

# ETHNOBOTANICAL CLASSIFICATION SYSTEM AND MEDICAL ETHNOBOTANY OF THE EASTERN BAND OF THE CHEROKEE INDIANS

by

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(Under the direction of Brent Berlin)

## ABSTRACT

The Eastern Band of the Cherokee Indians live in one of the planet's most floristically diverse temperate zone environments. Their relationship with the local flora was initially investigated by James Mooney and revisited by subsequent researchers such as Frans Olbrechts, John Witthoft, and William Banks, among others. This work interprets the collective data recorded by Cherokee ethnographers, much of it in the form of unpublished archival material, as it reflects the Cherokee ethnobotanical classification system and their medical ethnobotany.

Mooney's proposed classification system for the Cherokee is remarkably similar to contemporary models of folk biological classification systems. His recognition of this inherent system, 60 years before contemporary models were proposed, provides evidence for their universality in human cognition.

Examination of the collective data concerning Cherokee medical ethnobotany provides a basis for considering change in Cherokee ethnobotanical knowledge, for re-

evaluation of the statements of the various researchers, and a means to explore trends that were not previously apparent.

Index Words: Eastern Band of the Cherokee Indians, Ethnobiological Classification Systems, Ethnohistory, Ethnomedicine, Historical Ethnobotany, Medical Ethnobotany, Native American Medicine, Tradition Botanical Knowledge.

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## DEDICATION

To my daughters, Jocelyn Grace and Alyssa Joy, whose love and support sustained me throughout the process.

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## Chapter 1

### Introduction

The Eastern Band of the Cherokee Indians live in one of the most botanically diverse temperate zone ecosystems on the planet. A complete study of Cherokee ethnobotany would be a monumental, multifaceted task, so in this present work I have chosen to concentrate on just two aspects: the ethnobotanical classification system and medical ethnobotany of the Cherokee. The former, until recently (Cozzo 2000), has not been explored and the latter, while partially described in several works (Mooney 1891, 1900, Mooney and Olbrechts 1932, Banks 1953), has not been treated in a comprehensive manner.

As the field of ethnobotany has matured and been embraced by professional anthropologists, theoretical and methodological approaches have also matured. Mere lists of economically useful plants have been shown to be inadequate in explaining the human relationship to their botanical environment. The functional, social, and ideological context must all be considered when taking a holistic approach to plant/human interactions. Conklin's study of the Hanunóo ethnobotanical classification system is considered a seminal work in the structure of cognition as it relates to the field of ethnobotany (Ford 1978), but it was Berlin and his collaborators that demonstrated the universality of folk systems (Berlin 1972, Berlin et al. 1973, Berlin 1992).

As the field of ethnobotany has matured and been embraced by professional anthropologists, theoretical and methodological approaches have also matured. Mere lists of economically useful plants have been shown to be inadequate in explaining the human relationship to their botanical environment. The functional, social, and ideological context must all be considered when taking a holistic approach to plant/human interactions. Conklin's study of the Hanunóo ethnobotanical classification system demonstrated that the structure of cognition was also an integral part of the field (Ford 1978).

The Cherokee myth of the origin of disease and medicine demonstrates why the Cherokee ethnobotanical system provides an ideal opportunity to integrate their ethnobiological classification system and their medical ethnobotany. In Mooney's version of the myth, all the plants, "Each Tree, Shrub, and Herb, down to the Grasses and Mosses, agreed to furnish a cure for some one of the diseases named and each said: 'I shall appear to help Man when he calls upon me in his need (1891: 252).'" Every plant was considered to have a medicinal application, "even the weeds", but the means to use each was not always understood by humans. Clearly, as the Cherokees assumed that all plants had a medicinal value, whether known or unknown, the system is truly holistic. The segregation of the plants into the various life forms also delineates the basis of the classification system. But this myth was recorded over 100 years ago and the belief system that fostered it has gone through numerous changes. A compilation such as that described below is limited to the information that has been recorded by previous researchers, which is inherently bounded by the strictures of

fieldwork and the awe-inspiring task of comprehensively recording the complexities of human culture.

Contemporary ethnobotany is a multidisciplinary field encompassing or integrated with such diverse disciplines as ethnoecology, ethnomedicine, cognitive ethnobotany, paleoethnobotany, traditional agricultural practices, and studies of material culture (Cotton 1996: 17). However, as traditional cultures are disappearing, there is a growing interest in historical ethnobotany. In the past, historical ethnobotanists have mainly been concerned with the relationship between people and plants as recorded in ancient texts and the pictographs of preliterate societies (Schultes and von Reis 1995: 89). However, as the discipline has evolved and methodologies have improved, it is advantageous from both practical and cultural perspectives to revisit the historical records of the ethnographers from the early days of the profession. This is especially relevant in North America, where most of the early ethnographic material was gathered by salvage ethnographers bent on compiling as much information as possible before the demise of the native populations, languages, and cultures. The bulk of this material was collected by the Bureau of American Ethnology.

The Bureau of Ethnology (later to become the Bureau of American Ethnology) was created as a division of the Smithsonian Institution in 1879. Under the direction of John Wesley Powell, the goal of the Bureau was to collect data on Native Americans in the categories of the arts, language, technology, beliefs, and institutions (Moses 1984: 7). Powell had been greatly influenced by Lewis Henry Morgan's evolutionary perspective on the stages of human development and wanted to collect enough empirical data to establish a basis for the science of anthropology, much as Darwin had

done for biology. However, Powell perceived the importance of the new ethnology as being not so much the gathering of materials on individual societies, but as a means to reconstruct the lines of mental development and cultural evolution inherent in the various stages of Morgan's model of social development (Hinsley 1981: 136-8). Powell's authoritarian style of management and strict adherence to his version of cultural evolution often put him at odds with his ethnologists, and he was prone to correct staff member holding what he perceived as wayward notions (Hinsley 1981: 212). One of these was James Mooney, at the time a young, Irish-Catholic newspaperman from the Midwest with a passion for studying Native Americans.

Mooney had gained Powell's attention by his compilation of a list of two thousand Indian tribes of North and South America along with their linguistic affinities, histories, and tribal relations. Powell was so impressed that he offered Mooney a paid position the following year if he would volunteer his services until the next fiscal appropriations. Mooney became a full time ethnographer in August of 1886 (Moses 1984: 20). In the spring of 1887, he began his first field assignment among the Eastern Band of the Cherokee. Mooney considered the Cherokee to be one of the most important tribes in North America, and the Eastern Band, due to their relative isolation, to be "the purest-blooded and most conservative of the nation (Moses 1982: 22)."

The Eastern Band of the Cherokee was formed by approximately 1,000 of the more conservative members of the Cherokee Nation who evaded the forced removal of 1838. At its peak, the Cherokee Nation's sphere of influence included the entire Southern Appalachian region including eastern Tennessee, most of Kentucky, the mountainous region of North Carolina, northeastern Alabama, north Georgia, and

northwestern South Carolina. Finger (1984: xii) pushes the formation of the Eastern Band back to 1819, as it was at this time that the more conservative element broke away from the others in their disgust over a treaty for land concessions. Many of them lived outside the new boundaries in the small settlements of Quallatown and Cheoah, proclaiming themselves citizens of the state of North Carolina (Finger 1984: 17). This nucleus would later attract those who resisted removal and became known as the Eastern Band. It took many years for this group to establish their claim to tribal lands and settle the issue of their citizenship, especially after the Cherokee sided with the Confederacy during the Civil War. But their new tribal government was finally inaugurated in 1870 and the final deeds to the reservation executed by 1880 (Mooney 1900: 174). So Mooney's arrival in 1887 was at a pivotal point in Cherokee history, and even among this most conservative faction it was a time when they were increasingly abandoning their traditional ways (Finger 1984: 153).

When considering the scope of Mooney's research among the Cherokee, one must remember that the bulk of his publications on the Cherokee came around or before 1900. His major works, *Sacred Formulas of the Cherokees* and *Myths of the Cherokees*, were published in 1891 and 1900 respectively and he published nothing on the Cherokee after 1900. Yet he collected and partially organized much additional information in the decades that followed these publications. Mooney's first field seasons occurred in 1887, 1888, and 1889, and his primary publications were based on these data. But Mooney also returned to the Cherokee and collected additional data in 1913, 1914, and 1917.

Mooney was under pressure from his superiors to turn his research into publications, but, as was true with many of the salvage ethnographers, he was much more concerned with gathering of data than synthesizing and publishing his findings (Moses 1984: 45). When questioned about the amount of material he gathered against the few publications he had penned, Mooney responded that the day of the Indian was a thing of the past and ethnologists must record their history before it was gone (Moses 1984: 144). Mooney would rather assume the risk that his field notes would be of no use and unfathomable to successive researchers than miss an opportunity to acquire what he perceived as the last bits of knowledge from a dying race (Hinsley 1981: 224). As Mooney's health was failing in the later decades of his career and his interests had spread to several other Native American groups, he would have no choice but to leave the task of synthesizing and interpreting his materials to others.

Powell's death in 1902 in some ways freed Mooney from the yoke of Morgan's evolutionary perspective and allowed him to immerse himself in the history and ethnography of specific groups (Hinsley 1981: 219). Caught between Powell's concept of the gentleman anthropologist and the newly emerging Boasian school of professional anthropology, Mooney had little theoretical framework for his studies and was more intent on telling the story of Native people to the public at large (Hinsley 1981: 224).

What is obvious from Mooney's later data is that he changed some of his earlier biases toward Cherokee ethnobotanical knowledge. Having once stated that, "the medicine man's knowledge is about on a level with that of the ordinary farmer's wife" (Mooney 1890), his later research expanded into their ethnobotanical system and a broader perspective on medicinal uses, preparation, and ecological knowledge of the

Cherokee plants. Unfortunately, he was never able to complete his planned multi-volume series on the Cherokee (Moses 1984: 123).

After Mooney's death in 1921, Frans Olbrechts, a Belgian ethnographer, continued Mooney's work among the Cherokee. Olbrechts is best known for his 1932 posthumous collaboration with Mooney, *The Swimmer Manuscript: Cherokee Sacred Formulas and Medicinal Prescriptions*. Mooney died well before Olbrechts came to the United States, but by combining Mooney's sacred formulas and observations on plant use with his own observations on Cherokee medical practices, he was able to produce one of the finest published works known concerning a Native American medical system. However, this would be his only major American work, as he returned to Belgium in 1929 to become director of the Musée du Congo Belge at Tervuren.

Olbrechts began his studies in the United States when he received a fellowship for post-graduate studies in linguistics at Columbia where he studied under Franz Boas (Forde 1958). After completing his studies in 1926, he briefly returned to Belgium to marry, but was soon honeymooning with his new bride in the loft of a small cabin among the Eastern Cherokee in Jackson and Swain Counties, North Carolina. He and his wife spent the winter and spring of 1926-27 living with a Cherokee family, gathering materials on Cherokee religion and language in preparation for what would eventually become *The Swimmer Manuscript* (Alexander 1927).

Much of *The Swimmer Manuscript* was posthumously attributed to Mooney's research, but as one becomes familiar with the published works and archival materials of both authors, Olbrechts' predominance in the text becomes evident. Olbrechts appeared to have a greater interest in a broad range of topics inherent in the Cherokee



ethnomedical system such as their categories of disease and the combinations of herbs used in the formulas. But like Mooney he gave little credence to the efficacy of their methods and appeared more concerned with ceremony and symbolism than the potential efficacy of the cures.

John Witthoft was the next anthropologist to take an abiding interest in Cherokee ethnobiology. He developed his interest as one of the last graduate students to study under Frank Speck, a renowned ethnographer of the eastern Native Americans. Witthoft had a life-long interest in Cherokee ethnobiology and especially Cherokee ethnobotany, and he continued field research as a professor of anthropology at the University of Pennsylvania from 1966 to 1986. But the majority of his publications on the Cherokee were during his post-Masters research at Michigan, and he published little about the Cherokee after 1949 (Cotter 1996). This indicates that much of his research was never published. A portion of that material was housed at the American Philosophical Society Archives in Philadelphia and is described below. The remainder has not yet been located and does not appear to be available to public scrutiny.

### Archival Materials and Primary Sources

The bulk of Mooney's material that will be considered in this work comes from several manuscripts found among Mooney's archival materials housed at the Smithsonian Institution. The largest body of this material was from Ms. 2591 (n.d. a); a three-volume work hand-written by Mooney and entitled *Cherokee Botany*. This appears to be the framework for a planned later volume, or series of volumes, on Cherokee ethnobotany. Each page was devoted to a particular plant and the more complete

entries included the botanical name, the Cherokee name, Mooney's gloss of the name, the etymology of the name, and the medicinal uses for the plant. It was in these volumes that Mooney also made the bulk of his notes concerning the Cherokee ethnobotanical classification system. However, this was a work in progress and much of these data is missing for many of the plants. Often in this manuscript only the Cherokee name or botanical name is recorded or the gloss for the name was not available. Mooney would gather some of this material in later field seasons, but he did not thoroughly update his data in *Cherokee Botany*.

Another source from these materials that aided in cross-referencing the Cherokee names to botanical names is a collection of forty-three labels that were attached to the plant specimens that Mooney sent back to the Smithsonian to be identified (n.d. b, Ms. 2497). The labels, penned by Mooney, had the Cherokee names and bits of information about the plant on one side and a botanical designation, penned by the identifying botanist, on the other side. Most of these are dated from September of 1911.

Three small pocket notebooks, labeled by Mooney as "Medical Notes", provided an indication that Mooney's attention had shifted towards a more complete botanical pharmacopoeia in his later Cherokee research (n.d.c, Ms. 1894). The notebooks contain 119 Cherokee names for plants and a range of botanical, environmental and cultural applications. There is often a description of the plant, a description of its habitat, medical conditions it would treat, and preparation techniques. Occasionally, there is also a note on whether the plant was dried for future use or identified in winter from its

dried stalk, as well a few references about plants gathered to sell to white traders or the Cherokee knowledge of how it was used by local whites.

Also in the same manuscript package is a list of 117 Cherokee plants compiled by Mooney in 1913 and the botanical name for each recorded by a different researcher. This would suggest that Mooney had collected these plants and sent them to the Smithsonian to be determined to species. A similar manuscript (n.d.d, Ms. 2235) consisted of eighteen pages of plants listed by their botanical name with the corresponding Cherokee name in the column beside it.

For further verification of the botanical names I also was permitted to view the herbarium accession records of 272 plants that were collected by Mooney. The dates of entry into the collection are missing from the copies of records provided to me by the herbarium staff. However, I was able to match the accession numbers to two specimens collected in 1888, suggesting that these may have been ascescioned around this time. In a letter to Powell dated September 8, 1889 (Mooney 1982a), Mooney indicated that he had collected around 300 plants and I assume that these are the mentioned specimens. I did not manage to get copies of the accession records for Mooney's later collections from 1911-1913 and I found no specimens in the collection from this period. The herbarium was not cataloged in a way that made this material accessible; at the time of my research it was in disarray due to construction. However, in a 1916 statement of his research (Mooney 1982), Mooney indicated that he had collected 500 to 600 specimens by 1913, so that record may still exist. Generally the entries in the located accession records were identified to the genus level, but many were determined to the species level by botanists at the Smithsonian Institution.

Several small manuscripts and random notes on scraps of paper also provide a substantial amount of material. Twenty-one plants are identified by common names and their Cherokee names in Ms. 2282 (n.d.e). Most of Ms. 2285 (n.d.f) is missing, but the Cherokee and botanical names for ten or so plants, fungi, and mosses are still available.

The bulk of Olbrechts' Cherokee material is also housed in the Smithsonian Institution's Anthropology Archives. Olbrechts' materials consist of one set of papers (Ms. 4600) that included several typed manuscripts. The most impressive portion of this is his *Cherokee Botanical Materia Medica*. This document consists of individual pages devoted to the Cherokee name, local common name, botanical name, and various medicinal uses for several hundred plants. In his introduction to these notes, Olbrechts admits that it was not his original intention to collect information on Cherokee medical botany, but when the opportunity presented itself he recorded an impressive body of knowledge. He claimed his material was gathered independently of Mooney's influence and, as it was 35 to 40 years later, that he used many different informants. However, some of Mooney's informants were still alive and were central to Olbrechts' data.

The numbering system used in this material suggests that there were at least 546 plants originally referenced but many pages are absent and Olbrecht's numbering system is erratic. Olbrechts indicated that he referred to the plants by their reference numbers, so the numbering system may just be collection numbers and only the medicinal plants were discussed in this document. He did write that he did not have time to properly investigate non-medicinal plants.

Olbrechts also appeared to be preparing another document on the Cherokee system of disease classification. There are 196 entries describing ethnomedical conditions, including their Cherokee names, the glosses for the Cherokee names, and the treatments applied by the Cherokee healers for the condition. Some of these were described in *The Swimmer Manuscript*, but a majority of them were not included in any published materials. While not all of these were treated with plant-based remedies, those that were often include the application of several formulas or single herbs.

Witthoft's *A Cherokee Economic Botany from Western North Carolina: Man and Nature in the Southern Appalachians* (not dated), an unpublished manuscript housed at the American Philosophical Society Archives in Philadelphia, describes a wide range of plant uses. He includes chapters on wild edible greens, roots, fruits and seeds as well as mushrooms, poisonous plants, dye plants, and fiber bearing plants. It includes extensive descriptions of Cherokee basket weaving, log cabin construction, and woodcrafts. The final chapter describes Cherokee farming practices and the processing of farm products. Interspersed throughout are references to the medicinal uses of the plants described and a few references to the botanical classification system.

I have also recently acquired the botanical portions of the Payne/Butrick Manuscript (not dated), the compilation by John Howard Payne of Cherokee ethnographic material predominantly collected by missionary Daniel S. Butrick just before and around the time of removal. The original document, housed at the Newberry Library in Chicago, consists of four volumes of late 18<sup>th</sup> and early 19<sup>th</sup> century ethnographic materials concerning the Cherokee. I was provided with extracts of the documents containing references to medicinal and ceremonial plant use, the plants

usually identified with a Cherokee name recorded by Butrick. While not a comprehensive ethnobotanical account, there is enough information to identify the majority of the named species and this will provide more information for cross-referencing purposes.

Two Masters theses on Cherokee plant use also augment the materials of previous researchers. William Banks' *Ethnobotany of the Cherokee Indians* (1953) and Myra Jean Perry's *Food Use of "Wild" Plants by Cherokee Indians* (1974) both contain a substantial amount of primary research and some linguistic data. These will aid in cross-referencing Cherokee names with botanical species and supplementing their medicinal and edible applications. Banks work may prove the most useful as he included nearly 250 plants identified to at least the genus level and often provided several versions of their Cherokee names. Perry's work, while not as comprehensive, still fills a valuable niche with its focus on the wild edible plants of the Cherokee.

The Cherokee informant base varied over the tenure of the different researchers. Most of the medicine men who remembered the pre-removal period died just before or in the early years of Mooney's research (Mooney 1982b). Olbrechts used some of Mooney's sources, but attempted to develop his own informant base as a means to separate his work from Mooney's considerable influence (Ms. 4600). However, one common thread that colored Cherokee research from Mooney's first field season through the work of John Witthoft was the Cherokee informant Will West Long.

Long's background bridged the Cherokee and Euroamerican worlds. He was the son of a Cherokee Baptist minister and was raised in a traditional Cherokee household in the part of the reservation known as the Big Cove, one of the more conservative

Cherokee communities in western North Carolina. While at the reservation school, Long learned to read and write both in English and the Cherokee syllabary. He began working with Mooney as a scribe and continued as an interpreter during Mooney's subsequent visits to the reservation. His abiding interest in his Cherokee heritage made him an extremely valuable informant to subsequent researchers such as Olbrechts, Frank Speck, William Gilbert, Leonard Bloom, and John Witthoft (Witthoft 1948). Banks also attributed a portion of his information to Long, but this material must have been borrowed from Witthoft's research. Long died in 1947, five years before Banks' research.

#### Cherokee Ethnobotanical Classification

One of the most salient features of Mooney's archival materials was his keen observation of the Cherokee ethnobotanical classification system. Mooney used terms and concepts in the first decades of the 20th century usually attributed to later researchers starting with Conklin in 1954 (Berlin 1992: 4). However, there is no doubt Mooney was cognizant of the pattern inherent in the Cherokee ethnobotanical classification systems and, had he finished his work, it would undoubtedly have been influential in the development of the field.

Mooney made his intention to focus on the classification systems clear in the following note dated May 10, 1889, that he sent to Professor G. Brown Goode at the National Museum of Natural History:

Your note is at hand. I should feel rather pleased to know that I had found a species before unknown in the North Carolina mountains. I expect to return there in July and want to give considerable attention then to collecting botanic and natural history specimens, in order to get at the Cherokee basis of classification, and hope then to throw more light on the insect question.

Mooney also recorded his interview methodology (Ms. 1894), which showed excellent technique for determining and developing an ethnobotanical classification system. When Mooney came across a name for a new plant, he would ask his other informants, "Do you know it?". If they were familiar with the plant he had named, he would try to determine its availability and proximity to the reservation by asking, "How far away is it?". When he was sure they were discussing the same plant, he would ask, "How many kinds are there?" and follow up with, "Are there any other kinds?". Then he would request that his informant bring him a sample of every kind of that folk genus that was known. He would also ask the informant to bring him samples of the fruit and flowers when they were available. This methodology was sufficient to produce a basic framework for the Cherokee ethnobotanical system.

### Medical Ethnobotany

Medical ethnobotany lies at the interface of the human pursuit of well-being and the propensity of plants to produce a variety of chemical products that provide a selective advantage in their struggle for survival (Briskin 2000, Williams et al. 1989). Rarely considered as a distinct field, medical ethnobotany is usually subsumed in its



sister field, ethnopharmacology (Etkin 1988), but distinguishes itself through a focus on the promotion of traditional therapies and a greater concern with the context of plant use rather than a concern with potential pharmaceutical products (Berlin and Berlin 1994).

In this work, piecing together the medical ethnobotany of the Cherokee will require a comparison of the works of the researchers discussed above and assembling relevant information. The medicinal or edible uses, ecological considerations, gathering and processing instructions, linguistic analysis, and cultural beliefs will be assembled for each species. All this information will rarely be available for every species; however, as much as possible must be assembled to approach as complete an investigation as is feasible.

### Structure of the Dissertation

This work is structured around Mooney's direct or implied system of ethnobiological classification. Many concepts now established as integral aspects of ethnobiological classification systems, such as the intermediate categories so prevalent in Mooney's notes on the herbaceous plants, were not formally developed until long after Mooney's work, but they are none the less implied from the structure of his notes. This present work differs from Fradkin's (1990) work on the Cherokee ethnozoological classification system in that the concepts of classification used herein are based on Mooney's observations and analysis, and not on currently accepted models of ethnobiological classification. It is essential that the data are handled in this manner to support the premise Mooney's interpretation predated current models and that current models are not being imposed on the Cherokee ethnobotanical system.

I will begin with a discussion of the Cherokee ethnobotanical classification system, including Mooney's observations of its structure, the relationship of his observations to the findings of later researchers, and an analysis of the patterns that are obvious in the collective data. This will be followed by a discussion of Mooney as a researcher and an analysis of his philosophical perspective and research biases.

Subsequent chapters are arranged by the life form categories as presented in the myth of the origin of medicine, "Each tree, shrub, and herb, down even to the grasses and mosses, agreed to furnish a remedy for some of the diseases named..." (Mooney 1891: 323). Added to these will be the ferns and fungi, which Mooney appeared to handle as distinctive life forms.

Each life form will be discussed in terms of its overall relevance to the Cherokee and the structure of the sub-life form rankings. The Cherokee names of the individual folk genera, species, and varieties will be presented with the glosses and semantic analysis provided by the various researchers, the botanical names will be matched to the Cherokee name, and any medicinal or edible qualities of the plant as used by the Cherokee will be discussed. The major works of other researchers mentioned above will be consulted to augment and cross-reference the data provided by Mooney and Olbrechts. Those plants for which no Cherokee name, gloss for the Cherokee name, or botanical species name are available will also be included in the work to provide as complete a record as possible and provide a base of reference for future researchers. The folk genera and species included in each life form category are listed in alphabetical order by their Cherokee names to assist researchers identifying plant references from historical works. Indices of botanical species, arranged in alphabetical

order by their Latin names and matched with their associated Cherokee genera or species, are included in the introduction to each life form to facilitate cross-referencing.

Following this is a re-evaluation of the medical ethnobotanical data and a discussion of how this reflects on accepted models of the Cherokee ethnomedical system. This will include a discussion of the discrepancies and oversights found in the assertions of the various researchers, an evaluation of the humoral component and Cherokee health concerns from an ethnobotanical perspective, and a discussion of symbolism as selection criteria for plant-based remedies.

Included at the end of this work is an appendix that examines the Cherokee disease categories and the corresponding botanical formulas that were gathered by Olbrechts. Several Cherokee folk illnesses are discussed in *The Swimmer Manuscript*, but few of the various botanical formulas were included and many discussed in Olbrechts' notes were not included in the final work. The appendix will be necessary to cross-reference the Cherokee ethnomedical conditions with the individual remedies.

I have used Mooney's phonetic spellings when available and substituted these for the phonetic spellings of other researcher's when possible. This was important for the continuity of the work and for explanations of the etymology of the plant names. However, since Olbrechts and the other researchers recorded many of these, and they had no counterpart in Mooney's notes, I have not included a pronunciation guide to the phonetic symbols. Mooney did not include one in his published works and Olbrechts has been criticized for including sounds not found in the Cherokee language (Banks 1953: xiv). The Cherokee language was in a state of transition during Mooney's research, as evidenced by his recording of both Middle and Upper Cherokee names for plants, and

the language has changed significantly since his work (Alexander 1971: title page). Olbrechts' system was based on an international model, and is useless without a working knowledge of German and French (Mooney and Olbrechts 1932: 11-13). As this present work is an historical analysis of Cherokee ethnobotany, lack of a pronunciation guide will not affect the nature of this work.

### Relevance to Anthropology

This research addresses the debate over whether ethnobiological classification systems are imposed by the researcher (Ellen 1979: 13) or are a universal feature of human cognition (Berlin et al. 1973, Berlin 1992). It is notable that Mooney recorded the patterns and principles inherent in the Cherokee ethnobotanical system well before he could have been influenced by any published theoretical or comparative material on the subject. Comparison of his observations on the principles of Cherokee ethnobotanical classification to those proposed as universal to all systems will address the issue of universality, as it appears to be difficult to argue that Mooney was imposing a preconceived framework over his data.

Expanding the knowledge of potentially useful medicinal plants from the Southern Appalachian region, an acknowledged center of medicinal plant diversity (Price 1960), should provide a basis for research in establishing a more pluralistic medical system. The growing interest in alternative and complementary medicine will require an expanded understanding of plant-based medicines, and those used in traditional medical systems are considered to be especially efficacious (Trotter and Logan 1986).

A basis of comparison must be established before issues over the nature of change in traditional knowledge can be addressed. How is traditional knowledge transmitted and maintained in a society? Is traditional knowledge lost when a culture is absorbed by a dominant society or is it transformed by the persistence of cultural values (Inglehart and Baker 2000, Ryder et al. 2000)? These questions can not be addressed without the basic understanding of what constitutes the traditional knowledge of a group. This basis can be established through the re-evaluation of historical materials, comparing them to contemporary studies, and determining the nature of diachronic change in traditional knowledge.

The global ecological crisis is having a dramatic impact on traditional medical systems. Around 80% of the population of developing countries depends on plant-based traditional medicines for their primary means of health care (Moran 1997). The relative affordability of medicinal plants when compared to pharmaceuticals (McCaleb 1997) and the loss of an estimated 4,000 or more species of plants and animals per year (Southwick 1996: 253) create a growing need for potential replacement therapies for lost local species. The inherent botanical diversity in the Southern Appalachian Mountains coupled with the ethnomedical knowledge of the indigenous people should contribute to the quest towards global health security.

The consolidation and organization of this material will facilitate the repatriation of Cherokee traditional botanical knowledge to the tribe from its relative inaccessibility in the archives of the Smithsonian Institution. The return of this portion of their rich cultural legacy could aid the Cherokee in several ways:

- It can provide documentation for potential legal cases involving intellectual property rights concerning their traditional botanical knowledge as well as with contested access to traditional resources on public lands.
- It will provide the basic information necessary for the development of a culturally based industry associated with the blossoming market in botanical medicines and plant-based products. This is especially relevant in an area where unemployment is well above the national average.
- It can be used to aid the Cherokee in their efforts to re-establish their cultural identity, subject to decades of assault from social forces and official governmental policies, and to enhance their sense of pride in their Cherokee heritage.

## Chapter 2

### Cherokee Ethnobotanical Classification System

One of my primary goals in this research is to demonstrate that Mooney recognized an inherent structure in the Cherokee ethnobotanical system, and this system is comparable to contemporary models. I will use Berlin's (1972, 1976, 1992) hierarchical ranks as a model for comparison. These ranks include the categories of kingdom, life form, intermediate, generic, specific, and varietal. All were developed to some degree in the notes of Mooney and the works of other Cherokee researchers.

#### Kingdom

The most inclusive rank in folk biological classification is the kingdom. This rank is often unnamed in folk systems (Berlin, 1992). Mooney gives no Cherokee term for the plant kingdom; however, in *Myths of the Cherokees* (1900) he recounts the story of the origin of disease. In this story, the plants decide to provide all medicines necessary to counteract the diseases inflicted upon humans by the animals. "Each tree, Shrub, and Herb, down even to the Grasses and Mosses, agreed to furnish a cure for some one of each of the diseases named..."

The concept of the plant kingdom as an inclusive category is evident in the myth of the origin of medicine. We see the plants as a unified entity functioning with collective intent. What is not clear is whether Mooney ever procured a discrete lexical entity for

the plant kingdom. If he did, it was not present in his notes or published material. It was also not included in any of the Cherokee plant names, as were such concepts as “herbaceous” or “woody”. When Mooney or Olbrechts use the concept of “plant” in a name, such as when Olbrechts glossed *gáw’sûkĩ* as ‘the smelling (plant)’, it is always an implied concept and placed in parentheses, never a direct gloss of a part of a name. Olbrechts did find that the Cherokee language, “possesses words to express such concepts as “herbs (in general)”, but he did not say what they were and he indicates that they were rarely used (Mooney and Olbrechts 1932:53).

## Life Form

The rank of life form generally consists of a small group of highly inclusive terms that represent a few shared gross morphological characteristics. Taxa of lesser rank are commonly included in the life form rank (Berlin, 1976). The Cherokee terms for the majority of these were found among Mooney’s materials and most were labeled by him as “generic” terms. But Mooney’s use of “generic” is a more inclusive term than that of the folk generic, perceived as the basis for ethnobiological systems (Berlin 1992: 53).

Some of the life forms were clearly labeled in Mooney’s notes. For example, when distinguishing the life form *kanéska*, he states that it is “the generic name for all grasses.” However, some labels had to be gleaned from the specific qualifiers included in individual plant names. These are all included and explained in the individual life form chapters. For the remainder of this discussion of the life form category, I would like to examine some trends that were obvious at this level of classification.



Berlin has asserted that the likelihood of a semantically opaque or unanalyzable name generally increases with cultural salience (Berlin 1992: 256). Analysis of the ratio of opaque to transparent generic Cherokee names shows that the life form inclusive of the trees was more likely to have members with opaque names than other life forms. Of 49 folk genera, 33 or 67% had opaque names. The ratio diminished with size of the life forms. Of the 38 folk genera of shrubs and vines, only 13 or 34% were labeled with opaque names. At the herbaceous level, only 19 of 174, or 11% of folk genera were labeled with opaque names, and of these, eleven were either crop plants or popular edible non-cultigens. There were no opaque names in the remaining life form categories.

It is not surprising that trees would demonstrate such a high degree of cultural salience in an Eastern Woodlands tribe like the Cherokee. As Hunn has pointed out (1999: 49), the size of an organism will relate to its perceptual salience, and this will often translate to cultural salience. Also, if tree species are the first to appear in an ethnobotanical classification system (Berlin 1972, Brown 1977, Atran 1985), then the prevalence of opaquely named genera in this life form may be due to the persistence of names whose meaning has long been forgotten. What is surprising in the Cherokee example is the precipitous drop off in the number of opaquely named genera in smaller life forms. Hunn proposed that much of the biota in an area is unclassified because it is too small to be noticed. But in this case, most species recorded are of a noticeable size. The shrubs are proportionately half as likely as trees to be labeled with an opaque name, and of the 14 that are opaquely named, six have edible seeds or fruits. Edibility appears to be a significant factor in the retention of an opaque name for shrubby and

herbaceous life forms. This would support Berlin's contention that cultural salience increases the likelihood that a name would be opaque. Many of the plants in the smaller life form categories were useful as medicines, but this would have been specialized knowledge and not deeply ensconced in the Cherokee culture. Tree species also played a significant role in the Cherokee ethnomedical system, but this aspect will be analyzed and discussed in the final chapter.

### Intermediate

Intermediate categories are generally identified by a primary lexeme that indicates a salient feature, usually morphological similarities, shared by a number of often unrelated biological genera, and, as Mooney's data demonstrates, from several plant families (Berlin, 1976). As mentioned above, Mooney referred to these lexical distinctions as "generic" terms, indicating his acknowledgement of inclusive categories. In the Cherokee system, inclusion in an intermediate category was designated by several criteria. These may include shared coloration of plants or plant parts, plants that change in color due to mechanical manipulation, plants or plant parts that share inherent qualities other than color (leaves resembling ashes, dirty appearance of the roots), plants having a strong odor, or a shared mechanical feature (burrs). While generally few in number in most folk classification systems, Mooney's notes on the Cherokee indicate that this is a significant category in their system.

I discuss the intermediate categories in the chapters on herbaceous species because, with rare exceptions, they were exclusively composed of herbaceous plants. The exceptions were two shrubby plants and a grass from the category *dalâni* ('yellow'), and a tree from the category *ûnagéi* ('black'). It would appear from this observation that

use of a color term as the basis for a name was merely descriptive and not due to a higher level of inclusiveness. Without a more detailed account of Mooney's interview data, it is impossible to be sure of the inclusiveness of the color-based categories. However, Mooney clearly defined the remaining categories and they were exclusively herbaceous in content.

## Generic

The category of folk genera typically includes the largest number of folk categories and tends to correspond most closely to the biological species level (Berlin, 1992: 23). This is reflected in Mooney's use of the term "species", or the related "specific", which appears to be congruent with the currently accepted rank of folk generic. When referring to the intermediate category of *nugû'la* or *kă- nugû'la*, which he glosses as 'scratcher', Mooney indicated that each thorny shrub or vine in this category also had a "specific" Cherokee name. Also, in the description of the formation of folk species and varietals below, he refers to the "species" as the unit being differentiated by a qualifying adjective. While his nomenclature referring to the different ethnobiological ranks may be different than the currently accepted terminology, it is obvious that his meaning was congruent with the definition of the folk generic in contemporary models of ethnobiological classification systems. Mooney (1890b) used the term "generic" in an early work (see below), which appears to be used in the same manner as the currently accepted definition of the folk generic, but changed it to "species" in his later work.

The Cherokee system appears to be atypical in one aspect: the ratio of monotypic to polytypic genera. Monotypic genera are not subdivided into specific or varietal taxa,

while polytypic genera will have two or more taxa designated by a specific qualifier. Typical folk classification systems will consist of approximately 80% monotypic genera (Berlin 1992: 23). In this work, the ratio is much lower, with 209 of 310 genera, or 67%, of genera recorded as monotypic. In determining this figure, I only included the most common names reported by the researchers, so it is not a precise figure. But the Cherokee synonyms recorded for many of the plants tended to classify the plants in other polytypic genera, so if all could be considered as independent aspects of the Cherokee taxonomy, the ratio would appear to be much lower than 67% if all synonyms were included.

Mooney may have explained this apparent anomaly in his discussion of Cherokee medical practices (1890b). When discussing how the medicine men differentiate between related plants, Mooney wrote:

Each doctor commonly only knows but a few of the species included under one generic name ... Consequently, when obliged to distinguish different species having the same generic name, they are completely at a loss. Each man is apt to have a different basis of classification, and no one knows how many plants are included under the common name, or what descriptive term will sufficiently distinguish each from the others. It is only by comparison of the plants brought in by each name that it is found that half a dozen distinct terms are intended to designate the same species.

Mooney made a similar comment when voicing his frustration on the formation of specific and varietal taxa (see below). When considering the apparent variation among informants, it must be noted that the majority of Mooney's and Olbrechts' informants were medicine men, specialists that would have had significantly more plant knowledge than the average Cherokee. When challenged by their interviewer, they would have used descriptors that distinguished the most salient differences between similar species. They would have recognized the various species as different, often with unrelated uses, but may not have previously labeled them or shared that knowledge with others. This is apparent in the text of this work from the large number of synonyms recorded for many of the biological species and the distinct uses applied to them. What is not known is whether the general Cherokee population would be able to distinguish the subtle variation in a folk genus and if this would have influenced the ratio of monotypic to polytypic genera.

The names for the Cherokee folk genera were constructed around a range of concepts, but the most common by far were organoleptic qualities inherent in the plants. The primacy of vision among the senses was reflected in the Cherokee choice of names, but smell, taste, touch, and sound were also represented. Names that involved a visual quality usually described a salient morphological feature that distinguished the folk genus. For example, *Magnolia fraseri* was known as *tsugwalâga tsegwa* ('big leaves'), a name describing the large leaves, which reach lengths of up to half a meter. *Polymnia uvedalia* was called *gâtâ'yăťĩ* ('it has gone round'), also describing the leaves, which surround the stem.

The sense of smell was especially evident in the genera included in the intermediate category *gáw'sûkĩ* ('smeller'), whose members are noted for their prominent scents. The members of this category were mostly in the mint family, but it also included muskmelon. *Monarda clinopodia* was called *dilaiyústĩ* ('skunk-like'), a reference to its pungent odor. Species of *Oxalis*, commonly known as sourgrass, were included in the genus *tsuntsâ'y'stĩ* ('it is sour'), reflecting its prominent sour taste. The sense of touch was evident in the Cherokee name *utsaléstĩ* ('it is sticky'), the Cherokee name for wheat, *Triticum aestivum*. The name was descriptive of the consistency of dough made with wheat flour. Names that depicted sound usually referred to noises made by dried seed pods, such as *anigína-(ts)unâ'năsû'ta* ('ghosts' terrapin rattles'), the name applied to *Dioscorea villosa*.

Utility and ecological function also played a role in the construction of Cherokee generic names. *Erigeron canadensis* was known as *atsilsû'tĩ* ('fire, to make with'), due to its prominent role in the making of ceremonial fires. *Mitchella repens* was known as *tlûtístĩ unígistĩ* ('pheasant food'), a reference to the succulent red berries that are often eaten by game birds.

Considering the long history of contact with Europeans before Mooney's work and the incorporation of introduced species in the Cherokee diet and pharmacopoeia, it is surprising that there were only two examples of the conversion of an English name to a Cherokee folk genus. Coffee, *Coffea arabica*, became *káwĩ*, as there is no "f" sound in the Cherokee language and cucumber, *Cucumis sativus*, was slightly changed to *kagama*. Onomatopoeia, generally a common feature in folk zoological classification systems, was represented by a single example in the Cherokee ethnobotanical

classification system. The tall thistle, *Cirsium altissimum*, was known as *tsítsĩ*, a replication of the sound made by a blowgun dart. The down of this particular thistle was used as the primary material to fletch darts.

Mooney's notes indicate that the concept of the prototypical taxon was apparent in the Cherokee ethnobotanical taxonomic system and was expressed at the level of the folk generic. This feature was observed among several Native American groups (Gatschet 1899), typically by the addition of a secondary lexeme, suffix, or prefix to indicate the "true" or "real" plant of a category. This would be the member of a category that embodied the defining characteristics of the category, also known as the "type specific" or a "type-species" (Berlin 1972, Berlin 1992: 110).

In the Cherokee system, the suffix *-yû* or *-yă*, glossed by Mooney as 'true' or 'real', was added to indicate the most representative member of a more inclusive taxa. This concept functioned at both the intermediate and generic levels of classification. At the intermediate level *Desmodium nudiflorum*, or tick-trefoil, is designated as *únistilû'istĩ-yu* or the 'true *únistilû'istĩ*', being prototypical of an inclusive category of burrs that shared the morphological feature of being able to 'stick flat to a hairy substance.' *Agertina altissima*, yet another example of the most prototypical member of an intermediate category, was called *gátatsú'ĩl'-ya*, or the 'true' form of *gátatsú'ĩl'* ('it has dirt in it'). It was considered the most prototypical of plants that appear to remain dirty after they are washed.

At the level of the folk genus, examples of the prototypical member of a category included the curly variety of *Brassica oleracea* and certain species of the genus *Pinus*. *Brassica oleracea* was considered the 'true' cabbage, or *tsugûntéayu*, *tsugûntéa* being

the folk generic name for broad-leafed varieties of cabbage. *Natsuya* was glossed as ‘true pine’, but the exact botanical species is not clear (see *natsĩ* in the chapter on trees).

Not all of the prototypical folk genera or intermediate categories were labeled. *Rubus ideaus* was known simply as *sũntiwáľĩ* (‘bowl’), but other members of this folk genus were labeled with specific qualifiers. This would indicate that *R. ideaus* was the embodiment of the characteristics of a typical *sũntiwáľĩ*. *Cucumis melo*, the muskmelon, became a relished food of the Cherokee after its introduction and, due to its fragrant flesh, became prototypical of the intermediate category *gáw’sũkĩ* (‘smeller’). The unmodified folk generic may have been a more common expression of prototypicality than those labeled by –*yũ* or –*yă*, but the labeled lexemes demonstrate unambiguous prototypicality.

While prototypicality expresses the highest level of inclusiveness in a category, with the properties of the prototypical taxon defining the category, there is often a need to express a relationship between two taxa based on the perception of shared inherent qualities. In his discussion of the comprehensiveness of the Mayan ethnobotanical system, Berlin proposed that unnamed taxa are included in a taxonomic scheme through a perceived similarity to a named taxon (1999: 73). The informant may not know what the plant is called, but will recognize that it is similar to or “conceptually related to” a known, named taxon. But in an historical ethnobotany such as this, I am limited by the plant names that were documented. Unnamed species are rarely included on plant lists. The conceptual relationship between taxa was recognized and labeled in



the Cherokee ethnobotanical classification system by the addition of the suffix *-iyústĭ* ('like' or 'as') to a known name.

One of the best examples of this concept is the introduced species, *Oenothera biennis*. *Oenothera fruticosa* is a native species, known to the Cherokee as *atátsû´* ('trout') because of its speckled leaves, which resemble the patterns on a trout.

*Oenothera biennis* was called *atátsû´-iyústĭ* ('like *atátsû´*') due to its close resemblance to *O. fruticosa*. The two are so similar that it takes careful inspection to identify them in the field. But they have very different blooming habits, *O. biennis*, commonly known as evening primrose, blooming around sunset, and *O. fruticosa*, commonly known as sundrops, blooming in full sunlight. Even though *O. biennis* had several medicinal applications and was gathered in the spring as an edible green, it retained the subordinate position of being 'like' the native *O. fruticosa*, a plant with no recorded Cherokee use.

Among the tree species, *Platanus occidentalis* was labeled as *kuwiyu´stĭ* ('like mulberry'), due to its resemblance to *Morus rubra*, known as *kuwû´*. Another synonym for *P. occidentalis* was *ku´wû une´ga* ('white mulberry'). While the use of *-iyústĭ* alone was not enough to signify an inclusive relationship at the level of the folk genus, the synonym *ku´wû une´ga* strongly suggests that *P. occidentalis* was considered a kind of *kuwû´*. The similarity between *P. occidentalis* and *M. rubra* is less evident than the comparison in the previous example. Both have aggregate fruit and large, simple leaves, but the fruit of *P. occidentalis* are dry and fibrous, nothing like the succulent fruit of *M. rubra*, and the shape and surface of the leaves is dissimilar in the two species. But

the Cherokee perceived enough of a conceptual relationship between the two species to label *P. occidentalis* with the comparative suffix *-iyústĩ*.

The suffix *-iyústĩ* also had number of other applications which were used to express a range of concepts. While the primary use was to signify a resemblance of one plant to another, seemingly in the same folk genus, it could also refer to a plant in a completely different botanical genus and frequently a different life form. The suffix often indicated an exclusive relationship rather than inclusive one, suggesting that the labeled plant was not a member of the folk genus to which it is being compared. When the relationship appeared to be exclusive, the suffix *-iyústĩ* was added to describe a significant morphological similarity between two plants or plant categories.

For example, *Potentilla canadensis* was known as *aniyústĩ*, in reference to its resemblance to *Fragaria virginiana*, the strawberry or *ána*. The leaf and flower morphology is quite similar, as is the growth habit, but the number of leaflets, flower color, and fruit type are all different. *Potentilla canadensis* was not a kind of *ána*, but could easily be described as being 'like' *ána*. Another example comes from Mooney's explanation of the taxa included in the intermediate category *tsâliyústĩ* ('like tobacco'). Mooney's statement that they were classified, "not on account of similar use or general appearance, but on account of having a similar flower and seed stalk" strongly suggests that they were considered a separate taxon from the types of tobacco (*tsâ'lá*).

Other examples from the intermediate categories tend to cross life form boundaries. The category *na'tsiyústĩ* ('like a pine tree') was so named because the habit of its members resembled the branches of pine trees. However, none were woody species and there is no indication that they were considered a type of pine. This also

happened at the level of folk genus. *Aruncus dioicus* was known as *tiliyústĩ* ('like chestnut'), due the resemblance of the inflorescence to that of the American chestnut, *Castanea dentata*. It is unlikely that these two plants, one an herbaceous plant, the other a large tree, were considered the same "kinds" based on inflorescence morphology alone, but the conceptual relationship based on inflorescence morphology was clearly labeled in the name.

When *–iyústĩ* was part of a subgeneric qualifier, it could be used to describe a perceived similarity between members of different kingdoms. For instance, *Pityopsis graminifolia* was known as *kâstúta selikwayústĩ* ('simulating ashes, like a green snake') due to the resemblance of the long leaves to the green snake, *selikwáya*. Subgeneric qualifiers could also contain *–iyústĩ* to express ambiguous qualities. *Desmodium canescens* was called *únistilû'istĩ sa'kanigiyústĩ ukwalága* ('they stick flat to a hairy substance, bluish leaved'), due to the grayish or bluish cast to the leaves from the dense pubescence. *Sa'kanigiyústĩ* literally meant 'like blue'; not a true blue, but giving the impression of blueness. So, while the primary function of this linguistic construction was to signify a relationship at the generic level, it was by no means limited to this function.

### Specific and Varietal

The most outstanding example of Mooney's insight into the Cherokee folk system was evident in the following description of the linguistic production of specific and varietal taxa among the category of herbs with a strong smell (*gáw'súkĩ* or 'smeller'):

No adjective term is added unless it becomes necessary to distinguish species and then the adjectives used generally serve only to distinguish the species in hand, necessitating a new set of adjectives as often as new specimens are added to the series. Thus with two specimens the most obvious visual distinction is *útana* (large) or *usdíga* (small), but when another specimen, or two, is brought in, these words must be discarded and another basis of classification adopted.

Bartlett (1940) made a similar observation in his discussion of the development of the genus concept in botanical classification systems (in Berlin 1972):

With enlarging experience, people make finer distinctions and need different names for newly distinguished entities which have previously been called by the same generic name. The original name becomes generic in its application; variously qualified it provides the basis of specific names.

Both statements are quite similar to Berlin's generalization on folk specifics: "contrasting specific taxa differ on the basis of very few morphological characteristics, many of which are readily visible and sometimes verbalizable (Berlin 1991: 104)." It also relates to the principle of classification concerning the partitioning of the generic rank into species and varietals: "Taxa of the rank of folk species partition folk generic taxa into two or more members; in those systems where they occur, folk varietals further subdivide folk species (Berlin 1992: 24)."

However, Mooney also voiced his frustration at the degree of variation in the Cherokee system. The large number of synonyms extant for a single botanical species led him to write the following about a species of mint:

As a sample of the worthlessness of Indian specific classification it may be stated that this species was designated, under different specimens, as *gáw'sûkĩ tĕlugéĩ* ('purple smeller'), *gáw'sûkĩ tĕlugiyústĩ* ('purplish smeller'), *gáw'sûkĩ égwa* ('large smeller'), *gáw'sûkĩ wâtigéĩ* ('brown smeller'), two or three of these designations being given by the same man, while another described the *Pycnanthemum muticum* as *gáw'sûkĩ útana* ('large smeller').

The phenomenon of several synonyms appears to be most common among the herbaceous plants, but the only explanation for this phenomenon appears to be overdifferentiation by Cherokee medicine men as described above.

While the designation of a 'large' and 'small' variety was the most common means of differentiating multiple members of a folk genus, flower color and the ecological niche of the folk species under consideration were commonly incorporated into specific qualifiers. Mooney identified two folk species of *Pedicularis canadensis* based on the color of the flower. The yellow flowered form was labeled as *ugukúskă' dalânige adsilû'skĩ* ('owl's head, yellow-flowered'), while the purple flowered form was labeled as *ugukúskă' tĕlugéĩ adsilû'skĩ* ('owl's head, purple-flowered'). Botanists consider *Pedicularis canadensis* to be a single species with variable flower color. Several species of violets commonly found in the Southern Appalachian region were

differentiated into folk species by the recognition of, among other criteria, various flower colors. The violets were included in the folk genus *dindáskwatéskĩ* ('they pull each other's heads off'), but some were classified into folk species with the addition of the qualifiers *dalânige adsilû'skĩ* ('yellow-flowered'), *tělugéĩ adsilû'skĩ* ('purple-flowered'), or *unega adsilû'skĩ* ('white flowered').

In an ecologically heterogeneous region like the Southern Appalachians, an area of ample rainfall and changing elevation, there microclimates and isolated habitats are common. This would provide a variety of natural and anthropogenic ecological niches that could house a diverse flora, some with specific habitat requirements. The Cherokee appreciation for this ecological heterogeneity was linguistically represented by the addition of the suffix –*ě'hĩ* ('living' or 'dwelling') added to term representing an ecological habitat. The habitat terms usually represent common aspects of the environment, such as wet areas or steep slopes, but they could also represent a very limited niche. For instance, qualifying adjectives could be quite subtle, demonstrating such fine distinctions as *gatusě'hĩ* ('mountain dwelling') and *gútlatûě'hĩ* ('growing on the mountainside'). Other environmental qualifiers demonstrated the wide range of environmental situations, such as an anthropogenic ecosystem represented by the term *klayuě'hĩ* ('growing in old fields') or the perception of wildness inherent in the term *inagě'hĩ* ('growing in the wilderness'). Limited niche requirements were labeled with terms like *kutlaě'hĩ* ('growing under the beech tree') or *nunyâhi-ě'hĩ* ('rock dwelling'). There are at least 16 environmental descriptors included in this work, a few more if synonymous root terms are considered independently. For instance, the terms *igâ'teně'hĩ* and *saluyě'hĩ* were both glossed as 'swamp growing', but were derived from

the root words *igâ'tĩ* and *salúyi* respectively. The specificity of the Cherokee terms suggests that their botanical terminology was as sophisticated as any devised using the Linnaean system of nomenclature, in spite of Mooney's frustration with the naming process.

There are inherent difficulties in determining and developing an historical ethnobotanical classification system. Informants are often anonymous experts, and they are typically few in number. It is difficult to determine if their rendition of cultural knowledge was widely shared or the result of years of personal experience in their chosen field of expertise. The methodologies used to determine informant consensus (Trotter and Logan 1986, Romney et al. 1986, Handwerker 1998) are of limited use in an historical evaluation. Yet there appeared to be a level of consistency between the works of Mooney and Olbrechts, and, despite some overlap in the informant base, many of Mooney's informants had died prior to Olbrechts visit. Olbrechts made a conscious effort to maintain his independence by including different informants from those used by Mooney (n.d. Ms. 4600). It is not until the work of Banks that we see the simplification of the system, mostly through the loss at the level of folk species and varietals. However, at the level of the folk genus, there appears to be a high level of consistency with the findings of Mooney and Olbrechts. It would appear that the folk genus is not only the first aspect to develop in an ethnobiological system (Berlin 1972), but also the most persistent aspect through the dissipation of that system.

Another problem is that the exact identification of the biological species under consideration is often unclear. In many instances throughout the text, I have questioned

the accuracy of botanical name associated with a Cherokee name. But much of this can be remedied with an intimate knowledge of the regions' flora and careful examination of the meaning of the Cherokee name. For instance, Olbrechts identified *tsâliyústĩ gígagéĩ* ('like tobacco, red') as *Lobelia siphilitica*, a blue flowered species. Most members of the intermediate category *tsâliyústĩ* were in the botanical genus *Lobelia*; however, of the species common to the Southern Appalachian region, only *Lobelia cardinalis* has red flowers. This obvious misidentification was rectified by comparison with Mooney's notes, but others that were not as clear have been cited as a questionable throughout this text. Also, some of the botanical species correlated with a Cherokee name are not indigenous to the Southern Appalachian region. In those cases, I have proposed similar species as acceptable alternatives for obvious misidentifications.

But in spite of the inherent difficulties, the methodology used by Mooney and the contributions of subsequent researchers has produced a very intricate ethnobotanical classification system. These findings add support to the premise that folk biological classification systems are a universal feature of human cognition (Berlin et al. 1973, Berlin 1992). Conklin (1954) is generally credited with developing one of the first ethnobotanical taxonomies (D'Andrade 1995: 92), but Mooney began his observations on the Cherokee system more than 60 years before Conklin's research. It is clear from what is known about Mooney that he was not looking for universals at the time of his research.

The prevailing framework for anthropological study at the Bureau of Ethnology during Mooney's employment as an ethnographer was the evolutionary theory of social development as described by Lewis Henry Morgan. This theory was embraced and



promoted the Bureau's director, John Wesley Powell. Powell's commitment to the evolutionist stance would often cause him to devalue the importance of Mooney's research, referring to his findings about the Cherokee as "vestiges of an earlier system." Powell firmly believed that the study of "survivals" among American Indians using the comparative method of ethnology would help solve the "Indian problem" and provide scientific evidence that would help explain the evolution of civilized man and his culture (Moses, 1984: 30).

Mooney seemed to parrot the evolutionist theme in his early works and cited the inferiority of the Indian medical system and limited range of botanical knowledge among the medicine men (Mooney 1890b). But he also accepted that the Cherokee had an elaborate religious system and that his work refuted earlier assumptions that "the Indian had no religion except what they are pleased to call the meaningless mummeries of the medicine men" (Hinsley, 1981: 212). Hudson credits Mooney with being one of the first anthropologists to realize that Native Americans did have a system of beliefs that were as consistent and complex as many world religions (Hudson, 1976:14). Mooney did not accept the prevailing attitude that dominant cultures were somehow superior to suppressed cultures. In his eyes, loss of prestige and domination were products of history, not a sign of inferiority. Mooney did not accept that the premise of many evolutionists that decline of political influence and disrupted social patterns were a sign of "moral failure" (Hinsley, 1981: 207).

Mooney's assertion that religious beliefs determined the daily lives of Indians in the same way that it did for many whites was not well received by his superiors at the Bureau of Ethnology. He caused them great consternation when he compared the

Ghost Dance messianic movement to Christianity. They made every effort to mute his statements due to misgivings about the backlash that the Bureau might suffer in the politically sensitive climate in Washington. Their fears turned out to be unfounded, and Mooney received high praises for the thoroughness of his research, his sympathy towards his subjects, and his conclusions about the nature of the native religions (Moses, 1984: 91-93).

It was Mooney's activist approach toward Native American rights that led to his being reassigned to positions that did not include fieldwork. In 1888, he brought the plight of the Cherokee to the government's attention and proposed measures to alleviate the problems on the reservation (Judd, 1967: 49). Mooney's sympathy towards the Indians and his disgust at the methods of their forced enculturation put him in conflict with those who supported the cause of "Indian advancement." After Mooney secured the release of a Cherokee friend's son from the Carlisle Indian School in Pennsylvania, the school's founder, Henry Pratt, considered Mooney an impediment to the assimilationist cause. Pratt eventually developed his case against Mooney and in 1918 had him barred from further research on reservations in light of his support of the use of peyote in Native American religious ceremonies (Moses, 1984: 86).

Mooney's assertion to Professor G. Brown Goode that he was trying, "to get at the Cherokee basis of classification" (see Introduction) indicates that he believed in an inherent native system, unique to the Cherokee. At the time he proposed this, more than 60 years before Conklin, there were no other models available to influence Mooney's thinking on how the Cherokee grouped kinds of things in their natural world. What is clear from Mooney's record of the Cherokee ethnobotanical system is that the

principles and structure inherent in the system that he found extant among the late 19<sup>th</sup> century Cherokee are congruent with contemporary models of ethnobiological classification systems. And, while it appears that Mooney was searching for a unique system, congruency with contemporary models provides evidence for the contention that such systems are universal features of human cognition.

■

## Chapter 3

### *Tlukûĩ* – Tree

The range of species diversity of the eastern woodlands culminates in the Southern Appalachian Mountains. This diversity is due in part to a favorable climate and abundant rainfall in association with diverse soil types, variations in topography, and a wide range of microclimates (Randolph et al. 1999: 72). The resources associated with these forests were an essential component for survival in a land of limited agricultural potential. So it should come as no surprise that trees would play a significant role in the lives of the Eastern Cherokee. Trees would supply the Cherokee with food for humans, livestock, and game animals as well as providing building materials, fuel, and medicine. However, it was during Mooney's tenure as a researcher (1887-1917) that the Cherokee relationship with the forests went through its greatest transformation. Logging interests began buying large tracts of land in the region in the 1890s and the Cherokee began selling logging rights on the reservation starting around 1900 (Finger 1984: 11). The employment opportunities provided by the timber companies were the primary sources of wage labor available to the Cherokee in the first decades of the 20<sup>th</sup> century. But by 1929, the majority of the large mills had shut down and the corporate logging interests had pulled out of the region (Finger 1984: 54).

This change in the physical environment did not appear to translate into an immediate loss of ethnobotanical knowledge. The Cherokee were a people of the

eastern woodlands, and their reliance on the forest resources was deeply embedded in their culture. Mooney may have worked among the Cherokee before the removal of the forests, but Olbrechts recorded considerably more medicinal uses for tree species than Mooney. This observation will be discussed below in my Re-evaluation of the Cherokee Ethnomedical System (Chapter 11). Witthoft (n.d.) also presented evidence of the value of trees to the material culture of the Cherokee. All aspects of Cherokee life were influenced by the forests around them and, as will be seen below, trees played a prominent role in the Cherokee medical pharmacopoeia.

The Cherokee relationship to the tree life forms appears to be represented in their classification system. As mentioned above, the relatively high percentage of opaque name associated with the taxa included in the tree life form category indicates the high degree of cultural salience attributed to the trees. There were 49 folk genera represented in the Cherokee data, 33 of which were labeled with opaque names. The 49 folk genera represent 66 botanical tree species (see Table 3.3). However, it is from the relationship of monotypic to polytypic genera that we can speculate on the history of cultural salience within the tree life form.

When considering the relationship of the botanical genera with the highest number of representative species included in the Cherokee system, patterns become apparent. Common species, such as the hickories and maples, are predominantly placed in polytypic folk genera (see Table 3.1). The hickories are all considered to be kinds of *wanéí* and one appears to be most prototypical due to the lack of a specific qualifier. But the poor association of the Cherokee names with botanical species limits our understanding of hickory classification. The two large species of maples are

recognized as types of *tsûnwagi*, while *Acer pensylvanica*, a typically shrubby species (see Chapter 4), appears to be a taxonomic outlier. However, there is little linguistic evidence that the oaks, which comprise the largest group of botanical species of the trees labeled by the Cherokee, are recognized as being closely related (see Table 3.2).

Table 3.1: Botanical and Cherokee Names for Maples and Hickories

Botanical Name	Cherokee Name	Cherokee Gloss
Maples <i>Acer pensylvanicum</i> <i>Acer rubum</i> <i>Acer saccharum</i>	<i>ă'ta-tsũ'siwă ditanélawáskĩ</i> <i>tsûnwagi gigage adsilû'skĩ</i> <i>tsûnwagi unega adsilû'skĩ</i>	'hollow wood, it peels them off' 'maple with red flowers' 'maple with white flowers'
Hickories (see text) <i>Carya spp.</i> <i>Carya spp.</i> <i>Carya spp.</i> <i>Carya spp.</i>	<i>wanéĩ</i> <i>wanéĩ sǎ'hĩ tsúntana</i> <i>wanéĩ sǎ'hĩ tsundí-ga</i> <i>wanéĩ tsutisti</i>	opaque 'large nuts' 'small nuts' no gloss (see text)

Table 3.2. Botanical and Cherokee Names for Oaks

Botanical Name	Cherokee Name	Cherokee Gloss
<i>Quercus alba</i> <i>Quercus bicolor</i> <i>Quercus coccinea</i> <i>Quercus falcata</i> <i>Quercus imbricaria</i> <i>Quercus nigra</i> <i>Quercus prinus</i> <i>Quercus rubra</i> <i>Quercus stellata</i> <i>Quercus velutina</i>	<i>tǎ'lû'</i> <i>gasotegwalega</i> <i>dalûtsi</i> <i>watsiyũ'</i> <i>gule tsunstiga</i> <i>gulěnégwa</i> <i>tsisátugwûléga</i> <i>tsugwû'nstǎtsǎ'li</i> <i>tsuskǎ'</i> <i>dagû'nageí</i>	opaque 'small abdomen' opaque opaque 'small acorns' 'large acorns' opaque? 'the leaves taper' 'heads' 'they are black'

Only *Quercus nigra* and *Q. prinus*, being named for the size of their acorns, demonstrate a discernable linguistic relationship, but this does not appear to represent

a polytypic genera. It would appear from the linguistic evidence that the oaks are not affiliated in the Cherokee system in the same manner as the maples and hickories. However, the high number of opaque species and monotypic genera in such an obviously related botanical genus may be representative of the high degree of cultural salience formerly attributed to the oaks.

The degree of reliance on acorns for sustenance in the Archaic and Woodland periods in the Southern Appalachians is not clearly understood and often controversial. Delcourt et al. (1986) found the highest percentage of acorns in nut remains in the Little Tennessee River Valley during the Early Archaic period (36%), but the percent diminished to less than 10% for the remainder of the Archaic and Woodland periods. But their pollen analysis shows a strong dominance for oak trees in the area throughout both periods. Yarnell and Black (1985) adjusted the shell-to-food ratio from archaeological evidence, and claim that acorns comprised up to 75% of the nut food in the region until the switch to a reliance on corn in the Mississippian Period. According to this model, hickory nuts made up the bulk of the archaeological remains from the region, but they only comprised around 20% of the total diet.

Acorns would have been a more plentiful and reliable food source for Southeastern Natives. The evidence is strong for the use of fire to modify the Southeastern environment, which would result in the predominance of oaks in the region. Oak trees are fire tolerant and increase in areas of repeated burning (Delcourt and Delcourt 1997, 1998). Hickories, on the other hand, are relatively fire intolerant and would not have thrived in such conditions. This indicates that, after several generations of seasonal burning, acorns would be the dominant nut in terms of quantity.

Acorns would also be a more reliable food product. White oaks and red oaks are divided into two subgenera, the *Leptobalanus* (white) and *Erythrobalanus* (red). The acorns from the members of the *Leptobalanus* subgenera mature from flowers in a single season, while those in the *Erythrobalanus* mature the next year after flowering (Sork and Bramble 1993). As the quantity of fruit yield is environmentally determined (Sharp and Sprague 1967), a bad fruiting season would not affect both subgenera of the oaks. If the white oaks were decimated by a late frost, the red oaks would still produce a crop based on the previous seasonal conditions. The difference in the yearly cycles of the two oak subgenera would decrease the likelihood of a poor crop, suggesting a more reliable resource. The dependability of oaks as a food source and their pervasiveness in the Southern Appalachian region appears to have been reflected in the Cherokee ethnobotanical classification system.

Other relationships between botanical genera also appear to be reflected in the Cherokee tree life forms. The genus *Prunus* is represented by four species, two cherries (*Prunus serotina* and *P. pensylvanica*), a plum (*P. americana*), and the peach (*P. persica*). The two cherries were grouped together in the folk genus *ta'ya* while the larger plum and peaches were known as *kwǎ'na*. The names reflect a finer distinction in the Cherokee perception of the members of the genus *Prunus* than that indicated by their botanical classification. However, trees with apple-like fruit were included in the folk genus *sũnktǎ'*, which included representative taxa from the botanical genera *Malus* and *Crataegus*. The Cherokee perception of the folk genus *sũnktǎ'* appears to be more inclusive than is indicated by botanical classification.



Some relationships have no apparent explanation. Why are the pines generally referred to as *natsí'*, yet *Pinus strobus* is singled out as *tátskí'*? Why do the Cherokee names for *Juglans nigra* (*sétí*) and *J. cinera* (*kahí*), two very similar species, not reflect a perceptual relationship? Questions such as these are difficult to address in an historical work such as this and the answers may be lost with the original meanings of the names.

Table 3.3. Tree Index: Botanical Species and Folk Genera

Botanical Species	Folk Genus	Botanical Species	Folk Genus
Abies fraseri	<i>unagéí</i>	Nyssa sylvatica	<i>uníkwă</i>
Acer rubrum	<i>tsûnwagi</i>	Oxydendron arboreum	<i>nûdâgweja</i>
Acer saccharum	<i>tsûnwagi</i>	Picea rubens	<i>unagéí</i>
Aesculus octandra	<i>úniskwûtû'</i>	Pinus echinata	<i>natsí'</i>
Amelanchier arborea	<i>udâ'láńă'</i>	Pinus pungens	<i>natsí'</i>
Asimina triloba	<i>disûnki</i>	Pinus rigida	<i>natsí'</i>
Betula lenta	<i>atsû'kí</i>	Pinus strobus	<i>tátskí'</i>
Betula lutea	<i>atsû'kí</i>	Pinus virginiana	<i>natsí'</i>
Betula nigra	<i>gûnetiski</i>	Platanus occidentalis	<i>ku'wû</i>
Carpinus caroliniana	<i>tsutanû'</i>	Prunus americana	<i>kwă'na</i>
Carya glabra	<i>wanéí</i>	Prunus pensylvanica	<i>ta'ya</i>
Carya ovata	<i>wanéí</i>	Prunus persica	<i>kwă'na</i>
Carya tomentosa	<i>wanéí</i>	Prunus serotina	<i>ta'ya</i>
Castanea dentata	<i>tíí'</i>	Quercus alba	<i>tă'lû'</i>
Cercis canadensis	<i>tsunyû'stí</i>	Quercus bicolor	<i>gasotegwalega</i>
Cornus florida	<i>kăńûsí'tă</i>	Quercus coccinea	<i>dalûtsi</i>
Crataegus coccinea	<i>sûnktă'</i>	Quercus falcata	<i>watsiyû'</i>
Diospyros virginiana	<i>salí'</i>	Quercus imbricaria	<i>gule tsunstiga</i>
Fagus americana	<i>kutlû'</i>	Quercus nigra	<i>gulênégwa</i>
Fraxinus americana	<i>tsukânan</i>	Quercus prinus	<i>tsisátugwûléga</i>
Gleditsia triacanthos	<i>kûlsétsí</i>	Quercus rubra	<i>tsugwû'nstătsă'íí</i>
Halesia carolina	<i>tsuskû'találti</i>	Quercus stellata	<i>tsuskă'</i>
Ilex opaca	<i>ústăstí</i>	Quercus velutina	<i>dagû'nageí</i>
Juglans cinera	<i>kahí</i>	Robinia pseudoacacia	<i>kûlăkwégti</i>
Juglans nigra	<i>sétí</i>	Salix alba	<i>díligalí'skí</i>
Juniperis virginiana	<i>atsíní'</i>	Salix babylonica	<i>gágílanahíta</i>
Liquidambar styraciflua	<i>tsilalû'</i>	Salix humulis	<i>díligalí'skí</i>
Liriodendron tulipifera	<i>tsiyu</i>	Sassafras albidum	<i>kûnstû'tsí</i>
Magnolia acuminata	<i>tsuhyûnsti (ăťă)</i>	Tilia americana	<i>idehû'</i>
Magnolia fraseri	<i>tsugwalâga tsegwa</i>	Tsuga canadensis	<i>nona</i>
Malus coronaria	<i>sûnktă'</i>	Tsuga caroliniana	<i>nona</i>
Malus pumila	<i>sûnktă'</i>	Ulmus americana	<i>dawătsíliyústi</i>
Morus rubra	<i>kuwû'</i>	Ulmus fulva	<i>dăwătsíla</i>

## Cherokee Trees

*atsĩnĩ'or atsĩnũ'* – cedar – *Juniperis virginiana* L. – red cedar

Mooney reported that the red cedar was, “held sacred above all other trees” by eastern tribes due to its evergreen habit, pleasant smell, the color of its wood, and its resistance to decay (Mooney 1900: 421). It was used ceremonially as an incense and for diseases associated with dreams of ghosts (see *aniskina göwani'tsö istöi*). By the time Olbrechts was among the Cherokee, it was remembered that it was once used medicinally, but the specifics of that use were forgotten. He did find that the branches were used in a magic rite (not described) and the branches were used to make fish traps.

*atsũ'kĩ gũnage* – ‘black smelling wood’, *atisöyi uyalemö* – ‘smelling wood with rough bark’ – *Betula lenta* L. – black birch, sweet birch, cherry birch, *Betula lutea* Michaux – yellow birch

The second name for this species comes from Olbrechts, but he only glossed *uyalemö* as ‘rough bark’ and provided no gloss for *atisöyi*. However, Mooney recorded *Betula* as *atsũ'kĩ*, stemming from *ã'tã* or ‘wood’ and *sũ'kĩ* or ‘smelling’, and *atisöyi* was probably Olbrechts’ version of *atsũ'kĩ*. Mooney identified *atsũ'kĩ gũnage* as *Betula lutea*, but it is highly unlikely that the yellow birch, with a distinctly golden cast to the bark, would be the ‘black smelling wood’ and I am going to assume that this is actually *B. lenta*, a species with very dark bark. However, *B. lutea* does have what is referred to as a peely bark, and the rough appearance would provide evidence that this is the species

to which Olbrechts was referring. Both are found in the mountains near the Cherokee reservation, but the yellow birch is found at the higher elevations.

When a novice was a candidate to become a medicine man, he was required to take great pains to avoid any food prepared by a menstruating woman or touch an object she had touched. If this did occur, he would forget all that he had learned and be spoiled as a candidate. As a prophylactic to these nefarious influences, the novitiate would chew the inner bark of *B. lenta* and rub the juice over his heart area, or the “place where the soul is” (Mooney and Olbrechts 1932: 102).

Olbrechts recorded *B. lutea* as a remedy for *uyo’usö tsunineliçq* (‘disgusted by the sight of a corpse’), but, as mentioned above, it is not clear which species was actually used or if they were used interchangeably. An infusion of the bark of *B. lenta* was also used alone in a ritual monthly emesis. It is not an emetic, but its pleasant taste probably eased the process and settled the stomach. Olbrechts quoted his informant as saying they would take in “as much as they can hold.” This supposition on my part of the role of *B. lenta* in the emetic process is supported by Banks, who reported that it was used to settle the stomach (1953: 29).

*atsǔ’nki unega* – ‘white smelling wood’ – *Tsuga canadensis* (L.) Carr – eastern hemlock

The phonetic spelling of *atsǔ’nki* is slightly different than that of the previous species, but this was from the plant labels and Mooney might not have had the opportunity to refine his notes. The name is appropriate, though, as *T. canadensis* is quite fragrant and the wood is very light in color. Neither Mooney or Olbrechts attributed any medicinal properties to this species, but Olbrechts did record several uses for *T.*

*caroliniana* (see *nona* below). The two species may be interchangeable, as their distribution is sympatric in the mountains of North Carolina. Banks found *T. canadensis* used by the Cherokee and made no mention of *T. caroliniana*, other than to attribute a citation to Olbrechts which he mistakenly placed under the heading of *T. canadensis*. In his own research he found that the tips of the branches were made into a tea for kidney troubles and that the pounded bark could be used as a poultice for itchy armpits (1953: 7).

*dagû'nageí* – 'they are black' or 'blackwood' – *Quercus velutina* Lam. – black oak

The Cherokee name here is evident for the same reason as the common English name; the bark of black oak is the darkest of the oaks. In Mooney's linguistic analysis for 'blackwood', he found that *dagû'nageí* stemmed from *ăťă'* or 'wood' and *û'nageí* or 'black'. His informant indicated that *da* or *d* at the beginning of the name makes it specific as "the black." This was one of several species combined for the treatment of wounds in cases such as *adayuni't'i'lö* ('pierced by wood'), *a'yelsti tsundat'istanöçi* ('pierced by a knife'), and *yigetsiyolö* ('if they have been shot by a bullet or arrow'). A decoction of the bark was also a remedy for a sore throat, an aching tooth, diarrhea, and to improve appetite. It was combined with *Polygonum sagittatum* and two unidentified plants for *duletsi*.

*dalûtsi* – scarlet oak – *Quercus coccinea* Muenchh.

Mooney included this in a list of Cherokee plants (Ms. 2235). There was no gloss or other information about this species. I am assuming it is an opaque, proper name.

*dâwātsíla* – ‘tree with saliva’ – *Ulmus rubra* Muhl. (*U. fulva*) – slippery elm

The Cherokee gloss is very fitting for a species known for the mucilaginous nature of its inner bark. The only uses from Olbrechts’ notes was a reference to *Ulmus rubra* as part of a formula for a condition known as *dawzni e’i unittöyö*; however, no gloss or description of this condition was included (see appendix). Other uses were included in *The Swimmer Manuscript*, though. *Dâwātsíla* was made into a decoction with *Impatiens capensis*, the roots of *Veronica officinalis*, and the cones of *Pinus pungens* to prepare a woman to give birth. The slippery elm was given to lubricate the passage for the child and ensure an easy birth (Mooney and Olbrechts 1932: 119). It was also used as part of the formula for *amayí didatsoststi dinineldö* (‘he is sick by the water’). Banks (1953: 34) also recorded that the steeped bark was used as a wash to heal burns.

*dawātsíliyústi* – ‘like *dâwātsíla*’ – *Ulmus americana* L. – American elm

While it may surprise those familiar with the elms that *Ulmus rubra*, the smaller species, is the more prototypical species here and *Ulmus americana* is designated as the ‘like’ or subordinate species, this is most likely due to the frequency of occurrence in the mountains. The range of *Ulmus americana* in the North Carolina mountains is restricted to the area around Swain County (Radford et al. 1968: 387) and it would appear that these were introduced to the region. No medicinal uses were recorded for this species.

*díligalí'skí* – 'it peels to the bark' – *Salix spp.* - willow

Mooney recorded this gloss for the willows, which stems from *tsigáliă'*, or 'I peel it'. Olbrechts glossed *díligalí'skí* as 'they strip themselves'. Both appear to be due to the habit of the bark of the willows, which peels easily from the stem. Mooney and Olbrechts noted two species used by the Cherokee, *Salix humilis* Marshall and *Salix alba* L., but difficulties with field identification of the species of the genus *Salix* may have led to misidentification. *Salix humilis* is the only common species of *Salix* without serrations on the leaf margin found in the North Carolina mountains, and this is probably one of the species used by the Cherokee. The labels identified by the Smithsonian botanists support this speculation (Mooney Ms. 2591). But *Salix alba*, a species with a serrated margins and densely hairy undersides to the leaves, is not common in the mountains and was an introduced species. The most common of the *Salix* species that fits the above description and is found in the region is *Salix sericea* Marshall, and I would presume that this is the species most frequently used by the Cherokee (Radford et al. 1968: 387). But without a voucher specimen, this can not be verified. I will use *Salix alba* in the remainder of this description as it was the species discussed by Mooney and Olbrechts, but the reader should maintain a degree of skepticism concerning the exact species.

The medical applications and ethnobotanical classification were deeply intertwined in the case of *díligalí'skí*. At the level of the folk generic, any *díligalí'skí* could be used with *Prunus serotina* for a severe cold that resulted in laryngitis or for *andlköça yunalstuneça* ('if their urine is stopped'). At the level of folk species, the two biological species were associated with several synonyms. *Salix alba* was known as

*díligalí'skí egwa* or *díligalí'skí utana*, both glossing as 'it peels to the bark, large', *díligalí'skí utana amayulteí* or 'it peels to the bark, large, growing by the water', and *díligalí'skí ustiga geyöeçi* or 'it peels to the bark, small, growing by the river'. The last gloss is anomalous due to it being described as a 'small' variety, which would support the argument that it was actually *S. sericea*.

The medicinal uses for *S. alba* are as varied as the names given to it. It was added to *Morus rubra*, *Platanus occidentalis*, and *Lobelia spicata* for cases of *unawasti egwa* ('big chill'). It was one of the alternative ingredients in the formula for *unak'ewagöi* ('if they lost their voice'). It was included in one of many formulas for *e'isti andik'ö'öi* (no gloss), a condition typified by painful urination, along with *Vitis lambrusca*, *Alnus serrulata*, and *Rubus occidentalis*. As with many urinary conditions, the plants should all have their roots growing in water. It was also combined with *S. humilis* for the condition *gotisgi tsunitsöyöi* ('when their stomach is swollen'), a condition that occurs when the food in the stomach was changed by a witch or a conjurer. *Salix alba* was combined with an unidentified plant known as *inadö tsunigatogi*, or 'snake odor', for *uyo'usö tsuninelicq* ('disgusted by the sight of a corpse'). And it was used alone for *aniskina göwani'tsö istöi* ('when they have been made sick by dead persons').

*Salix humilis* was known as *díligalí'skí ustiga gatlatöeçi*, or 'the small *díligalí'skí* growing on the hillside'. One of the common names for this species, the tall prairie willow (Petrides 1986: 250), suggests that it is less dependent on a constant water source and would fare quite nicely on a well-drained Southern Appalachian hillside. Olbrechts recorded it as *digalulegi*, but did not provide a gloss for this name. Other than the use mentioned above in combination with *S. alba*, *S. humilis* was used by itself as a

remedy for a condition known as ‘bones coming out’, which was not clarified but may be a severe case of *didölesgi* (‘thecrippler’), a type of rheumatism.

*disûnki* – pawpaw – *Asimina triloba* (L.) Dunal

This also comes from a list of Cherokee names matched with botanical species (Ms. 1894). Witthoft (n.d.: 35) verified that this is an opaque, proper name. He also said that it was quite rare on the Cherokee reservation and insignificant as a food product. No medicinal uses for pawpaw were attributed to the Cherokee.

*gágīlanahíta* – ‘hanging down long’ – *Salix babylonica* L. – weeping willow

The name *gágīlanahíta* (‘hanging down long’) is the same as the word used to describe someone with long hair; however, it is applied only to soft things. No medicinal application was attributed to this introduced species.

*gasotegwalega* – ‘small abdomen’ – *Quercus bicolor* Willd. – swamp white oak

This identification is highly unlikely, as the distribution of *Q. bicolor* is limited to the Piedmont region of North Carolina. As the oaks are known to hybridize, it is possible that the specimen he found was a hybrid between *Q. prinus* and another species of white oak (Radford et al 1968: 374). Olbrechts also gave *tsisotegwalega* as a synonym for *gasotegwalega*, but gave no explanation for the etymology of either name. He recorded that it was used in the formula for *unöłstay’ti tsuniyotc’eça* (‘when their appetite gets spoiled’).



*gulĕnĕgwa* - 'large acorns' – *Quercus nigra* L. (*Q. aquatica*) – water oak

The name stems from *gŭlĕ* or 'acorn' and *ĕgwa* or 'large', which brings its identification into question, as the acorns for *Q. nigra* are fairly small and the high mountain areas are outside of its range. The original identification may have been a hybrid species that was misidentified as *Q. nigra* or this could be black oak, *Q. velutina*, that was referred to as "nigra", meaning black. No further information was given for this species.

*gule tsunstiga* – 'small acorns' – *Quercus imbricaria* Michaux – shingle oak

The acorns for *Q. imbricaria* are between 1 and 1 ½ cm long (Radford et al. 1968: 382)), hence the basis for the Cherokee name. Mooney called this species *tsugwŭ'nstătsă'li* or 'leaves tapering', but he also identified *Q. rubra* by the same name, so this could have been a misidentification. The leaves of *Q. imbricaria* do not taper. The only recorded medicinal use was for the bark as an alternative for *Q. falcata* in the formula for the condition known as *unak'ewagŏi* ('if they lost their voice') (Mooney and Olbrechts 1932: 199).

*gŭnetiski* – river birch – *Betula nigra* L.

The range of *Betula nigra* is limited in the mountains of North Carolina (Radford et al. 1968: 368) and it seems unlikely that this is the species that was available to the Cherokee. However, both Mooney and Olbrechts recorded it as a Cherokee plant and both identified it as *gŭnetiski*. Banks also included it in his work, providing more evidence for its presence among and use by the Cherokee. *Gŭnetiski* appears to be an

opaque, proper name. This assumption is also supported by Banks' research (1953: 29).

Olbrechts found that *B. nigra* was used by itself or in the formula for *unödi tsandik'uça* ('they urinate all milk') (Mooney and Olbrechts 1932: 200). Banks added the use of the bark sap (inner bark?) as a tea to alleviate loose bowels (1953: 29).

*idehû'* (Mooney) or *itea* (Olbrechts) – basswood – *Tilia heterophylla* Vent. or *Tilia americana* L.

I included both pronunciations of the Cherokee name for this species because of the variation between Mooney's and Olbrechts' versions. *Tilia heterophylla* is the most common species of basswood in the North Carolina mountains, but *T. americana* was the species that both Mooney and Olbrechts identified as *idehû'*. While *T. americana* is rare in North Carolina, it is found in Swain County, the home of the largest portion of the Cherokee Reservation. The two species are very similar and Banks (1953: 87) suggested that the Cherokee do not distinguish between the two.

Olbrechts recorded two uses for *idehû'*. It was used for a type of diarrhea that was attributed to animals, known as *at'awini e'i* or 'the forest dwellers'. Women would drink a decoction of the bark as soon as they found out they were pregnant. This was done every month until they delivered the child because the bark is slippery, like that of slippery elm (see *dâwātsíla* above), and aids in the birthing process.

Banks attributes a use to the notes of Mooney, which he acquired from Witthoft, stating that the juice from chewed bark from a lightning struck tree was rubbed on a snakebite. I did not come across this reference in my searches. He also found that the

beaten bark was used as a poultice for boils and that the bark was a component in a decoction used for tuberculosis caused by conjuring (see *kutlû´* below) (1953: 86-87).

*kahĩ* – butternut – *Juglans cinera* L.

*Kahĩ* appears to be an opaque, proper name for butternut. The inner bark was used as a cathartic (Witthoft 1947), while an infusion of several barks, including *J. cinera*, *Prunus serotina*, *Alnus serrulata*, and *Diospyros virginiana*, was used to draw the pus out of an infected tooth (Banks 1953: 26). The edible nut was used in Cherokee cooking (Perry 1974: 42). Accounts from the early 19<sup>th</sup> century suggest that the oil of black walnuts was extracted in much the same way as that from hickory nuts (see *waněĩ* below), but the informant had never seen the operation performed (Payne n.d.: 157). Contemporary experiments with the extraction of oil from walnuts and butternuts have shown that bits of the husks are trapped in the rough outer shell of the nut and that pounding and boiling creates an inedible, bitter product (Talalay et al. 1984: 354). This would suggest that the Cherokee may have used a more labor intensive means to extract walnut oil and that this was not the preferred nut for oil extraction.

*kănúsí'tă* – flowering dogwood – *Cornus florida* L.

*Kănúsí'tă* appears to be an opaque, proper name. This is one of the few tree species highlighted by Mooney. In one of his random notes, he states that this is a “noted medicine” and that the inner bark was boiled for dysentery and a decoction of dogwood and black oak barks (*Quercus velutina*) was drunk for sore throats. The bark of dogwood was harvested from the east side of the tree.

Olbrechts added a wide range of applications for *C. florida*. It was part of the formula for the form of cancer known as *ada'yeski* ('eating itself'), *unawasti egwa* ('big chill'), *unak'ewagöi* ('if they lost their voice'), and *unegö tsandiköça* ('if they water out white'). He included it in a formula for severe diarrhea (Mooney and Olbrechts 1932: 283) and found it was used alone for chicken pox or any condition that produced boils on the skin. The chewed bark was spat on spider bites and a decoction of the bark was used as a remedy for poison ivy. For poison ivy part of the decoction is drunk and part sprinkled on the rash, but the sprinkling must occur after a portion has been drunk or the rash will be driven into the body.

Banks also found that dogwood was used for dermatological conditions (1953: 96). A tea of the bark was taken alone or decocted with *Prunus serotina* and *Lindera benzoin* as a remedy for measles. The decoction was added to corn whiskey to break out the rash. The bark of an old tree was made into a decoction to bathe one suffering from chicken pox, clearing up the outbreak that same day. The bark was chewed for headaches and the flower petals were boiled and drunk for colds.

*kûlākwégti* – 'to use as a bow' – *Robinia pseudoacacia* L. – black locust

This species was apparently named for its use in the making of a hunting bow. King (1976) said that *Robinia pseudoacacia* and *Gleditsia triacanthos* were the preferred woods for Cherokee bows, but that *Platanus occidentalis* and *Carya spp.* were also acceptable. Witthoft (1953: 149) stated unequivocally that *R. pseudoacacia* and *G. triacanthos* were the only woods used in traditional Cherokee bows. Medicinally, it was

used for *uyosöçi e'isti tsanançtatia* ('when they suffer painful remembrances of the dead').

*kûlsétsĩ* – honey locust – *Gleditsia triacanthos* L.

Both Mooney and Olbrechts recorded *kûlsétsĩ* as an opaque, proper name for honey locust. Olbrechts recorded several medicinal uses for *G. triacanthos*. The sweet pods could be used in place of honey to sweeten unpalatable medicines, such as the harsh medicines used for worms (Mooney and Olbrechts 1932: 249). It was a component in the formula for *unitseno'ise'oi* ('when a person has stomach trouble') (Mooney and Olbrechts 1932: 239) and for *uyosöçi e'isti tsanançtatia* ('when they suffer painful remembrances of the dead'). *Kûlsétsĩ* was used with others to make an emetic used to throw off spoiled saliva (see *dunikstisgöi* in the appendix for a discussion on spoiled saliva). It was one of the plants used to prepare ball players for the match, the wood of honey locust being burnt with that of a lightening struck tree that was not killed and used to paint designs on the contestant. It was believed that such a treatment would make the ball player's flesh, "as hard and firm to the touch as the wood of honey locust (Mooney 1890a)." Banks (1953: 71) was told that a tea from the bark of *G. triacanthos* or *Crataegus spp.* would help ball players repel tacklers because no one would want to run into the sharp spines of either. He also reported that a tea of the pods was used for measles and that the bark of honey locust was combined with the leaves of *Tovaria virginiana* and the hot tea given to patients with whooping cough (1953: 72).

