HEIRLOOM BULBS: HORTICULTURAL RARITIES, 'PASSALONG' PLANTS, & BIOTIC

CULTURAL RESOURCES

by

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(Under the Direction of Wayde Brown)

ABSTRACT

This thesis examines why and how heirloom bulbous plants have been preserved by individuals and organizations in the United States. Bulbs are an important biotic cultural resource seen in historic landscapes. The thesis reviews various methods used to preserve bulbs according to type and provides insights to understand why people have preserved them. The methods of preservation are presented in chapters according to commonalities. The various motivations are then analyzed and presented as a synthesized set of answers to the main thesis question.

INDEX WORDS: Heirloom, Historic, Bulbs, Bulbous Plants, Geophyte, Cultural Landscape, Biotic Cultural Resource, Passalong Plants, Historic Preservation

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DEDICATION

I dedicate this thesis to the memory of my grandmother, Francis Louise Martin, who introduced me to the joys of gardening. The many bulbs I received from her are true heirlooms, which remind me of her with every year's new bloom.

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CHAPTER 1

INTRODUCTION

Flowering bulbs, brought by early European colonists, were among the first exotic plants introduced to North America. Emigrants dug bulbs, from their own gardens, and carried them across the ocean where they were planted in new gardens as physical reminders of their past. The reasons flowers are planted and enjoyed is often for more than just their aesthetic qualities. Thomas Jefferson used flowers as a metaphor to teach his granddaughter about the ephemeral nature of beauty, and the cyclical pattern of life and death.

"... the flowers come forth like the belles of the day, have their short reign of beauty and splendour, and retire, like them, to the more interesting office of reproducing their like. The Hyacinths and Tulips are off the stage, the Irises are giving place to the Belladonnas, as these will to the Tuberoses, etc. ..." - Jefferson to Anne Cary Bankhead. Monticello. May 26, 1811.¹

Despite Jefferson using bulbs to show the ephemeral nature of life, he also alluded to bulbs persistent nature. Due to their predilection to clone and reproduce, bulbs persist longer than the lives of individual human patrons, who pass them from person to person. Over decades or centuries, some bulbs become 'heirlooms,' carrying with them their collective histories.

Flower hybridizers continuously introduce new bulb varieties, yet many old varieties survive.

Why then do heirloom bulbs survive, despite a flower industry that is obsessed with newness?

Human emotion and sentiment are perhaps one answer, but the manifestation of this displays itself in many different ways. Certainly, there are other reasons, besides sentiment, which are relevant for exploration.

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Peggy Cornett, "Thomas Jefferson's "Belles of the Day" at Monticello," *Twinleaf Journal Online* (Charlottesville: Thomas Jefferson Center for Historic Plants, January 2001), accessed January 20, 2014, http://www.monticello.org/site/house-and-gardens/thomas-jeffersons-belles-day-monticello

Thesis Question

Why do people preserve heirloom bulbs, and how have individuals and groups achieved this goal in the United States since the late-nineteenth century?

Explanation of Terms

To understand this question, it is necessary to reference several points. First, what does the term 'heirloom' mean? Merriam-Webster suggests that an heirloom is, "a horticultural variety that has survived for several generations usually due to the efforts of private individuals." Heirloom, however, is not the only standard term used when discussing older bulb or plant varieties. Other terms, including antique, historic, heritage, oldie, old-timer and vintage, are often used interchangeably. Antique is generally used in reference to apples rather than bulbs. Historic is often interchangeably used with heirloom, and is preferred by some national societies with reference to bulbs of a specific age. Heritage is more commonly used in England and Canada. Oldie, old-timer and vintage are more informal and often denote varieties that are not as old or important. Heirloom is used in this thesis because it encompasses the human and cultural element of significance in its definition. These elements, in addition to genetic diversity, provide a greater number of motivations to answer why people preserve bulbs.

The next explanation that must be made is to define what is meant by the term 'bulb.' 'Bulb' is often used to include any plant that grows from an underground 'storehouse' including: bulbs, corms, tubers, tuberous roots, and rhizomes.³ A bulb is "a subterranean bud consisting of fleshy leaves closely packed around a woody core, whence roots proceed downward and stems upward." Lilies, narcissus/daffodils, tulips, and hyacinths are well-known true bulbs. A corm differs from a bulb slightly; it is a solid body that is not made of leaves or scales and dies

² "Heirloom," Merriam-Webster.com, accessed December 15, 2013, http://www.merriam-webster.com/dictionary/heirloom

³ Louise Beebe Wilder, Adventures with Hardy Bulbs (New York: The Lyons Press, 1998), 4.

⁴ Ibid.

annually.⁵ Before dying, it produces new corms that feed from the nutrition of the original corm. Commonly known corms are crocus, gladiolus, and colchicum. A tuber is a modified section of underground stem that is a storehouse for food. The plant develops via 'eyes' or buds, and feeds from the tuber until roots are established. Potatoes are tubers; other flowering tubers include cyclamens and anemones. Tuberous roots are specialized swollen 'bodies' that store food for use during the growing season and are replaced with new tuberous roots.⁶ Sweet potatoes, dahlias, and daylilies are common examples. Finally, rhizomes are horizontally growing swollen stems covered with the dry bases of leaves.⁷ The bearded iris is the best-known rhizome.

The various types of bulbous plants described are properly called geophytes because they have underground storage units. However, for this body of work the terms 'bulb' and 'bulbous plants' will be used comprehensively to describe bulbs, corms, tubers, tuberous roots, and rhizomes. The authors of *Hortus Third*, who define bulbs as "ornamental, partial season, mostly simple-stemmed plants arising from bulbs, corms, tubers or thickened rhizomes", support this practice. This thesis considers all of these geophyte groups, and utilizes this broad definition of 'bulb' to collectively reference them.

Historic Context

Human propagation of bulbous plants pre-dates recorded history. Historic records trace their use by many ancient civilizations. The Egyptians used lilies in their funeral garlands, and records indicate that lilies were also beloved by the ancient civilization of Crete.⁹ Romans grew

⁵ Ibid.

⁶ The National Gardening Association, Bob Beckstrom, Karan Davis Cutler, Kathleen Fisher, Phillip Giroux, Judy Glattstein, Mike MacCaskey, Bill Marken, Charlie Nardozzi, Sally Roth, Marcia Tatroe, Lance Walheim, and Ann Whitman, *Gardening All-in-One For Dummies* (New York: Wiley Publication, Inc., 2003).

⁷ Ibid.

⁸ Liberty H. Bailey and Ethel Z. Bailey, *Hortus Third*, Rev. ed. (New York: MacMillian, 1976).

⁹ J. Horace McFarland, R. Marion Hatton, and Daniel J. Foley, *Garden Bulbs in Color* (Harrisburg, Pennsylvania: J. Horace McFarland Company, 1938), xv.

lilies, narcissus, and hyacinths in their gardens.¹⁰ The lily was also cherished in the Middle Ages as a symbol of the purity of the Christian Church.¹¹ The lily has still retained its religious symbolism today; the Easter Lily decorates Christian churches across the United States around the Easter holiday. Early horticultural literature prescribed bulbs with herbal virtues and assumed medicinal usefulness in addition to aesthetic qualities.¹²

Merchants and explorers distributed bulbs across the world; at least forty species were brought to the colonies before the Revolutionary War.¹³ Bulbs were better suited to transport from Europe than living herbaceous plants that required watering and care. Bulbs are small, relatively compact, and required little attention during shipment. This fact also aided in their spread and movement across the continent once they arrived.

Evidence of bulb and plant trade between John Custis, a Virginia planter, and Peter Collinson of England, is found in their correspondence between 1734-1746.¹⁴ Their letters detail the species of plants traded between them and the troubles of shipping plants across the Atlantic. Custis sent native flora from around Williamsburg, and Collinson sent popular plants of the day from Europe and Britain. In both cases, the plant species that survived shipping are the earliest recorded introductions into North American, and conversely, England. The Southern Garden History Society and The Colonial Williamsburg Foundation created the *Southern Plant List* that provides dates plant species were introduced into horticultural use in the American South.¹⁵ The dates were obtained from letters, correspondences, newspaper advertisements, and nursery catalogues.

¹⁰ Ibid.

¹¹ Ibid.

¹² Ibid., xvi.

¹³ Katherine Whiteside, *Classic Bulbs: Hidden Treasures for the Modern Garden* (New York: Villard Books, 1991), x.

¹⁴ E. G. Swemm, Brothers of the Spade: Correspondence of Peter Collinson, of London, and John Custis, of Williamsburg, Virginia, 1734-1746 (Worcester: American Antiquarian Society, 1949).

¹⁵ Gordon W. Chappell, *Southern Plant List* (Williamsburg: Southern Garden History Society, 2000).

In the nineteenth century, American nurseries started growing bulbs imported from Europe and sold them via newspaper bulletins, catalogues, and traveling salesmen.

Importation of bulbs, from Britain and the Netherlands especially, continues even today. Plant explorers scavenged China, Japan, Africa, and the Americas, collecting species, and sending them back to their homelands.

Subsequent propagation and breeding have resulted in incalculable cultivars or varieties of each bulb species. Preservation of the numerous cultivars is the subject that concerns this thesis. Many, perhaps most, cultivars developed are lost as aesthetics and tastes change. Additionally, commercial horticulture is and has always been driven by a desire to offer new and improved varieties. Thus, commercial providers stop producing older varieties in favor of the newest hybrid or undiscovered species. Despite this trend some varieties survive and gain heritage or heirloom status due to age or family and cultural associations.

The practices and motivations of people in the late-nineteenth and twentieth centuries to preserve heirloom varieties will be examined in this thesis. Individuals, and to some extent plant nurseries, have preserved bulbs since the founding of the United States of America. However, in the latter part of the nineteenth century there was a paradigm shift in garden design that returned attention to older plants. In the twentieth century, many new networks and garden organizations were created that contributed to the preservation of heirloom bulbs. For these reasons, the predominate focus, of this thesis, is limited to the latter part of the nineteenth century forward.

As alluded to in the previous chapter, garden design trends and fads are ever changing. These paradigm shifts in design thought, influence how and what kinds of plants are used. This thesis acknowledges the influence, both positively and negatively, of popular gardening trends in the preservation of heirloom plants, but does not explore the relationship in detail. With

¹⁶ Whiteside, *Classic Bulbs*, x.

¹⁷ McFarland, Garden Bulbs in Color, xvi.

exception to the nursery trade and specific gardens, the focus of the research is to determine reasons and methods that are generally 'disconnected' from changing gardening 'themes.' Regardless, the influence of changing gardening attitudes and trends cannot be denied, with regard to promotion and use of heirloom plant varieties.

In the late-nineteenth century, starting with William Robinson and the British Arts and Crafts movement, gardening design focused on older and more 'natural' planting schemes of native and exotic plants. Robinson started his career working for private estates in Ireland, and then moved to England in 1861, where he secured a position at the Royal Botanical Society's garden in Regent's Park. Robinson published *The Wild* Garden in 1870, in reaction to the theatrical 'bedding' schemes of the Victorian Era, and promoted a more natural and wild garden approach that included hardy and older herbaceous plants. Robinson portends a shift in design thought in *The Wild* Garden.

"Some are looking back with regret to the old mixed-border gardens; others are endeavouring to soften the harshness of the bedding system by the introduction of fine-leaved plants, but all are agreed that a mistake has been made in destroying all our old flowers, from Lilies to Hepaticas..." ²¹

Robinson's book, and the Arts and Crafts movement, spread to the United States in the final decades of the nineteenth century. British and American garden writers carried the principles from *The Wild Garden* forward into the twentieth century, promoting the use of "[t]he best of the old-fashioned flowers as well as the most fashionable new plants."²²

Independent of, and somewhat counter to the 'wild garden' style, is the Colonial Revival movement, which looked to the formally designed gardens of the colonial era, from European

¹⁸ Denise Wiles Adams, *Restoring American Gardens: An Encyclopedia of Heirloom Ornamental Plants* 1640-1940 (Portland: Timber Press, Inc., 2004), 10.

¹⁹ William Robinson, new chapters by Rick Darke, *The Wild Garden Expanded Edition* (Portland: Timber Press, Inc., 2009), 10.

²⁰ Ibid., 163.

²¹ Ibid., 104.

²² Adams, Restoring American Gardens, 164.

settlement to Independence.²³ The Centennial International Exhibition of 1876, held in Philadelphia celebrated the hundredth anniversary of the signing of the Declaration of Independence. It also marked the start of the Colonial Revival, period helping to promote a nostalgic attitude regarding the 'American past.'²⁴ This resurgence and pride in the history of the United States was again promoted with the World's Columbian Exposition of 1893 in Chicago where "old-fashioned" gardens were planted outside of colonial-inspired buildings constructed by states.²⁵ This revival of colonial heritage extended to important historic sites like George Washington's Mount Vernon, Colonial Williamsburg, and Thomas Jefferson's Monticello. This interest spread to the design and preservation of private gardens as well. One regionally important landscape architect is Hubert Bond Owens, founder of the Landscape Architecture program at the University of Georgia, who "never completely strayed from th[e] revival style."²⁶

The gardening movements presented are important because they have a nation-wide influence on the kinds of plants that are grown and available in the market. This is especially true with the kinds of plants that are provided and demanded by plant nurseries. It also has implications for historic sites, which will be discussed further in Chapter Five.