The pods were also once prepared as a beverage. The dried pods were crushed and placed in a vessel with water. This was set in a warm spot until the sweet flavor

was imparted to the drink. Hotter water was later added to extract all remnants of the sweet pulp (Payne n.d.: 157-158).

*kûnstû'tsĩ* – sassafras – *Sassafras albidum* (Nutt.) Nees.

*Kûnstû'tsĩ* appears to be an opaque, proper name for *S. albidum*. Olbrechts recorded several medicinal applications for sassafras, but none were included in the published materials and the material on preparation and application was scanty. The leaves and bark were chewed and the juice spat on spider bites. It was brewed for all types of diarrhea and as a remedy for scrofula. It was combined with *Pinus pungens* and *Bovista pila* for the purple form of the cancer known as *ada'yeski*. He also said it was used for a condition known as “when they are shaking with fever”, possibly a form of *unawasti egwa* ('big chill').

Mooney, in one of his few references to the medicinal properties of trees, recorded the use of the barks sassafras, *Carpinus caroliniana*, and *Alnus serrulata* with the leaf of *Hexastylis arifolia* for cancer and old sores.

Banks also found *S. albidum* used for diarrhea, but he added several more applications to Olbrechts' findings. The root tea was drunk as a blood builder, for headaches and colds, as a poultice for sprains and bruises, and as a favored beverage. The pith of the young twigs was made into a cold eyewash for any type of sore eyes, including conditions such as sties or pink eye (1953: 53). Along with its use as a beverage, Perry (1974: 45) recorded that the roots could be chewed to dispel the personal odor that accompanies eating ramps. She was told that there are two varieties of sassafras roots, but that the red roots were superior to the white roots.

*kutlû´* or *kusû´* - beech – *Fagus grandifolia* Ehrh. (*F. americana*)

This was apparently an opaque, proper name for beech. Neither Mooney or Olbrechts recorded a medicinal use for beech, but Banks (1953: 32) acquired two formulas. An infusion of the barks of *Fagus grandifolia*, *Castanea dentata*, *Liriodendron tulipifera*, and unidentified species of *Quercus* and *Tilia* was used for a type of tuberculosis that was due to conjuring. Another formula was for “bad disease”, a condition that typically involved a high fever. It consisted of a combination of *F. grandifolia*, *P. occidentalis*, *Vitis aestivalis*, *Smilax glauca*, *Euonymus americanus*, *Liquidambar styraciflua*, and *Nyssa sylvatica*, the barks of which were made into an infusion and drunk by the patient.

*kuwû´* - mulberry – *Morus rubra* L.

*Kuwû´* appears to be an opaque, proper name for *M. rubra*. Olbrechts recorded two uses for it; combined with a species of *Salix* it was used for *unawasti egwa* (‘big chill’) and with *Panax quinquefolium* it was used for chest pains. The berry was one of the favorite ingredients in Cherokee corn bread (Witthoft n.d.: 50).

*ku´wû une´ga* or *kuwiyu´stĩ* – ‘white mulberry’ or ‘like mulberry’ – *Platanus occidentalis* L. – sycamore

The designation *kuwiyu´stĩ* is not a definite indication that the Cherokee considered this a folk species of *kuwû´* as the suffix *–iyusĩ* (‘like’) can represent perceived similarities that are not necessarily classificatory relationships, such as the leaves of plants that resemble ferns being referred to as *igûliyusti* (‘fern-like’). However,

Mooney recorded both *kuwiyu'stĩ* and *ku'wû une'ga* for *P. occidentalis* and Olbrechts recorded an unidentified botanical species as *ku'wû une'ga*. However, the name *ku'wû une'ga* would indicate that this is a white species of *kuwû'* and that the Cherokee perceived a classificatory relationship between the two trees. As the bark, leaves, and buds of the two species are quite different from each other, it appears that the relationship is due to the similarity of the fruits. Both have a pendulous aggregate fruit and, while that of *P. occidentalis* is dry and inedible, the visual similarities would indicate that it was considered a species of *Morus rubra*. Witthoft (n.d.: 148) claims that both names are due to the resemblance of the whole tree to *Morus rubra*, but the differences mentioned above cast doubt on this assertion.

Another possible explanation is that the introduced *Morus alba* L., or white mulberry, was also known to the Cherokee and this is the species that was known as *ku'wû une'ga*. Radford et al. indicate that it is now a widely scattered species, but it is not on their distribution maps in the mountains of North Carolina (1968: 390). Hamel and Chiltoskey (1975: 45) also mention it as a medicinal, but it is included in the same reference as *Morus rubra* and no distinction is made between the two. Without voucher specimens, it is impossible to resolve the identity of *ku'wû une'ga*. For the purposes of this work, the medicinal uses attributed to *ku'wû une'ga* will be included with others for *P. occidentalis*.

*Platanus occidentalis* appears in several formulas in *The Swimmer Manuscript*, where it was attributed to a wide range of conditions such as *ut'igadö* ('to drive out afterbirth'), *unödi tsandik'uça* ('they urinate all milk'), *at'awini e'i* ('the forest dwellers'), *andkt'egö* ('they are under restriction'), and *uyalot'isga* ('if there is swelling') (Mooney



and Olbrechts 1932: 126, 200, 244, 246). Olbrechts also included several applications for *P. occidentalis* in his notes, used alone or in a formula, for Cherokee ethnomedical conditions including *yigōwaninilööski* ('when they have suint'), *dalânige tsandik'ōça* ('yellow urine'), *ada'yeski* ('eating itself'), *dawzni e'i unitlōyö* (no gloss), *gigö analdziskwsköi* ('when they spit blood'), and *unawasti egwa* ('big chill'). For the discharge of yellow urine, a special type of root was required and it was designated by the name *kuwiyu'stī amayi tsunastunöi* or 'the sycamore with its roots in the water'.

Witthoft (n.d.: 148) found that the inner bark was steeped in water and the infusion applied to sores on the skin that resembled the scaly, variegated bark of the sycamore. He also found that the roots growing in water were beaten and steeped, the resulting infusion used to wash the genital lesions due to venereal disease.

*kwă'na* – peach – *Prunus persica* (L.) Batsh

Mooney speculated that the introduced peach superceded the wild plum (*Prunus americana*) as the folk generic *kwă'na*, due to its rapid assimilation and status as a relished food crop for the Cherokee after its introduction by the Spanish. Olbrechts reported that it was used medicinally with *Aristolochia serpentaria* for scrofula and alone for a type of heartburn attributed to "the insects living in the water". For the latter condition, all juicy fruits and vegetables were avoided during treatment. Banks (1953: 63) confirmed this use, finding that a tea made of the bark in cold water was used for a "sick stomach". He also found that cold bark tea was used to ease the pain of piles and to stop vomiting, while a hot infusion was used as a cough medicine. For the bark to work correctly as an anti-emetic, the knife used to harvest the bark must slice upwards,

while for bowel conditions it must slice downwards, both representing the direction of movement of the condition.

The Cherokee relished peaches as a food crop and peach orchards were noted by several 18<sup>th</sup> century observers (Goodwin 1977: 127). To preserve the peaches, the pit and skin were removed, the flesh pounded in a mortar, and the resulting pulp was made into cakes and dried in the sun (Payne n.d.: 156).

*kwă'na unsdíga* – ‘little peach’ – *Prunus americana* Marsh. – wild plum

*Unsdíga* or *usdí* is the irregular form of *tsundíga*, the regular plural form for ‘small’. Only the plural form was used when referring to *Prunus americana*. Mooney speculated that this was the original *kwă'na*, being renamed as the small variety after the introduction of the peach by the Spanish (see *kwă'na*). No medicinal uses were recorded for this species, which was probably an oversight as all other species of *Prunus* have multiple applications (see *ta'ya gadusie'i* below).

*natsí'* - pine or *natsuya* – ‘true pine’ – *Pinus echinata* Miller – short-leaf pine; *Pinus pungens* Lambert – Table Mountain pine; *Pinus virginiana* Miller – Virginia pine; *Pinus rigida* Miller – pitch pine

There are classification problems with the pines stemming from either misidentification by the researchers or a lack of differentiation among the Cherokee. *Natsí'* appears to be an opaque, proper name and is applied as the generic term for all pines (excluding *Pinus strobus*, see *tâtskí'* below). However, Mooney identified *P. echinata* as *natsuya* or the ‘true pine’, that pine demonstrating the most prototypical

qualities of the pines, while Olbrechts matched *natsuya* with *P. pungens*. Conspicuously absent from the notes of both Mooney and Olbrechts was *P. virginiana*, which was the most prominent medicinal pine in Banks' work. Complicating the matter even further was a note from one of the botanists with whom Mooney had collaborated determining that a sample of *natsĩ'* was *P. rigida*. Olbrechts identified *natsĩ'* simply as *Pinus spp.*, indicating the generic aspect of the term and leading me to the conclusion that the Cherokee did not differentiate the pines into folk species.

The ambiguity surrounding the pines continues in the reports of their medicinal applications. When he identified the species, Olbrechts exclusively referred to *P. pungens* as the pine used medicinally by the Cherokee, such as its use in the formula for *amayĩ didatsostsi dinineldö* ('to take pregnant women to the water') (Mooney and Olbrechts 1932: 119). Other uses for *P. pungens* from his notes included severe cases of cancer or gangrene known as *ada'yeeski tsunitłöyi nundiwsköna* (no gloss), *aninedzi dik'anöwoti* ('to cure their breast with'), *duletsi* ('kernels'), and *tsidunitsileça* ('when they have itching').

Olbrechts also published generic uses for the pines. Cherokee homes were smudged by burning pine branches after the burial of a recently deceased family member. The belief was that the evergreen quality of pines was symbolic of long life and the smell would eliminate the remnants of death and disease (Mooney and Olbrechts 1932: 139). A decoction made from the tops pine trees was also used for the condition sent by conjurers known as *ayeligogi uniyelö'nöçi* ('they have made it like it') (Mooney and Olbrechts 1932: 188).

Banks found that a tea of the needles from *P. echinata* was used as cough remedy (1953: 5), but the majority of his findings concerned *P. virginiana*. A tea of the roots was used for sore throats while the steam from a tea of the needles could be used for as a cold remedy. Tea of the buds and needles was used to ease diarrhea or as an anti-tussive. A hot decoction of pine needles, *Hamamelis virginiana*, and *Lindera benzoin* was given to a patient to cause a fever to break. Pine needles were placed in apple juice with *Vicia caroliniana* to prevent fatigue of ball players. The roots of pine were combined with those of *Alnus serrulata* and a species of dewberry (*Rubus spp.*) as a remedy for piles (1953: 6-7).

*nona* – hemlock – *Tsuga canadensis* (L.) Carr. or *Tsuga caroliniana* Engelm.

*Nona* appears to be an opaque, proper name and a folk generic for both species of hemlock, Olbrechts applying it to *T. caroliniana* and Banks to *T. canadensis*. Mooney also recorded *T. canadensis* as *atsû'unki unega* or 'white smelling wood', indicating a name based on the two organoleptic qualities of sight and smell. Olbrechts recorded two medicinal applications for *nona*; *ut'igadö* ('to drive out afterbirth') and *adayuni't'i'lö* ('pierced by wood'). Banks added that a tea from the tips of the stems was used for kidney problems and the pounded bark was used as a poultice for itchy armpits (1953: 7).

*nûdâgweja* – sourwood – *Oxydendrum arboreum* (L.) DC

*Nûdâgweja* appears to be an opaque, proper name for sourwood. Sourwood played a prominent role in Cherokee myths. When the daughter of the Sun was killed by

a conjured rattlesnake, she was retrieved from the land of the dead by seven men, each carrying a short rod of sourwood. When they touched the spirit of the daughter with the rods, she fell down and left the circle of the dancing dead. She was then placed in a box and taken back to her mother (Mooney 1900: 253). The role of sourwood is not explained, but it appears that the twigs had the power to restore life to the dead.

Sourwood stakes were also used to pin the stone man to the ground after he had been made weak by coming into contact with seven menstruating women. He then had large logs piled on him and as the fire approached he shared his medicine knowledge with the bystanders (Mooney 1900: 320). The wood of sourwood was also used to barbecue meat as its flavor was transferred to the meat, but it was not used for firewood because the ashes would cause the cook to become ill (Mooney 1900: 422). The wood also had a prophylactic power against the spells of witches (Mooney 1900: 469).

The straight twigs of sourwood were included in formulas for stopped urination because it was thought that they would straighten out twisted urinary passages that caused the blockage (Mooney and Olbrechts 1932: 222). Olbrechts found that it was also included in a formula for another urinary condition, *unegö tsandiköça* ('if they water out white'), as well as being included in a formula for a type of severe diarrhea (Mooney and Olbrechts 1932: 283). Banks reported that the bark scraped off of young shoots, used in combination with the leaves, was used for diarrhea and a decoction of the bark was added to baths for the itch (1953: 100-101). Witthoft claimed that sourwood was considered one of the "great medicines" of the Cherokees, not for unique or spectacular conditions, but because a tea of the bark was applied to such common problems as thrush and diarrhea of infants and children (n.d.: 145-146).

*salĩ* - persimmon – *Diospyros virginiana* L.

*Salĩ* appears to be an opaque, proper name for persimmon. Persimmon appears in a few different contexts in *The Swimmer Manuscript*, such as for part of the remedy for bloody flux (1932: 275) and as part of a multi-bark decoction given for *uyalot'isga* ('if there is swelling') (1932: 298). A stamper made of persimmon wood was used to massage patients suffering from rheumatic pains, although the reason for selecting persimmon wood was forgotten by the time of Olbrechts' research (1932: 293). The unpublished materials suggest that *D. virginiana* was a popular remedy for a wide range of ethnomedical conditions including *ada'yeski* ('eating itself'), *duni'alagöi ata'yesgi* ('inflamed palate'), inflammation of the urinary tract known as *e'isti andik'ö'öi* (no gloss), and *gançawadööski* ('blisters caused by heat'). Banks found that the bark was chewed for heartburn and combined with the barks of *Alnus serrulata*, *Juglans cinerea*, and *Prunus serotina* in a cold infusion for toothaches (1953: 104). The tea would be held in the mouth, causing the infection to come to a head.

Witthoft found that the fruit from selected trees was eaten fresh, but other means to store the fruit for later consumption had been forgotten (n.d.: 49). However, older accounts describe how pulp was processed for storage. The seeds were removed and the fruit pulp pounded in a mortar, formed into flattened cakes, and dried in the sun on a drying rack (Payne n.d.: 156).

*sétĩ* – black walnut – *Juglans nigra* L.

*Sétĩ* appears to be an opaque, proper name for the black walnut. In addition to *sétĩ*, Olbrechts also recorded *wanduya* as another proper name for *J. nigra*, but Mooney

attributed this name to *Carya glabra* (Miller) Sweet. No clarification could be obtained from the notes of either man or subsequent researchers.

The nuts of *J. nigra* were taboo for pregnant women for fear that the child would have a large, broad nose (Mooney and Olbrechts 1932: 121). Also, the wood of walnut was not used as firewood because the inner bark was yellow, and if the ashes from it were used to cook corn gruel, it would cause a yellow discharge to emanate from the person who consumed it (Mooney 1890b). Olbrechts found that the bark was used medicinally for *u'iyugwatisgi* ('he has a toothache') and the urinary tract affliction known as *e'isti andik'ö'öi* (no gloss). He also recorded that *wanduya* was used for spoiled appetite and for saliva that was spoiled by dreams, but the ambiguity associated with the identification of *wanduya* must be considered here. Banks was told that the bark, a known fish poison, was too toxic to use as medicine, but another informant said that the inner bark was a remedy for smallpox (1953: 26). The edible nut was a component in Cherokee bean bread (Perry 1974: 43). Accounts from the early 19<sup>th</sup> century suggest that the oil of black walnuts was extracted in much the same way as that from hickory nuts (see *wanéř* below), but the informant had never seen the operation performed (Payne n.d.: 157). It is unlikely that black walnuts were processed in this way for reasons discussed earlier (see *kahř* above).

*sûnktă'* - apple – *Malus pumila* Miller (*Pyrus malus*)

The notes concerning the various species of apple and related plants are somewhat confusing. For instance, Olbrechts distinguishes between *sûnktă'* *uniganasta*, or 'sweet apples', and *sûnktă'* *uiyösti*, or 'bitter apples', but he identifies

them *Malus malus* (L.) Britt. and *Pyrus malus* (L.) Mill., which are both synonyms of *Malus pumila*. Also, Mooney identifies *sûnktă' inăgeaně'hĩ*, the 'wilderness dwelling apple', as *Crataegus coccinea*, while Olbrechts has the same Cherokee species as *Malus coronaria*. With the materials between researchers and in their individual work in conflict, I will present the materials here as they were recorded in their notes and the reader will need to be aware that the association of an exact species with its description or medicinal use is tenuous at best.

*Sûnktă'* appears to be an opaque name for the apples and the generic name for apples and trees that bear apple-like fruit. But like *kwă'na* it seems that the introduced apple became the prototype and the smaller native species were designated as folk species. Apples appeared to reach the Cherokee soon after their introduction by the Spanish (Goodwin 1977: 58). To avoid further confusion and because the voucher specimens are absent or nearly impossible to locate, I will present the species and their uses as they have been recorded by the researchers.

The primary medicinal use for *sûnktă'* found by Olbrechts was in a combination with *Malus coronaria*, *Cornus florida*, and *Nyssa sylvatica* as a remedy for cancer. No directions for preparation or application of this remedy were included. He also found that the bitter variety was used with others for *unak'ewagöi* ('if they lost their voice'). Banks (1953: 65) found that the bark of *sûnktă'* was used by ball players, a cold infusion of the bark and the outer layer of a corn stalk combined to allay a dry throat. Apple juice was also infused with the stem of *Vicia caroliniana* and the needles of *Pinus virginiana* to increase the ball players' endurance.



*sûnktă' ínăgeaně'hĩ* – ‘wilderness dwelling apple’ – *Crataegus coccinea* L. – hawthorne or *Malus coronaria* (L.) Miller – crab-apple

The name stems from *sûnktă'* or ‘apple’, *ínăge* or ‘a wilderness’, and *ăně'hĩ*, the plural form of *ě'hĩ*, which glosses as ‘dwelling’ or ‘growing’. Mooney’s identification of this species as *Crataegus coccinea* is questionable, as this is an uncommon species of *Crataegus* that is rarely found outside of the Piedmont region. The genus is considered botanically difficult and this was probably *C. flabellata*, a very similar species more commonly found in the mountains. *Malus coronaria* is found in the North Carolina mountains and could have been the species used by the Cherokee. This could also be the *sûnktă' uiyösti* or ‘bitter apples’ mentioned above, as Olbrechts recorded a Cherokee synonym for this species as *sûnktă'tsunsti*, which may be a short form of *tsunyû'stĩ* (‘bitter’).

Besides its inclusion in the cancer remedy mentioned above, an infusion of the bark and fruit of *M. coronaria* was drunk by ball players. The purpose for this was not explained.

*tă'lû'* or *t'ala* - white oak – *Quercus alba* L.

*Tă'lû'* appears to be an opaque, proper name for the white oak. The range of uses attributed to it indicate that it was an important component of Cherokee life. Mooney noted that the white oak acorn was the favored acorn for making acorn bread (*gulé gátũ*). Olbrechts recorded several medicinal uses, including as a component of the formulas for *at'awini e'l* (the forest dwellers), *dalânige tsandik'öça* (yellow urine), *e'isti andik'ö'öi* (painful urination), and another condition that consisted of sores that burst,

possibly *yigöwaninilööski* ('when they have suint'). He also noted that the inner bark was used to make baskets. Witthoft (n.d.: 54) reported that the acorns of white oak were coarsely crushed in a mortar, thoroughly parched, pulverized further, and then boiled to be used as a coffee substitute.

*tâtskĩ'* - white pine – *Pinus strobus* L.

*Tâtskĩ'* appears to be an opaque, proper name. Mooney gave both *tâtskĩ'* (from Middle Cherokee) and *tâtsũ'* (from Upper Cherokee) as versions of this name. It is morphologically different than the other members of the genus *Pinus*, having flexible needles in bundles of five instead of stiff needles in bundles of 2 to 3, which may explain why it was not included in the folk genus of *natsĩ'*. None of the researchers recorded any medicinal uses for *P. strobus* and it is not known if it was used in the same way as the *natsĩ'*.

*ta'ya* or *gita'hya* – wild cherry – *Prunus serotina* Ehrhart, *Prunus virginiana* L.

*Ta'ya* appears to be a proper, opaque name for the wild cherry, but there is some confusion over the botanical species represented by the name. Olbrechts identified both *P. serotina* and *P. virginiana* L. as *ta'ya*, and he recorded other synonyms for *P. virginiana*, but this is a shrubby species that is rare in North Carolina and only found in two mountain counties, neither contiguous to the Cherokee lands (Radford et al. 1968: 568). Olbrechts also exhibits this confusion in his notes, citing names that can be a combination of *P. virginiana*, *P. pensylvanica* L., or *P. serotina*. Banks (1953: 64), while adding several used for *P. serotina*, only attributes uses of *P.*

*virginiana* to Olbrechts. While I am doubtful that the species encountered by Olbrechts was *P. virginiana*, I will discuss that species when he identifies it as one used exclusively for a Cherokee ethnomedical condition. When two species are identified as possible botanical species that match up with a Cherokee name, I will refer to the species that is common to the region and assume that *P. virginiana* was a misidentification.

Mooney recorded wild cherry bark as the main treatment for the intermittent fevers known as *unawasti egwa* ('big chill'). The bark was beaten, placed in water with seven coals that heated the decoction, and blown on the body of the patient (1891: 362). As *P. virginiana*, Olbrechts found it was a component for another formula for *unawasti egwa* (Mooney and Olbrechts 1932: 277), as well as for *unak'ewagöi* ('if they lost their voice') (Mooney and Olbrechts 1932: 199) and *gotisgi tsunitsöyöi* ('when their stomach is swollen') (Mooney and Olbrechts 1932: 297). In his notes he also reported it used for, swollen testicles, a condition described only as "when heat caused it", for a form of diarrhea when combined with *Alnus serrulata* and another unidentified plant.

Banks (1953: 64) found that the Cherokee, like the mountain whites, used cherry bark for all the symptoms associated with colds and the flu, as well as other conditions. A decoction, cooked down until it was thick, was taken for coughs. Combined with *Clethra acuminata*, it was employed to break a high fever. Mixed with the barks of *Lindera benzoin* and *Cornus florida*, it was made into a decoction, added to corn whiskey, and given to a patient to cause the rash from measles to appear on the skin's surface. A decoction of the bark was given to break up the congestion that accompanied a cold. A tonic formula, used to strengthen the blood, consisted of P.

*serotina*, *Xanthorhiza simplicissima*, *Goodyera pubescens*, *Asarum canadensis*, and *Alnus serrulata*. This combination was made into a decoction and several swallows were taken before meals to improve the appetite.

*ta'ya gadusie'i* – 'the cherry that grows in the mountains' and *kwanustiga* – 'little peach' – *Prunus pensylvanica* L. – pin cherry

The name *ta'ya gadusie'i* is quite appropriate for this species, as it is only found in the high mountain counties of North Carolina (Radford et al. 1968: 567); however, Mooney connected the name *kwanustiga* to *Prunus americana*. Whether this is a misidentification or a case of synonymy cannot be determined without voucher specimens.

Careful reading of *The Swimmer Manuscript* indicates that the formula for *unawasti egwa* ('big chill') contained *ta'ya gadusie'i*, but this was misidentified as *P. virginiana* (Mooney and Olbrechts 1932: 276). Also, it was included in the formula for *gigö digöguski* ('when they discharge blood from their bowels'), but recorded as *kwanustiga*, so this may have actually been *Prunus americana* (Mooney and Olbrechts 1932: 275).

Olbrechts' notes provide a much broader range of application toward Cherokee ethnomedical conditions for *P. pensylvanica* than is indicated by the published material. It was used in formulas for the scrofulous condition known as *duletsi* ('kernels'), the lung disease *ganedzi u'tsöya* ('he is sick in the breast'), *gigö yandik'öça* ('urinating blood'), and a type of seizure known as *unalötölö* ('they have fits').

*tilí'* - chestnut – *Castanea dentata* (Marsh.) Borkh. (*C. americana*)

*Tilí'* appears to be a proper, opaque name for the American chestnut. Mooney and Olbrechts provided surprisingly little information on a species that was once so prominent in the Southern Appalachian region. Olbrechts reported that *C. dentata* was used for the condition known as 'when they dream of all sorts of things', but did not clarify the condition. It may be a form of *anskitsö'ö sköi* ('whenever they dream (of...)'). However, Banks, even though he did his research in the years after the chestnut blight had decimated the larger trees, found a wide range of medicinal and material uses for the American chestnut (1953: 30-31). The new leaves were used to help heal old sores, while year old, dried leaves were made into a decoction for heart trouble. A decoction of the leave of *C. dentata* and *Verbascum thapsus*, mixed with honey or brown sugar, was used a cough remedy. A small amount of a cold infusion of the bark of *C. dentata* and a species of *Aesculus* was taken by women who had recently birthed to stop bleeding and cramping. An infusion of the bark was used for a type of tuberculosis that was due to conjuring (see *kutlú'* - *Fagus grandifolia*, above). A decoction of *C. dentata*, *Acer rubrum*, *Quercus alba*, and *Q. nigra* was drunk for "monthly female trouble". The inclusion of *Q. nigra* in this formula is questionable, as it is rare in the mountains (Radford et al. 1968: 382). While Banks said the nuts were ground into flour and added to bread, Witthoft said that the chestnuts were never ground like acorns, but cut into pieces, boiled, and the nuts and stock mixed with cornmeal to make bread (Witthoft n.d.: 47-48). Witthoft also reported that the nuts were roasted whole and eaten or boiled and added to soup. He also found that they could be used in place of acorns as a coffee substitute (see *tă'lú'* above). An earlier account also mentions the extraction of oil from

chestnuts in much the same manner as from hickory nuts (see *wanéí* below) except that the nuts were hulled and dried before the extraction process (Payne n.d.: 174).

*tsilalŭ́* or *tsilǎlí́* - sweet gum – *Liquidambar styraciflua* L.

*Tsilalŭ́* appears to be a proper, opaque name for sweetgum. Neither Mooney nor Olbrechts recorded a medicinal use for *L. styraciflua*, but Banks (1953: 58) included it in the formula he found for “bad disease” (see *kutlŭ́* - *Fagus grandifolia*, above). Witthoft (1947), in an edited version of an early 19<sup>th</sup> century text, noted that the gum of *L. styraciflua* was used as a drawing plaster and the inner bark was made into a tea for calming nerves. He also reported it to be one of the barks used with *Nyssa sylvatica* in a multi-bark formula for gonorrhea (see *uníkwǎ* below) (Witthoft n.d.: 134).

*tsisátugwŭléga* or *gasátakwŭlégwa* – chestnut oak – *Quercus prinus* L.

Mooney recorded both names for *Q. prinus*, but did not include a gloss or the etymology for either name. No further mention is made of this species in any of the Cherokee ethnobotanical literature, which I find strange for a common upland species with some of the largest acorns among the region’s white oaks. This species may have been confused with other species of oaks (see *gulěnégwa* - *Q. nigra* above).

*tsiyu* – tulip poplar – *Liriodendron tulipifera* L.

*Tsiyu* appears to be an opaque, proper name for tulip poplar. In his notes, Olbrechts indicated that the Cherokee held a high regard for the healing properties of *L. tulipifera*, “The bark of this tree is used in most “chirurigical” treatments; wherever

bruises or cuts, arrows or bullet wounds have to be treated and infusion of poplar-bark is held to be a sovereign remedy.” This was supported in his notes with its inclusion in the formula for *adayuni’t’i’lō* (‘pierced by wood’). In *The Swimmer Manuscript*, he reported that *L. tulipifera* was used for *gotisgi tsunitsöyöi* (‘when their stomach is swollen’) (1932: 298) and as an acceptable substitute for *Aristolochia serpentaria* for itchy genitals due to urinating on the fire (1932: 286). A decoction of the bark or root of tulip poplar could also be used as a substitute for *Botrychium virginianum* as a remedy for a poisonous snakebite, the decoction blown over the patient and rubbed on the actual bite (1932: 177). The decoction of the bark was also blown over fractured bones (1932: 71). In his notes, he indicated that *L. tulipifera* was used in the formula for the urinary condition known as *e’isti andik’ö’öi* (no gloss) and for swelling of the neck.

Banks (1953: 50) added that the bark from the roots was made into an infusion and drunk for indigestion and a decoction of the bark was drunk for bowel trouble. The bark was added to homemade medicines as a preservative and the inner bark scraped off, dried in the oven, and a small quantity taken for pinworms. And an infusion of the bark of *L. tulipifera* and several other barks was used for tuberculosis due to conjuring (see *kutlû’* - *Fagus grandifolia*, above).

*tsugwû’nstätsâ’lī* – ‘the leaves taper’ – *Quercus rubra* L. – red oak

Mooney did not explain this gloss, other than to mention that the “*ts*” at the beginning designates the plural form. It is not obvious from looking at the leaf why the Cherokee considered the taper a salient feature. Olbrechts recorded two other names; *doladzi*, which appears to be a proper, opaque name and *gulnegwa* or ‘large acorns’,

the name given by Mooney to *Q. nigra*. However, *Q. rubra* does have the largest acorns of the oaks common to the Southern Appalachian Mountains, so this name would seem most appropriate when applied to *Q. rubra*.

Olbrechts found *Q. rubra* to be a component in several formulas for a wide range of conditions. It was one of the plants used for painful urination or *e'isti andik'ö'öi*, and *unölstay'ti tsuniyotc'eça* ('when their appetite gets spoiled'). It was part of the wound healing formula for such conditions as *adayuni't'i'lö* ('pierced by wood'). The roots were used with others for *dalânige tsandik'öça* ('yellow urine') and it was a component of the formula used when someone had diarrhea due to *at'awini e'i* ('the forest dwellers'). Olbrechts also said it was one of four different types of red oak, the barks of which were boiled down and placed while still hot against an aching tooth. However, the only other species of oak that he identified for this purpose was *Q. velutina*. It was part of a formula with *Castanea dentata* for 'when they dream of all sorts of things' (see above), but the other trees whose barks were used for this condition are not evident from his notes. The other woody species that he identifies for this condition, a species of *Ilex*, *Clethra acuminata*, and a species of *Cornus*, are all shrubs and will be dealt with in a later chapter.

*tsugwalâga tsegwa* – 'big leaves' – *Magnolia fraseri* Walter – umbrella tree

The large leaves, up to a half a meter long, indicate the source for this Cherokee name. Mooney also mistakenly identified *tsugwalâga tsegwa* as *Chionanthus virginicus* L., but his description of the seed heads as being red, shaped like ears of corn, and containing round, red berries indicates that this is a species of *Magnolia*. He also said



that the leaves were 15 inches long, about twice the length of those of *Chionanthus*. A sketch of the outline of the leaf in a later work (Ms. 1894) is clearly that of *M. fraseri*.

Medicinally, Olbrechts found it to be used for toothaches, the bark either steeped and the infusion held in the mouth or chewed and held against the tooth, or as a remedy for painful urination when combined with *Quercus velutina*. Banks found that a tea of the bark of *tsugwalâga tsegwa* was sniffed up the nose for sinus problems, but he identified the botanical species as *Magnolia macrophylla* Michaux (1953: 51). This is most likely a misidentification, as *M. macrophylla* has not been recorded in the mountains of North Carolina and both are commonly referred to as umbrella tree (Radford et al. 1968: 474).

*tsuhyûnsti* (ăță) – ‘bitter (wood)’ – *Magnolia acuminata* L. – cucumber tree

Olbrechts recorded *M. acuminata* as *tsuyösti* (‘they are bitter’), which appears to be a version of *tsuhyûnsti*, which Mooney recorded on one of his later trips to the Cherokee reservation (Ms. 1894). It was used in the formula for *uyalot’isga* (‘if there is swelling’), with *Castanea pumila* for *dunitsalöi* (‘when they have blisters’), and as part of the formula for *e’isti andik’ö’öi* (no gloss). Alone it was chewed or steeped into a tea and kept in contact with a sore tooth. Banks (1953: 51) found that the leaves were combined with those of *Ostrya virginiana* (Miller) K. Koch and made into a decoction for a toothache. The bark tea was also used to relieve cramps in infants, ease belching and stomach aches, and was part of a formula for bloody flux.

*tsukânan* – ash – *Fraxinus americana* L.

*Tsukânan* appears to be an opaque, proper name for the ash tree; however, Olbrechts noted that the name was shared with the wooden mortar in which corn was pounded. This was originally made of ash, but at the time of his research it was made of oak.

Olbrechts recorded that *tsukânan* was used medicinally in formulas for the urinary tract condition known as *e'isti andik'ö'öi* (no gloss) and for *gigö analdziskwsköi* ('when they spit blood'). It was also used for a form of *dalâni*, but Olbrechts gave no further information on how it was used or with what it might be combined. Witthoft found that the bark of *F. americana* was used as a treatment for diabetes (n.d.: 147-148). The bark must be harvested from the east side of the tree near ground level and large quantities of the tea, prepared one time in a large batch, are drunk at night over a four-day interval whenever the patient wakes up. This is a rare remedy for diabetes, a disease which Witthoft claims was rampant among the Cherokee when he was there in the 1940s.

*tsûnwagi gigage adsilû'skĩ* – 'maple with red flowers' – *Acer rubrum* L. – red maple

Mooney did not provide a gloss for *tsûnwagi gigage adsilû'skĩ* and Olbrechts glossed it as 'plant with red flowers', but *tsûnwagi* does not gloss as 'plant'. But both King (1975) and Alexander (1971) included a Cherokee word for maple in their dictionaries, *tsuwaki* and *tlvwagi* respectively, and it was obvious from these that *tsûnwagi* is the generic term for 'maple'. Other variations in spelling included *tsuwagi* (Olbrechts) and *klûhwagĩ* (Mooney, Ms. 1894).

Olbrechts found *A. rubrum* was with *Diospyros virginiana* for the type of cancer known as *ada'yeski* ('eating itself') and for *du'alagosa* ('inflammation of the palate'). Combined with *Quercus velutina*, it was used for wounds caused by arrows, bullets, axe cuts, etc. No directions for preparation or application were provided for the latter.

Banks found that a decoction of the bark of *A. rubrum* was used for dysentery, hives, and combined with *Quercus alba*, *Q. nigra* (but see *gulĕnégwa* above), and *Castanea dentata* for menstrual irregularities. The steam from the boiled bark was allowed to enter the eyes to help with blindness (1953: 81-81). In his recounting of the plants observed by the early 19<sup>th</sup> century missionaries working with the Cherokee, Witthoft also reported that *A. rubrum* was used for eye problems. The notes of Mrs. Anna Gambold, the wife of Moravian minister John Gambold, contained the following use for *A. rubrum*, "The inner bark boiled to a syrup, made into pills, and these dissolved in water, is used in case of sore eyes; the eyes washed therewith."

*tsûnwagi unega adsilû'skĩ* – 'maple with white flowers' – *Acer saccharum* Marshall – sugar maple

While the flowers are described as being more greenish-yellow than white (Radford et al. 1968: 688), they are obviously lighter in color than the red maple and would help give the tree a whitish appearance while in bloom. No medicinal applications were recorded for *A. saccharum*, but if the sap was processed into a sweetening agent. It has been speculated that the precontact Cherokee used *Gleditsia triacanthos* as their primary sweetener, but that they later learned to process maple sap from the Iroquois (Goodwin 1977: 59).

*tsunyû'stĩ* – ‘bitter’ – *Cercis canadensis* L. – redbud

Mooney did not clarify whether the name *tsunyû'stĩ* was synonymous for both *Cercis canadensis* and *Magnolia acuminata*, but the similar spelling and gloss for the Cherokee name suggests that it may have been so. Banks (1953: 70) referred to *C. canadensis* as *kwaniyustĩ* (‘little peach’), but this is an obvious misidentification on his part. This also raises doubt on his reference to its use as a remedy for whooping cough (see *kwaniyustĩ* above). No other medicinal applications were attributed to *C. canadensis*, but Witthoft (1947) did write that the Cherokee children were fond of snacking on the flowers.

*tsuskă'* – ‘heads’ – *Quercus stellata* Wang. (*Q. obtusifolia*)

The name stems from a plural form of *uskă'* or ‘head’, but Mooney gave no explanation for the name. Olbrechts recorded its use in formulas for the ethnomedical conditions *unödi tsandik'uça* (‘they urinate all milk’) (Mooney and Olbrechts 1932: 200) and *dalânige tsandik'öça* (‘yellow urine’). It was used alone for *dalâni ga'öski* (‘*dalâni* squatting down’), a form of biliousness or gastric distress with gripping pains (see *dalâni* in the appendix).

*tsuskû'találti* – ‘striped shins’ – *Halesia carolina* L. – silverbell

Mooney claimed the name stemmed from the plural form of *uskutagě* (‘shin’), which is *tsuskutagě*. It is in reference to the stripped appearance of the trunk of the tree. The only medicinal application came from Olbrechts, who found that it was used with other unidentified materials for backaches.

*tsutanû´* or *tsutkĩñũ´* - ironwood – *Carpinus caroliniana* Walter

Mooney did not elaborate on the two names he recorded for *C. caroliniana*, but the variations are consistent with other renditions of the middle and upper dialects of Cherokee that he recorded for other species. *Tsutanû´* appears to be an opaque, proper name for ironwood. Mooney found it was used with other barks and plant parts for cancer and old sores (see *kũnstũ´tsĩ* above).

Olbrechts recorded two uses for *C. caroliniana* in *The Swimmer Manuscript*, as part of the formula for *unödi tsandik´uçā* ('they urinate all milk') (1932: 200) and for a type of *dalāni* (1932: 265), but he also found other uses that were not published. It was part of the formula for the conditions *unawasti egwa* ('big chill') and *unak´ewagöi* ('if they lost their voice'), as well as being used alone for toothaches.

*udā´lǎñǎ´* - serviceberry – *Amelanchier arborea* (Michaux f.) Fernald

Both Mooney and Olbrechts identified this species as *Amelanchier canadensis* (L.) Medicus, but that species is not found in the mountains of western North Carolina. *Udā´lǎñǎ´* appears to be an opaque, proper name for serviceberry.

Olbrechts recorded several medicinal uses for *A. arborea*, but only its application in a formula for a severe form of diarrhea was published (Mooney and Olbrechts 1932: 283). The unpublished uses included its presence in formulas for three conditions of the urinary tract; a type of painful urination known as *e´isti andik´ö´öi* (no gloss), *gigö yandik´öçā* ('urinating blood'), and for a form of *dalānige tsandik´öçā* ('yellow urine') in combination with *Vitis aestivalis*. Other applications included *yöwi tsunstia göwani skastane´öi* ('when the little people frighten them'), *dalāni*, and backache. Witthoft

reported that the berries are a relished wild food, typically eaten raw when found (n.d.: 46).

*ûnagéĩ* – ‘black’ – *Abies fraseri* (Pursh) Poiret – Fraser’s fir; *Picea rubens* Sargent – red spruce

The name *ûnagéĩ* (‘black’) is also used for several herbaceous species, usually due to the overall appearance or to the attributes of one specific plant part, but Mooney did not clarify which aspect of *A. fraseri* the Cherokee considered to embody blackness. However, he did say that the Cherokee recognized a male and a female form of *ûnagéĩ*, recognized by the male having alternate branches and the female having opposite branches. The genus *Abies*, like all members of the family Pinaceae, is monoecious, each individual having both male and female flowers. However, the older common names for *A. fraseri* and *Picea rubens* are “she balsam” and “he balsam” (Radford et al. 1968: 38,40), respectively, and it may be that the association recorded by Mooney is based on a folk model of male and female kinds in nature. This association has been observed in both the mountain and Cherokee folk classification systems (Cozzo 2003) and this appears to be another example of this. Olbrechts identified *ûnagéĩ* as *P. rubens*, further supporting the likelihood of this association. The two species, remnants from a time when the region was much cooler, are found growing together at the highest altitudes in the Blue Ridge Mountains and are the dominant species at those altitudes, which is commonly known as the Spruce-Fir forest. This would suggest a special relationship between the two that would not be obvious in a more diverse forest and

may explain the Cherokee perception that they are male and female types of the same tree. No medicinal uses were reported for either tree.

*uníkwă* – black gum – *Nyssa sylvatica* Marsh. (*N. multiflora*)

*Uníkwă* appears to be an opaque, proper name for *N. sylvatica*. It appears several times in *The Swimmer Manuscript*, as an alternative to *Oxydendron arboreum* for blocked urinary passages (1932: 222), for *unödi tsandik'uça* ('they urinate all milk') (1932: 308), as part of the remedy for *dalâni dikstoti* ('to make patient vomit bile') (1932: 218), and in the formula for severe or chronic diarrhea (1932: 283). This last condition was not included Olbrechts' notes on ethnomedical conditions, so I will include the formula from *The Swimmer Manuscript* in this section.

A decoction was made from the roots, harvested from the east side of the tree, of *O. arboreum*, *Amelanchier arborea*, *N. sylvatica*, and *Cornus florida*, along with runners from the east sides of the vines *Vitis aestivalis* and *Ampelopsis cordata*, was boiled down for four consecutive times before it is administered to the patient. Chicken and fish were avoided during the treatment (1932: 283). The presence of *Ampelopsis cordata* in this formula is probably a misidentification, as it is a Piedmont species that has only been located in Madison County in the mountains of North Carolina.

Olbrechts also cited other uses for *N. sylvatica* in his notes. It was one of the barks used for wounds or when one was shot, such as in the condition *adayuni't'i'lö* (pierced by wood'). *Uníkwă* was combined with other unidentified plants for gonorrhea and toothaches as well as being part of a cancer formula for *ada'yeski* ('eating itself').

Banks found *N. sylvatica* was still in use at the time of his research in 1952. A tea of the bark was used to stop excessive menstrual bleeding. The roots were made into a tea to aid the delivery of birthing women and an “ooze”, or thick decoction, was made from the roots for eye problems. The “ooze” was wrapped in a cloth and allowed to drip into the afflicted eyes. Also, a decoction of the barks of *N. sylvatica*, *Euonymus americanus*, *Smilax glauca*, *Platanus occidentalis*, *Liquidambar styraciflua*, *Vitis aestivalis*, and *Fagus grandifolia* was drunk as a tea for “bad disease”, a condition whose primary symptom was a severe fever (Banks 1953: 90-91).

Witthoft (n.d.: 134) found *N. sylvatica* was used as an ingredient for venereal disease, but only named *Liquidambar styraciflua* as one of the ingredients. There were at least ten other unidentified tree barks used in the formula. He also said a cold infusion was used as a burn remedy, again attributing to its reputation as a wound healer. He also found that a depression was carved into a sound length of black gum, about 15 inches across and three feet tall, and this was used as the pounding block for the corn mortar. The toughness of the cross-grained wood and its resistance to decay made it an ideal choice (n.d.: 133). The Cherokee also used hollow sections of the trunks of large specimens of *N. sylvatica* for “bee gums” (n.d.: 134). As this name suggests, the practice of using hollow black gum logs by beekeepers was common where the trees reached a usable size (Wigginton 1972: 37).

*úniskwûť* - buckeye – *Aesculus octandra* Marsh. (*A. flava*)

Mooney said the name stems from *úniskwûť* or ‘they have a head’, but this Witthoft (n.d.: 137) claims this was a proper name for the yellow buckeye and doubts



this etymology for the name. However, the seeds can be described as head-like and there may be little cause to doubt Mooney's assertion.

Olbrechts recorded some uses for buckeye, but he claimed that the Cherokee used the red buckeye, *Aesculus pavia* L., for medicinal purposes. This is highly unlikely as *A. pavia* is limited to the coastal plain of North Carolina and not found in the mountains. The only species common to the mountains is *A. octandra* (Radford et al. 1968: 690) and I will assume that it is the species that Olbrechts found in his research.

Olbrechts identified *úniskwûtu'* as part of the formula for *unitseno'ise'oi* ('when a person has stomach trouble') (Mooney and Olbrechts 1932: 239). In his notes he recorded it used for a variety of problems associated with the urinary tract. He noted it as a remedy for painful urination, which may possibly have been the condition known as *e'isti andik'ö'öi*. It was a part of the formulas for two conditions that were typified by a whitish discharge in the urine, *unegö tsandiköça* ('if they water out white') and *unegö unanugots'eça* ('it is coming out white'). Buckeye was also a component in a complex formula for *dalânige tsandik'öça* ('yellow urine').

Witthoft (n.d.: 139) found that the bark was steeped and used in small quantities by midwives to aid with postpartum cramping, but it was considered a dangerous remedy. In his rewrite of the notes of a Moravian missionary, Witthoft (1947) also found the pounded nuts were used as a poultice and the bark as a fish poison.

Banks also recorded several uses for *úniskwûtu'*, which he also mistakenly identified as *A. pavia*, possibly due to the initial identification by Olbrechts (1953: 82-83). The nuts appeared to be the most medicinal portion of the buckeye. The meat of the nuts was used as a salve to heal sores (much like the poultice activity above) and

simply carrying a nut on one's person will help cure piles. Small pieces of the nut were chewed and the juice was swallowed for colic. When a person was feeling "queer", like they were going to faint or have a seizure, the nuts were ground and steeped in warm water. This infusion was drunk by the afflicted. Banks also elaborated on the use of *úniskwûtu'* as a birthing plant. The bark was made into a tea to aid in delivery and, like Witthoft, he found that a tea of buckeye and *Castanea dentata* in small portions would ease postpartum cramping and bleeding. Again, there was a warning against using too much, "or it will stop everything."

*ústăstî* – 'he spins' – *Ilex opaca* Aiton – holly

Mooney indicated that the name *ústăstî* stems from *dístăstî* ('spinning wheel'), but Witthoft found that spinning wheels were made of tulip poplar in the Cherokee region of the mountains and this was probably not due to the use of the wood of holly. He said the name refers to the act of twisting cord or thread, whether on the thigh or on a wheel, but that the name could also stem from the whorled (or spinning) appearance of the leaves (n.d.: 146). Neither is a satisfactory explanation for the etymology of *ústăstî*. Olbrechts found a variation on the name, calling it *tsustasti* ('she will spin') but he provided no explanation for the source of the name. The only medicinal application came from Banks (1953: 80) who found that the leaves used to scratch muscles that were sore with cramps. He did not indicate if any medicines were applied after scratching. Other species of *Ilex* that were used for a variety of medicinal applications are shrubby species and will be described in another chapter.

*wanéĩ* – hickory – *Carya* spp.

*Wanéĩ* is handled as the folk generic for the hickories by Witthoft (n.d.: 52), Perry (1974: 40), and Banks (1953: 24), and appears to be an opaque, proper name. Determining the botanical species that constitutes *wanéĩ* is quite confusing, especially in light of the large number of botanical synonyms for each of the hickories (Britton and Brown 1970: 580-584). For instance, Mooney identifies *Carya microcarpa* (*Carya ovalis* (Wang.) Sargent) as *wanéĩ* and recorded the names for *Carya sulcata* (*Carya laciniosa* (Michaux f.) Loudon) and *Carya alba* (*Carya ovata* (Miller) K. Koch) as *wanéĩ sǎ'hĩ tsúntana* ('large hickory nuts') and *wanéĩ sǎ'hĩ tsundí-ga* ('small hickory nuts'), respectively. Olbrechts, on the other hand, identified *Hicoria alba* (*Carya tomentosa* (Poiret) Nuttall) as *wanéĩ* and referred to *Hicoria glabra* (*Carya glabra* (Miller) Sweet) as *wanéĩ tsutisti* (no gloss for *tsutisti*). He also identified them by the common names shagbark and shellbark hickory, neither of which matches the botanical species he named.

Two species carry the specific epithet *alba*, yet the generic epithet is different, indicating two distinct species. Witthoft (n.d.: 52) stated that the two edible species favored by the Cherokee were the variety with large nuts, or *C. ovata*, and the small fruited variety, *C. ovalis*. Distribution maps or descriptions of distributions indicate the occurrence of *C. ovata* as very limited in the mountains of North Carolina and that *C. laciniosa* is rare in the whole state of North Carolina (Radford et al. 364 and 365), further complicating any chance of identifying the species under consideration here. For the purposes of ethnobotanical classification it is sufficient to state that *wanéĩ* is the folk generic for the hickories and that at least two folk species were recognized, *wanéĩ sǎ'hĩ*

*tsúntana* ('large hickory nuts') and *wanéĩ sǎ'hĩ tsundí-ga* ('small hickory nuts'). *Wanéĩ tsutisti* is probably a third folk species, but without a gloss for *tsutisti* this would be difficult to establish.

Olbrechts identifies two conditions treated with the inner bark of the hickory in *The Swimmer Manuscript*, *du'alagosa* ('inflammation of the palate') was treated by the medicine man chewing the bark and blowing the juice into the mouth of the patient (1932: 260). *Yigetsiyolö* ('if they have been shot (by a bullet or arrow)') was treated in a similar way, the chewed bark blown through a buzzard quill or the hollow stalk of a plant that Olbrechts identified as *Gerardia pedicularia*, which was later changed to *Aureolaria pedicularia* (L.) Raf. (1932: 273).

Olbrechts included several more uses for hickory bark in his notes. He wrote that the Cherokee considered it a "universal panacea for all wounds" and in this capacity it was used in a formula for *adayuni't'i'lö* ('pierced by wood'), for accidents with axes known as *undalu'yöçi* ('chopped' or 'if they have chopped it'), for *tsidunitstaldia* ('if they have scars'), and by itself for the type of cancer known as *ada'yeski* ('eating itself'). It appeared in a formula to treat the urinary tract condition known as *e'isti andik'ö'öi* (no gloss) and for *unölstay'ti tsuniyotc'eça* ('when their appetite gets spoiled'). He also wrote that it was part of a formula to make somewhat forget, but he did not elaborate on the condition or the formula. This is probably a formula for painful remembrances of a recently departed loved one. Thoughts and dreams of the deceased were thought to be signs of a departed spirit calling their loved one to join them in the afterlife (Mooney and Olbrechts 1932: 26).

Banks also recorded several uses for *wanéĩ* (1953: 25). Ball players drank an infusion of the bark to keep their limbs supple. An infusion of the barks of hickory, *Castanea dentata*, *Tilia spp.*, *Liriodendron tulipifera*, *Fagus grandifolia*, and *Quercus spp.* was for a type of tuberculosis caused by conjurers. The bark of a species only identified as black hickory was steeped in cold water and the infusion was blown over patients to alleviate the pain of poliomyelitis; however, it did not prevent the crippling effects of the disease.

The nuts of hickory were an important food item for the Cherokee. The whole nuts were crushed with a wooden mortar until the shells and nutmeats were pulverized, then rolled into balls for immediate use or storage. These balls would then be boiled in water, the shells sifted out, and the resulting nut milk used as a base for soup or drunk as a beverage (Witthoft n.d.: 52). Earlier accounts state that the oil from the nuts was extracted and used for culinary and medicinal purposes. The nuts were pounded in the manner described above and boiled until the oil floated to the surface. The oil was then skimmed off the surface of the water and placed in a vessel. This was heated until all residual water had evaporated and then stored in a container for future use. The finished product, “resembled bear’s oil in both consistency and appearance and answered all the purposes of that oil (Payne n.d.: 157).”

*watsiyũ’* or *wagũ’* - Spanish oak, Southern red oak – *Quercus falcata* Michx.

*Watsiyũ’* and *wagũ’* appear to be proper, opaque names as Mooney provided no gloss for either. Olbrechts found *Q. falcata* to be a component in the formulas for

*unak'ewagöi* ('if they lost their voice') (Mooney and Olbrechts 1932: 199) and for *unegö*  
*tsandiköça* ('if they water out white').

## Chapter 4

### *Uwáwa'téna* – Shrub

### *Udûnsínĭ* - Vine

Mooney mentioned the life form “shrub” in the myth concerning the origin of medicine (1900: 252), but he did not provide the exact Cherokee word that could be glossed as ‘shrub’. The botanical usage of the term “shrub” usually encompasses perennial woody plants with relatively low stature (when compared to trees) and multiple stems. Mooney did collect terms that approach this meaning. For instance, in his description of the Cherokee name for *Desmodium nudiflorum*, he glossed the specific qualifier *uwáwa'téna* as ‘bushy’ or ‘having leafy branches’ (see *tuyayústĭ uwáwa'téna*, Herbaceous Plants, Part 3). In 1885, before he visited the reservation, Mooney interviewed then Cherokee chief Nimrod J. Smith and recorded a glossary of Cherokee terms (Mooney n. d. g). He recorded the word for “brush” as *tsuyá'nu* and “thicket” or “bushes”, as *sûlúyĭ*. The latter may have been restricted to low, wet ground, but other contextual usage of *sûlúyĭ* places this in question (see below). As *uwáwa'téna* appears to most closely approach the botanical definition of a shrub, I have headed this section by that name.

Mooney did not specify what constituted the Cherokee concept of ‘shrub’ and the variability inherent in the botanical life form known as shrubs makes it difficult to establish which plants should be included in this category. For instance, *Xanthorhiza*

*simplicissima* is known as a colonial shrub (Radford et al. 1968: 453), but the plants are usually only 1 foot tall and rarely surpass a height of 2 feet. The members of the genus *Rubus* are considered shrubs, but the canes of the bramble fruits are often referred to as vines. The smaller members of the genus *Acer* are considered predominantly shrubby, but some individuals reach the proportion and habit of small trees. As the Cherokee perception of the inclusiveness of the category “shrub” was not recorded, those plants that fit the botanical definition will be included in this chapter.

Mooney recorded the word for ‘vine’ as *udûnsínĭ*, but did not discuss its place in the ethnobotanical classification system. There are several morphological similarities between shrubs and vines (woody stems, diffuse branching patterns, etc.), but also considerable differences (vines have flexible stems, the two often occupy different ecological niches, etc.). As several of the species of vines used by the Cherokee were used in conjunction with or in place of certain shrubby species, they are included in this chapter solely at the discretion of the author.

The various researchers collected the names of 38 folk genera of shrubs and vines representing 57 botanical species. The relationship between the folk genera and botanical species is as complex as that in the tree life form (see Table 4.1) and comparisons between the shrubs and trees are necessary due to botanical inclusiveness that crosses life forms. For instance, the shrubby members of the genus *Cornus* are known as kinds of *wală’hûne’ga*, but *Cornus florida*, a small tree, was called *kănûsĭ’tă*, a name indicating no clear relationship. While the leaves are quite similar, the obvious difference in flower morphology may have contributed to the Cherokee differentiation at the generic level. The shrubby member of the genus *Acer*, discussed in



the previous chapter, was classified in a different folk genus from the larger tree species, even though the leaves and fruit are morphically similar. *Castanea pumila*, the shrubby member of the genus that includes the American chestnut, was called *unigína*, a label with no obvious relationship to its larger cousin, *tĩĩ*. Yet *Leucothoe axillaris* was labeled as *nûdâgweja-iyu'stĩ* ('like sourwood'), an acknowledgement of its resemblance to *Oxydendron arboreum* (*nûdâgweja*). However, there is no apparent linguistic relationship to its sister botanical species, *L. recurva*, labeled with the opaque name *euisúhĩ*.

There also appears to be no general pattern among the vines. The members of the botanical genus *Smilax* were generally known as kinds of *galiwâ'dĩ*, while the various species of *Vitis* were labeled with distinct, opaque names. The viney members of the genus *Rubus* were labeled as *utlásinûta* ('it has crept'), while the erect, bushy members were called kinds of *sûntiwálĩ* ('bowl'). The perceptual similarity between *Passiflora incarnata*, labeled as *uwă'lă'*, and *P. lutea* was recognized by labeling the latter as *uwă'liyústĩ*.

Certain polytypic folk genera of shrubs demonstrated apparent linguistic relationships. The functional relationship between the laurels (*Kalmia latifolia*, *Rhododendron maximum*, *R. catawbiense*) is evident by their inclusion in the folk genus *dusúga*, a reference to their use in the scratching ritual. Perceptual similarities are evident in the labeling of *Viburnum acerifolium* as *kûnigûiyústĩ*, an acknowledgement of its resemblance to *V. prunifolium* (*kûnigû*), and *Lyonia ligustrina* as *kuwáya-iyu'stĩ* in recognition of its resemblance to the blueberries and huckleberries (*kuwáya*).

For all the variety that appears in the relationship between the Cherokee shrub and vine category and the botanical classification system, there is one consistency that is notable. Rarely are unrelated botanical genera included in the same folk genera and those that are, such as *Kalmia latifolia* in the genus *dusúga* or *Lyonia ligustrina* as resembling *kuwáya*, they are in the same botanical family as the other members of the folk genus. So, why botanical relationships are not always apparent from the Cherokee labels, there are also no apparent anomalies when comparing the Cherokee system to the botanical system.

Table 4.1. Shrub and Vine Index: Botanical Species and Folk Genera

Botanical Species	Folk Genus	Botanical Species	Folk Genus
Acer pensylvanicum	ă'ta-tsű'siwă	Rhododendron	dusúga
Alnus serrulata	itsě'hĩ	maximum	
Alnus viridis	itsě'hĩ	Rhododendron	kûnagĩ'l'ka
Aralia spinosa	ultsă'gĩtă'	periclymenoides	
Aristolochia macrophyllum	udăĩ	Rhus copallina	dalâni
Calycanthus floridus	kanélskă	Rhus glabra	kwălăgă
Castanea pumila	unigína	Rhus typhina	kwălăgă
Ceanothus americanus	elĩ'skală	Rhus vernix	didăleyû'skĩ
Clematis virginiana	igagû'tĩ	Rosa carolina	atáyakalĩ'skĩ
Clethra acuminata	ditanélawáskĩ	Rosa eglanteria	atáyakalĩ'skĩ
Cornus alternifolia	wală'hûne'ga	Rubus allegheniensis	nugû'la
Cornus amomum	wală'hûne'ga	Rubus ideaus	sûntiwálĩ
Corylus americana	hayúgĩtă	Rubus occidentalis	sûntiwálĩ
Dirca palustris	kuwáya-iyu'stĩ	Rubus odoratus	sûntiwálĩ
Euonymus americanus	tsuwatúna	Rubus flagellaris	utlâsinûta
Gaylussacia baccata	kuwáya	Rubus hispidus	utlâsinûta
Hamamelis virginiana	kûnasútlawă	Sambucus canadensis	gaksûka
Hydrangea arborescens	ă'ta-tsű'siwă	Smilax glauca	galiwă'dĩ
Ilex montana	gă'lăgû'skű	Smilax pseudochina	galiwă'dĩ
Ilex verticillata	kâlûgûtliski	Smilax tamnoides	dinû'skĩ
Kalmia latifolia	dusúga	Toxicodendron radicans	ulû'ta
Leucothoe recurva	euisúhĩ	Vaccinium stamineum	ayălatĩskĩ
Leucothoe axillaris	nûdăgweja-iyu'stĩ	Viburnum acerifolium	kûnigûiyústĩ
Lindera benzoin	nátû'tlĩ	Viburnum prunifolium	kûnigû'
Lyonia ligustrina	kuwáya-iyu'stĩ	Vitis aestivalis	telû'latĩ
Passiflora incarnata	uwă'lă'	Vitis baileyana	unăsúga
Passiflora lutea	uwă'liyústĩ	Vitis lambrusca	kwălúsĩ
Photinia pyrifolia	gă'lăgû'skű	Vitis vulpina	kwălúsĩ
Pyrularia pubera	tsigwăgwă	Xanthorhiza	dalâni
Rhododendron	dusúga	simplicissima	
catawbiense			

## Cherokee Shrubs and Vines

*atáyakalí'skĩ* – ‘it chokes one’ – *Rosa carolina* L. – wild rose

The name *atáyakalí'skĩ* stems from *ágiyǎgû'lihû* (‘I am choking’) and was attributed to the fact that the “berries (hips) are dry and powdery when bitten.” Or, as another informant noted, the berries were, “furry inside.” Mooney also recorded the synonym *tsíst- unígistĩ* (‘rabbit’s food’), from *tsístu* (‘rabbit’) and *unígistĩ*, the plural form of *agístĩ* (‘food’). This was because rabbits were perceived to be fond of the berries.

Olbrechts recorded several synonyms for *R. carolina* based on the folk generics *atáyakalí'skĩ*, *tsíst- unígistĩ*, and *tsistukskilönti* (‘rabbit’s bobbed tail’). He found it was known as *atáyakalí'skĩ usdíga*, *tsíst- unígistĩ usdíga*, or *tsistukskilönti usdíga*, all representing the recognition of it as the ‘small’ kind, as well as *atáyakalí'skĩ igâ'teně'hĩ* or *tsíst- unígistĩ igâ'teně'hĩ*, signifying that it was known as the ‘swamp-growing’ kind. The designation as the ‘swamp-growing’ kind suggests that these species names may have also been used for *Rosa palustris* Marshall, the swamp rose, which is morphologically very similar to *R. carolina* and inhabits the same distribution range (Radford et al. 1968: 551).

According to Olbrechts, *R. carolina* was used in combination with *R. eglanteria*, *Euonymus americanus*, and *Phlox stolonifera* for diarrhea with a slimy discharge. He also recorded that *R. palustris* was used for two conditions involving the loss of blood, *gigö digöguski* (‘when they discharge blood from their bowels’) and *gigö yandik'öça* (‘urinating blood’). He did not indicate which parts of the plants were used or how they were prepared.

*atáyakalí'skĩ gatusě'hĩ* – 'it chokes one, mountain dwelling' – *Rosa eglanteria* L. – sweet briar rose

The specific qualifier *gatusě'hĩ* ('mountain dwelling') stems from *gatúsi* ('mountain') and *ě'hĩ*, a form of *éhû* ('it dwells'). Olbrechts also recorded the synonyms *tsistukskilönti útana* ('rabbit's bobbed tail, large') and *tsíst- unígistĩ útana* ('rabbit's food, large'). It was used with or in place of *R. carolina* for slimy diarrhea and *gigö yandik'öça* ('urinating blood') and in combination with two species of *Ilex* for groin pain caused by a ghost. The roots were used as an emetic when prepared in a decoction with *Vitis aestivalis*, *Lobelia cardinalis*, *Cornus florida*, *Prunus pensylvanica*, *Aureolaria flava*, *Lindera benzoin*, *Xanthorhiza simplicissima*, and a species of *Ilex*.

*ă'ta-tsũ'siwă* – 'hollow wood' – *Hydrangea arborescens* L. – hydrangea

The name *ă'ta-tsũ'siwă* stems from *ă'ta* ('wood') and *tsũ'siwă* ('empty or hollow') and was due to the stem having pith instead of a solid core. Mooney also recorded the synonyms *ditanélawáskĩ ă'ta-tsũ'siwă* ('it peels them off, hollow wood'), which was due to the exfoliating bark, and *ditanélawáskĩ ustsáhĩ* ('it peels them off, topknot'), 'topknot' referring to the appearance of the inflorescence. Olbrechts recorded it simply as *ditanélawáskĩ*, suggesting that his informants found the exfoliating bark a more diagnostic feature than the pithy core. But Mooney found that the folk generic *ditanélawáskĩ* was a reference to *Clethra acuminata* (see below) which also has exfoliating bark.

Mooney found that a cold infusion of either the roots or the bark was drunk to stop vomiting. Olbrechts found that it was combined with *Lindera benzoin* for the same

purpose and used by women for *andkt'egö* ('they are under restriction'). An infusion of the bark was also used as an emetic for the biliary condition known as *dalâni* ('yellow') (Mooney and Olbrechts 1932: 192). A cold infusion of the green bark was given to infants and children to alleviate vomiting, while the freshly scraped bark was used on burns and swellings or made into a poultice and used on sore muscles (Banks 1953: 57).

*ă'ta-tsũ'siwă ditanélawáskĩ* – 'hollow wood, it peels them off' – *Acer pensylvanicum* L. – striped maple

Mooney did not explain the gloss for this name (Ms. 1894), and it is not clear why this would be known as 'hollow wood' or why it is described as having bark that peels off. He also recorded the synonym *ă'ta-tsũ'siwă ditawisgage*, but provided no gloss for the specific qualifier. However, Olbrechts also recorded it as *ă'ta-tsũ'siwă* without a modifier, so the perception of hollowness or pithy wood appears to be consistent. *Acer pensylvanicum* is a northern species that grows as a shrub or small tree and reaches its southern terminus in the Southern Appalachian Mountains (Preston 1989: 311). Olbrechts found that it was used in a formula with 18 other plants for when a person "feels queer", a condition caused by the intervention of a witch.

*ayălatískĩ* – 'its abdomen is swollen' – *Vaccinium stamineum* L. – wild gooseberry, deerberry

The folk generic *ayălatískĩ* stems from *ayălâ'tistihû* ('it is causing the abdomen to swell'), which is a composite of *skwa'lıyĩ* ('abdomen') and *ga'tískû* ('it is swelling').

Mooney speculated that this was due to the swollen appearance of the berry. A decoction of all parts of the plant was drunk at night and the following morning before meals for colic with associated cramps. A decoction of the roots prepared in combination with those of *Gaylussacia baccata*, *Amelanchier arborea*, and *Ilex montana* for excess menstrual discharge with a pale color. Mooney said the berries were always eaten raw, never dried for future use. Witthoft also said they were eaten from the bush when very ripe, but not normally gathered for use during meals (n.d.: 45). He found that they were sometimes stewed, but not preserved for future use.

*dalâni* – ‘yellow’ – *Rhus copallina* L. – winged sumac

Mooney did not explain why *R. copallina* was referred to as ‘yellow’, but both he and Olbrechts recorded *dalâni* as the folk generic. From my observations of the plant I would suggest that it might have been due to the inflorescence, which has a yellowish color. Mooney also recorded it as *dalâni kûlâgwă-iyústĩ* (‘yellow, like smooth sumac’), due to its resemblance to *Rhus glabra*, and *dalâni tsunâgsti* (‘yellow foods’), possibly due to the edibility of the sour berries. Mooney did not provide a gloss for *tsunâgsti* (Ms. 1894), but it appears to be a plural form of *agístĩ* (‘food’). Olbrechts recorded the name for *R. copallina* as *dalâni goksti* (‘yellow, to smoke’), due to the prevalent use of the leaves in smoking mixtures. An early 19<sup>th</sup> century account from the Payne/Butrick papers referred to it as “the common *talony* used for smoking” to distinguish it from *Xanthorhiza simplicissima*, which was also recorded as *talony* (Payne n.d.b: 279). In fact, Mooney said that the leaves were once used in place of tobacco (Ms. 1894).

Olbrechts found that *R. copallina* was used in a formula for blisters caused by the sun, known as *unawat'ö'öski* ('blisters').

*dalâni amayultehi* – 'yellow, water edge growing' – *Xanthorhiza simplicissima* Marshall – yellow-root

The name *dalâni* was in reference to the intensely yellow color that was apparent when the bark is removed from the roots. The specific qualifier *amayultehi* ('water edge growing') refers to the preferred habitat of *X. simplicissima*, which is commonly found growing near mountain streams. Olbrechts also recorded the synonyms *dalânige unastetsi* ('yellow root') due to the yellow color that permeates the roots and *gígagéï atat'aski* ('bloody juice comes out of it'), but he did not explain the gloss and during my interactions with this plant I have not observed red juice coming from any of its parts.

The broad range of seemingly unrelated uses for *X. simplicissima* suggests that this was an important medicinal in the Cherokee pharmacopoeia. Mooney recorded a single use (1891: 364), as a decoction that was blown on the head, breast, and palm of each hand of a birthing mother. This was reiterated as the single published account of for this plant's use by Olbrechts (Mooney and Olbrechts 1932: 274), but he recorded a number of uses in his notes. The yellow roots were indicative of its efficacy for the condition *dalâni tsanöttiyöskiliça* ('when they have yellow slime coming out of their nostrils'). It was used alone or in combination with other plants for *danak'ewsköi* ('when they have sore eyes'), the scrofulous condition *duletsi* ('kernels'), *gigö yandik'öça* ('urinating blood'), and *uniskowldisgöi* ('whenever they have diarrhea'). The roots were also steeped and the infusion held in the mouth to cure thrush.

Banks (1953: 47-48) added the scraped bark was used as a poultice to relieve sore eyes, the root was added to mutton tallow and used as a salve for sores, and the chewed root or an infusion of the root was used for a sore mouth. A tea of the roots was drunk to alleviate cramps and to calm nerves. A decoction of *X. simplicissima* combined with *Asarum canadensis*, *Goodyera pubescens*, *Alnus serrulata*, and *Prunus serotina* was used as a blood tonic and to increase the appetite.

Yellowroot was also the primary source of yellow dye used to color white oak baskets as well as masks, bows, and other objects. In the early part of the 19<sup>th</sup> century, this dye, with the addition of black oak bark, was also used to color ceremonial feathers, turning them “a most brilliant yellow” (Payne n.d.b: 279).

*didáleyû'skĩ* – ‘they burn them’ – *Rhus vernix* L. – poison sumac

According to Mooney, *didáleyû'skĩ* was the plural form of *adáeyû'skĩ* (‘it burns them’), which stemmed from *tsilě'tiskû* (‘I am burning it habitually’). This was due to the severe dermatological irritation caused by contact with *R. vernix*. While not common in the southern Appalachians, it is found in the southwestern portion of North Carolina (Radford et al. 1968: 677) and its reputation would have guaranteed its persistence in Cherokee folklore, much as the fear of “poison sumac” does in the Euro-American tradition. Witthoft referred to it as “one of the most dreaded of local plants” and was told of one fatality due to contact with this plant (n.d.: 60).



*dinû'skĩ* or *didanûskĩ* – ‘breeder’ or ‘it breeds’ – *Smilax tamnoides* L. – bristly greenbriar

*Dinû'skĩ* and *didanûskĩ* stem from *anûskû'* (‘it is bringing forth’), a term used for birthing animals and birds laying eggs, but not for women. It was called ‘breeder’ because it was thought that a thorn from *dinû'skĩ*, if left in the flesh, will breed other thorns in the same spot. Mooney only identified this to the genus level, but he described it as having, “slender stalks, smaller thorns”, which fits the description for *S. tamnoides*. This may also have been the species used for scratching ceremonies (see *galiwâ'dĩ* below). However, Witthoft claimed Mooney was mistaken and *dinû'skĩ* was not a species of *Smilax*, but a species of *Rubus* with “innumerable tiny prickles” on the creeping vine that were impossible to completely remove if a bare leg caught the runner. A voucher specimen would be necessary to settle the discrepancy.

*ditanélawáskĩ* – ‘it peels them off’ – *Clethra acuminata* Michaux – sweet pepperbush

The name *ditanélawáskĩ* refers to the exfoliating bark of *C. acuminata*. Olbrechts also recorded the synonym *saluyitsuga* (‘the tree growing among the laurels’) due to its habitat preference, but he placed the name *ditanélawáskĩ* next to it in parentheses. However, he did not specify if it was a folk species of *ditanélawáskĩ* or if this was an alternative name. *Clethra acuminata* was included in two formulas from *The Swimmer Manuscript* (Mooney and Olbrechts 1932: 192 and 218), both referring to its use as an emetic to dislodge stagnant bile in cases of *dalâni*. In the first reference, he stated that specimens of both *C. acuminata* and *Hydrangea arborescens* were collected by his informants as samples of *saluyitsuga*. The two may have been used interchangeably, especially for biliary disease, but this is not clear from either his or Mooney’s notes (see

ă'ta-tsǔ'siwă above). Olbrechts also recorded that *C. acuminata* was combined with *Dirca palustris* for another biliary condition known as *dalâni unit'elα'öska* ('shaking *dalâni*'), as well as for strange dreams associated with a woman's menstrual cycle. Banks added that an infusion of the bark was used for bowel complaints and a decoction of the bark, in combination with *Prunus serotina*, was drunk to break a high fever (1953: 97).

*dusúga gatusě'hĩ* – 'laurel, mountain dwelling' – *Rhododendron catawbiense* Michaux – mountain rosebay, purple laurel

Mooney and Witthoft both indicated that *dusúga* was an opaque, proper name for the laurels. But Olbrechts glossed it as 'they are claws'; possibly referring to their topical application in rituals that involved scratching (see *askwaneta* in Herbaceous Plants, Part 3). The word *dusúga* may also be closely related to *da'núga* ('scratcher'), a term that applied to the scratching devices used by the medicine men, and also to the leg of a grasshopper (see *da'núga* in Herbaceous Plants, Part 3). The specific qualifier *gatusě'hĩ* was a combination of *gatusĩ* ('mountain') and *ehĩ* ('dwelling' or 'growing'), because of the tendency for *R. catawbiense* to grow high in the mountains. No applications were attributed to *R. catawbiense* and it is not clear from the notes if it was an acceptable alternative to *R. maximum* (see below).

*dusúga tsundí-ga* – 'small laurel' – *Kalmia latifolia* L. – mountain laurel

The specific qualifier *tsundí-ga* is the plural from of *usdíga* ('small'). According to Mooney, a decoction of *K. latifolia*, *Rhododendron maximum*, and *Leucothoe axillaris*

was applied to a scratched area for the relief of involuntary muscular twitching and rheumatism of the knee. The Cherokee would not burn any part of these plants, not even the leaves swept off of the floor, because burning would destroy their medicinal qualities of the whole species and cause the onset of cold weather (Mooney 1900: 422). Olbrechts was more general about its use and recorded that *K. latifolia* was combined with *R. maximum*, *L. axillaris*, *Porteranthus trifolius*, and *Veratrum viride* were, as a rule, used for all conditions that required pretreatment by scratching (Mooney and Olbrechts 1932: 203-204). The same combination, with *Cassia marilandica* substituted for *P. trifolius*, was used for heart attacks, known to the Cherokee as *usonuli unt'ane'ö* ('sudden attack'). *Dusúga tsundí-ga* was made into a warm infusion with *R. maximum* and *V. viride*, and rubbed on an area scratched with the serrated edges of the leaves of *L. axillaris* for the condition *unestanelidoloçöi* ('when they have pains all over their body'). The medicine man follows the pain to different areas, treating each spot each spot until there is no new pain (Mooney and Olbrechts 1932: 220-221). Banks similarly found that the laurels were used to treat rheumatism, as well as for preventing cramps in ball players (1953: 99).

*dusúga tsúntana* – 'large laurel' – *Rhododendron maximum* L. – great laurel

The specific qualifier *tsúntana* is the plural form of *útana* ('large'). As the Cherokee and common names suggest, this shrub can get quite large and will sometimes reach the proportion of a small tree (Radford et al. 1968: 798). The medicinal uses have been discussed in the previous entry; however, the wood was also favored by woodworkers for making combs and spoons. Well-seasoned rhododendron

wood was used to make, “the finest cooking spoons made anywhere” (Witthoft n.d.: 139).

*elí'skală* – New Jersey tea or redroot – *Ceanothus americanus* L.

*Elí'skală* appears to be an opaque, proper name for *C. americanus*. Mooney found that a warm decoction of the bruised roots of *C. americanus*, *Cacalia atriplicifolia*, *Cimicifuga racemosa*, and *Polymnia uvedalia* was drunk as a remedy for fevers. Olbrechts noted that the steeped root was drunk for dysentery and that the plant was used in ceremonies to separate two lovers. Banks found that large quantities of warm *elí'skală* tea were drunk as an emetic for when one was “tired in the chest”, and a tea of the roots was drunk before bedtime for bowel complaints (1953:84).

*eusúhĩ* – dog-hobble – *Leucothoe axillaris* var. *editorum* (Fernald & Schubert) Ahles

*Eusúhĩ* appears to be an opaque, proper name for dog-hobble. Most of the uses for *L. axillaris* were recorded above (see *dusúga tsundí-ga*). In addition to these, Mooney found that a cold infusion of the beaten leaves was applied after scratching for rheumatism, hurts, and stings. Olbrechts called *eusúhĩ*, “one of the most important agents in the Cherokee *materia medica*”. Besides its use in conditions that required scratching, it was used with the three varieties of *dusúga* for *dinileni dunt'askiye'öi* (‘their ears burst’). Banks (1953:100) found that an “ooze” of the roots was applied to a dog’s skin to cure mange and that people would bathe in a decoction of the leaves and stems to cure a related condition; the “itch” or scabies. It is extremely toxic and, according to

Witthoft, it was “used only in medicine, and externally at that, and is noted mostly to prevent stock and children from chewing on it (n.d.: 60).”

*gaksûka usdíga* – ‘small *gaksûka*’ – *Viburnum spp.* – mountain elderberry

*Gaksûka* (spelled with a “g” or a “k”) appears to be an opaque, proper name for the elderberries. The specific qualifier *usdíga* indicates that there were at least two folk species, but the vague botanical identification for the small variety and no outside references to “mountain elderberry” makes it difficult to clarify this point. Witthoft (n.d.: 40) also mentions that the Cherokee distinguished between a large and small variety of *gaksûka*, but he decided that they were ecological variations of the same species. The red elderberry, *Sambucus racemosa* L. var. *racemosa* Michaux, grows at the higher elevations and apart from the red fruit and panicle inflorescence, is very similar to the elderberry, *Sambucus canadensis* (see below), so there is a good chance that Mooney misidentified it as a *Viburnum*. No medicinal uses were attributed to *gaksûka usdíga* and, if it was *S. racemosa*, the fruits are considered to be toxic and are usually avoided (Muenscher 1975: 221).

*gaksûka útana* – ‘large *gaksûka*’ – *Sambucus canadensis* L. – elderberry

Mooney identified *S. canadensis* as the ‘large’ species of *gaksûka*, but Witthoft, Banks, and Olbrechts simply referred to it by the folk generic. Mooney found that the bark, scraped from the stems of *S. canadensis*, was combined with *Xanthorhiza simplicissima* and made into a tea and considered a good remedy for the small white worms that were common in children. Olbrechts recorded that a young root growing

from a new sprout of an old root of *Sambucus canadensis* was made into a hot infusion and drunk for the kidney condition *dunatsöwalö ne'öi* ('swellings on both sides'). He also found it used for heartburn and the biliary condition *dalâni* ('yellow'). Banks (1953: 121) added that elderberry tea was a remedy for rheumatism and that a decoction of the bark was used for diarrhea ("summer complaint"). Several sources suggest that the berries were used in jelly (Banks 1953: 121, Perry 1974: 32, White 1975), but Witthoft observed that they were rarely eaten (n.d.: 40), occasionally being stewed or cooked into bean bread.

*gâ'lägû'skü gatusě'hĩ* – 'it ripens in winter, mountain dwelling' – *Ilex montana* Torr. & Gray ex Gray – mountain holly, mountain winterberry

The folk generic *gâ'lägû'skü* refers to the tendency of the berries to turn red and remain on the plant until late in winter. The specific qualifier *gatusě'hĩ* was a combination of *gatúsĩ* ('mountain') and *ehĩ* ('dwelling' or 'growing'), and, as the common name suggests, this species is most commonly found in the mountains. *Ilex montana* will be discussed below, but is included here for classification purposes.

*gâ'lägû'skü saluyě'hĩ* – 'it ripens in winter, swamp growing' – *Photinia pyrifolia* (Lam.) Robertson & Phipps – red chokeberry

The specific qualifier *saluyě'hĩ* stems from *salúyi* ('swamp') and *ehĩ* ('dwelling' or 'growing'), due to the preference of *P. pyrifolia* for wet ground. Mooney also recorded the synonym *gâ'lägû'skü tlawâtuehĩ*, the specific qualifier being a form of *klawátuě'hĩ*

(‘growing in mud’); another reference to its preference for wet ground. There is no available information on the medicinal properties of *gâ’lăgû’skŭ saluyě’hĩ*.

*galiwâ’dĩ gŭnagěĩ* – ‘greenbriar, black’ – *Smilax pseudochina* L. -

*Galiwâ’dĩ* was the Cherokee folk generic for the species of *Smilax*, the greenbriars or catbriars. *Smilax pseudochina* was considered *gŭnagěĩ* (‘black’) due to the color of the stalk at certain times of the year. He identified the botanical species as *S. pseudochina*, but this species is most common on the coastal plain and only occasionally encountered in the mountains (Smith 1998: 18). Another herbaceous species, *Smilax herbacea* L., is commonly encountered in the North Carolina mountains, but Mooney wrote that *galiwâ’dĩ gŭnagěĩ* was used as a scratching implement. The herbaceous species of *Smilax*, unlike the woody species, do not have bristles that could be used in such a manner. One of Mooney’s informants identified *S. herbacea* as *anisgína-(ts)unâ’năsŭ’ta* (‘ghosts’ terrapin rattles’), a name generally reserved for the wild yam (*Dioscorea villosa*), but this may have been a misidentification due to the similarity of the two plants in their early stages of development. However, the informant did say that a tea of the roots of *S. herbacea*, combined with those of *Collinsonia canadensis*, was used for “rumbling bowels”, which was similar to the use recorded by Banks (1953: 17-18). Will West Long told Banks that a decoction of the roots and vines of both *S. herbacea* and *S. rotundifolia* was drunk for bowel problems. While it appears that the Cherokee utilized *S. herbacea*, it was not likely that it was the ‘black’ species of *galiwâ’dĩ* recorded by Mooney. He also recorded the synonyms *galiwâ’dĩ wâtigeĩ* (‘brown’) and *galiwâ’dĩ itsě’hĩ* (‘green’).

*galiwâ'dĩ talânige* – ‘greenbriar, yellow’ – *Smilax spp.* – greenbriar, catbriar

This was another case of Mooney, or the Smithsonian’s botanists, identifying the botanical species as one that does not grow in the region. He recorded *galiwâ'dĩ talânige* as *Smilax smallii* Morong, a species commonly found in the coastal plain and lower Piedmont, but not present in the mountains (Radford et al. 1968: 289). He also did not indicate why it was known as the ‘yellow’ species of *galiwâ'dĩ*. He found that *galiwâ'dĩ talânige* was used to cool the pain caused by a burn, but did not specify how it was prepared.

*galiwâ'dĩ sa'kânigeĩ* – ‘greenbriar, blue’ – *Smilax glauca* Walter – catbriar or greenbriar

*Smilax glauca* was known as the ‘blue’ species of *galiwâ'dĩ* due to the bluish color of the stems. Mooney also recorded the synonym *galiwâ'dĩ klayuě'hĩ* (‘greenbriar, growing in old fields’), due to its frequency in abandoned garden sites and fields.

Mooney found that the root of *S. glauca* was pounded and placed in the hollow portion of an aching tooth. Olbrechts recorded several uses, including in formulas for *dalânige tsandik'öça* (‘yellow urine’) and *ut'igadö* (‘to drive out afterbirth’), and as a scratching utensil for a condition involving cramps known as *dik'anugosti nugötlö götoti* (‘to be used with a briar to cause it to come out’). It was combined with *Vitis aestivalis* and used as a love attraction medicine and with *Eryngium yuccifolium* for “insects coming out of wounds”. He also wrote that a portion of the stem used as a scratching implement to treat rheumatism (Mooney and Olbrechts 1932: 196).

Banks (1953:17) added that the wilted leaves were used as drawing poultice for bringing boils to a head and that the bark was added to a decoction with that of *Nyssa*



*sylvatica*, *Euonymus americanus*, *Platanus occidentalis*, *Liquidambar styraciflua*, *Vitis aestivalis*, and *Fagus grandifolia*. This was drunk as a tea for “bad disease”, a condition whose primary symptom was a severe fever.

*hayúgĩtă*, *uy'úgĩtă* or *yúgĩtă* – hazel-nut – *Corylus americana* Walter

Mooney recorded *hayúgĩtă*, *uy'úgĩtă* and *yúgĩtă* as acceptable names for the hazel-nut bush, and they all appear to be opaque, proper names. Olbrechts recorded that it was used in a formula as an emetic for *dalâni dikstoti* (‘to make patient vomit bile’), toothaches, and with *Platanus occidentalis* for fevers accompanied by shaking. The nuts were also cracked and eaten raw, especially by Cherokee children (Witthoft n.d.: 48a).

*igagû'ĩ* – ‘light’ or ‘light hangs on it’ – *Clematis virginiana* L. – virgin’s bower

The folk generic *igagû'ĩ* (‘light’) was due to the long, white styles on the seeds creating the appearance of a ball of light. Mooney also collected the synonyms *û'tsatĩ uwadsĩ'ska-iyústĩ* (‘like fish scales’), due to its resemblance to *Thalictrum thalictroides*, *unutláeta* (‘a heavy mass of vines’), and *ulkátăškĩ* (‘it swells at the base’). Mooney found that a cold infusion of the pounded plant was used for the biliary disease *dalâni* (‘yellow’) with associated dysentery. It appears to have been especially useful in conditions of the urinary tract. Olbrechts found it used in formulas for both *dalânige tsandik'öça* (‘yellow urine’) (Mooney and Olbrechts 1932: 288) and *unegö tsandiköça* (‘if they water out white’). Banks added that it was used for profuse urination and as a general remedy for the kidneys and bladder. He also found that an infusion of the roots

was drunk for an ulcerated stomach and the root was chewed alone or it was combined in an infusion with a species of *Asclepias* for back problems. It was an ingredient in the medicine if one got ill from eating the first ears of corn (Banks 1953: 45).

*itsě'hĩ* or *t'tsě'hĩ* – ‘green’ – *Alnus serrulata* (Aiton) Willd. – tag alder

Mooney did not explain why this shrub would be considered prototypical of “green-ness”, but Olbrechts glossed *itsě'hĩ* as both ‘new’ and ‘green’, so it may have been due to shade of green found on the emerging spring leaves. Olbrechts also recorded the synonyms *at'tsě'hĩ* (‘green’) and *tsaya* (no gloss).

*Alnus serrulata* appears only twice in Mooney’s notes. In a formula for old sores and cancers, the bark was combined with that of *Sassafras albidum* and *Carpinus caroliniana* as well as the leaves of *skwáľi utana* (see Herbaceous Plants, Part 3). It was also part of a formula used for sickness sent by animals who had not been respected by a hunter known as *at'awini e'i* (‘the forest dwellers’).

In contrast, Olbrechts found it used for a wide variety of ethnomedical conditions. It was part of an infusion held in the mouth of the medicine man for sucking out the affliction caused by *adansiludoĩ yune'istanelö* (‘trailing along, if there is pain in different places’) or the similar condition *unestanelidoloçöi* or *uneistaneo gananugotsidoi* (‘when they have pains all over their body’). The chewed bark was blown into the eyes of a patient suffering from *akt'oli yutłöya* (‘when their eyes hurt’) or *daninsugi* (‘sore eyes’ or ‘when they have them drooping’), and it was part of a formula given to menstruating women known as *andkt'egö* (‘they are under restriction’). It was used in an emetic formula for *dalâni dikstoti* (‘to make patient vomit bile’) and for an undescribed condition

known as *dawzni e'i unitłöyö* (no gloss). It was included in formulas for *gotisgi tsunitsöyöi* ('when their stomach is swollen'), *unisi'kwaskö* ('when they are coughing') or *utliyaktanöçi yiki nundiwsköna* ('when they have a bad cough'), and *unödi tsandik'uça* ('they urinate all milk'). This is one of the few species that Olbrechts noted as a species cultivated by the Cherokee medicine men (Mooney and Olbrechts 1932: 91).