Literature Review

While there are many garden resources dedicated to bulbous plants, there is relatively little specifically concerning the preservation of heirloom species and cultivars. There are few resources that discuss heirloom bulbs specifically, yet a majority of resources include bulbs with other heirloom plants. While the focus of the thesis is on heirloom bulbs, resources concerning heirloom plants and the preservation of historic landscapes help to form an informational foundation.

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²³ Richard Guy Wilson, Shaun Eyring, & Kenny Marotta, editors, *Re-creating the American Past: Essays on the Colonial Revival* (Charlottesville: University of Virginia Press, 2006), 4.

²⁴ Susan Lee Hitchcock, "The Colonial Revival Gardens of Hubert Bond Owens" (Master's thesis, University of Georgia, 1997), 14.

²⁵ Susan Prendergast Schoelwer, "Curious Relics and Quaint Scenes: The Colonial Revival at Chicago's Great Fair," in *The Colonial Revival in America*, 201.

²⁶ Hitchcock, "The Colonial Revival Gardens of Hubert Bond Owens," 14.

There are several National Park Service (NPS) documents that identify and provide guidance on the treatment and maintenance of cultural landscapes and plants. The Secretary of the Interior is responsible for providing guidance for the preservation of historic properties listed, or eligible for listing, on the National Register of Historic Properties.²⁷ The Secretary's Standards were published in 1976, and revised in 1992 to include guidance for all historic resource types including: buildings, structures, sites, objects, districts, and landscapes.²⁸ In 1996, *The* Secretary of the Interior's Guidelines for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes was published, providing guidelines for application of four 'treatments' to cultural landscapes.²⁹ The four 'treatment' standards for historic properties are preservation, rehabilitation, restoration, and reconstruction. Preservation protects the greatest amount of historic material, including "the landscape's historic form, features, and details as they have evolved overtime."30 Rehabilitation allows for the alteration of the cultural landscape to meet new and continuing uses, while "retaining the landscape's historic character."31 Restoration allows a landscape to be depicted to a specific period of time by preserving materials only from the site's period of significance, and the removal of material outside of that period.³² Reconstruction standards provide the framework for recreating non-extant landscapes using modern materials, generally to aid in the site's interpretation.³³ The Guidelines for the Treatment of Cultural Landscapes also outlines seven aspects in which to assess a properties authenticity of historic character, or integrity.³⁴ The seven aspects of integrity are location, setting, feeling, association, design, workmanship, and materials. An unspecified number must

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²⁷ Charles A. Birnbaum and Christine Capella Peters, *The Secretary of the Interior's Guidelines for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes* (Washington D.C.: USDI, NPS, Cultural Resource Stewardship and Partnerships, 1996), 3.

²⁸ Ibid.

²⁹ Ibid.

³⁰ Ibid.

³¹ Ibid.

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³² Ibid.

³³ Ibid.

³⁴ Ibid., 5.

exist to sufficiently prove the historic character remains, for a property to be listed in the National Register of Historic Places.

This document also provides useful terms with which to classify cultural landscapes, based on their design and development. These are historic designed landscape and historic vernacular landscape. A historic designed landscape is one "consciously designed or laid out by a landscape architect, master gardener, architect, engineer, or horticulturist according to design principles, or an amateur gardener working in a recognized style or tradition." By contrast, a historic vernacular landscape is one that evolved over time due to the activities and use of the people who occupied the landscape. This type of landscape is influenced significantly by function, but includes the associated social and cultural themes of the population. The distinction and inclusion of both of these landscape types is important because it provides a framework within which to classify and manage not just traditionally 'designed' landscapes, but also those which have no designer, but have developed organically over time.

Guidelines for the Treatment of Cultural Landscapes divides the landscape into seven components including, spatial organization/land patterns, topography, water features, circulation, structures, small-scale features, and vegetation.³⁷ All plant material is included in vegetation, and guidelines for their documentation and treatment are broad. It addresses that significant plant material can be a specimen plant or a collection of plant material.³⁸ Additional information more pertinent to this thesis has been produced by the NPS.

In 1985, University of Georgia professor, Ian Firth wrote *Biotic Cultural Resources:*Management Considerations for Historic Districts in the National Park System, Southeast

Region.³⁹ It was produced as part of a Research/Resources Management Series for the

³⁵ Ibid.

³⁶ Ibid.

³⁷ Ibid., 15.

³⁸ Ibid.

³⁹ Ian J. W. Firth, *Biotic Cultural Resources: Management Considerations for Historic Districts in the National Park System, Southeast Region,* (Atlanta: USDI, NPS, Southeast Regional Office, 1985).

Southeast Regional Office of the NPS. Firth discusses the inherent differences involved in preserving abiotic and biotic cultural resources. ⁴⁰ Abiotic resources being those non-living elements such as buildings and small-scale features, where as biotic resources are the living animals and plants important to a landscape. Firth's identification of separate resources is significant because it identifies a unique concern involved with preserving a living organism that has a definite lifespan. Long-term preservation requires reproduction, cloning, or replacement of important biotic resources, for example bulbs. *Biotic Cultural Resources* is significant because it not only recognizes plants as important cultural resources, but it identifies the unique concerns involved in preserving them.

NPS-28: Cultural Resources Management Guideline also discusses biotic cultural resources, and provides instruction on plant management. Of particular importance is specimen plant management, which includes "individual plants and aggregations of plants that have distinct, unique, or noteworthy characteristics in a landscape. NPS-28 also calls for the propagation of "historic genetic material" to ensure rare and unavailable plants can be perpetuated in the landscape. Lastly, it provides guidelines for specimen plants to ensure integrity of form, location, type, and shape are retained. These management guidelines are significant because they show that individual plant materials are recognized as resources, and can be 'treated' individually. Furthermore, they recognize the significance of particular plant cultivars, and the importance of preserving varietal genetic material. Since living plants cannot all be saved, and replacements may be a part of a treatment option, NPS-28 provides guidelines to also preserve the overall design through 'in-kind' replacements.

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⁴⁰ Ibid., 8.

⁴¹ NPS-28: Cultural Resources Management Guideline (National Park Service, June 11, 1998), 103.

⁴² Ibid., 104.

⁴³ Ibid.

Landscape Line 4: Historic Plant Material Sources is another NPS publication that provides additional guidance for 'in-kind' plant replacements.⁴⁴ This document provides important explanations of the taxonomic differences between species plants and cultivated varieties (hybridized cultivars). It also identifies the challenges of finding exact plant cultivars because varieties are often only propagated, in the nursery industry, for a short period.⁴⁵ This supposition will be investigated through an examination of historic nursery catalogues. Finally, the document addresses the importance of correctly identifying extant plants by their species and cultivar names; conversely, it is also important when obtaining plants to verify they are correctly named.⁴⁶ These are important considerations not only to NPS managed sites, but also to private and public gardens.