Banks added several more uses to this list (1953: 27-29). An infusion of the bark was used for heart trouble, excessive menstrual discharge, coughs, thrush in newborns, as a diuretic, and to bring down blood pressure while purifying the blood. A cold infusion of *A. serrulata*, *Prunus serotina*, *Juglans nigra*, and *Diospyros virginiana* was held in the mouth to heal an abscessed tooth. The roots of alder, *Rubus spp.* (a type of dewberry), and *Pinus virginiana* were made into a tea and used as a soak to relieve hemorrhoids. A decoction of alder, *Goodyera pubescens*, *Xanthorhiza simplicissima*, *Asarum canadense*, and *Prunus serotina* was considered to be a good blood tonic and a decoction of alder alone was used as a general tonic.

*itsě'hĩ usdīga* – 'green, small' – *Alnus viridis* (Vill.) Lam. & DC. or *Alnus viridis* (Vill.) Lam. & DC ssp. *crispa* (Ait.) – green alder, mountain alder

Olbrechts observed the 'small' *itsě'hĩ* growing in the neighboring settlement from where he was based. The identification of the botanical species is speculation on my part because the smaller species of *Alnus*, the green alder and the mountain alder, are found at the highest elevations and are very rare. It may have been one of these species that was cultivated by the medicine men (see above), as they would not have been conveniently located near the towns.

The uses her recorded were slightly different from those of *A. serrulata*. An infusion of the scraped bark was blown on the patient in cases of “heat”, possibly a type of fever, and it was combined with a larger species of alder to counteract the effects of eating food prepared by a menstruating woman.

*kâlûgûtliski* – ‘bone joiner’ – *Ilex montana* Torr. & Gray ex Gray – mountain holly, mountain winterberry

The folk generic *kâlûgûtliski* (‘bone joiner’) was used in reference to the use of the plant to mend broken bones (see below). Mooney recorded several synonyms for *I. montana* including *kâlûgûtliski usdîga* (‘small’), *kâlûgûtliski útana* (‘large’), *kâlûgûtliski na’tsihi-ehi* (‘growing in the pines’), and *gâ’lăgû’skû gatusě’hĩ* (‘it ripens in winter, mountain dwelling’). The last name referred to the red berries that remain on the bush after the leaves have dropped in the late fall. Olbrechts recorded three synonyms based on an unidentified yellow quality of *I. montana*. They were *dalâni usdîga* (‘small yellow’), *dalâni útana* (‘large yellow’), and *dalâni gigage atat’aski* (‘red fruit yellow’), again referring to the red berries.

Mooney found that a decoction of the bark was used as a wash to mend broken bones. Olbrechts also found that it was used in combination with *Vitis aestivalis* for broken bones and in formulas for *dalânige tsandik’öça* (‘yellow urine’) and *unisi’kwaskö* (‘when they are coughing’). Along with its use for ‘yellow urine’, it was combined with *Rosa eglanteria* for *gigö yandik’öça* (‘urinating blood’), as well as in combination with *I. verticillata* for *an’t’asgiski tskoya* (‘insects are breaking out’).

*kâlûgûtliski usdia egwanulti-ehi* – ‘bone joiner, small, growing by the river’ – *Ilex verticillata* (L.) Gray – winterberry, black alder

Mooney did not provide a gloss for *egwanulti-ehi*, but Alexander recorded *e quo ni* as one of the Cherokee words for “river” (1971: 135). Other synonyms suggest this is a viable name for *I. verticillata*. Mooney also found that it was called *salúĩtskĩ* (‘swampy tree’) from *salúyĩ* (‘swamp’) and *tskûĩ* (‘tree’).

Olbrechts recorded it as *kâlûgûtliski amayułtei* (‘bone joiner, growing by the water’), another reference to its preference for wet areas, and *t’elanö* (‘it has been shaken’), but he did not explain this name.

Mooney found that the outer bark was scraped off and boiled for one to two minutes and drunk as an emetic for cases of *dalâni* (‘yellow’). This was repeated for four mornings while fasting. Olbrechts found that, like *I. montana*, it was used for *undöłaksöçi* (‘broken bones’). However, he found that the bark of *I. verticillata* was chewed and blown over the previously scratched area instead of being poured on as a decoction. He also found that it was used with or in place of *I. montana* for *dalânige tsandik’öça* (‘yellow urine’) and *an’t’asgiski tskoya* (‘insects are breaking out’), as well as for strange dreams during menstruation known as *andkt’egö* (‘they are under restriction’).

*kanélskă* – *Calycanthus floridus* L. – sweet-shrub

*Kanélskă* appears to be an opaque, proper name for *C. floridus*. According to Mooney, Cherokee hunters would eat the seeds of *kanélskă* to ward off hunger. Witthoft elaborated on this use, offering that, “the seeds in the ball-like pods, which ripen in

autumn, are remembered as starvation-time food or stimulant, and are said to have formerly been eaten by hunters in the woods (n.d.: 51). He also determined *C. floridus* was the species referred to as “strawberry shrub” in a missionary report on Cherokee plants from the early 19<sup>th</sup> century (Witthoft 1947). The roots were used as a powerful emetic and the seeds used to poison wolves. However, this may have been *Euonymus americanus*, commonly known as “strawberry bush” (see *tsuwatúna utana* below).

Olbrechts found that *C. floridus* was used for the scrofulous condition *duletsi* (‘kernels’) when combined with *Pyrularia pubera* and the bark was used in an infusion with that of *Xanthorhiza simplicissima* for *andkt’egö* (‘they are under restriction’). It was part of a formula for *dalânige tsandik’öça* (‘yellow urine’) and used singly for venereal disease of men and “to drive witches about”. Banks (1953: 51-52) added that a cold bark tea, dripped into the eye from a rag, was used for those going blind from cataracts. The tea would “take white stuff off the eyeball”. A tea of the bark would also cure sores on children and hives on infants.

*kûnigû’* - *Viburnum prunifolium* L. – black haw

*Kûnigû’* appears to be an opaque, proper name for *V. prunifolium*. The only medicinal application for black haw was recorded by Olbrechts, who found that the bark was boiled down in a decoction with several other woody species for cancerous sores known as *ada’yeski* (‘eating itself’). However, in another section of his notes, Olbrechts identified *kûnigû’* as *Viburnum rufidulum*, but this species is not common in the mountains. He was probably observing *Viburnum nudum* L. var. *cassinoides* (L.) Torr. & Gray, commonly known as withe-rod. Mooney recorded the name for *V. nudum* var.

*cassinoides* as *kûnigû´ unígistĩ*, *unígistĩ* being the plural of *agístĩ* ('food'), in reference to the edible fruit.

Olbrechts found *kûnigû´* was used for a dermatological condition known as *uninidla* ('crevices on the skin'), as well as in a formula for scrofula and in combination with otter's brains and rock water for tuberculosis. Banks added that an infusion of the bark of withe-rod was used to wash the mouth in cases of a sore tongue (1953: 121).

*kûnigûiyústĩ* – 'like *kûnigû´*' – *Viburnum acerifolium* L. – mapleleaf viburnum

The Cherokee classification of *V. acerifolium* appears to have been due to the inflorescence and fruit. The leaves are nearly identical in form and arrangement to the red maple, *Acer rubra*, and are often found growing in the same habitats, but the inflorescence and fruit are quite similar to other species of *Viburnum*. In this case, the plant was identified as being 'like' *kûnigû´* and the resemblance to red maple was not acknowledged. This reliance on the inflorescence and fruit as criterion for classification demonstrates a high level of botanical sophistication.

Olbrechts found that *V. acerifolium* could be used as a replacement for *V. nudum* var. *cassinoides* and was combined with an unidentified plant for the biliary condition known as *dalâni* ('yellow'). Banks added that it was an ingredient in a formula for small pox (1953: 121), but did not include the other ingredients.

*kûnagĩ'l'ka unega* (*adsilû'skĩ*) – ‘turkey, white (flowered)’ – *Rhododendron periclymenoides* (Michaux) Shinnars – pinxter azalea

Mooney claimed that the folk generic *kûnagĩ'l'ka* stemmed from *kû'na* (‘turkey’) because turkeys ate the berries that resembled the turkey’s dewlap. This is unlikely, as the fruit of the azaleas is an inedible, dry capsule. However, Banks (1953: 101) and Witthoft (n.d.: 55) recorded that a gall of a fungus which on *Rhododendron calendulaceum* (Michaux) Torrey, probably *Exobasidium rhododendri* (Fuckel) Cramer, was eaten by the Cherokee to assuage thirst while traveling through the mountains (see *sûnktă'* in the chapter on Fungi). The irregular gall, which is found on species of *Rhododendron* (Bassette et al. 1997: 467), could easily be said to resemble the dewlap of a turkey. Witthoft said the name was due to the arrangement of the flowers and leaves, said to resemble parts of a wild turkey (n.d.: 55), but his explanation leaves too much to the imagination to be considered tenable.

Mooney found that an infusion of the scraped bark of *R. periclymenoides* was drunk to alleviate vomiting caused by over-eating the wrong foods. Banks, in reference to *R. calendulaceum*, found that a peeled, boiled twig was rubbed on areas affected by rheumatism.

*kûnasútlawă* – ‘tangled up’ – *Hamamelis virginiana* L. – witch-hazel

The gloss for *kûnasútlawă* was purely speculative on Mooney’s part. Will West Long told him it might have been derived from *akĩ'năsúdălûnkĩ* (‘I am tangled’), but there was no explanation for the gloss.



According to Mooney, the green twigs of *H. virginiana* were combined with those of *Lindera benzoin* to increase appetite, relieve the pains of rheumatism and sore joints, and to reduce fever. The tea could also be rubbed in the mouth to relieve soreness. Banks found that a hot decoction of the bark of *H. virginiana*, the bark of *L. benzoin*, and the needles from *Pinus virginiana* was drunk to break a fever. He also found that the bark of *H. virginiana* was used alone as a hot infusion for colds and as a hot decoction to relieve a sore throat (Banks 1953: 58).

*kuwáya* – ‘hanging’ or ‘bending down’ - *Gaylussacia baccata* (Wangenh.) K. Koch – black huckleberry, *Vaccinium spp.* – blueberries

Mooney did not provide a gloss for *kuwáya*, which he associated with huckleberries, but Witthoft said the same name was used for wild and cultivated blueberries and glossed it as ‘hanging’ or ‘bending down’ and suggested that it was, “descriptive of the loaded branches” (n.d.: 45). Witthoft said the fruits of *G. baccata* were eaten fresh in the field, but were not as relished as the blueberries. Perry (1974: 39) found that they were added as flavoring to corn bread and biscuits.

*kuwáya-iyu’sťi uni’elusati* – ‘like “hanging”, with soft things hanging on it’ – *Lyonia ligustrina* (L.) DC. – male-berry, male-blueberry, *Dirca palustris* L. – eastern leatherwood

Olbrechts glossed *kuwáya-iyu’sťi* as ‘plant like the real *kuwû*’, the suffix *-ya* indicating the ‘true’ or ‘real’ kind and *-iyu’sťi* (‘like’) indicating a resemblance to the ‘real’ kind. But this was probably incorrect, as there is little morphological similarity between the mulberry tree (*Morus rubra*) and the shrubby species he identified. The name

*kuwáya-iyu'stĩ* would indicate a resemblance to the huckleberries and blueberries and I have chosen to use Witthoft's gloss for *kuwáya* (see above). The specific qualifier *uni'elusati* ('with soft things hanging on it') would suggest that the species under consideration is *Dirca palustris*, which has hanging flowers that appear in the axils of the leaf buds before the leaves appear. However, as the common name "male-blueberry" implies, the leaves and inflorescence of *Lyonia ligustrina* are very similar to the blueberries. It may be that *L. ligustrina* and *D. palustris* are both types of *kuwáya-iyu'stĩ*, but only *D. palustris* required the specific qualifier.

Olbrechts found that *kuwáya-iyu'stĩ uni'elusati* was used in combination with *Aesculus octandra* and *Cassia marilandica* for painful urination and with *Alnus serrulata*, *Ilex verticillata*, and *Corylus americana* for cases of shaking due to fever. It was also used alone for *dalâni unit'ela'öska* ('shaking *dalâni*'). Witthoft added that it was "recognized as a plant that stupefies animals and makes them ill, but rarely kills (n.d.: 60)."

*kwăłágă* – 'bow' - *Rhus glabra* L. – smooth sumac

Mooney did not provide a gloss for *kwăłágă*, but Olbrechts glossed it as 'bow', most likely in reference to the shape of its trunk rather than its functional qualities, as the wood is quite soft. Olbrechts also included the synonyms *kwăłágă unega* ('white'), *kwăłágă dawiskage* ('smooth'), and *kwăłágă dalânige* ('yellow').

A woman that wanted her children to become witches would feed them nothing but corn hominy for 24 days. She would drink a decoction of *Rhus glabra* to start her milk flowing again after this time (Mooney and Olbrechts 1932: 130). Banks added that

a cold tea of the roots would make the milk of older women begin to flow (1953: 79). A topical application of a warm infusion of the bark of *R. glabra* was used to treat *unawat'ö'öski* ('blisters') caused by exposure to the sun (Mooney and Olbrechts 1932: 251). Olbrechts also found it was used for the back problem known as *ga'yedi* ('pain in the back'), *yöwi tsunstia göwani skastane'öi* ('when the little people frighten them'), strange dreams associated with menstruation known as *andkt'egö* ('they are under restriction'), and the biliary condition *dalâni*. Banks found that a tea of the berries and roots were part of a remedy for gonorrhea, the berries were eaten for kidney problems and bedwetting, a tea of the berries was used as a gargle for tonsillitis. He also found that an infusion of the roots was drunk for bowel problems and blown on convulsive patients (1953: 79). Witthoft found that the roots of *R. glabra* produced a yellowish-brown dye when used alone or a black dye when ferrous sulfate was added as a mordant (n.d.: 66). It was used to dye fabric, but not for baskets.

*kwălagă útana* – 'large bow' – *Rhus tyhpina* L. – staghorn sumac

The specific qualifier *útana* ('large') was in reference to the size of the plant, which was the largest of the sumacs in the southern mountains. Like *R. glabra*, it was used for the back problem *ga'yedi* ('pain in the back') and for *unawat'ö'öski* ('blisters').

*kwalúsĩ* – *Vitis lambrusca* L. – fox grape, *Vitis vulpina* L. – frost grape

*Kwalúsĩ* appears to be an opaque, proper name for both the fox grape and the frost grape, although Mooney identified it as *V. vulpina* and Olbrechts as *V. lambrusca*. Olbrechts also recorded the synonym *kwalúsĩ inagě'hĩ* ('growing in the wilderness').

Olbrechts found *V. lambrusca* was used in formulas for the urinary conditions *andlköça* *yunalstuneça* ('if their urine is stopped') and *dalânige tsandik'öça* ('yellow urine'), as well as in combination with *Vitis aestivalis* as a love attraction medicine. When used for stopped urination, a special plant was sought that had its roots growing in water.

Grapes were generally eaten fresh when ripe, but were also dried for use as a winter beverage. Segments of the grapevines were cut and hung on a drying frame placed in the sun. In the evening the racks were placed in front of the fire. The dried grapes were stored in the house until needed, then they were placed in boiling water and the resulting beverage drunk with meals (Witthoft n.d.: 41).

*nátû'tlĩ* or *nátûtsĩ* – 'feverbush' – *Lindera benzoin* (L.) Blume – spicebush

Mooney speculated that *nátû'tlĩ* (upper dialect) or *nátûtsĩ* (middle dialect) glossed as 'feverbush', but this was also the common name among the local whites and may have been unrelated to the Cherokee names. Olbrechts indicated that *L. benzoin* was the primary remedy for *ganewot'iski* ('measles') and was used in a formula for *gigö yandik'öça* ('urinating blood'). It was also used alone for fevers and with *Hydrangea arborescens* as an anti-emetic. According to Witthoft (n.d.: 53), the winter twigs and buds were often made into a beverage, along with its use for colds and fevers. Banks added that the tea of spicebush alone was given to infants for hives or in combination with *Cornus florida*, *Prunus serotina*, and good corn whiskey it was a remedy for measles. When combined with the bark of *Hamamelis virginiana* and the needles of *Pinus virginiana*, it would cause a fever to break (Banks 1953: 52-53).

*nûdâgweja-iyu'stĩ* – ‘like sourwood’ – *Leucothoe recurva* (Buckley) Gray – fetter-bush

The name *nûdâgweja-iyu'stĩ* (‘like sourwood’) was due to the resemblance of the twigs, leaves, and inflorescence of *L. recurva* to the sourwood tree, *Oxydendron arboreum*. Olbrechts provided the only use for this species, finding that it was used with other plants for a fever accompanied by thirst known only as “heat”.

*nugû'la* – ‘scratcher’ – *Rubus allegheniensis* Porter, *Rubus argutus* Link – blackberry

Mooney wrote the following about the word *nugû'la*, also known as *kă-nugû'la*, “a general term for all briars and thorny shrubs, including bamboo (*Smilax*), blackberry, raspberry, wild rose, etc., each of which also has a specific name. The word, as commonly used, refers to blackberry.” Olbrechts added the synonyms *nugû'la agístĩ* (‘food’), *salâ'ĩ atka* (‘squirrel’s eye’), and *udansinöte* (‘it is snaking along’); however the last name may be due to misidentification of a species of dewberry, which is known to have a prostrate habit (see below). He found that it was used in a formula for *dalânige tsandik'öça* (‘yellow urine’), the root was chewed for thrush and as a prophylactic against toothache, and for “heat”, or a fever accompanied by thirst, with *Acorus calamus*. Banks found that a tea of the roots was drunk for bowel complaints (1953: 66).

Witthoft (n.d.: 44) claimed that the fruit was usually eaten raw but that the Cherokee did not especially relish blackberries. However, Cherokee men sometimes chewed roots as an acceptable substitution for chewing tobacco.

*sûntiwálĭ* – ‘bowl’ – *Rubus ideaus* L. – red raspberry

Mooney wrote the following to explain the name *sûntiwálĭ*, “Cherokees got the idea of the bowl from the raspberry, the bowl first called *sûntiwálĭ* but later abbreviated to *tiwá’lĭ*. *Sûn* may be connected with *usûndânĭ* (‘a hollow log’).” But Witthoft (n.d.: 42) found that *tiwá’lĭ* had a more encompassing meaning including concepts such as bowl, mushroom, and, in the modern era, hubcaps and automobile tires. Mooney also used a similar term, *tawálĭ*, as the name for the life form category for the mushrooms (see the chapter on fungi). So the relationship between the raspberry and the bowl may have been less distinct than Mooney indicated in the quote above and this may have been a minor myth on how the bowl came to be. Although it is lacking the suffix *–yu* or *–ya* (indicating the ‘true’ or ‘real’ kinds), *Rubus ideaus* appears to be the prototypical type of *sûntiwálĭ* as the other members of this folk genus carry specific qualifiers (see below).

Olbrechts included *R. ideaus* in a formula for *andkt’egö* (‘they are under restriction’). The plants used in this case were the vegetatively-reproduced tip-sprouts from a second-year cane. Mooney thought the preference for sprouts was because the new sprout was more bitter than the parent plant, but bitterness does not appear to be an important factor in determining the medicinal qualities of Cherokee plants (Mooney and Olbrechts 1932: 246). According to Olbrechts, the Cherokee believed that the parent plant had lost its medicinal properties and the vitality was passed to the new growth (Mooney and Olbrechts 1932: 54).

Banks recorded a specialized use for raspberry roots (1953: 66). If two sisters had babies and one of the sisters died, the other sister could successfully raise the

dead sister's child if it drank a decoction of the root of red raspberry before it tried to nurse. Otherwise, the baby would "sicken and die".

The berries of *R. ideaus* and the other species of raspberry (see below) were generally eaten raw in the field, the cooking or stewing of berries considered a, "distinctly mountain white trait (Witthoft n.d.: 42)."

*sûntiwálĭ gatusě' hĭ* – 'bowl, mountain dwelling' – *Rubus odoratus* L. – flowering raspberry

*Rubus odoratus* is found only in the mountainous region in North Carolina, hence the specific qualifier *gatusě' hĭ* ('mountain dwelling'). Both Mooney and Olbrechts recorded synonyms reflecting a 'large' aspect of the plant or its parts, Mooney recording it as *sûntiwálĭ útana* and Olbrechts as *sûntiwálĭ egwa*.

Olbrechts recorded the only medicinal use for *R. odoratus*, finding that it was used in cases of *gigö dunikstisgöi* ('when they vomit blood'). Mooney and Witthoft both mentioned the commercial value of the leaves to the Cherokee in their interactions with the white herb traders. Witthoft wrote that, "in 1891 the dried leaves brought three cents a pound (n.d.: 42)."

*sûntiwálĭ usdĭga* – 'bowl, small' – *Rubus occidentalis* L. – black raspberry, black-cap

*Rubus occidentalis* was considered the 'small' folk species of *sûntiwálĭ*. All information on this species was collected by Olbrechts, who found that it was a suitable substitute for *R. ideaus* for the condition *andkt'egö* ('they are under restriction') and part of the formula for *dalânige tsandik'öçä* ('yellow urine'). It was used in combination with

*Orontium aquaticum* for *uyosöçi e'isti tsanançtatia* ('when they suffer painful remembrances of the dead') and for painful urination.

*telû'latĩ* – 'it has them hanging down' – *Vitis aestivalis* Michaux – summer grape

The folk generic *telû'latĩ* ('it has them hanging down') refers to the hanging clusters of fruit. Olbrechts recorded the bulk of the medicinal information about *V. aestivalis*, finding it used in formulas for *adayuni't'i'lö* ('pierced by wood'), *aniskina uniyaktanöçi* ('ghosts have changed (the condition of the patient)'), and *dalânige tsandik'öça* ('yellow urine'). It was used in combination with *Diospyros virginiana* for *duni'alagöi ata'yesgi* ('inflamed palate') and with *Ilex verticillata* for *undöläksöçi* ('broken bones'). It was used alone for *unölstay'ti tsuniyotc'eça* ('when their appetite gets spoiled'). It was also included in two formulas that were not discussed in the section on Ethnomedical Conditions. It was combined with *Vitis lambrusca* and *Rubus ideaus* for stopped urination and for cases of chronic diarrhea with *Vitis vulpina*, *Nyssa sylvatica*, *Cornus florida*, *Amelanchier canadensis*, and *Tradescantia subaspera*. Banks (1953: 86) included *V. aestivalis* in a formula for "bad disease", a condition associated with a high fever (see *kutlû'* in the chapter on Trees).

*tsigwágwă* – *Pyralaria pubera* Michaux – buffalo nut

*Tsigwágwă* appears to be an opaque, proper name for the buffalo nut. The bulk of medicinal uses attributed to *P. pubera* comes from Olbrechts, who found it used in combination with *Calycanthus floirdus* for the scrofulous condition *duletsi* ('kernels') and associated tuberculosis and to treat *unitlöyö yiki uniskwali* ('when they have a stomach



ache'). He also found it was used for the biliary disease *dalâni*, which may have been related to the stomach condition. Banks added that the nuts were roasted and pulverized for use on old sores (1953: 35). It could be used alone or mixed with tallow and made into a salve. The pounded roots, mixed with bear grease, were also used to heal old sores (1953: 36).

*tsuwatúna usdíga* – 'veins or sinews, small' – no botanical species

Mooney described the 'small' folk species of *tsuwatúna* (see below) as resembling a vine. It may have been *Euonymus obovatus* Nuttall, a species of *Euonymus* with trailing stems found in the mountains. No medicinal qualities were attributed to this particular species.

*tsuwatúna útana* – 'sinews or veins, large' – *Euonymus americanus* L. – strawberry bush, hearts-a-burstin'

*Tsuwatúna* is the plural form of *watúna* ('veins' or 'sinews') and was in reference to the use of green strips of bark from *E. americanus*, once used in place of sinew to attach arrowheads to the shaft. Mooney found that a tea of the leaves and seeds was used as a wash to eliminate head lice and a tea of the leaves was drunk to alleviate painful menses. Olbrechts recorded the use of *E. americanus*, combined with seven twigs of *Oxydendron arboreum* for *andlköça yunalstuneça* ('if their urine is stopped') and in an infusion for young children when they suffer from *awini uniyst'osgö* ('they are burning inside'). It was used in formulas for *dalânige tsandik'öça* ('yellow urine') and

*ga'yedi* ('pain in the back'). For digestive problems, it was combined with *Vitis aestivalis* for slimy diarrhea and with an unidentified plant for *dalâni* ('yellow').

Banks (1953: 81) found that a tea of the roots was drunk in cases of a prolapsed uterus, stomachaches, and gonorrhea. The bark was scraped off and made into a tea that was rubbed on varicose veins ("cramps in the veins"). *Euonymus americanus* was also included in a formula for "bad" disease (see *kutlû'* in the chapter on Trees).

*udâĩ* – 'it has something hanging to it' – *Aristolochia macrophylla* Lam. – Dutchman's pipe

The folk generic *udâĩ* refers to the flowers, which hang on a long peduncle. The long stem and curved corolla give the flower the appearance of a pipe, hence the common name Dutchman's pipe. Olbrechts recorded *A. macrophylla* as *udâĩ útana* ('it has something hanging to it, large') and described *udâĩ* as a vine with cucumber-like fruit. But he did not provide a botanical name for the latter. He found that *A. macrophylla* was used when one suffered from bad dreams. It was also part of the formula for *dalânige tsandik'öça* ('yellow urine') (Mooney and Olbrechts 1932: 288).

*ultsă'gĩtă' útana* – 'it cuts its top off, large' – *Aralia spinosa* L. – Devil's walking stick

Mooney said the folk generic *ultsă'gĩtă'* ('it cuts its top off') was a reference to the deciduous nature of the branches (they are actually compound leaves), which drop off every year. He mentioned that there was a *ultsă'gĩtă' usdíga* ('small'), but provided no description of it and I know of no species that could be considered a small version of *A. spinosa*.

According to Olbrechts, a decoction that included *A. spinosa* was blown on a scratched area to treat paralysis on one half of the body. The other ingredients were not recorded. According to an early 19<sup>th</sup> century account, the roasted roots were used as an emetic, but the green roots were considered to be poisonous (Witthoft 1947). The roots were also made into a salve to heal old sores (Banks 1953: 92).

*ulû'ta* – ‘it has climbed’ - *Toxicodendron radicans* (L.) Kuntze – poison ivy

The folk generic *ulû'ta* (‘it has climbed’) refers to the ability of the poison ivy vine to reach high into the forest canopy. Mooney said that, “boys spit on their hands and touch it lightly so as not to offend and say *gĩnalũ'* (‘we are friends’)”. *Parthenocissus quinquefolia* (L.) Planchon was also labeled as *ulû'ta* and, while generally harmless, was thought to be mildly poisonous by the Cherokee (Witthoft n.d.: 60). The dermatitis caused by contact with poison ivy was treated by rubbing it with the pounded flesh of a crawfish (Mooney 1900: 425).

*unāsúga* or *unināsúga* – possum grape – *Vitis baileyana* Munson

Mooney thought this name *unāsúga* (pl. *unināsúga*) might have come from *uyāsúga*, the Cherokee name for the opossum, but he was not sure of the etymology. Mooney and Olbrechts recorded both the singular and plural forms for this plant and both recorded it as *Vitis cordifolia* Lam. While this is a synonym for *Vitis vulpina*, they both also identified it as the possum grape, a very similar species to *V. vulpina*. *Unāsúga* may refer to the distinct species *V. baileyana*, or it could be a synonym for *V. vulpina*. But because the common name possum grape was used by both Mooney and

Olbrechts and it was distinguished from both the fox and frost grapes (see *kwalúšĩ* above), I have included here as *V. baileyana*. It was used in much the same manner as *kwalúšĩ* for yellow urine and a love attractant, but was also combined with *Vitis aestivalis* for chronic diarrhea.

*unigína* – chinquapin – *Castanea pumila* (L.) Miller

*Unigína* appears to be an opaque, proper name for the chinquapin, a shrubby version of the American chestnut, *Castanea dentata*. It was used alone for conditions related to heat such as *aniskoli didzstistoti* ('to blow on their heads') and *dunitsalöi* ('when they have blisters'). The nuts are edible, but their use by the Cherokee was only mentioned in passing (White 1975) or as an inconsequential food for the Cherokee (Witthoft n.d.: 48).

*utlásinûta* or *utû'nsinûta* – 'it has crept' – *Rubus flagellaris* Willd. or *Rubus hispidus* L. – dewberry

The name stems from *gûtláinĩ* ('it creeps'), *utlásinûta* being the most common term applied to the dewberries but *utû'nsinûta* being the usual verb form for 'it has crept'. It refers to the prostrate habit of the stems of the dewberry. Mooney identified the botanical species as *Rubus trivialis* Michaux, but this species is not common in the mountains. *Rubus flagellaris* and *R. hispidus* are both frequently encountered in and around the Cherokee lands.

Olbrechts included dewberry in the formula for yellowish urine (Mooney and Olbrechts 1932: 253). Banks added that a tea of the roots was used for diarrhea and

dysentery and the chewed root would take the coating off the tongue (1953: 66).

Dewberry, combined with *Pinus virginiana* and *Alnus serrulata*, was made into a tea and drunk or applied externally for hemorrhoids (1953: 687). The berries were eaten and used in the same manner as blackberries and raspberries (see above).

*uwă'ľă'* or *uwága* – passionflower – *Passiflora incarnata* L.

*Uwă'ľă'* appears to be an opaque, proper name for the passionflower, *Passiflora incarnata*. Mooney found that the primary use was as a food source, the fruit either eaten raw or boiled twice and strained. Once the seeds were removed, the remaining pulp thickened with meal and made into a gruel called *uwága agānû'hĩ* ('boiled apricots'). Banks recorded the only medicinal properties, those being associated with the roots of the plant (1953: 89-90). The pounded root was made into a warm infusion and this was placed into the ears to treat earaches. The roots were also made into a tea and given to an infant to encourage weaning. If drunk by the infant at six months, it would drop off the breast at one year of age, just like the ripe fruit drops off the vine.

*uwă'ľiyústĩ* or *tsiyu-iyústĩ* – 'like passionflower' or 'like tulip poplar' – *Passiflora lutea* L. – yellow passionflower

*Uwă'ľiyústĩ* ('like passionflower') was derived from *uwă'ľă'* and the suffix *-iyústĩ* ('like' or 'as'), due to the resemblance of the plant to the larger *P. incarnata*. The second name, *tsiyu-iyústĩ* ('like tulip poplar') was in reference to the leaves, which were considered to resemble those of *Liriodendron tulipifera*, known to the Cherokee as *tsiyu*. Mooney found that *P. lutea* was used for sore eyes, but he did not elaborate on this use.

Banks attributed the knowledge of a use for *P. incarnata* to Will West Long, but his description of a plant with a small, inedible berry suggests that he was referring to *P. lutea* (1953:89). He said that the pounded root was applied to sores caused by locust thorns and briers. This type of poultice would draw out the infection.

*walǎ'hûne'ga gígagéǎ* – ‘frog’s skin, red’ – *Cornus alternifolia* L. – pagoda dogwood

Mooney thought *walǎ'hûne'ga* was a “generic” term for the dogwoods, but Olbrechts glossed it as ‘frog’s skin’ and said it was due to the pattern on the spotted bark. This may have stemmed from *walosí*, a term used for both frogs and toads (Fradkin 1990: 135), and *ganega* (‘skin’) (Alexander 1971: 146). Mooney claimed that this was called the ‘red’ species of *walǎ'hûne'ga* because of the color of the bark and the blossoms. No medicinal qualities were attributed to this species.

*walǎ'hûne'ga gûtlátûě'hǎ* – ‘frog’s skin, growing on the mountainside’ – *Cornus* spp.

The specific qualifier *gûtlátûě'hǎ* stems from *gû'tlátû* (‘mountainside’) and the suffix *-ě'hǎ* (‘living’ or ‘dwelling’). The exact botanical species was not identified and it is not discernable from the description. The following species, *Cornus amomum*, is found in both swampy areas and alluvial woods (Radford 1968: 792), so *gûtlátûě'hǎ* may be descriptive of habitat and not a different species.

*walǎ'hûne'ga tě'luge-iyústǐ* – 'frog's skin, purplish' – *Cornus amomum* Miller – silky dogwood

The specific qualifier *tě'luge-iyústǐ* was from *tělugéǐ* ('purple') and *-iyústǐ* ('like' or 'as'), a reference to the color of the berries. Both Mooney and Olbrechts recorded this as *Cornus stricta* Lam., the swamp dogwood, but this is not common in the mountains (Radford et al. 1968: 791), while *C. amomum* is very common and usually found in wet areas. Olbrechts recorded the only medicinal application for *C. amomum*, finding it was used for the strange dreams associated with *andkt'egö* ('they are under restriction').

## Chapter 5

### *Ganulû'hĩ* – Herbaceous (Non-woody) Plants

Mooney glossed *ganulû'hĩ* as 'herbaceous' and claimed it was, "the generic term for herbs as distinguished from trees and shrubs." The life form *ganulû'hĩ* constitutes the largest category of Cherokee plants and is the most intricate category in their classification system. This intricacy is exemplified by the number of intermediate categories (10) and the inclusion of a large number of folk species and folk varietals. In fact, the ratio of monotypic to polytypic genera is quite low in the herbaceous category. Out of approximately 154 folk genera, only around 83 are monotypic and 71 are polytypic. These numbers are approximations due to the large numbers of synonyms found in the herbaceous life form, discrepancies between researchers, and the ambiguous relationships between genera and those that are labeled as "like" them, but they provide a general idea of the nature of the herbaceous life form. The high number of polytypic genera in this category skews the overall proportion of polytypic genera in the Cherokee classification system as discussed in Chapter 2. The life form *ganulû'hĩ* also includes the greatest number of biological species of the life form categories with 275 recorded species.

An independent observation of the notes of Mooney and Olbrechts would give very different perspectives about which life forms were most important to the Cherokee ethnomedical system. For instance, Mooney recorded very few uses for woody species,



and from this it would appear that the Cherokee system was based primarily on remedies prepared from herbaceous species. However, Olbrechts often observed multiple applications for the woody species and, except for a few culturally salient plants like tobacco and ginseng, generally found only one or two uses for each of the herbaceous plants. Had it not been for the combined efforts of both men we would have a very limited view of the range of the Cherokee botanical pharmacopoeia. Banks took a more even-handed approach and included a broad representation of the various life forms, but without access to Mooney's and Olbrechts' archival materials he had a limited perspective on the applications of herbaceous plants.

Unlike the previous chapters, this chapter will be divided into two parts:

Part 1: Cherokee Intermediate Categories

Part 2: Cherokee Herbaceous Plants

The intermediate categories will include a few of the biological species that have already been discussed or will be discussed in other life form sections as some of these intermediate categories include trees, shrubs, or grasses. The names of the intermediate categories will be in bold print to distinguish them from the folk species and varieties that are included in them.

### **Part 1: Cherokee Intermediate Categories**

As stated in Chapter 2, intermediate categories are generally identified by a primary lexeme that indicates a salient feature, usually morphological similarities, shared by a number of often unrelated biological genera. However, the Cherokee

intermediate categories tend to be more inclusive than this, usually encompassing several unrelated botanical families (see Table 5.1). Of the ten intermediate categories,

Table 5.1. Botanical Families in the Intermediate Categories (with No. of Genera)

Intermediate Category	Botanical Families	Intermediate Category	Botanical Families
<i>dalâni</i>	Anacardiaceae (1) Asteraceae (2) Polygonaceae (1) Ranunculaceae (1)	<i>kâstûta</i>	Asteraceae (6)
<i>gânigwalí'skĩ</i>	Asteraceae (1) Fabaceae (1) Hypericaceae (1) Lamiaceae (1) Scrophulariaceae (1)	<i>na'tsiyústĩ</i>	Asteraceae (2) Hypericaceae (1) Lamiaceae (1)
<i>ganitawaâ'skĩ</i>	Caryophyllaceae (1) Rubiaceae (1)	<i>tsâliyústĩ</i>	Boraginaceae (1) Campanulaceae (1) Boraginaceae (1)
<i>gátatsú'ĩ</i>	Asteraceae (2) Lamiaceae (1) Polemoniaceae (1) Rubiaceae (1) Scrophulariaceae (1)	<i>únistilû'istĩ</i>	Apiaceae (1) Asteraceae (3) Boraginaceae (2) Fabaceae (3) Onagraceae (1) Rosaceae (1) Rubiaceae (1) Solanaceae (1)
<i>gáw'sûkĩ</i>	Chenopodiaceae (1) Cucurbitaceae (1) Lamiaceae (8)	<i>ûnagéĩ</i>	Fabaceae (1) Pinaceae (2) Ranunculaceae (1) Rosaceae (1)

nine include members from 2 or more plant families. The most diverse category, *únistilû'istĩ* ('they stick flat to a hairy substance'), includes 13 botanical genera in eight plant families. Such diversity defies comparison to the botanical classification system, but demonstrates the naturalness of the Cherokee system. The natural affinities between these diverse plants were recognized and they were identified with the same generic label.

This inclusiveness in the face of such diversity also required greater distinction between members of each folk genus. This is especially evident in the category

*gānigwalí'skí*, with three folk varieties of the folk speices *gānigwalí'skí útana*, but the varietal level of classification is also present in several of the other categories. The index for the intermediate categories (see Table 5.2) pairs the Cherokee species name with the botanical species, as the polytypic intermediate categories contain too many taxa in each genus to be indexed by folk genus alone.

Table 5.2. Intermediate Category Index: Botanical Species and Folk Species

Botanical Species	Cherokee Genera and Species	Botanical Species	Cherokee Genera and Species
Ageratina aromatica	<i>gátatsú'í' egwa</i>	Eupatorium perfoliatum	<i>gátatsú'í' gatusě'hí</i>
Ageratina altissima	<i>gatusě'hí</i>	Galium pilosum	<i>únistilú'istí</i>
Agrimonia parviflora	<i>gátatsú'í' ya</i>		<i>ganidaáskiyústí</i>
Agrimonia spp.	<i>únistilú'istí uniwásgí'í</i>	Glechoma hederacea	<i>gáw'súkí udúnsínidá'itá</i>
Anemone virginiana	<i>únistilú'istí andayalúgi</i>	Gnaphalium spp.	<i>kástúta usdí-ga</i>
Antennaria	<i>únagé'í tsulátskí</i>	Hackelia virginiana	<i>únistilú'istí tsunsdíga</i>
plantaginifolia	<i>kástúta usdí-ga</i>	Hedeoma pulegioides	<i>gáw'súkí událkí</i>
Antennaria solitaria	<i>kástúta gatłaski</i>	Helenium autumnale	<i>dalāni ganulúhi</i>
Arctium spp.	<i>únistilú'istí gúnagé'í</i>	Houstonia purpurea	<i>ganitawaá'skí usdia</i>
	<i>unastetsí</i>	Hypericum gentianoides	<i>na'tsiyústí</i>
Bidens bipinnata	<i>únistilú'istí</i>	Hypericum hypericoides	<i>gānigwalí'skí tsustú'ní</i>
	<i>tsundíwatłúgí</i>	Hypericum punctatum	<i>gānigwalí'skí dalānige</i>
Bidens frondosa	<i>únistilú'istí</i>	Ionactis linariifolius	<i>na'tsiyústí gatusě'hí</i>
	<i>unilú'tigwinú'</i>	Lespedeza repens	<i>únistilú'istí tsunsdíga</i>
Blephilia ciliata	<i>gáw'súkí wátigé'í</i>	Lespedeza violacea	<i>únistilú'istí</i>
	<i>adsilú'skí</i>	Lobelia amoena	<i>tsáliyústí sa'kánige'í</i>
Cassia marilandica	<i>únagé'í kúlakwégtiyústí</i>	Lobelia cardinalis	<i>tsáliyústí gígagé'í</i>
	<i>unastetsí</i>	Lobelia inflata	<i>tsáliyústí usdíga</i>
Cassia nictitans	<i>únagé'í klayuě'hí</i>	Lobelia puberula	<i>tsáliyústí élatígatí</i>
Chemopodium	<i>gáw'súkí atúkiyústí</i>	Lobelia spicata	<i>tsáliyústí usdíga</i>
ambrosioides		Lobelia syphilitica	<i>tsáliyústí útana</i>
Chrysopsis mariana	<i>kástúta usatú'lātú'</i>	Mentha piperita	<i>gáw'súkí amáy-utúhi</i>
Circaea leutiana	<i>únistilú'istí tsuwatéstí</i>	Mimulus ringens	<i>gátatsú'í' aniskutataski</i>
Coreopsis major	<i>dalāni ganulúhi</i>	Monarda didyma	<i>gáw'súkí gígagé'í</i>
Cucumis melo	<i>gáw'súkí</i>		<i>adsilú'skí</i>
Cynoglossum	<i>tsáliyústí únistilú'istí</i>	Monarda fistulosa	<i>gáw'súkí tēlugé'í</i>
virginianum		Phaseolus spp.	<i>unistilú'istí unatsú'well</i>
Datura stramonium	<i>únistilú'istí tsunitsiyástí</i>	Phlox maculata	<i>gátatsú'í'</i>
Desmodium canescens	<i>únistilú'istí</i>	Phlox paniculata	<i>gátatsú'í'</i>
	<i>sa'kanigiyústí</i>		<i>tsunikwitayuwani</i>
	<i>ukwalāga</i>	Pityopsis graminifolia	<i>kástúta selikwayústí</i>
Desmodium nudiflorum	<i>únistilú'istí-yú'</i>	Prunella vulgaris	<i>gátatsú'í' agisti</i>
Diodia virginiana	<i>gátatsú'í' elatě'hí</i>	Pseudognaphalium obtusifolium	<i>kástúta útana</i>

Table 5.2. Intermediate Category Index: Botanical Species and Folk Species (contd.)

Botanical Species	Cherokee Genera and Species	Botanical Species	Cherokee Genera and Species
Pycnanthemum incanum	<i>gáw'sûkĩ unéga</i>	Solidago odora	<i>na'tsiyústĩ útana</i>
Pycnanthemum muticum	<i>gáw'sûkĩ sũ 'tĩ</i>	Stylosanthes biflora	<i>gǎnigwalĩ'skĩ usdĩ-ga</i>
Pycnanthemum tenuifolium	<i>gáw'sûkĩ ustitláhĩ</i>	Symphyotrichum concolor	<i>kástúta tēlugéĩ</i>
Rumex spp.	<i>dalânige unastetsi</i>	Trichostema dichotomum	<i>gáw'sûkĩ usdĩga</i>
Salvia officinalis	<i>gáw'sûkĩ gúnatlái</i>	Verbascum thapsus	<i>tsáliyústĩ unĩktú 'tĩ</i>
Sanicula canadensis	<i>únistilũ 'istĩ gatusé 'hĩ</i>	Verbesina alternifolia	<i>gǎnigwalĩ'skĩ</i>
Scrophularia marilandica	<i>gǎnigwalĩ'skĩ útana</i>	Verbesina virginica	<i>tsulawsútsatĩ</i>
Scutellaria elliptica	<i>gǎnigwalĩ'skĩ elatígatĩ</i>	Veronica officinalis	<i>gǎnigwalĩ'skĩ útana</i>
Scutellaria lateriflora	<i>gǎnigwalĩ'skĩ útana</i>	Xanthium strumarium	<i>gǎnigwalĩ'skĩ nigá 'lũ</i>
Silene ovata	<i>ganitawaâ'skĩ útana</i>		<i>itsě 'hi</i>
Silene stellata	<i>ganitawaâ'skĩ usdĩ-ga</i>		<i>únistilũ 'istĩ</i>
Silene virginica	<i>ganitawaâ'skĩ útana</i>		

## Cherokee Intermediate Taxa

### *dalâni* or *dalânige* – ‘yellow’

The name for this category is based on the perception of a pronounced yellow coloration of a part of the plant, usually the roots, flowers, or, in the case of woody species, the inner bark. Two shrubby species, *Rhus copallina* L. and *Xanthorhiza simplicissima* Marshall, were known as *dalâni*, suggesting that they were the most prototypical members of this category. It is not clear why *R. copallina* is known as *dalâni*, but it may be due to the color of the early inflorescence. It was also known as *dalâni goksti* (‘yellow, to smoke’) and *dalâni kûlágwăiyusti* (‘yellow, like red sumac’). *Xanthorhiza simplicissima* is commonly known as yellowroot due to the intensely yellow color of the roots. Yellowroot was a common dye plant of the Cherokee, imparting a

persistent yellow color to baskets, masks, etc. Other names for it included *dalâni amayultehi* ('yellow, water edge growing') and *dalânige unastetsi* ('yellow roots'). The other shrub that could be included in this category is a species of *Ilex*. Known primarily as *kolagutliski* ('it joins the bones'), Olbrechts also recorded the synonyms *dalâni ustiga* (yellow, small), *dalâni utana* (yellow, large), and *dalâni gigage atat'aski* (yellow, red fruit). All have been described in the chapter on shrubs. The other plant from the life form category encompassing the grasses that was a type of *dalâni* is *Sisyrinchium angustifolium* Miller. One of the synonyms for this species was *dalânige unastetsi kaneska* (yellow root grass). It will be discussed in the next chapter. Three herbaceous species round out the intermediate category of *dalâni*, and these are discussed below:

*dalâni ganulûhi* – 'yellow, herbaceous' – *Helenium autumnale* L. – sneeze-weed

The yellow flowers provide the basis for the inclusion of *H. autumnale* in the category *dalâni*. Mooney also recorded it as *u'lâ' usdî* ('small sunflower'), indicative of its family association, and *sûnna dalânige adsilû'skî* ('?', yellow-flowered'). Banks (1953: 130) provided the only recorded use for this species, finding that the bruised roots of *H. autumnale* were combined with those of *Vernonia novboracensis* (L.) Michaux and made into a cold infusion. This was given to women who had just given birth and this would prevent menstruation for two years. At the end of two years they would menstruate once and this would signal that they were ready to conceive another child.

*dalâni ganulûhi gadusí-ehi* – ‘yellow, herbaceous, mountain dwelling’ – *Coreopsis major* Walter – greater tickseed

Mooney also recorded the synonym *dalâni adsilû’skĩ gadusí-ehi* (‘mountain dwelling yellow flower’) for *C. major* and pointed out that there were several varieties of *dalâni adsilû’skĩ* (‘yellow flower’). On one of the two voucher specimens I observed at the Smithsonian Institution’s herbarium, Mooney identified *Senecio aureus* L. as *dalânige adsilû’skĩ*, but he identified as *tsugwalága tigásakwalû’* (‘round leaves’) in his notes and I have discussed it under that heading below. The only other one he named was *dalâni adsilû’skĩ tsulaw’sútsatĩ* (‘fringed yellow flower’), which is a synonym for *gûnigwalĩ’skĩ tsulaw’sútsatĩ* (*Verbesina alternifolia* (L.) Britton ex Kearney). However, because Mooney pointed out that this was a type of *gûnigwalĩ’skĩ*, this species will be discussed in the section dealing with that intermediate category. Olbrechts also recorded a plant known as *dalâni adsilû’skĩ*, but he was unable to associate it with a biological species. He did record the names *dalâni unitla* and *dalâni götłaska* for *C. major*, but did not give a gloss for either of the qualifiers he provided. However, all the Cherokee synonyms contain the term *dalâni*, which indicates that this was a prominent member of this category. As with the previous species, the name was due to the yellow flowers.

Mooney found that a decoction of the roots was used for bowel complaints and vomiting. He wrote that the plant was not dried, but located in winter by the dried tops. Olbrechts found that the raw root of *C. major* was made into a cold infusion and used for the condition *uniskowldisgöi* (‘whenever they have diarrhea’). Banks (1953: 127) attributed a similar application to a type of dysentery with a greenish discharge, but only

identified the species as *Coreopsis* spp. Witthoft (1947) also mentions *Coreopsis* spp. as a plant that was used to obtain a red dye, which would correlate with the common name “dye flower” that Mooney noted for *C. major*.

*dalânige unastetsi* – ‘yellow roots’ – *Rumex obtusifolius* L. – yellow dock, broad-leafed dock, *Rumex crispus* L. – yellow dock, curly leafed dock

This name was also mentioned for *Xanthorhiza simplicissima* above, but, as with the common name ‘yellow root’ in the herbal traditions in the Southern Appalachians, it may apply to several botanical species. *Rumex obtusifolius* does have yellow roots, hence its common name “yellow dock”, which it shares with *Rumex crispus* L.

Banks (1953: 40) is the only researcher to attribute medicinal qualities to *dalânige unastetsi*, but he identifies it solely as *R. crispus*. However, the herb diggers in the mountains of North Carolina made no distinction between the two when gathering herbs for market (Cozzo 1999: 114), referring to both as yellow dock, and I have observed *R. obtusifolius* to occur much more frequently in the North Carolina mountains than *R. crispus*. The two readily hybridize, further limiting the exact identification of the species in question (Radford et al. 1968: 405).

The medicinal applications described by Banks were all attributed to the roots of the plant. Root tea was given to pregnant women to facilitate labor and it was given in late pregnancy to prevent the loss of blood during childbirth. It was thought to purify the blood, especially in the spring when sores were slow to heal, and it was used as a laxative. As an ethnoveterinary medicine, yellow dock was given to horses to alleviate digestive problems.

***gǎnigwalí'skǐ*** – ‘it becomes discolored when bruised’

Some discrepancy exists with the gloss of *gǎnigwalí'skǐ*, even between the notes of the researchers and their published materials. In his discussion of *gǎnigwalí'skǐ* in his notes, Mooney traces the etymology to *gǎnigwǎ'lihû* (‘it is becoming discolored by being bruised’), which stems from *unigwû'la* (‘a bruise’). This was said to be due to the stalk turning red when bruised. However, in his description in *The Sacred Formulas of the Cherokees*, he said, “the name refers to the red juice which comes out of the stalk when bruised or chewed (Mooney 1891: 325).” Olbrechts glossed *gǎnigwalí'skǐ* as ‘it has become purplish’ in his notes, but changed this to ‘it is like clotted blood’ in *The Swimmer Manuscript* (1932: 126). Witthoft (n.d.: 11) claimed Mooney and Olbrechts both published erroneous etymologies for *gǎnigwalí'skǐ*, and he glossed it as ‘it is bruised’, which is most similar to the gloss in Mooney’s notes and correlates well to his etymology. For the purpose of this work, I will use ‘it becomes discolored when bruised’ as the gloss for *gǎnigwalí'skǐ* and will assume it is due to the change of color on the stalk when it is damaged.

*gǎnigwalí'skǐ dalânige* – ‘it becomes discolored when bruised, yellow’ or *gǎnigwalí'skǐ klayuě'hǐ* – ‘it becomes discolored when bruised, growing in old fields’ – *Hypericum punctatum* Lam.

The specific qualifier of the first name *dalânige* (‘yellow’) is due to the color of the flowers. *Klayuě'hǐ* is a combination of *klayúhǐ* (‘an old neglected field’) and *ě'hǐ* (‘living’ or ‘dwelling’). *Gǎnigwalí'skǐ dalânige* was used in combination with three other species of *gǎnigwalí'skǐ* to promote delayed menstruation and to counteract the effects of



encountering or eating food prepared by a menstruating woman (Mooney 1891: 325).

The other three species, *Scutellaria elliptica* (*pilosa*), *Stylosanthes biflora* (*elatior*), and *Scutellaria lateriflora*, will be discussed in individual monographs.

Olbrechts recorded *H. punctatum* as *gǎnigwalĩ'skĩ uniskutati* ('it becomes discolored when bruised, with seeds at the top'), probably due to the plant's having the inflorescence in the upper portion of the plant. He found it was used with other plants for profuse urination, but he did not name them or the method of preparation.

*gǎnigwalĩ'skĩ elatĩgatĩ* – 'it becomes discolored when bruised, low' – *Scutellaria elliptica* Muhl. – hairy skullcap

The specific qualifier *elatĩgatĩ* glosses as 'low' meaning 'low growing', as distinguished from *inĩgatĩ* ('high'). *Gǎnigwalĩ'skĩ elatĩgatĩ* was used in combination with three other species of *gǎnigwalĩ'skĩ* to promote delayed menstruation and to counteract the effects of encountering or eating food prepared by a menstruating woman (Mooney 1891: 325).

*gǎnigwalĩ'skĩ nigā'lũ itsě'hi* – 'it becomes discolored when bruised, that is green all the time' – *Veronica officinalis* L. – common speedwell

Olbrechts recorded *nigā'lũ itsě'hi* as 'evergreen', and this quality was part of its medicinal value. *Veronica officinalis* was given in a formula to women about to give birth. The belief was that the evergreen quality was transferred to the child and would impart long life (Mooney and Olbrechts 1932: 119). It was also used for *unawasti* ('he

gets cold' or 'that which chills one'), given to the patient as a separate infusion when they felt thirsty from a fever (Mooney and Olbrechts 1932: 277).

*gǎnigwalí'skǐ tsulawsútsatǐ* – 'it becomes discolored when bruised, fringed' – *Verbesina alternifolia* (L.) Britton ex. Kearney – wingstem

The specific qualifier, *tsulawsútsatǐ* ('fringed'), is due to the flanges or wings that appear on the stems and is the plural form of *ulawsútsatǐ* ('fringed'). Mooney also recorded synonyms for *V. alternifolia*, including *gǎnigwalí'skǐ dalânige adsilû'skǐ* ('it becomes discolored when bruised, yellow flowered'), *dalânige adsilû'skǐ tsulawsútsatǐ* ('yellow flowered, fringed'), and *gǎnigwalí'skǐ útanũ ulawsútsatǐ* ('it becomes discolored when bruised, large, fringed'). Mooney found that the root was made into a red colored infusion that was given after menses; however, it can cause weakness. He also found that it was used for a condition he called *kayétǐ*, a "private" disease he also called "whites". This may have been another name for gonorrhea.

*gǎnigwalí'skǐ tsustû'nǐ* – 'it becomes discolored when bruised, that branches out immediately upon the ground' – *Hypericum hypericoides* (L.) Crantz – St. Andrews cross

The specific qualifier, *tsustû'nǐ* ('that branches out immediately upon the ground'), has to do with the habit of *H. hypericoides*, a small, low growing plant with many branches (but see *kâstúta útana uyanéna* below). Mooney also recorded the synonym *gǎnigwalí'skǐ tsuyátûlǐ* (plural of *uyátûlǐ*), which Banks glossed as 'flat on ground' due to the low growing habit (1953: 87). Mooney also thought that this might be

the plant one of his informants identified as *gǎnigwalĩ'skĩ uyanéna* ('it becomes discolored when bruised, a bunch of). Mooney also said that this was the *gǎnigwalĩ'skĩ nigâ'lû itsě'hi* (evergreen *gǎnigwalĩ'skĩ*) that Swimmer used, but this plant is different from the one described in Olbrechts' notes (see above). Banks found that infants were bathed in a warm or cold tea of the roots, which was thought to give them strength and hasten their ability to walk. Drinking tea from *H. hypericoides* was also thought to cause a fever to break (1953: 88). Adair mentioned St. Andrew's cross as one of the plants carried by hunters and warriors in case of snakebite (Witthoft 1947).

*gǎnigwalĩ'skĩ usdí-ga* – 'it becomes discolored when bruised, small' – *Stylosanthes biflora* (L.) BSP – pencil flower

The specific qualifier designates this as the small *gǎnigwalĩ'skĩ*, and this is a low-growing species. Mooney also collected the names *nugû'la ganúlûhĩ* ('briar, herbaceous'), *distáiyĩ usdí-ga* ('they are tough, small'), and *astáí-ya unastétsĩ* ('strong or tough root'). *Nugû'la* is often used as the term for the ceremonial scratching utensils and the latter two names are both due to the toughness of the roots. Mooney said *S. biflora* was found on the south side of the mountains. He found that a tea of the leaves was used for dysentery and that a tea of the whole plant was used to bathe the body of a patient with a fever. The bathing was repeated four times in one night. This was one of the four species of *gǎnigwalĩ'skĩ* used to promote delayed menstruation and to counteract the effects of encountering or eating food prepared by a menstruating woman (Mooney 1891: 325). Banks also added that a hot tea of *S. biflora* was used for menstrual irregularity (1953: 72).

*gǎnigwalí'skǐ útana* – 'it becomes discolored when bruised, large' – *Scutellaria lateriflora* L. – mad-dog skullcap

Mooney also recorded the synonyms *gǎnigwalí'skǐ tělugéř adsilû'skǐ* ('it becomes discolored when bruised, purple flowered') and *gǎnigwalí'skǐ sa'kánigeř adsilû'skǐ* ('it becomes discolored when bruised, blue flowered'). The flowers of *S. lateriflora* tend to be blue or violet, so this was probably a judgement call by Mooney's informant. Olbrechts also recorded *S. lateriflora* as *gǎnigwalí'skǐ útanŭ*, along with the synonyms *gǎnigwalí'skǐ egwa* (also 'it becomes discolored when bruised, large') and *unestala útana* ('?', large').

*Scutellaria lateriflora* was used in combination with three other species of *gǎnigwalí'skǐ* to promote delayed menstruation and to counteract the effects of encountering or eating food prepared by a menstruating woman. It was also used alone for diarrhea and combined with other unidentified plants for breast pains (Mooney 1891: 325). It was one of the plants used for the condition known as *ut'igadö* ('to drive out afterbirth') (Mooney and Olbrechts 1932: 126).

*gǎnigwalí'skǐ útana uktû'tǐ* – 'it becomes discolored when bruised, large, having seeds' – *Scrophularia marilandica* L. – figwort

Mooney gave no explanation for the gloss of the varietal qualifier and provided no information on the medicinal uses for *S. marilandica*. He did record the synonym *diyesatiski útana* or *d. egwa* ('it gets dew on it, large').

*gǎnigwalíʼskǐ útana ulawsútsatǐ* – ‘it becomes discolored when bruised, large, flanged’ – *Verbesina virginicus* L.

Mooney glossed the varietal qualifier *ulawsútsatǐ* as ‘flanged’ for this species, as opposed to ‘fringed’ for previous kinds of *gǎnigwalíʼskǐ* with winged stems (see *gǎnigwalíʼskǐ tsulawsútsatǐ* above). However, this still provides an apt description for the papery wing-like structures on the stems of *Verbesina*. He also recorded the synonym *uněʼstalu unûnsûtǎʼ*, which he roughly glossed as ‘fastened on it’, referring to the same papery wings. Mooney wrote the following in his notes, “Used much in warm decoction of water for easy childbirth, not common, very useful and very much in demand.” Distribution maps indicate that *V. virginicus* is rare in the mountains of North Carolina (Radford et al. 1968: 1119).

***ganitawaâʼskǐ*** – ‘it unjoints itself’

The name *ganitawaâʼskǐ* stems from *ganidáaskûʼ* (‘it is unjointing itself’). Mooney gave the following reason for this name, “the dried stalk in the fall breaks off joint by joint, beginning at the top.” This is not a large intermediate category, but there is enough internal variation to include it in this section.

*ganitawaâʼskǐ usdia tǔlugéǐ adsilûʼskǐ* – ‘it unjoints itself, small, purple-flowered’ – *Houstonia purpurea* L.

Mooney merely listed the Cherokee and botanical name for this species (Ms. 1894), but the Cherokee name and the botanical name are congruent here, *purpurea* and *tǔlugéǐ adsilûʼskǐ* both being descriptive of the purple flowers of *H. purpurea*. He

also recorded the synonym *atsila* ('fire'), but gave no explanation for this name (Ms. 2235). No medicinal qualities were attributed to this species.

*ganitawaâ'skĩ usdí-ga* – 'it unjoints itself, small' – *Silene stellata* (L.) Aiton – starry campion

Mooney recorded two other synonyms for *S. stellata*, both of them variations on the plant's physical attributes. Because of its white flowers it was known as *ganitawaâ'skĩ usdia unega adsilû'skĩ* ('it unjoints itself, small, white-flowered') or simply *ganitawaâ'skĩ unega adsilû'skĩ* ('it unjoints itself, white-flowered'). This was the small species, which may reach a height of 1 meter, in contrast with the larger *Silene ovata* Pursh. (see below), which tends to reach a height of up to 1.5 meters (Radford et al. 1968: 447-448). Mooney reported the only medicinal applications for *S. stellata*, stating that, "the juice is held to be a sovereign remedy for snake bites, and it is even believed that the deadliest snake will flee from one who carries a small portion of the root in his mouth (Mooney 1900: 426)." In his notes he elaborated on the use of the generic *ganitawaâ'skĩ*, stating that if one was bitten, the dried root was beaten and made into a poultice or rubbed on the bite. It would cure the bite if applied within 24 hours from the time of the bite, even if yellow liquid had started to seep from the punctures and the site was swollen. He also mentioned that a tea of the roots was drunk all day at short intervals for yellow urine. No special diet was required.

*ganitawaâ'skĩ útana* – 'it unjoints itself, large' – *Silene virginica* L. – fire pink

It was not explained why this is considered the 'large' (*útana*) species of *ganitawaâ'skĩ*, as it is smaller than both *S. stellata* and *S. ovata*, but both Mooney and Olbrechts recorded it as such. It may be due to the size of the flowers, which tend to be larger in *S. virginica*. Mooney also collected the name *ahwi kanígě usdi* ('deer knee, small'), presumably describing the joints of the plant, which resemble the knee area of a deer.

Olbrechts recorded the only medicinal use for *S. virginica*, finding that the root was chewed as a prophylactic to ward off snakebites. However, in case of an actual bite the juice from chewing the root was blown onto the spot in a circular motion. The circle would be in a counterclockwise direction, symbolizing the uncoiling of the snake and countering the effects of the bite. There may be some confusion between this and the previous species (see *ganitawaâ'skĩ usdí-ga*), or perhaps both were considered efficacious for snakebites.

*ganitawaâ'skĩ útana unega adsilû'skĩ* – 'it unjoints itself, large, white-flowered' – *Silene ovata* Pursh. – fringed campion

This is the larger of the white-flowered species, as opposed to *S. stellata* (see above). Mooney only provided the name (Ms. 2235), no other information is available concerning this plant.

***gátatsú'íł*** – ‘it has dirt in it’

The name for this category stems from *gáta* (‘dirt’) and *tsú'íł* (‘it has it inside’), which relates to the tendency of the roots to appear dirty after being thoroughly washed. Mooney indicated that some of his informants classified the components of *gátatsú'íł* by habitat, while others classified them by size. But he did not record a large and small variety of *gátatsú'íł*, even though he suggested in his notes that they did exist. All members of the intermediate category *gátatsú'íł* are also members of the life form *ganulû'hł*.

*gátatsú'íł* – ‘it has dirt in it’ – *Phlox maculata* ssp. *pyramidalis* (Smith) Wherry – sweet William

Both Mooney and Banks (1953: 106) recorded this particular botanical species as identified by the folk generic *gátatsú'íł*, but that does not necessarily make it the prototypical *gátatsú'íł*. The following species deserves that distinction. Neither Mooney or Banks mentioned the subspecies status, but according to Radford et al. (1968: 873) the spp. *pyramidalis* is the only one in the area under consideration. Banks recorded the only medicinal used for *P. maculata*, finding that the Cherokee would bathe children in an infusion of the roots to make them grow larger and fatter.

*gátatsú'íł-ya* – ‘true it has dirt in it’ or *gátatsú'íł unega adsilû'skł* – ‘it has dirt in it, white flowers’ – *Ageitina altissima* (L.) King & H.E. Robins var. *altissima*

The suffix *-ya* or *-yu* indicates that this is the “true” or “real” type of *gátatsú'íł*, or the species that is most prototypical of the category. The name *gátatsú'íł unega*



*adsilú'skĩ* is also appropriate as this is one of the white-flowered species of *Eupatorium* that is found in the mountains. Mooney indicated that there may be as many as four varieties of *gátatsú'ĩ unega adsilú'skĩ*; however, *A. altissima* is the most prolific of the white-flowered species I have encountered in the region. Olbrechts identified *gátatsú'ĩ unega adsilú'skĩ* as *Eupatorium coelestinum* L., but this is a blue-flowered species that is not particularly common in the mountains of North Carolina and was an obvious misidentification. No medicinal qualities were attributed to *A. altissima* by Mooney.

Witthoft (1949), in a discussion of the Green Corn Ceremony, cites a 1818 article in the Raleigh Register that quotes then Cherokee Chief Charles Hicks as referring to the use of wild horehound as a medicine in the ceremony. While neither man identifies the botanical species associated with wild horehound, Mahoney (1847: 227) identifies it as *Eupatorium pilosum* Walter, a species that resembles *A. altissima*. This species is rare in the North Carolina mountains and is predominantly a lowland species (Radford et al. 1968: 1059), but it could well be that one of the several species of white-flowered *Ageratina* or *Eupatorium* that Mooney encountered is the wild horehound mentioned by Hicks. In his introduction to the plant, Mahoney states, "The wild horehound is too well known to need a description. The leaves are remarkably bitter to the taste. The leaves are the part used, and are a valuable laxative bitter tonic." While Banks (1953: 136) discredits this work as inauthentic, Witthoft (n.d.: 215) praises it as, "the most genuine and sterling of Indian herbals, and has no parallel in the annals of herbal medicine." Despite the differing opinions of previous researchers, I chose to include this reference because it is the only place I have encountered any mention of wild horehound. And if *A. altissima* was known as *gátatsú'ĩ-ya*, its place in such an important function as the

Green Corn Ceremony would indicate a high degree of cultural salience and would have insured it was remembered long after its medicinal uses were forgotten.

*gátatsú'í agisti* – ‘it has dirt in it, to be eaten’ – *Prunella vulgaris* L. – heal all or self heal

Olbrechts indicated, as the name states, that this plant was used as a vegetable and not for medicine. Mooney, Banks (1953: 112), and Perry (1974: 44) also recorded this as an edible green, but Money and Banks also recorded several medicinal uses for *P. vulgaris*. These will be included under the synonym *ínatû wasítsû'* below.

*gátatsú'í aniskutataski (uwetige adsilû'skĩ)* – ‘it has dirt in it, ?, (? flowers)’ – *Mimulus ringens* L.

Mooney did not provide a gloss for *aniskutataski* or *uwetige*, but the latter may be a form of *wâtigeĩ* (‘brown’). However, this is difficult to reconcile because the flowers of *M. ringens* are lavender in color. Mooney also recorded *uninâyúgi* (‘rattles’ or ‘they make noise’) as a synonym for *gátatsú'í aniskutataski*, due to the rattling of the dried seed capsules. No medicinal properties were attributed to *M. ringens*.

*gátatsú'í egwa gatusě'hĩ* – ‘it has dirt in it, large, mountain dwelling’ – *Ageratina aromatica* (L.) Spach var. *aromatica*

Mooney identified this biological species with a question mark, indicating that it could be one of several white-flowered species of *Eupatorium* (several of which are now part of the genus *Ageratina*) commonly found in the mountains of North Carolina. *Ageratina aromatica* is botanically very similar to *A. altissima*. However, he did discuss

another species, *Eupatorium perfoliatum* L., and recorded its name as *gátatsú'íĩ* *gatusě'hĩ* (see below). This would indicate more than one kind of *gátatsú'íĩ gatusě'hĩ* in the Cherokee classification system. Olbrechts identified *gátatsú'íĩ egwa* as a synonym for *Eupatorium coelestinum* L., but this is most likely a misidentification (For a further discussion, see *gátatsú'íĩ-ya* above).

*gátatsú'íĩ elatě'hĩ* – ‘it has dirt in it, lowland dwelling’ – *Diodia virginiana* L.

The lexical qualifier for this folk species stems from *elatĩ* (‘lowland’) and *ě'hĩ* (‘dwelling’) and it does prefer low, marshy areas (Radford et al. 1968: 979). No medicinal qualities were attributed to this species.

*gátatsú'íĩ geyöě'hĩ* – ‘it has dirt in it, grows along the river’ – species unknown

Olbrechts did not provide the etymology for the specific qualifier for this species of *gátatsú'íĩ*, but he did give the general gloss. However, he gave no indication of which biological species this might be and the qualifier *geyöě'hĩ* (‘grows along the river’) could apply to a wide range of water loving species. But he did indicate that this was used for the condition *dalânige tsandik'öça* (‘yellow urine’) and two species of *Eupatorium*, *E. purpureum* and *E. coelestinum*, are mentioned in one of the formulas. One of these may have been *gátatsú'íĩ geyöě'hĩ*. The other use Olbrechts recorded was for “dreaming of all sorts of things” but he did not elaborate on the condition.

*gátatsú'í' gatusě'hǐ* – 'it has dirt in it, mountain dwelling' or *gátatsú'í' gûtlûtě'hǐ* – 'it has dirt in it, dwelling on the hillside' – *Eupatorium perfoliatum* L. – boneset

The lexical qualifiers for this folk species stem from *gatúsi* ('mountain') and *gû'tlûta* ('hillside') combined with *ě'hǐ*, a form of *éhû* ('it dwells'). As stated above, differentiation of Cherokee folk species was often accomplished by a qualifier indicating the preferred habitat of the species. These names appear mismatched with *E. perfoliatum*, a species that prefers wetlands and river sides; however, Banks also recorded it as *gátatsú'í' gatusě'hǐ* (1953: 128). Mooney also recorded the synonyms *tsusalětǐ útana*, *tsusalě'skǐ útana*, and *kanatlántskǐ*. No gloss was provided for *kanatlántskǐ*; however *tsusalětǐ* was glossed in two ways. The primary one that Mooney accepted was as 'it lifts itself up', the image raised being a person holding up their arms and resembling the joined leaves of boneset. The other gloss from Will West Long stemmed from *tsisǎlûnyehǔ'* ('I am poking it'), as one might poke a stick into a hollow log to chase out an animal. A poking stick was known as *gasalû'ntátǐ*, the plural of which was *tsúsǎlǐ'tǐ*. This latter explanation makes sense in light of two other plants, *Uvularia perfoliata* L. and *Triosteum perfoliatum* L., that were both recorded as *tsusalětǐ* for at least one of their synonyms. As the specific epithet for each suggests, the leaves merge around the stem looking as if the leaves are pierced by it.

Mooney found that the leaves or roots were pounded and made into a warm infusion. This was used as a wash for rheumatism and for erysipelas, an inflammatory disease of the skin. A decoction of the leaves was also drunk for intestinal worms. The plant was dried and stored for winter use. Olbrechts recorded no uses for *E. perfoliatum*, but Banks found that a decoction, steeped for several hours and taken by

spoonfuls every hour or two, was used for colds and sore throat. He also found that it was used for fevers, flu, and as an emetic.

*gátatsú'í tsunikwitayuwani* – ‘it has dirt in it, no gloss’ – *Phlox paniculata* L. – summer phlox

Mooney did not provide a gloss for the qualifier for this Cherokee species and it has no recorded medicinal uses.

***gáw'sûkǐ*** – ‘smeller’ or ‘it smells’

Mooney wrote the following description of *gáw'sûkǐ* in his notes, “The Cherokee make no distinction between good and bad odors. This is the generic term for all mints or spicy scented herbs and also for the muskmelon.” Olbrechts glossed *gáw'sûkǐ* as ‘the smelling (plant)’, but for consistency I will use ‘smeller’ in all glosses. *Gáw'sûkǐ* is one of the larger Cherokee intermediate categories.

*gáw'sûkǐ* – ‘smeller’ – *Cucumis melo* L. – muskmelon

The Cherokee quickly adopted watermelons from the Spanish (Goodwin 1977: 58), but there is less information available about muskmelons. As early as 1715, Longe observed muskmelons served at “The Feasts of the First Fruits” (Longe 1969: 40). What is significant about Mooney’s observation is that muskmelon obtained such a high degree of cultural salience as to become the type-specific (Berlin 1972), the prototypical or ideal type, for the intermediate category *gáw'sûkǐ*. It was referred to solely by the

primary lexeme *gáw'sûkĩ* and it appears that the fragrant fruit was the embodiment of the qualities inherent in this category.

*gáw'sûkĩ amáy-utúhi* – ‘smeller, standing in water’ or *gáw'sûkĩ gûnagéĩ* – ‘smeller, black’  
– *Mentha piperita* L. – peppermint

There is some confusion here as to which botanical species Mooney collected. It was identified by a botanist as *Mentha canadensis* L., but this species is not known to the North Carolina mountains. The species that is most similar to *Mentha canadensis* is *Mentha arvensis* L., our only native mint (Smith 1998: 143), but one that is rare in North Carolina (Radford et al. 1968: 922). I have used *Mentha piperita* here due to the similarity of the names collected by Olbrechts and the probable misidentification by Mooney. Olbrechts found *M. piperita* to be called *gáw'sûkĩ amayiě'hĩ* (‘smeller, that grows near the water’) and *gáw'sûkĩ amayi tsuduöi* (‘smeller, that is standing near the water’), both of which are very similar to the name Mooney recorded. *Mentha piperita* was introduced and quickly established in cool, damp climates and thrives in marshy, wet soils. The other name Mooney collected, *gáw'sûkĩ gûnagéĩ* (‘smeller, black’), was due to the dark color of the leaves and stalk. However, even this identification was questioned in his notes. He probably provided a specimen without flowers, which would make it very difficult to identify the exact species. Banks (1953: 110) reported *Mentha spicata* L. as the species used by the Cherokee, but it is likely both were used as it is quite similar to *M. piperita* in form and habitat preference.

Olbrechts’ only recorded use for the mint plant was for a condition known as “the heat”, probably a form of fever, for which the leaves of the mint plant were boiled and

the decoction poured over the body by hand. Banks found that mint was taken as a cold infusion for an upset stomach, for colds, and as a flavoring for food and medicine.

*gáw'sûkĩ atûkiyústĩ* – ‘smeller, like lamb’s-quarters’ – *Chenopodium ambrosioides* L. – wormseed

The specific qualifier for this folk species stems from *atûka* (lamb’s-quarters, *Chenopodium album* L.) and *-iyustĩ* (‘like’), indicating both a physical resemblance and a botanical relationship at the genus level for the two plants. Olbrechts gathered several synonyms for *C. ambrosioides*, including *gáw'sûkĩ adanelõnaöë'hĩ*, *dilaiyústĩ*, and *unidziya tsuni'istoti* (‘it is used to kill worm with’). The gloss for the last one, the only gloss he provided, suggests its use for intestinal parasites but he did not specify this use. *Dila* is the Cherokee word for skunk, so *dilaiyústĩ*, would be ‘skunk-like’, most likely referring to the plant’s smell. He did record that it was used for “the heat”, possibly a type of fever, by blowing a warm infusion of the leaves over the patient. Both of these uses were supported by the findings of Banks (1953: 41).

Banks recorded three modes of application for *C. ambrosioides* for the treatment of intestinal worms. For hookworms, the stem and leaves were boiled down to a thick consistency and given to children in bite size blocks. No water was taken during the treatment. For general worm treatment, the tops and roots were pounded and made into a hot infusion. No breakfast was eaten, and this infusion was drunk at intervals all morning. Another general treatment consisted of the seeds made into a thick syrup and added to molasses. The warm root tea was also drunk in winter for fevers and a cold tea was used for colds and headaches, taken internally as well as applied to the head.

*gáw'sûkĩ gígagéĩ adsilû'skĩ* – ‘smeller, red flowered’ – *Monarda didyma* L. – bee balm

The name stems from the deep red color of the flowers. Olbrechts recorded two uses for *M. didyma*, both conditions pertaining to blood, which most likely relates to the color of the flower. It was used for *gigö yandik'öça* (‘urinating blood’) and the root was made into an infusion and sniffed up the nose in case of a nosebleed. Banks (1953: 111) also found it was used for nosebleeds, but also found that a hot infusion of the leaf brought out the measles rash when all else failed.

*gáw'sûkĩ gûnatlái* – ‘tame or cultivated smeller’ – *Salvia officinalis* L. – sage

This is the same garden sage so prevalent in Mediterranean cooking. It could not naturalize in the mountains of North Carolina, so it must have been propagated in Cherokee gardens. The Cherokee attributed no medicinal qualities to *S. officinalis*.

*gáw'sûkĩ sũ'tlĩ* – ‘smeller, bridge’ – *Pycnanthemum muticum* (Michaux) Persoon – mountain mint

Mooney glossed *sũ'tlĩ* as ‘bridge’, but stated, “there seems no reason for calling the species by such a name.” However, Olbrechts also collected the synonym *gáw'sûkĩ sötli tsanose'öi* (‘the smeller which is called “footlog”’) for *Blephilia hirsuta* (see *gáw'sûkĩ wâtigéĩ adsilû'skĩ* below). *Pycnanthemum muticum* favors mesic habitats and could very well have been found growing by a bridge or “footlog” over a wet area. Perhaps the meaning in this case was associated with a specific location rather than a general habitat.



Mooney also collected the synonyms *gáw'sûkĩ útana* ('smeller, large') due to its relative size and *gáw'sûkĩ sa'kánigeĩ* ('smeller, blue') which he claims was due to the color of the flowers. But the specific qualifier *sa'kánigeĩ* was more likely due to the blue cast of the leaves which have a covering of grayish hairs (Smith 1998: 141) than to the flowers, which are white with purple spots (Radford et al. 1968: 918).

No medicinal uses were attributed to this species, but Banks (1953: 112) collected uses for the general *Pycnanthemum* species, and I will include these here as this is the first *Pycnanthemum* mentioned in this section. A poultice of the leaves, as with many other species of *gáw'sûkĩ*, was placed on the head for headaches. A tea of the leaves was used for fever and colds, as well as for heart trouble and to wash an inflamed penis.

*gáw'sûkĩ tělugéĩ* (*adsilû'skĩ*) – 'smeller, purple(-flowered)' – *Monarda fistulosa* L. – wild bergamot

The name *gáw'sûkĩ tělugéĩ* (*adsilû'skĩ*) was due to the head-like clusters of purple flowers. Mooney actually recorded it as *gáw'sûkĩ tělugéĩ* but Olbrechts added *adsilû'skĩ*. Mooney voiced his frustration the number of synonyms for *Monarda fistulosa*, and the inherent variability in folk classification systems, in the following statement:

As a sample of the worthlessness of Indian specific classification it may be stated that this species was designated, under different specimens, as *gáw'sûkĩ tělugéĩ* ('purple smeller'), *gáw'sûkĩ tělugiyústĩ* ('purplish smeller'), *gáw'sûkĩ égwa* ('large smeller'), *gáw'sûkĩ wâtigéĩ* ('brown smeller'), two or three of these

designations being given by the same man, while another described the *Pycnanthemum muticum* as *gáw'sûkĩ útana* ('large smeller').

Olbrechts said the medicinal application had been lost, but Banks found that a warm poultice of the plant was used as to relieve headaches (1953: 111).

*gáw'sûkĩ událkĩ* – 'smeller, ?' or *gáw'sûkĩ usdíga* – 'smeller, small' – *Hedeoma pulegioides* (L.) Persoon – pennyroyal

Mooney did not provide a gloss for *událkĩ*, but the small size of *H. pulegioides* would explain it being called *gáw'sûkĩ usdíga*. Banks (1953: 109) provided the only medicinal uses, and he found several. The pounded leaves were put in the mouth in case of a toothache or placed on the head in case of a headache. An infusion of the entire plant was drunk cold for flux and warm for colds, while an infusion of the leaves was drunk for fevers. The leaves were also rubbed on the body to repel insects.

*gáw'sûkĩ udûnsínidâ 'itã* – 'smeller, climbing vine on the ground' or *gáw'sûkĩ sôkto'ie 'hĩ* – 'smeller, growing in apple orchards' – *Glechoma hederacea* L. – ground ivy

Mooney claimed that the first qualifier, *udûnsínidâ 'itã*, was derived from *gálégĩ* ('climber') and *ulû'nta* ('vine'), providing a name very similar to the common name ground ivy. Olbrechts provided the second name and this introduced, weedy species would have thrived in Cherokee orchards. He also claimed that knowledge of its use had been forgotten by the time of his research. However, Banks (1953: 109) found that an infusion of it was still used for babies with hives and for measles.

*gáw'sûkĩ unéga* – ‘smeller, white’ – *Pycnanthemum incanum* (L.) Michaux – hoary mountain mint

Mooney claimed that this species was known as *unéga* (‘white’) due to the color of the flowers, but the white hairs on the leaves give the plant a frosted appearance, hence the common name hoary mountain mint. Mooney also recorded the synonym *gáw'sûkĩ sũ'tlĩ útana* (‘smeller, bridge, large’), which is appropriate because *P. incanum* is the largest of the mountain mints that grow in the North Carolina mountains (Radford et al. 1968: 919). He also recorded it as simply *sũ'tlĩ* (‘bridge’), which is relevant to another species that was recorded as *sũtliyústĩ* (‘like *sũ'tlĩ*’, see below). No medicinal or other applications were recorded for *P. incanum*.

*gáw'sûkĩ usdíga* – ‘smeller, small’ or *utanita tsugwalagũ'nhĩ* – (no gloss) – *Trichostema dichotomum* L. – blue curls

Other species have been referred to as the ‘small’ smeller, but this may be a misidentification due to *T. dichotomum* lacking much of an odor. This is one of the non-aromatic members of the mint family, Lamiaceae. Without a gloss for *utanita tsugwalagũ'nhĩ*, it is difficult determining if this name has any correlation to *T. dichotomum*. However, both these names were recorded on a plant label and the botanical species identified by the botanist at the Smithsonian Institution, so it may very well have been a proper match. No medicinal applications were attributed to this species.

*gáw'sûkĩ ustitláhĩ* or *gáw'sûkĩ ustitsáhĩ* – ‘top-knot smeller’ – *Pycnanthemum tenuifolium*  
Schrader – narrowleaved mountain mint

The specific qualifier stems from the resemblance of the flower heads to the topknot hairstyle worn by Cherokee men, *ustitláhĩ* from the upper Cherokee dialect and *ustitsáhĩ* from the middle dialect. Mooney also recorded the synonyms *gáw'sûkĩ unéga usdí* (‘smeller, white, small’) and *na'tsiyústĩ klayuě'hĩ* (‘like pine, growing in old fields’). The plant is called *na'tsiyústĩ klayuě'hĩ* because of the resemblance of the linear leaves to pine needles, stemming from *nátsĩ* (‘pine’) and *-iyústĩ* (‘like’) and from its preferred habitat stemming from *klayu'hĩ* (‘an old field’) and *ě'hĩ* (‘living’ or ‘dwelling’). Mooney included a vague reference to its medicinal properties, saying that it was, “used in preliminary medicine for general complaints and by others to vomit.”

*gáw'sûkĩ wâtigéĩ adsilû'skĩ* – ‘smeller, brown-flowered’ – *Blephilia hirsuta* (Prush)  
Bentham

The flowers of *B. hirsuta* are white and speckled with purple, but they soon turn brown after blooming which may explain the name. Olbrechts recorded this and two other synonyms for *B. hirsuta*, *gáw'sûkĩ sa'kánigeĩ* (‘smeller, blue’) and *gáw'sûkĩ sőtli tsanose'öi* (‘the smeller which is called “footlog”’); however he gave no explanation for the names and they may have been due to misidentification or underdifferentiation (see *gáw'sûkĩ sũ'tlĩ* above). He identified the botanical species as *Blephilia ciliata* (L.) Bentham, but this is a piedmont species and not found in the mountains. Assuming it was identified correctly to the genus level, the species of *Blephilia* that does grow in the mountains is *B. hirsuta*. The only medicinal application he recorded was as a remedy for

mumps. Banks (1953: 108) found that the leaves of *Blephilia* were used as a poultice for headaches.

***kâstúta*** – ‘simulating ashes’

Mooney attributes the name of this intermediate category to the ashy appearance of the leaves. The name stems from *kastú* ‘(ashes)’ and *utáhĩ* or *utě’hĩ* (‘pretending to be’). All members in this category are in the family Asteraceae.

*kâstúta gatłaski* – ‘simulating ashes, ?’ – *Antennaria solitaria* Rydberg – solitary pussy-toes

Olbrechts did not provide a gloss for the specific qualifier *gatłaski* and its gloss could not be found as a part of any other name. He also recorded the synonyms *kâstúta tsaninöita* and *kâstúta unéga ałkodöski*, also without glosses. He did; however, record several medicinal applications, including its use as part of the remedy for *unak’ano’stisgöi* (‘swollen testicles’), for kidney trouble, and for a type of diphtheria caused by insect ghosts known as *aniyötseni ada’nöwoti* (‘to cure their throat’) (Mooney and Olbrechts 1932: 261).

*kâstúta selikwayûstĩ* – ‘simulating ashes, like a green snake’ – *Pityopsis graminifolia* (Michx.) Nutt. var. *graminifolia* – narrowleaf silkgrass

The specific qualifier *selikwayûstĩ* stems from *selikwáya* (‘green snake’) and – *iyûstĩ*, a suffix meaning ‘like’. This was due to the long, blade-like leaves that resembled a green snake. Mooney also collected the synonyms *kâstúta sa’kánigeĩ* (‘simulating

ashes, blue'), due to the overall appearance of the plant, and *kâstúta gûnahita* ('simulating ashes, long'), due to the long, slender leaves. No medicinal uses were attributed to *P. graminifolia*.

*kâstúta tělugéř* – 'simulating ashes, purple' – *Symphyotrichum concolor* (L.) Nesom

The identity of the botanical species here is questionable, as *S. concolor* is rarely encountered in the North Carolina mountains. However, Smith names 29 species of *Aster* in his *Wildflowers of the Southern Mountains* and includes *S. concolor* (as *Aster concolor*) as a mountain species (1998: 211). It may be *S. concolor* is the species in question or it could be one of several other species of blue- to violet-colored asters that are more common in the region. Asters are a taxonomically difficult group and it would be impossible to speculate on this matter without a voucher specimen. Mooney also speculated that this could be the *kâstúta tělugéř adsilû 'skř* mentioned by one of his informants, but this could represent several botanical species (see *kâstúta útana uyanéna* below).

Mooney attributed a fascinating application to *kâstúta tělugéř adsilû 'skř* and, while its identity is questionable, this would appear to be the most appropriate place to discuss it. When a warrior prepared for battle, he would place the dried root of *kâstúta tělugéř adsilû 'skř* in his pocket. He would chew the root before entering battle, which would cause the bullets of the enemy to hit the ground at his feet, and he would be unharmed (Ms 1894).

*kâstúta usatû 'lătû'* - 'simulating ashes, having leaves twisted around the stalk' –

*Chrysopsis mariana* (L.) Ell.

The specific qualifier *usatû 'lătû'* stems from *gátalatû* ('arrow') and might also be glossed as 'it has itself (to be) an arrow', as the leaves were considered to resemble feathers mounted on an arrow shaft. Mooney also recorded the synonym *kâstúta dalânige adsilû 'skĩ* ('simulating ashes, yellow-flowered'), the same name he recorded for *Pseudognaphalium obtusifolium* (see *kâstúta útana uyanéna* below).

A warm infusion of *kâstúta usatû 'lătû'* was used for what Mooney referred to as a "fit", possibly an epileptic seizure, where the patient had a dark, black appearance and their tongue rolled back in their mouth. The patient was scratched all over and washed with the infusion.

*kâstúta usdí-ga díyatal tsugwalága* – 'simulating ashes, small, narrow-leaved' –

*Gnaphalium* spp.

The varietal qualifier, *díyatal tsugwalága*, stems from *díyatal* ('narrow') and *tsugwalága*, the plural form of *ugwalaga* ('leaf'). Mooney did not identify this to species, only to the genus level. However, there are only two species of *Gnaphalium* common to the western North Carolina region, and this appears to be the smaller species, *Gnaphalium purpureum* L. (now *Gamochaeta purpurea* (L.) Cabrera). In his notes, he mentioned that this plant was about the same size as *Antennaria plantaginifolia*, which correlates with *G. purpureum* when both species send up their flowering stalk. Mooney also recorded the name *kâstúta tsusdí-ga tsugwalága* ('simulating ashes, small-leaved'), *tsusdí-ga* being the plural form of *usdí-ga*, also calling this *Gnaphalium* spp.

This may be the *kâstúta tēlugéĩ adsilû´skĩ* that Mooney speculated as being other, unlikely species (see *kâstúta útana uyanéna* and *kâstúta usdí-ga tigásakwalû´ tsugwalága*), as this is a purple-flowered species, but Mooney did not make this association.

*kâstúta usdí-ga tigásakwalû´ tsugwalága* - ‘simulating ashes, small, round-leaved’ – *Antennaria plantaginifolia* (L.) Richardson – pussy-toes

The varietal qualifier *tigásakwalû´* is the plural form of *gásakwalû´* (‘round’), which Mooney stresses is circular, not cylindrical, and *tsugwalága*, which is the plural form of *ugwalaga* (‘leaf’). Mooney said this may be the *kâstúta tēlugéĩ adsilû´skĩ* (‘simulating ashes, purple-flowered’) that one of his informants mentioned (see *kâstúta útana uyanéna* below), but this is a white flowered species and that association is highly unlikely. In one of his later trips he collected the name *tsuyátûli tulawatéstĩ* (roughly ‘growing in patches or bunches, it grows around the white oak tree’). In his description he said it grew on wooded mountainsides in rich soil and resembled plantain, but with smaller leaves and not so stiff or glossy (Ms. 1894). This is an excellent description of the genus *Antennaria*, and the description of the small leaves would most likely apply to the species *plantaginifolia*. He also recorded the name *kâstúta tsuyátûli*, but he did not associate it with a botanical species. However, this appears to be a composite of other names he collected for *A. plantaginifolia* and he mentioned that the plant was evergreen, and the basal leaves of *A. plantaginifolia* persist for much of the year.

As a medicinal plant, Mooney found that *tsuyátûli tulawatéstĩ* was used mainly for dental problems. An infusion made by pouring hot water over bruised leaves was drunk



and rubbed on an area afflicted by neuralgia and similar swellings caused by a toothache. Another informant told him that the pounded root was rubbed on a sore tooth. It was considered a strong, bitter remedy (Ms 1894). As *kâstúta tsuyátûli*, Mooney found it was used for *ga'yedi* ('pain in the back'), the whole plant made into a decoction and drunk for 3 to 4 days.

Banks mentioned different uses for *A. plantaginifolia* (1953: 126), citing its use as a decoction for the summer diarrhea of children and as an infusion to regulate excessive menstrual flow.

*kâstúta útana uyanéna* – 'simulating ashes, large, branching' or *kâstúta egwa* – 'simulating ashes, large' – *Pseudognaphalium obtusifolium* (L.) Hilliard & Burt – rabbit tobacco

There is a discrepancy over the gloss of *uyanéna* between this plant and *gănigwalí'skí tsustû'ní* (see above). Mooney originally glossed *tsustû'ní* as 'that branches out immediately upon the ground' and *uyanéna* as 'a bunch of', signifying a bunching growth pattern. *Pseudognaphalium obtusifolium* is an erect plant that often branches as it matures, so it would definitely not be described as having a bunching growth pattern and the gloss for *gănigwalí'skí tsustû'ní* may be questionable. Other synonyms recorded by Mooney include *kâstúta dalânige* ('simulating ashes, yellow'), *kâstúta útana* ('simulating ashes, large', no varietal qualifier), and *tskĩlĩ'* ('witch'), due to its shining appearance at night. He speculated that this might be the *kâstúta tēlugéĩ* *adsilû'skí* ('simulating ashes, purple-flowered'), but this is an unlikely match (see *kâstúta tēlugéĩ* above) as the actual flowers are inconspicuous and the conspicuous

papery bracts are whitish. Olbrechts recorded it simply as the folk generic *kâstúta*, and it may be that this was considered the most prototypical member of this category, and also as the synonym *kâstúta dalânige adsilû'skĩ* ('simulating ashes, yellow-flowered').

Mooney mentions *P. obtusifolium* (as *G. decurrens*) in *The Sacred Formulas of the Cherokees* as, "one of their most valuable medicinal plants" used for colds and in a medicinal sweat bath (1891: 325). However, he elaborated on the cold remedies in his notes and added other applications. For colds, they made a hot infusion of the tops of the plants and gave it to the patient. Another cold remedy involved pouring a tea of *P. obtusifolium* over hot stones while the patient covered themselves and the stones with a blanket, thereby keeping in the steam so it could be inhaled. The beaten tops were also soaked in cold water and used as a styptic. It was reputed to immediately stop blood flow and quickly seal the wound. As an aside note, Mooney said the whites down in Tennessee used the same plant for dysentery.

Olbrechts also found that it was used for a condition related to colds known as either *unisi'kwaskö* ('when they are coughing') or *utliyaktanöçi yiki nundiwsköna* ('when they have a bad cough'), as well as for a type of diphtheria caused by insect ghosts known as *aniyötseni ada'nöwoti* ('to cure their throat') (Mooney and Olbrechts 1932: 261). It was a component of a formula used to scratch patients for a condition known as *dik'anugosti nugötlö götoti* ('to be used with a briar to cause it to come out'). The medicine man would scratch the patient with a species of cat briar (*Smilax glauca* Walter) and rub a warm infusion of *P. obtusifolium* and *Vicia caroliniana* Walter into the scratches. This was repeated four times before noon, the patient fasting during the treatment, for four consecutive mornings (Mooney and Olbrechts 1932: 205).

***na'tsiyústĭ*** – 'like a pine tree'

This is a small intermediate category, but it includes a wide variety of botanical species. The name stems from *na'tsĭ* ('pine') and *-iyústĭ* ('like'), usually in reference to a plant having linear leaves resembling pine needles.

*na'tsiyústĭ* – 'like a pine tree' – *Hypericum gentianoides* (L.) BSP – pineweed

Mooney stated the following in his notes, "The English name, "pineweed", conveys the same meaning as the Cherokee name." Mooney's comment and lack of a qualifier suggests that this is the most prototypical member of the category. No medicinal qualities were attributed to *H. gentianoides*.

*na'tsiyústĭ gatusě'hĭ* – 'like a pine tree, mountain dwelling' – *Ionactis linariifolius* (L.)

Greene – stiff aster

The stiff, linear stem leaves resemble a pine branch. The specific qualifier stems from *gatusĭ* ('mountain') and *ě'hĭ* ('dwelling'). Mooney recorded two uses for *na'tsiyústĭ gatusě'hĭ* (Ms. 1894). A decoction of the leaves was used to wash sores and it was combined with *Hepatica acutiloba* DC for diarrhea. *Ionactis linariifolius* was gathered and dried for future use. Banks (1953: 126) also found that the pounded roots were soaked in water and sniffed up the nose to eliminate excess mucus.

*na'tsiyústī klayuě'hī* – 'like a pine tree, growing in old fields' - *Pycnanthemum tenuifolium* Schrader

*Klayuě'hī* is a combination of *klayúhī* ('an old neglected field') and *ě'hī* ('living' or 'dwelling'). This is another species with linear leaves. The medicinal qualities were discussed under the synonym *gáw'súkī ustitláhī* (see above).

*na'tsiyústī útana* – 'like a pine tree, large' – *Solidago odora* Aiton – sweet goldenrod

*Solidago odor* reaches a height of up to 1.5 meters, making it the tallest of the *na'tsiyústī* and deserving of the specific qualifier *útana* ('large'). However, it is the least pine-like of the category, having leaves that are more lanceolate than linear (Radford et al. 1968: 1092). It may be that its anise-like odor reminded the Cherokee of the smell of pine and it was not named for solely for its appearance. Mooney did not record any uses for *S. odora*, but did say that it was found in old fields.

***tsâliyústī*** – 'like tobacco'

*Tsâliyústī* is a combination of *tsâ'lâ'*, the Cherokee name for tobacco (*Nicotiana tobacum* L.) and *-iyústī* ('like'). Mooney wrote the following about this category of plants, "Several other plants – including the Lobelia, mullein, and cardinal flower are called *tsâliyústī* ('like tobacco'), not on account of similar use or general appearance, but on account of having a similar flower and seed stalk."

*tsâliyústĩ élatígatĩ* – ‘like tobacco, low growing’ – *Lobelia puberula* Michaux – downy lobelia

The specific qualifier *élatígatĩ* (‘low’) was in reference to its height, not a favored habitat. Mooney also collected the synonyms *tsâliyústĩ udayéluě’hĩ* (‘like tobacco’, no gloss) and *tsâliyústĩ sa’kânigeĩ gatusě’hĩ* (‘like tobacco, blue, mountain dwelling’). The varietal qualifier *gatusě’hĩ* (‘mountain dwelling’) may have been due the ability of this species to survive in drier areas, such as on a mountainside. Some of the larger lobelias, such as *Lobelia cardinalis* and *L. siphilitica*, are restricted to wet habitats.

Mooney provided the only medicinal uses for *L. puberula*. The root was bruised, wrapped in a rag, and made into a warm infusion. One drop of this was placed in the eye of a patient with cataracts or white scum over the eye. The process was repeated as necessary. The same preparation was sniffed up the nose in case of nasal congestion due to a cold. He also reported that local whites would place the seeds in whiskey and take it for dyspepsia.

*tsâliyústĩ gígagéĩ* – ‘like tobacco, red’ – *Lobelia cardinalis* L. – cardinal flower

The specific qualifier *gígagéĩ* (‘red’) is due to the color of the beautiful, blood-red flowers. Olbrechts recorded the majority of its medicinal applications, but only its use for the condition known either as *adansiludoĩ yune’istanelö* (‘trailing along, if there is pain in different places’) or *unestanelidoloçöi* or *uneistaneo gananutotsidoi* (‘when they have pains all over their body’) was published (Mooney and Olbrechts 1932: 216). He recorded several uses of *L. cardinalis* for related conditions including *aniskina göwani’tsö istöi* (‘when they have been made sick by dead persons’), *aniskina*

*uniyaktanöçi* ('ghosts have changed (the condition of the patient)'), *ayeligogi* *uniyelö'nöçi* ('they have made it like it'), and *gegane'sagöçi* ('they have it caused by plotters'). It was also included in two formulas for *gigö yandik'öça* ('urinating blood') and, combined with *Galium lanceolatum*, for bleeding from both nostrils. This association with conditions that included the presence of blood was most likely due to a correlation of the red flowers to the red color of blood. Banks (1953: 123) also found that *L. cardinalis* was used to stop nose bleeds, but he found that a cold infusion of the roots and leaves were snorted up the nose, and that *L. cardinalis* was often combined with *L. siphilitica* for this purpose. He was also told that a decoction of the leaves was drunk to reduce fevers.

*tsâliyústĩ sa'kânigeĩ* – 'like tobacco, blue' – *Lobelia amoena* Michaux

Mooney only provided the Cherokee and botanical names for *L. amoena*. The specific qualifier, *sa'kânigeĩ* ('blue'), was most likely due to the violet to blue color of the flowers (Radford et al. 1968: 1007) and not to the overall appearance of the plant (see *tsâliyústĩ unĩktû'tĩ* below). No other information is available for this plant.

*tsâliyústĩ unĩktû'tĩ* – 'like tobacco, downy' or *tsâliyústĩ sa'kânigeĩ* – 'like tobacco, blue' – *Verbascum thapsus* L. – mullein

The qualifier *unĩktû'tĩ* ('downy') is due to the dense covering of pubescence on the leaves, while *sa'kânigeĩ* ('blue') is due to the overall appearance of the leaves, which the Cherokee considered to be a bluish color due to the pubescence. The latter was not due to flower color as with the lobelias. Mooney may have gathered as many

synonyms as he had informants for *V. thapsus*. One called it *tsâliyústĩ dalânige* ('like tobacco, yellow') because of its yellow flowers. It was occasionally referred to as *tsâliyústĩ egwa* ('like tobacco, large') as it is the largest of the *tsâliyústĩ*, and *tsúskwanû'ní* ('blanket') due to the fuzzy appearance of the leaves. Another name, referring specifically to the seeds, was *tsâliyústĩ unikw'téna* or just *unikw'téna*, which stems from *un'ktûtĩ* ('having seeds or seedy'). This would relate to the massive spikes of seed heads that are prevalent in the fall, each plant producing an enormous amount of tiny seeds.

Olbrechts added several more synonyms for *V. thapsus*. He found it was called *tsâliyústĩ tsunikwtayuwani* ('like tobacco, it is hairy'), *tsâliyústĩ unikwtali* ('like tobacco', no gloss), and *tsuskwanöwoti*. Although he did not gloss *tsuskwanöwoti*, it appears to be formed by a combination of *tsúskwanû'ní* ('blanket') and *wá'ti*, a shortened form of *wâtigéĩ* ('brown'). This could easily be a descriptive term for the dried leaves.

Mooney recorded two uses for mullein, the first involving a poultice of the bruised leaves, sometimes with the root added, used to bring down swelling. The poultice was placed on the swollen area at night and changed in the morning. This was repeated four times if necessary. Dried mullein was also stored for later use. A decoction of the roots was also drunk to aid with prolonged menses. The patient would fast all day on the first day, until dinner on the second, until mid-morning on the third, and not at all on the fourth day. The first year rosettes could be harvested through the winter as needed.

Olbrechts found it was also used for swellings, especially swelling of the testicles (possibly *unak'onçö* – no gloss) and of the neck. As mentioned under

*tsâliyústĭ gĭgagéĭ*, it was used for the condition *adansiludoĭ yune'istanelö* (trailing along, if there is pain in different places') (Mooney and Olbrechts 1932: 216) and also as a poultice for the condition *aniyötseni ada'nöwoti* ('to cure their throat'). For the latter, the leaves were pounded in warm water and the infusion placed on the patient's throat by the medicine man (Money and Olbrechts 1932: 255). He also found mullein was applied to the rheumatic condition *didölesgi* ('the crippler').

Banks found that an infusion of the roots was used for swollen glands, kidney problems, water retention in the legs, and for "female trouble", while the leaves were rubbed on the armpits for prickly rash. A decoction of the roots was taken for coughs and the decocted leaves were mixed with brown sugar or honey and used as a cough syrup. Like Mooney, he found that a poultice of the dried leaves, shredded and soaked in warm water, would take the swelling out of a sore. And an infusion of the leaves was drunk after a miscarriage (Banks 1953: 117-118).

*tsâliyústĭ únistilû'istĭ* – 'like tobacco, they stick flat to a hairy substance' – *Cynoglossum virginianum* L. – wild comfrey

The specific qualifier *únistilû'istĭ* ('they stick flat to a hairy substance') is in reference to the seeds and, as Mooney pointed out, "is a generic term for all burs." Most of the synonyms for this species are classified as a type of *únistilû'istĭ*, which will be discussed as an intermediate category below, and it is only mentioned here to demonstrate the flexibility of the Cherokee system. This is one of the few examples of a plant that embodies the qualities inherent in two intermediate categories. The medicinal qualities will also be discussed in the section concerning the category *únistilû'istĭ*.



*tsâliyústĭ usdĭga* – ‘like tobacco, small’ – *Lobelia inflata* L. – Indian tobacco

The etymology of the Cherokee name here is self-explanatory, this being one of the smaller species of *Lobelia*. Mooney mentioned it in *The Sacred Formulas of the Cherokees* and stated that it was used with old tobacco, *Nicotiana rustica* L., to counter sicknesses sent by friends or rival conjurers to test the knowledge of a medicine man (Mooney 1891: 369). The whole blossoms or an infusion of the blossoms of *N. rustica*, *Cicuta maculata*, and *L. inflata* were held in the mouth of the medicine man while he sucked the afflicted area. The fluid was spit into a bowl and an offending object, such as a stick, pebble, or insect, was located in the liquid.

In his notes, Mooney mentioned two other uses for *L. inflata*, both from imbibing a decoction of the pounded leaves and roots for an emetic effect. Emesis was considered beneficial for fluid retention known as dropsy and for when the saliva was spoiled by a conjurer, the act of vomiting eliminating the spoiled saliva. This was one of several plants that Mooney found were dried and stored for future use (Ms. 1894).

*tsâliyústĭ usdĭga gatusě’ hĭ* – ‘like tobacco, small, mountain dwelling’ – *Lobelia spicata* Lam.

*Lobelia spicata* is commonly found in mountain meadows and woodlands, so it was appropriately labeled with the varietal qualifier *gatusě’ hĭ* (‘mountain dwelling’). Olbrechts also collected the names *tsâliyústĭ tĕlugéĭ adsilû’ skĭ* (‘like tobacco, purple-flowered’) and *tsâliyústĭ sa’ kánigeĭ adsilû’ skĭ* (‘like tobacco, blue-flowered’). The flowers of *L. spicata* range from blue lavender or bluish-white (Radford et al. 1968: 178).

Mooney made no mention of *L. spicata* in his publications or in his notes, so the only extant references come from Olbrechts. He found that this was one of the plants used to overcome conditions caused by ghosts such as *aniskina göwani'tsö istöi* ('when they have been made sick by dead persons') and *aniskina uniyaktanöçi* ('ghosts have changed (the condition of the patient)'). Similar conditions, caused by human agents, had *L. spicata* in their formulas such as *ayeligogi uniyelö'nöçi* ('they have made it like it') and *gegane'sagöçi* ('they have it caused by plotters'). It was a component in one of the many formulas for *unawasti egwa* ('big chill') and pain in the stomach area known as *uniyelo'iselöi* ('pain about'). His only published report of its use was for a condition typified by temporary bouts of violent trembling and, in severe cases, paralysis. The patient was scratched over the seat of the pain and a cold infusion of *L. spicata* was prepared in a small gourd and is blown on the scratched area (Mooney and Olbrechts 1932: 226).

*tsâliyústĩ útana* – 'like tobacco, large' or *tsâliyústĩ klawátuě'hĩ* – 'like tobacco, growing in mud' – *Lobelia siphilitica* L. – great lobelia

As the common name suggests, this is one of the largest species of *Lobelia* and indicates the source of the specific qualifier *útana* ('large'). It also favors wet areas, indicating the incentive for the second name *klawátuě'hĩ*, which stems from *klawátu* ('mud') and *ě'hĩ* ('dwelling or living'). Olbrechts makes little mention of *L. siphilitica*, misidentifying it in his notes as *tsâliyústĩ gígagéĩ adsilû'skĩ* ('like tobacco, red-flowered'), the name associated with and more appropriate for *L. cardinalis*. He also mentions it once in his notes, recording its use with *L. cardinalis* for the affliction by ghosts known

as *aniskina göwani'tsö istöi* ('when they have been made sick by dead persons'), so he was obviously aware of the difference. This awareness did not translate into his notes.

Mooney only recorded one use for *L. siphilitica*, finding that it was used in conjunction with *L. inflata* as an emetic. Banks found the greatest number and wide range of applications for *L. siphilitica* (1953: 123). A cold infusion of the roots of the great lobelia and *L. cardinalis* was sniffed into the nose to stop nosebleeds while a poultice of the roots was used to reduce swelling. A warm infusion of the leaves was drunk as a cold remedy and a poultice of the crushed leaves was used for headaches.

***únistilû'istĩ*** – 'they stick flat to a hairy substance'

Mooney stated that this was the, "generic name for all burs. The name implies that they attach themselves to hairy substances, such as cloth, wool, or hides of animals, flat, i.e. along the whole surface." The name stems from *askilû'isti* ('it is sticking to me'). These plants developed a seed dispersal system that involved attachment to a member of the more motile animal kingdom. Walk through a field or the border of a woodland in the Southern Appalachians in the late summer or fall and you will find an assortment of these hitchhikers on your pant legs, socks, or shoe laces. This is easily the largest and most diverse of the Cherokee intermediate categories.

As a group, the *únistilû'istĩ* had a specific medicinal application. When a novitiate was preparing to become a medicine man, it was essential that he remember the knowledge that was being imparted to him. A decoction of the *únistilû'istĩ*, used singly or in combination, was drunk to aid in the process of memory retention, memories sticking just as the burs stick to a hairy substance (Mooney and Olbrechts 1932: 101).

*únistilû'istĩ-yû'* - 'the true they stick flat to a hairy substance' – *Desmodium nudiflorum* (L.) DC – tick trefoil

The prolific, triangular, flat burs of *D. nudiflorum*, which inspired the common name tick trefoil, distinguish it as the “true” *únistilû'istĩ*, or that species which best typifies the category. Mooney also collected the synonyms *únistilû'istĩ aniya'téna* ('they stick flat to a hairy substance, flat') and *únistilû'istĩ tuyayúnstĩ* ('they stick flat to a hairy substance, bean-like'). The specific qualifier *aniya'téna* is the plural form of *aya'téna* ('broad' or 'flat') and *tuyayúnstĩ* stems from *túya* ('pea' or 'bean') and *iyúnstĩ*, the plural form of the suffix *-iyústĩ* ('like'). This refers to the resemblance of the blossoms and pods of *D. nudiflorum* to those of beans and peas, and this is appropriate because all are members of the family Fabaceae.

The medicinal qualities attributed to *D. nudiflorum* were provided by Banks (1953: 71), who found that bathing in a tea of the roots was believed to ease cramps. Also, a decoction of *D. nudiflorum* and any other *únistilû'istĩ* that were encountered was drunk in large quantities and regurgitated to improve a bad memory. This was repeated every four days. The symbolism evident here would suggest that the sticky burs would help memories “stick” with the patient, much as the water from the pitcher plant (*Sarracenia purpurea* L.), a carnivorous plant that traps insects, helps the patient “trap” their memories (Mooney and Olbrechts 1932: 101).

*únistilû'istĩ* – 'they stick flat to a hairy substance' – *Xanthium strumarium* L. – cocklebur

Olbrechts recorded the folk generic *únistilû'istĩ* for the cocklebur. The impression here is that, even though *Desmodium nudiflorum* is the “true” *únistilû'istĩ*, *X. strumarium*

embodied sufficient prototypical qualities to be referred to solely by the folk generic. However, Mooney might have disagreed, as he recorded the names *únistilû'istĩ* *uniyâ'natĩ* ('they stick flat to a hairy substance, horned or prickly'), and *únistilû'istĩ* *tsunitsiyástĩ* *tsunsdí-ga* ('they stick flat to a hairy substance, piercing, small'). The first specific qualifier, *uniyâ'natĩ* ('having long branches or spikes') is due to the hook-like spines surrounding the seeds. These are also the reason this is an efficient *únistilû'istĩ*, the hooks making it difficult to remove the bur from animal fur. The specific qualifier *tsunitsiyástĩ* ('they pierce or prick') is a form of *tsiyásayáû'* ('I prick or pierce') and *tsunsdí-ga* is the plural form of *usdíga* ('small').

Olbrechts' only recorded application for *X. strumarium* was for itching, but he did not elaborate on the condition or the remedy. Banks, however, recorded several medicinal applications (1953: 133-134). A tea of the roots was used for cramps and a large swallow of the same tea would dislodge a fish bone or other object that was stuck in the throat. A tea of the roots was used as an emetic for those with an upset stomach and the chewed roots were used on rattlesnake bites. If a child was fearful when a person was in their presence, that person could take a bur from *X. strumarium* and touch their forehead, then that of the child. The child would then want to cling to the person just as the bur clings to things. Also, when the top bur matured, it was considered a sign that it was near the time of the first frost.

*únistilû'istĩ andayalûgi* – 'they stick flat to a hairy substance, ?' – *Agrimonium* spp.

Mooney identified this species as *Agrimonium incisa* C&G (Ms 2235), but this species is not known to be found in or near the North Carolina mountains (Radford et al.

1968: 547). It may be one of several species that are found in the mountains, but probably not *A. parviflora*, which is discussed below. He did not provide a gloss for *andayalûgi*. No medicinal properties were attributed to this species.

*únistilû'istĩ ganidaáskiyústĩ tsúntana* – ‘they stick flat to a hairy substance, like *ganitawaâ'skĩ*, large’ – *Galium pilosum* Aiton - bedstraw

The root of the specific qualifier *ganidaáskiyústĩ* (‘like it unjoints itself’) is the name for the intermediate category *ganitawaâ'skĩ* (‘it unjoints itself’). The combination of two perceptual qualities, bur-like seeds and disarticulating joints, resulted in this name which included two intermediate categories. The varietal qualifier *tsúntana*, the plural of *úntana* (‘large’), suggests that there was a small variety, and this is one of the synonyms recorded for *únistilû'istĩ tsunsdíga* below. No medicinal qualities were attributed to *G. pilosum*.

*únistilû'istĩ gûnagéĩ unastetsĩ* – ‘they stick flat to a hairy substance, black root’ – *Arctium* spp. – burdock

The identification of this biological species is purely speculative on my part. Mooney referred to the plant in his notes as being, “described as having large burs and large leaves like tobacco”, indicating that he did not see it and did not collect a specimen. But this description, along with the specific qualifier *gûnagéĩ unastetsĩ* (‘black root’), led me to believe that this could be a species of *Arctium*, which do have very dark roots. No mention of its use was recorded.

*únistilû'istĩ gatusě'hĩ* – ‘they stick flat to a hairy substance, mountain dwelling’ –

*Sanicula canadensis* L. – sanicle

Mooney only provided the Cherokee and botanical name for this species ((Ms. 2235). Banks (1953: 95) gave a general use for *Sanicula spp.*, finding it was used for stomach troubles and colic.

*únistilû'istĩ sa'kanigiýústĩ ukwalága* – ‘they stick flat to a hairy substance, bluish leaved’

– *Desmodium canescens* (L.) DC – hoary tick trefoil

The specific qualifier stems from *sa'kánigeĩ* (‘blue’) and *–iyústĩ* (‘like’) modifying *ukwalága* (‘leaf’). The Cherokee name, the common name, and the botanical name are all descriptive of *D. canescens*, as the leaves have a covering of dense, grayish hairs. Plants with this feature are referred to as canescent, and this is what gives the plant a bluish or hoary appearance. No specific uses were attributed to *D. canescens*.

*únistilû'istĩ tsundíwatlúgĩ* – ‘they stick flat to a hairy substance, swallowtailed’ – *Bidens*

*frondosa* L. – Spanish needles

Mooney recorded two forms of the specific qualifier, *tsundíwatlúgĩ* from the Upper Cherokee dialect and *tsundigwántsgĩ* from the Middle Cherokee dialect. Both stem from the plural form of *udígwantlgĩ* (‘it is pronged or swallowtailed’), due to the forked barbs on the end of the seeds.

Olbrechts recorded *B. frondosa* as *únistilû'istĩ tlâgesě'hĩ* (‘they stick flat to a hairy substance, growing in fields’). The specific qualifier *tlâgesě'hĩ* (‘growing in fields’) stems from *klagésĩ* (‘field’), but the difference in spelling was not explained by Mooney or Olbrechts. No further information was available for *B. frondosa*.

*únistilû'istĩ tsunitsiyástĩ tsúntana* - 'they stick flat to a hairy substance, prickly, large' –  
*Datura stramonium* L. – jimson weed

This is the Cherokee "large" counterpart to *Xanthium strumarium*, known to the Cherokee as *únistilû'istĩ tsunitsiyástĩ tsunsdí-ga* ('they stick flat to a hairy substance, piercing, small') (see *únistilû'istĩ* above). The specific qualifier *tsunitsiyástĩ* ('they pierce or prick') is a form of *tsiyásayáû'* ('I prick or pierce') and the varietal qualifier, *tsúntana*, is the plural form of *útana* ('large'). This is due to the size of the seedpods, the spiny capsules of *D. stramonium* being significantly larger than the heads of *X. strumarium*.

Banks provided the only medicinal uses for *D. stramonium*, finding that the dried leaves were used for asthma and the wilted leaves were used as a poultice on boils.

*únistilû'istĩ tsunsdíga* – 'they stick flat to a hairy substance, small' or *únistilû'istĩ ganidaáskiyústĩ tsunsdíga* – 'they stick flat to a hairy substance, like *ganitawaâ'skĩ*, small' – *Lespedeza repens* (L.) Barton – bush clover

Mooney simply stated that this was the 'small *u.*' or the '*u.* like *ganitawaâ'skĩ*, small'. The second qualifier was already discussed under *únistilû'istĩ ganidaáskiyústĩ tsúntana* above. No further information is available on the Cherokee relationship to this plant.

*únistilû'istĩ tsunsdíga únatĩ* – 'they stick flat to a hairy substance, small, attached' –  
*Hackelia virginiana* (L.) I. M. Johnson – beggar's lice or *Cynoglossum virginianum* L. – wild comfrey

Identification of the botanical species associated with *únistilû'istĩ tsunsdíga únatĩ* is difficult due to lack of congruence between the notes of Mooney and Olbrechts and



the number of synonyms that were collected. Mooney does not mention *C. virginianum* at all, only discussing *H. virginiana*, and Olbrechts only mentions *H. virginiana* in *The Swimmer Manuscript* (Mooney and Olbrechts 1932: 174). Mooney also collected the synonym *kanatsistaga ugatsalagisti*, but gave no gloss for this name. Both collected the name *únistilû'istĩ tsunsdíga únatĩ*, but only Mooney discussed its etymology. The qualifier *únatĩ* glosses as 'they are attached' and *tsunsdíga* is the plural of *usdíga* ('small'), the plural form indicating that this was in reference to the seeds.

According to Mooney, the *H. virginiana* was used for cancer, the dry root burned and the ash mixed with bear grease to make an ointment. The ointment was spread on the cancerous lesion, followed by sprinkling some of the pulverized dry root on top of the ointment. The plant was harvested in the summer because it had to be harvested by being pulled up by the top. There was a taboo against digging the roots. It was then dried for future use. Mooney also found that the plant was used for kidney troubles that included whitish (or milky) urine. It was boiled down four times until it became a thick syrup and was drunk for four days while abstaining from salt.

Olbrechts mentions both botanical species in his published work (Mooney and Olbrechts 1932: 174), identifying *H. virginiana* (cited as *Lappula virginiana*) as *únistilû'istĩ egwa* ('large u.') and *C. virginianum* as *únistilû'istĩ usdíga* ('small u.'). However, he does not mention *H. virginiana* in his notes and describes *C. virginianum* in two places. His process of identification for botanical species is not as transparent as Mooney's and it is impossible to discern if the inconsistencies for species reported in his notes were intentional or misidentifications. Besides the synonym *tsâliyústĩ únistilû'istĩ* ('like tobacco, they stick flat to a hairy substance') that was discussed above, he found

that *C. virginianum* was called *únistilû'istĩ gûnagéĩ* ('u., black'), *únistilû'istĩ usdíga* ('small u.'), and *únistilû'istĩ gûnagéĩ unastetsĩ* ('u., black roots').

Olbrechts recorded several applications for Cherokee ethnomedical conditions for wild comfrey including *duletsi* ('kernels'), *gat'esgeni u'tsöya* ('his spine aches'), and *unödi tsandik'uça* ('they urinate all milk'). It was also used for *tsuniyotogia* ('when they itch'), the only published account of an application for this plant by Olbrechts (Mooney and Olbrechts 1932: 174). Olbrechts also recorded that the ashes of the burned, pounded root spread over all kinds of sores, very much the same as Mooney's finding.

Banks recorded that *C. virginianum* was one of the alternate plants used by Will West Long in his version of the Green Corn Ceremony (1953:155). He also found that the root was used for cancer and it was one of the *únistilû'istĩ* described above used to improve memory (1953: 107).

*únistilû'istĩ tsuwatéstĩ* – 'they stick flat to a hairy substance, it grows around the stalk' – *Circaea lutetiana* spp. *canadensis* (L.) Ascherson & Magnus – enchanter's nightshade

Mooney did not explain the specific qualifier *tsuwatéstĩ* ('it grows around the stalk'), but it could possibly be due to the manner in which the flowers tend to open and mature in a spiral pattern on the stalk. No further information was available on the Cherokee association with this species.

*únistilû'istĩ unati usdi* – ‘they stick flat to a hairy substance, attached, small’ –

*Lespedeza violacea* (L.) Persoon

The Cherokee name is a rearrangement of *únistilû'istĩ tsunsdíga únatĩ* above and most likely has the same meaning, a reference to small, bur-like seeds. The species of *Lespedeza* identified here is questionable as this species is not found in the mountains of North Carolina (Radford et al. 1968: 615). It is probably another one of several species of *Lespedeza* that are common to the region. However, it was mentioned in a list of Cherokee names paired with biological species (Ms. 2235), therefore it warranted inclusion in this section.

*unistilû'istĩ unatsû'welĩ* – ‘they stick flat to a hairy substance, they stand up along side the stalk’ or *únistilû'istĩ unadéhyatǎ* – ‘they stick flat to a hairy substance, they surround the stalk’ – *Phaseolus vulgaris* L. – kidney bean

The specific qualifiers *unatsû'welĩ* (‘they stand up along side the stalk’) and *unadéhyatǎ* (‘they surround the stalk’) must refer to the bean pods, although I am not sure if the pods of kidney beans stick to clothing more so than the pods of other beans. However, the generic term for beans is *túya*, so beans in general will be discussed under that heading. *Unatsû'welĩ* and *unadéhyatǎ* are the plural forms of *utsû'welĩ* (‘it stands up along side the stalk’) and *uwadéhyatǎ* (‘it surrounds the stalk’), respectively.

*únistilû'istĩ unilû'tigwinû'* - 'they stick flat to a hairy substance, cylindrical' – *Bidens bipinnata* L. – Spanish needles

The specific qualifier *unilû'tigwinû'* is the plural form of *galû'tigwinû'* ('cylindrical'). The seeds of *B. bipinnata* are slender and cylindrical, quite different from the double pronged, flattened seed of its sister species, *B. frondosa* (see *únistilû'istĩ tsundíwatlúgĩ* – 'they stick flat to a hairy substance, swallowtailed'). No Cherokee applications were attributed to *B. bipinnata*.

*únistilû'istĩ uniwásgĩĩ* – 'they stick flat to a hairy substance, velvety' – *Agrimonia parviflora* Aiton – agrimony

The specific qualifier *uniwásgĩĩ* ('velvety') is the plural form of *uwásgĩĩ* ('it is soft, downy, or velvety') and relates to the pubescent underside of the leaf. Mooney also collected the synonym *únistilû'istĩ igâ'teně'hĩ* ('swamp growing u.'), stemming from *igâ'tĩ* ('swamp') and *aně'hĩ*, the plural of *ě'hĩ* ('living' or 'dwelling'). *Agrimonia parviflora* is known to favor river bottoms and marshy habitats (Radford et al. 1968: 547).

Mooney and Olbrechts also collected the lexically unrelated synonym *kanatsístaga* (no gloss) for *Agrimonia*, Mooney calling *A. parviflora* *kanatsístaga útana* ('k., large') and Olbrechts calling it *kanatsístaga gûtlûtě'hĩ* ('k., dwelling on the hillside'). Mooney identified *kanatsístaga usdíga* as *Agrimonia stricta* Michx., but this is a northern species not found in the North Carolina mountains. This could possibly be one of the smaller species of *Agrimonia*, such as *Agrimonia gryposepala* Wallroth or *Agrimonia pubescens* Wallroth, that are common to the region. Olbrechts also claimed that the roots of *A. parviflora* had a special name and were referred to as *kanatsístaga usdíga*

*gûtlûtě'hĩ* ('k., small, dwelling on the hillside'). These roots were used specifically for diarrhea, but his notes indicate that this specificity only applied to the condition *uniskowldisgöi uyönskilötiiyusti* ('when they have diarrhea and discharge light colored feces').

Medicinally, Olbrechts found that *A. parviflora* was used for diarrhea and to relieve coughs. Besides the diarrheal condition mentioned above, he also reported it used for general diarrhea known as *uniskowldisgöi* ('whenever they have diarrhea'). As a cough remedy it was applied to *utliyaktanöçi yiki nundiwsköna* ('when they have a bad cough') and *unisi'kwaskö* ('when they are coughing'). Banks also found it was used for bowel troubles, but he also found that it was given to children to alleviate hunger pangs in times of food shortage (1953: 60).

### ***ûnagéĩ*** – 'black'

Mooney discussed the category *ûnagéĩ* in the following manner, "*ûnagéĩ* ('black') is the name applied to a number of species on account of the black color of some part of the plant – root, bark, or leaf. Besides the balsam tree, informants gave 5 varieties of *ûnagéĩ*." The balsam is a woody species and was discussed in the chapter on trees under the heading *ûnagéĩ* (*Abies fraseri* (Pursh) Poiret). The herbaceous species are discussed below.

### ***ûnagéĩ*** – 'black' – *Agrimonia* spp.

The genus *Agrimonia* has been discussed above (see *únistilû'istĩ uniwásgĩĩ*), but is included here because Mooney found *ûnagéĩ* was a general term used for these

plants. The reference had to do with the color of the roots. Mooney also recorded *Cassia marilandica* L. as *ûnagěĩ* in *The Sacred Formulas of the Cherokees* (1891: 325), but identified it with modifiers in his notes (see *ûnagěĩ kûlakwégtyústĩ unastetsĩ* below).

*ûnagěĩ áťă´ kûlakwégtyústĩ* – ‘woody black , like black locust’ – no species identified

The etymology of the name stems from *áťă´* (‘wood’) and *kûlakwégtyústĩ* (‘like black locust’), a combination of *kûlăkwégty* (‘black locust’, see chapter on trees) and *iyústĩ* (suffix glossing as ‘like’ or ‘as’). The qualifier *kûlakwégtyústĩ* is due to the structure of the leaves, which closely resemble those of black locust. Mooney named two species in his notes as *kûlakwégtyústĩ*, *Cassia marilandica* L. and *Amorpha fruticosa* L.; however, of the two, only *A. fruticosa* is woody. I have viewed *Amorpha* in the field and thought I was encountering a young black locust. Also, Mooney identified the following Cherokee species in this series as *C. marilandica*, suggesting that this is a different species. But in the description in his notes he said that *ûnagěĩ áťă´ kûlakwégtyústĩ* was around four feet tall with yellow flowers and was the tallest variety of *ûnagěĩ*. *Amorpha fruticosa*, while growing taller than *C. marilandica*, has purple flowers. Olbrechts identified *C. marilandica* as *kûlakwégtyústĩ* among other names (see below) but does not mention *Amorpha*. Therefore, the botanical species here remains illusive. In a side note, Mooney said that the roots of *kûlakwégtyústĩ* were pounded and soaked in cold water, and the resulting infusion drunk for sore eyes.

*ûnagේĩ kûlakwég̃tiyústĩ unastetsĩ* – ‘black root, like black locust’ – *Cassia marilandica* L.  
– wild senna

The name was due to the black roots of the plant, stemming from *ûnagේĩ* (‘black’) and *unastetsĩ* (‘root’), and the resemblance of the leaves to *kûlāk̃wég̃ti* (‘black locust’). Both Mooney and Olbrechts recorded this as simply *kûlakwég̃tiyústĩ* (see above), but Olbrechts also recorded the synonym *ûnagේĩ útana* or *egwa* (‘large’). Mooney also referred to *C. marilandica* as *ûnagේĩ* in *The Sacred Formulas of the Cherokees* (1891: 325), but this is incongruent with his notes.

Mooney recorded several uses for *Cassia marilandica*, the most specific from *The Sacred Formulas of the Cherokees* (1891: 325). The pounded root was made into an ointment and used as a wash for sores, as well as being steeped in hot water and drunk for fevers. A decoction of the pounded roots was used for a condition that, like the plant, was known as *ûnagේĩ* due to the patient having black circles around the eyes and a black coloration of the hands. It could also manifest as partial paralysis and black patches appearing on the arms, legs, and sides of the patient. The decoction was drunk several times throughout the day with no dietary restrictions. In a separate section of his notes, he also recorded that a tea of the whole plant of *C. marilandica* was used with *Cassia nictitans* (see below) for spasms in infants and in combination with other unnamed plants for scratching (Ms 1894). The plant was also dried for future use.

Olbrechts recorded the use of *C. marilandica* for several Cherokee ethnomedical conditions including the scrofulous condition *duletsi* (‘kernels’), painful urination known as *e’isti andik’ō’ōi* (no gloss), and heart attacks known as *usonuli unt’ane’ō* (‘sudden attack’).

Banks (1953: 70) found that a tea of the leaves was used as a laxative, while a tea of the roots alleviated high fevers in children. Unspecified parts of the plant were made into tea for fainting spells, cramps, and as part of a formula for pneumonia. To cure a sprained arm, the patient would attempt to pull the plant up by its roots with the sore arm. It was unlikely that the effort would be successful, but if it was, the arm would be cured.

*ûnagěĩ klayuě'hĩ* – ‘black, growing in old fields’ – *Cassia nictitans* L. – wild sensitive plant

*Klayuě'hĩ* is a combination of *klayúhĩ* (‘an old neglected field’) and *ě'hĩ* (‘living’ or ‘dwelling’). This is appropriate as *Cassia nictitans* favors roadsides, fields, and waste areas (Radford et al. 1968: 578). Mooney recorded that a tea of the whole plant was used in combination with *Cassia marilandica* for spasms in infants (Ms 1894). The plant was dried for future use.

*ûnagěĩ tsulátskí* – ‘forked black’ – *Anemone virginiana* L. – thimbleweed

The specific qualifier *tsulátskí* (forked) was due to the plant’s forked stalk. Mooney also recorded the synonyms *aniyústĩ* (‘like strawberry’), from *ána* (‘strawberry’) and *-iyustĩ* (‘like’), and *tsístu akata* (‘rabbit eye’). Both of these names were likely descriptive of the cylindrical fruiting head. The only medicinal use was recorded by Banks (1953: 44) who found that a tea of the roots was used for whooping cough.



## Part 2: Cherokee Herbaceous Plants

The polytypic genera in the remainder of the herbaceous life form are not classified down to the varietal level as are those in the intermediate categories. While there are still a large number of polytypic genera, they tend to be limited to two members. The most common specific qualifiers indicate, as Mooney pointed out, a large and a small kind, with ecological niche and flower color also frequently indicated (see the discussion of specific and varietal categories in Chapter 2). Each of the polytypic genera tends to be associated with a single botanical genus (see Table 5.3). There are a few polytypic genera that include several folk species which are associated with polytypic botanical genera. For example, six of the seven members of the botanical genus *Viola* are associated with species of the folk genus *dindáskwatéskǵ*. Four of the five members of the botanical genus *Aureolaria* are associated with species of the folk genus *dilastagístǵ*. While these tend to be the exception, they reflect a close association of the classification of taxa in the herbaceous life form to the botanical classification system.

Not all botanical genera are clearly linguistically related in the Cherokee system. Three members of the genus *Asclepias* are labeled with different names as monotypic genera. There is little indication that the members of this genus held any special cultural significance for the Cherokee, so it is unclear why they would not be labeled as the same folk genera. But this exception is also uncommon.

Table 5.3. Herbaceous Plant Index: Botanical Species and Folk Genera

Botanical Species	Cherokee Genus	Botanical Species	Cherokee Genus
Acalypha gracilis	<i>aniwaniskĩ</i>	Chamaesyce maculata	<i>ugatasigĩskĩ</i>
Acorus calamus	<i>uyátálû</i>	Chenopodium album	<i>atûka</i>
Actaea pachypoda	<i>ulidástĩ</i>	Chimaphila maculata	<i>ústástĩ</i>
Agastache	<i>diyě 'satiskiyústĩ</i>	Cicuta maculata	<i>kanasâ 'la</i>
scrophulariaefolia		Cimicifuga racemosa	<i>ulidástĩ</i>
Amaranthus hybridus	<i>watskĩ'</i>	Cirsium altissimum	<i>tsĩtsĩ</i>
Amaranthus retroflexus	<i>watskĩ'</i>	Cirsium vulgare	<i>tsĩtsĩ</i>
Ambrosia artemisifolia	<i>ugwau stalyato</i>	Clintonia umbellulata	<i>wá'ka gán'ka</i>
Ambrosia trifida	<i>iyuga</i>	Clitoria mariana	<i>tuyayústĩ</i>
Amphicarpa bracteata	<i>astĩ'</i>	Collinsonia canadensis	<i>digáyasû 'kĩ</i>
Amsonia	<i>ugatasigĩskĩ'</i>	Coronilla varia	<i>altsástĩ</i>
tabernaemontana		Cuscuta spp.	<i>kwardisátĩ</i>
Angelica venenosa	<i>ganéłĩta &amp;</i>	Cypripedium acaule	<i>k'kwě' ulasúla</i>
	<i>kanasâ 'liyústĩ</i>	Cypripedium calceolus	<i>k'kwě' ulasúla</i>
	<i>sútlıyústĩ</i>	Desmodium	<i>tuyayúst</i>
Anthemis cotula	<i>dunúnă'</i>	rotundifolium	
Apios americana	<i>katû 'latû</i>	Diodia teres	<i>aniwaniskĩ</i>
Apocynum cannabinum	<i>û 'tsatĩ uwadsĩ'ska</i>	Dioscorea villosa	<i>anisgĩna-(ts)unâ'</i>
Aquilegia canadensis	<i>wanégitiyústĩ</i>		<i>năsû'ta</i>
Aralia nudicaulis	<i>yâ'na unígistĩ</i>	Diphylleia cymosa	<i>uniskwetû'gĩ</i>
Aralia racemosa	<i>túyastĩ'</i>	Disporum lanuginosum	<i>walâ 's-ĩ unû 'łsti</i>
Arisaema triphyllum	<i>unastétstiyă</i>	Echium vulgare	<i>uniskă' -hĩ</i>
Aristolochia serpentaria	<i>tıliyústĩ</i>	Elephantopus	<i>tsuyátû'lı</i>
Aruncus dioicus	<i>nuyagûłĩ'</i>	carolinianus	
Asarum canadense	<i>guhĩ</i>	Epigaea repens	<i>ată unéga adsilû' skĩ</i>
Asclepias incarnata	<i>andôladô</i>	Epilobium coloratum	<i>kwaniyústĩ ganulû' hĩ</i>
Asclepias syriaca	<i>gugû'</i>	Erechtites hieracifolium	<i>tsitsiyústĩ</i>
Asclepias tuberosa	<i>uniskă' -hĩ</i>	Erigeron annuus	<i>atsilsû' tĩ</i>
Asclepias verticillata	<i>altsástĩ</i>	Erigeron canadense	<i>atsilsû' tĩ</i>
Astragalus canadensis	<i>dilastagístĩ</i>	Erigeron pulchellus	<i>u'iyat'atti</i>
Aureolaria flava	<i>dilastagístĩ</i>	Erigeron strigosus	<i>atûkiyústĩ</i>
Aureolaria laevigata	<i>igû'liyústĩ</i>	Eryngium yuccafolium	<i>sělikwâ'ya</i>
Aureolaria pectinata	<i>dilastagístĩ</i>	Erythronium	<i>atátsû'</i>
Aureolaria pedicularia	<i>dilastagístĩ</i>	americanum	
Aureolaria virginica	<i>diliwátaheskĩ</i>	Eupatorium fistulosum	<i>amditátĩ</i>
Baptisia tinctoria	<i>ulĩsĩ útana</i>	Eupatorium maculatum	<i>amditátĩ</i>
Barbarea verna	<i>dayewû'</i>	Eupatorium purpureum	<i>amditátĩ</i>
Cacalia atriplicifolia	<i>gawâ'gĩ</i>	Fragaria virginiana	<i>ána</i>
Campanulastrum		Frasera carolinensis	<i>gahû' skĩ</i>
americana		Galactia mollis	<i>tuyayústĩ</i>
Campanula divaricata	<i>diyěsatĩskĩ</i>	Galax aphylla	<i>nuyagûłĩ'</i>
Cardamine diphylla	<i>anałskwalöski</i>	Galium lanceolatum	<i>gĩga tsanose'öi</i>
Cassia fasciculata	<i>kûłsétsiyústĩ</i>	Gaultheria procumbens	<i>atsû' kĩ</i>
Castilleja coccinea	<i>gotadawina</i>	Gentiana villosa	<i>tsunihyû' stĩ</i>
Caulophyllum	<i>kanástăgwâ'lı'</i>	Geranium carolinianum	<i>tsugwû' nstătsâ'lı</i>
thalictroides			

Table 5.3. Herbaceous Plant Index: Botanical Species and Folk Genera (continued)

Botanical Species	Cherokee Genus	Botanical Species	Cherokee Genus
Geranium maculatum	<i>andánkalagíski</i>	Phryma leptostachya	<i>uktanéga udá'</i>
Helianthus tuberosus	<i>kúntsi'</i>	Physalis angulata	<i>unú'guhísti'</i>
Hepatica acutiloba	<i>skwáli'</i>	Physalis heterophylla	<i>unú'guhísti'</i>
Heuchera americana	<i>andánkalagíski</i>	Physalis pubescens	<i>unú'guhísti'</i>
Heuchera villosa	<i>tsuskwanú'ni</i>	Phytolacca americana	<i>tsáyatihí'</i>
Hexastylis arifolia	<i>nuyagúli'</i>	Pilea pumila	<i>taléta</i>
Hieracium gronovii	<i>ú'tsatí uwadsí'ska</i>	Plantago major	<i>núná'hí udetkí</i>
Hieracium paniculatum	<i>ugatasigíski</i>	Podophyllum peltatum	<i>uniskwetú'gí</i>
Hieracium venosum	<i>áháwí-gúlě'</i>	Polygala curtissii	<i>uyú'gíliyústí</i>
Impatiens capensis	<i>walélu unítsilāgísti'</i>	Polygala senega	<i>uyú'gíli'</i>
Impatiens pallida	<i>walélu unítsilāgísti'</i>	Polygala verticillata	<i>uyú'gíliyústí</i>
Ipomoea coccinea	<i>dikéwuskí</i>	Polygonatum biflorum	<i>uganásti'</i>
Ipomoea pandurata	<i>nuniyústí</i>	Polygonum hydropiper	<i>uhyú'stí</i>
Iris cristata	<i>tsuyátú'li' &amp; uyátáli'</i>	Polygonum	<i>uhyú'stí</i>
Iris verna	<i>tsuyátú'li' &amp; uyátáli'</i>	pensylvanicum	
Iris virginica	<i>uyátáli'</i>	Polygonum sagittatum	<i>da'núga</i>
Laportea canadensis	<i>taléta</i>	Polygonum scandens	<i>ásigúniski</i>
Lecha racemulosa	<i>takaya di'nuwá'gí</i>	Polymnia uvedalia	<i>gātá'yáti'</i>
Lepidium virginicum	<i>túksún ulísí</i>	Porteranthus trifolius	<i>úlě' ugíli'</i>
Lespedeza capitata	<i>tsuskwú'tí</i>	Portulaca oleracea	<i>wáliwalí</i>
Lespedeza striata	<i>núná'hí udetkí</i>	Potamogeton spp.	<i>tsuswatúna</i>
Lespedeza stuevei	<i>skwayeíu</i>	Potentilla canadensis	<i>aniyústí</i>
Liatris scariosa	<i>dunúná'</i>	Prenanthes alba	<i>dayewú'</i>
Ligusticum canadense	<i>wanégitá</i>	Rudbeckia fulgida	<i>áháwí-ākātá'</i>
Lilium canadense	<i>kanegutsōtagi</i>	Rudbeckia hirta	<i>áháwí-ākātá'</i>
Lilium philadelphicum	<i>kūngútsatú'</i>	Rudbeckia laciniata	<i>satsú'nná</i>
Lilium superbum	<i>kūngútsatú'</i>	Rudbeckia spp.	<i>áháwí-ākātá'</i>
Linum usitatissimum	<i>taléta</i>	Rumex acetosella	<i>síkw'unígísti'</i>
Ludwigia alternifolia	<i>úninayú'gí</i>	Sabatia angularis	<i>skáy'tí</i>
Lycopus virginicus	<i>aniwaniskí</i>	Sagittaria latifolia	<i>a'oli ye'ōski</i>
Lysimachia quadrifolia	<i>gigatsúya-hí</i>	Sanguinaria	<i>gíli wá'ta</i>
Malaxis unifolia	<i>tsulāgéta</i>	canadensis	
Matelea spp.	<i>nuniyústí</i>	Saponaria officinalis	<i>uyu'li'</i>
Medeola virginiana	<i>uganásti'</i>	Sarracenia purpurea	<i>yúgwilú'</i>
Melanthium hybridum	<i>sēlikwá'yaiyústí</i>	Saxifraga	<i>áháwí ganka</i>
Mitchella repens	<i>tlútístí unígísti'</i>	micranthidifolia	
Monarda clinopodia	<i>dilaiyústí</i>	Sedum ternatum	<i>wáliwalí</i>
Nepeta cataria	<i>wesu unígísti'</i>	Senecio aureus	<i>tsugwalága</i>
Nicandra physalodes	<i>unú'guhístiyústí</i>		<i>tigásakwalú'</i>
Oenothera biennis	<i>atátsú'</i>	Silphium compositum	<i>túlagw</i>
Oenothera fruticosa	<i>atátsú'-iyústí</i>	Sisymbrium officinale	<i>ulísí</i>
Osmorhiza longistylis	<i>salá'li usuga</i>	Smilacina racemosa	<i>walá's-i unú'lsti</i>
Oxalis corniculata	<i>tsuntsá'y'stí</i>	Solanum carolinense	<i>didáwahístiskí</i>
Oxalis stricta	<i>tsuntsá'y'stí</i>	Solanum dulcamara	<i>unú'guhístiyústí</i>
Panax quinquefolium	<i>á'talí-gúli'</i>	Solanum ptycanthum	<i>sel-únageí</i>
Panax trifolium	<i>á'talí-gúli'</i>	Solidago caesia	<i>unástetsí gúnahíta</i>
Pedicularis canadensis	<i>ugukúská'</i>	Solidago spp.	<i>tsgáú' digágwatāgí</i>
Perilla frutescens	<i>tciskwa dunotcilu'gi</i>	Sonchus asper	<i>sélutsí'</i>
Phoradendron	<i>udátli'</i>	Spigelia marilandica	<i>gígagéí adsilú'skí</i>
leucarpum			

Table 5.3. Herbaceous Plant Index: Botanical Species and Folk Genera (continued)

Botanical Species	Folk Genera	Botanical Species	Folk Genera
Spiranthes cernua	<i>únatlúnwéhitu</i>	Triodanis perfoliata	<i>uskwayeluyi</i>
Spiranthes gracilis	<i>unedâita</i>	Triosteum perfoliatum	<i>unâyû'li</i>
	<i>uniskwalatisgu</i>	Uvularia sessilifolia	<i>uganástĩ</i>
Streptopus	<i>uganástĩ</i>	Veratrum viride	<i>askwaneta</i>
amplexifolius		Verbena urticifolia	<i>tsuntsâ'y'stiyústĩ</i>
Tephrosia virginiana	<i>distaiyĩ</i>	Vernonia	<i>súnna</i>
Thalictrum dioicum	<i>a'yû'tawígi</i>	novaboracensis	
Thalictrum pubescens	<i>a'yû'tawígi</i>	Vicia caroliniana	<i>altsástĩ</i>
Thalictrum thalictroides	<i>û'tsatĩ uwadsĩ'ska</i>	Viola cucullata	<i>dindáskwatésķĩ</i>
Thermopsis villosa	<i>unatlû'taliyústĩ</i>	Viola pubescens	<i>dindáskwatésķĩ</i>
Tradescantia	<i>tagualũ</i>	Viola pedata	<i>dindáskwatésķĩ</i>
subaspera		Viola rotundifolia	<i>tsuyátû'li</i>
Tradescantia virginiana	<i>tagualũ</i>	Viola striata	<i>dindáskwatésķĩ</i>
Trifolium pratense	<i>tuyayústĩ</i>	Viola sororia	<i>dindáskwatésķĩ</i>
Trifolium repens	<i>tsuwatúniyústĩ</i>	Yucca filamentosa	<i>sělikwâ'ya</i>
Trillium grandiflorum	<i>a'yōda gwalogi</i>	Zizia aurea	<i>ganéłĩta</i>

## Cherokee Herbaceous Plants

*a'oli ye'ōski* – ‘mouth, it grows’ – *Sagittaria latifolia* Willd. – duck-potato, wapato

When he described this plant, Olbrechts identified it with a question mark (Mooney and Olbrechts 1932: 31-31). It appeared that he was unsure of the botanical species, and from his description of the scarcity of the plant he may very well be mistaken. The name was descriptive of the appearance of the plant, which was said to look somewhat like a beetle with the stalk coming out of its mouth. However, *S. latifolia* is common in the North Carolina mountains, so this may have been one of the less common species.

The discussion of *a'oli ye'ōski* in *The Swimmer Manuscript* contends that it was the species used to impart supernatural powers on a child and make them into a witch.

If an infusion of the plant was drunk for four consecutive days, it would impart the power to metamorphose into another person or animal. If drunk for seven days, the drinker would gain the power to become an animal that flies through the air or burrows underground. These are the most powerful of the witches. The same infusion of the root of *a'oli ye'öski*, if drunk for seven days while fasting until sunset, allowed a person to see a witch in their human form and shoot them.

The only other medicinal use was attributed to Banks (1953:8), who found that bathing a child in the tea of the leaves of *S. latifolia* would reduce a persistent fever. The child would also take a sip of the tea.

*áhăwĩ-ăkătă' elatě'hĩ* – 'lowland growing deer eye' – *Rudbeckia fulgida* Aiton

The folk generic *áhăwĩ-ăkătă'* is a combination of *áhăwĩ* ('deer') and *ăkătă'* ('eye'). The specific qualifier *elatě'hĩ* stems from *elatĩ* ('lowland') and *ě'hĩ* ('dwelling'), presumably due to the species preference for lower elevations.

Mooney recorded the only Cherokee uses for *R. fulgida*, publishing some of his data in *The Sacred Formulas of the Cherokees* (Mooney 1891: 327), while augmenting the processing technique for a few of the uses in his notes. However, he just called it *áhăwĩ-ăkătă'* in his notes, and the application might apply to the next two species. He found that a decoction of the roots was used as a wash for snakebites and for swelling caused by worms sent by a conjurer. For dysentery, cold water was poured over the pounded roots and this was drunk until the symptoms dissipated. The root was dried and kept for "private" diseases. A strong tea was made by pouring hot water over the

pounded roots and using a leaf to drop it into inflamed or weak eyes, presumably because of the resemblance of the flower to an eye.

*áhăwĩ-ăkăťă' usdí-ga* – ‘deer eye, small’ – *Rudbeckia hirta* L. – black-eyed Susan

It is unclear why this is called the ‘small’ *áhăwĩ-ăkăťă'*, as *R. hirta* is about the same size as the other brown centered species. Mooney said nothing else about this species, but it may have been a suitable substitute for the *R. fulgida* as it is the most common species in the region.

*áhăwĩ-ăkăťă' útana* – ‘deer eye, large’ – *Rudbeckia* spp.

Mooney did not identify the ‘large’ species in this series. It may have been *Rudbeckia triloba* L., the only other common brown centered *Rudbeckia* in the region, but this is speculation on my part. As stated above, the species of *Rudbeckia* might have been interchangeable.

*áhăwĩ ganka* – ‘deer tongue’ – *Saxifraga micranthidifolia* (Haw.) Steudel

The name *áhăwĩ ganka* is due to the shape and texture of the leaves, *áhăwĩ* glossing as ‘deer’ and *ganka* as ‘tongue’. The same name was used for a species of *Plantanthera* (see *askwaneta* below). The leaves were eaten in the early spring after being parboiled and topped with bacon grease, (Perry 1974: 54).

*áhăwĩ-gûlě́* - 'deer ear' – *Hieracium venosum* L. – rattlesnake weed, hawkweed

The name *áhăwĩ-gûlě́* stems from *áhăwĩ* ('deer') and *gûlě́* ('ear'), an apt description of the elliptic shape of the leaves. The leaves also have a red coloration near the most prominent veins, suggesting the veins in the ear of an animal. Mooney also collected the synonyms *áhăwĩ-gûlě́ usdí* ('deer ear, small') and *tsístu gûlě́* ('rabbit ear').

Olbrechts recorded that *H. venosum* was part of the formula for the ethnomedical condition known as *unegö unanugots'eça* ('it is coming out white') and a warm infusion of the leaves was dropped into sore eyes. Mixed with other unidentified plants, the roots were used for diarrhea. Banks also found that the roots, combined with the roots of *Mitchella repens* L., were used for bowel complaints.

*altsástĩ usdí-ga* – 'a wreath for the head, small' – *Vicia caroliniana* Walter – wood vetch

Mooney did not explain the etymology of *altsástĩ*, so I assume that the wreath had a ceremonial purpose or may have been used to acquire a medicinal effect through contact with the skin. According to Mooney (1891: 325), this was one of the most valued herbs of the Cherokee. He found it used for a wide range of applications including as a decoction for indigestion, back pain, and stomach cramps. It was used after scratching to make the muscles of ball players tough and for the condition known as *ûnagěĩ* ('black', see *ûnagěĩ kûlakwégtyústĩ unastetsĩ* in intermediate categories). It could also be combined in a decoction with *Pseudognaphalium obtusifolium* for rheumatism. Olbrechts elaborated on this use under the condition known as *dik'anugosti nugötlö*

*götoti* ('to be used with a briar to cause it to come out') and in *The Swimmer Manuscript* (Mooney and Olbrechts 1932: 207).

Olbrechts found *V. caroliniana* used for several other conditions including the scrofulous condition *duletsi* ('kernels') and for *gakweoski* ('wrapped up', 'coiled up', 'contracted', 'heart attack'). It was also part of the emetic formula for *inadö danskitsöi* ('when they dream of snakes'), a condition that often resulted in spoiled saliva (Mooney and Olbrechts 1932: 198). Banks (1953: 74) added that the stem of *V. caroliniana* and the needles of *Pinus virginiana* were placed in apple juice and drunk by ball players to increase stamina.

*altsástř útana* – 'a wreath for the head, large' – *Astragalus canadensis* L. – milk vetch or *Coronilla varia* L. – crown vetch

This is the 'large' variety of *altsástř*, and both species here tend to be more robust than *altsástř usdí-ga* (*Vicia caroliniana*). Mooney recorded *A. canadensis* as *altsástř útana*, while Olbrechts found it referred to *C. varia*. However, *C. varia* is an introduced species and without knowledge of the time of its introduction to the region or a voucher specimen, it is difficult to discern if this is the species Olbrechts encountered or if he misidentified the botanical species. The two are very different in habit and flower color.

Mooney also collected the synonym *distaiyústř* ('like *distaiyř*'), referring to the similarity of *altsástř útana* to *Tephrosia virginiana* (see *distaiyř* below). These two also shared a common use, the bruised leaves being combined and made into a decoction which was used as a wash to toughen the limbs of ball players. Olbrechts found that



*altsástĩ útana* was prepared and used in much the same manner as *altsástĩ usdí-ga* and was often used with it.

*amditátĩ usdíga* – ‘thing to drink water with, small’ – *Eupatorium purpureum* L. – Joe-Pye-weed, gravel weed

The generic term *amditátĩ* stems from *ãmă* ‘(water)’ and *ditátĩ* ‘(something to drink with)’, from *gatitáskû* ‘(I am drinking)’. Mooney also glossed *amditátĩ* as ‘water spoon’ or ‘water dipper’, because the hollow stalk was used like a straw to suck up water instead of using a dipper. This was the ‘small’ species as opposed to *E. maculatum*, the large species (see below). Olbrechts recorded two names for *E. purpureum*, *amditátĩ usdi gûtlûtě’hĩ* ‘(thing to drink water with, small, hillside dwelling)’ and *amditátĩ usdíga gigage u’yöducwita* ‘(thing to drink water with, small, red stem)’. Another unidentified plant was simply called *gigage u’yöducwita* ‘(red stem)’ and could very well be *E. purpureum* due to the reddish-purple color of the stems and the uses discussed below.

Mooney found that an infusion of *E. purpureum* combined with *E. maculatum*, made by pouring hot water over the pounded roots, was used for kidney problems and difficult urination. Olbrechts also found it was used for conditions of the urinary tract including *dalânige tsandik’öça* ‘(yellow urine)’, *unegö tsandiköça* ‘(if they water out white)’, and *unegö unanugots’eça* ‘(it is coming out white)’. As *gigage u’yöducwita*, Olbrechts found it was used for *gigö yandik’öça* ‘(urinating blood)’ and *göwanigistöi* ‘(when they are eaten by them)’. These two conditions, blood in the urine and lower back pain, are typical symptoms of kidney stones. This would suggest that *gigage*

*u'yöducwita* is *E. purpureum*, the common name “gravel weed” indicating its efficacy as a remedy for eliminating the painful stones. Olbrechts also found that *E. purpureum* was used as one of the components in formulas to stimulate love attraction. The stalk of *E. purpureum* was a medical implement used to blow medicine into the throat to treat the condition known as *aniyötseni ada'nöwoti* ('to cure their throat') (Mooney and Olbrechts 1932: 261).

Banks (1953: 129) found that a tea of the root, alone or combined with the roots of *Vernonia noveboracensis* (L.) Michaux, was drunk for kidney problems and used by itself for women's health issues such as menstrual irregularities and to strengthen women during pregnancy.

*amditáti útana* – 'thing to drink water with, large' – *Eupatorium maculatum* L. or *Eupatorium fistulosum* Barratt – queen-of-the-meadow

This species was identified from Mooney's collections. Olbrechts recorded the Cherokee name, but did not collect a sample. Mooney collected *E. maculatum*, but it is so similar to *E. fistulosum*, I am assuming that the species are interchangeable. Also, one of the differentiating characteristics between *E. maculatum* and *E. fistulosum* is the latter's hollow stem, a feature that is necessary to draw liquid through it. Both are also extremely large, reaching heights of up to 2.5 meters and justifying the specific qualifier *útana*.

The use as a kidney medicine recorded by Mooney was discussed in the previous section. Olbrechts identified both the large and small Cherokee species as *E. purpureum*, but treated them as different species in his notes, stating that the 'large'

species was also used for *unödi tsandik'uça* ('they urinate all milk') as well as for patient's who were feverish and thirsty.

*ána* – 'strawberry' – *Fragaria virginiana* Duchesne

The name *ána* is a proper, opaque name for the delicious and nutritious wild strawberry. These were considered superior to the "tame" strawberries (Perry 1974: 56) and, as one of the first available fruits in spring, were a welcomed addition to corn bread. Mooney also stressed their importance in maintaining marital harmony in Cherokee households through the myth of the origin of strawberries (Mooney 1900: 259).

*aniyústĩ* – 'like strawberry' – *Potentilla canadensis* L. – five fingers

The name *aniyústĩ* stems from *ána* ('strawberry') and *-iyústĩ* ('like'), referring to the resemblance of the plant to the wild strawberry. Mooney found it was used in combination with *Tephrosia virginiana* and *Heuchera americana*, the roots of all three alternately boiled and cooled for four consecutive days until it became a thick syrup. This was drunk on the fourth day as a morning emetic to treat the dry cough associated with tuberculosis. The roots were dried for future use.

Olbrechts found that a cold infusion of *P. canadensis*, used in conjunction with *Rhododendron maximum* L. and *Kalmia latifolia* L., was rubbed on ball players on their way to the ball field to ward off the medicine of the other team's medicine man. Banks (1953: 62) found similar uses, finding that ball players would chew the root the night before the game to improve their stamina and would eat the root or bath in a tea of the

root to prevent injury. He also found that a tea of the pounded roots was drunk to cure thrush. Witthoft (1947) reported that the root was once used by the Cherokee to treat fevers.

*anałskwalöski* – ‘they cut themselves’ – *Cardamine diphylla* (Michaux) Wood – toothwort

Olbrechts indicated that the name *anałskwalöski* (‘they cut themselves’) is especially in reference to long objects and the name refers to the brittle roots. He also found that the pounded roots were placed on the scratched forehead of a patient to treat a headache and a tea of the steeped roots was drunk for a cough remedy. Banks (1953: 55) also recorded the same uses as Olbrechts, along with drinking the root tea for sore throats and eating the greens in the early spring. The roots were considered to be strong and have an inherent peppery heat.

*andánkalagískĩ* – ‘it takes things from around the teeth and tongue’ – *Geranium maculatum* L. – wild geranium or *Heuchera americana* L. – alumroot

The name *andánkalagískĩ* was one of the few examples of Cherokee names representing utilitarian functions. It originated from the application of these plants to treat conditions like thrush and scurvy and stems from *tstlâskû*’ or *tstlâskĩ* (‘the fire, or light, has gone out’), a form of *ktlâskû* (‘the fire is going out’). The name symbolized the alleviation of pain from the mouth and gums. Mooney referred to both *G. maculatum* and *H. americana* as simply *andánkalagískĩ*, while Olbrechts differentiated them into two species, *andánkalagískĩ usdí-ga* and *andánkalagískĩ útana* respectively. Mooney

also recorded the synonym *ditanélawáskĩ ganulû'hĩ* ('it peels them off, herbaceous') for *H. americana*. The name refers to the tendency for the bark to easily peel off and distinguishes it as a non-woody species (see the chapter on shrubs for a discussion of *ditanélawáskĩ*).

Mooney found that the chewed root of *G. maculatum* was blown into the mouth of a child suffering from thrush (1891: 326). Olbrechts found a similar application, but in his version the roots were steeped and blown into the mouth through a tube. This was repeated four times while the patient faced east. He also found that it was used for the conditions *unisi'kwaskö* ('when they are coughing') and that either species of *andáncalagískĩ* were used for *unit'adesgiskö* ('thirsty').

According to Olbrechts, *H. americana* was used in obstinate cases of thrush when *G. maculatum* failed to alleviate the condition. Mooney recorded a similar application for a case of thrush with sores in the throat known as *unitstălâskû'*. The roots of *H. americana*, combined with either *Tephrosia virginiana* or a combination of *Potentilla canadensis* and a species of *únistilû'istĩ*, were boiled in two separate containers, one decoction made stronger than the other one. The weaker portion was drunk to vomit, and then the stronger one was drunk throughout the day. This was done for four days with meals taken after vomiting. No salt, hot food, or vegetables that ooze water after picking were taken while under treatment. A tea of the bark was also used to stop vomiting. The plant was dried for future use.

Banks had nothing to add for *G. maculatum*, but found several more uses for *H. americana*. A tea of the roots was drunk for dysentery and rumbling in the bowels and the chewed root would remove a coating on the tongue. Finely pounded roots were

soaked in cold water for several hours and the resulting infusion was used for thrush. Sores that appeared in late summer were cured with a tea of *H. americana*. The tea was sprinkled on the sore and the scab would fall off revealing new, healthy skin.

*andöladö* – no gloss – *Asclepias syriaca* L. – common milkweed

Olbrechts recorded this name, but did not provide a gloss. He found that bowstrings were once made from the stem fibers, but that medicinal applications were forgotten.

*anisgína-(ts)unâ'năsû'ta* – 'ghosts' terrapin rattles' – *Dioscorea villosa* L. – wild yam

The name stems from *anisgína* ('ghosts'), the plural form of *asgina* ('a ghost'), and *tsunăsû'ta*, the name of the rattles worn on the ankles of by women in the ceremonial dances. The dried seedpods of *D. villosa* made a noise that was reminiscent of the sound made by the pebbles in the tortoise shell rattles. Olbrechts also recorded the synonyms *uninayugi* ('rattles' or 'makes noise') and *gitsitsi* ('fowl's breast bone'), the latter due to the resemblance of the dried capsule to the breastbone of a large bird.

Mooney found that a decoction of the roots was used as an emetic to remove saliva that had been spoiled by ghosts. It was used in a similar fashion for dreams about snakes or when snake poison was put in food, both of which caused spoiled the saliva. The plant was not dried and stored, but could be found in winter by the dried tops (Ms. 1894).

Olbrechts found it was used in formulas for such conditions as *göwanigistöi* ('when they are eaten by them') and *unawasti* ('he gets cold' or 'that which chills one').

It was also used for the condition with the colorful name, “when a person’s guts have come alive.” This was not a form of diarrhea, but another form of gastric distress typified by bloat from overeating. The patient drank a decoction of the roots of *D. villosa*, *Carduus altissimus*, *Collinsonia canadensis*, *Impatiens pallida*, and other unidentified plants.

*aniwaniskĩ usdĩ-ga* – ‘talkers’ or ‘they talk’ – *Lycopus virginicus* L. – bugleweed or *Diodia teres* Walter – buttonweed

The folk genus *aniwaniskĩ* is the plural form of *awanĩskĩ* (‘he talks’). Mooney said that both these plants were, “given to children as a charm to make them eloquent speakers.” Mooney also recorded that there was a large variety, *aniwaniskĩ útana*, but he did not provide the botanical species. He found that *L. virginicus* was used for snakebite and Banks added that the plant was boiled in milk for five minutes and given to a dog that had been bitten by a snake (1953: 110).

*aniwaniskĩ gũtlũtě’hĩ* – ‘talkers or they talk, dwelling on the hillside’ – *Acalypha virginica* L. – three-seeded mercury

The specific qualifier *gũtlũtě’hĩ* stems from *gũ’tlũta* (‘hillside’) combined with *ě’hĩ* (‘living’ or ‘dwelling’). No further information was available about the medicinal qualities of this species.

*âsigûniski* – ‘it covers it’ – *Polygonum scandens* L. – climbing buckwheat

The name *âsigûniski* (‘it covers it’) stems from *gûnnishi* (‘I cover it’ or ‘I roof it’). Mooney did not explain the name; however this is a climbing vine that can cover a large area.

Mooney also collected the names *uwedâ’ita* (‘it is going about’) or *unedâ’ita* (‘they are going about’) for a plant he identified simply as wild buckwheat. But he did say that the plant “sends out runners like the strawberry”, so he may have been referring to *P.*

*scandens*. A decoction of *P. scandens* was used as a wash to make hair grow longer.

*askwaneta* – ‘it made curly’ – *Plantanthera* spp. or *Veratrum viride* Aiton – Indian poke, American hellebore

Mooney recorded this name, but Olbrechts provided the gloss, applying to the second species, *Veratrum viride*. Olbrechts attributed the name to a part of the plant that was curly, and Mooney wrote that this plant did have a “mass of cord-like roots.” This species of *Plantanthera* was one of the purple varieties that flowers in late summer. Mooney also collected the name *áhăwĩ ganka* (‘deer tongue’) for the genus *Plantanthera*, presumably describing the shape of the leaves. The only medicinal applications were attributed to the orange-flowered species, *Plantanthera ciliaris* (L.) Lindl., in Banks (1953: 23). A cold infusion of the rhizome was used for headaches and a warm infusion for dysentery. A piece of the root was also used to stimulate fish to bite the hook.

Olbrechts collected the names *askwaneta* and *dusu’ga askwaneta* (‘they are claws, it made curly’) for *V. viride*. *Dusu’ga* (‘they are claws’) is a folk generic usually reserved for plants associated with the scratching ritual, and *V. viride* was used in



conditions that required scratching. Scratching was often done to treat such conditions as rheumatism, listlessness, and preparing for the ball game. *Veratrum viride* was considered a harsh remedy and could only be used externally (Mooney and Olbrechts 1932: 204). Olbrechts specifically mentioned it for conditions that required scratching such as *unestanelidoloçöi* (when they have pains all over their body'), *usonuli unt'ane'ö* ('sudden attack'), and for muscle cramps. For muscle cramps, the roots were steeped in water and sprinkled on the scratched area.

*astĩ'* or *ũstĩ'* - 'string' or 'thread' – *Amphicarpa bracteata* (L.) Fernald – hog peanut

The name *astĩ'* ('string' or 'thread') was most likely due to the thin, twining vines produced by *A. bracteata*. Olbrechts found that it was used for snakebite, a tea of the plant steeped and blown around the bite in a clockwise direction. Banks also found that it was useful for snakebite, identifying the root as the medicinal part of the plant. The root was brewed into a tea and blown on the bite while reciting a prayer. He also found that a tea of the roots was used for diarrhea (1953: 67-68).

*atã unéga adsilũ'skĩ* – 'white-flowered wood' – *Epigaea repens* L. – trailing arbutus

The name stems from *atã* ('wood'), *unéga* ('white'), and *adsilũ'skĩ* ('flower'), due to its woody stem and white flowers. Mooney also recorded the synonym *tigũ'nahíta tsuskwalága* ('long prongs of the young deer'), from *tigũ'nahíta*, the plural of *gũnhíta* ('long'), and *tsuskwalága*, the plural of *uskwálaga* ('the prong or incipient antler of the young deer'). Olbrechts recorded the name *ogano agöntage* ('groundhog's forehead') for *E. repens*, as well as the synonyms *tuksi mooyi* and *tuksi usu'ga*, for which he did

not provide a gloss. But Mooney recorded an unidentified plant as *tûksĩ usú'ga* ('terrapin's claw') or *tûksĩ uwáyĩ* ('terrapin's hand or paw'), a reference to the shape of the leaves.

Mooney found that *E. repens* was used with another unidentified evergreen species for gonorrhea (Ms. 1894). Olbrechts published two uses for *E. repens*, for *anatłoyçi ustiga* ('if the children cry constantly') (Mooney and Olbrechts 1932: 193) and *aninedzi ada'nöwoti tuksinigöwayö nategsöi* ('their breast, to cure anyone with, terrapin does it to them, as they go about') (1932: 251). Banks (1953: 98) added other uses including a root tea drunk for kidney trouble and combined with *Gaultheria procumbens* L. for chronic indigestion. For chest ailments, a tea of the leaves and roots is used in the summer month, just the roots in the winter.

*â'talĩ-gũlĩ'* - 'it climbs the mountain' – *Panax quinquefolium* L. – ginseng or *Panax trifolium* L. – dwarf ginseng

The name *â'talĩ-gũlĩ'* was a composite of the words *â'talĩ* ('a high mountain') and *gũlĩ'* ('it climbs'), from the root *tsĩlǎhĩ'* or *tsĩlĩ'* ('I am climbing'). There is some confusion concerning the botanical species associated with *â'talĩ-gũlĩ'*. Mooney makes no mention of *P. trifolium* in his published materials or his notes, while Olbrechts only refers to it and never to *P. quinquefolium*. However, Olbrechts does refer to a small variety of known as *â'talĩ-gũlĩ' tsunstĩ* ('it climbs the mountain, small') and he recorded special uses for this kind of *â'talĩ-gũlĩ'*. *Panax trifolium* is much smaller and more gracile than *P. quinquefolium*, and it is quite likely that he misidentified the larger species. He claimed in his notes that the small kind was not a different species, but Banks (1953: 93) found

that the uses and names for the two species were the same, with the exception of a few informants who identified a large and small kind. At this time, *P. trifolium* is quite rare in the North Carolina mountains (Radford et al. 1968:760), but it is not known how prevalent it was in the late 19<sup>th</sup> and early 20<sup>th</sup> century. It is unlikely that it was over-harvested like its more robust cousin, *P. quinquefolium*, as the ginseng traders were not interested in the small, round roots of *P. trifolium* (Harding 1972: 53). I believe it is safe to assume that it was never as common to the region as the larger species and not as well known as a distinct species to many Cherokee. For the purposes of this work, I will treat Olbrechts' record of use for *â'talĭ-gŭlĭ'* to mean *P. quinquefolium* and for *â'talĭ-gŭlĭ' tsunsti* to mean *P. trifolium*.

Timberlake may have been the first to mention a medicinal application by the Cherokee for ginseng, stating that it, "never fails curing the most inveterate venereal disease, which, however, they never had occasion for, for that distemper, before the arrival of the Europeans among them (Williams 1927: 71)." According to Mooney, the dried root of *P. quinquefolium*, which he claimed was bitter like licorice, was beaten into a powder and an infusion was made by pouring hot water over the pulverized root. This was used for headaches, cramps, and female troubles as well as by conjurers for unspecified diseases. In his published materials he also added that the chewed root was blown on the area when pain was present in the patient's side (Mooney 1891: 326). The root was gathered in the fall and sold to white traders, increasing its value to the Cherokee as it was one of the few sources of income in the region.

Olbrechts made the following observation about ginseng:

This is one of the most important plants in the Cherokee medical botany. It is not only used in curing but also plays a part in love medicine. There is no other plant that is treated with so much respect by the laity as well as by the medicine men. When collecting the roots, the medicine man would often recite a prayer to *Unetlanö'i* ('Great Man' or 'The Apportioner'), in which permission was humbly begged to gather the plant.

Olbrechts claimed that ginseng, along with *Nicotiana rustica* and some of the birthing plants were the only ones dried by the Cherokee for future use (Mooney and Olbrechts 1932: 91). However, it is obvious from Mooney's notes that this was not an accurate observation and that many species were dried for future use or were recognized by the dried tops for collection when not in season.

Olbrechts recorded several applications for *P. quinquefolium*, including for such conditions as *aninedzi digöwalosöçi yune'istaneça* ('to cure anyone with a piercing pain in their breast'), *aniskoli ada'nöwoti* ('to cure headache'), *ayeligogi uniyelö'nöçi* ('they have made it like it'), and *uyo'usö tsunineliçq* ('disgusted by the sight of a corpse'). It was used alone or with *Aristolochia serpentaria* for *aniskina uniyaktanöçi* ('ghosts have changed (the condition of the patient)') and for *dalâni* ('yellow'), *unawasti egwa* ('big chill'), and a condition simply referred to as "heat". The small variety, *P. trifolium*, was specifically noted for use against the condition *göwanigistöi* ('when they are eaten by them') and to prevent attacks by witches. It was used as a love medicine and to "gain the goodwill with whoever one comes in contact with."

Banks found that ginseng was used for “bold hives”, a rash that babies develop soon after birth. If the rash did not develop, it was believed that the baby might die (Cavender 1996). The root could be chewed or sometimes made into a tea for pain in the side, colic, and shortness of breath or coughing. A cold infusion of the pounded roots of ginseng and *Erythronium americanum* was given to a person who was feeling faint. The pounded roots also made a good poultice for bringing boils to a head.

*atátsû´* – ‘trout’ – *Oenothera fruticosa* L. – sundrops

Mooney provided no other information than the botanical and Cherokee names for *O. fruticosa*. Olbrechts glossed *atátsû´* as ‘trout’, due to the speckled leaves.

*atátsû´-iyústĭ* – ‘like *atátsû´*’ – *Oenothera biennis* L. – evening primrose

The name *atátsû´-iyústĭ* has to do with the resemblance of *O. biennis* to *O. fruticosa*. The latter is the native species and would be considered the original while the former was introduced from Europe and would be ‘like’ the original. Mooney also recorded the name *sĭ´kw unígistĭ* (‘hog food’), a name applied to several edible species that were enjoyed by or fed to the hogs. The name stems from *sĭ´kw* (‘hog’) and *unígistĭ*, the plural of *agístĭ* (‘food’).

Olbrechts found that *O. biennis* had several medicinal applications. It was used for kidney problems and the pounded roots were steeped in water and used to relieve the pain of hemorrhoids. It was used for stomachaches and with a species of *Rosa* for *unisi´kwaskö* (‘when they are coughing’). Witthoft found that the leaves of *O. biennis*

were parboiled and cooked in grease and that the juice extracted from the roots was used as a poultice on hemorrhoids.

*atátsû' amayultehi* – ‘trout, water edge growing’ – *Erythronium americanum* Ker – trout lily

The Cherokee name and the common name for *E. americanum* are both indicative of the resemblance of its mottled leaves to a trout, with the Cherokee name indicating the plants favored location in rich soil along mountain streams. Olbrechts also was provided with a specimen of *Thalictrum dioicum* L. as an example of *atátsû' amayultehi*, which may have been due to the resemblance of the leaves to fish scales, but this species will be dealt with under another heading (see *a'yû'tawígi* below).

Medicinal applications were attributed to Banks, who found that a tea of the root tea was used to break a fever. The roots were also combined with those of *Panax trifolium*, pounded together, and made into a cold infusion that was given to a person who was feeling faint. The warm juice of the leaves, heated over a fire, was extracted and placed on a slow healing wound. The plant was also an ecological indicator of fishing season, the bloom of the plant signifying that it was time to start fishing. Spit from the chewed root was believed to enhance the fisherman's chance of catching a fish (1953: 14),

*atíyústĭ* – ‘like wood’ – *Symphyotrichum pilosum* (Willd.) Nesom var. *pilosum*

– frost aster

The name *atíyústĭ*, a combination of *ăťă* ‘(wood)’ and *iyústĭ* ‘(like’), was due to the woody stalk. No medicinal applications were attributed to *S. pilosum*.

*atsílsû’ťĭ* – ‘fire, to make with’ – *Erigeron canadensis* L. – horseweed or *Erigeron annuus* (L.) Persoon – daisy fleabane

The name is composed of *atsíla* ‘(fire)’ and *sû’ťĭ* ‘(to make with’). Olbrechts best explained the reason for this name:

(It) was never extensively used in medicine proper, but was important in ceremonies because it was used by the Cherokees to make fire: the stalk was dried and pulverized, and then the powder was used in drilling fire. Its general use has become extinct in everyday life many generations ago, but it continued to be used to kindle the ceremonial fires.”

Two botanical species are named above due to a discrepancy in identification between Mooney and Olbrechts. Mooney said that *atsílsû’ťĭ*, the name in the Middle Cherokee dialect, was *E. canadensis*. He recorded a shortened version of it, *tsílsû’ťĭ*, and a version in the Upper Cherokee dialect, *atsílsû’ťû*, as well as the synonym *i’yágû* or *i’yágĭ* (no gloss). Olbrechts identified the botanical species as *E. annuus*, and in addition to *atsílsû’ťĭ*, recorded the synonyms *tsiso’ťi usdíga* (no gloss) and *tcísti* (no gloss).

Although he said that it had little medicinal use, Olbrechts did record that the leaves of *E. annuus* were taken out of an infusion and held against the jaw in case of a toothache. He also found it was used with an unidentified species of fern for rheumatism. Mooney also found that the leaves of *E. canadensis* were used for toothache, but he did not explain the procedure.