As mentioned previously, there are many resources that discuss bulbs and plants for the purpose of describing their habit, form, use, etc., but there are less that discuss preserving heirloom varieties. Several resources have been found that follow a hybrid format offering information about some aspect of preservation, and an encyclopedia of heirloom plants. The first resource of this type is Restoring American Gardens: An Encyclopedia of Heirloom Ornamental Plants 1640-1940, by Denise Wiles Adams. 47 Adams holds a Ph.D. in horticulture from The Ohio State University, and is a historian of ornamental plants and American garden design. As the title suggests, the work provides an encyclopedia of heirloom plants, but also provides NPS management and treatment information to the reader. The four treatment options, preservation, rehabilitation, restoration, and reconstruction are discussed, in addition to other less formal ones.⁴⁸ Adams' describes the responsible procedures necessary to consider when

⁴⁴ Robert R. Page, Cathy A. Gilbert, and Susan A. Dolan, A Guide To Cultural Landscape Reports: Landscape Lines, "Landscape Lines 4: Historic Plant Material Sources" (Washington D.C: United States, National Park Service, Park Historic Structures and Cultural Landscapes Program, 1998).

⁴⁵ Ibid., 3.

⁴⁶ Ibid., 6.

⁴⁷ Denise Wiles Adams, Restoring American Gardens: An Encyclopedia of Heirloom Ornamental Plants 1640-1940 (Portland: Timber Press, Inc., 2004).

⁴⁸ Ibid., 17.

'restoring' an existing garden following NPS standards; creating an inventory, historic research, determination of significance, and finding appropriate plant materials.⁴⁹ This book is significant because it disseminates responsible techniques to preserve landscapes and advocates for appropriate replacement of plant material.

The next pertinent resource differs from the systematic methods of preservation discussed, and introduces a more organic method in which heirloom plants have been preserved. In *Passalong Plants*, authors Steve Bender and Felder Rushing introduce a subset of heirloom plants, termed 'passalongs' because of their proficiency to propagate, and be passed from person to person. ⁵⁰ Both authors maintain gardening blogs, but are respected writers in their own right. Bender is a Senior Writer at Southern Living Magazine, educated at King's College, Cambridge. Rushing is a former Extension Service urban horticulture specialist and author or co-author of eighteen gardening books. Published in 1993, this book recognizes a whole subset of plants that have long ago been dropped by commercial growers, yet they continue to persist in many gardens through individuals actively passing them along. This occurrence, the motivations, and other trading practices are 'grass-roots' method of preservation that will be explored in Chapter Two.

Heirloom Gardening in the South: Yesterday's Plants for Today's Gardens, published in 2011, is a recent revision of William Welch and Greg Grant's 1995 Southern Heirloom Garden.⁵¹ Welch is a native of Houston, Texas with a Ph.D. in Horticulture and Extension Education from Louisiana State University. He is a professor and Argi-Life Extension landscape horticulturist in the Texas A&M System.⁵² Grant is a former Agri-Life Extension Agent and currently is the

⁴⁹ Ibid., 19-24.

⁵⁰ Steve Bender and Felder Rushing, *Passalong Plants* (Chapel Hill: The University of North Carolina Press, 1993).

William C. Welch and Greg Grant, Heirloom Gardening in the South: Yesterday's Plants for Today's Gardens (College Station: Texas A&M University Press, 2011).
 Ibid.

Stephen F. Austin Gardens outreach research associate.⁵³ As the title suggests, the authors promote heirloom plants for use in gardens today. They introduce a new concern for using heirloom plants; based solely on the usefulness of the individual plants. The authors include the cultural and social associations in their descriptions of each plant, suggesting that these intangible qualities somehow contribute to their appeal and use by modern gardeners. They also discuss methods for people to search for heirloom plants in their community, especially bulbs, at old home sites, cemeteries, and along roadsides. This practice contributes to the preservation of forgotten and at-risk bulbs, but can also be illegal if permission is not obtained. This method of preservation is an interesting one that deserves more attention, as does the connection that heirloom plants provides with social history.

The final resource is the work of a well-known garden writer, Elizabeth Lawrence. *Gardening for Love: The Market Bulletins* is a book that Lawrence was writing, at the time of her death.⁵⁴ Allen Lacy edited and compiled the material Lawrence left, publishing *Gardening for Love* in 1986. Lacy is a Professor Emeritus at Stockton College, author or editor of 10 books, and garden columnist for *The Wall Street Journal* and *The New York Times*, for a dozen years.⁵⁵

Lawrence was born in Marietta, Georgia, in 1904, and moved to Raleigh, North Carolina at age twelve.⁵⁶ She attended Barnard College in New York, majoring in English. After returning to Raleigh, she entered the Landscape Architecture program at North Carolina State College, and was the first woman to graduate from the program.⁵⁷ Frustrated by a lack of literature concerning gardening in the South, she decided she "would have to grow the plants in my

⁵³ Ibid.

⁵⁴ Elizabeth Lawrence, *Gardening for Love: The Market Bulletins*, edited by Allen Lacy (Durham: Duke University Press, 1987).

⁵⁵ Jason Kay, "Interview with Garden Writer Allen Lacy" (GardenInACity, WordPress, June 10, 2013), http://gardeninacity.wordpress.com/2013/06/10/interview-with-garden-writer-allen-lacy/

⁵⁶ Lawrence, *Gardening for Love*, 11.

⁵⁷ Ibid., 13.

garden and learn about them for [her]self."⁵⁸ Lawrence gained acclaim as a garden writer in 1942 with the publication of *A Southern Garden*, which was the result of her observations and work with plants in her Raleigh garden.⁵⁹ She moved to Charlotte, North Carolina in 1948 and produced several other books including *The Little Bulbs: A Tale of Two Gardens, Gardens in Winter*, and *Lob's Wood*.

Lawrence's other books include information about many heirloom bulbs, but do not specifically call for their preservation. In *Gardening for Love: The Market Bulletins*, Lawrence identifies the importance of market bulletins, and the people who use them, as an incredible mechanism that preserves more plants than any one garden could. 60 The market bulletins are like a newspaper with advertisements for wanted items and to sell agricultural products, including plants. Based on decades of buying and correspondence through the bulletins she identifies them as a resource that connects distant people over a common interest. Additionally, Lawrence identifies the bulletins as resources that document not just plants, but the social history of the people who use them.

<u>Methodology</u>

The objective of this thesis is to understand why people seek to preserve and propagate heirloom flowering bulbs; and discover how people and groups have achieved this goal in the United States since the late-nineteenth century. The scope of the thesis is the United States, but with a regional focus on the South and Mid-Atlantic, due to the preponderance of garden literature, specific discussion of the market bulletins of Southern States, and specific sites chosen for case studies. Despite this, many elements of the research are applicable to the entire country, so the broader scope is still national. This thesis will not document the bulbs preserved, there are thousands, but will consider why people felt this a 'noble cause' and how they achieved their mission. Flowering bulbs are an important biotic resource within many

⁵⁸ Ibid.