*atsû'kĩ ganulû'hĩ* – 'smelling wood, herbaceous' – *Gaultheria procumbens* L. – wintergreen, teaberry

The name *atsû'kĩ* is the same as the folk genus for the birches, stemming from *ă'tă* or 'wood' and *sû'kĩ* or 'smelling' due to the fragrance of the essential oils. The qualifier *ganulû'hĩ* designates that as the 'herbaceous' kind of *atsû'kĩ*. Mooney said that this plant had a smell like birches, grew under pines, was a woody creeper with red berries, and was used by manufacturers to flavor candy. He did not attribute any medicinal applications for *G. procumbens* to the Cherokee, but Banks found that the roots of it and *Epigaea repens* were used for chronic indigestion and the leaves were chewed like tobacco (1953: 98).

*atûka* – 'it unravels' – *Chenopodium album* L. – lamb's-quarters

Mooney did not explain the etymology of *atûka*, and though I am familiar with the plant, I can not speculate on the reason for this name. In his notes, Mooney recorded that *C. album* was as an edible green, but he also found that ball players were encouraged to avoid eating this plant because the stalk was easily broken and they would not want to become fragile through consumption of the plant (Mooney 1890a).



*atûkiyústĭ* – ‘like lamb’s-quarters’ – *Erigeron strigosus* Muhl. ex Willd. – daisy fleabane

The name *atûkiyústĭ* is from the name for lamb’s-quarters, *atûka* (‘it unravels’), and the suffix *-iyústĭ* (‘like’) due to the resemblance of the plant to *Chenopodium album*. No other information is available on the Cherokee relationship to this plant.

*a’yöda gwalogi* – ‘it thunders (habitually)’ – *Trillium grandiflorum* (Michaux) Salisbury – large flowered trillium

This name and gloss came from Olbrechts who did not provide an explanation for the gloss. Banks collected several names, which he claimed were collective names for all the trilliums, the most common of which was *ayadigwaloskí*. All of them he glossed as ‘thunder and lightening’ in reference to the mythical little red men whose conversations from the Darkening land cause the rumble of thunder from the west (Mooney 1900: 248).

Mooney collected the name *nigûtagualaski* for a plant he questioningly identified as *Trillium grandiflorum* and the similar name *andagûntagwalaski* for *Trillium cernuum* L., again with a question mark (Ms. 2235). In his notes he included the name *unigûntagwaliáskĭ*, which he glossed as ‘they butt the ground’, but he was unable to identify the plant. He did record that there were two varieties differentiated by leaf color, one with dirty brown leaves and the other with spotted leaves. He did say that the plant grew in rich coves, came up in March, and had red flowers, all characteristics of the red-flowered trilliums, including *T. cernuum*.

Banks and Olbrechts both claimed that the Cherokee did not use trilliums for medicine. Olbrechts said that the uses had been forgotten, but *T. grandiflorum* was

collected and sold to the herb traders. But Mooney found that the roots of both varieties of *unigûntagwaliáskĩ* were steeped in cold water and drunk for four days for a condition known as *gaktûta*. The main symptom of this condition was the spitting of blood, so the symbolism inherent in the red-flowered species of *Trillium* may have indicated that they were preferred remedies.

*a'yû'tawígi* – 'it bursts' – *Thalictrum dioicum* L. – early meadow rue

The name *a'yû'tawígi* is due to the tendency of the hollow stalk to burst under pressure. This may have been the 'small' (*usdí-ga*) species, as the following is the 'large' species. Mooney recorded the synonym *dalâni ûtsûtuwadsiska* ('yellow fish scales'), due to the resemblance of the leaves to fish scales, and Olbrechts recorded it as *atátsû' amayuktehi* ('trout, water edge growing'), possibly for the same reason. Olbrechts also said that it was once used for medicine, but the use was forgotten. Banks (1953: 47) found that a tea of the roots was used for diarrhea.

*a'yû'tawígi útana* – 'it bursts, large' – *Thalictrum pubescens* Pursh. – tall meadow rue

This is the large folk species of *a'yû'tawígi*. No other information is available concerning *T. pubescens*.

*da'núga* – 'scratcher' – *Polygonum sagittatum* L. – gander's teeth, tearthumb

Mooney gave four meanings for *da'núga*: 1) as the fork generic for *P. sagittatum*, because of its rasping stalks, 2) a professional scratcher used to scratch the ball players, 3) a large yellow grasshopper with roughly serrated legs, and 4) a garfish with a

long snout and small, serrated teeth. He also recorded the synonym *ditáwaskĩ* ('it causes festering'), from *gawáskû* ('it is festering'), but he did not explain the etymology of this name. Olbrechts recorded *P. sagittatum* as *da'núga ganösge* ('grasshopper, his leg'), due to the appearance and texture of the stem.

Mooney wrote that a cold decoction of the pounded, upper portion of the plant was used for colic. The patient was scratched over the most painful areas and the decoction was rubbed on the scratched area. Olbrechts found *P. sagittatum* was used for the scrofulous condition *duletsi* ('kernels') and as a love attractant. The barbs along the stem were symbolic of grasping the attention of the object of ones affection.

*dayewû'* - 'it sews itself up' – *Cacalia atriplicifolia* L. – pale Indian-plantain

Mooney wrote that the name stemmed from the observation that, "when the leaves are torn they grow together again where injured." He also recorded it as *dayewû' egwa* ('it sews itself up, large') to distinguish it from the 'small' species (see *dayewû' usdíga* below).

Mooney said the following of *C. atriplicifolia*,

Held in great repute as a poultice for cuts, bruises, and cancer, to draw out blood or poisonous matter. The bruised leaf is bound over the spot and frequently removed. The dry powdered leaf was formerly sprinkled over like salt (1891: 326).

In his notes he added that a warm decoction of the pounded roots of *dayewû´*, combined with those of *Ceanothus americana* L., *Polymnia uvedalia* L., and *Cimicifuga racemosa* L., was used for fevers. Olbrechts found three applications for *C. atriplicifolia*; a warm infusion of the roots was applied to inflamed wounds, a warm infusion was drunk by a woman immediately after giving birth, and the hollow stalks were used to blow medicine on a patient.

*dayewû´ usdíga* – ‘it sews itself up, small’ – *Prenanthes alba* L. – white lettuce

The name *dayewû´ usdíga* is a synonym for this species, which is included here as a counterpart to the previously discussed ‘large species’. Its medicinal qualities will be discussed under the heading *tsugâ´skĩ útana* below.

*dâ´yĩ uwâ´yĩ* – ‘beaver’s paw’ – no botanical identification

The name *dâ´yĩ uwâ´yĩ* is a composite of *dâ´yĩ* (‘beaver’) and *uwâ´yĩ* (‘paw’), but Mooney gave no further information about the etymology of the name. It was included as part of a formula for the rheumatic condition known as *didölesgi* (‘thecrippler’ or ‘when it breaks them’) (Mooney 1891: 350). As all the other components of this formula are ferns, this may be *Lygodium palmatum* (Bernh.) Swartz, the American climbing fern, which has a leaf resembling the fingers of a hand that could be said to resemble the paws of a beaver. However, this is purely speculation on my part.

*didáwahistiskĩ* – ‘it makes fetid sores’ – *Solanum carolinense* L. – horse nettle

The wound from scratches caused by the sharp prickles of *S. carolinense* tends to become infected, hence the name *didáwahistiskĩ*. Banks provided the only Cherokee medicinal applications for *S. carolinense*, finding that the berries, fried in grease, were used to cure dogs with mange and a necklace made from pieces of the root were placed around a baby’s neck to check excessive saliva flow (1953: 115). The Creek used the roots in the same way to ease the pain from teething, the most likely cause for excessive saliva flow with infants (Alexander and Paredes 1998).

*dilaiyústĩ* – ‘skunk-like’ – *Monarda clinopodia* L. – basil balm

Olbrechts did not provide a gloss for *didlaiyústĩ*, but Alexander (1971: 146) recorded *dila* as the Cherokee name for skunk. The addition of the suffix *–iyústĩ* (‘like’) indicates that the plant was known for its strong odor which resembles the skunk’s best defense. It was combined with *Solidago caesia* L. for the condition known as *gigö yandik’öça* (‘urinating blood’).

*digáyasû’kĩ* – ‘it smells like armpits’ – *Collinsonia canadensis* L. – stone root, horse balm

Mooney claimed the source of *digáyasû’kĩ* was *asûgû’* (‘it smells’) and *digáiskénĩ*, the plural form of *gáiskénĩ* (‘his arm pit’). Olbrechts provided a similar gloss for *digáyasû’kĩ*, changing it to ‘his armpits smell’. Mooney claimed that this was due to the bad odor of the plant. I propose that both of these may have been a misinterpretation of the Cherokee intent. The leaves and flowers of *C. canadensis* have

a lemony smell, which is not at all offensive, and this was also the portion that was used as a deodorant for smelly armpits (Banks 1953: 108).

If the Cherokee perceived this plant as smelling bad, it is highly unlikely they would use it to remedy a bad odor. Therefore, I conclude that the name is due to the application of the plant and not its organoleptic qualities. Olbrechts also collected it as *digáyasû'kĩ gatusě'hĩ* ('his armpits smell, mountain dwelling').

Mooney found that a tea of the root of *C. canadensis*, combined with either the root or top of *Carduus altissimum* or the roots of *Smilax herbacea*, was taken for bloat from overeating. The chopped root, used alone, was also made into a decoction and used for diarrhea. The roots could be gathered through the winter as needed. Olbrechts found it was a component in the formula for *aninedzi gotiski* ('their breast swells') and *dalânige tsandik'öça* ('yellow urine').

*digáyasû'kĩ sa'kánigeĩ adsilû'skĩ* – 'it smells like armpits, blue-flowered' – *Trichostema dichotomum* L. – blue curls

*Trichostema dichotomum* has already been discussed as *gáw'sûk usdīga* ('smeller, small'), but was included here as a species of *digáyasû'kĩ*. The blue flowers are the source of the specific qualifier.

*dikéwuskĩ* – 'it is going blind' – *Ipomoea coccinea* L. – red morning glory

Mooney found two glosses for *dikéwuskĩ*, 'it is going blind' and 'it has sore eyes'. Mooney may have misidentified the botanical species here as he stated that this was known as wild potato and that it was, "like morning glory with a tuber." This sounds

more like *Ipomoea pandurata* (L.) G. F. W. Meyer, commonly known as “man-root”.

*Ipomoea coccinea* is an introduced annual and does not have a tuberous root. Mooney claimed that one of his informants said that there were two varieties of *dikéwuskǐ*, the large (*útana*) species and the small (*usdíga*) species, but these were not identified.

Mooney recorded that a tea of the roots was used for “spinal fever” (meningitis?), the tea drunk at intervals for four days while avoiding salt for seven days. It was reported to be a good remedy.

*dilastagístǐ egwa* – ‘it is tramped upon (constantly), large’ – *Aureolaria virginica* (L.)

Pennell – false foxglove

*Dilastagístǐ* was the form from the Middle Cherokee dialect, that from the Upper dialect being *dilastéstǐ*. It stems from *gûlastûgû´* (‘I am tramping upon it’). I will use the Middle dialect form for the remainder of this section as it was the only one extant at the time of Olbrechts’ research and he recorded all his species as kinds of *dilastagístǐ*.

Mooney did not know the rationale behind the name, but my observations of the genus *Aureolaria* is that they often fall over at the fruiting stage, suggesting a plant that has been “tramped upon”. All members of *dilastagístǐ* are also members of the botanical genus *Aureolaria*. *Aureolaria virginica* was considered the ‘large’ kind, but the botanical accounts on maximum heights do not agree with this assessment (Radford et al. 1968: 956-958).

The medicinal qualities for the *dilastagístǐ* were exclusively recorded by Olbrechts, who found that all species of *dilastagístǐ* were used for a condition known as “this is to treat (them) with if the raccoon has made them to be ill”. The symptoms for

this condition included fainting and gasping for breath, much like the sound made by a cornered raccoon. The roots of the different species were combined and made into an infusion or a decoction. The patient drank this for four consecutive mornings while abstaining from food. Applications attributed specifically to *A. virginicus* included *unak'ewagöi* ('if they lost their voice'), *at'awini e'i* ('the forest dwellers'), and *unegö tsandiköça* ('if they water out white').

*dilastagístĩ usdĩ-ga* – 'it is tramped upon (constantly), small' – *Aureolaria flava* (L.)

Farwell – false foxglove and *Aureolaria laevigata* (Raf.) Raf.

Both *A. flava* and *A. laevigata* were identified as the 'small' kinds of *dilastagístĩ*, but *A. flava* tends to be the largest species in the region, so this may have been a case of misidentification (Radford et al. 1968: 958). Olbrechts also recorded the synonym *dilastagístĩ usdĩ-ga usöndone nigesöna* ('it is tramped upon (constantly), small, stalk of which is not hollow') for *A. flava*. This would be significant in light of the following species, *A. pedicularia*, the hollow stalk of which was used as an implement to blow liquid medicines on a patient.

Besides its combination with all kinds of *dilastagístĩ* for the disease caused by raccoons mentioned above, *A. flava* was identified specifically for use to treat the conditions *at'awini e'i* ('the forest dwellers') and *unegö tsandiköça* ('if they water out white').



*dilastagístĩ usdí-ga uwásgilĩ* – ‘it is tramped upon (constantly), small, soft’ or *dilastagístĩ ugatsalagísti* – ‘it is tramped upon (constantly), it is sticky’ – *Aureolaria pedicularia* (L.)

Raf. – false foxglove

The specific qualifier *ugatsalagísti* (‘it is sticky’) is due to the sticky glandular hairs that characterize this particular species (Smith 1998: 153). Field observation will be necessary to determine if it is typically ‘small’ or ‘soft’, or at least smaller and softer than other kinds of *dilastagístĩ*.

Besides its combination with all kinds of *dilastagístĩ* for the disease caused by raccoons mentioned above, *A. pedicularia* appears to be the most widely used of the *dilastagístĩ*. It was used for the ethnomedical condition *dawzni e’i unitłöyö* (no gloss), as well as for burns, profuse urination, to relieve the thirst that accompanies fevers, and in combination with *Eupatorium purpureum* for *unegö tsandiköça* (‘if they water out white’). The hollow stalks were used to blow liquid medicine on a patient who had been wounded, bruised, or shot by a gun or a bow. It was combined with *Silene antirrhina* L. as a medicine to attract the attentions of a love interest. Both species have a sticky quality, so this was probably due to the belief that the object of affection would be “stuck” on the user of this combination.

*dindáskwatéskĩ dalânige adsilû’skĩ* – ‘they pull each other’s heads off, yellow-flowered’ – *Viola pubescens* Ait. var. *leiocarpon* (Fern. & Weig.) Seimore –smooth yellow violet

*Dindáskwatéskĩ* was the folk generic for several species of violet, stemming from *tsíswate’skû* (‘I am pulling his head off’) and *dastadaskwtěskû’* (‘we two are pulling each other’s heads off’), but Mooney did not explain the reason for this name. It is most likely

due to the way the flower appears to dangle on the stalk. This is one of the yellow-flowered species, hence the specific qualifier *dalânige adsilû'skĩ* ('yellow-flowered').

Olbrechts claimed that violets were once used, but that the use was forgotten. But in his notes he states that several species, including *V. pubescens* var. *leiocarpon*, were used as part of the remedy for the type of cancerous sores known as *ada'yeeski* ('eating itself'). This was the only application attributed to this species.

*dindáskwatéskĩ tsuligwántagalû'íta* – 'they pull each other's heads off, its leaves are split' – *Viola pedata* L. – bird-foot violet

The specific qualifier *tsuligwántagalû'íta* ('its leaves are split') stems from *tsigwánutagalû'iskû'* ('I am splitting a leaf') and relates to the dissected leaves that resemble a bird's foot, hence the common name. No medicinal applications were attributed specifically to this species.

*dindáskwatéskĩ tsundí-ga* – 'they pull each other's heads off, small' – *Viola cucullata* Aiton – marsh blue violet or *Viola sororia* Willd. – common blue violet

The botanical species is unclear for *dindáskwatéskĩ tsundí-ga*. Mooney identified it as *V. cucullata*, but then described it as the common blue violet, which is *V. sororia*. It may be that the Cherokee did not differentiate between the two species as they are quite similar, but this is purely speculation on my part. The specific qualifier *tsundí-ga* is the plural form of *usdíga* ('small'). Mooney also collected the synonym *dindáskwatéskĩ tsukwalaga tigasakwalû'* ('they pull each other's heads off, round leafed'), *tsukwalaga* being the plural of *ukwalága* ('leaf') and *tigasakwalû'* the plural of *gasakwalû'* ('circular')

or 'round'). There was also a white and yellow flowered variety of *dindáskwatéskǐ tsukwalaga tigasakwalû´*. Olbrechts referred to *V. sororia* as *dindáskwatéskǐ tělugěĩ adsilû´skǐ* ('they pull each other's heads off, purple-flowered').

Mooney found that a poultice of the pounded roots, leaves, or both was used as a poultice to draw a boil to a head. Olbrechts claimed that violets were once used, but that the use was forgotten. But in his notes he states that several species, including *V. sororia*, were used as part of the remedy for the type of cancerous sores known as *ada'yeski* ('eating itself').

*dindáskwatéskǐ unega adsilû´skǐ* – 'they pull each other's heads off, white flowered' – *Viola striata* Aiton – white violet

The specific qualifier *unega adsilû´skǐ* ('white-flowered') reflects the salient feature of *V. striata* and the source of its common name. This was the third species, along with *V. sororia* and *Viola pubescens* Ait. var. *leiocarpon*, that were specifically mentions as part of the remedy for *ada'yeski* ('eating itself').

*diliwátaheskǐ* – 'its ears shake' – *Baptisia tinctoria* (L.) R. Brown – wild indigo

The generic name *diliwátaheskǐ* stems from *gûlénĩ* ('its ears') and *talíwatǎ'heskǐ* ('it is shaking') due to the way the wind shakes the leaves. Mooney wrote that there was a similar term, *aliwǎ'tahehû* (plural form: *daliwǎ'tahehû*) that glosses as 'the leaf or ear is shaking', but he did not indicate that it was a synonym for *B. tinctoria*.

Mooney found that the pounded root was held against an aching tooth. Will West Long told Money that it would make the bad tooth fall out. Banks (1953: 68) found that a

cold tea was used to stop vomiting and that the roots imparted a blue dye to fabrics, but Witthoft (n.d.: 67) claimed that no one actually still used the plant.

*distaíyř* – ‘(they are) tough’ – *Tephrosia virginiana* (L.) Persoon – goat’s rue

*Distaíyř* stems from *astaíyř* (‘it is strong, hard, or tough’) and refers to the long, tough roots of *T. virginiana*. This perceived toughness is reflected in the primary uses for *T. virginiana*. The roots were made into a decoction in which women would wash their hair to make it strong and prevent it from falling out, and ball players would use a preparation of the leaves to make their limbs tougher (Mooney 1900: 425). In his notes, Mooney elaborated on this procedure to add that the ball players would use a cold infusion of the bruised leaves of *T. virginiana* combined with *Astragalus canadensis*, sometimes with the addition of the leaves of *Leucothoe axillaris* or other plants. He also added that the plant was used for a tired, languid feeling and that it was combined with *Heuchera americana* and *Potentilla canadensis* for the dry cough associated with tuberculosis (see *aniyústř* above).

Olbrechts recorded the synonym *andánkalagískř astaíyř unastetsi* (‘it takes things from around the teeth and tongue, strong roots’), but claimed that his informants had forgotten the use of the plant. However, he did publish that a decoction of the roots was given to a child to make them, “strong and muscular” (Mooney and Olbrechts 1932: 128). Banks added that the roots were used with other ingredients for kidney troubles and that a tea of the roots, applied after scratching, was good for muscle cramps.

*distaiyústĩ* – ‘like *distaiyĩ*’ – *Astragalus canadensis* L. – milk vetch

This plant was named *distaiyústĩ* (‘like *distaiyĩ*’) for its resemblance to *Tephrosia virginiana*. It has already been discussed above as *altsástĩ útana*.

*diyěsatískĩ usdí-ga* – ‘it gets dew on it, small’ – *Campanula divericata* Michaux – harebell

*Diyěsatískĩ* was the Middle Cherokee dialect form, *diyisatískĩ* being the Upper Cherokee dialect form. Plants in this folk genus can also be called by the singular form, *ayesatískĩ*. It stems from *yesatũĩ* (‘dew’), because dew or rain is slow to evaporate from the leaves of these plants.

Mooney found that a cold infusion of the beaten roots was used for diarrhea. Water was added to the infusion and drunk until the root lost its strength. A decoction of the unbeaten roots was drunk hourly for bloody flux. This was repeated until relief was attained. For whooping cough, a decoction of the root was drunk at short intervals for four days. Salt was avoided during this treatment. The root was not dried and stored for future use.

*diyěsatískĩ útana* – ‘it gets dew on it, large’ – *Scrophularia marilandica* L. – figwort

This is the ‘large’ kind of *diyěsatískĩ*, and *S. marilandica* can be up to 3 three times as tall as *Campanula divericata*. Mooney found that it was used in combination with or in the same manner as *diyěsatískĩ usdí-ga*.

*diyě́satískiyústĭ* – ‘like *diyě́satíski*’ – *Agastache scrophulariaefolia* (Willd.) Kuntze –  
hedge hyssop

The specific epithet *scrophulariaefolia* explains the Cherokee perception that the foliage this plant was ‘like’ that of the previous species, *Scrophularia marilandica*. Mooney also collected the synonym *sû́gĭ gatága* (‘mink’s tail’) due to the resemblance of the inflorescence to the downy tail of the mink. No further information was available for this species.

*dunúnǎ́* – ‘tubers’ or ‘potatoes’ – *Liatris scariosa* (L.) Willd. – blazing star

The folk generic *dunúnǎ́* is due to the globular tuberous rootstock. Mooney recorded potato as *núnǎ́*, and Olbrechts glossed *dunúnǎ́* as ‘potatoes’, so I am assuming that this is a plural form. No further information was available concerning this species.

*dunúnǎ́ gatúsě́hĭ* – ‘tubers, mountain dwelling’ – *Liatris squarrosa* (L.) Michaux – scaly  
blazing star

*Liatris squarrosa* is not a common plant in the North Carolina mountains, but Mooney appears to have collected it and identified it as a plant known to the Cherokee. His informant said that it was not eaten, but was used as medicine. He did not elaborate. Olbrechts recorded a folk species of *dunúnǎ́* he identified as *dunúnǎ́ gŭtlútě́hĭ* (‘tubers, dwelling on the hillside’), but he did not identify it to botanical species. It may well have been this species or another species of *Liatris*. He found that the tubers were pounded, either alone or with *Apios americana* and *Antennaria solitaria*,

and made into an infusion that was blown onto swollen testicles. The remnants of the tubers were later applied to the area as a poultice.

*dunúnǎ' igâ'teně'hǐ* – 'swamp growing potatoes' – *Apios americana* Medicus – groundnut

The specific qualifier *igâ'teně'hǐ* ('swamp growing') is quite appropriate as this is one of the few edible tubers that thrives in waterlogged soils (Blackmon and Reynolds 1986). Mooney wrote that the tubers were eaten in the spring when provisions were scarce. They were common along the creeks and the tubers could be found by locating the dead vines. The Cherokee prepared the tubers by boiling them, some of them as large as potatoes. Mooney also called *A. americana núnǎ' igâ'teně'hǐ* ('swamp growing tuber'). As mentioned above, Olbrechts found that this was one of the species used to treat swollen testicles. He also found that it was given to those who were suffering from having looked at a corpse or *unōłstay'ti tsuniyotc'eça* ('when their appetite gets spoiled').

*gahû'skǐ* – 'it moves over, sitting' or 'it quits its sitting place and moves over' – *Frasera carolinensis* Walter – columbo

The folk generic *gahû'skǐ* stems from *gahû'nû* ('he is moving over while sitting') due to the tendency of *F. carolinensis* to avoid growing in the same place for two consecutive years. This is an odd observation for a perennial species. No further information was available concerning this species.

*ganéllita* – ‘pregnant’ – *Angelica venenosa* (Greenway) Fernald – hairy angelica;  
*Zizia aurea* (L.) W. D. J. Koch –golden alexander

The folk generic *ganéllita* (‘pregnant’) is due to the swollen leaf nodes, a feature typical to the genus *Angelica*. Mooney also recorded *A. venenosa* as *kanasâ’liyústĩ* (‘like *kanasâ’la*’), referring to its resemblance to *Cicuta maculata* L. He found that a decoction of the roots was drunk and used to bathe a patient with a fever.

Banks (1953: 93) referred to *A. venenosa* as “water parsnip”, a common name usually reserved for *Cicuta maculata*. He recorded that an infusion of the leaves was used to wash the hands of someone that had handled the dead, which would suggest that it was *C. maculata*, a highly toxic plant often associated with death. However, he also said the plant was drunk by pregnant women, suggesting that in this instance he was referring to *A. venenosa*.

Olbrechts identified *ganéllita* as *Zizia aurea*, commonly known as golden alexander, but this may have been a misidentification on his part and the young leaves are quite similar. He found that the root was used as a prophylactic against the negative consequences from coming into contact with a pregnant or menstruating woman, especially for aspiring medicine men (Mooney and Olbrechts 1932: 102). He elaborated on this in his notes:

When a person is made ill by the look or presence of a pregnant or menstrual woman, or eating food prepared by such, the root is chewed and the juice rubbed all over, especially where the soul is (heart). Others can do it if the patient is too ill.



*gātā'yǎtǐ* – 'it has gone round' – *Polymnia uvedalia* L. – leaf cup, bear's foot

Mooney did not provide a gloss for *gātā'yǎtǐ*, but Olbrechts glossed it as 'it has gone round'. This was most likely due to the bases of the opposite leaves meeting around the stem, hence the common name leaf cup. Olbrechts glossed this species as *gātā'yǎtǐ usdǐ-ga* ('it has gone round, small'), but this is highly unlikely as the species that it is paired with, *Polymnia canadensis* L. is generally much smaller (Radford et al. 1968: 1102). Olbrechts referred to *P. canadensis* by the folk generic *gātā'yǎtǐ*, but said its use had been forgotten.

Mooney found that the pounded roots of *gātā'yǎtǐ*, combined with those of *Ceanothus americana* L., *Cacalia atriplicifolia* L., and *Cimicifuga racemosa* L., was used for fevers. Olbrechts found that *gātā'yǎtǐ* was used with *Scutellaria lateriflora* L. for *ut'igadö* ('to drive out afterbirth') (Mooney and Olbrechts 1932: 126) and for *andkt'egö* ('they are under restriction').

*gawā'gǐ* – 'it oozes' – *Campanulastrum americanum* (L.) Small – tall bellflower

The generic name *gawā'gǐ* stems from *gawā'gû* ('it is oozing'). Mooney wrote that this was said of thick liquids, but not water. This is due to the milky latex that is apparent when the plant is injured. No medicinal qualities were attributed to *C. americana*, but Olbrechts did find that the young leaves were eaten as a vegetable.

*gígagéǐ adsilû'skǐ* – 'red flower' – *Spigelia marilandica* L. – Indian pink

The name *gígagéǐ adsilû'skǐ* is due to the red flowers that form at the top of this plant. Mooney wrote that the roots, combined with those of *Pilea pumila* (L.) Gray or

another unidentified plant, were made into a decoction and drunk for treating intestinal worm. Olbrechts also found that *S. marilandica* was used as a worm remedy. A tea of it was mixed with honey and taken day and night for four days until the worm were expelled (Mooney and Olbrechts 1932: 214). Another formula consisted of a decoction of the roots of *S. marilandica*, combined with *Cypripedium calceolus* (L.) var. *parviflorum* and the bark of *Aesculus octandra* Marsh, take in the same manner as the previous formula. It was sweetened with honey or the pods of *Gleditsia triacanthos* (Mooney and Olbrechts 1932: 249).

*gigatsúya-hĩ* – ‘it has blood in it’ – *Lysimachia quadrifolia* L. – whorled loosestrife

The name of the folk genus *gigatsúya-hĩ* stems from *gíga* (‘blood’) and *truyáhĩ*, the 3<sup>rd</sup> person form of *dágiyaû’* (‘I have them in me’). Mooney pointed out that this is a plural form because the names of liquids are always in the plural form. He did not explain the reason for this name; however, the flowers are yellow with a red center, suggesting that they appear to have blood in them. Olbrechts found that *L. quadrifolia* was used for three conditions associated with the urinary tract: *unegö tsandiköça* (‘if they water out white’) and *gigö yandik’öça* (‘urinating blood’) were from his notes and *dalânige tsandik’öça* (‘yellow urine’) from *The Swimmer Manuscript* (Mooney and Olbrechts 1932: 253).

*gigatsuyá iyústĩ* – ‘like *gigatsúya-hĩ* – no species identified

The implication for *gigatsuyá iyústĩ* is that there was a plant in the Cherokee classification system that was known to resemble *Lysimachia quadrifolia* and was

named due to this resemblance. Although Mooney did not obtain a botanical identification for the plant, he did record that it was used for snakebites. The roots, combined with those of *Scirpus validus* Vahl., were pounded and made into a poultice for the bite and were made into a decoction to be drunk by the patient. He also pointed out the obvious in that the plant was not stored for winter use, as there was no need for snakebite medicine in cold weather.

*gíga tsanose'öi* – 'it is called blood' – *Galium lanceolatum* Torrey

Olbrechts did not explain the etymology of the name *gíga tsanose'öi*, but *gíga* ('blood') appears to stem from the maroon color of the mature flowers. The qualifier *tsanose'öi* ('it is called ') appears in several of the names collected by Olbrechts, but it is not clear if it is truly a part of a name, or just part of the response of the informant. The botanical species named here, *Galium lanceolatum*, may have been a misidentification as it is not common in the mountains of North Carolina (Radford et al. 1968: 986). It would more than likely have been a similar, more common species of maroon-flowered *Galium* such as *Galium latifolium* Michaux. *Gíga tsanose'öi* was combined with *Lobelia cardinalis* and used for *gigö danayöskoi'öi* ('when they bleed from both nostrils').

*gíí wǎ'ta* – 'dog's penis' – *Sanguinaria canadensis* L. – bloodroot

The Cherokee generic *gíí wǎ'ta* ('dog's penis') was due to the reddish color and tubular shape of the rhizome, reminiscent of the penis of a dog. Mooney found that the pounded root was used to relieve the pain from an aching tooth. Olbrechts found no medicinal uses, but said it was used as a dye plant to impart a red dye to masks, bows,

baskets, ball sticks, etc. Witthoft claimed it was a favored dye of basket makers, imparting a, “rich, fast color not matched by any other dyes (n.d.: 64).” He also said that the roots were best when harvested in late summer, the plants having little dye value in early spring. Banks (1953: 54) added that the roots soaked in cold water were used as a cough medicine and that the powdered dried root was used as a snuff for mucus congestion.

*gotadawina* – no gloss – *Castilleja coccinea* (L.) Sprengel – Indian paint brush

Olbrechts provided no gloss for *gotadawina*, and he also found that the plant was once used for medicine, but that the use had been forgotten.

*gugǔʼ* - ‘chigger’ or ‘jigger’ – *Asclepias tuberosa* L. – butterfly-weed, pleurisy root

The name *gugǔʼ* (‘chigger’) is in reference to the tiny red mite that frequents fields throughout the Southeastern United States and causes itching welts when it feeds on human hosts. The mite was thought to frequent the reddish-orange blossoms of *A. tuberosa*, which was often referred to by the common names chigger weed or jigger weed. Mooney also collected the synonym *uniskáhĩ tsúntana* (‘it has heads, large’), having to do with the shape of the flower heads. This will be discussed under the folk generic *uniskáhĩ*.

Mooney found that *A. tuberosa* was used for flux, but he did not elaborate. Banks, however, found that a tea of the roots was used for diarrhea and flux, and that the ideal time to harvest the root was when the butterflies were visiting the flowers. The

butterflies needed to be the same reddish-orange color as the flowers. He also found that it was used for pleurisy, heart trouble, and fever (Banks 1953: 105).

*guhí* – ‘it stays green in the water’ – *Asclepias incarnata* L. – swamp milkweed

The folk generic *guhí* stems from *guhû* ‘(it is in the water or liquid)’ due to the habit of *A. incarnata* to grow in wet places. No further information was available concerning this species.

*igû’liyústĩ* – ‘fern-like’ – *Aureolaria pectinata* (Nuttall) Pennell – false foxglove

The name *igû’liyústĩ* stems from *igû’lĩ* ‘(fern)’ and the suffix *–iyústĩ* ‘(like)’, due to the similar morphology of the leaf to that of a fern. The genus *Aureolaria* was discussed under the folk genus *dilastagístĩ*, *A. pectinata* being the only species found in the mountains that was not discussed in that section. Two species actually have fern-like leaves, *A. pectinata* and *A. pedicularia*, and both tend to intergrade with each other. Matching the botanical species to the name may be more flexible here than is indicated by Mooney’s identification.

*iyuga egwa* – no gloss, ‘large’ – *Ambrosia trifida* L. – ragweed

Mooney provided no gloss for the folk genus *iyuga* and the large variety is the only species he recorded, so it is not clear if there was a small variety and, if there was, if it was a species of *Ambrosia*. The name for the smaller species of *Ambrosia* found in the mountains, *Ambrosia artemisiifolia* L., was recorded by Olbrechts as *uwagu staluyato* ‘(the leaves have split themselves’), which was very different from *iyuga*.

Banks provided the only specific use for *A. trifida* as an ingredient in the medicine for the Green Corn Ceremony (1953: 155). Generic uses for species of *Ambrosia* included the leaf used as a tea for fever and the crushed leaf was rubbed on hives, infected toes, or poison ivy.

*ínatû tsunigatogi tsanose'öi* – ‘the (plant) which is called: snake’s odor’ – no species

Olbrechts was not able to identify this species, but the distinctive name and the hope that someone may still know which plant has the odor of a snake warrants its inclusion. It was combined with a species of *Salix* and used for *uyo'usö tsunineliçq* (‘disgusted by the sight of a corpse’).

*ínatû wasĩtsû'* – ‘snake rattle’ or *ínatû gatága* – ‘snake tail’ – *Prunella vulgaris* L. – heal all or self heal

The snake references in the two names recorded by Mooney are indicative of the resemblance of the seed heads to the erect tail of a rattlesnake. Olbrechts recorded it as *gátatsú'ĩ agisti* (‘it has dirt in it, to be eaten’ – discussed above) due to the edibility of the leaves.

Olbrechts claimed that *P. vulgaris* was just used for its edible greens and not for medicine, but Mooney, along with concurring on its edibility, recorded a medicinal use for it. For dreams of snakes or mud turtles, the root was boiled and the decoction drunk as an emetic for four mornings while abstaining from salt. This clears the patient of too much saliva, possibly caused by conjurers, but he did not elaborate on this. The plant can be located in winter by the dried stalks or the few green leaves that survive in colder

weather (Ms. 1894). Banks found that a root tea was used to treat bruises and a cold water infusion to treat burns (1953: 112).

*kanasâ'la* – 'water hemlock' – *Cicuta maculata* L.

*Kanasâ'la* appears to be an opaque, proper name for *C. maculata*. This plant is often identified as "wild parsnip", but it is always noted for being poisonous and the escaped cultivated parsnip is not toxic. Mooney said it was so poisonous that the smell was enough to produce dizziness, but that the Cherokee medicine men had a way to "conjure" the poison out of it.

The primary applications for *C. maculata* were for conjuring and as a prophylactic against disease. A small piece of the root was chewed and blown on the body of a person who was preparing to travel as a way to ward off disease, but the smell was thought to aggravate snakes and cause them to bite the traveler. It could also be used as a soothsaying device by placing seven pieces of root put in one hand and gently rubbed with the other. The final position of the roots determined the outcome of the situation. It was taken for suicides and poisoning a victim. If the victim fell asleep after taking the root, they must be kept in motion until the effects wore off or they would not wake up (Mooney 1900: 424-425). A decoction of the roots was also used in sweat baths for a wide range of diseases (Mooney 1891: 333). In his notes, Mooney stressed that the stones used in the sweat bath for healing purposes must be white. *Kanasâ'la* was also used for conjuring that was intended to take the life of a victim. The conjurer would take the spittle of his intended victim and mix it with several crushed earthworms and some splinters from some lightning struck wood. He would then put the paste in a

joint of the stem of *C. maculata* and ceremonially buries it. If all goes to plan, the victim dies within seven days (Mooney 1891: 392-393). *Kanasâ'la* was also used with other remedies to counter sicknesses sent by friends or rival conjurers to test the knowledge of a medicine man (Mooney 1891: 369) (see *tsâliyústĩ usdíga* above).

Olbrechts found similar powers associated with *kanasâ'la*. If a medicine man had a patient die under his care, one option was to wash himself in a decoction of *C. maculata* (Mooney and Olbrechts 1932: 104). It was also reported to be a contraceptive, a woman chewing a piece of the root for four consecutive days becoming permanently infertile (Mooney and Olbrechts 1932: 117). However, Witthoft disputed this claim, stating that Will West Long only told Olbrechts about this use after he “questioned too closely about abortion-producing herbs (n.d.: 59).” The highly toxic nature of the root would cause mortality and insure that a woman taking the herb would “bear no more children”. Olbrechts recorded another use for *kanasâ'la* as a divining tool. A person would chew up to seven pieces of the plant, approximately one-inch in length, to determine the duration of their life. If all seven were consumed without effect, the person would live for at least seven more years. But if they became “drowsy or intoxicated” before that point, their life would only be as long in years as the number of pieces of the plant they had consumed (Olbrechts 1930: 550).

*kanasâ'liyústĩ* – ‘like *kanasâ'la*’ – *Angelica venenosa* (Greenway) Fernald – hairy angelica

*Angelica venenosa* has already been discussed under the folk generic *ganéłĩta*. However, the synonym *kanasâ'liyústĩ* is highlighted here to reiterate that the name



reflects the Cherokee perception of the resemblance of *A. venenosa* to *Cicuta maculata*.

*kanástăgwâ'łł'* – no gloss – *Caulophyllum thalictroides* (L.) Michaux

No gloss was provided by either Mooney or Olbrechts for *kanástăgwâ'łł'*.

Mooney also collected the synonym *wanegitiyústł sa'kánigeł* ('like angelica, blue') due to the resemblance of *C. thalictroides* to members of the genera *Angelica* and *Ligusticum*. Olbrechts wrote that it was once used as medicine, but that the use had been forgotten. Banks recorded that the boiled root was held against the tooth in case of a toothache and that a tea of the roots was used for pain after giving birth. The leaves were also rubbed on poison ivy (1953: 48).

*kanegutsötagi* – 'the skin has been taken away from where it was hanging' – *Lilium canadense* L. – Canada lily

Olbrechts did not explain the association with the gloss for *kanegutsötagi* and I can not speculate on its meaning. He was presented with two specimens for this folk genus, *Lilium canadense* and *Erythronium americanum* (see *atátsû' amayultehi* above), so the identification of *kanegutsötagi* is questionable. He also found a large folk species, *kanegutsötagi útana*, but he only identified it as a species of *Lilium*. He did identify it in *The Swimmer Manuscript* as the species that was made into a decoction and given to a child to drink, as well as bath in, to make them "fleshy and fat" (Mooney and Olbrechts 1932: 128). Banks found that *L. canadense* was combined with an orange red lily

(possibly *Lilium philadelphicum* L.) and made into a decoction for the pain of rheumatism (1953: 15).

*katû'latû útana* – 'my leg is broken, large' – *Apocynum cannabinum* L. – dogbane, Indian hemp

Mooney was not certain of the root of the folk generic *katû'latû*, but he speculated that it might have stemmed from *katû'lagû* ('my leg is broken') or *gatû'líta* ('I am holding my breath'). Will West Long later interpreted it as 'broke my leg' (Banks 1953: 104), while Witthoft glossed it as simply 'broken leg'. Witthoft also said the name had to do with the way the inner portion of the stalk could be broken into short lengths while the outer fibers remained intact (n.d.: 70). Besides being known as the 'large' species of *katû'latû*, *A. cannabinum* was also known by the synonym *katû'latû inígať* ('my leg is broken, tall'). Two other plants were described by an informant but samples were not collected. Mooney speculated that these were also *A. cannabinum*, but that they were named by their immediate condition and not because they were distinct species of *katû'latû*. They were called *katû'latû ústakalû' útana* ('my leg is broken, leaning against, large) and *katû'latû ústakalû' usdí-ga* ('my leg is broken, leaning against, small) because they were supported by nearby plants.

Mooney claimed that the fibers from the stalk of *A. cannabinum* were once used to make bow strings. Banks added that a decoction of the roots was used for kidney problems and that the pounded plant was used as a poultice for rheumatic pains (1953: 104-105).

*katû'latû usdî-ga* – ‘my leg is broken, small’ – *Euphorbia corollata* L. – flowering spurge

Besides being the ‘small’ species of *katû'latû*, Mooney recorded several synonyms for *E. corollata* from the same informant and incorporating rearrangements of the same qualifiers. These included, *katû'latû élatĩ iyû'natĩ* (‘k., low growing’), *katû'latû tsúntana uniyâ'natĩ* (‘k., large, branching’), *katû'latû tsusdî-ga élatĩ iyû'natĩ* (‘k., small, low growing’), *katû'latû unega adsilû'skĩ* (‘k., white flowered’), and *katû'latû uniyâ'natĩ élatĩ iyû'natĩ* (‘k., branching, low growing’). Other informants called it *ugatasigískĩ* (‘pus oozes out’), *ugatasigískĩ gigage ulû'tinû'ta* (‘pus oozes out, red stalked’) and *unátĩ* (‘milk’), all due to the profuse milky latex. Olbrechts also recorded it as a species of *ugatasigískĩ*, calling it *ugatasigískĩ gû'tlûta tsu'iyegsi* (‘pus oozes out, hillside, ?’). He also found it to be called *ust'agali*, but gave no gloss for this name.

The fibers of *E. corollata* were used for bow strings in much the same way as those from *Apocynum cannabinum*. Mooney also found that *E. corollata* was used for milky urine. About one pint of the beaten roots were soaked in warm water and drunk at intervals throughout the day. No food was taken except for once at night. The treatment lasted for about 2 days.

Olbrechts also found that *E. corollata* was used for urinary conditions such as *unegö tsandiköça* (‘if they water out white’) and *ga'yedi* (‘pain in the back’) as well as the related condition *göwanigistöi* (‘when they are eaten by them’). For this last condition, Olbrechts noted the symbolic correlation between a milky discharge, the latex from the plant, and the avoidance of milk (Mooney and Olbrechts 1932: 180). Banks added that the bark of the roots was placed in a hollow tooth to ease a toothache and

the latex from the leaves and stem was used to heal sores and remove warts (1953: 77-78).

*k'kwě́' ulasúla* – 'partridge shoe' – *Cypripedium calceolus* (L.) var. *pubescens* (Willd.)

Correll – large yellow lady's-slipper; *Cypripedium calceolus* (L.) var. *parviflorum* (Salisb.)

Fern – small yellow lady's-slipper; *Cypripedium acaule* Aiton – pink lady's-slipper

The Cherokee name, *k'kwě́' ulasúla* ('partridge') ('shoe' or 'moccasin'), has the same basis as the common name lady's-slipper. The lower lip of the flower is united into a pouch-like sac that resembles a shoe, moccasin, or slipper. Mooney claimed that there was only one variety, which was identified as a yellow variety, but in other notes he mentions the pink species using the same Cherokee name (Ms. 1894). Olbrechts used the same name for the smaller yellow variety. It may well be that the Cherokee did not differentiate between the two yellow varieties, but I think it is highly unlikely that the pink species would be placed in the same category.

Mooney, apparently referring to the pink lady's-slipper, found that the roots were boiled into a thick decoction and given to children for worms; however, Olbrechts wrote that it was the small yellow lady's-slipper that was used for the same purpose (Mooney and Olbrechts: 1932: 249). He also said that this was the variety that was gathered by the Cherokee and sold to white traders.

Banks (1953: 20-22) differentiated between the three species, finding that the pink species was combined with a species of *Sanicula* for stomach cramps. The roots of the same were made into a tea for nervous conditions, kidney problems (either alone or combined with *Comandra umbellata* (L.) Nuttall), and "female problems" such as

menstrual irregularities and menopausal changes. A hot tea of four whole plants was said to relieve the pain of a hernia in both men and women. A root tea of the large yellow variety was used for a wide range of applications including colds and flu, kidney problems, nervous conditions, high fevers, and stomachaches. The roots of all three kinds of lady's-slipper were made into a decoction and drunk for diabetes.

*kûlsétsiyústĩ* – 'like honey locust' – *Cassia fasciculata* Michaux – partridge pea

The folk generic *kûlsétsiyústĩ* stems from *kûlsétsĩ* (honey locust – *Gleditsia triacanthos* L.) and *-iyústĩ* ('like'), the suffix representing a resemblance to something else. In this case, the leaves of *C. fasciculata* are similar to those of *G. triacanthos*.

Banks provided the only medicinal applications for *C. fasciculata* (1953: 68). The roots were used by ball players to ward off fatigue. It was mixed with *Cassia marilandica* and given to those experiencing fainting spells. It was also considered a sexual aid for older men. A woman would gather the plant and rub the scraped root on her vulva, thereby easing entry for a man who was at less than full potency. A man was not allowed to handle the plant, or it was believed that his penis would "die".

*kûngútsatû'* or *kûngútsatĩ* – 'mean' – *Lilium superbum* L. – Turk's-cap lily or *Lilium philadelphicum* L. – wood lily

Mooney's explanation of the etymology of *kûngútsatû'* is dubious, but he identified the botanical species related to the names and his explanation warranted inclusion in this text. He speculated that *kûngútsatû'* was from *unegútsatû* ('it is mean'), based on the difficulty of removing the root intact from the soil. The root was often dug

and used as an ingredient in bread. However, Will West Long did not agree with this explanation, and told Mooney that he thought the name was *kûngútsatû'kĩ*, from the root *gútsănăkiû'* ('I am lifting up the skin, or cloth'). This is much closer to Olbrechts' observations (see *kanegutsötagi* above), which may also have come from West Long. Banks observed that his informants often confused the names and identification of the species of *Lilium* (1953: 15). This may have been in part due to the plants becoming scarce due to the roots being a favored food of free-ranging hogs on the reservation (Witthoft n.d.: 33).

Banks found that the roots of *L. superbum* were made into a decoction and rubbed on rheumatic joints and that a warm or cold infusion of the roots was used for flux (1953: 15).

*kûntsĩ'* – Jerusalem artichoke – *Helianthus tuberosus* L.

*Kûntsĩ'* appears to be an opaque, proper name for the Jerusalem artichoke. Mooney said that this name had been replaced by *núnă'*, the folk generic for potato, but Witthoft still found a form of *kûntsĩ'* in use when he did his research decades later. Witthoft also found that the tubers were eaten raw in the field or were baked or boiled as a vegetable. It was also semi-domesticated, being moved to more convenient locations for an easier harvest.

*kwandisátĩ* (Middle) or *kwánditlá'tĩ* (Upper) – ‘they put peaches upon it’ – *Cuscuta* spp. – dodder

*Kwandisátĩ* stems from *kwána* (‘peach’ or ‘wild plum’) and *tsitlă'hûskû* or *tsisă'hûskû* (‘I am putting it upon it’). It is related to the string-like quality of this parasitic, leafless, twining vine, which was used as the webbing for drying racks for peaches and fish. Witthoft claimed that peaches were at one time the most important fruit available to the Cherokee, and that large quantities of a variety known as the “winter peach” were dried for storage (n. d.: 205). Mooney also found that a decoction of the roots was drunk by a woman four days after she had given birth, but he did not explain the purpose of the treatment. Olbrechts recorded *Cuscuta* as *uduyoçí* (‘it has formed itself’), because the plant appears to have no roots and its growth was mysterious.

*kwaniyústĩ ganulû'hĩ* – ‘peach-like herb’ – *Epilobium coloratum* Biehler – purple-leaved willow herb

The name *kwaniyústĩ ganulû'hĩ* stems from *kwána* (‘peach’) and *-iyústĩ* (‘like’) coupled with *ganulû'hĩ* (‘herb’ or ‘herbaceous’). This was due to the shape of the leaves, which were observed to be similar to those of a peach tree. The common name willow herb is due to the same observation. No further information is available concerning the Cherokee relationship with *E. coloratum*.

*nûnă'hĩ udetkĩ* – ‘it stands in the road’ – *Plantago major* L. – broad-leafed plantain

The name stems from *nûnă'hĩ* (‘road’ or ‘trail’) and *udetkĩ* (Middle dialect) or *udétĩ* (Upper dialect) (‘it stands habitually in the road’) and is due to the erect seed stalks.

Both Mooney and Olbrechts collected several synonyms for *nûnâ'hĩ udetkĩ*. Some were descriptive of the leaves such as *tsugwûténa nûnâ'hĩ udetkĩ* ('broad leaved it stands in the road') and *nûnâ'hĩ udetkĩ ugwalaga gasakwalû'* ('it stands in the road, round leaved'). Others described the seed stalk such as *tlûtû'tsĩ gatá'ga tsusdí-ga* ('small panther tail') and *kaw'stû'nĩstĩ* ('whip lash'). Olbrechts, besides reiterating the names *nûnâ'hĩ udetkĩ* and *kaw'stû'nĩstĩ*, recorded *P. major* as a type of *diyěsatískĩ* ('it gets dew on it') and as *tcistedzi gatá'ga* ('rat tail' or 'mouse tail').

Olbrechts found that *P. major* was used alone or with *Agrimonia parviflora* for diarrhea and that the root, cut in half lengthwise, was made into an infusion and drunk for *gigö dunikstisgöi* ('when they vomit blood'). The root was used for the condition known as 'their feet get hot', but Olbrechts did not explain how it was used.

Banks recorded Cherokee uses for the genus *Plantago* (1953: 119), but it will be assumed here that they apply to *P. major*, as it is the most common species in the region. The wilted leaves were used as a poultice for bee stings, headaches, infected sores, and rheumatism. An infusion of the leaves of plantain and *Juncus tenuis* was given to a toddler who was learning to walk. This may have been due to the erect habit of both plants, symbolizing the ability to stand up straight. If the child failed to walk, he or she was considered to be afflicted with rheumatism.



*nûnâ' hĩ udetkĩ útanũ* – ‘it stands in the road, large’ – *Lespedeza striata* (Thunberg) H. & A. – Japanese clover

Mooney said that this species was unknown in the region until a few years before he did his research among the Cherokee (Ms. 2235). No further information about it was available.

*nuniyústĩ* – ‘like potato’ – *Matelea* spp. – climbing milkweed

The folk generic *nuniyústĩ* stems from *núnă'* (‘potato’) and *–iyústĩ* (‘like’), which is due to the tuberous roots. Mooney discussed *nuniyústĩ* in *Myths of the Cherokees* (1900: 426), but does not identify the botanical species associated with the name. Olbrechts collected and identified it as a species of *Matalea*, and claimed that this is the species that Mooney was referring to, but in his description Mooney said that *nuniyústĩ* was a flowering vine that grew in old fields. Species of *Matalea* tend to favor wooded areas and the flowers tend to be small, reaching only around 2 cm across (Radford et al. 1968: 858-860). While Olbrechts may have collected and identified a species of *Matalea*, it is more likely that Mooney was discussing *Ipomoea pandurata*, which will be discussed below. Both species have tuberous roots, cordate leaves, and twining vines that are reminiscent of sweet potatoes, *Ipomoea batatas*, but *I. pandurata* has large, showy flowers.

Olbrechts found that *nuniyústĩ* was used with *Podophyllum peltatum* for stomachaches and that it was used as a purgative for *dalâni* (‘yellow’).

*nuniyústĩ klayuě'hĩ útanũ* – ‘like potato, growing in old fields, large’ - *Ipomoea pandurata* (L.) G. F. W. Meyer – man-root

As the common name suggests, the tuberous root can be very large. Mooney found a specimen where the root was 3 feet long. This is the only *nuniyústĩ* that he identified in his notes and is most likely the species discussed in his published materials. Mooney found that the milky latex of *nuniyústĩ* was rubbed on an object that emulated the bleat of a young deer, which would attract its mother to the vicinity of the hunter (Mooney 1900: 426). Banks found that a root tea was used medicinally for bowel complaints and the root bark was made into a poultice for rheumatic pains (1953: 106). He also wrote that a tea of the roots was used to soak sweet potato plants as a deterrent to moles and insect pests. Although this was called “Indian potato” by local whites, Witthoft could find no evidence that the Cherokee ever used the root as a food product. He claimed that many wild roots were called “Indian potato” (n.d.: 33), and that use of “Indian” in the name was a disparaging term referring to a false or counterfeit type (n.d.: 36).

*nuyagûlĩ'* – ‘it climbs the rocks’ – *Hexastylis arifolia* (Michaux) Small – heartleaf or *Asarum canadense* L. – wild ginger

The folk generic *nuyagûlĩ'* stems from *nû'ya* (‘rock’ or ‘stone’) and *gûlĩ'* (‘it climbs’), from *tsĩlahĩ* or *tsĩlĩ* (‘I am climbing’). The name refers to the plant’s ability to grow on moss covered rocks. Mooney identified *nuyagûlĩ'* as *Hexastylis arifolia*, while Olbrechts said it was *Asarum canadense*. Both men also recorded the synonym *skwál-ĩ*

*utana* ('liverleaf, large') for the respective species mentioned. The folk genus *skwál-ĩ* will be discussed below.

Mooney found that a hot infusion of the bruised roots was used for coughs, or the root could simply be chewed for the same purpose. The root was also dried for future use. The leaves were used in a formula with *Alnus serrulata*, *Carpinus caroliniana*, and *Sassafras albidum* for old sores and cancers. Olbrechts found that *nuyagûlĩ'* was used for the ethnomedical conditions *aninedzi ada'nöwoti tuksinigöwayö nategsöi* ('their breast, to cure anyone with, terrapin does it to them, as they go about'), *aninedzi gotiski* ('their breast swells'), and *yöwi tsunstia göwani skastane'öi* ('when the little people frighten them'). He found that it was used for milky urine and sores in the abdominal region. For the latter condition, the roots are made into a decoction and this was blown over the afflicted region with a tube. This was also an herb of commerce that was sold to the white herb buyers.

Banks added that a tea of the roots of *A. canadense* was drunk for heart trouble, menstrual irregularity, and colds, while a decoction of heartleaf combined with *Goodyera pubescens*, *Alnus serrulata*, *Prunus serotina*, and *Xanthorhiza simplicissima* was taken as a blood tonic and to improve the appetite (1953: 38). Witthoft (1947) added that the dried leaves were used as a snuff and the fresh leaves for healing wounds.

*nuyagûlĩ' usdí-ga* – 'it climbs the rocks, small' – *Galax aphylla* L. – galax

This is the 'small' species of the previous folk genus. Mooney also recorded the synonym *tsugwalága tigásakwalû'* ('round leaves'), due to the appearance of the ovate

leaves. Olbrechts reported that it was once used, but that the use had been forgotten. However, Banks found that a tea of the roots was used for kidney problems (1953: 102).

*salâ'ĩ usuga* – 'squirrel's claw' – *Osmorhiza longistylis* (Torrey) DC. or *O. claytonii* (Michaux) Clarke – sweet cicely

The name *salâ'ĩ usuga* stems from *salâ'ĩ* ('squirrel ') and *usuga* ('claw'), which is due to the long, curved, black fruits. Olbrechts recorded it as *uniwoti tsunosut'oh* (no gloss) and said that the stalks were rolled in the hand while praying. Witthoft said the greens were eaten in the spring and the roots were either pounded and added to bread or were boiled or baked and eaten as a vegetable (n.d.: 28).

*satsû'nnă* – *Rudbeckia laciniata* L. – green coneflower

*Satsû'nnă* appears to be an opaque, proper name for the green coneflower. It was also one of the Middle dialect forms, the other being *katsûnnĩ*, while the Upper dialect form was *katsû'na*. Olbrechts identified it as *Hydrophyllum canadense* L., but I believe this is a misidentification on his part. Its main use was as a spring green, and Witthoft claimed that it was likely to be the more conservative individuals who consumed the greens (n.d.: 25). They would be picked early in the spring, parboiled in three or four changes of water, and cooked in grease (Witthoft 1977). Mooney also recorded a medicinal use, finding that the roots were boiled down into a thick syrup and this would be put in the ear in case of an earache. The plant was often transplanted into gardens for easy access (Banks 1953: 132). Witthoft (1977) claimed that *R. laciniata* was a very

toxic plant, but other references suggest that any poisoning attributed to it may have been due to other plants (Muenscher 1975:233).

*sělikwâ'ya* – ‘green snake’ – *Eryngium yuccifolium* Michaux – button snake root, rattlesnake master; *Yucca filamentosa* L. – bear-grass

The folk generic *sělikwâ'ya* (‘green snake’) was used to refer to the resemblance of the leaves of *E. yuccifolium* and *Y. filamentosa* to the rough green snake, *Opheodrys aestivus* L. (Fradkin 1990: 145). There is some confusion as to the designation of folk species in this genus as Mooney identified *E. yuccifolium* as *sělikwâ'ya útana* and *Y. filamentosa* as *sělikwâ'ya usdī-ga*, while Olbrechts reversed them, identifying *Y. filamentosa* as *sělikwâ'ya útana* and *E. yuccifolium* as *sělikwâ'ya usdī-ga*. Banks referred to both simply as *sělikwâ'ya* (1953: 19, 94).

The confusion with species identification makes it difficult to relate the synonyms to a botanical species, but I will include them here to provide a more complete record. Mooney recorded the synonym *sělikwâ'ya tlâgesě'hĩ* (‘green snake, growing in old fields’) for *E. yuccifolium* and *sělikwâ'ya igâ'teně'hĩ* (‘swamp growing green snake’) for *Y. filamentosa*. One informant also called *Y. filamentosa* *gigage ulĩ* (‘red tuber’). Olbrechts recorded *uwe'ti* (‘it grows straight down’, referring to the root) and *sōtłi* (no gloss) for *E. yuccifolium* and *sělikwâ'ya tlâgesě'hĩ* (‘green snake, growing in old fields’) and *a'yelsti* (no gloss) for *Y. filamentosa*. Again, his identification of *sělikwâ'ya tlâgesě'hĩ* as *Y. filamentosa* is counter to Mooney’s record.

Olbrechts recorded the bulk of the uses for *E. yuccifolium*, finding it was used for the ethnomedical conditions *amayitsistano utsya* (he is sick by the water’),

*göwanigistöi* ('when they are eaten by them'), (*an't'asgiski tskoya* – 'insects are breaking out'), *useski* ('whooping cough'), *uwanu'söçiça dalânige* ('gonorrhea'), and *uyoi ani'ayölöçi* ('when they have inhaled bad odors'). He wrote that a decoction was given to children as a prophylactic against whooping cough (Mooney and Olbrechts 1932: 76), but in his notes he elaborated and said it was a prophylactic against all contagious diseases.

Informant Will West Long reported that *Y. filamentosa* was one of the ingredients used in a sacramental drink in the Cherokee version of the Green Corn Ceremony. He included it in his list of the plants used in the Ceremony and identified it as one of the three obligatory plants included in the drink (Banks 1953: 155). He also said that the roots and leaves were soaked in water and drunk by those afflicted with diabetes (Witthoft 1946). An early 19<sup>th</sup> century account reported that the pounded roots were used to wash blankets and as a fish poison (Witthoft 1947), indicating a high saponin content in the roots. White (1975) claimed that the young shoots of *Y. filamentosa* were parboiled or fried in grease and eaten by the Cherokee. But Witthoft disputed this and claimed that this was a misidentification on White's part, and that he was actually referring to a species of *Tradescantia*, which also goes by the common name "bear grass".

*sělikwâ'yaiyústĩ* – 'like green snake' – *Melanthium hybridum* Walter – bunch-flower

The name *sělikwâ'yaiyústĩ* suggests that the Cherokee considered this to be 'like' *sělikwâ'ya*. Olbrechts did not elaborate on the etymology of the name, but he did record the synonym *sělikwâ'ya gútlûtě'hĩ* ('green snake, dwelling on the hillside'. He

also said it was used for *dalânige tsandik'öça* ('yellow urine'). No further information is available for this species.

*sel-ûnageř* – 'black greens' – *Solanum ptycanthum* Dunal – black nightshade

The folk generic *sel-ûnageř* stems from *séla* ('greens') and *ûnageř* ('black'), due to the dark color of the cooked greens. Mooney also found the Catawba name *yăhá iwoktcĩ* ('greens, black') used by one of his informants. He claimed that the greens were much esteemed by both the Cherokee and the Catawba, and that they were often gathered and sold. The leaves were also used medicinally for cuts, lesions, and skin poisoning. The leaves were crushed, strained through a cloth, and the juice made into a salve for topical application. Banks added that a large quantity of a tea of the leaves and stems was drunk every four days and used as an emetic to clear the saliva and relieve the sense of loss of those mourning the death of a loved one (1953: 115).

*sélutsĩ* - 'corn's mother' – *Sonchus asper* (L.) Hill – spiny sowthistle

The name stems from *sélu* ('corn') and *ustĩ* ('his mother'). Mooney attributed this name to tall grass, possibly *Tripsicum dactyloides* L., but this will be investigated in the chapter on grasses. But Olbrechts association of *Sonchus asper* with the corn plant warranted its inclusion in this section. He said that it was a common plant in cornfields and that the old people never touched it when they hoed the corn, "as the corn would be sorry if the pulled it out." It is not at all clear why this was the case. Species of *Sonchus* are considered detrimental to certain field crops and can reduce yields in grain fields (Peschken 1982). However, they also contain a group of phytochemicals known as

sesquiterpene lactones (Shimizu et al. 1989, Helal et al. 2000), of which one has been shown to promote root growth in cuttings from bean plants (Shibaoka et al. 1967). Until more is known about the chemical ecology of the genus *Sonchus*, we will not know how the growth of *S. asper* affects corn production or if this effect would be altered by the integrated style of gardening used by the Cherokee. Mooney also recorded *S. asper* as *atsitsagûniski tsitsiyústĩ útana* (no gloss, 'like thistle, large'), *tsitsiyústĩ útana* ('like thistle, large') referring to the similar growth pattern as thistles and the spines on the leaves. *sĩkw' unígistĩ* – 'hog food' – *Rumex* spp. – dock

The name stems from *sĩkw'* ('hog') and *unígistĩ* ('food'). Mooney and Olbrechts also used this name for *Oenothera biennis* (see *atátsû'-iyústĩ* above) and both are weedy, edible species that would provide nutritious fodder for the hogs. Mooney did not provide an exact botanical identification but simply called the plant "speckled dock", a common name that could apply to one of several species.

Mooney claimed that pregnant women drank an infusion of the whole root to ease the pains of childbirth. Banks (1953: 40), in his discussion of *Rumex crispus* L., found that the tea was given to women in labor and a strong infusion was given to pregnant women to reduce the loss of blood when giving birth. The root was also made into a tea to relieve constipation and to build blood in the spring when sores were slow to heal. Beaten roots were also fed to horses with stomach ailments.



*skâti-nûwa* – no gloss – *Sericocarpus linifolius* (L.) B.S.P. – white-topped aster

Mooney did not provide a gloss for this folk generic, but it may be a form of the following entry (Ms. 2235). No further information is available concerning the Cherokee relationship to this species.

*skáy'tĩ* – ‘worm killer’ – *Sabatia angularis* (L.) Pursh – rose pink, rose gentian

The folk generic *skáy'tĩ* stems from *tsgâ'ya* (‘worm’ or ‘insect’) and *tíhĩ*, a contracted form of *tíhihĩ'* (‘killer’). Mooney did not provide an explanation for the source of the name and I know of no application of *S. angularis* as a vermifuge. Mooney also recorded the synonyms *usaléta* (no gloss) and *û'tsatĩ uskwâ'liyústĩ* (‘like fish bladder’). A tea of the plant was used to treat diarrhea.

*skwálĩ usdí-ga* – ‘small liverleaf’ – *Hepatica acutiloba* DC – liverleaf

Mooney speculated on the gloss for *skwálĩ*, suggesting that it may have stemmed from *uskwâ'ĩ* (‘stomach’). It is sometimes referred to as simply *skwálĩ*, but is often accompanied by the modifier *usdí-ga* to distinguish it from *nuyagûlĩ'* (see above), which could also be recognized with the synonym *skwálĩ utana*. Olbrechts added the synonym *uniskwaslũ usdí-ga*, but did not provide a gloss or name a large variety.

Mooney mentioned in his notes that *H. acutiloba* had several uses, but only two appear in his published materials (Mooney 1891: 326). The leaves or roots were chewed or made into a tea and drunk by a person with a cough. It was also combined with *Asplenium rhizophyllum* as an emetic to treat a person who had dreams of snakes. In his notes he elaborated on the treatment, saying that the roots or leaves of both

plants were used and the decoction boiled to ½ or its original volume. Liverleaf plants were also harvested and sold to white traders. Mooney was of the opinion that the Cherokee esteem for the plant grew with market demand for the leaves.

Olbrechts found it was used for several ethnomedical conditions including *aninedzi ada'nöwoti tuksinigöwayö nategsöi* ('their breast, to cure anyone with, terrapin does it to them, as they go about'), *aninedzi gotiski* ('their breast swells'), and *yöwi tsunstia göwani skastane'öi* ('when the little people frighten them'). Banks found that the roots were used hot in tea for bowel complaints and in a decoction drunk on the new moon as a prophylactic against whooping cough. The dried leaves were smoked for heart troubles, as well as crushed and made into a tea for toothaches (1953: 46).

*skwáĩ utana* – 'large liverleaf' – *Hexastylis arifolia* (Michaux) Small – heartleaf or *Asarum canadense* L. – wild ginger

Both botanical species here were discussed above (see *nuyagúĩ'*) but are included here to associate the botanical species with the Cherokee folk species.

*skwayeíû* – no gloss – *Lespedeza stuevei* Nuttall

This was another species on Mooney's list of botanical species and Cherokee names (Ms. 2235). No other information is available about this species.

*sûnna dalânige adsilû'skĩ* – ‘?, yellow flowered’ – *Helenium autumnale* L. – sneeze-weed

Mooney did not provide a gloss for *sûnna*, but it appears to be a shortened form of *satsû'nnă* (see above). *Helenium autumnale* was discussed in the intermediate categories (see *dalâni ganulûhi*).

*sûnna tĕlugéĩ adsilû'skĩ* – ‘?, purple flowered’ – *Vernonia noveboracensis* (L.) Michaux

This is a purple flowered species of *sûnna*, but it also identified by the synonyms *tsisáti útana* (‘it smothers large’) and *i'yágĩ útana* (no gloss, ‘large’) (see *atsilsû'tĩ* above). This same name was used for a species of fern, *Osmunda cinnamomea*, and referred to its use as an agent to smoke animals out of logs and yellow jackets out of the hive so the larvae could be harvested for consumption (see *egû'ĩ uwásgilĩ usdí* in the chapter on ferns).

*sûtlíyústĩ* – ‘like *sû'tlĩ*’ – *Anthemis cotula* L. – dog fennel

The name *sûtlíyústĩ* stems from the resemblance of *A. cotula* to *Pycnanthemum incanum* (see *gáw'sûkĩ unéga* in Herbaceous Plants, Part 1), which has the name *sû'tlĩ* as one of its synonyms. No other information is available concerning the Cherokee relationship with this plant.

*tagualǔ* – no gloss – *T. subaspera* Ker. or *Tradescantia virginiana* L. – bear grass, spiderwort

*Tagualǔ* appears to be an opaque, proper name for these larger members of the genus *Tradescantia*. *Tradescantia virginiana* (often recorded as *virginica*) was mentioned by several researchers (Mooney, Witthoft 1947, Banks 1953:12, Perry 1974: 33), but this is a rare species found in the lower Piedmont and not a species that is found in the mountains of North Carolina (Radford et al. 1968: 271). But all did agree that the young shoots of *Tradescantia* were one of the favorite spring greens of the Cherokee.

Olbrechts found that the plant was used for swollen testicles and for the condition involving a prolapsed rectum known as *göskanugoga* ('arse bowel falls out'). Banks added that a tea of the whole plant was prepared with six other plants and drunk for female complaints and rupture. It was also used as an ingredient in a kidney medicine, the roots were made into a tea for overeating, and the roots were pounded and used as a poultice for cancerous growths (Banks 1953: 12-13).

*takaya di'nuwá'gǐ* – no gloss – *Lecha racemulosa* Michaux - pinweed

Mooney provided little information about this plant other than the Cherokee name and botanical name, along with the synonym *wá'tige uktû'tǐ* ('brown seeds').

*taléta* – no gloss – *Linum usitatissimum* L. - flax

*Taléta* appears to be a proper, opaque folk generic for plants that have usable fibers. Mooney speculated that this name was once originally applied to *Pilea pumila*

(see below), but that it was transferred to flax as it gained cultural prominence. The name might also have been applied to hemp. Witthoft called the name, “a very interesting linguistic fossil” because it was the same name used for a tote sack, which was a burlap bag or feed sack to haul objects (n.d.: 69). The only medicinal application was from Olbrechts, who found that a decoction of the plant is used as a wash for patients with an attack of the fever (Mooney and Olbrechts 1932: 243).

*taléta usdíga* – ‘small *t.*’ – *Pilea pumila* (L.) Gray – richweed, clearweed

This is the ‘small’ folk species of *taléta*, also known by the synonyms *taléta unitsistaligiski* (no gloss) and *úyalugíski* (‘it gets cut, as by a blade of grass’), possibly having to do with the toughness of the fibers. This is a member of the nettle family, Urticaceae, a family whose members are known as a source of vegetable fibers.

A hot infusion of the whole plant or just the roots was made from the pounded plant and used for intestinal worms. The patient would skip breakfast and drink the tea continuously from early in the morning until dinner. It was also combined with *Spigelia marilandica* (see *gígagéi adsilû’skí* above) and another unidentified plant and used for the same purpose. The tea was drunk three times in a day with no special dietary restrictions. Banks added that an infusion of the plant was given to children to quell excessive hunger and the stem was rubbed between itching toes (1953: 34-35).

*taléta tsunsdi andatsû'skĩ* – 'small, stinging t.' – *Laportea canadensis* (L.) Weddell – wood nettle

*Laportea canadensis* is the only native stinging nettle found in the North Carolina mountains. The European stinging nettle, *Urtica dioica* L. (as *U. gracilis*), was reportedly used by the Cherokee (Banks 1953: 35, Witthoft n.d.: 69), but it is not commonly found near the Cherokee reservation (Radford et al. 1968: 393). Due to this ambiguity, I will include the uses for *Urtica* under this heading. Mooney did not explain the name, but it appears that the qualifier *tsunsdi* (the plural form of *usdíga* or 'small') is used to modify *andatsû'skĩ* ('stinging' or 'smarting') and is in reference to the stinging hairs on all parts of the plant. These hairs would be much smaller than the thorns usually associated with plants that cause mechanical discomfort. Mooney also recorded the synonym *taléta uniyalugiski* (no gloss).

Witthoft found that the fibers of *Urtica* were used to make the bowstrings for children's bows. The plant was harvested immediately after it had been killed by a frost (n.d.: 69). In the same reference, he referred to *L. canadensis* as *talétaiyústĩ* ('like *taléta*'). Banks found that *Urtica* was rubbed on a patient after the stinging hairs had been burned off to relieve an upset stomach. He also found that the whole plant was pounded and made into a warm infusion for intermittent fevers (1953: 35).

*tciskwa dunotcilu'gi* – 'the bird with the protruding chest' – *Perilla frutescens* (L.) Britton – beefsteak plant

Olbrechts did not explain the meaning of this name, but it appears to be due to the appearance of the purple leaves. He also recorded the synonym *anitciskwa* ('they

birds’). He found the roots were used as a love attraction medicine, but he did not elaborate on this. However, Bank described a similar plant, *Phryma leptostachya*, which was used in the same manner and considered efficacious due to the symbolism of the intended union inherent in the pairing of the flowers (see *uktanéga udâ ĭ* below). The introduced *P. frutescens* has similar paired flowers and grows prolifically once its established, so it may have replaced the native *Phryma leptostachya* as a love attraction medicine.

*tiliyústĭ* – ‘like chestnut’ – *Aruncus dioicus* (Walter) Fernald – goat’s-beard

The folk generic *tiliyústĭ* stems from *tilĭ* (‘chestnut’) and *-iyustĭ* (‘like’), due to the resemblance of the inflorescence of *A. dioicus* to that of the chestnut tree. Olbrechts identified *tiliyústĭ* as a synonym for *Cicuta maculata*, but this is an obvious misidentification as not part of the plant has a distinct resemblance to the chestnut tree.

Banks provided the only medicinal uses for *A. dioicus*, finding that a decoction of the pounded root was used for excessive urination. The pounded root was also used as a poultice for bee stings of the face and eyes. An infusion of the roots was used to soak swollen feet and pregnant women drank a hot tea of the roots to prevent blood loss and pain due to childbirth (1953: 60).

*tlûtístĭ unígistĭ* – ‘pheasant food’ – *Mitchella repens* L. – partridge berry

The folk generic *tlûtístĭ unígistĭ* stems from *tlûtístĭ* (‘pheasant’) and *unígistĭ* (‘food’), due to the berries that persist on the plant through the winter. It is also the source of the common name partridge berry.

Mooney found that the whole plant was made into a decoction and given to children who had diarrhea that was caused by spoiled mother's milk. It was drunk for three to four days. Banks found that a tea of the roots was given prophylactically to newborns to prevent the same condition, as well as combined with *Hieracium venosum* for diarrhea and for menstrual pains. He also found the belief that a pregnant cat would abort if it ate the internal organs of a pheasant. A tea of the leaves prevented the cat from aborting (1953: 120).

*tlûtû'tsǐ gatá'ga utana* – 'large panther tail' – no species

The folk species *tlûtû'tsǐ gatá'ga utana* was recorded as the counterpart for *tlûtû'tsǐ gatá'ga tsusdí-ga* ('small panther tail'), a synonym for *Plantago major* (see *nûná'hǐ udetkǐ* above). No further information is available concerning this plant.

*tsáyatihǐ'* – pokeweed – *Phytolacca americana* L.

*Tsáyatihǐ'* appears to be an opaque, common name. Mooney found four variations, two from the Middle dialect (*tsáyatihǐ'* or *tsáyăťăǵǐ'*) and two from Upper dialect (*tláyatǐ'* or *tláyagǐ'*). Olbrechts found it was used medicinally for such conditions as cancer (combined with *Chamaesyce maculata*), swelling of the body, and *ga'yedi* ('pain in the back'). Banks added that the dried roots were powdered and sprinkled on old sores, the fresh roots were pounded and made into a cold infusion to increase urine flow, and the berries were made into wine and drunk for rheumatism (1953: 42).

Pokeweed was considered a healthful spring green by the Cherokee. The young shoots were picked, boiled in a couple of changes of water, and then fried in grease



(Witthoft 1977). The Cherokee believed that the greens were a good blood builder (Banks 1953: 43). The berries, generally considered toxic, were also used to add color to canned fruit and were made into a beverage with sour grapes, sugar, and cornmeal (Perry 1974: 52).

*tsgáû' digágwatăgĩ dalânige* – ‘things to put yellow jackets on, yellow’ – *Solidago* spp. – goldenrod

The name stems from *tsgáû'* (‘yellow jacket’) and *digágwatăgĩ* (‘we put them on it’), from *tsígwată'sku* (‘I am putting it on it’) due the utility of its stem as a skewer to string yellow jackets combs. The pupae of yellow jackets was a favored food of the Cherokee and was made into soup stock or were roasted and eaten out of hand (Witthoft n.d.: 162). After the insects were smoked away from the nest (see *egû'ĩ* *uwásgilĩ usdí* in chapter on ferns), the brood combs were strung on the stem of a plant. One to several species of goldenrod was apparently used for this purpose, the qualifier *dalânige* (‘yellow’) referring to the color of the flowers of goldenrod.

*tsgáû' digágwatăgĩ gigage uyödu'witö* – ‘things to put yellow jackets on, red stem’ – *Symphyotrichum laeve* (L.) A.& D. Löve var. *laeve* – smooth aster

Olbrechts did not explain the various components of the Cherokee name for *S. laevis*, but this appears to be the red stemmed variety of plants used to string the brood combs of hornet’s nest. Olbrechts found that *S. laevis* was used medicinally for *dalâni* (‘yellow’), *ga'yedi* (‘pain in the back’), and for *unak'ano'stisgöi* (‘swollen testicles’).

*tsítsĩ* – no gloss – *Cirsium altissimum* (L.) Sprengel – tall thistle

This is, to my knowledge, the only example of onomatopoeia in the Cherokee ethnobotanical classification system. The down from this thistle was used for the fletching on blowgun darts and the name *tsítsĩ* represents the sound the darts make as they are blown from the gun, as well as being the name for the dart. Mooney and Olbrechts both recorded the synonym *tsítsĩ tsuntanû* ('large thistle') for *C. altissimum*. Mooney recognized *tsítsĩ unigátsalagístĩ* ('sticky or resinous thistle') as being like *C. altissimum*, but having sticky heads. It is not clear if this was another distinct species or an indication of species diversity for *C. altissimum*. Olbrechts mentions *tsítsĩ unigátsalagístĩ*, but does not provide a botanical identification.

Mooney found that the root roots of *tsítsĩ* were used to treat swelling and pain in the abdomen from adding new foods to the diet. This could happen on a seasonal basis and Mooney claimed that the Green Corn Ceremony was an attempt to avoid this condition. The roots of *tsítsĩ* were mixed with those of *Erechtites hieracifolium* and the whole plant of *Impatiens pallida* and made into a tea. It was also used for similar conditions such as *dalâni* ('yellow') and overeating. For overeating, an infusion was made by pouring hot water over the bruised roots and/or leaves and drunk by the patient.

*tsítsĩ tsunsdia* – 'small *tsítsĩ*' – *Cirsium vulgare* (Savi) Tenore – bull thistle

While this is referred to as the 'small' *tsítsĩ*, the bull thistle is a robust field pest naturalized from Europe. Although it can reach a height of 2 meters, it is still smaller by comparison to *C. altissimus*, which can reach up to 3 meters in height (Radford et al.

1968: 1043). This may have been the same species Olbrechts identified as *tsítsĩ* *usdíga*, which he found was used with *C. altissimum* for *dalâni* accompanied by swelling.

*tsitsiyústĩ* – ‘like *tsítsĩ*’ – *Erechtites hieracifolia* (L.) Raf. - fireweed

The folk generic *tsitsiyústĩ* stems from *tsítsĩ* (see above) and the suffix *-iyústĩ* (‘like’), due to the sharply pointed teeth on the lanceolate leaves, resembling those of the thistles. Mooney also recorded it as *atsitsagûniski tsitsiyústĩ usdíga* (no gloss, ‘like thistle, small’), this being labeled as the ‘small’ variety to distinguish it from the ‘large’ variety, *Sonchus asper* (see *sélutsĩ* above). Mooney may have reversed these Cherokee names, as *E. hieracifolia* is generally much larger than *S. asper*. Olbrechts recorded *E. hieracifolia* as *kwandí’so’ti* and *sõna*, but did not provide a gloss for either.

Mooney found that it was used like the thistles to treat swelling and pain in the abdomen from adding new foods to the diet (see *tsítsĩ* above). Olbrechts wrote that the use was secret and the plant is not mentioned in the sacred formulas, but an informant told him that it was used, “to prevent menses from appearing after the birth of a child.” A cold infusion of the outer layer was drunk immediately after the child was delivered and it was believed that this would prevent menstruation until the next birth. It was also used for the condition *akt’oli yutłöya* (‘when their eyes hurt’).

*tská’yayĩ* – ‘there is a worm in it’ – *Coreopsis* spp.

*Tská’yayĩ* stems from *tská’ya* (‘worm’ or ‘small insect’) and *ayĩ* (‘a particle’), implying that the object is on the inside. This was due to insect larvae that burrow into

the stalks. Little else is known about this plant, other than Mooney's note that it was yellow, around 5 feet tall, and grew in river bottoms.

*tsugâ'skĩ útanũ* or *ugâ'skĩ útanũ* – 'rottener, large' – *Prenanthes alba* L. – white lettuce, rattlesnake root

The botanical identification may be questionable here, as *P. alba* is only locally common in the North Carolina mountains (Radford et al. 1968: 1020), but this could be another large species of *Prenanthes*. *Tsugâ'skĩ* is the plural form of *ugâ'skĩ*, stemming from *aktihũ'* ('it is rotting it'). This was because the root was chewed when one had an aching tooth, but this caused the tooth to rot, which would aid in its removal. The bruised leaves were used as a poultice to bring a boil to a head. A warm infusion of the root or leaves was used to relieve piles or children's discomfort from straining with a bad case of diarrhea. The tea was applied to the anus while warm. *Prenanthes alba* could be used alone or with the small variety of *tsugâ'skĩ* (see below).

Olbrechts associated the folk generic *tsugâ'skĩ* with *Taraxicum officinale* Wiggers, the common dandelion. It is not clear if this is a misidentification on his part or if *T. officinale* was considered a type of *tsugâ'skĩ*. However, he did not record it as used for toothaches, which would establish it as a 'rottener', just a remedy for diarrhea.

*tsugâ'skĩ usdíga* or *ugâ'skĩ usdíga* – 'rottener, small' – *Prenanthes* spp.

This is the 'small' small species of the folk genus *tsugâ'skĩ* ('rottener'). It was used in place of or in conjunction with *tsugâ'skĩ útanũ*.

*tsugwalága tigásakwalû´* – ‘round leaves’ – *Senecio aureus* L. – golden ragwort

This name was a composite of *tsugwalága*, the plural form of *ugwalaga* (‘leaf’), and *tigásakwalû´*, the plural form of *gásakwalû´* (‘round’). This was due to the shape of the basal leaves. Mooney was also given a specimen of *Galax aphylla*, and told it was also *tsugwalága tigásakwalû´* (see *nuyagûlĩ´ usdí-ga* above), indicating that some specimens were named on the spot due to outstanding morphological features. Mooney also labeled his voucher specimen of *S. aureus* as *dalâni adsilû´skĩ* (‘yellow flower’), one of several referred to above (see *dalâni ganulûhi gadusí-ehi*). A warm infusion of the crushed, whole plant of *tsugwalága tigásakwalû´* was drunk for four days, all day long, to treat yellow urine. No salt, lye, or hot food was taken during this treatment.

*tsugwû´nstătsă´lĩ* – ‘the leaves taper’ – *Geranium carolinianum* L. – Carolina cranesbill

The name *tsugwû´nstătsă´lĩ*, recorded by Olbrechts, is the same name Mooney recorded for *Quercus rubra* (see chapter on trees). It was not explained in either man’s notes, but in reference to *G. carolinianum* it appears to refer to the deeply cut lobes of the leaves, which taper towards the point where they are palmately attached. Olbrechts also recorded the synonym *aniyústĩ* (‘like strawberry’), presumably due to the resemblance of some part of the plant to wild strawberries. He found it was used to treat the condition *uyoi ani´ayölöçi* (‘when they have inhaled bad odors’).

*tsulāgéta usdíga* – ‘it has fields, small’ – *Malaxis unifolia* Michaux – green adder’s mouth

The folk genus *tsulāgéta* is the plural form of *klagésǎ* (‘field’), but Mooney could find no evident reason for this name because he found the plant in the mountains, not near garden areas. He recorded the name of a large counterpart, *tsulāgéta útanǔ*, but did not provide a botanical name with it. No further information is available concerning the Cherokee relationship to either species of *tsulāgéta*.

*tsunátlû-hǐ* or *unātlûhǐ* – ‘it presses against something’ – no botanical species

*Tsunátlû-hǐ* is the plural form of *unātlûhǐ*. The name was due to the leaves, which grow pressed against the stem. The root of *tsunátlû-hǐ* was boiled with the root of another unidentified plant and used for gonorrhea and diarrhea. For gonorrhea, known to the Cherokee as *kayetǐ* (‘whites’), the sliced roots were boiled into a red tea. This was drunk all day on the first day while fasting, and continued for three more days while skipping breakfast. For diarrhea, the decoction of the roots was drunk for 1 to 2 days, but fasting was not required. The plant was not dried for storage, but could be found in winter by its upright stalks.

*tsunihyû’stǐ* – ‘they are bitter’ – *Gentiana villosa* L. – Sampson’s snakeroot, striped gentian

*Tsunihyû’stǐ* was the plural form of *uhyû’stǐ* (‘bitter’) and is due to the intensely bitter quality inherent in the gentians. Mooney recorded the name *tsunihyû’stǐ tsuntana* (‘bitter, large’), indicating that there was more than one species of *tsunihyû’stǐ*, but he

only identified it to the genus *Gentiana* (Ms. 2235). There are several species of *Gentiana* found in the North Carolina mountains, and there is no reason to believe that the Cherokee only used one of these.

*Gentiana villosa* was the only Cherokee plant mentioned for abortion, yet, while it was recorded in Mooney's notes on Cherokee botany, it was ignored by Olbrechts when he penned *The Swimmer Manuscript*. In fact, he said that abortion was totally unknown among the Cherokee and his informants were horrified at the thought when he explained the concept. This is one example of how the work, though attributed to the works of Mooney, was predominantly based on Olbrechts' field work and little of Mooney's data on the use of plants were included in the finished product. Mahoney (1857: 217) said that this plant, which he recorded as *oo-har-stee* (similar to the singular form *uhyû'stĩ*), was in all Cherokee formulas for "obstructed menstruation", a reference that usually indicates abortion. Mooney also found that a warm decoction of the bruised root, weaker than that used for abortion, was drunk for "crampy colic" and heart palpitations.

*tsuntsâ'y'stĩ usdĩ-ga* – 'it is sour, small' – *Oxalis corniculata* L. – creeping lady's sorrel

Mooney wrote that *tsuntsâ'y'stĩ* ('it is sour') is the same word used to indicate vinegar. The yellow flowered members of the genus *Oxalis* are taxonomically difficult (Smith 1999: 88) so this and the following Cherokee species may represent a recognition of only two kinds, a large and a small folk species of *tsuntsâ'y'stĩ*. Mooney found that a decoction of the bruised plant was used as a mordant to fix dye colors to

thread and fabric. Olbrechts also identified *tsuntsâ'y'stĩ usdĩ-ga* as *O. corniculata* and found that the root was chewed for spoiled saliva.

Banks discussed the genus *Oxalis*, avoiding the separate species all together. He found wide, varied applications for the genus (1953: 75). The leaves of two separate species were chewed as a remedy for conditions of the saliva, one to cure spoiled saliva and another for “disordered saliva”, a condition where the saliva “tastes bitter and dry”. His informant, Will West Long, was clear that the two conditions were not the same. A salve made of sheep grease and a decoction made from the leaves of *Oxalis* was used on sores and the extracted juice from the leaves was used in the early stages of skin cancer. A cold tea of the leaves was drunk as an anti-emetic and a tea the whole plant was given to children for hookworm. The child would drink the tea and was also be bathed in it.