⁵⁹ Elizabeth Lawrence, *A Southern Garden* (Chapel Hill: The University of North Carolina Press, 1991).

⁶⁰ Lawrence, Gardening for Love, 24.

cultural landscapes. However, their presence is often forgotten due to their ephemeral bloom and foliage, but many bulbs are persistent perennials. Their varying colors, forms, and fragrances are often integral to the complete understanding of both designed and vernacular landscapes.

The research data will be qualitative, presented to reveal broad trends that answer why people preserve heirloom bulbs. The data will be gathered and analyzed from journals, articles, personal accounts, and other printed sources. Results will be presented within each chapter, and then an analysis will be provided to identify commonalities and trends.

Answering why and how people and groups preserved bulbs first required identifying what groups, organizations, and networks have existed since the late-nineteenth century. The various groups, organizations, and networks discovered were then categorized based on common methods of preservation. These groups form the chapters based on method of preservation, and within each chapter specific individuals, groups, and networks serve as case studies to show how heirloom bulbs are preserved via that method.

Chapter Synopsizes

The methods of preservation, developed into four broad groups, including trading practices, nurseries, plant societies, and public gardens and historic landscapes. These four groups are presented in Chapters Two through Five. Chapter Two discusses the oldest and simplest methods, including inheriting and trading bulbs, and several organized trading networks that seek to connect individuals for the purpose of exchanging plants. Chapter Three reviews plant nurseries starting with those that existed in the nineteenth century, which promoted new versus heirloom varieties. The chapter concludes with nurseries today that are specifically dedicated to heirloom bulb preservation. Chapter Four looks at several national plant societies that organized with a mission to preserve a specific genus of bulb. Chapter Five reviews estate and private gardens that have programs to conserve their historic plant collections. Chapter Six analyzes and synthesizes the motivations detailed in the previous

chapters and presents them according to trends. Finally, Chapter Seven presents a conclusion of findings, and connects them to the broader field of historic preservation.

CHAPTER 2

TRADING

Trading and sharing bulbs is certainly one of the oldest methods of distributing, and in some cases preserving them. Since bulbs were introduced for botanical use, they have been traded among neighbors and strangers. This chapter will review trading and selling practices, and motivations, limited to the exchange between two individuals. First, trading practices between familiar individuals will be discussed. Such exclusive exchanges between two individuals occur among friends and family members every day, generally without an exchange of money. Second, trading practices that utilize media to connect individuals who may be strangers, but who share a common interest in plants will be investigated.

Unorganized Trading

Swapping plants with neighbors and friends is a common occurrence among many gardeners. The motivation may be as simple as obtaining something new. This appears to be the motivation behind the plant trading described in *Brothers of the Spade: Correspondence of Peter Collinson, of London, and John Custis, of Williamsburg, Virginia, 1734-1746.* Collinson was born in London in the year 1694 to Quaker parents.⁶¹ He succeeded, with his brother, to their father's business of haberdasher and mercer. At an early age, he became interested in the study of plants, and at age thirty-four he was chosen to be a member of the Royal Society of London for his knowledge of botany and gardening.⁶² He corresponded and made shipments with businessmen in the American and East Indian colonies. These connections also resulted in personal correspondence and the trade of plants. Collinson traded plants with colonists and

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⁶¹ Swemm, Brothers of the Spade, 18.

⁶² Ibid., 18-19.

plant explorers John Bartram, John Custis, and others.⁶³ Custis was born in Northampton County, Virginia in 1678.⁶⁴ He married Francis Parke, in 1705, who inherited an estate and land in York County.⁶⁵ Custis inherited several other plantations, totaling around 15,000 acres, from his father.⁶⁶ Custis was also a member of the House of Burgesses in 1705.⁶⁷ Collinson sent Custis many plants as described in their correspondence including bulbs that would have been considered heirlooms even in their day.⁶⁸ Gardening had become a popular pastime for the wealthy class, but there were few or no nurseries growing plants in the eighteenth and early-nineteenth centuries.⁶⁹ Consequently, plants were sold or traded among neighbors, or imported from abroad.

Trading of bulbs has occurred wherever there are two gardeners, from the earliest settlement on this continent. Several factors make trading bulbous plants much easier than other plants. Bulbs are small and weigh little, allowing them to be easily moved and shipped. They are food 'storehouses' and go dormant for long periods of time meaning they need no care. Additionally, many bulbs reproduce by creating genetic clones or can easily be divided to produce multiple plants. These facts, in addition to the myriad variations of color, form, and variety, make them ideal for trading and movement over great distances.

Trading is also an economical method of increasing the botanical and aesthetic interest of a garden. The poor and middle classes, historically and today, often have little time and money to import or buy expensive new hybrid nursery stock. Trading or receiving a few bulbs from a neighbor when they dig up a clump of overcrowded bulbs that need dividing is a free method of increasing plant stock. In a letter written by Jane Bath, a garden designer from Stone Mountain, Georgia, to Steve Bender, author of *Passalong Plants*, introduced in the literature

⁶³ Ibid.. 20.

⁶⁴ Ibid., 29.

⁶⁵ Ibid.

⁶⁶ Ibid., 30.

⁶⁷ Ibid., 31.

⁶⁸ Chappell, Southern Plant List, 1-5.

⁶⁹ Swemm, Brothers of the Spade.

review, she tells about receiving bulbs from her grandmother. "Both of my Grandmothers loved and grew flowers—but one of them, even though she had very little money and lived far away in Tennessee, would send me a bearded iris each August." This story shows how bulbs can be given as inexpensive gifts and how easy bulbs can be cheaply shipped. Shipping increases the possibilities of trading from just the neighbors and family in your community to those across the nation and beyond.

Trading among family members and inheriting bulbs is also a common occurrence. The motivations may correspond to those discussed previously, but further review may reveal another level of impetus for preserving bulbs specifically of 'heirloom' status. The Merriam-Webster definition of heirloom is any botanical variety that "has survived for several generations usually due to the efforts of private individuals."71 This concept is perfectly displayed in a story Elizabeth Lawrence shares in A Southern Garden about the rare Iris persica. She asks a garden club friend, Mrs. Calvert, about the iris pinned to her shirt, who then explains the bulbs were originally in her great-grandmother's garden. They had moved the bulbs when the family moved into town, and they were finally passed to her when she moved to Raleigh.⁷² Lawrence goes on to detail her trouble finding the bulb in years of catalogue searching, and failure at keeping it alive once obtained. Calvert does not offer any other information beyond the chronology through her family. Determining the reason Calvert and her family passed the plant from generation to generation and moved it with them as they moved can only be speculated. But these bulbs are true heirlooms in all senses of the word. As with any family heirloom, the bulbs are not just beautiful flowers, but vessels that hold the collective memories of relatives and experiences of past.

The human emotions that we attach to objects often compel us to preserve that object and pass it and the connected stories to someone else. This occurrence is relevant for this

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⁷⁰ Bender, Passalong Plants, 103.

^{71 &}quot;Heirloom," Merriam-Webster.com, accessed December 15, 2013.

⁷² Lawrence, A Southern Garden, 34.

study because when the 'object' is a bulb, preservation is the result. It is not confined to any particular social class, race, or region of the country. As a result, today many varieties of flowering bulbs have been preserved that may not be commercially grown. Therefore, they exist only due to the efforts of private gardeners who trade and propagate them.

This introduces the idea of 'passalong' plants, a term believed to be coined by garden writer Allen Lacy, who is author or editor of ten garden books and Professor Emeritus at Stockton College.⁷³ In *Passalong Plants*, Steve Bender and Felding Rushing describe what 'passalong' plants are and how they differ from heirloom plants. The major difference is that 'passalong' plants are easily grown and easily divided. Only plants that can be divided and multiply at the same time will be readily passed and traded. A second factor that distinguishes them from other plants is their lack of production by commercial growers. These plants are often only ones that can be obtained by someone who already has them or a few small propagators.

Bender and Rushing provide several insights that suggest how 'passalong' plants have survived that are pertinent to the study of why people trade heirloom bulbs. They too have the opinion that older 'passalong' plant varieties survive because they elicit some emotion. Whether they "evoke memories of your first garden, of relatives and neighbors that have since passed on, of prized bushes you accidentally annihilated with your bicycle," 'passalong' plants remind people of the past. They argue that it is these associations that motivate people to grow the old varieties despite constant new hybridized varieties that are 'improved' and have more extravagant colors, forms, longer bloom time, and disease resistance. Additionally, they contend that the unique traits and quirks of older unimproved varieties serve as triggers to remind us of people or memories and capture our curiosity. One such element is fragrance, which has been bred out of many modern hybrid bulb varieties. The fragrance of the *Iris pallida 'Dalmatica*,' crinums, or ginger lilies, can both trigger a long-forgotten memory and seduce new patrons for

⁷³ Bender, *Passalong* Plants, 1.

⁷⁴ Ibid., 3.

their preservation. Finally, the authors attribute preservation for botanical diversity as another reason why people trade and pass plants along to their friends and family.

Trading among friends and family is one of the simplest and cheapest methods of obtaining plants. This practice may be as old as the concept of cultivation. Early American colonists traded with their English and colonial companions; as a result, bulbs were among the first exotic, or non-native, plant species brought to the continent. The practice of plant, and specifically, bulb trade still occurs today. The trading practices discussed thus far were focused on those who were acquaintances or family whether they lived close or far. However, there are print bulletins and organizational networks that seek to connect strangers in order to trade and sell products, prequels to the digital media sites, such as Craigslist.

Organized Trading

One of the first published sources were the Market Bulletins, which sought to connect farmers, and offer a platform for people to sell and advertise needs and products. The *South Carolina Market Bulletin* was among the first published, with the establishment of the Bureau of Marketing, in the summer of 1913.⁷⁵ Then it was published as a weekly column in several city newspapers across the state. Finally, on September 10, 1917, it became a weekly listing mailed out to individuals. The concept of a state funded and managed bulletin or publication that collects the agricultural needs and wants of the citizens, was quickly copied by several states. In 1916, Louisiana created a bulletin, and Georgia followed in 1917.⁷⁶ Eleven states had created Market Bulletins of various titles by 1932 including: South Carolina, Louisiana, Georgia, West Virginia, Florida, Connecticut, North Carolina, Tennessee, Mississippi, Alabama, and Kentucky. Except for Connecticut, all of the states are in the Southeast, and they offered the publication for free. They each differ in the frequency of distribution from monthly, bi-monthly, to weekly; and

Nouth Carolina Department of Agriculture, South Carolina Department of Agriculture: History of the Market Bulletin (2013), https://agriculture.sc.gov/content.aspx?ContentID=763.

⁷⁶ Lawrence, *Gardening for Love*, 27.

they have changed over time. Kentucky and Tennessee are the only states of the eleven that have discontinued their publications.

Today, the remaining nine state market bulletins are no longer free and require small yearly subscriptions with the exception of the *North Carolina Agricultural Review*, which is free to citizens of the state.⁷⁷ The *Connecticut Weekly Agricultural Report* is the only bulletin that is still offered weekly.⁷⁸ It does have an advertisements section for reporting items for sale or want; however, a review of recent issues reveals that there are generally only a few advertisements, few dealing with plants, and none for bulbs. The other state bulletins still retain their lengthy classified advertisements of which there is a wide range of sections based on agricultural resource. Louisiana, South Carolina, Georgia, and Mississippi publish their bulletins twice a month and offer them in both printed and electronic versions. The remaining states, North Carolina, Alabama, Florida, and West Virginia only publish monthly bulletins. They too are provided in print and online, except in Florida which only offers the bulletin as an online resource.

In the early-twentieth century, agriculture and farming were significant sectors of the southern economy. The market bulletins were established to provide news and information to farmers and offer a platform for them to sell and obtain products. The result was much more than just business transactions, the bulletins connected farmers who often lived in isolated areas. Additionally, it connected urban dwellers with their rural roots. A review of the products listed in the bulletins also provides a clear picture of the states agricultural practices and the cultural traditions. In 1986, Dudley Clendinen, New York Times reporter and editor, wrote of the bulletins in *The New York Times* that "[f]or countless rural families there were just three printed

North Carolina Department of Agriculture & Consumer Services, North Carolina Agricultural Review (Raleigh: North Carolina Department of Agriculture & Consumer Services), accessed December 31, 2013, http://www.ncagr.gov/paffairs/AgReview/.

⁷⁸ Connecticut Department of Agriculture, *Connecticut Weekly Agricultural Review*, edited by Linda Piotrowicz (Hartford: State of Connecticut), accessed December 31, 2013, http://www.ct.gov/doag/cwp/view.asp?a=3243&q=398994.

references in the house: the Bible, The Market Bulletin and The Saturday Evening Post."⁷⁹ Today, the bulletins do not hold that same place in most family's homes. However, their historic importance and popularity is significant to understanding how they have aided in the preservation of many plants and bulbs.