*tsuntsâ'y'stĩ útana* – ‘it is sour, large’ – *Oxalis stricta* L. – yellow wood sorrel

This was the ‘large’ species of *tsuntsâ'y'stĩ*. The name probably also referred to *Oxalis grandis* Small, a similar large species of sorrel. Mooney said it was used as a mordant in the same manner as *tsuntsâ'y'stĩ usdĩ-ga*. Olbrechts did not designate a botanical species, but did record that *tsuntsâ'y'stĩ útana* was used for *unölstay'ti tsuniyotc'eça* (‘when their appetite gets spoiled’).



*tsuntsâ'y'stiyústĩ* – ‘like it is sour’ – *Verbena urticifolia* L. – white vervain

Mooney did not explain the name, but the similarity to the genus *Oxalis* must have to do with a sour flavor, as the plants are morphologically very different. Nothing else was recorded concerning the Cherokee relationship to this plant.

*tsuskwanû'nĩ* – ‘blanket’ – *Heuchera villosa* Michaux – alumroot

The name *tsuskwanû'nĩ* (‘blanket’) refers to the downy appearance of the leaves, but the term literally means ‘stripes’ (stemming from *utû'tanû'nĩ* or ‘stripe’), because Cherokee trade blankets were originally striped. The name was also used for plants that had zonal color differences resembling stripes. As the specific epithet suggests, the undersides of the leaves are covered with soft hairs, suggesting the source of the name. Olbrechts called *Hydrophyllum canadense* L. *tsuskwanû'nĩ*, but this may have been a case of misidentification, as the young leaves resemble those of *H. villosa*. However, Olbrechts did gloss *tsuskwanû'nĩ* as ‘it is striped’, and this may have been due to the variations in color on the leaves of *H. canadense*. Contrary to *Heuchera americana*, the other member of this genus that was known to the Cherokee (see *andánkalagískĩ* above), no medicinal properties were attributed to *H. villosa*.

*tsuskwû'tĩ* – ‘it has heads’ – *Lespedeza capitata* Michaux – round-headed bush clover

The Cherokee name, common name, and specific epithet all point to the distinguishing feature of *L. capitata*, a compact inflorescence that has a head-like quality. The name stems from *uska* (‘head’) or *dakskwutû'* (‘I have a head’). Mooney also recorded it as *uskwû'tĩ*, which is obviously the singular form of *tsukwû'tĩ*, but he

said it also glossed as ‘a pin’. This was due to the use of its stalks as the shaft of blowgun darts and the name was transferred to a dressmaker’s pin. A one-foot long section of the stalk was trimmed and sharpened, making a sturdy, lightweight dart. These were then fletched with the down of the tall thistle, *Cirsium altissimum* or *tsítsĩ* (Witthoft n.d.: 78). He also glossed *uskwû’ťĩ* as ‘it has a taproot’, but provided no explanation for this gloss.

Mooney recorded another species, *Lespedeza hirta* (L.) Hornemann, as also being used for the shafts of blowgun darts. He did not provide a gloss for the Cherokee name, *úskwayehũ’ĩ*, but it appears to be related to *uskwû’ťĩ*.

*tsútlagalakĩ gûtlûťě’hĩ* – ‘spread legs, growing on the hillside’ – *Symphyotrichum concolor* (L.) Nesom – eastern silvery aster

Mooney did not explain the etymology of *tsútlagalakĩ* (‘spread legs’), but *A. concolor* can have several stems emanating from a single rhizome (Radford et al. 1968: 1080). The uses have already been discussed above (see *kâstúta tělugéĩ*). It appears, because there is a specific qualifier, that there are other species of *tsútlagalakĩ*, but no others were recorded.

*tsuswatúna tsunsdi amáyaně’hĩ* – ‘sinews, small, growing in water’ – *Potamogeton spp.* – pondweed

Mooney only mentioned the Cherokee name and genus for this plant, so the name will be explained by analyzing its components. *Tsuswatúna* stems from *watúna* (‘sinew’ or ‘vein’), but in this instance I do not know why it was referred to in this way. As

the common name pondweed suggests, these are aquatic plants and the qualifier *amáyaně́hǐ* ('growing in water') incorporates the habitat into the name. The qualifier *tsunsdi*, the plural form of *usdǐ-ga* ('small'), suggests that there was a large variety, but none was recorded. No medicinal qualities were attributed to this plant.

*tsuwatúniyústǐ* – 'like *tsuswatúna*' – *Trifolium repens* L. – white clover

The name indicates that *tsuwatúniyústǐ* was considered to resemble a member of the folk genus *tsuswatúna*, but Mooney did not clarify which plant. It would most likely have been *Euonymus americanus* (see *tsuswatúna* in the chapter on shrubs), a plant that was sometimes labeled by the folk generic without modifiers. Mooney also recorded the synonym *sǐkw' unígistǐ* ('hog food') or *unega sǐkw' unígistǐ kanéska* ('white grass hog food'), presumably because it was eaten by the Cherokee's pigs (see *sǐkw' unígistǐ* above). This is an introduced species and the Cherokee would say the following about *T. repens*: "*yú'neka tsukû'nawatégǐ*" or "it follows the white man". A cold infusion of the bruised roots was used, after scratching, to bathe a patient suffering from rheumatism.

*tsuyátû'ǐlǐ*– *Iris verna* L. and *Iris cristata* Aiton – dwarf iris

The folk generic *tsuyátû'ǐlǐ* ('it grows in bunches') was in reference to low-growing plants with leaves that grew in tufts. The specific qualifier, *inagě́hǐ*, stemmed from *inagéǐ* ('wild' or 'wilderness') and *ě́hǐ* ('living' or 'dwelling'). Mooney also collected the synonym *uyátǎǐlǐ usdǐ-ga* ('it makes a ridge, small'), because the rhizome makes a ridge of earth (see *uyátǎǐlǐ* below). No medicinal uses were attributed to *tsuyátû'ǐlǐ inagě́hǐ*.

*tsuyátû'í kutlaě'hí* – 'it grows in bunches, growing under the beech tree' – *Viola rotundifolia* Michaux – round-leaved yellow violet

The qualifier for this species of *tsuyátû'í* stems from *kutlû'* ('beech') and *ě'hí* ('living' or 'dwelling'). The implication of this name is that the Cherokee perceived *V. rotundifolia* to grow under beech trees. This species is frequently found in rich wooded coves (Radford et al. 1968: 730), the same habitat that favors the growth of beech trees. It was used to treat fevers, but the modes of preparation and application were not included.

*tsuyátû'í táluwatéstí* – 'it grows in bunches, it grows around the white oak tree' – *Elephantopus carolinianus* Willd.

The qualifier for this species of *tsuyátû'í* stems from *talû'* ('white oak') and *uwatéstí* ('it grows around a tree') because the plant tends to grow under a white oak tree. A warm infusion of the bruised leaves was rubbed on sores caused by insects, as with the condition known as *tckoya* ('insects cause swelling in body'). A warm infusion of the whole plant was also rubbed on the forehead to relieve a headache and the swallowed juices of the chewed leaf were considered a strong remedy for severe coughs.

*tûksûn ulísí* – 'turnip's grandmother' – *Lepidium virginicum* L. – peppergrass

The name stems from *tûksûna* ('turnip') and *ulísí* ('his maternal grandmother') and is used to describe this botanical species that is in the family Brassicaceae, the same family as turnips. Mooney mentioned two varieties, but only named this one.

Olbrechts glossed *ulísĩ* as ‘grandchild’, which is a more accurate gloss according to Alexander (1971: 69), and used that name exclusively for *L. virginicum*. Mooney recorded two folk species of *ulísĩ*, which may have been the two varieties of *tûksûn ulísĩ*, but these will be discussed under the heading *ulísĩ* below. The tender young greens and roots were eaten by the Cherokee and were reputed to smell like turnips (Perry 1974: 37), suggesting the source for the name.

*tûlagw egwa* – no gloss, ‘large’ – *Silphium compositum* Michaux – rosinweed

Mooney did not provide a gloss for the folk genus *tûlagw*, but the specific qualifier *egwa* (‘large’) would indicate that there was at least one other folk species. No further information was available for the Cherokee use of *tûlagw egwa*.

*tûyastĩ* – ‘a boil or carbuncle’ – *Arisaema triphyllum* (L.) Schott – Indian turnip, Jack-in-the-pulpit

Mooney claimed the name was due to the bulbous corm, which is covered with a shriveled “skin” and resembles a boil or carbuncle. But the name may also be associated with its use. The dried root and a small quantity of walnut bark were pounded together and placed in the center of a boil (known as *tústĩ*). Turpentine was gathered from pine trees and used as an ointment in conjunction with the pounded herbs. This was covered with cloth or paper until healed. The ointment was also used to heal a wound without leaving a scar. Banks added that the root was used as a poultice for headaches and the briefly roasted root, rolled into balls the size of a small grape,

were eaten for kidney problems. The patient would eat 2, 3, 4, or 7 of the little balls (1953: 11).

Although this plant is often referred to as a Native American edible plant, Witthoft claimed that the adjective “Indian” in the name Indian turnip was used to mean “counterfeit” or “treacherous”. This was analogous to such terms as “Indian giver” or “Indian summer”, and that the plant was considered poisonous when consumed (n.d.: 36). However, accounts from the early 19<sup>th</sup> century reported that the roots were, “boiled to remove the strong smart taste, and then mashed with the hands, & mixed, or kneaded like dough & baked or fried like other dough (Payne n.d. b: 268).” The corms are high in calcium oxalate, an intensely irritating substance that can be removed through processing. However, drying may be the only effective way to eliminate enough of these crystals to provide a palatable product (Peterson 1977: 156).

*tuyayústĩ* – ‘like a bean’ – *Trifolium pratense* L. – red clover

The folk generic *tuyayústĩ* is a composite of *túya* (‘bean’) and *-iyústĩ* (‘like’) due to the resemblance of the plant to the bean plant. Mooney claimed that, in the case of *T. pratense*, it was due a resemblance to the peanut plant. It is not clear why this introduced species was considered prototypical of the folk genus, but no qualifier was recorded by Mooney and he did not discuss the name. The same name was used for coffee, but was used to describe the bean and not the whole plant. The only medicinal use was recorded by Banks (1953: 74), who found that a tea of the plant was used for fevers.

*tuyayústĩ tsunsdíga* – ‘like a bean, small’ – *Galactia mollis* Michaux - milk pea

The specific qualifier *tsunsdíga* (‘small’) indicates that there are other types of *tuyayústĩ*, and, indeed, there are several that will be discussed below. The botanical species is probably misidentified as *G. mollis* is mostly found on the coastal plain (Radford et al. 1968: 642), but *G. regularis* and *G. volubilis* are both found in the mountains (Smith 1999: 28-29). No medicinal properties were attributed to *tuyayústĩ tsunsdíga*.

*tuyayústĩ útana* – ‘like a bean, large’ – *Clitoria mariana* L. – butterfly pea

The specific qualifier *útana* (‘large’) indicates that this was the largest of the *tuyayústĩ* (‘like a bean’) and the flowers of *C. mariana* are among the largest of the family Fabaceae. The only medicinal application was recorded by Banks (1953: 70), who found that a tea of the roots was held in the mouth for 10 to 20 minutes to cure thrush in adults and infants. This was then followed by a mouthful of fresh tea.

*tuyayústĩ uwáwa’téna* – ‘like a bean, brushy or having leafy branches’ – *Desmodium rotundifolium* D.C. – dollarleaf

It is not clear why the specific qualifier *uwáwa’téna* (‘brushy’ or ‘having leafy branches’) was associated with *D. rotundifolium*, as it has a prostrate habit and is not particularly brushy. He documented the common name as bush trefoil, so this may have been a misidentification. But this is one of several species of *Desmodium* that Mooney recorded and it is the only one that is a type of *tuyayústĩ*, so it may be that its distinct

growth habit and leaf shape were distinguishing features for its classification. No further information was available for this species.

*udátlí* – ‘it is wedded’ – *Phoradendron leucarpum* (Raf.) Reveal & M.C. Johnston – mistletoe

The folk generic *udátlí* (‘it is wedded’) was due to the parasitic nature of *P. leucarpum*. The new plant feeds on the host plant and becomes fused with it. Mooney said, “The same expression is used of a married person.” Banks found that a person with a headache would bathe their head with a tea of mistletoe and that a tea of mistletoe, drunk after four days of vomiting, would cure lovesickness (1953: 36).

*uganástí usdíga* – ‘sweet, small’ – *Medeola virginiana* L. – Indian cucumber

Mooney recorded two other versions of the folk generic *uganástí* (‘sweet’), *uganástû* and the plural form *úniganástí* (‘they are sweet’), which appears to refer to the edibility and pleasant flavor of the members of this category. There were other synonyms for *M. virginiana*, including *uniganástû aní’laskí* (‘sweet having round tubers’) and *uganástí anisgaya tsunsdia unitwatsila* (‘sweet, little man’s saliva’). The first name is due to the small tuberous roots that were once boiled or roasted (Witthoft n.d.: 34), but neither Mooney nor Olbrechts provided an explanation for the second name. Mooney noted that *uniganástû aní’laskí* was used by “bad conjurors” in love conjuring formulas.



*uganástř usdíga agístř* – ‘sweet small food’ – *Streptopus amplexifolius* (L.) DC – twisted stalk

The qualifiers *usdíga* (‘small’) and *agístř* (‘food’) were in reference to the edibility of *S. amplexifolius* and the related species *Streptopus roseus* Michaux. Later references refer exclusively to *S. roseus*, which was also referred to as bean salad. The young shoots were collected, boiled, and fried in grease (Witthoft 1977) or combined with other greens such as *Polygonatum biflorum* and *Ligusticum canadense* (Perry 1974: 48). White (1975) said that the cooked greens were reported to taste like green beans, hence the name bean salad, but he identified the botanical species as *Disporum lanuginosum*, which closely resembles *Streptopus*.

*uganástř usdíga unaskû’li* – ‘sweet, small, ?’ – *Uvularia sessilifolia* L. – wild oats

Mooney did not provide a complete gloss for this folk variety and did not record any uses for it. However, Witthoft (1977) found that the greens of a related species, *Uvularia perfoliata*, were collected in the early spring, partially boiled, and fried in grease, suggesting that this might also have been considered an edible species. Banks found that the roots of *U. sessilifolia* were crushed and made into an infusion for diarrhea (1953: 19).

*uganástř útana* – ‘sweet, large’ – *Polygonatum biflorum* (Walter) Ell. – Solomon’s seal

This was the largest of the *uganástř* and the most important food from this folk genus. The young shoots were eaten as greens while the root was pounded in a corn mortar and added to bread, possibly as a famine food (Witthoft n.d.: 28, Perry 1974: 47-

48, Banks 1953: 16). The roasted root was pounded and applied to boil-like swellings (Mooney 1891: 327) or made into a tea and drunk for stomach problems (Banks 1953: 16). The root of *P. biflorum* and some soil, procured from the front of a ground hog's den, were boiled and the decoction was drunk as a medium for emesis to clear "spoiled saliva" due to dreams of the dead. The patient would vomit until all the liquid was expelled, repeating the action for four straight mornings (Banks 1953: 16). Mooney also found that it was called *utístűgĩ* or *utístkĩ* ('hanging head'), most likely due to the fruits that hang below the arching stalk. Olbrechts recorded its use for a purple form of the cancerous condition known as *ada'yeski* ('eating itself').

*ugatasigĩskĩ* – 'pus oozes out' – *Chamaesyce maculata* (L.) Small

The folk generic *ugatasigĩskĩ* ('pus oozes out') was due to the profuse milky latex that was prevalent throughout these plants. The name stems from *úga* ('pus'), which was closely related to *úgamû* ('soup'), and *atasgĩskĩ* ('it oozes out habitually'), from *átasgiû'* ('it oozes out'). Mooney and Olbrechts both recorded *C. maculata* as *ugatasigĩskĩ*, the lack of a qualifier suggesting that it was the prototypical representative for the folk genus. Mooney also collected the synonyms *ugatasigĩskĩ tlâgesě'hĩ* ('pus oozes out, growing in old fields') and *ugatasigĩskĩ tsuwastûna* ('pus oozes out, sinews'). A related species, *Euphorbia corollata*, which was also a type of *ugatasigĩskĩ*, has been discussed above (see *katû'latû usdí-ga*).

Mooney claimed that this was an "important medicine", and it was one of twenty that he highlighted in his early work (1891: 325). The juicy latex was rubbed on eruptions on the head of children and the finely beaten root was used as a purgative

after a day of fasting. The juice was also rubbed to relieve sore nipples and was combined with other plants as a cancer remedy. Mooney also mentioned its use for gonorrhea, but his description was more elaborate in his notes. Mooney said the condition, was typified by white urine and was known as *uhyetĩ*. A pint of the tea of the bruised root was drunk early in the morning and again before the evening meal. This was repeated two or three time, which was usually sufficient to elicit a cure. The same treatment was used for both sexes. Olbrechts also found that it was used for the condition *ga'yedi* ('pain in the back'), which may have been a similar urinary tract infection.

*ugatasigískĩ dalânige adsilû'skĩ* – 'pus oozes out, yellow flowered' – *Hieracium paniculatum* L. – panicked hawkweed

Mooney only provided the Cherokee name and botanical species, but the qualifier *dalânige adsilû'skĩ* ('yellow-flowered') is true to botanical descriptions of the *H. paniculatum* (Radford et al. 1968: 1027) and many species from the family Asteraceae are known to contain milky latex.

*ugatasigískĩ 'útana gútlûtě'hĩ* – 'pus oozes out, large, dwelling on the hillside' – *Amsonia tabernaemontana* Walter – blue star

Olbrechts only recorded the Cherokee and botanical names for this species, but it is in the family Apocynaceae, many members of which are known to exhibit milky latex when damaged.

*ugukúskǎ́* - 'owl's head' – *Pedicularis canadensis* L. – lousewort

The name stemmed from *ugukú* ('the hooting owl') and *úska* ('head'), due to the appearance of the inflorescence. Mooney recorded two folk species, *ugukúskǎ́ dalânige adsilû'skǐ* ('owl's head, yellow-flowered') and *ugukúskǎ́ tělugéǐ adsilû'skǐ* ('owl's head, purple-flowered'), but these variants represent one botanical species (Radford et al. 1968: 962).

Mooney found that the roots were used in conjunction with the whole plant of *Scutellaria lateriflora* and the roots of an unidentified plant called *watulisí'* ('honey' or 'bee') to reduce the fever and spasms of a woman who had recently delivered a baby. The tea was drunk throughout the day "for some time". *Pedicularis canadensis* was found on mountainsides and recognized in winter by a few persistent green leaves. Olbrechts added that a decoction of the roots was used on sores. Banks (1953: 117) found that a decoction of the roots was used for stomach problems, an infusion of the roots relieved flux, and it was an ingredient in a mixture used for coughs.

*ugwau stalyato* – 'the leaves have split themselves' – *Ambrosia artemisifolia* L. – ragweed

Olbrechts did not explain the etymology for this name, but his gloss of *ugwau* appears to be incorrect, as it is the singular form. However, the Cherokee name is quite descriptive of the deeply dissected leaves of *A. artemisifolia*. He provided the only uses attributed to this species, finding it used for *an't'asgiski tskoya* ('insects are breaking out') and the half-roasted leaves were rubbed on cases of poison ivy. He also said it may have been used for snakebites, but he did not know which parts of the plant were

used or how it was prepared and applied. Banks recorded some general uses for the genus *Ambrosia*, but these have already been discussed (see *iyuga egwa* above).

*uhyû'stĩ* – 'bitter' – *Polygonum hydropiper* L. - smartweed

The folk generic *uhyû'stĩ* ('bitter') was mentioned above in the plural form *tsunihyû'stĩ* ('they are bitter'), but this appears to be a whole different category of plants. The inherent organoleptic quality of the genus *Polygonum* is considered to be more acrid/peppery than bitter (Peterson 1977:116), hence the common name smartweed. This may indicate that the Cherokee concept of *uhyû'stĩ* had a broader range of quality than our current concepts of bitter. Mooney found that the plant was pounded and placed in pools to poison fish, but Banks said it was no longer used as of the early 1950s. However, he did find that the plant was crushed or cooked up and used as a liniment for bruises or painful joints and the peppery/acrid nature of the plant was employed to prevent thumb sucking by children (1953: 39).

*uhyû'stĩ unéga adsilû'skĩ* – 'white-flowered bitter' – *Polygonum pensylvanicum* L. – pink smartweed

It is not clear why this was considered the 'white-flowered' species of *uhyû'stĩ*. As the common name suggests, the flowers are predominantly pink. However, there are rare white individuals (Radford et al. 1968: 420) and this may have been an on-the-spot naming of *P. pensylvanicum*. Little else is known about the Cherokee relationship with this species.

*u'iyat'atli* – no gloss – *Erigeron pulchellus* Michaux – robin's plantain

Olbrechts did not provide a gloss for *u'iyat'atli*; however, he did record two synonyms, *uwatéstĩ* ('it grows around a tree') and *tsuyátû'ĩ táluwatéstĩ* ('it grows in bunches, it grows around the white oak tree'). These were the same names Mooney recorded for *Elephantopus carolinianus* (see *tsuyátû'ĩ táluwatéstĩ* above). This could indicate misidentification on the part of one of these men or a case of underdifferentiation by the Cherokee, but without voucher specimens from both men we can not know for sure. To add to the uncertainty, Olbrechts recorded that leaves and roots of *E. pulchellus* were made into an infusion and sprinkled on swollen insect bites, one of the primary uses that Mooney recorded for *Elephantopus carolinianus*.

*uktanéga udâ'ĩ* – 'it has bran hanging to it' – *Phryma leptostachya* L. – lop-seed

The Cherokee folk generic *uktanéga udâ'ĩ* stems from *uktanéga* ('bran') and *udâ'ĩ* ('it has something hanging from it'), a form of *ugwadâû'* ('I have something long hanging from me'). It and the common name lop-seed are both descriptive of the flowers, which open in opposing pairs and droop on the stem soon after opening. Banks (1953: 119) found that the roots were used in a formula to attract the object of one's affections, the paired flowers and seeds being symbolic of the intended union. However, the Cherokee name that he recorded, *tciskwa dunoṭcilu'gi* ('the bird with the protruding chest'), is the same name that Olbrechts recorded for *Perilla frutescens* (see above).

ûlě' ugĩłtĩ' – 'it trees the locust' – *Porteranthus trifolius* (L.) Britt. – Bowman's root, Indian physic

The generic name stems from *ûlě'* ('locust') and *ugĩłtĩ'* ('it trees it'), a form of *akw'gĩłtĩ'* ('I have it treed'). It was due to the perception that the locust preferred to emerge from the ground under the shade of *P. trifolius*. The earliest reference to this plant may have come from Palisot de Beauvois in the late 18<sup>th</sup> century. He found that the plant was used as a purgative and emetic to augment the treatment for snakebites (Anderson 1984). Mooney found mixed responses for the application of this plant. Two informants said that a decoction of the root was used for bowel complaints accompanied by fever and the vomiting of bile. Another said it was too toxic to take internally but the pounded root was used as a poultice on swellings (1891: 326). Olbrechts found that *P. trifolius* was one of several plants used in a formula for scratching with a snake's tooth. This was done before ballgames and in cases of rheumatism or listlessness. Along with the roots of *P. trifolius*, the mixture could include the leaves of *Leucothoe axillaris*, *Rhododendron maximum*, or *Kalmia latifolia*, and the roots of *Veratrum viride*. This was considered very potent, irritating medicine and patients could rarely stand a series of four applications (Mooney and Olbrechts 1932: 203-204).

Will West Long claimed that this was considered a female contraceptive, an infusion of the roots causing permanent sterility. A cold infusion of the root or the juice of the chewed root was used to alleviate insect bites and bee stings, while the pounded root was placed on an aching tooth (Banks 1953: 62). A strong infusion or decoction of the whole plant was once used as an emetic (Witthoft 1947).

*ulidástĩ usdí-ga* – ‘it deceives, small’ – *Actaea pachypoda* Ell. – doll’s eyes, white baneberry

The folk generic *ulidástĩ* (‘it deceives’) stems from *tsílidastû* (‘I cause him to make a mistake’ or ‘I am deceiving him’). It was so called because the young plant resembles and was confused with ginseng and angelica, both of which were highly esteemed and sought after by the Cherokee. Olbrechts was told that the foliage turns yellow in the fall, just like that of ginseng, distracting the ginseng hunter. Mooney also collected two possible synonyms, *ulidástĩ unega* (‘it deceives, white’), due to the white berries, and *ulidástĩ atû’laě’hĩ* (‘it deceives, growing in the low plain’), stemming from *atû’la* (‘low plain’) and *ě’hĩ* (‘dwelling’ or ‘living’).

Olbrechts found that *A. pachypoda* was used alone for *dida’nikwutisgi* (‘rheumatism in the kneecaps’) and as part of a formula for *unawasti* (‘he gets cold’ or ‘that which chills one’). Banks added that a decoction of the roots was used for the condition called *tckoya* (‘insects cause swelling in body’) and that the plant was thought to destroy the teeth of young people (1953: 43). One of Witthoft’s informants elaborated on this latter belief, stating that merely handling the leaves or root would transfer some sap onto the hands of the person. This would eventually get into their food and “cause the teeth to rot and crumble away in a matter of three to four years (n.d. 61).”

*ulidástĩ útana* – ‘it deceives, large’ – *Cimicifuga racemosa* (L.) Nutt. – black cohosh

This was the ‘large’ folk species of *ulidástĩ*, reaching a height of as much as 2.5 meters tall. Mooney found that the pounded roots were made into a warm decoction with those of *Cacalia atriplicifolia*, *Ceanothus americana*, and *Polymnia uvedalia*, and



drunk for fevers and Olbrechts found that it was part of the formula with *Actaea pachypoda* for *unawasti* ('he gets cold' or 'that which chills one'). The roots may have been soaked in alcohol and the extract used for rheumatism (Witthoft 1947), but this form of herbal preparation was not common with the Cherokee.

*ulísĭ usdí-ga* – 'grandchild, small' – *Lepidium virginicum* L. – peppergrass

The folk generic is a shortened version of *tûksûn ulísĭ* ('turnip's grandmother' or 'turnip's grandchild') and highlights the perceived relationship of edible members of the family Brassicaceae to the turnip. *Lepidium virginicum* was discussed above under that heading.

*ulísĭ útana* – 'grandchild, large' – *Sisymbrium officinale* (L.) Scopoli – hedge mustard

This introduced species became the 'large' folk species of *ulísĭ*. A common weed in disturbed areas, it was used as an edible green (Banks 1953: 55).

*ulísĭ útana dalânige adsilû'skĭ* – 'grandchild, large, yellow-flowered' – *Barbarea verna* (Miller) Ascherson – early winter cress, creasy greens and *Barbarea vulgaris* R. Brown – winter cress

This varietal qualifier *dalânige adsilû'skĭ* was due to the yellow flowers that appeared in warm weather. Both of these introduced species were collected and eaten as the earliest green vegetables of the season in the Cherokee diet (Witthoft 1977). The leaves, either eaten alone or mixed with other early spring greens, were parboiled and fried in grease (Perry 1974: 36) or eaten raw with some salt (Witthoft n.d.: 26).

Secondary sources suggest that the Cherokee considered creasy greens to be a blood cleanser (Duke 1992: 46, Moerman 1998: 121), but the primary source of this information, Hamel and Chiltoskey's *Cherokee Plants, Their Uses – A 400 Year History* (1975), is not referenced and the original source is unclear.

*unástetsĩ gûnahíta* – ‘long root’ – *Solidago caesia* L. – blue-stem

The name stems from *unástetsĩ* (‘root’) and *gûnahíta* (‘long’), which apparently referred to the extensive roots system of *S. caesia*. The botanical species is in question for this folk genus. Olbrechts identified it as *S. caesia*, but Mooney had two potential botanical names for *unástetsĩ gûnahíta*. One specimen had no flowers and he tentatively identified it as *S. caesia* (Ms. 2235). But a plant label that was associated with the folk generic *unástetsĩ gûnahíta* was identified as *Aster infirmus* Michaux, and the note on the label indicated that it was a common white-flowered species (Ms. 2497). This would differentiate it from the yellow-flowered *S. caesia*.

The medicinal application does not help clarify the botanical uncertainty. Olbrechts found that the chewed root of *unástetsĩ gûnahíta* was blown up the nostrils of a hunting dog that had become lazy from excessive hunting or eating food prepared by a menstruating woman. The treatment caused excess “bad slime” to be expelled from the dog’s nose. A similar application, removing excess mucus from humans, was ascribed to *Aster infirmus* (see *na’tsiyústĩ gatusě’hĩ* in intermediate categories), but no species of *Solidago* were reported used for such conditions. It was also combined with *Monarda clinopodia* for *gigö yandik’öça* (‘urinating blood’).

*unastétstiyă* – ‘very small root’ – *Aristolochia serpentaria* L. – Virginia snakeroot

The name was a composite of *unástetsĩ* (‘root’) and *usdíyă*, the intensive form of *usdí* or *usdíga* (‘small’), and was due to the diminutive root of *A. serpentaria*. Mooney found that the Cherokee, as the common name might suggest, used the root as a remedy for snakebites. A decoction of the root was blown on the patient and the juice created from chewing the root was rubbed on the site of the bite. The decoction was also drunk for fevers and associated headaches, as well as for coughs. The bruised root was placed against an aching tooth or placed in the hollow area of a decayed tooth, as well as rubbed on a nose that had been irritated by constant wiping during a cold (Mooney 1891 324).

Olbrechts claimed that *A. serpentaria* was an alternative medicine to treat dreams of snakebites. When the fern *Botrychium virginianum* was not available, the medicine man would chew a piece of the root of *A. serpentaria* and blows it on the place that had been bitten in the dream (Mooney and Olbrechts 1932: 177). He also found that it was used for *aninedzi gotiski* (‘their breast swells’), the scrofulous condition *duletsi* (‘kernels’), *aninedzi digöwalosöçi yune’istaneça* (‘to cure anyone with a piercing pain in their breast’), and *tsidunitsileça* (‘when they have itching’). This last condition was for itchy genitals due to urinating on the hot ashes remaining from a fire, and *A. serpentaria* was mentioned as the primary remedy for this condition (Mooney and Olbrechts 1932: 286).

Banks added that a decoction of the roots was used for stomachaches, fevers, headaches, and heart trouble. The roots could also be made into a cold infusion or simply chewed and the juice swallowed for colds. In case of an accident, like getting cut

with an axe, a cold infusion was used to alleviate pain and prevent the patient from fainting (1953: 37-38).

*unatlâ'stĩ* – no gloss – *Amianthium muscaetoxicum* (Walter) Gray – fly poison, crow poison

Neither Mooney nor Olbrechts provided a gloss for this folk genus; however, Olbrechts did record the synonym *dutsasti*, which he glossed as ‘they are mixed’. Mooney recorded that there was a large (*útana*) and small (*usdí-ga*) folk species of *unatlâ'stĩ*, but did not match either with a botanical species. Olbrechts found that it was used in a formula with *Veratrum viride*, *Aralia spinosa*, and an unidentified species for “they are cutting it up”, a form of rheumatism. Witthoft (1947) reported that *A. muscaetoxicum* was once used as a poison for crows (hence the common name “crow poison”) and as, “a sure, but severe cure for the itch (scabies).”

*unatlû'taliyústĩ* – ‘like they are upright against or supported by something’ – *Thermopsis villosa* (Walter) Fernald and Schubert – hairy bush pea

The name stems from *unatlû'talĩ* (‘they are upright against or supported by something’), a synonym for *Pisum sativum* L. or the garden pea (see *túya usdíga* in Part 2), and *-iyústĩ* (‘like’). This would indicate the Cherokee perception that *T. villosa* was similar to but a distinctively different kind of plant than *P. sativum*. No further information is available concerning the Cherokee relationship to this plant.

*únatlûnwéhitu* – ‘having spirals’ – *Spiranthes cernua* (L.) Richard – nodding ladies’ tresses

Mooney placed a question mark next to the botanical species in his notes and did not identify the species in his published materials (1900: 427), but from the Cherokee name *únatlûnwéhitu* (‘having spirals’), it is likely that he was correct about the generic designation. One of the identifying characteristics of the genus *Spiranthes* is the spiral arrangement of the inflorescence (Radford et al. 1968: 346). The root was used, “in conjurations designed to predispose strangers in favor of the subject.” The medicine man would chew a small piece of the root and blow or rub the juice on the body and arm of one who was preparing to travel and persuade others of the worthiness of his cause. This was done in hopes that all he met would find his bearing and appearance appealing, and would be inclined to support his goals (1900: 427). Banks mentions the use of *Spiranthes lucida* (H. H. Eaton) Ames, but this species is not known to the Southern Appalachian region and it was most likely *S. cernua*. He found that a warm tea was used to wash infants and insure their healthy growth and that it was used with *Liparis loeselii* (L.) Richard for painful urination (1953: 23).

*unâyû’li* – ‘they (berries) are attached to leaf stalk’ – *Triosteum perfoliatum* L. – horse gentian

The name *unâyû’li* (‘they (berries) are attached to leaf stalk’) was due to the sessile berries that grew in the axils of the leaves. Mooney also collected the synonym *tsusalět* (see *gátatsú’lĩ gatusě’hĩ* in Part 1), which had to do with the perfoliate leaves.

Olbrechts, who recorded the common name as wild coffee, found that a tea was made from the roots and applied to swollen insect bites.

*unedâita uniskwalatisgu* – no gloss – *Spiranthes gracilis* (Bigelow) Beck – slender ladies' tresses

Mooney only provided the Cherokee name and botanical species for this plant (Ms. 2235). No further information is available concerning the Cherokee relationship to this plant.

*uněʼstală unûʼsûtĩ* – 'it has ice on its leg' – *Oligoneuron rigidum* (L.) Small var. *rigidum* – hard-leaved goldenrod

The name stems from *uněʼstală* ('ice') and *unûʼsûtĩ* ('it has it on its leg') because frost tends to gather on the stalk in late fall. The synonym *ukanáwĩ* ('tallow') was related to this because the ice often looked white like tallow. A tea made from the roots was drunk for four days to treat listlessness. This was followed by a tea of *Sambucus canadensis*, which acted as an emetic.

*úninayûʼgĩ* – 'rattles' or 'they make noise' – *Ludwigia alternifolia* L. – seedbox

The name *úninayûʼgĩ* was due to the rattling of the dried seed capsules and was also the same name used for ceremonial rattles. It was also a synonym for *Dioscorea villosa* (see *anisgína-(ts)unâʼnăŝûʼta* above) and for *Mimulus ringens* (see *gátatsúʼĩ aniskutataski (uwetige adsilûʼskĩ)* in Part 1). No medicinal qualities were attributed to *L. alternifolia*.

*uniskă'-hĩ* – ‘it has heads’ – *Echium vulgare* L. – viper’s bugloss

The name stems from *uníska*, the plural form of *úska* (‘head’), due to the numerous white seeds. These seeds played a vital role in Cherokee diagnostic practices, as they were the precursors to the beads used by medicine men to divine the outcome of a therapy (Mooney 1900: 426). Mooney found that a tea of the roots was considered an effective remedy for gonorrhea. It was usually drunk for four days, but could elicit a cure in one day (Ms. 1894). Olbrechts found that it was used for a related condition, *unegö tsandiköça* (‘if they water out white’), as well as for *dunikstisgöi* (‘when they vomit’).

*uniskă'-hĩ tsundí-ga* – ‘it has heads, small’ – *Asclepias verticillata* L. – whorled milkweed

Mooney was unsure why this was a type of *uniskă'-hĩ*, but it was designated the ‘small’ folk species to distinguish it from *Asclepias tuberosa* (see *gugű'* above), which sometimes went by the synonym *uniskă'-hĩ tsúntana* (‘it has heads, large’). No medicinal uses were attributed to *A. verticillata*.

*uniskwetú'gĩ tsundí-ga* – ‘they wear a hat or they have their heads covered, small’ – *Podophyllum peltatum* L. – may-apple

The folk generic *uniskwetú'gĩ* (‘they wear a hat’) is a form of *ágwûlskwetgû'* (‘I am wearing a hat’), and is due to the umbrella-like appearance of the leaves. Both Mooney and Olbrechts recorded its use for chronic *dalâni*, but Mooney gave the best description for its use. The roots of *P. peltatum* were combined with the bark of black walnut and that of butternut and made into a strong decoction. This was boiled down

four times until it became a thick syrup. About a half a teacup full was drunk one time as a powerful cathartic. The patient would recover at once unless a menstruating woman entered the room, then they would swell up and die. Olbrechts also found it was useful for *unisi'kwaskö* ('when they are coughing') and a condition related to *dalâni*, *uniskwotlii tsunittöyö yuwot'isö andanawoski* ('when they have a stomach-ache with swollen and throbbing stomach').

Banks found that the dried powdered roots or a tea of the roots were used as a laxative and the roots were soaked in whiskey and taken for rheumatism. The pounded roots were also soaked in water and corn seed was soaked in the resulting tea to keep pests from eating the freshly planted corn. Some informants warned that the only the portion of the root between the nodes was used, the nodes themselves being too poisonous (1953: 48). In fact, Witthoft found that the nodes were used specifically to poison crows and dogs (n.d.: 39). He also added that a drop of the juice of root was placed in the ear to cure deafness (Witthoft 1947). The fruits of mayapple are considered edible, but Witthoft found that the more conservative Cherokees would avoid the plant completely, believing that any vine plants in their garden would wither and die if they tended them after eating the fruit (n.d.: 38).

*uniskwetú'gĩ tsúntana* – “they wear a hat or they have their heads covered, large” –  
*Diphylleia cymosa* Michaux – umbrella-leaf

This was the ‘large’ species of *uniskwetú'gĩ*, and the leaves are large, some up to a half a meter wide (Radford et al. 1968: 471). No medicinal uses for *D. cymosa* were attributed to the Cherokee.



*unû'guhístĩ* – ‘they leak’ – *Physalis angulata* L. – ground cherry

The folk generic *unû'guhístĩ* stems from *gûgústû* (‘it is leaking’), a term used to describe meal, wheat, or a liquid. This most likely referred to the seeds that would “leak” from the ripe fruit. Mooney also recorded the synonym *anahâ'skĩ* (‘they drop off’), stemming from *gahâ'skû* (‘it is dropping off’, referring to round objects). This was because the fruit dropped off when it was ripe. The berries of this and other species of *Physalis* were eaten fresh when they turned yellow (Witthoft n.d.: 39, Perry 1974: 55).

*unû'guhístĩ unikwtayúwani* – ‘they leak, fuzzy or downy’ – *Physalis pubescens* L. or *Physalis heterophylla* Nees. – ground cherry

Both botanical species here have varying degrees of pubescence, hence the specific qualifier *unikwtayúwani* (‘fuzzy’ or ‘downy’). Mooney also collected the synonyms *unû'guhístĩ digísti* (Ms. 2497) and *unû'guhístĩ anitawisgáge* (Ms. 1894) for *P. pubescens*, but did not provide a gloss for either specific qualifier. He claimed the edible fruit had yellow seeds and was sweet when ripe.

*unû'guhístiyustĩ* – ‘like they leak’ – *Nicandra physalodes* (L.) Persoon – apple of Peru; *Solanum dulcamara* L. – bittersweet nightshade; *Solanum carolinense* L. – horse nettle

The folk genus *unû'guhístiyustĩ* was a composite of *unû'guhístĩ* (‘they leak’) and -*iyústĩ* (‘like’), referring to the similarity of the fruit to the ground cherry. This is one of the few instances of underdifferentiation apparent in the Cherokee ethnobotanical system. *Solanum carolinense* has already been discussed above (see *didáwahistĩskĩ*). No medicinal applications were attributed to *S. dulcamara* or *N. physalodes*. However,

Witthoft did mention that the Cherokee were careful to point out the differences between these two toxic species and the edible members of *Physalis*, especially to novices and children (n.d.: 40). He also found that the leaves of *N. physalodes* were crushed in water with a sweet, sticky substance and left out as a poisonous trap to control flies (n.d.: 62).

*uskwayeluyi* – no gloss – *Triodanis perfoliata* (L.) Nieuwl. var. *perfoliata* – Venus’  
looking-glass

Olbrechts provided no gloss for this Cherokee folk generic, but he did find that it was used to treat *unitseno’ise’oi* (‘when a person has stomach trouble’).

*ústǎstǐ usdíga* – ‘he spins, small’ – *Chimaphila maculata* (L.) Pursh – spotted  
wintergreen, pipsissewa

The name stems from the resemblance of the leaves to the American holly, *Ilex opaca*, known to the Cherokee as *ústǎstǐ* (‘he spins’). But its diminutive size makes it the ‘small’ kind. Banks provided the majority of the uses for *C. maculata*, finding that a root tea was used for colds, flu, and fever, the beaten roots were used as a poultice for headaches and other pain, and it was made into a tea for menstrual pain (1953: 97). Mooney may have been referring to *C. maculata* when he noted the use of a plant he called *utastí’ ustí*, which he described as an evergreen that grew in the mountains. The pounded leaves were wrapped in a cloth and soaked in water. The water was then used to bathe the eyes of a patient whose eyes were sore and they could not look at the sun.

*û'tsatĩ uskwâ'ĩl' usdí-ga* – 'fish bladder, small' – no botanical species

*û'tsatĩ uskwâ'ĩl' útana* – 'fish bladder, large' – no botanical species

The folk generic stems from *û'tsatĩ* ('fish') and *uskwâ'ĩl'* ('bladder' or 'stomach') due to the resemblance of the seed capsule to a fish bladder. Mooney recorded two folk species, but was not able to identify the botanical species associated with the names. He did record the name *û'tsatĩ uskwâ'liyústĩ* ('like fish bladder') for *Sabatia angularis* (see *skáy'tĩ* above), suggesting that the capsules of the two species of *û'tsatĩ uskwâ'ĩl'* resembled those of *S. angularis*. No medicinal qualities were associated with either species.

*û'tsatĩ uwadsĩ'ska usdí-ga* – 'small fish scales' – *Thalictrum thalictroides* (L.) Boivin – windflower, rue anemone

The folk generic stems from *û'tsatĩ* ('fish') and *uwadsĩ'ska* ('scales'), referring to the resemblance of the leaves to fish scales. *Thalictrum thalictroides* was considered the 'small' species of *û'tsatĩ uwadsĩ'ska*. A decoction of the bruised roots of *T. thalictroides*, *Aquilegia canadensis*, and *Clematis virginiana* was drunk to relieve dysentery.

*û'tsatĩ uwadsĩ'ska útana* – 'large fish scales' – *Aquilegia canadensis* L. – columbine

*Aquilegia canadensis* was considered the 'large' species of *û'tsatĩ uwadsĩ'ska* and the leaflets are generally larger than those of *Thalictrum thalictroides*. Mooney also recorded a shortened version for the generic name, *uwasdĩ'skălănû'ĩ* ('scale', implying one attached to the body of a fish). Its use for diarrhea was mentioned in the previous

entry, but Mooney elaborated on this in other parts of his notes (Ms. 1894). The root was boiled and the decoction drunk every hour to combat diarrhea with associated vomiting. Mooney also noted that it was standard practice to drink a medicinal tea once a day or at one hour intervals.

*û'tsatĩ uwadsĩ'ska unikwtayúwani* – 'fish scales, downy' – *Hieracium gronovii* L. – queendevil

The specific qualifier *unikwtayúwani* ('downy') was due to the pubescent leaves. However, it is not clear why this was a type of *û'tsatĩ uwadsĩ'ska*, as the leaves of *Hieracium gronovii* do not resemble either of the previous types of *û'tsatĩ uwadsĩ'ska*. Olbrechts found that this plant was once used for medicine, but the use was forgotten at the time of his research.

*û'tsatĩ uwadsĩ'skiyústĩ* – 'like fish scales' – *Clematis virginiana* L. – virgin's bower

Mooney recorded *C. virginiana* as the species known to be 'like' the two previous species, but it is not clear why, as the trifoliate leaves are distinctly different from those of the two previous species. It will be discussed in the chapter on vines (see *igagû'tĩ*) and is only mentioned here for continuity with *Thalictrum thalictroides* and *Aquilegia canadensis*.

*uweskâ'yĩ* – 'curving' (like a rooster's tail) – no botanical species

The name is due to the white flowers that curve over like the tail of a rooster. Unfortunately, Mooney often conflated the meaning of the terms "flower" and

“inflorescence”, so it is not clear what is curving. Will West Long noted that this was a fall/winter plant and the leaves remained green in winter. Mooney questioningly suggested that this might be “star grass”, a common name for *Aletris farinosa* L. But it could also be *Chamaelirium luteum* (L.) Willd., which was known as blazing star or devil’s bit and has an inflorescence that tends to droop and could be said to resemble a rooster’s tail. Both are noted medicinal plants from the North Carolina mountains and the basal rosettes remain green in winter, but neither is mentioned in the literature concerning Cherokee medicine. No medicinal qualities were attributed to *uweskâ’yí*.

*uyátălû gûnatlái* – ‘tame or cultivated it makes a ridge’ – *Acorus calamus* L. – sweet flag

The generic *uyátălû* (‘it makes a ridge’) was due to the habit of the rhizome of *A. calamus* to make a ridge in the earth. The specific qualifier *gûnathái* (‘tame’ or ‘cultivated’) would suggest that this plant was transplanted and treated with care. Mooney and Olbrechts both recorded this plant as simply *uyátălí*, but Olbrechts added several other synonyms, such as *uyátălí egwa* (‘large *u.*’), *uyátălí usdí-ga* (‘small *u.*’), and *uyátălí usdí-ga amayuthehi* (‘small *u.*, water edge growing’). One of Mooney’s informants called it *uyátălí inagě’hí* (‘it makes a ridge, growing in the wilderness’).

Mooney found that an infusion made by pouring hot water on the bruised root was rubbed on areas of the body affected by rheumatism, the root being found in the river bottoms and dried for future use (Ms. 1894). The root was also chewed at dances to keep the singers from getting hoarse (Ms. 3462). Olbrechts found it was used for *dalânige tsandik’öça* (‘yellow urine’), *unegö tsandiköça* (‘if they water out white’), *unisi’kwaskö* (‘when they are coughing’), and for fever accompanied by thirst. A hot

infusion of the root or the chewed root was used as a cold remedy and the chewed root was also used for headaches and sore throats (Banks 1953: 11).

*uyátǎǎlǐ usdǐ-ga* – ‘it makes a ridge, small’ – *Iris cristata* Aiton – dwarf crested iris

*uyátǎǎlǐ usdǐ-ga gatusě ‘hǐ* – ‘it makes a ridge, small’, mountain dwelling’ – *Iris verna* L. – dwarf iris

These were considered the ‘small’ species of *uyátǎǎlǐ*, and, as the common names indicates, they are small species of *Iris*. Both species were discussed above under the heading *tsuyátû’lǐ inagě ‘hǐ*. This creates a problem with the glosses for *uyátǎǎlǐ* and *tsuyátû’lǐ*. The latter is obviously a plural form of the former, but Mooney glossed *uyátǎǎlǐ* as ‘it makes a ridge’ and *tsuyátû’lǐ* as ‘it grows in bunches’. Perhaps the Cherokee terms have a flexible meaning that encompasses both concepts or there are subtle variations in the terms that change the meaning, but Mooney did not clarify this point.

*uyátǎǎlǐ útana* – ‘it makes a ridge, large’ – *Iris virginica* L. – blue flag

This was considered the ‘large’ species of *uyátǎǎlǐ* and it is the tallest species of *Iris* in the Southern Appalachian region (Smith 1999: 19). No medicinal qualities were attributed to *I. virginica*.

*uyátǎǎlǐyústǐ* – ‘like it makes a ridge’ – no botanical species

Mooney noted that there was a plant that was known as being ‘like’ *uyátǎǎlǐ*, but he was unable to identify it. No further information is available concerning this plant.

*uyû'gĩĩ* – senega snakeroot – *Polygala senega* L.

The folk generic *uyû'gĩĩ* appears to be an opaque, proper name for Seneca snakeroot. Adair reported the first indication of its use by the Cherokee in 1775:

I do not remember to have seen or heard of an Indian dying by the bite of a snake, when out at war, or a hunting; although they are then often bitten by the most dangerous of snakes – every one carries in his shot-pouch, a piece of the best snake-root, such as the Seneeka, or fern-snake-root, – or the wild horehound, wild plantain, St. Andrew's cross, and a variety of other herbs and roots, which are plenty, and well known to those who range the American woods, and are exposed to such dangers, and will effect a thorough and speedy cure if timely applied. When an Indian perceives he is struck by a snake, he immediately chews some of the root, and having swallowed a sufficient quantity of it, he applies some to the wound; which he repeats as occasion requires, and in proportion to the poison the snake has infused into the wound. For a short space of time, there is a terrible conflict throughout all the body, by the jarring qualities of the burning poison, and the strong antidote; but the poison is soon repelled through the same channels it entered, and the patient is cured (Adair 1974: 247-248).

However, Mooney claimed that the Cherokee did not use *P. senega* for snakebites, but for other unspecified illnesses. He did mention that the plant was an important part of their local economy and they sold the roots to white traders for \$.50 a

pound green and \$2.00 to \$3.00 a pound dried. This was a substantial amount of money in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries. As late as 1948 the price for dried senega snakeroot was only \$.60 a pound (Cozzo 1999: 171). Perhaps its financial value superceded its reputation as a medicinal product.

*uyû'gĩliyústĩ usdí-ga* – 'like senega snakeroot, small' – *Polygala verticillata* L. – whorled milkwort

The folk genus *uyû'gĩliyústĩ* was based on the resemblance of certain plants to *uyû'gĩlĩ* or *P. senega*. This was the 'small' species of *uyû'gĩliyústĩ*. No medicinal applications were attributed to *P. verticillata*.

*uyû'gĩliyústĩ útana* – 'like senega snakeroot, large' – *Polygala curtissii* Gray – Curtiss' milkwort

*Polygala curtissii* was considered the 'large' species of *uyû'gĩliyústĩ*. A warm infusion of the whole plant was used to treat dysentery in weaning children. The roots or the whole plant were also burned and the ashes were mixed with old bear's grease. The resulting salve was applied to old sores that would not heal. The plant was dried for use at a later time.

*uyu'ĩlĩ usdí-ga* – 'it is a sprout, small' – *Saponaria officinalis* L. – soapwort, bouncing bet

Mooney glossed the folk genus *uyu'ĩlĩ* as both 'it is a sprout' and 'it is only stuck on', which stemmed from *uwaíy-itlû'* ('a sprout or sucker from a stump or graft'). He said that the name implied that the stalk was loosely fit on the plant, but familiarity with the



plant leads me to believe that it had more to do with the aggressive side shoots that grow when the plant is topped. No medicinal qualities were attributed to *S. officinalis*.

*uyu'ĩ útana* – ‘it is a sprout, large’ – no botanical species

This was the ‘large’ species of *uyu'ĩ*. Mooney did not identify the botanical species, but he did describe it as having yellow flowers, being about 4 feet tall, and growing in the high mountains. No medicinal qualities were attributed to *uyu'ĩ útana*.

*wá'ka gán'ka* – ‘cow tongue’ – *Clintonia umbellulata* (Michaux) Morong – speckled wood-lily

The name *wá'ka gán'ka* (‘cow tongue’) was in reference to the leaves, which were thought to resemble the tongue of a cow. No medicinal qualities were attributed to *wá'ka gán'ka*.

*walá's-ĩ unû'lsti* – ‘it fights frogs’ – *Disporum lanuginosum* (Michaux) Nicholson – yellow mandarin

In his published materials, Mooney said that this name referred to a myth about a duel between two frogs who used the stalks of this plant as weapons (Mooney 1900: 421). But in his notes he attributes another explanation of the name to Will West Long. The fight was between a frog and a ratsnake, and when the snake bit the frog he would run to this plant. When the plant was removed, the frog died from the bite. White (1975) identified *D. lanuginosum* as an edible green used by the Cherokee (see *uganástĩ usdíga agístĩ* above).

*walâ's-ĩ unû'lsti útana* – ‘it fights frogs, large’ – *Smilacina racemosa* (L.) Desf. – false Solomon’s seal

Olbrechts recorded this name without a gloss, but it is obviously the ‘large’ variety of *walâ's-ĩ unû'lsti* (‘it fights frogs’). He said it was used for a condition he simply referred to as “heat”. Banks said that a cold infusion of the roots was used to bathe sore eyes (1953: 17). While there is no record of its use for food by the Cherokee, it is a known edible plant (Peterson 1977: 52) and the young shoots were probably gathered along with those of *Polygonatum biflorum* (see *uganástĩ útana* above). The plants emerge around the same time and the young shoots are nearly indistinguishable from each other.

*walélu unítsilăgístĩ* – ‘the hummingbird sucks the blossoms’ – *Impatiens pallida* Nuttall and *Impatiens capensis* Meerb. – jewel-weed

The folk genus *walélu unítsilăgístĩ* stems from *walélu* (‘hummingbird’) and *unítsilăgístĩ* (‘it sucks the blossom’), a composite of *udsíla* or *udsilû'ĩ* (‘blossom’) and *astăû'* (‘it is sucking’). Money identified the botanical species associated with *walélu unítsilăgístĩ* as *I. pallida*, while Olbrechts identified it as *I. capensis*. The two species are nearly identical, the differences being in flower color and slight variation in flower morphology. Banks claimed that most Cherokee considered them the same plant (1953: 84).

Mooney found that a poultice of the roots and lower stem was used to treat dislocations or broken limbs and that it was used to treat swelling and pain in the abdomen from adding new foods to the diet (see *tsítsĩ* above). The stems were part of a

tea drunk by pregnant women. The inclusion in the formula was due to the ripe seed pods that explode when they are touched. This would frighten the child and encourage it “to jump down” quickly at birth (Mooney and Olbrechts 1932: 119). It was also used for difficult births, the vaginal area being washed with a warm decoction of *walélu unítsilăgístî* (Mooney and Olbrechts 1932: 125). In his notes, Olbrechts added that the leaves were mixed with those of unidentified plants and made into a tea to bathe children with chronic diarrhea caused by the father’s infidelity before birth.

Banks (1953: 84) added that the leaves were rubbed on areas infected with poison oak and a tea of the leaves was used for measles. The roots were made into a tea and drunk for “bold hives”, a serious condition that afflicts infants shortly after their birth (see *â’talî-gûlî* above).

*wáliwalî usdî-ga* – ‘small *wáliwalî*’ – *Sedum ternatum* Michaux – stonecrop

*Wáliwalî* appears to be an opaque, proper name. The botanical species included in this folk genus are prostrate plants with succulent leaves and stems. *Sedum ternatum* was the ‘small’ folk species of *wáliwalî*. Mooney also collected the synonym *wáliwalî nunyâhi-ě’hî* (‘rock dwelling *wáliwalî*’) because the plant is frequently found growing on rock outcrops. Olbrechts found that it was part of the formula that was used to rub on ball player’s legs before a match, the only recorded medicinal application for *S. ternatum*.

*wáliwalĩ útana* – ‘large *wáliwalĩ*’ – *Portulaca oleracea* L. – purslane

*Portulaca oleracea* was considered the ‘large’ species of *wáliwalĩ*. Mooney also collected the synonym *wáliwalĩ tlâgesě’hĩ* (‘*wáliwalĩ* growing in old fields’), a common habitat for *P. oleracea*. Mooney found that the red stems of *P. oleracea* were combined with the roots of *Cypripedium spp.* for intestinal worms. This was in part because the stems resembled worms, but the seeds have been used as an anthelmintic by other Native American groups and in India (Simopoulos et al. 1995). Although it is known in many parts of the world as a palatable potherb, Witthoft (1977) claimed that the Cherokee did not use it as such.

*waliwáliyústĩ* – ‘like *wáliwalĩ*’ – *Rumex acetosella* L. – sheep-sorrel

Mooney did not explain the relationship of this plant to the species of *wáliwalĩ*. However, the name indicates that it was perceived to be similar to *wáliwalĩ*, possibly due to its red stalks or fleshy leaves. Banks (9153: 39) found that the leaves were used as a poultice on old sores and Perry (1974: 53) found that the leaves were known to be edible.

*wanégitã* – angelico – *Ligusticum canadense* (L.) Britton

The folk generic *wanégitã* appears to be a proper, opaque name for angelico. There is some confusion over the members of this folk genus. Mooney recorded two folk species, *wanégitã usdí-ga* (‘small’) and *wanégitã útana* (‘large’), but indicated that they were two species of *Angelica*. The two species of *Angelica* common to the region are *Angelica venenosa* (Greenway) Fernald, a relatively small species, and *A. triquinata*

Michaux, a substantially more robust species. However, *L. canadense* and *A. venenosa* are morphologically very similar and it has taken several encounters for me to readily distinguish between the two. But Mooney identified *A. venenosa* by the Cherokee names *ganélīta* ('pregnant') and *kanasâ'liyústī* ('like *kanasâ'la*') (see above), so in this instance it may be that the 'small' species was *L. canadense* and the 'large' species was *A. triquinata*. Without voucher specimens, it may be impossible to sort this out.

The primary use for *wanégitā* was as a potherb. Mooney said the young stalks were harvested when the leaves first appeared. They were boiled in hot water, rinsed off, and cooked, presumably in hot grease and often mixed with some species of *uganástī* (see above). Witthoft found that the leaves were eaten in some Cherokee households, but not by the local mountain whites (n.d.: 30). Perry (1974: 58) found that the greens were mixed with some of the sweeter greens, but it was often eaten alone because, "it's too good for mixing". The primary mode of preparation was to parboil the greens and fry them in grease, but they were also hung up and dried or blanched and canned. Will West Long told Mooney that the greens of both the 'large' and 'small' species were eaten and tasted "like parsnip roots", indicating that the greens of the species of *Angelica* were included in this edible complex.

*wanégitiyústī* – 'like *wanégitā*' – *Pastinaca sativa* L. – parsnip

The folk generic *wanégitiyústī* ('like *wanégitā*') was indicative of the similarity of *P. sativa* to *L. canadensis* or the species of *Angelica*. The similarity may have been morphological, but Will West Long told Mooney that the cooked roots of the parsnip tasted like *wanégitā* greens, so the relationship may have been due to the similar

flavors. The “wild parsnip” referred to in *The Sacred Formulas of the Cherokees* (Mooney 1891: 369) and *The Swimmer Manuscript* (Mooney and Olbrechts 1932: 104) was most likely *Cicuta maculata*, a deadly poisonous plant that must not be confused with the naturalized *P. sativa* that escaped from cultivation (see *kanasâ’la* above).

*wanégitiyústĭ ûnagéĭ* – ‘like *wanégitǎ*, black’ – *Aralia nudicaulis* L. – wild sarsaparilla

Mooney did not explain the gloss for *wanégitiyústĭ ûnagéĭ*, but it was most likely the ‘black’ species of *wanégitiyústĭ* because of the dark color of the fruit. It is morphologically similar to *Ligusticum canadense*, which most likely explains its inclusion in the folk genus *wanégitiyústĭ*. Banks recorded the only medicinal application for *A. nudicaulis*, finding that a tea of the roots was considered a good blood tonic (1953: 91).

*wanégitiyústĭ sa’kánigeĭ* – ‘like *wanégitǎ*, blue’ – *Caulophyllum thalictroides* (L.) Michaux – blue cohosh

*Caulophyllum thalictroides* is morphologically similar to *Ligusticum canadense*, suggesting its inclusion in the folk genus *wanégitiyústĭ*. The ‘blue’ represented by the specific qualifier *sa’kánigeĭ* was most likely due to the perceived color of the plant, which is also the reason for the common name. The medicinal qualities have already been discussed above (see *kanástăgwâ’lĭ*).

*watskĭ’* or *watskû’* - amaranth – *Amaranthus retroflexus* L. – pigweed

*Watskĭ’* appears to be an opaque, proper name for the genus *Amaranthus*. The species *A. retroflexus* was the prototypical member of this folk genus, recorded without

a specific qualifier. Witthoft found that the young plants were used as an early spring potherb (n.d.: 27). Will West Long also included *A. retroflexus* in his list of plants that could be used in the medicinal concoction drunk in the later versions of the Green Corn Ceremony (Witthoft 1946).

*watskí' gûnatlá'í gigage* – ‘cultivated, red amaranth’ – *Amaranthus hybridus* L. – pigweed

The qualifier *gûnatlá'í* indicates that there were species of *Amaranthus* that were nurtured in Cherokee gardens when Mooney did his field research. While Mooney identified *A. hybridus* as the ‘red’ variety, Witthoft speculated that this may have actually been the ‘white’ variety (see below) due to its white rootstock.

*watskí' gûnatlá'í unéga* – ‘cultivated, white amaranth’ – *Amaranthus* spp.

Mooney was unable to identify the ‘white’ variety of *watskí' gûnatlá'í*, so Witthoft’s speculation is the best evidence available for the identity of this species.

*wesu unígistí* – ‘cat foods’ – *Nepeta cataria* L. – catnip

The name stems from *wesu* (‘cat’) and *unígistí*, the plural form of *agístí* (‘food’), due to the fondness of the domestic cat for the plant (Olbrechts). Olbrechts found that a decoction of the leaves was drunk for fever, colds, chill, and sore throats. Banks found similar applications, and added that the tea promoted sweating as well as the relieving an upset stomach and the leaves were used as a poultice for boils (1953: 111).

*yâ'na unígistĩ* – ‘bear foods’ – *Aralia racemosa* L. – spikenard

The name stems from *yâ'na* (‘bear’) and *unígistĩ*, the plural form of *agístĩ* (‘food’), but it is unclear which part of the plant was eaten by bears. It may have been the berries, as the plant was sometimes called *udâ'lănă'* due to the resemblance of the berries to those of serviceberry (see *udâ'lănă'* in the section on trees).

Mooney found that the roots were used to stop hemorrhages, combined with a species of wild rose for thrush, and the pounded root was rubbed on sore joints. Banks added that a tea of the roots was drunk for lower back pain and kidney problems (1953: 91).

*yúgwilû'* - pitcher plant – *Sarracenia purpurea* L. and *Sarracenia flava* L.

*Yúgwilû'* appears to be an opaque, proper name for the pitcher plant. Mooney identified the botanical species as *S. flava* and said it was once found near Birdtown, but was extinct at the time of his research. He actually identified it as a species of *Dionaea*, but his description was of a plant that traps flies, is 2 feet tall, and has yellow flowers about 2 inches across and a long root. No species of *Dionaea* matches this description and there are rare populations of *S. flava* in the region (Smith 1998: 62). Olbrechts identified it as *S. purpurea*, a more common species in the North Carolina mountains. He also recorded the synonyms *ayúgwilû'*, *wa'edla*, and *tc'skoyi kanati*. He did not provide a gloss for the first two but the third glossed as ‘the successful insect hunter’ after the mythical first man, the hunter Kanátĩ (Mooney 1900: 242).

Olbrechts found that it was used by novice medicine men as an aid to retain information. The plant was known to trap insects that found their way into the



specialized leaf structure. This was symbolic of the ability to retain information, much like the belief surrounding members of the intermediate category *únistilû'istĩ* (see Part 1), and if the water from inside the plant was drunk it would, “keep the knowledge acquired imprisoned in the mind (Mooney and Olbrechts 1932: 101).”

## Chapter 6

### *Kanéska* – Grass

Mooney identified the term *kanéska* as, “the generic term for all grasses”, indicating that *kanéska* was the name for the life form that included members of the family Poaceae, as well as the graminoid, or grass-like, plants known to the Cherokee. With the introduction of domesticated stock, it also became the word for hay. This category also includes a few flowering plants that have grass-like leaves. I have included the category *ganága* (‘rush’) in this category even though it is unclear from Mooney’s notes whether the members of *ganága* are included in *kanéska* or could be considered a separate life form. Mooney glosses *ganága* simply as ‘rush’, but Olbrechts glosses it as ‘it has been licked’, indicating that the name is not opaque and might well be a folk generic. Mooney also stated that, according to one of his informants, there were three or four varieties of *ganága*, suggesting that the category was too small to consider it a separate life form. For this chapter I have included all the botanical species that qualify as graminoids and the flowering species that were labeled as types of *kanéska*.

The number of graminoid species reported to be named or used by the Cherokee is relatively small when compared to the total number of species present in the mountains of North Carolina. However, this is congruous with Moerman’s meta-analysis of the medicinal plants used by Native Americans. Moerman (1991) established a base

percentage by comparing the total number of plants found north of the Rio Grande with the total number recorded used by the 123 Native North American groups. He then demonstrated, using regression analysis, that the number of grasses and grass-like plants that had reported medicinal applications was much lower than the predicted number established by taking the base percent of the number of species present in a particular life form. The Cherokee data appear to conform to his overall findings.

There were 16 folk genera recorded in the grass life form representing 28 botanical species (see Table 6.1). Fourteen of the botanical species were included in three folk genera, *ganága* (5 species), *kanéska* (5 species), and *tsulâski* (4 species). All the *ganága*, except for one unidentified sedge, were rushes. The *kanéska* tended to be the least botanically related, including two herbaceous species, a grass, and a sedge recognized for its grass-like qualities. The members of the genus *tsulâski* were all grasses, but the lack of a gloss for *tsulâski* limits our understanding of the perceived relationship between them. There were four non-graminoid flowering plants included in this life form; *Calopogon tuberosus*, *Clintonia borealis*, *Orantium aquaticum*, and *Sisyrinchium angustifolium*, but all are monocots with linear leaves and parallel venation, suggesting a morphological similarity and natural affinity to the graminoids.

Table 6.1. Grass Index: Botanical Species and Folk Species

Botanical Species	Cherokee Genera and Species	Botanical Species	Cherokee Genera and Species
Andropogon virginicus	<i>kāneskawā'dī</i>	Eleusine indica	<i>tsulāski-iyústī</i>
Arundinaria gigantea	<i>í'ya</i>	Eragrostis cilianensis	<i>tsulāski uwásgilī</i>
Calopogon tuberosus	<i>kanéska dalānige</i>		<i>adsilú'skī</i>
Carex spp.	<i>adsilú'skī</i>	Eriophorum virginicum	<i>tsistu gatāga</i>
	<i>ganāga tsāninahita &amp;</i>	Glyceria spp.	<i>wă'tăkû' útana</i>
	<i>kanéska tsāninahita</i>	Juncus effusus	<i>ganāga nūnā'hī udetkī</i>
Clintonia borealis	<i>kaně'siyústī</i>	Juncus tenuis	<i>ganāga usdī-ga</i>
Coix lacryma-jobi	<i>sélutsī'</i>	Kyllinga pumila	<i>salā'l unígistī</i>
Cymophyllus fraseri	<i>tsulāgeta</i>	Orontium aquaticum	<i>kaně'sī</i>
Cyperus strigosus	<i>í'yāya</i>	Panicum gattingeri	<i>tsulāski atelagiski</i>
Digitaria sanguinalis	<i>tsulāski yahi</i>	Saccharum baldwinii	<i>selagwû'tsī útana</i>
Dichanthelium	<i>tsulāski útana</i>	Schoenoplectus	<i>ganāga útana</i>
commutatum		tabernaemontani	
Dichanthelium	<i>agisi</i>	Sisyrinchium	<i>kanéska tēlugēī</i>
dichotomum		angustifolium	<i>adsilú'skī</i>
Dichanthelium spp.	<i>wă'tăkiyústī</i>	Sorghastrum nutans	<i>selagwû'tsī usdī-ga</i>
Echinocloa crusgali	<i>séluiyústī</i>	Sorghum vulgare	<i>watulísī</i>
Eleocharis spp.	<i>ganāga</i>		

## Cherokee Grasses

*agisi* – no gloss – *Dichanthelium (Panicum) dichotomum* (L.) Gould var. *dichotomum* – forked panic grass

Mooney did not provide a gloss or an explanation for the name *agisi*. He also recorded the name *wă'tăkiyústī* ('like *wă'tăkû'*') for several species of panic grass, indicating their collective resemblance to the grasses known as *wă'tăkû'*. The medicinal uses for these will be discussed below.

*ganāga* – 'rush' – *Eleocharis* spp. – spike-rush

Due to the lack of a specific qualifier, it appears that members of the genus *Eleocharis* were considered the prototypes for the category *ganāga*. Mooney was not

able to identify this specimen to the species level, but it would appear from the distribution maps in the *Manual of the Vascular Flora of the Carolinas* that the only common species in the mountains are *Eleocharis obtusa* (Willd.) Schultes and *Eleocharis tenuis* (Willd.) Schultes (Radford et al. 1968: 183-189).

*ganága nûnâ'hĩ udetkĩ* – ‘rush that stands in the road’ – *Juncus tenuis* Willd. – path rush

The specific qualifier *nûnâ'hĩ udetkĩ* stems from *nûnâ'hĩ* (‘road’ or ‘trail’) and *udetkĩ* (the Middle dialect form for ‘it stands habitually in the road’) and is due to the plant’s ability to thrive on compacted soils from frequent traffic. The common name “path rush” is also indicative of this habitat preference. The qualifier *nûnâ'hĩ udetkĩ* was also the name given to *Plantago major*, due to its similar ability to thrive in areas of heavy traffic and erect habit (see Herbaceous Plants, Part 3).

A warm infusion of the whole beaten plant was used to wash newborns as a prophylactic against disease and to prepare ballplayers for a match. The plant was not dried, but the roots could be found in winter by knowing the location of the plants. Banks (1953: 13) found that ball players would drink the tea so that, like the plant, they would remain erect and not fall down during the match. He also found that infants were washed in the tea of both *J. tenuis* and *P. major* to impart the plants’ strength and straightness to the infant’s limbs and to prevent lameness.

*ganága tsăninahita* – ‘it has been licked, ?’ – *Carex* spp. – sedge

Olbrechts glossed *ganága* as ‘it has been licked’, but provided no gloss for *tsăninahita*. *Ganága tsăninahita* appears to be an inclusive term encompassing all the

sedges and implies a relationship to the rushes. However, Mooney recorded a similar, seemingly inclusive, term for the genus *Carex*, *kanéska tsāninahita*, which suggests that the Cherokee considered sedges to be grasses. He gave two examples with specific qualifiers (see below) that were only identified to the genus level as species of *Carex*, but he did not provide a gloss for *tsāninahita*. Without a gloss or an explanation for the etymology for the phrase, it is difficult to discern the inclusiveness of these terms. Olbrechts also recorded the name *ganuya* ('it is placed under') for a species of *Carex*, but did not explain the gloss. He found that *ganága tsāninahita* was used for the nightmarish condition *inadö danskitsöi* ('when they dream of snakes').

*ganága usdí-ga* – 'small rush' – *Juncus effusus* L. – soft rush

It is unclear why *J. effusus* would be considered the 'small' folk species of *ganága*. It reaches heights of .5 to 1.2 meters tall, while *J. tenuis* reaches a maximum height of .5 meters (Radford et al. 1968: 275). Mooney's notes indicated that both *J. tenuis* and *J. effusus* were labeled by the Cherokee as the 'small' folk species, but Olbrechts recorded the botanical species as *J. effusus*. And, while not a particularly small plant, *J. effusus* is generally much smaller than *ganága útana*, the 'large' species (see below). Olbrechts also recorded the synonym *anisgína unâ'năsû'ta usdí-ga* ('ghosts' terrapin rattle, small'), an obvious reference to the noise made by the dried seed heads (see *anisgína-(ts)unâ'năsû'ta* in Herbaceous Plants, Part 3). *Ganága usdí-ga* was used in the same manner as *ganága tsāninahita*, for the condition *inadö danskitsöi* ('when they dream of snakes').

*ganága útana* – ‘large rush’ – *Schoenoplectus tabernaemontani* (K.C. Gmel.) Palla – bull rush

This is one of the tallest rushes, reaching heights of up to 2 meters tall (Radford et al. 1968: 196). Mooney also recorded the synonym *ganága amáyaně’hĩ* (‘rush, growing in water’) due to the plant’s preference for marshy environments. It was also used in combination with *ganága usdí-ga* and *ganága tsăninahita* for *inadö danskitsöi* (‘when they dream of snakes’). Mooney added that rushes were tied into bunches, dried, and used like twine to tie bundles, the larger ones split into sections (Ms. 1894).

*í’ya* – rivercane – *Arundinaria gigantea* (Walter) Muhl.

Cane breaks (*i’hyâ’hi*) were once a common feature of the riverbottoms in the southeastern United States. The durable, flexible cane was used extensively by southeastern Native Americans for woven materials, such as baskets, walls for houses, and floor mats, as well as for musical instruments, furniture, tools, and weapons (Hill 1997: 39-40). Blowguns were also made from cane. A length of the green cane would be heated over a fire, straightened by hand, and allowed to dry. The septa between nodes were drilled through the length of the cane, then rasped to a smooth, even bore (Witthoft n.d.: 96). A flour made from cane was also mentioned as a famine food, but the process was not described (Hill 1997: 40). When purifying themselves for the hunt, hunters would wash with a tea of cane, cedar boughs, horsemint, and old tobacco (Payne n.d. a: 38).

*í'yáya* – no gloss – *Cyperus strigosus* L. – umbrella sedge

Mooney did not provide a gloss for *í'yáya*, but it may be that this was considered the “true” kind of *í'ya*, signified by the addition of the suffix –*ya*. However, this is speculation on my part. Mooney also recorded *C. strigosus* as *kanéska igâ'teně'hĩ* ('swamp growing grass'), which was due to its preference for wet environments. He found it was used for rheumatism and in association with witches, but he did not elaborate on either.

*kaně'sĩ* – 'swamp grass' – *Orontium aquaticum* L. – golden club

Olbrechts glossed *kaně'sĩ* as 'swamp grass', but he did not explain the gloss. It appears to be a form of the word *kanéska* ('grass'), but it is not clear how *igâ'tĩ* ('swamp') is incorporated into the name. *Orontium aquaticum* might not have been classified as a grass, as the leaves are not linear but range from ovate to elliptic (Radford et al. 1968:257), but will be placed here solely on the virtue of the gloss 'swamp grass'.

Several sources indicate that *kaně'sĩ* was considered a powerful and valuable medicine. In the early 19<sup>th</sup> century, the root of *O. aquaticum* was made into a tea with the root of a shrubby species of *Cornus* and used as an emetic by a medicine man after the death of a patient (Payne n.d. b: 586). He would dispose of all the medicines that were ineffective and not use any of them until the following year. Then he would purify himself with the emetic and pour some of the tea on hot stones to cleanse his hands.

Mooney recorded *O. aquaticum* as one of the few remedies for smallpox. It was made into a tea in combination with *Lindera benzoin* and the patient would be washed



all over with the tea. The patient also drank a large quantity of the tea. A warm infusion of the pounded roots was used as a wash for wounds. Children were also bathed in a tea of the pounded or rubbed leaves as a prophylactic against disease. It was observed that dew never stays on the plant, symbolizing its ability to prevent disease from staying with a child. Mooney said the plant was considered to be very scarce by the late 19<sup>th</sup> century (Ms. 1894).

Olbrechts found *O. aquaticum* was used for *uyosöçi e'isti tsanançtatia* ('when they suffer painful remembrances of the dead') and to heal wounds and bruises such as those caused by arrows, bullets, or an ax. He also said it was used as a prophylactic to guard children, "against any kind of disease." Infants would be bathed in a decoction of the plant at every new moon (Mooney and Olbrechts 1932: 76). Banks (1953: 11) added that the crushed root was used after scratching as a poultice for sore muscles. The plant was transplanted to nearby springs because it was so rare.

The fruit of *O. aquaticum* was also used for food, but only after intensive processing and with restrictions associated with its use. An early 19<sup>th</sup> century account described the process:

This is a kind of fruit growing in pods. And very much resembling beans. The weed producing it grows in springs. This fruit must be boiled full twenty four hours, or it will prove a most deadly poison. But after being sufficiently boiled, dried and pounded, it formed meal, or flour very much resembling, in taste, that of wheat, and might be used for all the purposes of flour. It was also made into

mush. But after eating this they must eat no berries or any kind of fruit for 24 hours, lest it should kill them (Payne n.d. b: 269).

The acrid portion, calcium oxalate crystals, causes an intense burning in the mouth. But drying the edible portion can eliminate this toxic aspect (Peterson 1977: 156).

*kaně'siyústĩ* – 'like golden club' – *Clintonia borealis* (Aiton) Raf. – bluebead-lily

The name stems from the resemblance of the leaves to those of *kaně'sĩ* (*Orontium aquaticum*). Like *kaně'sĩ*, it is not clear that the Cherokee classified this as a grass, but I have included it here due to its association with its counterpart. No medicinal uses were attributed to *C. borealis*.

*kanéska dalânige adsilû'skĩ* – 'yellow-flowered grass' – *Calopogon tuberosus* (L.)

Britton, Stearns, and Pogg – grass pink

While the flower of *C. tuberosus* is predominantly pink to rose-purple, the upper lip has a yellow beard (Smith 1999: 24), hence the name *kanéska dalânige adsilû'skĩ*. The single, narrow, pointed leaf qualifies this as a type of *kanéska*. No medicinal applications were recorded for *C. tuberosus*.

*kanéska gûnahíta igâ'teně'hĩ* – 'long grass growing in the swamp' – no botanical species

Olbrechts recorded the Cherokee name, but was not able to provide a botanical identification. This may be a synonym for *Cyperus strigosus* (see *i'yáya* above), but it

could also be one of many wetland-loving species of graminoid plant found in the mountains. He found that it was used with *Dioscorea villosa* for the condition known as *göwanigistöi* ('when they are eaten by them').

*kanéska tēlugéiʔ adsilûʔ skĩ* – 'purple-flowered grass' – *Sisyrinchium angustifolium* Miller  
– blue-eyed grass

The Cherokee name and the common name both stem from the blue flowers that grow at the tips of the grass-like leaves. Olbrechts also recorded the synonym *dalânige unastetsi kanéska* ('yellow rooted grass'). He found it was used for a wide range of conditions such as *unawasti egwa* ('big chill'), irregular menses, *uniʔyagwatisgöi* ('when they are having a toothache'), *aniskina uniyaktanöçi* ('ghosts have changed (the condition of the patient)'), and *ayeligogi uniyelöʔnöçi* ('they have made it like it'). Banks added that an infusion of the roots was used for a form of diarrhea typified by yellow stools (1953: 20). It was considered especially effective for this condition in children.

*kanéska tsāninahita igâʔteněʔhĩ* and *kanéska tsāninahita útana* – *Carex* spp.

As mentioned above (see *ganága tsāninahita*), *kanéska tsāninahita* appears to be a generic term for the genus *Carex*. Mooney recorded these two folk species (Ms. 1894), the 'swamp growing' and 'large' *kanéska tsāninahita*, but did not identify the botanical species or provide a gloss for the names. However, *tsāninahita* appears to refer to the plant or one of its parts as having a long quality. Other Cherokee terms ending in *-ahita* were glossed as with the descriptor 'long'.

*kaneskawâ'dĩ* – 'brown grass' – *Andropogon virginicus* L. – broom sedge

The name *kaneskawâ'dĩ* stems from *kanéska* ('grass') and *wâ'tige* ('brown'), due to the color of the plants in the fall and winter. Olbrechts found that *A. virginicus* was evoked in a formula for frostbitten feet, the accompanying prayer addressed to the spirit of the Rabbit (Mooney and Olbrechts 1932: 258-259). The patient would experience relief from frostbite by placing their feet under a warm covering, much the same way the rabbit finds shelter from winter weather under broom sedge. The rabbit was addressed because it is one of the creatures that can walk on the snow without suffering frostbite. This may relate more to a prophylactic measure against frostbite than an actual cure. The Cherokee were reported to place soft grasses in their moccasins as insulation against the cold in the winter months and to cushion their feet when hunting and traveling. Witthoft identified this grass as a small species of *Panicum*, but *A. virginicus* may have been an acceptable alternative, as it was the favored material to for bedding in the Cherokee mountain cabins (Witthoft n.d.: 75-76).

Banks found that *A. virginicus* was an ingredient in a salve made with mutton tallow used to cure sores and as a tea to heal cases of dermatitis from contact with poison ivy. The tops were also used alone or combined with onion skins and made into a yellow dye (1953: 8).

*salâ'l unígistĩ* – 'squirrel foods' – *Kyllinga pumila* Michaux – low spike sedge

The name *salâ'l unígistĩ* stems from *salâ'ĩ* ('squirrel') and *unígistĩ*, the plural form of *agístĩ* ('food'). Mooney did not explain the name. He also recorded two other plants as *salâ'l unígistĩ*, *Hypoxis* spp. and the nut rush, *Scleria* spp. There are several species

of *Scleria* found in the North Carolina mountains, but the only common species of *Hypoxis* is *H. hirsuta* (L.) Coville. No uses were recorded for *salá'l unígistĩ*.

*selagwû'tsĩ usdí-ga* – no gloss, 'small' – *Sorghastrum nutans* (L.) Nash. – Indian grass

Mooney did not provide a gloss for *selagwû'tsĩ*, but a similar word, *se la wo yi*, was glossed as 'fodder' by the Western Cherokee (Alexander 1971: 61). *Sorghastrum nutans* is known to be quite nutritious for livestock (Brown 1979: 178) and may well have been gathered and used as animal fodder. The identification of *S. nutans* as the 'small' folk species may have been a misidentification on Mooney's part. The following species, *Saccharum baldwinii*, was identified as the 'large' species of *selagwû'tsĩ*, but *S. nutans* reaches a height of 2.5 m while *S. baldwinii* only grows to about 1.5 m (Radford et al. 1968: 165 & 162). The two may have been reversed in Mooney's notes. Mooney also identified *Echinochloa crusgali* (L.) Beauv. as *selagwû'tsĩ usdí-ga* (Ms. 1894), which was introduced to this country as animal fodder (Brown 1979: 184). *Sorghastrum nutans* was the primary material used to construct Cherokee brooms (Witthoft n.d.: 76). Olbrechts recorded two medicinal applications for the folk genus *selagwû'tsĩ*, but did not specify which folk species and did not identify the associated botanical species. *Selagwû'tsĩ* was used as part of an emetic formula used to treat *anskitsö'ö sköi* ('whenever they dream (of...)') and for the scrofulous condition known as *duletsi* ('kernels').

*selagwû'tsǐ útana* – no gloss, 'large' - *Saccharum baldwinii* Spreng. – beard grass,  
plume grass

*Saccharum baldwinii* was identified as the 'large' species of *selagwû'tsǐ*, but this was probably a misidentification on Mooney's part (see *selagwû'tsǐ usdí-ga* above). There is no further information available about the Cherokee relationship to this grass.

*séluiyústǐ* – 'like corn' - *Echinochloa crusgali* (L.) Beauv. – barnyard grass

The name *séluiyústǐ* stems from *sélu* ('corn') and the suffix *-iyústǐ* ('like'), indicating a perceived resemblance of *E. crusgali* to the corn plant. It has already been mentioned as an introduced animal fodder (see *selagwû'tsǐ usdí-ga* above).

*sélutsǐ'* - 'corn's mother' – *Coix lacryma-jobi* L. – Job's tears

The name *sélutsǐ'* stems from *sélu* ('corn') and *ustǐ'* ('mother'). Mooney found that the grains were used for necklaces, and Banks added that the necklaces were placed on teething infants (1953: 9). Since *C. lacryma-jobi* was an introduced species, the name *sélutsǐ'* may have originally been applied to *Tripsicum dactyloides* L., a native plant in the region that shares many traits with the corn plant. It was once considered the progenitor of corn, as the wild corn plant is not known, but genetic analysis has shown this to not be the case (Brown 1979: 104).

*sélutiǐyústǐ* – 'like corn's mother' – no botanical species

The name here stems from the resemblance of the plant to *sélutsǐ'* ('corn's mother'). Mooney tentatively identified it as a species of *Zizania*, but wild rice is only

known to grow in the coastal region of North Carolina (Radford et al. 1968: 125). No other information is available for the Cherokee relationship to this plant.

*tsístu gatága* – ‘rabbit tail’ – *Eriophorum virginicum* L. – cotton grass

The name *tsístu gatága* is a composite of *tsístu* (‘rabbit’) and *gatága* (‘tail’), but the other synonyms recorded by Mooney may provide an explanation for the name. He also recorded this plant as *tsístu ukstilû’tí* (‘rabbit, tail sticking straight up in the air’) and *tsístu uksí* (‘rabbit anus’), both suggesting the image of an erect tail. Mooney did not associate this Cherokee name with a botanical species, but Banks found the name ‘rabbit tail’ associated with a species of *Eriophorum*. Members of this genus are collectively known as cotton grass due to the clusters of white hairs that subtend the fruits. These also resemble the white, raised tail of a rabbit. The species *virginicum* is the only one found in the mountains of North Carolina (Radford et al. 1968: 201). The only known use was a vague reference to its inclusion in a medicine accompanying a prayer (Banks 1953: 10).

*tsulâgeta* – no gloss – *Cymophyllus fraseri* (Andrz.) Mackenzie

Mooney only provided the Cherokee and botanical name for this plant (Ms. 1894). No gloss or uses were available.

*tsulâski atelagiski* – no gloss – *Panicum gattingeri* Nash – panic grass

Mooney did not provide a gloss for the folk generic or the specific qualifier. This is unfortunate, as he included the names of four folk species of *tsulâski* in his notes (Ms. 1894).

*tsulâski útana* – no gloss, ‘large’ – *Dichanthelium commutatum* (J. A. Schultes) Gould – panic grass

This was considered the ‘large’ folk species of *tsulâski*. No more information is available about the Cherokee relationship to this plant.

*tsulâski uwâsgilĩ adsilû´skĩ* – ‘soft flowered *tsulâski*’ – *Eragrostis cilianensis* (All.) Lutati – stink grass

The specific qualifier consists of *uwâsgilĩ* (‘soft’) and *adsilû´skĩ* (‘flower’), referring to the soft tops associated with this grass. No uses were attributed to *E. cilianensis*.

*tsulâski yahi* – no gloss – *Digitaria sanguinalis* (L.) Scopoli – crab grass

Only the Cherokee name and botanical name are known for this species.

*tsulâski-iyústĩ* – ‘like *tsulâski*’ – *Eleusine indica* (L.) Gaertner – goose grass

This grass was named for its resemblance to the folk genus *tsulâski*, but no explanation for the resemblance was available.



*wă'tăkû' usdî-ga* – no gloss, 'small' – no botanical name – star grass

Mooney did not provide a gloss for *wă'tăkû'*, but this was the 'small' folk species. The only identification that Mooney provided for *wă'tăkû' usdî-ga* was the common name "star grass", which is usually applied to *Aletris farinosa* L., but could be the common name for a number of plants. *Wă'tăkû' usdî-ga* was used to make arrow shafts for the bows used by young boys to practice their shooting skills.

*wă'tăkû' útana* – no gloss, 'large' – *Glyceria spp.* – manna grass

Mooney was able to have *wă'tăkû' útana*, the 'large' folk species of *wă'tăkû'*, identified to the genus level. No other information was available concerning the Cherokee relationship to this genus.