In addition to the market bulletins published by southern states, there were three privately published bulletins and newspapers, aimed at patrons across the United States rather than a particular state. *Joe's Bulletin: 'The Market Place for the Nation's Small Flower Growers'* was published by Joe Smith in Lamoni, Iowa for nearly fifty years, and after his death in 1962, by Jack Terry. A collection of *Joe's Bulletin* garden catalogues can be found in the Ethel Z. Bailey Horticultural Catalogue Collection held at Cornell University. *The Garden Gate: 'America's Largest Newspaper for Growers'* ceased publication sometime before *Joe's Bulletin*. It was comprised entirely of classified ads offering plants for sale, trade, or free. The third publication, *The Garden Gate*, was a monthly newspaper published by Edith Bestard & Cora Pinkley Call in Eureka Springs, Arkansas from 1953 to 1967. The newspaper covered life in the Ozarks, a variety of plants, urged conservation of all natural resources, and had plant ads, swaps, and free requests. Bestard donated the subscription records of the magazine to the University of Arkansas. Each of these three publications act much like the market bulletins, but were specifically dedicated to plants, gardening, and related interests.

Because the market bulletins and private publications connected so many people, there were opportunities to trade and sell many bulbs. Garden writer Elizabeth Lawrence subscribed to many of the bulletins from sometime after World War II, until her death in 1985. She compiled

⁷⁹ Dudley Clendinen, "Free Farmers' Paper Binds Georgians," *New York Times*, September 9, 1986, accessed December 31, 2013, http://www.nytimes.com/1986/09/09/us/free-farmers-paper-binds-georgians.html.

⁸⁰ Lawrence, Gardening For Love, 171.

⁸¹ Ibid., 181.

⁸² Ibid., 186.

⁸³ Ibid.

⁸⁴ Collection held in the University of Arkansas Libraries Special Collections, Manuscript 801

many of the letters and started to write a book about the market bulletins, but did not finish before her death. The material was edited by Allen Lacy, and published posthumously in 1987 as *Gardening For Love: The Market Bulletins*. As the title suggests, Lawrence believed that those who used the bulletins for plant trade are amateurs, who "garden for love." Especially pertinent to this study, she suggests the result of this 'gardening for love' is "a saving love." Among them they keep in cultivation many valuable plants that would otherwise be lost, and they preserve a reservoir of stock material that could never be collected in any one place, even an institution." This is the same concept identified previously regarding individuals trading bulbs. The various market bulletins are just a tool, which enables this to occur among a greater number of people.

Besides a love of gardening, Lawrence also identifies correspondence and letter writing as a motivation for using the market bulletins. In addition to selling or trading plants, Lawrence wrote letters to many people and developed many long-term friendships. This social interaction is a logical motivation when considering that there were few ways to interact in rural communities especially during the first half of the twentieth century. A letter from Mrs. U. B. Evans indicates that she lived in a remote location, "about twenty miles from Natchez, and nine miles from the highway and the nearest telephone." In the same letter, she discusses the many crinum bulbs she had in her garden and where they may have originated. These social interactions among people who share a common interest in gardening may be the catalyst for some, but the result is a two-fold benefit. The first benefit is the trade or continuation of the bulbs and plants, but also the transaction of the associated knowledge and history of the plants. The knowledge that follows the bulbs helps the new owner to care for the bulb and potentially pass on its history.

⁸⁵ Ibid., 24.

⁸⁶ Ibid.

⁸⁷ Ibid.

⁸⁸ Ibid., 39.

The market bulletins were also a perfect medium for the plant collector, especially for those plants that are hard to find commercially. Mrs. Brakefield, a bulletin correspondent from Birmingham, Alabama, discussed the bulbs she collected in a letter to Lawrence. She describes her collection of rare hyacinth; she had hundreds of them in several different colors and forms.⁸⁹ For her, the motivation was partially to obtain new varieties for her collection.

The direct preservation of bulbs and especially heirloom varieties is just one potential benefit. Lawrence often wrote to people seeking to identify the scientific names of plants, which are listed using their common names, and what she refers to as their 'sweet country names.' The plants listed in the bulletins are referred to by names that are often unique to specific areas or regions. Because of this she considered the market bulletins as "a social history of the Deep South."90

Lawrence sent a letter to Rhunella Johnson asking her about several bulbs, including the feather hyacinth, which she identifies as *Muscari comosum plumosum*.⁹¹ The feather hyacinth was introduced into England by 1596, from the south of France, and into America early. It was once much more popular, but Lawrence describes it as rarely seen in commercial cultivation.

Johnson confirms that it had been in her family a long time.⁹² This story presents a case where a botanically rare heirloom was offered a chance to be grown by more people and increase its chance of surviving.

Besides the direct preservation of plants, the market bulletins also provide snapshots of the plants available in specific locations and periods of times. Therefore, the surviving bulletins can be used to determine the variety of bulbs and plants that were common during a specific time period and in particular areas. Discerning the true identities of plants based on their 'sweet country names' may present a challenge to this, but Lawrence sought to unravel this mystery

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⁸⁹ Ibid., 129.

⁹⁰ Ibid., 35.

⁹¹ Ibid., 70.

⁹² Ibid.

during her lifetime. Much of her correspondence sought to identify the scientific names of the various regional names printed in the bulletins. A list of these translations is provided in Gardening for Love.

An additional resource are the letters and correspondences of bulletin users that provide more contextual information that might be useful in determining sources and types of plants which were once grown by a particular person. Finding or saving these letters may prove a more difficult task, especially relative to the information that they render, but many of Lawrence's letters have been preserved. Identifying to whom she wrote, and tracing them, could prove a rewarding task.

The usefulness of the market bulletins in preserving bulbs is not limited to the past. The bulletins are not as popular as they once were, which can be attributed to many factors, including a shift away from agricultural life, and rural living, increased access to transportation, and new media for social interaction. Increased availability to transportation, phone, and television, in addition to migrating populations to urban and suburban centers decreased the numbers of fragmented agricultural families. Despite this, the market bulletins remain today and states have adapted by offering them online in all states that continue publication.

The 1974 issue of the *Georgia Farmers & Consumers Market Bulletin* printed excerpts from the earliest *Georgia Bulletins*. Lawrence tells that bulbs in those excerpts can still be found in the 1974 *Bulletin.*⁹³ A review of the currently published bulletins reveals that most still have advertisements for plants and bulbs for sale. A 2013 issue of the *Mississippi Market Bulletin* has an advertisement selling red spider lilies (*Lycoris radiata*) and an assortment of crinums.⁹⁴ In a 2013 issue of the *Georgia Market Bulletin*, there were ads for red spider lilies, ginger lilies, and

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⁹³ Ibid., 28.

 ⁹⁴ Mississippi Department of Agriculture & Commerce, *Mississippi Market Bulletin*, vol. 85, no. 10, edited by Claude Nash (Jackson: Mississippi Department of Agriculture & Commerce, May 15, 2013), 5.

hellebores.⁹⁵ Red spider lilies, crinums, ginger lilies and hellebores are heirloom and 'passalong' plants that are not generally sold by commercial growers, such as Home Depot. The market bulletins are still a relevant resource to find heirloom and commercially unavailable plants. Even thirty years after Elizabeth Lawrence recognized the importance the market bulletins served in preserving plants, they continue to connect people and increase plant production today.