*wă'tăkiyústĭ* – 'like *wă'tăkû'*' – *Dichanthelium spp.* – panic grass

This folk genus was named for its resemblance to *wă'tăkû'*. Mooney named three species of *Dichanthelium* as *wă'tăkiyústĭ*, *D. candestinum* (L.) Gould, *D. dichotomum* (L.) Gould, and *D. latifolium* (L.) Gould & C. A. Clark. *Dichanthelium latifolium* also went by the synonym *adakehegi usdî*, but Mooney did not provide a gloss for this name (Ms. 2235). However, he also recorded it as the name for a species of *Tofieldia*, a plant that is occasionally found in mountain wetlands and that is more closely related to *Aletris farinosa* than *Dichanthelium* (see *wă'tăkû' usdî-ga* above). No uses were recorded for *wă'tăkiyústĭ*.

*watulísĩ* – ‘honey’ or ‘like honey’ – *Sorghum vulgare* Persoon – sorghum

*Watulísĩ* can be glossed as ‘honey’, ‘bee’, or ‘molasses’. The name relates to the cane juice that is processed into a light molasses resembling dark honey. The name *watulísiyústĩ* (‘like honey’) stems from the same source and both were used for *S. vulgare*. Sorghum was probably had a late introduction as a useful plant to the Cherokee. They were reluctant to take up the use of the plow until after the Revolutionary War and did not incorporate the European grain crops until after this time (Goodwin 1977: 129).

Mooney found that the pounded roots of *watulísĩ* were combined with *Pedicularis canadensis* and *Scutellaria lateriflora* for fever and spasms that might accompany childbirth (Ms. 1894). About a pint was drunk at frequent intervals throughout the day. Mooney’s informant said that this was a great remedy and the ingredients were expensive. However, the remainder of his description suggests that, while the medicinal value was attributed to a plant called *watulísĩ*, it was not *S. vulgare*. The plant he was describing was found in swamps and found in winter by the dry stalks, but not eaten. Sorghum is not a plant that favors swampy areas and it was grown for consumption. It also would not have been scarce once it was introduced into Cherokee agriculture.

## Chapter 7

### *Egû'łl* or *Igû'łl* – Fern

Mooney did not explain in his notes the two phonetic spellings for the category that encompassed the ferns. He often distinguished between the upper and middle dialects of Cherokee, but did not indicate that this was a dialectical difference. In this section, I will use the phonetic spellings that appear most frequently in the notes of the different researchers. Mooney also did not indicate that *egû'łl* or *igû'łl* represented a distinct life form. But Olbrechts clarified this point in *The Swimmer Manuscript*. In the formula for malarial chills, he states that *igû'łl*, “is a name given to any variety of fern; without any more definite description it is not possible to identify it...” (Mooney and Olbrechts 1932: 228). This would indicate that all *igû'łl* must be identified to the folk specific level or the term is considered descriptive of the life form. However, Mooney did indicate in his notes that *egû'łl* or *igû'łl* was a more inclusive term by pointing out that:

Heart trouble: caused by the lungs wrapping around the heart. All species of *igû'łl*, including also *kâ'ga-skû'tagǐ* (*Adiantum pedatum* L.) are coiled up when young and unwind as they grow, hence tea of any or all is used for heart troubles, to unwind the lungs from around the heart.

This is especially important if the term *igû'îl* is accepted to be polysemous, representing both the life form and a generic category. Many species of ferns are not labeled by the generic *igû'îl* and this piece of information from Mooney suggests that at least all ferns that unfurl are included in the same life form category. I will include the walking fern, *Asplenium rhizophyllum* (L.) Link, in this category solely due to its botanical classification and not from an inclusion in the category from information provided by Mooney or Olbrechts. Its habit is somewhat different from many Southern Appalachian ferns, having an entire, single bladed leaf, but there is no obvious reason to exclude it from this category.

It is not surprising that the Cherokee considers ferns as a distinct life form. They are the most ancient and primitive of vascular plants and their habit and reproductive structures distinguish them from other vascular plant life forms. While *Aureolaria pectinata* (Nuttall) Pennel was known as *igûliyusti* (Ms. 2235), or 'like fern,' there no indication that it was considered a type of fern, but the name was descriptive of the shape of the leaves and not a criteria for classification with other *igû'îl*. One fern species, identified in the same manuscript as *Botrychium virginanum* (L.) Swartz, was also glossed as *igûliyusti*; however, it was also reported to have yellow flowers, so this was an obvious mistake in matching the Cherokee names to the proper species and this was most likely a species of *Aureolaria*.

Some confusion exists due to Cherokee synonyms at the folk genus and species level for the various biological species. Also, the Cherokee folk genera and species were sometimes identified as more than one biological species by the botanists who identified Mooney's voucher specimens. As verification of archival material is difficult, all

of the synonyms and biological species names will be provided to insure as complete a record as possible. Table 7.1 shows the relationship of the 11 botanical species recorded by the reachers to the Cherokee species included in the fern life form.

Table 7.1. Fern Index: Botanical Species and Folk Species

Botanical Name	Cherokee Species
Adiantum pedatum	<i>ká'ga-skû'tagĩ</i>
Asplenium rhizophyllum	<i>inatû gán'ka</i>
Botrychium virginianum	<i>useliti</i>
Cystopteris fragilis	<i>igû'ĩ uwásgilĩ nŏyoehi</i>
Dennstaedtia punctilobula	<i>yân-a utsě'sa usdíga</i>
Onoclea sensibilis	<i>igû'ĩ igatehi</i>
Osmunda cinnamomea	<i>egû'ĩ uwásgilĩ usdí</i>
Polypodium vulgare	<i>igû'ĩ uwásgilĩ nŏyoehi</i>
Polystichum acrostichoides	<i>yân-a utsě'sa útana</i>
Pteridium aquilinum	<i>ká'ga skû'tagiyústĩ</i>
Thelypteris novaboracensis	<i>egû'ĩ uwásgilĩ</i>

### Cherokee Species of *Egû'ĩ* or *Igû'ĩ*

*egû'ĩ uwásgilĩ* – 'soft fern' – *Dennstaedtia punctilobula* (Michx.) Moore – hay-scented fern or *Thelypteris novaboracensis* (L.) Nieuwl. – New York fern

Mooney noted that the specific qualifier *uwásgilĩ* ('soft') was due to the softness of the leaves or fronds. Both botanical names were included in Mooney's notes and appeared to be the identifications of the Smithsonian botanists, but it was not clear if this was a case of underdifferentiation in the Cherokee system or confusion between the field and laboratory researchers. He also recorded the synonym *yân-a utsě'sa usdíga* ('the bear lies on it, small') for *Dennstaedtia punctilobula* (see below). Mooney

highlighted the folk species *egû'ĩ uwásgilĩ* as a remedy for heart troubles and, while all ferns were considered beneficial for this condition, his notation suggests that this species was considered especially useful for this condition.

Olbrechts added to the confusion by recording the names *igû'ĩ uyela'a* ('naked fern') and *igû'ĩ dawiskage* ('smooth fern') for *D. punctilobula*. He recorded it as a possible component of a medicine for "the Big Chill" or malarial fevers (Mooney and Olbrechts 1932: 228). In his notes, Olbrechts identifies *igû'ĩ uwásgilĩ* as *Cystoperis fragilis* (L.) Bernh., but in *The Swimmer Manuscript* (1932: 228), he identifies *C. fragilis* as *igû'ĩ uwásgilĩ nöyoehi* (see below). He glossed *uwásgilĩ* as 'smooth', but he had also glossed *dawiskage* in the same manner, indicating a possible misinterpretation of *uwásgilĩ*.

*igû'ĩ uwásgilĩ nöyoehi* – 'the smooth (soft) fern that grows on rocks' – *Polypodium virginianum* L. – rock cap fern or *Cystoperis fragilis* (L.) Bernh. – fragile fern

The two botanical species identified here exemplify the difficulty presented by the recorded glosses recorded for *uwásgilĩ*. *Cystoperis fragilis* could easily be considered one of the 'soft' species of *igû'ĩ*, as indicated by the common name "fragile fern". But Olbrechts glossed it as 'smooth', a more apt description for the glossy-leaved *P. virginianum*, which he also recorded as *igû'ĩ uwásgilĩ nöyoehi*. The specific qualifier *nöyoehi* ('growing on rocks') provides no help in distinguishing the intended species as both are commonly found growing on rocks. Olbrechts included *C. fragilis* as a potential ingredient in the formula for *unawasti egwa* ('big chill') (Mooney and Olbrechts 1932: 228).

*egû'ĩ uwásgilĩ usdí* – ‘little soft fern’ – *Osmunda cinnamomea* L. – cinnamon fern

The designation of this particular fern as the ‘little’ species is confounding, as it is a fairly large fern, much larger than either of the biological species cited above.

Olbrechts independently identified *egû'ĩ uwásgilĩ usdí* as *O. cinnamomea* but, consistent with his other interpretations, glossed it as ‘little smooth fern.’ But both men also recorded the synonym *tsisátĩ útana*, or ‘it smothers, large,’ referring to its use as an agent to smoke animals out of logs and yellow jackets out of the hive so the larvae could be harvested for consumption. Other synonyms Mooney recorded for *O. cinnamomea* included *egû'ĩ egwa* or ‘fern, large’ and *yân-a utsě'sa útana* or ‘the bear lies on it, large’ (see below). Along with its use in flushing out animals and insects, the bruised root of *O. cinnamomea* was used for severe diarrhea (flux) and, as with other ferns, for heart troubles.

*igû'ĩ gigage uyödu'wite* – ‘fern with a red stalk’ – (not identified)

This was also reported to be used against “the Big Chill” (intermittent fevers due to malaria) as well as for the condition known as ‘when it breaks them’, a form of rheumatism (Mooney and Olbrechts 1932: 292). It may be one of the several species of ferns mentioned in *The Swimmer Manuscript* for “the Big Chill” (Mooney and Olbrechts 1932:228), but having a red stalk is not a key characteristic used to identify any of them.

*igû'ĩ gadusi ehi* – ‘fern growing in the mountians’ – (not identified)

Olbrechts found that this fern was used for the disease “when they discharge light colored blood from their bowels”, but he was unable to identify the botanical species associated with the Cherokee name.

*igû'ĩ igatehi* – ‘swamp growing fern’ – *Onoclea sensibilis* L. – sensitive fern

The specific qualifier *igatehi* (‘swamp growing’) was due to the preference of this fern for wet, low-lying areas. No medicinal used were attributed to *O. sensibilis*.

*inatû gán'ka* – ‘snake’s tongue’ – *Asplenium rhizophyllum* L. – walking fern

The name for this plant comes from the shape of the leaf, which is very long and pointed. Mooney recorded that the whole plant was collected for use, as the roots are very small, and applied to problems caused by dreaming of snakes. Will West Long elaborated on this use, adding that *Hepatica acutiloba* DC was added to the decoction and the action of the resulting emetic stopped the dreams from reoccurring (Banks 1953: 4). It was also used in a formula for the condition known as *dalânige tsandik'öça* (‘yellow urine’).

*kâ'ga-skû'tagĩ* – ‘crow skin’ – *Adiantum pedatum* L. – maidenhair fern

Mooney said *A. pedatum* was called ‘crow skin’ because of its black stalk, which resembled the exposed areas of a crow. An infusion of the leaves, combined with those of other ferns, was used to unwind the lungs from around the heart and also, with an unidentified fern referred to as “bottom fern”, for rheumatism and chills. It was also used



alone for fevers, the patient drinking a tea made from the plant and also bathing their face with the remaining tea. A poultice of the beaten roots was applied when there was loss of the use of limbs (Mooney Ms. 1894). The “bottom fern” could be *Polystichum acrostichoides* (Michx.) Schott, which Olbrechts recorded as one of the species that could be used in combination with *A. pedatum* for “the Big Chill”. It is commonly found growing along wooded streambanks (Cobb 1984: 126).

Witthoft (1947) recorded that a decoction of the whole plant was considered “very strong medicine” and was used as an emetic for the flu and accompanying fever. Banks (1953: 3) added that the powdered leaves were smoked in case of heart trouble and an infusion of the whole plant was used to treat children suffering from a form of paralysis associated with severe illnesses such as pneumonia. The infusion was blown on the head and chest of the patient and in other areas where the patient was hot.

*ká'ga skû'tagiyústĩ* – ‘like crow skin’ – *Pteridium aquilinum* (L.) Kuhn – bracken fern

This fern was considered ‘like crow skin’ because the stalk turns dark brown with age, resembling the dark stalk of *Adiantum pedatum*. Mooney described this as a long, thin fern with a woody root (Ms. 2497). He and Olbrechts also recorded the name *atsísáti*, or ‘to make fire with,’ but neither elaborated on this application of the plant. Olbrechts also recorded the names *dayuwayi* and *tcisati* as synonyms for *P. aquilinum*, but did not record a gloss for either. No medicinal applications were attributed to *P. aquilinum*.

*useliti* – ‘it is held erect’ – *Botrychium virginianum* (L.) Swartz – rattlesnake fern

Olbrechts provided the gloss ‘it is held erect’ for *useliti* and this appears to be the singular form of *tsusalěťi*, the folk generic for one of the synonyms for *Eupatorium perfoliatum* (see *gátatsú’lĩ gatusě’hĩ* in herbaceous plants, Part 1). Mooney recorded the gloss for *tsusalěťi* as ‘it lifts itself up’, evoking the image of a person holding up their arms. The petiole and fertile frond of *B. virginianum* also have this erect quality and it is reflected in the name *useliti*.

Mooney found that a decoction of the root was drunk for three days to treat fevers. The root was dried for winter use as the top of the plant dies in early fall. Olbrechts found that it was used for nightmares about snakes, a condition known as *inadö danskitsöi* (‘when they dream of snakes’), as well as for actual snakebites, but he gave no details for its use. This is probably the “fern-snake-root” mentioned by Adair as one of the several snakebite remedies carried in shot pouches by all Indian hunters and warriors (Adair 1974: 247).

*yân-a utsě’sa útana* – ‘the bear lies on it, large’ – *Polystichum acrostichoides* (Michx.) Schott – Christmas fern

The name stems from *yân-a* (‘bear’) and *utsě’sa*, the third person of *agwatsě’saũ’* (‘I am lying down on it’). Mooney states that this name was due to the fact that this fern and the small variety (see below) both have a single stalk and there is a tendency for the leaves to lie flat instead of remaining erect. Apparently this makes the ferns look as if a bear had slept on them. He admits that other informants also identified *Osmunda cinnamomea* as the same plant, but both he and Olbrechts found *P.*

*acrostichoides* labeled as *yân-a utsě́sa*. Mooney also identified it as such in *Sacred Formulas of the Cherokees* (1891: 327), stating that a decoction of the roots was used as an emetic and for toothache, as well as taken internally and applied topically after scratching for rheumatism. It was one of several ferns mentioned as a possible remedy for “the Big Chill” (Mooney and Olbrechts 1932: 228). A cold infusion of the roots was used for stomach aches and bowel complaints, while a tea to the leaves was used to treat indigestion (Banks 1953: 5). This may also be the “bottom fern” mentioned above (see *kấga-skû́tagĩ*).

*yân-a utsě́sa usdíga* – ‘the bear lies on it, small’ – *Dennstaedtia punctilobula* (Michx.)

Moore – hay-scented fern

*Dennstaedtia punctilobula* was considered the ‘small’ species of *yân-a utsě́sa*, but it was also recorded as *yân-a utsě́sa uwásgilĩ* (‘the bear lies on it, soft’), further implicating it as the primary *egû́ĩ uwásgilĩ* (‘soft fern’). The uses for *D. punctilobula* have already been discussed above (see *egû́ĩ uwásgilĩ*).

## Chapter 8

### *Úgalŭ-hi* – Moss

### *Ustaléta* – Lichen

Mooney wrote the following about *úgalŭ-hi* (also used in the shortened form, *úgalŭ*):

*Úgalŭ* or *úgalŭ-hi* is the generic name for mosses, excepting lichens. The Cherokee distinguish them by habitat, as water moss, rock moss, balsam moss, etc.

However, of the four examples he recorded as types of *úgalŭ-hi* (see below), only one is a true moss. The others include a green, branching lichen, an unidentified plant, and a flowering plant. *Úgalŭ-hi* could more properly be glossed as ‘mosses and moss-like plants’ and may have included a wide range of mosses, non-fruticose lichens, and moss-like flowering plants.

Mooney recorded *ustaléta* as a “generic” term for lichens, but according to Will West Long, it referred to the fruticose (leaf-like) lichens that grew on rocks. *Ustaléta* was glossed as ‘scrapings’, a name “applied to dried food remains that stick to the inside of the pot.” *Ustaléta* stemmed from *utsaléstĩ* (‘it is sticky’), the name for dough or wheat products, and was in reference to the appearance of the lichens that seemed to be peeling off the rocks.

Table 8.1. Moss and Lichen Index: Botanical Name and Folk Species

Botanical Species	Cherokee Species
Hypnum spp. Parmelia spp. Podostemum ceratophyllum Usnea barbata	<i>úgalŭ-hi nŭ'yŭ ústa</i> <i>ustaléta</i> <i>úgalŭ-hi amaiyě'hĩ</i> <i>úgalŭ-hi ată' ústa</i>

## Cherokee Mosses and Lichens

*úgalŭ-hi amaiyě'hĩ* – ‘moss growing in the river’ – *Podostemum ceratophyllum* Michx. – riverweed

The specific qualifier *amaiyě'hĩ* (‘growing in the water’) signifies that the plant was submerged in water, as opposed to *amayultehi* (‘growing near water’), which was reserved for plants growing at the water’s edge. The best description of its use came from one of Mooney’s small manuscripts, a list of place names, descriptions of locations, mound sites, etc. (Ms. 1894), “In the old days, rock moss was gathered and dried, powdered, and used like salt.” While this may appear to be *úgalŭ-hi nŭ'yŭ ústa* (see below), Witthoft clarified that it was, “a salt ... prepared by burning the dried aquatic plants which grows on rocks in the swift moving mountain streams, called “moss”...”. The ashes that comprised this “salt” were used in flavoring food, and were especially important for bean bread (Witthoft n.d.: 56). Adair also made a similar reference to the used of aquatic plants, stating how the Cherokee “eat the saltish moss and grass, which grows on the rocks, and under the surface of the waters (Adair 1974: 239). “

*úgalŭ-hi atắ ústa* – ‘moss, it hangs on wood’ – *Usnea barbata* (L.) Vigg. – beard lichen, old man’s beard

The specific qualifier *atắ ústa* stems from *atắ* (‘wood’) and *ústa*, a form of *titstaŭ́* (‘I am hanging on’), referring to the filamentous, gray-green lichens that hang on tree trunks and branches. Mooney identified this as *Usnea barbata*, but he said the name was a general term for “all hanging tree mosses”. Mooney found that the tree moss growing exclusively on hickory trees was used to treat thrush (Ms. 1894).

*úgalŭ-hi nŭ́yŭ ústa* – ‘moss that hangs on rocks’ – *Hypnum spp.*

The specific qualifier *nŭ́yŭ ústa* stems from *nŭ́yŭ* (‘rocks’) and *ústa* (see above), but Mooney wrote that the name encompassed the “common” moss growing on rocks, as well as on wood and soil. This was applied to a species of *Hypnum*, the only true moss that Mooney identified as a type of *úgalŭ-hi*, but was probably the general term for a wide variety of mosses.

*úgalŭ-hi ŭ́nagéŭ stắhŭ-ehŭ* – ‘moss that grows in the Balsam forest’ – no species name

The specific qualifier *ŭ́nagéŭ stắhŭ-ehŭ* stems from *ŭ́nagéŭ* (‘black’), a reference to *Abies fraseri* and *Picea rubens* (see the chapter on trees), and *stắhŭ-ehŭ* (‘dwelling in a forest’), *stắhŭ* (‘thicket’ or ‘forest’) being a combination of *atắ* (‘wood’) and *ě́hŭ* (‘living’ or ‘dwelling’). So *stắhŭ-ehŭ* literally means ‘living where the wood is living’. Mooney also recorded the synonym *úgalŭ-hi ganáwŭnahíta* (‘tall, herbaceous moss’), *ganáwŭnahíta* being a combination of *ganulŭ́hŭ* (‘herb’) and *gŭnahíta* (‘long’). Mooney did not observe this plant, but relied on the description of his informants. It was described as, “growing 2 to 3 feet high and only around the base of balsam trees.” This

description does not fit any moss or moss-like plant with which I am familiar. No medicinal uses were recorded for this species of *úgalŭ-hi*.

*ustaléta* – ‘scrapings’ – *Parmelia* spp.

The meaning of *ustaléta* is discussed above. According to Mooney, the name also applied to “scum mosses”, which grew on damp ground and resembled lichens. These may have been lungworts; members of the genus *Lobaria*, a group that prefers damp environments (Nash 1996: 234). Several of the fruticose lichens were harvested from fallen twigs and used on cancerous sores (Banks 1953: 2).

## Chapter 9

### Crop Plants

The crop plants will include the native herbaceous species that were dependent on humans for their propagation, “native” here referring to plants that were in use before contact with Europeans, as well as those that were introduced by Europeans. I have also included the introduced condiment pepper and beverage coffee in this section. They were not and could not be grown by the Cherokee in their cool mountain homeland, but were embraced by the Cherokee and purchased from outside sources. Mooney also included both in his notes and stressed their cultural relevance to the Cherokee. Corn will also be discussed in this category as it was the Cherokee’s primary crop plant, but it will also be mentioned in the chapter on grasses.

Table 9.1. Crop Plant Index: Botanical Name and Folk Species

Botanical Species	Cherokee Species	Botanical Species	Cherokee Species
Allium cepa	<i>sûkĩ'</i>	Lagenaria vulgare	<i>galû'ná</i>
Arachis hypogaea	<i>túya aníladískĩ</i>	Lycopersicum esculentum	<i>unû'guhístĩ</i>
Avena sativa	<i>sâ'kwĩl unígístĩ</i>	Nicotiana rustica	<i>tsâ'lá' akayû'ĩĩ</i>
Brassica napus	<i>tûksûna</i>	Nicotiana tabacum	<i>tsâ'lá'</i>
Brassica oleracea	<i>skéwĩ</i>	Phaseolus spp.	<i>túya</i>
Capsicum annuum	<i>udsilû'ĩ</i>	Piper nigrum	<i>dikátûltĩ'</i>
Citrullus vulgaris	<i>gûgístĩ</i>	Pisum sativum	<i>túya usdígá</i>
Coffea arabica	<i>káwĩ</i>	Secale cereale	<i>utsítsûnahíta</i>
Cucurbita pepo	<i>íya</i>	Solanum tuberosum	<i>núnă'</i>
Cucurmis sativus	<i>kagama</i>	Triticum aestivum	<i>utsaléstĩ</i>
Gossypium herbaceum	<i>udsíla</i>	Vigna unguiculata	<i>túya unsdígá</i>
Helianthus annuus	<i>u'lá'</i>	Zea mays	<i>sélu</i>
Ipomoea batatas	<i>núnă' gûnahíta</i>		
Lactuca sativa	<i>agástagístĩ</i>		



## Cheorkee Crop Plants

*agástagístĩ* – ‘raw food’ – *Lactuca sativa* L. – lettuce

The name here stems from *agástĩ* (‘raw’) and *agístĩ* (‘food’). The Cherokee usually cooked all their greens (Witthoft n.d.: 24), so the introduced lettuce would have stood out as a raw edible green.

*atsíla* – ‘fire’ – *Brassica nigra* (L.) Koch – black mustard

Mooney claimed that this was table mustard and that the name *atsíla* was due to the peppery taste. I found no information on its introduction to the Cherokee.

*dikátûltĩ* – ‘things to sprinkle on’ – *Piper nigrum* L. – black pepper

This is the Cherokee name for the common table condiment. While not actually a viable crop plant in the temperate regions, it was introduced as a spice to the Cherokee and became an integral part of their diet. But I found no record of when it first appeared among the Cherokee. The name *dikátûltĩ* stems from *detsikátutlûskû* (‘I am sprinkling them on’) or *tsikátûtlûskû* (‘I am sprinkling it on’), due to the action of dispersing ground pepper. Mooney gave no indication of Cherokee attitudes towards or non-culinary uses for pepper.

*galû’ně* – ‘being in it’ – *Lagenaria vulgaris* Scringe – bottle gourd

The folk generic *galû’ně* stems from *galû’* (‘it is in it’). This refers to any kind of hollow vessel. Witthoft claims there were two types, a long neck variety used as a

dipper or ladle and a short necked variety that were used as bottles, cups, rattles, or salt containers (Witthoft n.d.: 202). Besides being used as a general container, Mooney found that the Cherokee hung hollow gourds on long poles to attract purple martins. The bird was a favorite of the Cherokee because of its aggressive nature and its tendency to chase crows away from the crops (Mooney 1900: 454-455). Gourd seed were also mashed and soaked in hot water to treat difficulty in urination (Witthoft 1946).

*gûgístĩ* – ‘something to eat any time’ – *Citrullus vulgaris* Schrader. – watermelon

The Cherokee generic *gûgístĩ* demonstrates the attitude of the Cherokee towards watermelons. Watermelons were observed in Native American gardens as early as 1562 and had spread to Virginia by 1587 (Davis 2000: 51). Not only did the Cherokee consider them an acceptable food, but they were so relished that they were ‘something to eat any time’ they were available. The name *gûgístĩ* stemmed from *agístĩ* (‘food’).

*íya* – pumpkin – *Cucurbita pepo* L.

The folk generic *íya* appears to be a proper, opaque name for the native varieties of pumpkin and squash. Witthoft said that the native varieties were no longer grown when he visited the reservation (late 1940s or early 1950s), but only the typical orange varieties were grown at that time. In his discussion of the preservation technique for pumpkins, he said the pumpkin was peeled and sliced in a spiral like an intact apple peel. Several of these (ten or more) were skewered on to the end of a stick and placed near the fireplace until dry. The dried pumpkin flesh was then stored in a sack and later soaked and cooked into a gruel (n.d.: 200-201).

*kagama* – ‘cucumber’ – *Cucurmis sativus* L.

Mooney referred to *kagama* as a “corruption” of cucumber. Cucumers were first observed in Native American gardens in Florida as early as 1562, so they may have reached the Cherokee at an early date Davis 2000: 51). Little else is available concerning the Cherokee relationship to the cucumber.

*káwǐ* – coffee or *tuyayústǐ* – ‘like beans’ – *Coffea arabica* L.

*Káwǐ* is the Cherokee pronunciation of coffee, there being no “f” in the Cherokee language. The synonym *tuyayústǐ* (‘like beans’) was due to the resemblance of coffee beans to the beans grown in Cherokee gardens or *túya*. Again, this is not a temperate crop, but was imported and embraced by the Cherokee. Mooney found that the more conservative Cherokee considered coffee to be a poison, but it was embraced by the more progressive factions as early as the 1820s (Mooney 1900: 214, Goodwin 1977: 129). Before 1900, the Cherokee would roast green coffee beans in much the same manner as parching corn, the beans placed in a Dutch oven with hot ashes and heated until they were roasted. These were then “ground” by pounding them in the large corn mortars (Witthoft n.d.: 54).

*núnǎʼ* - potato or ‘tuber’ – *Solanum tuberosum* L.

Mooney was of the opinion that the name *núnǎʼ* was originally applied to *Apios americana* (see *dunúnǎʼ igâʼteněʼhǐ* above), but was changed as the Irish potato became more popular. He also found that it was called *núnǎʼ gǎsakwlûn* (‘potato, round), the qualifier *gǎsakwlûn* being the plural form of *anǐsakwalûn* (‘round’). Mooney

claimed that these were an early introduction, but he does not suggest how early, and that they were highly esteemed by the Cherokee (Mooney 1900: 214).

*núnǎ' gûnahíta* – ‘potato, long’ – *Ipomoea batatas* (L.) Lam. – sweet potato

This is another introduced crop plant that was adopted soon after contact with Europeans, probably due to Spanish introduction (Goodwin 1977: 55). Archaeological evidence of sweet potato use is lacking, but they appear to have been introduced from the West Indies and are thought to have been grown in Native American gardens in northern Florida and South Carolina in the early 17<sup>th</sup> century (Davis 2000: 49). The qualifier *gûnahíta* (‘long’) was often presented in its plural form, *tsûnínahíta* or *dinínahíta*, and refers to the long tubers of the sweet potato.

*sâ'kwîl unígistĩ* – ‘horse foods’ – *Avena sativa* L. – oats

The name stems from *sâ'kwîl* (‘horse’) and *unígistĩ*, the plural form of *aígistĩ* (‘food’). There is some question as to whether the Cherokee actually grew oats as did their white neighbors (Goodwin 1977: 129), but they were obviously familiar with the grain and would more than likely have acquired it for their horses. However, it is not clear if they considered it an acceptable food for human consumption.

*sélu* – corn – *Zea mays* L.

The name for corn is the same as the name of the first woman, Selu, who, according to Cherokee myth, was responsible for the introduction of corn into the world (Mooney 1900: 249). There is not direct evidence that, even though botanists classify Z.

*mays* as a grass, the Cherokee did as well. However, they did associate it with other plants that obviously were grasses (see the chapter on grasses).

Mooney identified two folk species of *sélu*, a sweet corn called *sélu unítsima* ('shriveled corn') and a type of popcorn called *antaskĩski* ('they pop or burst'). The former stems from *útsima* ('shriveled') and was due to the wrinkled appearance of the kernels, while the latter was from *ataskĩû* ('it pops or bursts with swelling') due to the expansive, exploding nature of popcorn. Mooney specified that *antaskĩski* did not need to be accompanied by the folk generic *sélu*, which suggests that the association with that folk genus was implied.

Witthoft recorded several varieties of flour corn, although he found that the distinct varieties were intermixing and getting harder to distinguish. The small-eared, white-grained variety was called *dis'anulá*, a proper, opaque name. A mixed variety that had yellow and red stripes on white kernels was called *seluyaaahí* and the large-eared, eight-rowed, white variety was called *seludiywtłí*, but no glosses were recorded for either. The deeply colored corn, usually consisting of deep blue, yellow, or red kernels, was called *negadagwó*, again with no gloss (n.d.: 183). Coarse pieces of corn meal were boiled into a thick soup called *ganahena* that Witthoft identified as a type of hominy. The diluted, fermented version of the corn gruel was known as *ganahena amageí*, a sour beverage made in large ceramic vessels used exclusively for this purpose. This was the preferred table beverage of the Cherokee and resembled the *sofki* of the Creeks (n.d.: 191-192).

Corn was arguably the most important component in the Cherokee diet. The most popular way to prepare corn was in the form of corn bread. But this is more like a

boiled dumpling, and is nothing like the baked cornbread made from dried ground corn. The corn was picked in the milk stage and partially dried, or was boiled in the husk and dried in the sun for winter use. The partially dried or reconstituted dried corn is then pounded in the corn mortar until it formed a moist dough. Beans, chestnuts, sweet potatoes, hickory nuts, walnuts, groundnut tubers, or a wide range of berries were seasonally added to flavor the bread. The dough was rolled into a slightly flattened dumpling, wrapped in corn leaves, and dropped in boiling water until cooked. Hickory leaves were sometimes used as a substitute for corn leaves as wrappers for the bread. Other means to process corn included parching, soaking in ashes or soda and ground into meal or made into hominy, or made into a fermented gruel and drunk as a table beverage (Witthoft n.d.: 185-195). The growing influence of Euro-American culture led to changes in the processing of corn and, as early as 1897, much of the corn on the reservation was processed into dry corn meal at local grist mills (Greene and Robinson 1986).

Volunteer corn, or corn that had self-seeded from the previous year's crop, was one of the medicinal plants used in the Cherokee version of the Green Corn Ceremony (Witthoft 1946). Other sources mention the use of the silks and parched grains as medicine, but no mention is made of the preparation techniques or the afflictions addressed by these remedies (Chiltoskey 1975).

*skéwǐ* – 'making heads' – *Brassica oleracea* L. – cabbage

Some of Mooney's informants insisted that the name *skéwǐ* applied only to the actual head of cabbage, the name for the plant being *tsugwûnténa* or *tsugúnténa* ('large

leaves'). In another entry in his notes, he called the curly variety of *B. oleracea* *tsugúnténayû'* ('real cabbage'), the suffix –yû or –yă indicating the 'true' or 'real' kind. Timberlake mentioned cabbages growing in Cherokee gardens in the mid-eighteenth century (Williams 1927: 68), possibly the earliest recording of the Cherokee integration of the crop into their regular diet. Witthoft found that the inner leaves were strung on a thread and dried for winter use (n.d.: 204).

*sûkĩ'* – 'it smells' – *Allium cepa* L. – onion

Mooney thought that *sûkĩ'* might be a shortened form of *gáw'sûkĩ'* ('smeller'), so called because of its pungent odor. Little was written about the Cherokee association with onions, other than a brief reference to their introduction to the Cherokee in the pre-Revolutionary period (Goodwin 1977: 131).

*tsâ'lá'* – tobacco – *Nicotiana tabacum* L.

Mooney speculated that the original *tsâ'lá'* was *Nicotiana rustica* L. (see below), the original tobacco grown by Native Americans in the Southeast before it was replaced in cultural importance by the introduced *N. tabacum*. *Nicotiana tabacum* *Nicotiana tabacum* was most likely introduced to the North American mainland from the West Indies soon after European contact (Heiser 1992), but it is not clear when it was first incorporated by the Cherokee. *Tsâ'lá'* has no meaning in the Cherokee language but may have come from *atsíla* ('fire'). The Tuscaroran word for tobacco, *tcā'rhũ'*, was glossed as 'to hold fire in the mouth', stemming from *utcárũ* ('fire'), and this construction may be similar to that of the Cherokee.

Little is known about Cherokee uses of *N. tabacum* for medicinal purposes as most sources that discuss tobacco use among the Cherokee tend to focus on *N. rustica* (Mooney 1891: 369, Mooney and Olbrechts 1932: 151, Banks: 114, Ethridge 1977). However, Witthoft claimed that the, “growing of aboriginal tobaccos was uniquely the practice of pagan communities, since it is used mainly in ritual” and that the growing of *N. rustica* had ceased on the reservation around 1910 (n.d.: 205). Olbrechts found *N. rustica* to be so scarce in 1926 that smoking mixtures contained only about 10% of it and 90% ordinary tobacco (Mooney and Olbrechts 1932: 75). It is not known if *N. tabacum* was considered a suitable substitute for *N. rustica* or if it replaced it for medicinal purposes after its extinction. Olbrechts made one clear reference to tobacco as a treatment for headaches (*aniskoli ada’nöwoti* – ‘to cure headache’), but in one place he identifies it as *N. rustica* (Mooney and Olbrechts 1932:171) and later refers to it as ordinary chewing tobacco (Mooney and Olbrechts 1932: 289). So it is not clear which *Nicotiana* species was considered efficacious for headaches or if both were considered acceptable.

*tsâ’lâ’ akayû’lī* – ‘old tobacco’ – *Nicotiana rustica* L.

Mooney used the qualifiers *akayû’lī* and *gayûnli* to signify ‘old’ tobacco, but did not explain the difference. But he did explain that *akayû’lī* was from *ăkayû’lige* (‘old’), and that this adjective may have been added after its replacement by *N. tabacum*. While the origin of *N. rustica* and the time of its introduction into eastern North America is a source of debate (Heiser 1992), the Cherokee considered it to be their original tobacco and the tobacco that they used in ceremony and medicine (Ethridge 1978).



The use of *N. rustica* is well documented in Creek ceremonies, especially the Green Corn Ceremony or busk (Swanton 1938: 546-614); however its use among the Cherokee is not as evident. There is mention of the use of “old tobacco” in Cherokee ceremonies in the Payne/Butrick papers, but it is not clear if it is a species of *Nicotiana*. It was described as, “a weed, supposed to resemble in some respects tobacco (Payne n.d.: 79)”, but this is not a clear identification for *N. rustica*. Witthoft (1949) also pointed out that, prior to recording the Cherokee ceremonies, Daniel Butrick had been a missionary at Chickamauga, a mixed town of Creek, Cherokee, and Shawnee peoples, among others. It is possible that his rendition of the ceremonies was a conflation of the various groups he observed.

French naturalist Palisot De Beauvois may have been the first to record a Cherokee medicinal use for tobacco, finding that chewed tobacco was placed on a snakebite to counteract the poison (Anderson 1984). But it was Mooney who stressed the importance of *N. rustica* to the Cherokee:

Tobacco was used as a sacred incense or as the guarantee of a solemn oath in nearly every important function – in binding the warrior to take up the hatchet against the enemy, in ratifying the treaty of peace, in confirming sales or other engagements, in seeking omens for the hunter, in driving away witches or evil spirits, and in regular medical practice. It was either smoked or sprinkled on the fire, never rolled into cigarettes, as among the tribes of the Southwest, neither was it ever smoked for the mere pleasure of the sensation (Mooney 1900: 424).

*Nicotiana rustica* was also used with other remedies to counter sicknesses sent by friends or rival conjurers to test the knowledge of a medicine man (Mooney 1891: 369) (see *tsâliyústĩ usdíga* above).

Olbrechts elaborated on the use of tobacco as a prophylactic against the influence of witches (Mooney and Olbrechts 1932: 75). Finely crushed tobacco was sprinkled on a cone of hot ashes to determine which direction a witch might attack from or if a witch was already in the building. The medicine man might also walk around the house and blow tobacco smoke in all directions that a witch might approach from, including into the sky and toward the ground.

Several applications of *N. rustica* were published in *The Swimmer Manuscript*. The juice of chewed tobacco was blown on to patients suffering from *unawasti egwa* ('big chill') (1932:170) and was held in the mouth of the medicine man when he sucked the poison out of a snakebite (1932: 241). *Nicotiana rustica* could be combined with *Panax quinquefolium* and used on patients who had suffered a stroke (1932: 230) or chewed and rubbed on bean-like boils when the swelling first appears (1932: 301).

*tûksûna* – turnip – *Brassica napus* L.

The folk generic *tûksûna* appears to be an opaque, proper name for the turnip. Mooney also recorded the synonym *u'ĩĩ'* ('round tuber'), but this name appears to refer only to the tuberous root. Mooney did not mention the relationship with the folk generic, *tûksûn ulísĩ*, but it seems likely that the introduced turnip replaced the native

peppergrass in importance as the Cherokee embraced agriculture. However, applying a familial term recognized the botanical relationship between peppergrass and turnips.

*túya* – ‘bean’ – *Phaseolus* spp.

*Túya* is the folk generic for beans and bean-like plants and it appears to be an opaque, proper name. The folk generic was applied singularly to species of *Phaseolus*, such as *Phaseolus vulgaris* L., which would include such varieties as pinto or kidney beans, or *Phaseolus lunatus* L., known as lima or butter beans (Goodwin 1977: 52). *Phaseolus lunatus* may have been introduced from South America soon after contact rather than being developed in the Southeast (Witthoft n.d.: 52). Other bean-like plants and peas were labeled as folk varieties of *túya* and will be individually discussed below.

The association of beans and corn played a central role in Cherokee myth and nutrition, as well as in the ecology of their gardens. The first woman, Selu, who introduced corn to the Cherokee, was also the source of the first beans (Mooney 1900: 244). It is also common knowledge that beans are high in lysine, the limiting amino acid in grains, and provided the complement necessary to furnish all the essential amino acids in a corn-based diet. Beans were also planted in the same hills as corn and the nitrogen-fixing bacteria associated with the roots of beans provided a boost to the heavy-feeding corn plants (Goodwin 1977: 52).

Witthoft (n.d: 200) said the Cherokee mostly ate there beans in three ways: immature green beans, dried beans, and bean bread. The immature green beans were boiled and further cooked in heated grease. They could also be strung and dried in the sun for winter consumption. The half-ripe beans were boiled and eaten or pounded in a

mortar into the bean bread. The dried, mature beans were either shelled by hand or placed in a sack, beat with a stick, and the shells separated in a winnowing basket.

*túya aníladískĩ* – ‘bean, long tuber’ – *Arachis hypogaea* L. – peanut

The specific qualifier *aníladískĩ* (‘long tuber’) was descriptive of the subterranean legume of the peanut plant. Only a passing mention is made of the introduction of the peanut to the Cherokee (Goodwin 1977: 128) so we know little about their cultural importance. It appears that peanuts were introduced to Europe and the Far East by the Portuguese in the early 16<sup>th</sup> century (Baker 1965: 57), but it is unclear how they were introduced to the Cherokee.

*túya unsdiga* – ‘little beans’ – *Vigna unguiculata* (L.) Walpers – black-eyed peas, cowpea

The specific qualifier *unsdiga* in an irregular plural form of *usdíga* (‘small’) and here was used to refer to the size of the bean. Cowpeas were introduced by the Spanish and have been found with other Spanish artifacts in an archaeological site in central Alabama, indicating that they were grown there in the mid-seventeenth century (Davis 2000: 50). Cowpeas were used by the Cherokee in the same manner as other beans and peas.

*túya usdíga* – ‘small bean’ – *Pisum sativum* L. – garden pea

The specific qualifier *usdíga* (‘small’) was used in the singular form for *P. sativum* to distinguish it from the black-eyed bean. It could also be used in its abbreviated form,

*túyusdí*. The synonym *unatsû'talí* or *unatlû'talí* ('they are upright against or supported by something') was also used and referred to the practice of supporting the pea vines on dead branches. Peas were an early introduction through Spanish contact and were observed growing in Native American gardens in Florida as early as 1562 (Davis 2000 51). Mooney said that many Cherokee would not eat garden peas. However, he gave no reason for this.

*udsíla* or *udsilû'ĩ* – 'flower or bloom' – *Gossypium herbaceum* L. – cotton

The name was in reference to the boll of the cotton plant, not the flower itself. This may have referred to the spines on the boll (see next entry) and been a reference to the pain associated with touching the boll. Mooney did not discuss the role of cotton in Cherokee life and there is no information on its medicinal value.

*udsilû'ĩ* – 'it smarts' – *Capsicum annuum* L. – red pepper

The folk generic *udsilû'ĩ* stems from *udsi'listĩ'* ('it is smarting'), referring to the pungent flavor of red peppers. Mooney said the following about the resemblance to the previous name, "This name differs from that of cotton only in accent, a variation too slight to be indicated." No other information was available for *C. annuum*.

*u'lâ'* – sunflower – *Helianthus annuus* L.

The name *u'lâ'* appears to be a proper, opaque name for the sunflower. The plant was domesticated within the present boundaries of the continental United States

and the use of the seeds and their extracted oil has been documented among Native Americans, but there is little explicit information on Cherokee use for the seeds.

*unû'guhistĩ* – 'they leak' – *Lycopersicon esculentum* Miller – tomato

The folk generic *unû'guhistĩ* was the same as the name for the ground cherry, also in the family Solanaceae with a recognized edible fruit (see Part 3). This appears to be a case where the introduced food was not given cultural preference over the native food, nor was it designated by a special qualifying adjective. Perhaps the cool mountain climate prevented tomatoes from thriving as they do in other portions of the Southeast and limited their use among the Cherokee.

*utsaléstĩ* – 'it is sticky' – *Triticum aestivum* L. – wheat

The folk generic *utsaléstĩ* refers to the dough, which goes by the same name. This quality would have been especially obvious to the Cherokee, who were more accustomed to corn flour. The gluten in wheat gives it that sticky quality that is desired in bread making, but the gluten protein is absent from corn. The Cherokee did not adopt the growing of wheat until the early 19<sup>th</sup> century, when they incorporated the use of the plow into their farming practices (Goodwin 1977: 129).

*utsítsûnahíta* – 'long tassel' – *Secale cereale* L. – rye

The name stems from *utsítsatã* ('tassel') and *gûnihíta* ('long') and refers to the awns on the end of the grain. Mooney actually identified this as *Lolium perenne* L., or rye-grass, but this is not the edible species of rye. While the history of the use of rye

among the Cherokee is poorly documented, white farmers in western North Carolina grew large amounts for use as both human and animal food (Davis 2000: 143).

## Chapter 10

### Cherokee Ethnomycology

There is surprisingly little information available on the relationship of the Cherokee to the local fungi given both the variety of shapes and color as well as the large number of useful species that are available in the region. The extensive investigations into the Cherokee's use of plants for food (Perry 1974, Witthoft n.d.) and medicine (Mooney and Olbrechts 1932, Banks 1953) provide only a glimpse into the potential edible and medicinal species. The ideal environmental conditions of the southern Appalachian region, including abundant moisture, favorable soil conditions, and a wide variety of conifers and hardwoods, are most conducive to fungal growth and species diversity. Even the casual observer will notice an array of shapes and colors that are indicative of the region's fungal diversity.

Several factors may have led to the lack of information on Cherokee use of fungi. Europeans and their descendents are believed to harbor a cultural mycophobia (Morris 1987), which may have led to an oversight of fungi by the researchers. Field identification takes extensive training, as evidenced by the few taxa identified even to or beyond the biological rank of genus, and the difficulty of preserving fungi may have prevented their transfer to experts for identification. It may be that of the Cherokee were truly indifferent toward their local fungi, although I find this to be unlikely, given the close



association of the Cherokee with so many aspects of their biotic environment, as well as the perceptual salience and potential utility of the larger fungal species.

Mooney noted several aspects of the classification of fungi, but extracting a clear system from his notes is difficult. For instance, he indicates that *tawá'í* (he also spells it *tawá'û*) is the generic term for several varieties of mushrooms, excluding the puffballs. In most instances when Mooney has referred to a generic name, he is referring to what a life-form category, but it is not clear whether this is a folk life-form category or a folk genus. At various points in his notes he refers to *tawá'í* as mushrooms, fungi in general, and toadstools, a descriptive term usually reserved for the classic umbrella shaped fungi. He also used a similar term, *tiwá'í* ('bowl') as the name used for bowl-like objects such as red raspberries (see *tiwá'í* in the chapter on Shrubs and Vines), but Witthoft claimed that this was an inclusive name for all bowl-shaped objects including mushrooms (n.d.: 42). Not all the fungi identified as a type of *tawá'í*, such as those in the genus *Clavaria*, have this prototypical mushroom shape. This makes it difficult to discern the inclusiveness of the *tawá'í* category, but the inclusion of the genus *Clavaria* suggests a life form category exclusive of puffballs.

The information on puffballs is too limited to discern whether the Cherokee considered them a distinct life form from other fungi. However, Mooney's note that *tawá'í* excluded puffballs suggested that they were considered as a distinct category. The majority of them are considered as a type of *năkw'sí* ('star'). If a more inclusive life-form term for puffballs did (or does) exist, then *năkw'sí* would appear to be an intermediate category or a folk generic.

Another problem is the case of *wísí*, which Mooney reported as a type of puffball and which appears to be a shortened version of *năkw'sí*. However, later researchers have identified *wísí* as non-puffball species (Perry 1974, Witthoft n.d.). As these researchers were among the Cherokee several decades after Mooney, this may represent a loss of traditional knowledge and a degradation of the biological classification system. For the purpose of this work, the fungi reported used by the Cherokee by various researchers will be divided into the inclusive categories of *tawálí* and *năkw'sí* and the various *wísí* will be included under both headings depending on their identification as a biological genus or species.

Table 10.1. Fungus Index: Botanical Species and Folk Species

Botanical Species	Cherokee Species
Agaricus campestris Auricularia spp. Bovista pila Clavaria spp. Exobasidium rhododendri Fistulina hepatica Geastrum spp. Grifola frondosa Lactarius deliciosus Lycoperdon spp. Morchella spp.	<i>unílagwě́</i> <i>aníí</i> <i>dudusi</i> <i>tawálí uniyá'atí</i> <i>sûnktắ</i> <i>wísí</i> <i>năkw'sí udigido</i> <i>wísí</i> <i>anidzistezí</i> <i>năkw'sí' tsundí-ga &amp; wísí</i> <i>ahawi sayoniyustí</i>

## **Tawáľĩ (or Tawálû) – Mushrooms**

*ahawi sayoniyustĩ* – ‘deer antler-like’ – *Morchella* spp. – morel

Witthoft (n.d.: 58) provided this name and gloss for the morels, but gave no further information about them. Perry (1974: 31) reported that *Morchella esculenta* Pers. ex StAmans was known to grow under apple trees and was prized by the Cherokee for its flavor. They would split them in half or leave them whole, roll them in meal, and fry them.

*anidzistezi* – ‘they are red’ or *anidziskwadugá* ‘they turn themselves over’ – *Lactarius deliciosus* (Fr.) S. F. Gray – orange-latex milky

Witthoft recorded the name and identified this fungus, but gave no other information. The gloss ‘they are red’ most likely comes from the orange latex that is apparent when the flesh is broken. As the specific epithet indicates, this is a delectable edible (Fischer and Bessette 1992: 62).

*anĩľĩ* – ‘they are climbing’ – *Auricularia* spp. – wood ear

Mooney described this fungus, commonly known as the wood ear, as “a small semicircular fungus growing on rotten limbs.” They were washed several times until the water was clear and boiled in soup with salt. They were also eaten raw by hunters who would break them off the limbs and eat them.

*gatu anitsutsa* – ‘young boy's bread’ – (not identified)

No further information is available.

*sûnktắ* - ‘apple’ - *Exobasidium rhododendri* (Fuckel) Cramer – azalea apple

Witthoft described this fungus, commonly found growing on *Rhododendron periclymenoides* (Michaux) Shinnars, thusly:

The peculiar little ball-shaped or scale-like green excrescences which are found on the stems of this shrub are considered a great delicacy, and are generally called *sûnktắ*, which is also the word for the cultivated apple. These peculiar growths are much relished as a food and a thirst-quencher by hunters (Witthoft n.d.: 55).

*tawálĭ gigagéĭ* – ‘red toadstool’ – (not identified)

No further information is available.

*tawálĭ gûnagéĭ* – ‘black toadstool’ – (not identified)

No further information is available.

*tawálĭ tsiyŭ́ ústắ* - ‘poplar fungus’ – (not identified)

*Tsiyŭ́* is the Cherokee name for *Liriodendron tulipifera* L., the tulip or yellow poplar, and *ústắ* glosses as ‘adhering or sticking to’. Mooney describes this fungus as having a strong stalk, flat top, being about four inches in diameter, and growing on poplar stumps. The description matches that of the oyster mushroom, *Pleurotus*

*ostreatus* Fries, a common edible mushroom in the mountains that is most commonly found on *L. tulipifera*. If Mooney had mentioned the placement of the stalk, or stipe, there would have been little doubt, as the oyster mushroom has a short, lateral stalk.

*tawálĭ uniyâ'atĭ* – ‘branching fungus’ – *Clavaria* spp.

Members of the genus *Clavaria* are often referred to as coral fungi, due to branching pattern that resembles coral assemblages. Members of this genus were also known as *tawálĭ uwadsístatĭ* or ‘rough fungus’ because the branches have a rough appearance.

*tawálĭ uskuâĭlû* – ‘paunch fungus’ – (not identified)

The underside is said to resemble the inner surface of a paunch (cow’s stomach). One of Mooney’s informants suggested it might be the same fungus that he knew of as *úninagwáĭ*, or ‘they are crows’. This fungus was about three inches across with a red-brown underside and was eaten raw with a little salt. This suggests *Fistulina hepatica* Schaeff ex Fr., the beefsteak fungus (see *wísĭ* below). It is called the beefsteak fungus because of its pinkish red flesh and gelatinous consistency. The underside is often reddish brown and consists of individual tubes that may be said to resemble the paunch of an animal (Miller 1978: 274). It is commonly found on oak and chestnut trees, the latter being common in the region when Mooney was among the Cherokee. It is also one of the few fungi that are recommended as safe to consume uncooked (Fischer and Bessette 1992: 127).

*tûskĩ́ tsuníhyăgístĩ́* – ‘terrapins eat it’ – (not identified)

The name is a combination of *tûskĩ́* or ‘terrapin’ and *tsuníhyăgístĩ́* or ‘they are eating it,’ but there is no indication of which species this was or whether the Cherokee ate it.

*unílagwě́* or *unílagwû́* - ‘mushroom’ – *Agaricus campestris* Fr. and other *Agaricus* species

This is the common meadow mushroom, perhaps the best known of wild edible species in North America (Fischer and Bessette 1992: 38). Mooney also reports it as *tsulágwě* or *tsunílagwě́*, both plural forms of *unílagwě́*, because single specimens are rarely found. Witthoft (n.d.: 57) also identified this as *Agaricus (Psalliota) campestris*, but his version of the name is *usłowá*. Perry (1974: 30) recorded *unilukwe* as *Armillariella (Armillaria) mella* (Fr.) Karst., known commonly as the honey mushroom or “slicky mushrooms” by the Cherokee. They were boiled or soaked in vinegar before cooking and preserved by canning.

*wanéř ayû́ hihĩ́* – ‘it grows into hickory’ – (not identified)

This is the fungus reported to grow in dead hickory. The informant reported that it was this fungus, not that growing in black locust, that was used to start fires. The fungus would be held under the flint when it was struck (Mooney). However, Witthoft (n.d.: 154) claims that the rope-like mycelium of the fungus that grows in black locust was the “spunk” used by the Cherokee to transport fire to a new location and to ritually “steal” fire during the ball-play dance. He describes it as, “a felt-like cylinder a fourth to a half-

inch in diameter, enclosed in a papery cortex, which is split out of the wood in strings of two to three feet long.”

*wísĩ* – no gloss – *Fistulina hepatica* Schaeff ex Fr. or *Grifola frondosa* (Dicks.:Fr.) S. F. Gray

Witthoft (n.d.: 57) claims that *wísĩ* is the proper name (a term he uses to represent opaqueness in a folk genus) for the beefsteak fungus, *Fistulina hepatica*, also known as the “wood fungus” by the Cherokee because it grows on oak stumps and trunks. Banks (1953: 1) reported that it was eaten by the Cherokee and had a taste reminiscent of beef.

Perry (1974: 31) recorded *Grifola (Polyporus) frondosa (frondosus)* as *wísĩ* and also said it grew on old stumps. Also known as “hen of the woods” or *maitake* in Japan, is commonly found growing at the base of oak trees (Fischer and Bessette 1992: 118). *Maitake* means “dancing mushroom” in Japanese, because the finder was said to be overcome with joy at finding the fungus. It is considered a choice edible and has been shown to exhibit a wide range of pharmacological properties including reducing blood pressure, exhibiting a hepatoprotective effect, lowering blood glucose levels in tests with diabetic rats, promoting immune function, and inhibiting tumor growth (Hobbs 1995: 111-112). Perry reported that *wísĩ* were ground up with pumpkin seeds and used in soups or preserved by drying, canning, or freezing.

## **Năkw'sĩ – Puffballs**

*dudusi* – no gloss – *Bovista pila* Berk. and Curt.

*Dudusi* is a type of puffball, used with *Pinus pungens* and *Sassafras albidum* for a purple form of cancer known as *adayeski* ('eating itself'). Mooney also mentioned this fungus, but did not identify it or provide any use for it. He reported that it was the "ordinary" puffball and was not eaten. He said it was also known as *dudusi tuwalũ'hĩ* or *dudusi tawálĩ*, causing further confusion in determining the distinction between *năkw'sĩ* and *tawálĩ*.

*năkw'sĩ tsundĩ-ga* – "small stars" – *Lycoperdon* spp.

The name is derived from *năkw'sĩ* ('stars') and *tsundĩ-ga*, the plural form of *usdĩ-ga* ('small'), due to their resemblance to clusters of stars. Banks (1953: 1) recorded the small puffballs as *nakwisiusdĩ* and identified them as *Lycoperdon pyriforme* Persoon. The spores from dried puffballs were dusted on to old sores. Hobbs (1995: 19) claims that puffballs were universally used by Native Americans as a styptic, for starting fires, and as an incense to ward off malicious spirits.

*năkw'sĩ útana* – "large stars" – (not identified)

These puffballs are about six inches in diameter and could be any of several species of large puffballs found in the North Carolina mountains.



*năkw'sĩ udigido* – “star’s excrement” – *Geastrum* spp.

Commonly known as earthstars, the gloss for the Cherokee name is quite descriptive of these little earth-bound stars. The spores of *năkw'sĩ udigido* were placed on the umbilical cord of newborn infants until it fell off. Olbrechts claims this is done for both prophylactic and therapeutic purposes (Mooney and Olbrechts 1932: 124).

*wísĩ* – no gloss – *Lycoperdon* spp.

Mooney described *wísĩ* as a large, round fungus, six to twelve inches in diameter, which was good to eat when cooked like cabbage with gravy. Many of the large puffballs are considered delectable edibles.

## Chapter 11

### Re-evaluation of the Cherokee Ethnomedical System from an Ethnobotanical Perspective

It is apparent from the acquired data of the various researchers that there was a significant change in scope of Cherokee ethnobotanical knowledge between 1885 and 1977. Mooney and Olbrechts worked almost exclusively with medicine men, but they also included a few Cherokee midwives. These tribal experts on medical practices tribal experts on medical practices tended to be individuals with specialized plant knowledge. By the time of Banks' research in the early 1950s, there appeared to be a transition from a magico-religious approach to more of a system based on folk cures. These cures may have been extant for some time, but were not considered as valuable as the knowledge of the specialists.

Banks often cites Will West Long, who had served as an interpreter of both language and culture for Mooney and Olbrechts, as well as working extensively with Witthoft. However, Long died in 1947 (Witthoft 1948), five years before Banks did his research, so the appearance of the continuity of research is misleading. Long was familiar with a great many of the beliefs and practices surrounding the traditional medical practices; however, he was more of an interpreter of the traditional knowledge than he was a medical practitioner (Fogelson 1961). While the range of application of plant medicines is still evident and often expanded in Banks' work, knowledge of the

symbolic significance and evocative power of plants used in formulas appears to have been diminishing.

I do not mean to suggest that there were no medicine men remaining among the Eastern Cherokee after the 1940s. While all but two of the medicine men that had worked with Mooney had died by 1904 (Mooney 1982b), Fogelson (1961) found medicine men (or conjurers) practicing their trade in the late 1950s. But he also found that the integration of Christianity into Cherokee society was diminishing the status of the medicine men and many forms of conjuring were no longer practiced.

Another difference between Banks' work and the work of previous researchers that demonstrates a loss of ethnobotanical knowledge was the simplification of the remedies recorded by Banks. Most of the entries that were exclusively attributed to Banks' informants were based on single remedies or combinations of two herbs, rarely were any used in combinations of more than two. Olbrechts claimed that combinations of four or seven herbs produced the ideal formula (Mooney and Olbrechts 1932: 54), these being the sacred numbers of the Cherokee. Most of the medical formulas he recorded contained at least two plants and one formula contained as many as 24 ingredients (although most of the ingredients had been forgotten).

There were several discrepancies between Olbrechts' statements in *The Swimmer Manuscript* and the data in his and Mooney's notes. For instance, the statement cited above about using four or seven plants in a formula is not supported by Olbrechts' notes. Combinations of four or seven herbs tend to be the exception rather than the rule (see Cherokee Ethnobotanical Conditions in the appendix). Mooney's archival materials dispute another of Olbrechts' statements about the Cherokee

medicine men. He proposed that the medicine men rarely stored herbal materials for future use and that it was, “rare to find medicine men endowed with enough foresight to lay out a garden of medicinal plants as did the European monks in the Middle Ages (Mooney and Olbrechts 1932: 55).”

But in Mooney’s field notebooks, he mentions at least 30 herbaceous plants or roots that were dried for winter use and at least 15 others that were gathered in the winter either by recognizing the dried, above-ground portions or because they had persistent, evergreen leaves (n.d.c, Ms. 1894). The number of evergreen species would have been even greater if Mooney had included the ferns, but it appears he took this information for granted in his notes. If the barks of trees and shrubs, which would have been recognizable and available throughout the year, are also taken into consideration, the Cherokee would have had access to a sizeable pharmacopoeia available at any time of the year. Olbrechts used Mooney’s materials as a foundation for his research, but it appears that he only had access to a portion of Mooney’s notes when he made his observation on the foresight of the medicine men.

It is difficult to discern from the data whether the ecological changes in the Southern Appalachians were reflected in Cherokee ethnobotanical knowledge. The perspectives on the use of tree species by the Cherokee provided by Mooney and Olbrechts seem to be the inverse of the history of forest use. One might expect that trees would play a diminishing role in medicine and ceremony as the commercial value of timber rose and the forests were removed by logging interests. However, Mooney rarely discussed the medicinal uses of trees and in his notes he focused his attention on the linguistic analysis of the tree names. Olbrechts’ research in 1926-1927 came

towards the end of the intensive logging period, but it is through his research that we can view the cultural importance of tree species, especially in relationship to Cherokee ethnomedical practices. He often gave several uses for an individual species and many of the medicinal formulas contained the bark or roots of several tree species. When shrubs and woody vines are considered in this context, the range of medicinal woody species is truly impressive. This is especially obvious in the formulas included in the appendix (see Cherokee Ethnomedical Conditions).

The value of medicinal tree use becomes very clear when we consider the frequency of remedies selected for the various Cherokee ethnomedical conditions (Table 1). Each remedy was noted for its use as a single remedy or its inclusion in a formula for the most common ethnomedical conditions. These were then listed in rank order starting with the remedies with the most applications. What becomes clear from this figure is that woody species were disproportionately represented in the selection process. Of the 55 plant species represented here that had five or more applications, 18 were trees and 31 were woody species, including shrubs and vines. When the total number of applications is tallied, tree species were selected for a total of 136 uses out of a total of 378 possible selections (36% of all selections). When all woody species are considered, they were selected 234 times (62%), while herbaceous plants were selected 144 times (38%). Woody plants were nearly twice as likely to be selected as remedies as herbaceous plants.

To rework an old adage, it is likely that Mooney did not, “see the trees for the forest.” European and early American herbal traditions were dominated by the use of herbaceous plants and the relevance and range of tree use by the Cherokee may have

simply been overlooked. In *The Sacred Formulas of the Cherokees* he neglected tree species in his list of selected plant species used for medicinal purposes (1891: 324-327) and included only one formula where tree species were the dominant medicines (356). In *Myths of the Cherokee*, he devotes two pages to trees in his section on plant lore (1900: 421-422) but this mostly concerns beliefs surrounding trees and there is little included concerning their therapeutic potential.

Table 11.1. Frequency of Remedy Selection for Cherokee Diseases

Plant Name	Frequency	Plant Name	Frequency
<i>Alnus serrulata</i>	12	<i>Hepatica acutiloba</i>	6
<i>Nyssa sylvatica</i>	12	<i>Leucothoe axillaris</i>	6
<i>Platanus occidentalis</i>	12	<i>Prunus pensylvanica</i>	6
<i>Panax quinquefolium</i>	10	<i>Quercus velutina</i>	6
<i>Prunus serotina</i>	10	<i>Salix alba</i>	6
<i>Vitis aestivalis</i>	10	<i>Vicia caroliniana</i>	6
<i>Xanthorhiza simplicissima</i>	10	<i>Antennaria plantaginifolia</i>	5
<i>Aristolochia serpentaria</i>	9	<i>Asarum canadense</i>	5
<i>Cornus florida</i>	9	<i>Carpinus caroliniana</i>	5
<i>Euonymus americanus</i>	9	<i>Chimaphila maculata</i>	5
<i>Eupatorium purpureum</i>	9	<i>Cypripedium calceolus</i> var.	5
<i>Nicotiana rustica</i>	9	<i>pubescens</i>	
<i>Sassafras albidum</i>	9	<i>Eupatorium perfoliatum</i>	5
<i>Amelanchier canadensis</i>	8	<i>Porteranthus trifoliata</i>	5
<i>Diospyros virginiana</i>	8	<i>Gleditsia triacanthos</i>	5
<i>Lindera benzoin</i>	8	<i>Hedeoma pulegioides</i>	5
<i>Liriodendron tulipifera</i>	8	<i>Kalmia latifolia</i>	5
<i>Magnolia acuminata</i>	8	<i>Lobelia cardinalis</i>	5
<i>Rhus glabra</i>	8	<i>Lobelia spicata</i>	5
<i>Acorus calamus</i>	7	<i>Lobelia syphilitica</i>	5
<i>Cassia marilandica</i>	7	<i>Lysimachia quadrifolia</i>	5
<i>Clematis virginiana</i>	7	<i>Nepeta cataria</i>	5
<i>Ilex verticillata</i>	7	<i>Oxydendron arboreum</i>	5
<i>Quercus rubra</i>	7	<i>Plantago major</i>	5
<i>Acer rubrum</i>	6	<i>Salix humulis</i>	5
<i>Aesculus octandra</i>	6	<i>Sisyrinchium angustifolium</i>	5
<i>Clethra acuminata</i>	6	<i>Smilax glauca</i>	5
<i>Eryngium yuccifolium</i>	6	<i>Verbascum thapsus</i>	5

Contemporary studies have shown this to be an egregious oversight. In his meta-analysis of Native North American medicinal plants, Moerman (1991) found that the

frequency of use of trees and shrubs as medicinal agents was disproportionately represented when compared with the expected frequency of the use of other life forms. The barks of tree species are known to contain a wide range of pharmacologically active compounds (Turner and Hebda 1990), some with strong antioxidant (McCune and Johns 2002) and antimicrobial activity (Omar et al. 2000). It is fortunate for the student of Native American ethnobotany that Olbrechts revisited Mooney's work among the Cherokee. Had this not been the case, much of the rich association of the Cherokee with the forests that surrounded them would have gone unrecorded. It is only through the records of both men, especially in light of those of later researchers, that we begin to approach the relevance of tree species to the Cherokee.

There is some evidence of a humoral element in the Cherokee ethnomedical system, but it does not comply with the currently accepted focus on hot/cold, dry/moist dichotomies (Jackson 2001). The concept of heat balancing cold is barely mentioned in the Cherokee literature, mostly in the form of the spirit of fire being invoked to counter the diseases caused by cold blooded animals or spirits that rule the elements of cold (Mooney and Olbrechts 1932: 21). Countering moist with dry is also touched upon with the avoidance of wet, fleshy fruits and vegetables when one was blisters caused from exposure to the sun (Mooney and Olbrechts 1932: 211). But these concepts do not appear to be infused throughout the Cherokee system in the same manner as they are in Greek, Ayurvedic, and Chinese humoral systems (Foster 1994: 4-12). Their place in Cherokee medicine was not noted by any of the ethnographers.

When I speak of humoral medicine in the Cherokee system, I am referring to the humors themselves, the bodily fluids that were considered the basis of physiological

balance in the Hippocratic medical writings (Jackson 2001). In the Hippocratic corpus, the four humors were blood, phlegm, black bile, and yellow bile. The fluids mentioned as being “of capital importance in human physiology” from the Cherokee perspective were quite similar: saliva, blood, and bile (Mooney and Olbrechts 1932: 15). However, from an ethnobotanical perspective, I would add urine to that list. I will discuss saliva, blood, and bile first, as they were cited by Olbrechts, and then demonstrate the importance of urine.

## Saliva

In the Kilpatricks’ study of love formulas of the western band of the Cherokee, they claim that the ancestral Cherokee considered saliva, not blood, as the original vital fluid (Kilpatrick and Kilpatrick 1965: 25). Joining saliva with another person was considered to have a powerful bonding influence. They site as evidence two formulas that list the attributes that the desirous one must symbolically consume or possess in order to control the affections of the intended. The attributes are listed in descending order in the lines of the prayer and, according to the Kilpatricks, the Cherokee “gamut of values” suggests that the attribute with lowest priority or value was stated first and that with the highest priority or value was the last one stated. One of the formulas was glossed thusly:

Now! Ha! Very quickly I a have just come to take away your heart.

Ha! Very quickly I have just come to take away your thought.

Ha! Very quickly I have just come to take away your breath.



Ha! Very quickly I have just come to take away your saliva (Kilpatrick and Kilpatrick 1965: 115).

In another example, the order of attributes was soul, flesh, and saliva (Kilpatrick and Kilpatrick 1965: 114). This suggests the primacy of saliva over the other attributes. However, they are at a loss to explain two other prayers which suggest a different perception of values; one listing the attributes of heart, breath, saliva, and blood and the other saliva and soul (Kilpatrick and Kilpatrick 1965: 116-117).

While it is clear from the above discussion that saliva was an important component of the Cherokee ethnomedical system, it is not clear that it was of paramount importance. Olbrechts' observation that the Cherokee considered the state of the saliva to be, "as important as the blood and the gall" (Mooney and Olbrechts 1932: 15) suggests that the hierarchy of value of these bodily fluids was lateral and flexible. The remainder of this discussion will also demonstrate that the primacy of a fluid was context dependent. The variations in the formulas or prayers collected by the Kilpatricks also support this view. It may have been that saliva was a primary consideration because it was more accessible to the physician than blood or bile and easier to obtain for the perpetrator of an act of conjuring.

There were several diagnostic features of the state of the saliva, but the most important was the concept of "spoiled saliva". Saliva could be spoiled in many ways: ghosts, dreaming of snakes, having snake poison put in one's food, pregnancy, emotional upset, and dreaming of the dead all spoiled the saliva (Olbrechts Ms. 4600). Dreams of the bite of a snake were considered detrimental to the health of the patient

and were treated as seriously as an actual bite because it could cause the spoiling of saliva (Mooney and Olbrechts 1932: 176). Olbrechts described the state of spoiled saliva from dreaming of fish as tasting different, getting thick, and possibly changing color to white or yellow (Olbrechts Ms. 4600). The affliction associated with spoiled saliva was quite serious. A Cherokee who had spoiled saliva was thought to become, “despondent, withers away, and dies” (Mooney and Olbrechts 1932: 15).

The primary therapy used to treat spoiled saliva was emesis. Emesis, when applied to spoiled saliva, was seen not so much as a way to cleanse the alimentary tract, but as a means to throw off corrupted saliva (Mooney and Olbrechts 1932: 83). The range of medicinal plants used to treat the condition was specific to the cause of the affliction. When a conjurer spoiled the saliva, one of the primary remedies was the emetic herb *Lobelia inflata* (Mooney Ms. 1894). A decoction of *Dioscorea villosa* was used as an emetic for spoiled saliva caused by ghosts, dreams of snakes, or when snake poison was put in food. Large quantities of a tea of the leaves and stems of *Solanum ptycanthum* was drunk every four days as an emetic to clear the spoiled saliva caused by mourning the death of a loved one (Banks 1953: 115-116). For saliva spoiled from dreaming of the dead, a decoction of *Polygonatum biflorum* and some soil dug from the front of a ground hog’s den was drunk for four straight mornings, the patient vomiting until all the liquid was expelled, (Banks 1953: 16). Once spoiled saliva was deposited in the river through emesis, the disease was transported downstream and away from the patient (Mooney and Olbrechts 1932: 23).

Spoiling was not the only condition associated with saliva. It was also associated with the act of conjuring. Witches and mankillers could transform their saliva into spirit

insects that would inflict diseases on their intended targets (Olbrechts Ms. 4600).

Securing the spittle of a victim would also give the conjurer power over that person.

*Cicuta maculata* was used for a conjuring ceremony that was intended to take the life of a victim. The conjurer would take the spittle of his intended victim and mix it with several crushed earthworms and some splinters from some lightening struck wood. He would then put the paste in a joint of the stem of *C. maculata* and ceremonially buries it. If all goes to plan, the victim dies within seven days. A conjurer could also change a person's saliva, causing it to be a place where insects would breed or food, such as corn, would sprout (Mooney 1891: 392-393).

The influential power of a person's saliva was also evident in conjuring involving love and romance. Obtaining the spittle of the object of one's affection was considered a necessary ingredient in love charms (Mooney 1891: 392-393). A new husband or wife would also fix the affections of their mate on their first night together by rubbing spittle on the breast of the other while reciting a formula (Mooney 1891: 381).

Other ethnomedical conditions associated with saliva were excessive and deranged saliva. Caused by dreams of snakes or mud turtles, Cherokee physicians treated excessive saliva much as they did spoiled saliva, with an emetic. A decoction of the roots of *Prunella vulgaris* was drunk for four consecutive mornings while abstaining from salt (Mooney Ms. 1894). Along with being used for "spoiled saliva", a species of *Oxalis* was used for a condition known as "disordered saliva" (Banks 1953: 75). The informant was clear that the two conditions were not the same, and that the symptoms of "disordered saliva" included dryness and a bitter taste in the mouth.

Saliva was also a medium used to administer an herbal remedy. When a ghost caused a sharp pain in the chest, the medicine man would chew a ginseng root, *Panax quinquefolium*, and rub the mixture of root and saliva on the chest of the patient (Olbrechts Ms. 4600).

While it is clear from the above discussion that saliva was an important diagnostic tool for the Cherokee physicians, it is not clear that it was of paramount importance. Olbrechts' observation that the Cherokee considered the state of the saliva to be, "as important as the blood and the gall" (Mooney and Olbrechts 1932: 15) suggests that the hierarchy of value of these bodily fluids was lateral and flexible. The remainder of this discussion will also demonstrate that it was context-dependent. The variations in the formulas or prayers collected by the Kilpatricks also support this view. It may have been that saliva was a primary consideration because it was more accessible to the physician than blood or bile and easier to obtain for the perpetrator of an act of conjuring.

## Blood

The status of the state of the blood appears to rival that of saliva in the Cherokee ethnomedical system (Mooney and Olbrechts 1932: 15). While the primacy of saliva was determined by its place in the Cherokee love incantations, the following formula would suggest that blood was more important than saliva:

Now! Ha! Quickly I have just come to take away your heart.

Ha! Quickly I have just come to take away your breath.

Ha! Quickly I have just come to take away your saliva.

Ha! Quickly I have just come to take away your blood (Kilpatrick and Kilpatrick 1965: 116).

Perdue (1998: 29) claims that blood was the “most powerful” of the body’s substances and cites the influence of menstruating women as an example of the power of blood. Whatever its place in the hierarchy of value, the presence and constitution of a patient’s blood told the Cherokee physician much about the patient’s health.

There were several causes that led to problems with the blood. Contact with or eating food prepared by a menstruating woman could cause bloody emanations from the body’s orifices. A wound could “catch cold”, causing gangrene, and the resulting impure blood was thought to eat the flesh. Paralysis on one side of the body (possibly due to a stroke) was thought to be due to be caused by the blood being stopped (Olbrechts Ms. 4600). It was also necessary to respect the blood of other creatures. Desecrating blood, such as by urinating on the spot where blood has been spilled while butchering an animal, can cause a disease similar to the rheumatism sent by Little Deer to hunters who have not honored the corpse of a slain deer (Mooney 1900: 251). Eating too much salt might cause the expulsion of blood and the consumption of salt was usually tabooed for a patient suffering from conditions that involved bleeding, such as menstruation, wounds, or when a patient spits blood (Mooney and Olbrechts 1932: 65).

One of the most salient aspects involving blood in the Cherokee ethnomedical system was menstruation. Menstruating women would isolate themselves from contact and interaction with the rest of the community during their periods. They would retreat to

small, isolated huts and have food left for them by non-menstruating women (Perdue 1998: 29). The menstruating woman was thought to exercise a “nefarious” influence on those around them, causing disease in people, interfering with the growth of crops, and disrupting the catch in fish traps by wading in the rivers. Even the woman’s husband was believed to be dangerous at this time (Mooney and Olbrechts 1932: 34-35).

Pregnancy was associated with similar taboos, but the primary condition of the blood associated with childbirth was ‘she is sick with remainder’ (*ut’igadö u’tsöya*), which was due to stagnant blood which remained after the birth of a child (Olbrechts Ms. 4600).

Cherokee physicians applied techniques that directly involved interaction with blood, mainly the processes of cupping and scratching. During the cupping procedure, the medicine man scarifies the patient over the afflicted area and places the cupping implement over the freely flowing blood to remove an offending object. This usually consists of an object such as a pebble or small stick, often sent by an enemy and considered to be the source of the discomfort (Mooney 1891: 334). The cupping implement was originally a cut off buffalo horn with a buzzard’s gizzard stretched over the narrow end. The medicine man would produce a vacuum by sucking on the base of the implement (Mooney and Olbrechts 1932: 73).

Scratching involved making abrasions on the skin using a special scratching implement. These implements were made of bone, briars, flint, or snake’s teeth. Mooney observed that the scratching often drew blood (1891: 334) but Olbrechts found that the procedure had changed and the scratches were rarely deep enough to draw blood (Mooney and Olbrechts 1932: 69). Herbal preparations were then applied to the scratched areas, allowing for direct contact with the bloodstream. This procedure was

used for applying medicine to the ballplayers in preparation for matches and for painful conditions such as rheumatism (Mooney 1891: 335). Harsh or toxic medicines that could not be taken internally were often applied topically after scratching (Mooney and Olbrechts 1932: 204).

Certain plants were thought to affect the quality of the blood. A tea of the root of yellow dock (*Rumex crispus*) was given to pregnant women to facilitate labor and it was given in late pregnancy to prevent the loss of blood during childbirth. It was thought to purify the blood, especially in the spring when sores were slow to heal. Banks found that a tea of the roots of *Aralia nudicaulis* was considered a good blood tonic (1953: 91). Certain edible plants were also considered to have a beneficial effect on the blood. The young shoots of *Phytolacca americana* were eaten in the spring to cleanse and build the blood (Banks 1953: 43).

Plants whose flowers were a deep red color were often associated with conditions that involved blood. Bee balm (*Monarda didyma*) and cardinal flower (*Lobelia cardinalis*), both plants with blood-red flowers, were used when blood was present in the urine and for nosebleeds (Ms. 4600). The flowers of *Lysimachia quadrifolia* have a red center, hence the Cherokee name *gigatsúya-hĩ* or 'it has blood in it'. It was also used for blood in the urine.

Most of the remaining medicinal plants used to treat conditions involving blood were tree species. *Sassafras albidum* was a favorite table beverage of the Cherokee, but it was also considered a good blood purifier (Banks 1953: 53). A decoction of the bark of *Platanus occidentalis* or ash *Fraxinus americana* was drunk for spitting of blood. *Prunus pensylvanica*, *Magnolia acuminata* and *Diospyros virginiana* were all part of

formulas for bloody flux. *Amelanchier arborea* and *P. pensylvanica* were both used to treat blood in the urine.

## Bile

While bile was considered one of the primary body fluids of the Cherokee, discussion of it was limited to one ethnomedical condition, *dalâni* ('yellow'). *Dalâni* takes its name from the yellow bile that was observed to be present in the vomit of the patient. Mooney referred to the condition as "old biliousness" and ascribed it to the irregular eating habits of the Cherokee (1891: 365). While Mooney interpreted the Cherokee explanation for *dalâni* as due to the revenge of the terrapin and the turtle, Olbrechts expands the explanation to include the spirits of vengeful animal spirits. These confound the bile and caused excess to collect in the veins under the navel (Mooney and Olbrechts 1932: 182). In his notes, Olbrechts describes the most common symptoms of *dalâni*, which include a sallowness of the face, black rings around the eyes, dark urine, and a frothy discharge from the bowels (Ms. 4600). In *The Swimmer Manuscript* (1932: 182) he added vomiting of bile and soreness around the navel to these symptoms.

Olbrechts recorded several varieties of *dalâni*, most of them identified by an association with the color terms yellow, red, blue, purple, and black. He attributed the variation in color to color symbolism instead of from the recognition of differing symptoms. However, black *dalâni* is considered the most virulent manifestation of the condition and was highlighted in *The Sacred Formulas of the Cherokees* (1891: 365). In this form, the symptoms were described in the following manner, "the navel and abdomen of the patient swell, the ends of his fingers become black, dark circles appear



about his eyes, and the throat contracts spasmodically and causes him to fall down suddenly insensible.”

If contemporary studies are considered, it is not surprising that this condition would be prevalent among the Cherokee. Biliary diseases occur at a much higher rate among North American Native Americans than in white populations, with the frequency among Pima women over age 25 reaching as high as 75 percent (Sievers and Fisher 1981). The factors cited as the most likely explanation for this are a combination of genetic predisposition for biliary disease and the adoption of westernized diets (Weiss et al. 1984, Shaheb 1990, Heaton 1984). Diets high in fat and refined carbohydrates coupled with a decrease in physical activity exacerbate the inherent propensity for the condition.

The primary therapy for *dalâni* consisted of the medicine man warming his hands by the fire and massaging the navel area of the patient. This was repeated four times between sunrise and noon (Mooney and Olbrechts 1932: 182). Mooney claimed that herbs used to treat *dalâni* often had a distinctly yellow plant part, such as the flower or the root (Mooney 1891: 323). But of the remedies recorded by him and later researchers, none had yellow flowers and only *Xanthorhiza simplicissima* had a distinctly yellow root. Olbrechts explained that the woody species used in the treatment of *dalâni*, such as *Clethra acuminata* and *Alnus serrulata*, all had a “peculiar yellowish color” of their inner bark (Mooney and Olbrechts 1932: 218), but I have yet to verify this. The primary herbal therapy consisted of the medicine man giving the patient a large quantity of a decoction and taking him or her to the river to expel the offending bile through emesis (Mooney and Olbrechts 1932: 218). The disease was not only removed

from the patient, but was translocated downstream to “other” people (Mooney and Olbrechts 1932: 23).

## Urine

On the surface, urine does not appear to have been as important as blood, bile, or saliva as a diagnostic tool for determining the health of the Cherokee patient. There is no mention of it being one of the important bodily fluids. The primary discussions of urine concern broken taboos involving the act of urination. For instance, showing disrespect to the spirit of fire by urinating on it or its ashes would cause itchy genitals and accompanying sores. Urinating on anthills, on trails around the house, in the river, or on a spot where an animal has been killed will also lead to itching (Mooney and Olbrechts 1932: 174). Urinating in the river insults the spirit of the river and, along with itching, it can cause incontinence (Mooney and Olbrechts 1932: 23). These taboos tend to cast Cherokee attitudes toward urine in a disparaging light and suggest that urination was considered a means of desecration.

Conditions involving urine in the Cherokee ethnomedical system tended to be of two varieties; those that described the observable state of the urine such as bloody urine, yellow urine, or milky urine and those that involved the act of urination such as stopped urination, profuse urination, or painful urination. The physical state of the urine is one of the most important diagnostic aspects of many of the world’s ethnomedical systems, but little has been written about its role in the Cherokee system.

Uroscopy, the analysis of urine using the senses of sight, smell, and occasionally taste, has a long history of application in ethnomedical systems. In the roots of the

western medical system, uroscopy came to prominence in the Byzantine Empire and remained the primary means of medical diagnosis until the refinement of the microscope and the development of chemistry in the mid-nineteenth century (Voswinckel 2000). In the Middle Ages, European physicians carried color charts of up to twenty colors that were prepared to match urine color to health conditions (White 1991). The condition of the urine is observed to analyze the state of balance of *vata*, *pitta*, and *kapha*, the three humors in the Ayurvedic system of India (Lad 1984: 43). Color of urine and frequency of urination are diagnostic tools of Traditional Chinese medicine (Yanchi 1988: 209) and in the Tibetan system the condition of the urine is considered a reflection of all disease conditions in the body (Donden 1986: 130).

Conditions that involved an observable quality of the urine were not clearly explained by the Cherokee researchers. Even in his notes, Olbrechts gives little information about the condition he recorded as *gigö yandik'öça* ('urinating blood'). In his description of the condition *unödi tsandik'uça* ('they urinate all milk'), he mentioned the presence of pain in the pelvis and back associated with dark red urine. While this description appears to be related to kidney stones, it does not appear to be the same condition as *gigö yandik'öça*. *Monarda didyma*, *Lobelia cardinalis*, and *Lysimachia quadrifolia*, all plants with a substantial red coloration in their flowers, were used to treat blood in the urine. *Lindera benzoin* and two species of *Ilex*, species that have bright red berries, were also used for bloody urine. However, 10 other plants without any red coloration were also used, indicating that color symbolism was not a requirement for remedy selection.

Yellow urine, known as *dalânige tsandik'öça*, started as excessive urine, but the flow would decrease and get more and more yellow. If the flow stopped completely, it was believed that the patient would die. In the description of the condition *göwanigistöi* ('when they are eaten by them'), an association was made between yellow urine with back pain, but not enough information was available to determine if this was due to kidney stones.

Olbrechts described milky urine, or *unegö tsandiköça* ('if they water out white'), as an infection of kidneys. But whitish urine, or chyluria, is also associated with tuberculosis and diabetes (Sherman et al. 1987), two conditions that are currently problems among Native Americans (Farrell et al. 1993, Rhoades 1990). Both will be discussed below. Two species of plants with milky latex, *Chamaesyce maculata* and *Euphorbia corollata*, were used in a formula to treat milky urine. Olbrechts tried to symbolically associate these plants with milky discharges (Mooney and Olbrechts 1932: 180), but the majority of the other plants used to treat this condition did not exude milky latex.

Conditions that involved the act of urination tended to be of a mechanical nature and remedies were chosen to bring the system back into balance. For instance, the straight twigs of *Oxydendron arboreum* were included in formulas for stopped urination because it was thought that they would straighten out twisted urinary passages that caused the blockage (Mooney and Olbrechts 1932: 222). Difficult urination is a symptom of benign prostatic hypertrophy (BPH), an enlargement of the prostate gland (Thomas 1997: 212). While no information is available concerning the use of sourwood for BPH, Catawba women used it for menopausal symptoms (Moerman 1998: 374),

indicating that it may have an effect on the hormonal changes associated with BHP (McPartland and Pruitt 2000)..

The condition associated with painful urination was poorly defined by Olbrechts, but treatment relied heavily on woody plant species (Olbrechts Ms. 4600). Witthoft (n.d.: 134) mentioned that a multi-bark formula that was used by the Cherokee to treat gonorrhea, the primary symptom of which is an infection of the urethra that causes painful urination. The original condition may have been poorly defined due to modesty on the part of Olbrechts and his informants, or it may have been a general infection of the urethra.

Profuse urination, believed to be caused by urinating in the river (see above), was treated with a cold infusion of *Eryngium yuccifolium*, commonly known as rattlesnake-master. Profuse urination is a symptom of diabetes, and Will West Long, a primary informant for researchers from James Mooney in the late 1880s through John Witthoft in the 1940s, stated that a cold infusion of the roots and leaves of rattlesnake master was drunk to treat diabetics (Witthoft 1946). A high incidence of diabetes was thought to be a recent phenomenon among Native Americans (Weiss et al. 1989, Gohdes et al. 1993) and unknown among the Cherokee until after 1940 (Weidman 1989). But Witthoft, who began his research among the Eastern Cherokee in the mid-1940s, found an “exceptionally high incidence” of the disease at that time (n.d.: 147). In a letter to Olbrechts dated Feb. 5, 1928, Dr. R. D. Holt, a white physician who had a medical practice in the town of Cherokee beginning in 1903, stated that he treated a few cases of diabetes while practicing medicine on the reservation (Olbrechts n.d.). It would

appear that diabetes was known among the Cherokee for some time and it should come as no surprise that they would have remedies for some of the accompanying symptoms.

Viewing the importance of bodily fluids in Cherokee diagnosis from an ethnobotanical perspective, the status of urine appears to take on a more influential role. The methodology used here is similar to that used by Trotter (1981) in his evaluation of Mexican American home remedies. Trotter assumed that people are most likely to recall the remedies that were most frequently used or had been significant in treating an illness in their own life or the life of someone close to them. The ailments that were most commonly treated with home remedies were also the most culturally salient ailments. Trotter gauged the perceptual prominence of diseases by rank ordering the most common conditions treated with home remedies.

I have modified this method slightly to accommodate the ethnohistorical perspective in this work (see Table 11.2). I will consider that the cultural salience of Cherokee illnesses can be inferred by the number of remedies that have been used, either singly or in formulas, to elicit a cure. Those conditions that were particularly troublesome for the Cherokee would likely have generated the most interest among them for a cure and would be represented by the application of the greatest number of remedies from the Cherokee pharmacopoeia.

Comparing the number of remedies used for the various conditions, it becomes evident that the condition of the urine and urinary tract were primary diagnostic tools of Cherokee physicians. Of the 14 conditions with 20 or more uses, three are concerned with urinary problems. In Table 11.3, I have isolated the conditions concerned with the different fluids to ease comparison. I have included only two remedies for menstrual problems because these were the only ones that dealt specifically with menstrual bleeding. Stroke was also considered here because the Cherokee considered it caused

Table 11.2. Number of Remedies Used for Cherokee Diseases

Diseases	Number of Remedies Used	Diseases	Number of Remedies Used
Chills and Fever	64	Thrush	14
Diarrhea	55	Eye Problems	13
Coughing	44	Intestinal Worms	13
Menstrual Problems	37	Piercing Wound	11
Yellow Urine	33	Heart Attack	11
Cancer, Gangrene, Ulcers	32	Itching	11
Milky Urine	32	Boils and Blisters	10
Emetic for Biliousness	29	Pain in Breast	10
Toothache	29	Vomit Blood	8
Birth	27	Children's Stomachache	8
Rheumatism	24	Measles	8
Painful Urination	23	Conjuring	8
Dysentery	21	Blisters form Sunburn	7
Sore Throat	20	Abdominal Swelling	7
Kidney trouble	19	Insect Bites	6
Pain in Stomach	19	Hemorrhoids	6
Disturbing Dreams	19	Earaches	6
Headache	19	Painful Memories	5
Scrofula	18	Profuse Urination	5
Urine Blood	16	Broken Bones	5
Back Ache	16	Yellow Mucus	5
Nausea	16	Diabetes	5
Stopped Urination	16	Broken Bones	5
Spoiled Saliva	16	Painful Memories	5
Muscle Cramps	14	Small Pox	4
Snake Bite	14	Nose Bleed	4

by the blood stopping. Bloody urine was included in the urine section primarily because Olbrechts appeared to consider it a urinary condition, but it might also be considered in both the blood and urine categories. I have provided two totals: the first is the sum of all the plants used for all the conditions, the second takes into account plants that were used for more than one condition included under a bodily fluid category.

The three fluids that were considered of “capital importance”, blood, bile, and saliva, are represented by total remedy use of 31, 29, and 21 remedies, respectively. All these totals demonstrate the high degree of cultural salience expected, considering their prominence in the Cherokee ethnomedical system. However, the condition of the urine



Table 11.3. Number of Herbs Used per Bodily Fluid

Ethnomedical Condition	Number of Herbs Used	Total	Total per Fluid
Saliva		21	21
Spoiled or Deranged Saliva	16		
Yellow Mucus	5		
Bile ( <i>dalâni</i> )	29	29	29
Blood		31	31
Bloody Diarrhea	10		
Vomit Blood	8		
Stroke	4		
Nosebleed	4		
Blood After Birth	3		
Menstrual Bleeding	2		
Urine		125	90
Yellow Urine	33		
Milky Urine	32		
Painful Urination	23		
Bloody Urine	16		
Stopped Urine	16		
Profuse Urination	5		

and urinary tract is represented by a total of 90 remedies, more than the sum of the other three combined. The cultural salience of urine and conditions of the urinary tract is evidenced by the concern with finding remedies to alleviate related ethnomedical conditions. It would appear that the value of urine as a diagnostic tool was overlooked by previous Cherokee researchers.

Other aspects of Table 2 reflect historical and contemporary trends in Native American health. Dr. R. D. Holt wrote that, “the most common cases of illness among the Eastern Cherokee were colds, influenza, pneumonia, etc. Pulmonary tuberculosis was, however, more common among the Indians than the neighboring whites.” The number of remedies used for chills and fever (64) and Coughing (44) indicate that Dr.

Holt's perception of Cherokee illness was congruent with the concerns of the Cherokee physicians. The high number of cough remedies may also have been due to the prevalence of tuberculosis, which would also explain the high number of remedies for scrofula (18). Holt speculated that tuberculosis was such a problem due to "more frequent undernourishment and exposure." Incidence of tuberculosis has remained high in the general population of Native Americans, with mortality rates three times that of the general population in the mid-1980s (Rhoades 1990).

The Holt letter also indicated the need for the large number of diarrhea remedies (55). He wrote, "Due to lack of sanitary privies, and other causes, it was the general rule for all, or practically all, the children to be infested with the round worm (*Ascaris lumbricoides*)."

The same unsanitary conditions that would have led to an infestation of intestinal worms would have been conducive to rampant diarrhea. The small number of remedies applied to intestinal worms (5) was most likely due to the efficacy of available remedies than lack of concern over the condition. Two of the remedies for intestinal worms, *Spigelia marilandica* and *Chenopodium ambrosioides*, are well known anthelmintics and have persisted in both Native American and Euro-American folk systems. *Chenopodium ambrosioides*, especially the oil from the seeds, is known for its ability to expel roundworms and hookworms (Chevallier 1996:186), while *Spigelia marilandica* is used to expel roundworms and tapeworms (Chevallier 1996: 270).

The high number of remedies for rheumatism (24) is not surprising considering the prevalence of rheumatic diseases among North American Indian groups, which tends to be higher than any other populations (Sievers and Fisher 1981). There is strong evidence indicating a genetic etiology for the disease (Peschken and Esdaile

1999), however, archaeological evidence in the southeastern United States suggests that the transition to agriculture was accompanied by an increase in degenerative joint disease (Larsen 1984).

The prevalence of rheumatic diseases among the Cherokee is evident through their mythology and folk etiology of the diseases. The very name associated with rheumatism, *didölesgi* ('the crippler' or 'when it breaks them'), reflects the Cherokee dread of the condition. According to the Cherokee myth of the origin of disease, the chief of the deer inflicts rheumatism on man for not asking pardon of the spirit of a deer he has killed (Mooney 1900). Other activities that were believed to cause rheumatism included incest, sexual excess, and dreaming of the opposite sex (Mooney and Olbrechts 1932: 196). When afflicted with the disease, the sufferer must abstain from eating any creature that has a humped back, such as bison, rabbit, squirrel, or sunfish as well as not petting a cat or dog for fear of aggravating the condition (Mooney and Olbrechts 1932: 293). Loss of agility due to rheumatism would have been especially devastating to Cherokee male identity, as the limiting of motion would have curtailed traditional male activities such as hunting, stickball, and warfare (Hudson et al. 1975).

The primary treatment for rheumatism, a decoction of the roots of several species of ferns, was explained from a symbolic perspective. The unfurling of the young fern frond was considered to be symbolic of the straightening out of a rheumatic limb (Mooney 1891: 324). However, of the 24 remedies applied to rheumatic conditions, only two fern species, *Adiantum pedatum* and *Polystichum acrostichoides*, were clearly identified as treatments for rheumatism. The remaining remedies were selected from a variety of herbaceous and shrubby plants, few of which exhibited this unfurling quality.

One surprising aspect of Table 2 is the relatively few remedies for measles (8) and small pox (4). Both diseases were devastating to New World populations after initial contact with Europeans (Cook 1998: 72) and recurring epidemics cyclically ravaged the Cherokee people. Adair found that one such small pox epidemic in 1738 killed nearly half of the Cherokee (Adair 1974: 244). Adair (1974: 245) also reported that the epidemic had a demoralizing effect on the Cherokee physicians:

...all the magi and prophetic tribe broke their old consecrated physic-pots, and threw away all the other pretended holy things they had for physical use, imagining they had lost their divine power by being polluted...

Perhaps the impotence experienced by the Cherokee physicians when treating these deadly infectious diseases translated into the relatively few remedies for either condition.

A reoccurring theme in this re-evaluation of the Cherokee ethnomedical system has been the questioning of symbolism in the selection of plant remedies. The statements about the selection of remedies for their color, such as yellow plant parts for biliary diseases or red flowered plants for conditions of the blood, or developmental properties, such as the unfurling of a fern frond for rheumatism, are specific examples that do not follow general trends. I do not mean to belittle the value of symbolic importance to the Cherokee, but I merely want to point out that it was not the primary factor in selection criteria for treatment of remedies. Mooney's disparaging statements about the efficacy of Cherokee herbal medicines (1890 b) reflected the national trend of

the time away from plant based remedies to those produced by the burgeoning pharmaceutical industry. The rising influence of the American Medical Association in the late 19<sup>th</sup> century in both academic and political circles made the rejection of botanical medicines appear both sensible and fashionable (Griggs 1981: 233). Mooney's association with the Smithsonian Institution, a bastion of contemporary intellectual thought located in the heart of the American political process, would have exposed him to the medical biases of his time.

As explained in the discussion of the ethnobotanical system, Mooney was keen to demonstrate the intricacy and validity of Native American religions. He found the Cherokee ethnomedical system a rich blend of medical practice and spiritual beliefs. But his representation of remedy selection as primarily based on symbolic criteria is not supported by the combined data of all the researchers. As Ankli et al. (1999) found in their study of selection criteria among the Yucatec Maya, symbolic attributes appear to have been ascribed to a remedy after its efficacy had been established. Symbolic attributes can be powerful cultural mnemonic devices, that, when applied to plants, assure the transmission of acquired medico-botanical knowledge.

In this re-evaluation, I have attempted to question some of the assertions of previous researchers, highlight material that appeared to have been overlooked, and re-examine the voluminous data of all the researchers in light of contemporary studies. My intention in doing so was not to cast the conclusions of the previous researchers in a disparaging light. In the course of this research, I have gained a great deal of respect for Mooney, Olbrechts, and their successors. *The Sacred Formulas of the Cherokees* and *The Swimmer Manuscript* were and remain some of the finest works on Native

American medicine that have been produced. I have been both astounded by the intricate details of their research and frustrated at cursory passages that piqued my interest. And, as with any good body of knowledge, it generates more questions than it answers, questions that are difficult to answer in an ethnohistorical framework. My goal here is to expand perceptions of Cherokee ethnomedical practices beyond the interpretations of my predecessors and add another perspective to a complex subject.

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## Appendix

### Cherokee Ethnomedical Conditions

Olbrechts collected and cataloged a variety of Cherokee ethnomedical conditions and the methods to treat them. Many of these are described and explained in *The Swimmer Manuscript*, but a large portion of them are not included in that work. The description of the condition and treatments are included here as a glossary for the applications of the individual plants in the proceeding chapters. The entire selection will be included here as most were treated, at least in part, with herbal medicines. Each includes, when available, the Cherokee name for the condition, its gloss, a description of the condition, the cause of the condition, and the treatment regime as recorded by Olbrechts. Many have several combinations of plant-based remedies applied as a part of the cure.

While I refer to these combinations of herbal remedies as formulas, it must be clarified that they are different from the sacred formulas recorded by Mooney. Mooney's sacred formulas often describe the combinations of herbs in their text, but they are predominantly prayers or incantations that were recited while attending to an illness. Mooney considered them to be an indication of the presence of a religion among Native Americans, refuting the assertions of those who doubted that any true religion was in existence (Mooney 11891: 318). Olbrechts expanded the Cherokee medical treatments beyond the formulas in his research and recorded a wider range of the non-herbal

treatments used for the various conditions as well as lists of herbs used singly or in combination to treat the different ethnomedical conditions.

*a'alugi sak'oni* – 'the blue whirlwind'

This condition was caused by the spirit of the North Wind. The symptoms included a headache and a head cold. It was treated by invocation to the spirit of the wolf and the blowing of breath.

*adayuni't'i'lö* – 'pierced by wood'

This is caused by someone being pierced by a stick or a wood splinter. If the treatment is immediate, no taboo is necessary. However, if the treatment is the next day, the patient must abstain from salt and hot food for the next four days. An infusion of the following herbs was placed on the wound as a poultice with warmed grass stalks: *Nyssa sylvatica*, *Carya ovata*, *Quercus rubra*, *Vitis aestivalis*, *Tsuga caroliniana*, *Liriodendron tulipifera*, and *Quercus velutina*.

*adansiludoï yune'istanelö* – 'trailing along, if there is pain in different places'

Caused by witches or ghosts, this can manifest as either acute rheumatism or nervous collapse. Olbrechts claimed that these types of conditions were the most dreaded of the Cherokee diseases (Mooney and Olbrechts 1932: 33). One mode of treating the condition consisted of the medicine man simply warming his hands in a ceremonial way and rubbing the patient at the site of their pain. Another consisted of a warm infusion of *Verbascum thapsus*, *Lobelia cardinalis*, and *Alnus serrulata*, which the

medicine man places in his mouth and sucks the afflicted area, spitting the liquid into a waiting bowl. The offending object sent by the human or disincarnate agent was often found in the liquid. The ceremony was repeated up to four times, until the offending object materialized (Mooney and Olbrechts 1932: 216).

*ada'yeski* or *atayesgi* – 'eating itself'

This refers to cancer, ulcers, or gangrene. There were several causes for this condition. Insects of different kinds, such as bees, could cause a sore that would not heal. Also, a wound could "catch cold" causing gangrene and impure blood was thought to eat the flesh.

There were several treatments for *ada'yeski*. The barks of *Diospyros virginiana* and *Acer rubrum* were boiled and rubbed on a wound, as well as blown onto the wound. No salt or hot food were taken for four days. The bark of *Carya tomentosa* was chewed and the juice blown on the wound. This was considered a universal panacea for all wounds. The bark of *Platanus occidentalis* was boiled down and the decoction rubbed on the infected area. The tea was then wiped off and crushed, dried bark was sprinkled into the wound. A decoction of violet roots was used to wash the wounds. Olbrechts mentions three species: *Viola sororia*, *V. eriocarpa*, and *V. striata*. And the barks of the following trees were boiled down and the decoction sprinkled over all the affected parts, allowed to dry, and sprinkled again: *Nyssa sylvatica*, *Cornus florida*, *Malus coronaria*, *Malus pumila*, and *Viburnum prunifolium*.

*ada'yeski k'öniuniyotagisti* – 'eating itself, itching'

No remedy is reported for this type of gangrene with accompanying itching.

*ada'yeski tsunitlöyi nundiwsköna* – no gloss

This is an obstinate case of *ada'yeski*, also known as *uwet'i*. While Olbrechts gave no explanation for the names, *uwet'i* is also the Cherokee name for *Eryngium yuccifolium* and glosses as 'root grows straight down'. This may refer to an infection that is perceived to have its roots deep in the body. It is treated with the roots of *Aralia spinosa*, the young sprouts from the tops of *Sassafras albidum*, and *Pinus pungens* are boiled down with some pine sap and unsalted lard. This decoction is applied to the affected areas and the dust of *Bovista pila* is sprinkled on the wound. No whiskey is allowed for a year.

*adzilö* – 'clap, gonorrhea'

Olbrechts gave no specific explanation of this condition and provided no special instructions for a cure. There are some remedies mentioned in the individual herb categories.

*akgittige u'tsöya* – 'very sharp'

This malady manifests as a condition where the patient experiences sharp pains across the whole back side of the neck. The remedy is a formula or prayer that was not available to Olbrechts. It may be the next condition described.

*agittigu unitłöyö* – ‘very sharp’

This condition was referred to in *The Swimmer Manuscript* (Mooney and Olbrechts 1932: 171-173), but the explanation is lacking. In his notes, Olbrechts claims that this condition is due to a sharp object sent by a witch, causing the victim to experience severe pains. However, he refers to one of the formulas in Mooney’s *Sacred Formulas of the Cherokees* (1891: 366-369) as depicting the same disease. Mooney refers to this an “ordeal disease”, or one sent by another person to test the skills of a conjurer. It can also be sent by an enemy and manifests as an excessive appetite or a weed stalk that transforms into a worm in the patient’s stomach. Whatever the source, the treatment consists of the medicine man sucking out the offending object while holding the blossoms of *Nicotiana rustica*, *Cicuta maculata*, and *Lobelia inflata* in his mouth. He then spits the offending matter out of his mouth and often extracts a small object such as a stick, pebble, or insect.

*agötageni uwe’istaneça* – ‘he has pains in his forehead’

This condition describes a migraine-like headache, possibly caused by the spirit of the Sun (Mooney and Olbrechts 1932: 21). The remedy for this condition consists of a decoction of the roots and leaves of an unidentified fern known only as the ‘fern with a red stalk’, which is blown on the crown of the head of the patient.

*akt’oli yutłöya* – ‘when their eyes hurt’

This is explained as an eye disease caused by seeing a rattlesnake. It is mentioned in *The Swimmer Manuscript* under a different name (1932: 185), but

Olbrechts references them in his notes as the same condition. Two remedies are offered for this condition. The first consists of the medicine man chewing the bark of *Alnus serrulata* and blowing the juice into the patient's eyes. The second is a decoction of *Potentilla canadensis* and *Erechtites hieracifolium* mixed with some unidentified herbs. The administration of this remedy was not included.

*amayi didatsöstoh* – 'to take people to the water'

While not an illness, the ceremony of going to the water was an integral part of Cherokee life. The ceremony had ethnomedical applications and was used to obtain long life, to forget the deceased, to win the heart of another, and in conjunction with a number of therapeutic treatments. The treatment included the application of a type of graminoid, or *kaneska*, and stump water, but there is no explanation of how this was applied.

*amayi didatsoststi undaniyatö* – same as above, except it applies to one who is grieving the loss of a family member.

Excessive grief was believed to cause serious illness. No other remedy was included with this condition.

*amayi didatsoststi dinineldö* – 'to take pregnant women to the water'

Pregnant women were taken to the water on the new moon a few months prior to her delivery, the exact time being a subject of debate (Mooney and Olbrechts 1932:118). The medicine man dips some water in his hand and pours it on the head and



over the heart (or seat of the soul) of the expectant mother. Prior to the ceremony, the woman drinks a decoction of the bark of *Ulmus rubra*, the stems of *Impatiens capensis*, the roots of *Veronica officinalis*, and the cones of *Pinus pugnans*, which she eliminates through vomiting before the ceremony. This is believed to cleanse the woman and throw off any spoiled saliva (Mooney and Olbrechts 1932: 119-120).

*amayutsistano utsya* – ‘he is sick by the water’

The patient feels a need to urinate whenever they see water.

The disease is caused by the spirit of the river in response to the patient urinating in the river. It is treated with a cold infusion of the pounded roots of *Eryngium yuccifolium*, taken at regular intervals.

*anatloyçi ustiga* – ‘if the children cry constantly’

This is the stomach or bowel complaints, caused by the “Little People” that live in the mountains that tend to afflict young children. This is treated with an infusion of *Nicotiana rustica*, which is blown over the child for four consecutive nights. All feathers are removed from the house and the child is kept indoors to avoid the passing shadow of a bird. Birds have watery feces, and any contact was thought to exacerbate the condition. This is treated with a decoction of *Epigaea repens* (Mooney and Olbrechts 1932: 193).

*andkt'egö* – 'they are under restriction'

This condition usually refers to the restrictions placed on a woman during her menstruation, but can also refer to the restrictions placed on any person who was ill. This was elaborated on in *The Swimmer Manuscript* (1932: 246) to include a woman who dreams of birthing a litter of puppies, a bear, or some other animal while menstruating. The patient would drink a decoction of the roots of *Platanus occidentalis*, *Hydrangea arborescens*, *Alnus serrulata*, and the root of a new plant of *Rubus ideaus* that is has sprouted from the tip of the of an older plant. *Rubus occidentalis* can also be added to the decoction. The roots of the first three are selected from those individuals that have roots growing into water and must be from the east side of the tree. This is drunk several times a day for four days while abstaining from salt and hot food.

Two other remedies were included in Olbrechts' notes. The combined barks of *Xanthorrhiza simplicissima* and *Calycanthus floridus* were steeped in an infusion and drunk all day at regular intervals. Also, the roots of *Scutellaria laterifolia* and *Polymnia uvedalia* were prepared and administered in the same manner.

*andlköça yunalstuneça* – 'if their urine is stopped'

Stopped urine was thought to be caused by the twisting or clogging of the urinary tract. *Oxydendrum arboreum* was used to remedy this malady because the twigs grew straight, so straight that they were often chosen to make arrows (Mooney and Olbrechts 1932: 222). This remedy was an example of the Doctrine of Signatures, the straightness of the twig representing the straightening of the urinary passage. Seven twigs were

combined with *Euonymus americanus* and made into an infusion. No salt or hot food were consumed for four days.

Another treatment consisted of the imbibing of as large a quantity as possible of a hot infusion made of *Vitis lambrusca*, *V. aestivalis*, and *Aristolochia macrophyllum*. The first two should have their roots growing in water. Again, no salt or hot food were consumed for four days.

*aninedzi ada'nöwoti tuksinigöwayö nategsöi* – no gloss in the notes, but in *The Swimmer Manuscript* (1932: 251) he glosses it as 'their breast, to cure anyone with, terrapin does it to them, as they go about'

This is a piercing pain in the breast or pelvis region that is caused by dreaming of terrapins. The most painful area is rubbed and a strong decoction of *Epigaea repens*, *Asarum canadense*, and *Hepatica acutiloba* is boiled down four times on four consecutive days. The patient drinks enough to induce vomiting and fasts until the next treatment.

*aninedzi digöwalosöçi yune'istaneça* – 'to cure anyone with a piercing pain in their breast'

This is a sharp pain in the chest caused by a ghost. The treatment consisted of the recitation of a prayer while rubbing the saliva from the chewed root of *Panax quinquefolium* over the heart area. A similar treatment from *The Swimmer Manuscript* (1932: 202) consists of an infusion of *Aristolochia serpentaria* into which a few scrapings of *P. quinquefolium* and seven live coals have been added, which is drunk

after the medicine man recites a prayer and blows on the breast of the patient four times. Each treatment is repeated four times, the whole ceremony is repeated four times before noon, and, if necessary, it is continued for four consecutive days.

*aninedzi dik'anöwoti* – 'to cure their breast with'

This is a respiratory condition synonymous with *ganedzi u'tsöya* (see below). It was treated by massaging the patient with warmed hands, exerting slight pressure in a counterclockwise direction. After each rubbing, a pass was made in the four directions to "scatter the disease." The breath was blown on the patient, once after the first pass, twice after the second pass, until the ceremony was complete. Olbrechts' notes simply say "etc." after the second pass, but I will assume that there were four passes as this is common in many other ceremonies. A decoction of four tops of *Pinus pungens* was also prepared, possibly with other plants, but the directions for use were not included.

*aninedzi gotiski* – 'their breast swells'

While Olbrechts states that this condition is also known as black *dalâni* (see below), the treatments he gives in his notes are different than those he reported for black *dalâni* in *The Swimmer Manuscript* (1932: 224). The symptoms consisted of the swelling of the abdomen and navel area due to a biliary complaint. The turtle and the terrapin were believed to be the cause of the problem, such as when one forgot to wash their hands after handling the terrapin rattles.

Olbrechts recorded three treatments for this condition. An infusion of *Aristolochia serpentaria*, warmed by the addition of seven live coals, was blown on the patient's

head, neck, and back (Mooney and Olbrechts 1932: 224). A warm infusion of the bark of *Prunus serotina* was rubbed on the patient by the medicine man while he recited the proper prayer. A warm infusion of *Collinsonia canadensis*, *Hepatica acutiloba*, *Asarum canadense*, and *Asplenium rhizophyllum* was given to the patient as an emetic for four consecutive mornings (Mooney and Olbrechts 1932: 209) and the remainder was rubbed on by the medicine man as with the previous treatment.

*aninöskeni yuwot'isö uyotagisti* – ‘if their leg swells and itches’

This was caused by insects seeking revenge for human transgressions. The remedy consisted of making a salve by burning an old shoe to a powder and mixing it with bear's grease.

*aniskina göwani'tsö istöi* – ‘when they have been made sick by dead persons’

Dreams of a deceased person was considered to cause diseases similar to those caused by ghosts (see below). Some medicine men reported that it was the dream itself that caused the disease, others claimed that it was just a symptom of the ghostly affliction. Three remedies were offered for this condition. A decoction of the roots of *Lobelia cardinalis* and *L. siphilitica* was blown over the patient by the medicine man, then the leaves and flowers were chopped and also applied externally. Massage was also used. The medicine man could also massage the patient after warming his hands by the fire. The other treatment consisted of a mixture of 24 plants, 24 being the maximum ceremonial number, but no one could name all 24 plants. The large number

of plants was attributed to the fact that this was such a difficult disease to diagnose and the right remedy might be included in the mixture.

*aniskina uniyaktanöçi* – ‘ghosts have changed (the condition of the patient)’

Human ghosts were thought to be able to change or aggravate the condition of a patient, rattling the medicine man who is treating the condition. Olbrechts reported four remedies for this condition. *Lobelia cardinalis*, *L. spicata*, *Vitis aestivalis*, and *Sisyrinchium angustifolium* were combined with another unidentified herb, but the mode of application was not included. The seat of the pain could be sucked with a sucking horn. *Panax quinquefolium* was chewed and forcefully blown on the patient by the medicine man. And the medicine man could also massage the patient after warming his hands by the fire.

*aniskoli ada'nöwoti* – ‘to cure headache’

This is the ordinary headache. No cause was included. The medicine man would warm his hands and place them on the temples or where the pain was worse and blows his breath on the same area. Ordinary chewing tobacco (*Nicotiana tabacum*) or *Panax quinquefolium* were chewed and the juice blown on the patient's forehead, temples, neck, and crown of the head (Mooney and Olbrechts 1932: 171, 289).

*aniskoli didzstistoti* – ‘to blow on their heads’

The symptoms include headache, chills, and cold sweat. To treat it, an infusion of the leaves of *Castanea pumila* was heated with seven coals and blown on the patient’s head and shoulders.

*aniskoli une’istaneça* – ‘they have a headache’

This was another form of the common headache, the symptoms being the same as the previous condition. The treatment consisted of an unidentified type of purplish colored water cress that grows on stagnant water, which was regularly poulticed on the head. Also, the medicine man would blow his breath on the crown of the patient’s head.

*aniskuya göwanu’sö stiça* – ‘women’s disease, given them by their men’

While referring to syphilis in female patients, the disease also refers to male infections. No remedies were included in this section of Olbrechts’ notes.

*aniyötseni ada’nöwoti* – ‘to cure their throat’

This could be diphtheria or an acute case of laryngitis. The Cherokee understood this to be caused by insect ghosts taking up residence in the throat area. The medicine man would mash the leaves of *Verbascum thapsus* and hold them as a poultice on the throat area. He would blow his breath on the throat. The treatment was repeated four times. This appears to be the same condition described in formula 62 of *The Swimmer Manuscript* (Mooney and Olbrechts 1932: 261), in which a warm decoction of *Gnaphalium obtusifolium* is blown into the patient’s throat through a tube of *Eupatorium*

*purpureum*. The patient then avoids apples and peaches, whose watery nature resembles the blisters in the throat, and bean bread dumplings, whose shape resemble the swelling in the throat.

*anskitsö'ö sköi* – ‘whenever they dream (of...)’

This is digestive trouble accompanied by nightmares. There was no remedy included with this condition.

*an't'asgiski tskoya* – ‘insects are breaking out’

Insects were thought to cause boils, blister, and related skin eruptions. *Ambrosia artemisifolia* was steeped and sprinkled on the sores and the medicine man would blow his breath on the affected parts.

*a'setsunda'k'anelö tsc'koya* – ‘when they (plotters) give insects to each other on purpose’

Witches and mankillers make insects out of their saliva and send out the disease spirits to inflict their competitors. This condition is addressed with a prayer or spoken formula.

*askoli uwe'istaneça* – ‘he has a headache’

See *aniskoli* conditions above.



*askwageni utsöya* – ‘when his side hurts’

The side hurts due to insects sent by a hostile conjurer. The painful area was massaged after warming the hands and the breath was blown on the area. This was repeated four times.

*at’awini e’i* – ‘the forest dwellers’ (Olbrechts names *dawineçi* as a synonym, but provides no gloss.)

This condition is due to mishandling or disrespect of the bodies of game animals. Activities such as inhaling while disemboweling an animal or urinating on the spot where blood has been spilled can cause the disease, which may be similar to the rheumatism sent by Little Deer to hunters who have not honored the corpse of a slain deer (Mooney 1900: 251). According to the formula that Mooney recorded, the patient drinks a decoction of *Ulmus rubra*, *Platanus occidentalis*, *Alnus serrulata*, *Quercus rubra*, *Q. alba*, and a species of *Aureolaria*. However, Olbrechts expanded on this remedy in *The Swimmer Manuscript* (1932: 244). In this version, the symptoms are clarified to include a “frothy discharge from the bowels, accompanied by gripping pains in the abdominal region.” The decoction was drunk for four days while avoiding hot foods, salt, and the grease from animals. The expanded formula still included *U. rubra*, *P. occidentalis*, *Q. rubra* and *Q. alba*, but he replaces *Alnus serrulata* with *Tilia americana* and adds two species of *Aureolaria*, *A. virginiana* and another that grows “in the pine woods.” This could be *A. flava*, which favors pine savannahs and mixed woods (Radford et al. 1968: 958).

*awini uniyst'osgö* – 'they are burning inside'

This was a stomach disorder of very young children where they tended to be constantly thirsty and drool excessively. The child was treated with an infusion of *Euonymus americanus* and an unidentified plant, then scratched with *Leucothoe axillaris*.

*ayeligogi uniyelö'nöçi* – 'they have made it like it'

Mankillers and plotters (wizards) send diseases and confuse the symptoms so that they baffle the healer. This class of diseases is discussed in *The Swimmer Manuscript* (1932: 33) and is often due to the feuding of rival conjurers or can be sent as a joke by friends and relatives as a means to test the skill of the healer. Several approaches are used to treat this condition. Seven pine tops were made into a decoction and given four times in succession. The formula from *The Swimmer Manuscript* (1932: 187) stipulates that the pine tops should be harvested from different trees and after the administration, the medicine man carefully hides them in a dry spot. The decoction was passed four times over the head of the patient before being drunk. Another approach was to warm the hands and massage the patient while reciting a formula or prayer. Sucking the site of the malady, without a sucking horn, was done with the leaves of *Lobelia spp.* in the mouth of the medicine man. A different decoction consisting of *Nicotiana rustica*, *Lobelia cardinalis*, *L. spicata*, *Sisyrinchium angustifolium*, and one other unidentified plant was also a remedy for this condition. This formula is much the same as that for *aniskina uniyaktanöçi* described above. The

missing remedies may complement each other. And finally, *Panax quinquefolium* was chewed and the saliva blown over the patient.

*a'yelsti tsundat'istanöçi* – 'pierced by a knife'

The treatment is the same as that for piercing with wood splinters (see *adayuni't'i'lö* above).

*ayotli ude'nöçi yunitlöistiça* – 'they are made ill by the having borne a child'

Olbrechts described this condition as complications from childbirth, but provided no remedies.

*dagöna* – this appears to have two meanings, fresh water mussels and a variety of face pimples. No remedies were provided.

*dalâni* – 'yellow'

*Dalâni* takes its name from the yellow bile that was observed to be present in the vomit of the patient. Mooney referred to the condition as "old biliousness" and ascribed it to the irregular eating habits of the Cherokee (1891: 365). While Mooney interpreted the Cherokee explanation for *dalâni* as due to the revenge of the terrapin and the turtle, Olbrechts expands the explanation to include the spirits of vengeful animal spirits. These confound the bile and cause excess bile to collect in the veins under the navel (Mooney and Olbrechts 1932: 182). In his notes, Olbrechts describes the most common symptoms of *dalâni*, which include a sallowness of the face, black rings around the

eyes, dark urine, and a frothy discharge from the bowels. In *The Swimmer Manuscript* (1932: 182) he adds vomiting of bile and soreness around the navel to these symptoms.

If contemporary studies are considered, it is not surprising that this condition would be prevalent among the Cherokee. Biliary diseases occur at a much higher rate among North American Native Americans than in white populations, with the frequency among Pima women over age 25 reaching as high as 75 percent (Sievers and Fisher 1981). The factors cited as the most likely explanation for this are a combination of genetic predisposition for biliary disease and the adoption of westernized diets (Weiss et al. 1984, Shaheb 1990, Heaton 1984). Diets high in fat and refined carbohydrates coupled with a decrease in physical activity exacerbate the inherent propensity for the condition.

Olbrechts provided several varieties of *dalâni*, most of them identified by an association to a color term. As he attributed the variation in color to color symbolism instead of from the recognition of differing symptoms, those six varieties will be included under this heading. They include *dalâni dalânige* ('yellow *dalâni*'), *dalâni gigage* ('red *dalâni*'), *dalâni sa'k'onige* ('blue *dalâni*'), *dalâni de'aluge* (purple *dalâni*), and *dalâni ga'nage* (black *dalâni*). However, black *dalâni* is considered the most virulent manifestation of the condition and was highlighted in *The Sacred Formulas of the Cherokees*. In this form, the symptoms were described in the following manner, "the navel and abdomen of the patient swell, the ends of his fingers become black, dark circles appear about his eyes, and the throat contracts spasmodically and causes him to fall down suddenly insensible (1891: 365)."

The primary therapy for *dalâni* consisted of the medicine man warming his hands by the fire and massaging the navel area of the patient. This was repeated four times

between sunrise and noon. Several plants were also used for *dalâni*, but will be included with the various other forms of the condition below and in the individual plant monographs.

*dalâni dikstoti* – ‘to make patient vomit bile’

This variety of *dalâni* was typified by a painful, swollen abdominal area and a loss of appetite accompanied by vomiting. It was believed that the sooner the patient would vomit out the offending bile, the sooner the condition would subside. A warm decoction of the inner barks of *Nyssa sylvatica*, *Clethra acuminata*, *Alnus serrulata*, and *Corylus americana* was used as an emetic. Olbrechts noted that all four of the inner barks of these species have a yellowish coloration, which he determined to be symbolically associated with *dalâni* (Mooney and Olbrechts 1932: 218).

*dalâni ga’öski* – ‘*dalâni* squatting down’

Pain in the pit of the stomach caused the patient to double over. The bark of *Quercus stellata* was boiled down and drunk all day, four cups at a time.

*dalâni got’iski* – ‘swelling *dalâni*’

This may be a synonym for black *dalâni*, describing the tendency towards distention of the stomach.

*dalâni unit’ela’öska* – ‘shaking *dalâni*’

This describes twitching tissue, especially around the navel.

*dalâni unitłöyö udiyötali* – ‘their navel is ill with *dalâni*’

The seat of pain is directly around the navel.

*dalâni tsanöttiyöskiliça* – ‘when they have yellow slime coming out of their nostrils’

Dreams about the sun or moon causes yellow mucus to discharge from the nose.

This is not a form of the condition *dalâni*, but one in which the yellow color is a diagnostic feature. It was treated by drinking a decoction of *Xanthorhiza simplicissima*.

*dalânige tsandik’öça* – ‘yellow urine’

The best discussion for this condition comes from *The Swimmer Manuscript* (1932: 253). The symptoms started as excessive urine that gradually decreased and became more yellow. If urine flow stopped completely, it was thought the patient would die. The primary treatment consisted of a decoction of the barks of *Vitis aestivalis*, *Calycanthus florida*, *Rubus allegheniensis*, *Euonymus americanus*, *Vitis lambrusca*, and *Ampelopsis cordata* combined with the roots of *Lysimachia quadrifolia*. Taboos included salt, hot foods, and sexual intercourse, but only if all seven ingredients were present. No taboo was observed if less than seven were used. Other formulas incorporated a broad spectrum of the Cherokee pharmacopoeia. A decoction of the roots of an *Ilex* species, *Quercus stellata*, *Q. alba*, *Q. rubra*, and *Q. velutina*, all harvested from the east side of the tree, was drunk all day. No salt or hot food was taken for four days. A decoction of the roots of *Aesculus octandra*, *Collinsonia canadensis*, *Melanthium hybridum*, *Asplenium rhyzophyllum*, an unidentified plant known as the ‘large squirrel’s tongue’, *Eupatorium coelestinum*, *E. purpureum*, *Smilax glauca*, and *Acorus calamus* was drunk.

A simpler formula included *Smilax glauca*, *Rubus occidentalis*, *R. allegheniensis*, and *Platanus occidentalis*. *Euonymus americanus* was combined *Vitis aestivalis* for the same condition, as was a combination of *Platanus occidentalis*, *Quercus alba*, and a type of *tsoliyusti* (see chapter on herbaceous plants).

*danak'ewsköi* – 'when they have sore eyes'

This condition could be caught by looking at someone who was already afflicted by it. The treatment consisted of the scraped bark from the stem of *Xanthorhiza simplicissima*, which was put in water and then placed on a cloth. The cloth was then placed over the eyes of the patient when they went to bed and they were cured by the next day.

*danast'ayesköi* – 'when they cramp' or *daystayeska* – 'cramps in the arms or legs'

This is a condition caused by dreaming of deer or rabbits. No remedy was observed.

*daninsugi* – 'sore eyes' or 'when they have them drooping'

Olbrechts gave several spoken formulas for this affliction of the eyes (Mooney and Olbrechts 1932: 184, 185, 219), which consisted of sensitivity to light from the sun or a fire due to seeing a rattlesnake. The medicine man would blow an infusion or the juice from the chewed bark of *Alnus serrulata* into the eyes of the patient.

*dawzni e'i unitłöyö* – no gloss

Olbrechts did not mention this condition in his glossary of Cherokee ethnomedical conditions, but it was included in his botanical notes. Unfortunately, there is no information on the gloss for the name or any indication of the nature of the condition, but he did record a botanical formula. A combination of *Ulmus rubra*, *Platanus occidentalis*, *Alnus serrulata*, *Quercus rubra*, *Q. alba*, and *Aureolaria pedicularia* was used for this condition, but no directions for their application was included.

*dida'nikwutisgi* – 'rheumatism in the kneecaps'

The Cherokee related rheumatism in the knees to a problem with the kidneys. Treatment consisted of cooking and pounding *Actaea pachypoda*, combining it with rattlesnake oil, putting it in a cloth, and wrapping it around the knees.

*didölesgi* – 'thecrippler' or 'when it breaks them'

Both Mooney (1891: 345-351) and Olbrechts (Mooney and Olbrechts 1932: 196, 292) reported on *didölesgi*, Mooney glossing it as 'thecrippler', Olbrechts as 'when it breaks them'. The condition under consideration here is rheumatism. The cause of the condition was attributed to the spirits of slain animals seeking revenge for their demise or to the measuring worm, *wahĩĩ'*, because of the resemblance of the contracted limb to the motion of the caterpillar. *Wahĩĩ'* is also used a synonym for *didölesgi* (Mooney 1900: 347). Olbrechts also notes that dreams of the opposite sex may cause the condition, as will sexual excess or incest (Mooney and Olbrechts 1932: 196).



A range of treatments were employed against 'the crippler'. Sometimes the medicine man would blow his breath on the afflicted area, or he would blow the medicine, consisting of a decoction of the roots of ferns (see chapter on ferns), and rub it on the patient Mooney (1891: 347). The patients could be scratched and eel oil rubbed on all their joints (Mooney and Olbrechts 1932: 196) or the patient is massaged with a wooden pestle made from the wood of *Diospyros virginiana* (Mooney and Olbrechts 1932: 292). The taboos observed while under treatment include the avoidance of salt or lye, hot food, and women as well as consumption of the foot or leg of any animal or any animal that was observed to have a humped back (Mooney 1891: 349).

*diganöyeyaski geso dinigalo* – 'exema on their thigh'

No explanation or treatment was available for this condition.

*dik'anigeni du'tsöya gwali* – 'his knees hurt'

This is possibly a synonym for *dida'nikwutisgi*, but Olbrechts did not clarify its meaning. No treatment was explained.

*dik'anugosti nugötlö götoti* – 'to be used with a briar to cause it to come out'

This is the scratching done to relieve the patient from cramps. Similar to rheumatism, this ailment is caused by vengeful spirits of slain deer and often afflicts hunters. The patient would be scratched with *Smilax glauca* and have a warm infusion of *Pseudognaphalium obtusifolium* and *Vicia caroliniana* rubbed into the scratches four

times before while the patient was fasting (Mooney and Olbrechts 1932: 207). An alternative preparation included the previous plants combined with *Kalmia latifolia*, *Rhododendron maximum*, and *Leucothoe axillaris*.

*dinileni dunt'askiye'öi* – 'their ears burst'

No description was given for the condition, but the name suggests that it was a severe earache. *Leucothoe axillaris* was applied to this condition, but no instructions were included. *Nicotiana rustica* was also chewed and blown on the patient.

*diniskwageni dik'anöwati* – no gloss

*Panax quinquefolium* was chewed and blown on the patient.

*diniystli anade'usköi* – 'for children to be born'

Olbrechts explained that there were only two complications for giving birth, a slow delivery and poor placement of the uterus (Mooney and Olbrechts 1932: 125). To speed up a delivery, a decoction of *Impatiens capensis* was blown on the birthing mother.

*diniystli tsiduniskwoldisgöi* – no gloss

No explanation was provided for this condition.

*ditsstötiyi götti* – ‘to use horn’

The sucking horn was used by the medicine man to remove infection from an area with swelling. Mooney reported that scarification with a sharp object was performed prior to sucking, and an object such as a stick or a pebble was often found in the extracted blood (Mooney 1891: 334). Olbrechts found no sucking horns were available when he was among the Cherokee, but had one made while he was there. The horn was covered with a turkey’s gizzard tightly stretched over the small end. The medicine man would place the horn over the infected area at an angle and suck the air out. By the time he was among the Cherokee, they no longer used the horn, but the medicine man would use his mouth to do the sucking.

*du’alagosa* – ‘inflammation of the palate’

This is probably an infection of the mouth caused by the yeast *Candida albicans*, a condition commonly referred to as thrush. *Clethra acuminata* was used, but no directions were provided.

*dulasi’denö dudile’öseça* – ‘his feet become hot for him’

No remedy was recorded for this condition.

*duletsi* – ‘kernels’ or *duletsi ant’asgiski* – ‘boils on the neck’

Olbrechts indicated that ‘kernels’ referred to goiterous swellings in the throat area, or the scrofulous swellings due to tuberculosis. The Cherokee thought this condition was due to some sort of physical trauma. Several remedies and formulas

were applied to this condition, demonstrating the seriousness or the problem of tuberculosis among Native Americans both then and now (Rieder 1989).

Corn cobs were burnt and before they cooled they were placed on the swellings. They were then thrown outdoors, but not on the fire. *Vicia caroliniana* was burnt and the charcoal boiled. *Cynoglossum virginianum* and the pitch from *Pinus pungens* were added to the boiled charcoal and allowed to cool. The patient was instructed to eat honey for a lifetime and fresh meat until well.

*Calycanthus floridus* and *Pyrularia pubera* were combined for *duletsi*, but no further instructions were included. Other plants used singly or in formulas without instructions for use included *Sassafras albidum*; a combination of *Prunus pensylvanica*, *Xanthorhiza simplicissima*, *Polygonum sagittatum*, and three unidentifiable plants; and a combination of *Aristolochia serpentaria*, *Prunus virginiana*, *Prunus pensylvanica*, *Cassia marilandica*, and an unidentified plant. A formula gleaned from Olbrechts botanical notes indicates that *Polygonum sagittatum*, *Quercus velutina*, and two unidentified grass-like plants were also used for *duletsi*.

*duletsi iyunsti* – no gloss

No further information was provided for this form of *duletsi*. It was treated with a combination of *Desmodium cuspidatum* and *Cynoglossum virginianum*.

*duletsi tsunstanaya lewski* – no gloss

No further information was provided for this form of *duletsi*. No treatment was included.

*dunatsö walstçö* – ‘when they have pains along both sides’

No treatment was recorded for this condition.

*dunatsöwalö ne’öi* – ‘swellings on both sides’

This was a condition of the kidneys due to dreaming of crawling things such as snakes, lizards, etc. The remedy consisted of a young root growing from a new sprout of an old root of *Sambucus canadensis*. The root was steeped in hot water and drunk.

*duni’alagöi ata’yesgi* – ‘inflamed palate’ or *duni’alagöi dida’nöwsti* – ‘when the mount is sore’

This condition may have been more serious than the previous inflammation of the palate. Olbrechts indicates that the palate and pharynx are covered with a membrane or blisters, suggesting the symptoms of diphtheria (Thomas 1997: 547). It was treated with *Carya glabra* or a combination of *Diospyros virginiana* and *Vitis aestivalis*; however, no directions were included.

*duni’elöi* – ‘their hands are killed by frostbite’

There were several spoken formulas for frost bitten feet (Mooney and Olbrechts 1932: 257, 258, 298), but none for the hands (see *tsunastagöçi* below). No remedies were included with this condition.

*dunikstisgöi* – ‘when they vomit’ or *dunikstisgöi yunsłsatta’kö* – ‘when they vomit what they eat’

Vomiting was believed to be caused by dreaming of fish because that would cause the spoiling of the saliva. When the saliva gets spoiled it tastes different and may change color, often turning white or yellow and becoming thick. Remedies for this condition included *Echium vulgare* with no instructions for its use and the ‘little birch’, which, probably referred to wintergreen (*Gaultheria procumbens*) due to its having the same smell and flavor as birch. This was drunk before breakfast and vomited in the yard.

*dunileni dunt’askiye’öi* – ‘their ears burst’

Olbrechts gave no further information on this condition and did not mention it in *The Swimmer Manuscript*, which is surprising considering that he found several synonyms for earaches.

*dunitsalöi* – ‘when they have blisters’

Olbrechts indicated that the blisters mentioned here also included scabs. In *The Swimmer Manuscript*, he identifies the condition as “fever blisters” brought on by the heat of summer (Mooney and Olbrechts 1932: 211). These blisters were treated with the dried, brittle leaves of *Castanea pumila*, heated with seven coals and blown on the upper portion of the patient. In his notes he recorded a combination of *Castanea pumila* and *Magnolia acuminata* was used as the remedy, but no instructions were included.

*duni'yugwatisgöi* – 'pains moving about (in the teeth)'

Mooney interpreted this condition as neuralgia, a generalized pain affecting several teeth (1891: 358).

*dunçt'asgielido'öi* – 'when they are bursting out'

Olbrechts identified this condition as burst scrofula that manifest as boils that appear in different places. This was treated with a combination of *Salix humulis* and *S. alba*, boiled together and applied on the sores.

*dunölestoi* – 'when they have it broken'

No information was provided for this condition or plants used to treat it.

*du'st'its'ö u'tsöya* – 'he is sick between where head and neck joins'

A prayer or spoken formula was spoken. No more information was available about this condition.

*duwaye'sö waloska* – 'cramp in finger', *duwaye'sö unatsö* – 'cramp in toe'

Cramps were thought to be caused by catching cold. The remedy was scratching with the leaves of *Leucothoe axillaris* and blowing a decoction of the pounded and steeped leaves on the cramping spot.

*e'isti andik'ö'öi* – no gloss

Olbrechts' notes indicate that the primary symptom of this condition may have been painful urination, and the notes under each remedy indicate that this was the case. While the nature of the condition itself was not clearly defined, Olbrechts did record three formulas consisting of several plants each. A combination of *Carya ovata*, *Amelanchier arborea*, *Quercus rubra*, *Fraxinus americana*, *Juglans nigra*, and an unidentified plant were used, but no information was available on how they were used. *Dirca palustris*, *Cassia marilandica*, and two unidentified plants were combined, but again, no information was available on the processing of this formula. The bark of *Liriodendron tulipifera*, *Magnolia acuminata*, *Quercus velutina*, *Q. alba*, *Fraxinus americana*, and *Diospyros virginiana* were steeped raw and drink. The patient would avoid salt and hot food for four days.

*gakweoski* – 'wrapped up', 'coiled up', 'contracted', 'heart attack'

The Cherokee belief was that heart attacks were caused by the lungs wrapping tightly around the heart. This was due to dreams of wild animals such as bears, panthers, etc. Treatment consisted of scratching the patient with a briar scratcher starting across the tongue. Scratching continued across the body, including across the seat of the "soul" or the heart region. Olbrechts indicated that a decoction was sprinkled over the scratched area, but did not name the plants used in his description of the condition. Another treatment consisted of the roots of *Vicia caroliniana* and *Coronilla varia*, pounded and steeped, then rubbed on the patient as the medicine man was blowing his breath on the afflicted area. This was done four times consecutively. Food



taboos consisted of the avoidance of chicken wings and any kind of animal foot, as well as the life long avoidance of rabbit flesh.

*gançawadööski* – ‘blisters caused by heat’

This was severe sunburn causing blisters as if burned by a fire. The bark of *Diospyros virginiana* was boiled and rubbed on the burned areas until the blisters disappear.

*ganedzi u'tsöya* – ‘he is sick in the breast’

This condition encompassed a range of respiratory conditions including pneumonia, pleurisy, and bronchitis. It was believed to be caused by dreaming of fish or terrapins. It was treated with *Morus rubra* and *Prunus pensylvanica*, but no directions for their use was included.

*ganewot'iski* – ‘measles’

Olbrechts indicated that this condition affected adults and children alike, covering them with pimples and turning the skin red. The treatment consisted of *Lindera benzoin*, but no further instructions were included here.

*gat'esgeni u'tsöya* – ‘his spine aches’

No description for this sort of backache was provided, but it was treated with a combination of *Solidago caesia*, *Cynoglossum virginianum*, and an unidentified plant. No directions for their use were included.

*ga'yedi* – 'pain in the back'

This condition occurred due to eating food prepared by a menstruating woman. Several remedies and formulas were applied to alleviate *ga'yedi*. The roots of *Desmodium cuspidatum* were boiled and drunk all day while fasting. Three combinations of plants were included without further instructions. The first consisted of *Chamaesyce maculata*, *E. carollata*, *Aster laevis*, and four unidentified plants. The second was a combination of *Euphorbia carollata* and an unidentified plant. The third consisted of *Phytolacca americana*, *Euonymus americanus*, *Rhus glabra*, and two unidentified plants.

*gegane'sagöçi* – 'they have it caused by plotters'

This condition was due to some form of conjuring, but was not clearly defined. The remedy consisted of *Lobelia cardinalis* and *L. spicata*, boiled down and blown on the patient's throat.

*getsiyowlöçi* – 'when they have been shot'

The bark of *Carya ovata* was used, but no instructions were included. However, he did clarify it under the condition of *yigetsiyolö* below.

*gigage dunitlo nöösköi* – 'when they have red spots'

No further information was available for this condition, but *Spigelia marilandica*, which was reported to grow in Tennessee, was used to treat it.

*gigö analdziskwsköi* – ‘when they spit blood’ and *gigö dunikstisgöi* – ‘when they vomit blood’

The conditions here are distinguished only by the amount of blood eliminated by the patient. There were several causes. The eating of game killed without observing the proper taboos, such as observation of purification rites by the hunter or respectfully handling the animal’s remains, could cause this condition. Also, eating food prepared by a menstruating woman or eating too much salt might cause the expulsion of blood. Remedies included *Platanus occidentalis*, the slender roots of which were pounded, steeped, and drunk throughout the whole night as well as first thing in the morning. No salt, meat of any kind, or hot food was taken at this time. *Fraxinus americana* was mixed with *Phlox stolonifera*, steeped, and drunk. A species of blackberry or raspberry was also used, but the species and direction for use was unavailable.

*gigö danayöskoi’öi* – ‘when they bleed from both nostrils’

This, like most conditions where bleeding occurred, was attributed to eating food prepared by a menstruating woman. No treatment was included.

*gigö digöguski* – ‘when they discharge blood from their bowels’

This was due to severe cases of dysentery. The roots of *Ceanothus americanus* were boiled and the tea was drunk cold all day. *Rosa palustris* was also used, but no instructions were included. Olbrechts also included this condition in *The Swimmer Manuscript*, indicating that a decoction of the barks of *Prunus pensylvanica* and

*Diospyros virginiana* were given to the patient after repeated boiling (Mooney and Olbrechts 1932: 275).

*gigö yandik'öça* – 'urinating blood'

Two formulas were included for blood in the urine, but no instructions for their use was included. *Lobelia cardinalis*, *Cicuta maculata*, *Rosa palustris*, *R. carolina*, *Ilex verticillata*, *Prunus pensylvanica*, *Xanthorhiza simplicissima*, *Amelanchier arborea*, *Lindera benzoin*, and a member of the Solanaceae family were reported to be combined for this condition, but it is doubtful that *Cicuta maculata* was a component as it contains a deadly toxin. The second formula consisted of *Monarda didyma*, *Lobelia cardinalis*, *Solidago caesia*, and an unidentified plant.

*gotisgi tsunitsöyöi* – 'when their stomach is swollen'

This condition occurred when a witch changed the food in the stomach and this caused swelling. Olbrechts explained further in *The Swimmer Manuscript* (Mooney and Olbrechts 1932: 281) that the food was thought to sprout or change into a living thing in the body. The remedy, only found in Olbrechts' notes and not in *The Swimmer Manuscript*, consisted of *Alnus serrulata*, *Diospyros virginiana*, *Prunus virginiana* (probably *P. serotina*, see text), *Liriodendron tulipifera*, and *Platanus occidentalis*, which were boiled and drunk as an emetic.

*göskanugoga* – ‘arse bowel falls out’

Olbrechts identified this condition as a prolapsed rectum, but provided no information on a remedy in this section.

*göwanigistöi* – ‘when they are eaten by them’

No explanation of this condition was provided in the notes, but a condition with a similar name was published in *The Swimmer Manuscript* (Mooney and Olbrechts 1932: 179). The condition known as “eaters” was a urinary tract or kidney disease, affecting the patient by causing pain in the lower back and turning the urine yellow. The remedies combined in the formula for this condition give no clues either, as they were not commonly used for any one affliction. The treatment consisted of a combination of *Eryngium yuccifolium*, another *Eryngium* species, *Juncus effusus*, *Dioscorea villosa*, and an unidentified plant made into a decoction and blown on the left foot, right hand, right foot, left hand, and crown of the head, respectively.

*inadö danskitsöi* – ‘when they dream of snakes’

Dreaming of being bitten by a snake was treated as an actual snakebite, but with different medications. If this was not done, the patient would eventually develop the symptoms of an actual bite. *Botrychium virginianum* was used for the dream bite, the root boiled down to a syrup and the decoction rubbed on the place where the patient dreamed they had been bitten (Mooney and Olbrechts 1932: 176). To cure the spoiled saliva that may be the result of a snake dream, the patient would drink an emetic decoction consisting of *Juncus effusus*, *Scirpus validus*, *Vicia caroliniana*, *Coronilla*

*varia*, and part of the vine of *Rhus radicans* that is found growing on the east side of a tulip poplar tree.

*inadö egwa tsanotłöskei* – ‘when they have made a big snake’

Unfortunately, Olbrechts gave no further information about this condition with a very interesting name.

*inadö uniskötltsöçi* – ‘if they are bitten by snakes’

The rattlesnake was considered a supernatural being by the Cherokee and care was taken not to offend one. In case of a bite, tobacco juice was rubbed on the punctured spot, the rubbing performed in a counterclockwise direction signifying the uncoiling of the snake. Dreams about bites were also treated, or the patient would suffer inflammation and the symptoms of an actual bite at some point in the future (Mooney 1891: 352).

*tciski göwagisti* – ‘when children sleep with eyes open’

No further information was available for this condition.

*tckoya* – ‘insects cause swelling in body’

The spirits of slain insects were believed to take up residence under a person’s skin and causes swellings, blisters, and ulcers (Mooney and Olbrechts 1932: 29). No remedy was available for this condition.

*tsat'agö unöt'agwali ustiga* – 'chicken pox'

The gloss here is not a literal translation, but this is all Olbrechts provided. No remedy was included.

*tsidunitsileça* – 'when they have itching'

The primary symptom for this condition, itchy genitals, was believed to be caused by urinating on the ashes from a fire. The primary treatment was the chewed root of *Aristolochia serpentaria*, which was blown into the urethra of the patient. If *A. serpentaria* was not available, *Liriodendron tulipifera* was considered an acceptable substitute (Mooney and Olbrechts 1932: 286). In his notes he claimed that *Pinus pungens* was the preferred remedy for this condition.

*tsidunitstaldia* – 'if they have scars'

The bark of *Carya ovata*, the wound healer mentioned above for bullet and arrow wounds, was chewed and blown on the scars. No salt or hot food was taken for four days.

*tsidunilienoga* – 'earache'

See *dunileni dunt'askiye'öi* above.

*tsuk'olo diganugogi* – no gloss

Olbrechts indicates that this is a form of necrosis, possibly a type of *ada'yeski* (see above).

*tsuk'on'öçi u'tsöya* – ‘sick in the testicles’

No further information was available for this condition.

*tsunastagöçi* – ‘their feet are frostbitten’

Three of the sacred formulas were dedicated to frostbitten feet (Mooney and Olbrechts 1932: 257, 258, 298), but only one mentions a plant used to alleviate frostbite. The patients would put their feet under a covering of dried *Andropogon virginicus*, the favored shelter for the rabbit who appears to be immune from this affliction. The other therapy mentioned consisted of the medicine man holding snow or ice in his mouth and sucking on the frostbitten area.

*tsunalulödi eldi tsununötlstaneça* – ‘when womb falls down’

No further information is available for this condition. It is unclear whether this was a prolapsed uterus, or was related to the afterbirth.

*tsunisköistigi utliiyaktanöçi* – ‘when where they (children) have to suck is changed’

No further information was available for this condition.

*tsuniyotogia* – ‘when they itch’

Olbrechts indicated that this was an itching of the private parts and scratching the itch caused painful sores. The condition was due to the youthful indiscretion of urinating on the fire or the ashes from a fire. The itching may begin immediately after the transgression or can lie dormant until adulthood. Treatment consisted of a combination



of *Hackelia virginiana* and *Cynoglossum virginianum*, the roots of which made into a decoction. The affected parts were bathed in the decoction and the patient drank a portion. No food or drink was taken while under treatment, which lasted four days (Mooney and Olbrechts 1932: 174).

*tsuniyötsot'isga* – ‘when they have swelling in the neck’

This may have been a case of the mumps, but Olbrechts did not elaborate.

*tsunstiga didöŋ t'adinödan'ti* – ‘to make (the child) jump down from her’

A warm decoction of *Xanthorhiza simplicissima* was blown on the head, breast, and palm of each hand of the birthing mother to stimulate the arrival of the child (Mooney 1891: 364).

*t'uyasti* – ‘big boil’

No explanation was provided for the nature or remedy for this condition.

*udile'gi dalâni utanö* – ‘yellow fever’

No further information was available for yellow fever.

*udile'öska* – ‘fever’

This appears to be a generic term for fevers, but Olbrechts did not elaborate.

*uliskwötia* – ‘he has earaches’

See *dunileni dunt’askiye’öi* above.

*ulotalooska* – ‘he is paralyzed on one side’

This condition was believed to be due to lightening or the blood being stopped (stroke?). It was treated with a combination of *Aralia spinosa*, *Cirsium altissimus*, and two species of small thistles. No directions for their preparation were included.

*unak’ano’stisgöi* – ‘swollen testicles’

Olbrechts also names *tsuk’onçöçi* as a synonym for this condition, but gives no further description for the condition or the cause of it. The remedy consisted of *Apios americana*, *Antennaria solitaria*, and an unidentified tuberous root, which were pounded, steeped, and the infusion blown on the distressed area four times. The bark of the unidentified plant was then applied as a poultice.

*unak’ewagöi* – ‘if they lost their voice’

Olbrechts identified this condition as a case of chronic laryngitis, possibly due to diphtheria. The patient was very hoarse. This condition may have been synonymous with *duni’alagöi ata’yesgi*, but the remedies were different. The formula had several variations. The one from the notes consisted of a combination of *Quercus imbricaria*, *Cornus florida*, and *Prunus serotina* combined with either *Carpinus caroliniana* and *Salix alba* or *Aureolaria virginica* and *Malus pumila*. Directions for their use were not included. The version in *The Swimmer Manuscript* consisted of a decoction of the inner barks of

*Prunus virginiana*, *Quercus falcata*, *Q. imbricaria*, *Cornus florida*, *Salix alba*, and *Malus pumila*, drunk by patient and rubbed on the throat and neck. The bark was usually harvested from the east side of the tree (Mooney and Olbrechts 1932: 199).

*unak'onçö* – no gloss

This condition was probably also connected with the testicles (see below), but no description or gloss was included. It was treated with *Verbascum thapsus* and *Cicuta maculata* (or possibly a less toxic relative), but no directions were reported.

*unak'onçö yunot'i'iseça* – no gloss

Olbrechts indicated that this was also a case of swollen testicles, but did not elaborate. The remedy mentioned here was a type of fungus, but it was not identified and no directions for its use were included.

*unalötölö* – 'they have fits'

Olbrechts did not elaborate on this condition, but did report that *onage* was a Cherokee synonym for this type of seizure. The remedy consisted of a combination of *Nicotiana rustica*, *Picea rubens*, and *Prunus pensylvanica*, but no instructions for their use was included.

*unast'ayesöçi* – ‘their (arm, leg, neck) is sprained’ or *una'iyetsöçi* – ‘when their back is sprained’

Olbrechts claimed this condition was caused by “brisk or excited movement”. It was treated with the bark of a type of wild cherry (*Prunus spp.*) that was pounded, steeped, and applied to the area as well as being drunk.

*unawasti* – ‘he gets cold’ or ‘that which chills one’

Mooney describes this condition as the fever or ague that comes with intermittent fever such as that which accompanies malaria. He claimed that it was considered a very serious condition by the Cherokee medicine men (1891: 361). There were several varieties of *unawasti*, and they will be considered below. Olbrechts recorded four formulas for *unawasti*, but only two have any directions on how to prepare the plants. The first consisted of an infusion of *Actaea pachypoda*, *Phlox stolonifera*, *Veronica officinalis*, *Prunus virginica*, and an unidentified plant, which was blown on the patient four times (Mooney and Olbrechts 1932: 277). Another included four ferns species; *Cystopteris fragilis*, *Polystichum acrostichoides*, *Dennstaedtia punctilobula*, and an unidentified fern, combined with *Dioscorea villosa*. The next formula was composed completely of ferns including *Adiantum pedatum*, *Polypodium vulgare*, *Polystichum acrostichoides*, and an unidentified fern. And finally the leaves of *Chenopodium ambrosioides* were rubbed between the hands, steeped in water, and blown on the patient.

*unawasti egwa* – ‘big chill’

This was a severe case of *unawasti*, typified by symptoms such as a black coloration of the face, high fever, and chills accompanied by shaking. The fever was intermittent and would generally appear in the spring and summer, often returning in subsequent years (Mooney 1891: 361). Treatment consisted of the bark of *Prunus serotina*, beaten and placed in water with seven hot coals. This decoction was blown over the patient beginning at sunrise, starting at the top of the head, advancing to the right shoulder, the left shoulder, and the torso of the patient. This was repeated four times, morning and evening, for up to four days if necessary. *Nicotiana rustica* could be used in place of *Prunus serotina* (Mooney 1891: 362). Olbrechts recorded two more elaborate formulas for this condition, the first consisting of *Morus rubra*, *Platanus occidentalis*, and *Lobelia spicata*, while the second combined *P. serotina*, *Carpinus caroliniana*, *Malus pumila*, *Nicotiana rustica*, *Quercus imbricaria*, and *Cornus florida*. No directions for the preparation or application of either formula were included.

*unawasti unitisötiçi* – ‘the chill that makes them restless so that they could not lie still’

Olbrechts gave no further description of the condition and provided no remedies for it, but the descriptive name provides much information on the symptoms that were inherent with this condition.

*unawasti uskga* – ‘chill caused by the pain of neuralgia, boils, etc.’

Again, no further information, but a very descriptive name.

*unawat'ö'öski* – 'blisters'

Olbrechts described the blisters as, “watery blisters which break out on the body in summer, and are caused, according to the medicine man, but the heat of the sun (Mooney and Olbrechts 1932: 250).” His notes on the individual plants suggest that these were fever blisters, probably synonymous with *dunitsalöi*, and not the type described above as *gançawadööski*. The herpes simplex virus, which causes fever blisters, is activated by ultraviolet radiation. The remedy consisted of a combination of *Rhus glabra* and *R. copallina*, the barks of both species made into a decoction which was drunk, blown on the patient, and rubbed on the sores for four days. Food taboos included the avoidance of potatoes, melon, pumpkins, salt, beans, and eggs (Mooney and Olbrechts 1932: 251).

*unak'ewagöi* – 'if they lost their voice'

Olbrechts identified this condition as a case of chronic laryngitis, possibly due to diphtheria. The patient was very hoarse. This condition may have been synonymous with *duni'alagöi ata'yesgi*, but the remedies were different. The formula had several variations. The one from the notes consisted of a combination of *Quercus imbricaria*, *Cornus florida*, and *Prunus serotina* combined with either *Carpinus caroliniana* and *Salix alba* or *Aureolaria virginica* and *Malus pumila*. Directions for their use were not included. The version in The Swimmer Manuscript consisted of a decoction of the inner barks of *Prunus virginiana*, *Quercus falcata*, *Q. imbricaria*, *Cornus florida*, *Salix alba*, and *Malus pumila*, drunk by patient and rubbed on the throat and neck. The bark was usually harvested from the east side of the tree (Mooney and Olbrechts 1932: 199).

*undalu'yöçi* – 'chopped' or 'if they have chopped it'

I assume this condition referred to an injury with an axe, but Olbrechts did not elaborate. However, his remedy included a large variety of Hickory (*Carya spp.*) along with another unidentified plant. Hickory was one of the primary wound healers in the Cherokee pharmacopoeia and was used to heal a wide range of traumatic wounds, such as the use of *Carya ovata* for bullet and arrow wounds (Mooney and Olbrechts 1932: 273).

*undiksti yunalishineça* or *undiksti yunotłstineçatsu* – 'if they have their urinating stopped'

For an explanation of this condition, see *andlköça yunalstuneça* above. The treatment consisted of a combination of *Cicuta maculata* and *Xanthium strumarium*, but no preparation or application instructions were provided.

*undile'öskö* – 'when they are having a fever'

No further information was available for this condition.

*undiyöтали ада'nöwoti* – 'to treat their navel with'

This condition is a synonym of *dalâni unitłyö udiyöтали* (see above). It was treated with *Clethra acuminata*, but no directions for its use were included.

*undölaksöçi* – 'broken bones'

Broken bones were reported to be treated with a combination of *Ilex verticillata* and *Vitis aestivalis*, chewed and blown on the scratched patient. Olbrechts identified the

first species as *Ilex laevigata*, but it is most likely that the *Ilex* species under consideration here is *I. verticillata*. It closely resembles *I. laevigata*, but is commonly found in the North Carolina mountains. *Ilex laevigata* is associated with the coastal plain and its range does not extend to the higher elevations (Radford et al. 1968: 684).

*unegö tsandiköça* – ‘if they water out white’

Olbrechts described this condition as an aggravated case of a kidney infection, the symptoms consisting of pain in the hips and lower back with the discharge of white urine (Mooney and Olbrechts 1932: 199). Olbrechts’ notes indicate that he was quite familiar with the incidence of gonorrhea among the Cherokee, but he dealt with it in other sections of his notes and it appears to be unrelated to this condition. Several formulas were included in *The Swimmer Manuscript* and the plants mentioned in these will be discussed here with those from Olbrechts’ notes. A combination of the barks from *Prunus serotina*, *Quercus falcata* (which could be substituted or combined with *Q. imbricaria*), *Malus pumila*, *Salix alba*, and *Cornus florida* were made into a strong decoction. Small amounts were taken at frequent intervals for four days. Olbrechts states that *Cornus stricta* could be substituted or combined with *Cornus florida*, but he most likely mistook *C. stricta* for *C. amomum*, as the former is more common on the coastal plain and the latter frequent in the mountains. The patient abstains from salt and hot food for the duration of their treatment and milk for a much longer period (Mooney and Olbrechts 1932: 199). Another formula from *The Swimmer Manuscript* (307) utilizes plants with a prevalent milky latex, suggesting the Doctrine of Signatures. Two species of *Euphorbia*, *E. corollata* and *Chamaesyce maculata*, were combined with



*Echium vulgare*, the roots of all prepared and drunk as a warm infusion. In severe cases, the roots of *Lysimachia quadrifolia* were added to the infusion.

The formulas in Olbrechts' note were just lists of plants. No instructions on their preparation or administration were included. However, the sheer number of formulas included and the wide range of plant species used to address the condition indicate that it was prevalent and considered quite serious by the Cherokee. Severe cases appeared to be handled as a separate illness (see *unödi tsandik'uça* – 'they urinate all milk', below).

The plants were grouped as follows:

- a) *Acorus calamus*, *Chamaesyce maculata*, *Echium vulgare*
- b) *Aesculus octandra*, *Apios americana*, *Oxydendrum arboreum*, and an unidentified plant with yellow flowers
- c) *Aureolaria flava* and *Eupatorium purpureum*

*unegö unanugots'eça* – 'it is coming out white'

Olbrechts gives no clarification of the nature of this condition, but it appears to be another form of milky urine. Several plants from the category of plants with burrs were mentioned as a remedy for this condition, but the individual species were not identified. Another formula consisted of a combination of *Hieracium venosum*, *Aesculus octandra*, *Aster laevis*, *Eupatorium purpureum*, and *Euphorbia corollata*, drunk as a decoction all day. No milk or young cabbage leaves were used at this time.

*unestanelidoloçöi* or *uneistaneo gananutotsidoi*– ‘when they have pains all over their body’

This condition, where there were shifting pains moving around the patient’s body, was one of a group of illnesses caused by a human agent. A witch or another person with a similar power sends a disease that resembles one the medicine man knows, but it is a different condition disguised as the familiar one designed to perplex the medicine man. Often, an object was shot into the victim’s body and the pain was caused by a shift in the object’s position (Mooney and Olbrechts 1932: 257). Two primary formulas were used for this condition. A warm infusion of the bark of *Alnus serrulata* and the roots of both *Lobelia cardinalis* and *Verbascum thapsus* was held in the mouth of the medicine man while he sucked the offending area. He would then spit the liquid into a bowl. After four repetitions, he examines the liquid for offending objects that may have been sent by an enemy to cause the patient problems (Mooney and Olbrechts 1932: 216). The other therapy consisted of external application of a decoction of the leaves of *Rhododendron maximum*, *Kalmia latifolia*, and *Veratrum viride*, applied after scratching the immediate area of the pain with the leaves of *Leucothoe axillaris* (Mooney and Olbrechts 1932: 220). The flowers of *Nicotiana rustica* were also used for this condition, but no directions for their use was available.

*uninigwatisgöi* – ‘rheumatism in his knees’

This is a synonym for *dida’nikwutisgi*, but this version came directly from Mooney’s notes. The remedy here was a decoction of *Rhododendron maximum*, applied after scratching.

*uninidla* – ‘crevices on the skin’

This appears to be a dermatological problem, where the skin is deeply creased or cracked. The remedy consisted of *Viburnum*, boiled down and applied to the skin. *Viburnum rufidilum* was the species identified by Olbrechts, but it was more likely *V. cassinoides*, a common variety in the mountains of North Carolina.

*unisi'kwaskö* – ‘when they are coughing’

The cough mentioned here was due to the nefarious activities of a witch, enemy, or someone else conversant in the art of conjuring. Olbrechts recorded two formulas, but no directions for the preparation or administration of either were included. A combination of *Podophyllum peltatum*, *Acorus calamus*, and *Ilex verticillata* was applied to treat this condition, as was a mixture of *Alnus serrulata*, *Pseudognaphalium obtusifolium*, *Agrimonia parviflora*, and *Geranium maculatum*.

*unisködönisti* – ‘he is hot in the skin by them’

No further information on this condition or its treatment was available.

*uniskowldisgöi* – ‘whenever they have diarrhea’

Diarrhea could be caused by several factors, including the changing of the seasons, over-consumption of fruit, or the consumption of fish or fowl due to their watery feces. Olbrechts recorded several remedies and formulas for this malady. The bark of the roots of *Sassafras albidum* was pounded, steeped, and drunk. *Coreopsis major* and *Phlox stolonifera* were steeped raw and drunk while the offending foods were

avoided for four days. A mixture of *Xanthorhiza simplicissima* and two unidentified plants were made into a decoction and drunk, as well as being rubbed on the stomach. Salt was avoided for four days. *Coreopsis major* was used alone, the raw root made into an infusion. A combination of *Plantago major*, *Agrimonia parviflora*, and an unidentified plant were made into a decoction that was drunk by the patient and blown on them.

*uniskowldisgöi uyönskilötiiyusti* – ‘when they have diarrhea and discharge light colored feces’

This specific form of diarrhea was treated with the root of *Agrimonia parviflora*, used alone or combined with *Agalinis tenuifolia*.

*uniskwotlii tsunitlöyö yuwot’isö andanawoski* – ‘when they have a stomach-ache with swollen and throbbing stomach’

No additional description for this condition was provided, but the name provides us with a good idea of the symptoms. It was treated with a combination of *Podophyllum peltatum* and a species of *Matalea*, steeped in warm water and drunk in 2-cup portions. The use of *Podophyllum peltatum* and the symptoms inherent in the name suggests this is a form of *dalâni*.

*unit’adesgiskö* – ‘thirsty’ or *unet’adegisköi* – ‘they are thirsty’

Pathological thirst was treated with one of the astringent herbs, possibly *Geranium maculatum* or *Heuchera americana*, the roots of which were boiled and drunk. It was reported to have a very bitter taste.

*unitłöyö yiki uniskwali* – ‘when they have a stomach ache’

Olbrechts indicates that this is an acute type of indigestion. It was treated with the fruit of *Pyrolaria pubera*, cut in to four sections and each section swallowed.

*unitseno'ise'oi* – ‘when a person has stomach trouble’

This type of stomach trouble was typified by a swollen stomach and indigestion from eating unripe fruit and vegetables. The patient is constantly hungry but loses weight. The remedy consisted of an infusion made by steeping of the barks of *Gleditsia triacanthos* and *Aesculus octandra* with the roots of *Specularia perfoliata* in warm water for a full night. The following morning the medicine man took the patient to the river and gave them some of the infusion to drink and bathing them with the rest (Mooney and Olbrechts 1932: 239).

*unitsiya dida'nöwoti* – ‘to cure people of worms’

Olbrechts observed that almost all the Cherokee children had roundworms, with hookworms being less common. The remedy recorded by Olbrechts consisted of *Spigelia marilandica*, taken with honey.

*uni'yagwatisgöi* – ‘when they are having a toothache’

*Sisyrinchium angustifolium* was applied to a sore tooth, but no instructions for its application were included.

*uniyalotisgöi* – ‘when their stomach swells up’

Olbrechts give no further information on the nature or remedy for this condition, but it appears to be a form of *dalâni*.

*uniyeloskö ada'nöwoti* – no gloss

Olbrechts gave no gloss or remedies for this condition, but I have included it here because he recorded it in his list of conditions.

*uniyelo'iselöi* – ‘pain about’

This appears to be a synonym of *unestanelidoloçöi*. A combination of *Lobelia spicata* and *Alnus serrulata* were held in the mouth while the medicine man sucked out the offending object.

*uniyötsotisgöi* – ‘when their neck swells’

Olbrechts gave no further information on the condition and did not record a remedy.

*unödi tsandik'uça* – ‘they urinate all milk’

This appears to have been a severe infection of the urinary tract. Two versions were reported in *The Swimmer Manuscript*, both having basically the same symptoms consisting of the discharge of milky urine often appearing with discharges of dark red urine and pain in the pelvic area and lower back. However, in the second version he added excessive perspiration in the groin area as an additional symptom. The first

formula consisted of a strong decoction of the inner barks of *Platanus occidentalis*, *Quercus stellata*, *Carpinus caroliniana*, and *Betula nigra*, drunk in small quantities at frequent intervals for four days (1932: 199-200). The latter species was probably misidentified as it does not frequently occur in the mountains, more likely species being *B. lenta* or *B. lutea*. See the discussion for *gûnetiski* in the chapter on trees.

The second formula consisted of an infusion of the inner bark of *Nyssa sylvatica* and the bark of *Alnus serrulata*, harvested from the east side of the tree near the ground, was drunk at diminishing intervals for four days while avoiding sex, salt, and hot foods (Mooney and Olbrechts 1932: 308). Another formula from the notes consisted of *Cynoglossum virginianum* and an unidentified plant that had burr-like seeds. No instructions on their preparation or administration were included.

*unöłstay'ti tsuniyotc'eça* – 'when their appetite gets spoiled'

This condition was due to having looked at a corpse or an animal. The patient can not stand the sight of food and nausea causes them to expectorate. Olbrechts gave several remedies for this condition. A species of *Oxalis* was used to settle the stomach, but no directions for its use were included. A combination of *Quercus bicolor*, *Q. rubra*, and *Carya ovata* was used, but, again, no directions were included. The bark of *Vitis aestivalis* was boiled and the decoction drunk.

*unöt'agwali* – 'boils' or 'spots'

Olbrechts indicated that this was most likely small pox. The Cherokee belief immediately after the Civil War was that white doctors kept the disease in a jar in the

form of small, red fish. The remedy consisted of many plants whose roots were boiled and the patient was bathed in the decoction; however, Olbrechts only recorded *Mentha piperita* as a constituent of the formula. All fruit was avoided for four days.

*unöti yiduniyalotistiça* – no gloss

Olbrechts indicated that this was a form of children's diarrhea. It was treated with *Plantago major*, but no directions were included on the procedure.

*unstiunde'nonöçi aniskwotli yune'istaneçq* – 'to cure the mother after birth'

No remedies were included for this specific condition but this may be a synonym for *ut'igadö* (see below).

*useski* – 'whooping cough'

An infusion of *Blephilia ciliata* and *Eryngium yuccifolium* was drunk to alleviate the cough.

*usiwaska* – 'he is coughing'

Breathing in cold air was thought to cause this condition. The remedies consisted of the bark of *Prunus serotina*, which was boiled and drunk, and the bark of *Clethra acuminata*, which was scraped from the branches and steeped.



*uskolö gigö yunikwolstia* – ‘if they discharge pale blood from their bowels’

Taken from Olbrechts notes, the remedy for this condition is the fern *Polypodium virginiana*. But he also mentions this condition in *The Swimmer Manuscript*, with the additional symptom of slimy matter coming from the bowels. He indicates that a mountain fern was used in this case, but that the name was too vague to suggest a species (Mooney and Olbrechts 1932: 276).

*uskolö yandik’öçj gigö* – no gloss

Olbrechts indicated that this condition was a synonym of *dalânige tsandik’öça* or ‘yellow urine’, but the presence of *gigö* in the name suggests that this was also a condition where blood was present in the urine. No remedies were included.

*usonuli unt’ane’ö* – ‘sudden attack’

The attack here is a heart attack, and Olbrechts noted that this is a synonym of *gakweoski*. The symptom that typified this condition was a blue tinge around the patient’s eyes. Treatment consisted of a combination of plants used when a patient was scratched. The formula included *Kalmia latifolia*, *Rhododendron maximum*, *Leucothoe axillaris*, and *Veratrum viride* with *Cassia marilandica*, a plant not generally associated with scratching, added to the mixture. *Cassia marilandica* was also used alone, the root pounded and steeped in water and blown on the patient’s face and hands by the medicine man.

*ut'igadö* – ‘to drive out afterbirth’

Olbrechts recorded two remedies to expel the afterbirth. A combination of the roots of *Platanus occidentalis*, *Tsuga caroliniana*, and *Smilax glauca*, all harvested from the east side of the plants, were boiled down and drunk by the patient. *Scutellaria lateriflora* and *Polymnia uvedalia* were also used, the decoction drunk as an emetic (Mooney and Olbrechts 1932: 126).

*ut'igadö u'tsöya* – ‘she is sick with remainder’

This condition was due to stagnant blood that remained, possibly up to weeks, after a birth. The remedy consisted of *t'alaiyusti*, or ‘like white oak’, an unidentified tree whose bark was boiled and drunk.

*utliyantöçi yiki nundiwsköna* – ‘when they have a bad cough’

This condition is a synonym of *unisi'kwaskö*. The formula of *Alnus serrulata*, *Pseudognaphalium obtusifolium*, *Agrimonia parviflora*, and *Geranium maculatum* was reported again, but here directions for use were included. The patient drank part of the decoction and some was rubbed on the throat area.

*uwaiseça* – ‘he has a member (arm, leg, etc.) paralyzed’

This was very similar to *ulotalooska* and may have been a synonym. No specific treatment was included with this condition. It may have been the same as that for *ulotalooska*.

*uwanu'söçiça dalânige* or *adak'öça galesottö u'tsöya* – 'gonorrhea'

Modesty may have prevented Olbrechts from determining a more specific gloss for the terms used for these two synonyms for gonorrhea. The remedy consisted of the root of *Eryngium yuccifolium*, especially the deepest growing portion of the root, boiled and drunk by the patient.

*uwet'i* – no gloss

This is a synonym for *ada'yeski tsunittöyi nundiwsköna* (see above).

*uyalot'isga* – 'if there is swelling'

This was due to indigestion caused by overeating and may be another form of *dalâni*. The patient suffered from constipation and abdominal swelling. No remedies were included in Olbrechts' notes for this condition; however, this appears to be the same conditions as that described in formula 86 in The Swimmer Manuscript (Mooney and Olbrechts 1932: 297). The remedy described here consisted of a decoction of *Alnus serrulata*, *Diospyros virginiana*, *Prunus virginiana*, *Platanus occidentalis*, *Liriodendron tulipifera*, and *Magnolia acuminata*. Part of the decoction was drunk as an emetic and the remainder poured over heated river stones in a sweatbath.

*uyeloisti unitsonoi* – 'he becomes suddenly ill'

The patient would fall down and faint from the pain of a severe cramp. The treatment consisted of the medicine man massaging the patient after warming his hands

by the fire and blowing his breath on the cramped area (Mooney and Olbrechts 1932: 205).

*uyoi ani'ayölöçi* – ‘when they have inhaled bad odors’

The patient became nauseated from a noxious odor, such as that from a dead animal or a corpse. The treatment consisted of the tops from seven *Eryngium yuccifolium* plants. Each plant must have only one stalk, a rarity for this species. The infusion was used as an emetic and was taken for four consecutive days in the morning. Hot foods were avoided during treatment (Mooney and Olbrechts 1932: 245).

*uyoi unskitsöçi* – ‘to vomit spoiled saliva’

See *dunikstisgöi* above for an explanation of spoiled saliva. The remedy Olbrechts identified for this condition was a species of *Lobelia*, but no exact identification or directions for its use were provided. However, Mooney identified *Lobelia inflata* as a remedy used as an emetic for saliva spoiled by a conjurer (Ms. 1894), so this may be the same species found in Olbrechts notes.

*uyo'usö tsuninelicq* – ‘disgusted by the sight of a corpse’

This is possibly a synonym of *unölstay'ti tsuniyotc'eça*; however, the remedies provided were different than those mentioned above. None of these remedies were accompanied with instructions for their use. *Salix alba* was combined with an unidentified plant that had an odor like that of a snake. *Apios americana* was used alone. *Betula lutea* was also used alone or combined with *Panax trifolium*.

*uyosöçi e'isti tsanançtatia* – ‘when they suffer painful remembrances of the dead’

The following plants were used to assuage the grief that accompanied the loss of a loved one, but no directions for their use was included with the formula; *Orontium aquaticum*, *Robinia pseudoacacia*, *Gleditsia triacanthos*, and *Rubus occidentalis*.

*u'iyugwatisgi* or *uni'yugwatisgi* – ‘he has a toothache’

Olbrechts provided several remedies for a toothache. The root of *Sassafras albidum* or the bark of *Juglans nigra* was placed in the hollow of a rotten tooth. The smoke from *Nicotiana rustica* (old tobacco) was blown on to the offending tooth. And the nest of a hornet was placed in a pipe and the smoke blown on it as with *N. rustica*.

*wa'ili* – ‘the measuring worm’

A rheumatic limb was thought to resemble the measuring worm, so this condition is a synonym for *didölesgi*, ‘thecrippler’.

*waso'la tsamose'oi* – ‘they call it cocoon’

This was a type of scrofula, named after the cocoon of the tobacco hornworm moth *Manduca sexta* L. The scrofula or boil was considered to be due to man tramping on the larva of this moth. It was treated by warming the thumb and pressing on the swelling (Mooney and Olbrechts 1932: 299).

*yigetsiyolö* – ‘if they have been shot (by a bullet or arrow)’

This condition is a synonym for *getsiyowlöçi* (see above). Olbrechts provided two remedies. The first treatment was the same as a being wounded by a wood splinter (*adayuni’ti’lölö*). The other comes from *The Swimmer Manuscript* (1932: 273) and consists of the chewed inner bark of *Carya ovata*, chewed by the medicine man and the juice blown on the wound with the hollow quill of a buzzard’s feather. The down and of the buzzard was then applied to the wound. The patient was to avoid chewing tobacco, salt, and hot food for four days.

*yigöwaninilööski* – ‘when they have suint’

Olbrechts claims that this condition is a form of scrofula, but it is unclear how that relates to suint, the lanolin-like substance in the name. The description he provided in his notes depicts boils that crack in both directions before bursting. He said the Cherokee considered this a form of cancer. The remedy consisted of the bark of *Platanus occidentalis*, boiled and drunk.

*yutançteksö* – ‘if tooth comes out’

This was the state when a child lost one of their baby teeth. There was no remedy involved. The child would throw the tooth on to the roof of the house and address the beaver to give them a new one (Mooney and Olbrechts 1932: 308).

*yöwi uni'yak'anöçi* – no gloss

This condition was similar to and was considered by Olbrechts have been synonymous with the conditions that were sent to rattle the resolve of the medicine man (see *adansiludoï yune'istanelö*, *aniskina uniyaktanöçi*, and *ayeligogi uniyelö'nöçi*). No remedies were included.

*yöwi tsunstia göwani skastane'öi* – 'when the little people frighten them'

The little people were fairy-like spirits that inhabited the mountains, rocks, water, and forests that were only visible to a few gifted individuals (Mooney and Olbrechts 1932: 25). The symptoms of this condition included feeling "queer, disturbed, lonesome, or dispirited." Treatment consisted of the roots of *Asarum canadense* and *Hepatica acutiloba* and the bark of *Amelanchier arborea* pounded, steeped, and blown on the area over the heart (the seat of the soul) before dark for four consecutive evenings. The patient was not allowed to have human contact for four days.