Market bulletins are not the only method of connecting people with an interest in trading plants. Organized plant swaps bring many people together and allow them to trade something they have for another plant. These events can be only a few individuals or a group of several hundred people, and the rules range from strict to casual. In *Passalong Plants*, author Felder Rushing describes his experience organizing a plant swap. ⁹⁶ Based on the results of that first swap in which over 200 people attended, he suggests several guidelines to ensure the transactions are fair and everyone leaves happy. He suggests limiting the number of plants to one plant per person and requiring that the plants be desirable and ready to plant. The swap can be very informal and left to the will of the people, or structured where participants draw a number and that is the plant they get. Rushing describes the swap as "...merely a vehicle for getting like-minded people together to have a good time." ⁹⁷ The actual reasons why participants attend probably range the full gambit, from seeking new or rare plants to purely a social experience. This latter reason is the one that Rushing provides as the goal, and often the swaps can be combined with luncheons or other events.

Plant swaps can be organized by anyone from an individual, group of friends, or garden clubs. Advertising the event can be by word of mouth, mail and email, and advertised on online plant swap sites. Plantswap.net is one such forum which provides an outlet to advertise when

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⁹⁵ Georgia Department of Agriculture, *Georgia Farmers & Consumers Market Bulletin*, vol. 96, no. 26 (Atlanta: Georgia Department of Agriculture, December 25, 2013), 9.

⁹⁶ Bender, Passalong Plants, 209.

⁹⁷ Ibid., 211.

and where plant swaps will occur and advertise who and what kinds of plants will be there.98 Additionally, the site provides instructions to assist with setting up a plant swap. There are also websites that seek to connect individuals seeking to swap plants. GardenWeb.com organizes plant exchanges for members that are intended to facilitate swapping only. 99 The forum allows postings for plants that people 'have' and are 'wanted.' Subsequent correspondence and coordination of the trade is handled off the forum by personal email or other contact.

Rushing describes the plant swap process as one that dissolves many of the social barriers of today. People from all walks of life: male and female, old and young, and from many races can meet over a common love of plants. Additionally, these structured events also lead to exchange of experiences and stories connected to the plants. An old southern adage holds that if you thank a person for a plant it will not grow. 100 Gail Barton suggests that the best way to thank someone is to pass a piece of the plant on to someone else. 101 This attitude provides another possible answer to the question of why people trade plants. This reasoning is also supported by Rushing who recounts that many of the participants were offering plants that they too had received from previous swaps. 102

Trading, swapping, and selling plants between gardeners has occurred as long as there were gardeners to do such. Trading is still a prevalent practice today, and market bulletins from the early twentieth century have evolved and embraced the modern benefits of technology. So too have the organizations with websites who seek to connect people much the same way the market bulletins do but without the transaction of money.

Regardless of the method, the motivations for this practice are as numerous as the people who participate in the trades and sales. The reason may be as simple as just wanting to

^{98 &}quot;Plantswap," Jelsoft Enterprises Ltd. accessed January 2, 2014. http://www.plantswap.net.

^{99 &}quot;Plant Exchange," GardenWeb.com, accessed January 2, 2013, http://forums2.gardenweb.com/forums/explant/.

¹⁰⁰ Bender, Passalong Plants, 212.

¹⁰¹ Ibid.

¹⁰² Ibid., 210.

obtain a new bulb, or there may be emotional or nostalgic associations that remind us of past people and experiences. Another reason may be the preference of old varieties for their quirks and unique qualities. Elizabeth Lawrence suggests that the market and private bulletins were implements used by amateurs who love plants and gardening. They also connected distant and isolated individuals who used them to connect over a common interest. The bulletins and swaps can also aid the dedicated plant collector in their efforts to obtain sought after varieties. Felder Rushing suggests that some swap plants to return the favor and share with others. The numerous methods and motivations presented each have aided in the preservation of bulb varieties that may have been lost otherwise. For this reason, they have been detailed to show how the actions of individuals and their collective efforts have contributed to the preservation of heirloom bulbs and many other plants.

CHAPTER 3

NURSERIES

In Chapter Two, the practices of individuals was the focus; Chapter Three will review how commercial plant nurseries have, or have not, aided in the preservation of bulbs. Commercial nurseries are responsible for growing and distributing plant stock to the general public. They can range from small one-person operations to large companies with national and international distribution. For this thesis, the term commercial nursery is generally limited to the larger national and international companies. The primary reason for this is because archival and historical information is available for them. Second, they have a broader customer base, and thus provide a larger 'snapshot' of bulbs available in the country. There have always been single-run and small nurseries that have preserved and promoted heirloom bulbs, but the purpose of this chapter is to provide a broader analysis of bulbs offered in the country.

This chapter reviews the catalogues of late-nineteenth and twentieth century nurseries to determine if heirloom bulbs were offered or promoted as such. The individual nurseries were chosen to discuss broad trends, and help build a general picture of the nursery industry.

Nurseries were chosen based on the following criteria: predominant focus on bulbous plants, a large selection of bulbous plants and species varieties, varying locations, and availability of nursery catalogues. In the second part of the chapter, nurseries in the past few decades are considered, to the degree that they sell and advertise new hybrid and heirloom bulbs. These nurseries were chosen because of their proportion of heirloom to new varieties. They each provide a significant selection of heirloom bulbs, but still represent a minority percent of the total plants offered. Last, a review of smaller niche nurseries that were established purposely with a

mission to preserve heirloom bulbs is discussed. These nurseries are not the only of their sort, but two represent the largest heirloom-centric niche nurseries in the United States.

Historic Context

The first commercial nursery in North America was Prince Nursery, started around 1750 by Robert Prince of Flushing, New York. ¹⁰³ Prince Nursery was one of the largest during its operation and offered the largest number of plants until closing in the mid-nineteenth century. David Landreth founded Landreth Seed Company in 1784 in Philadelphia, Pennsylvania. ¹⁰⁴ It eventually expanded, opening a branch in Charleston, South Carolina in 1818. Landreth remained in operation until the Civil War, when it was forced out of business. These nurseries advertised their plant lists in newspapers and later in catalogues, known at the time as broadsides. ¹⁰⁵ Prince first published a broadside in 1771. Another prominent nursery was operated by Bernard McMahon of Philadelphia, who opened and published a catalogue in 1802. ¹⁰⁶ Until the 1840's, these northern companies provided plants to the southern states, which had no commercial nurseries capable of supplying the region. ¹⁰⁷

Prior to 1800, in both northern and southern states, merchants imported and sold plants using local newspapers to advertise. Several of the merchants' lists of plants were published in the *Southern Plant List*, showing that they were selling many varieties of bulbs. Peter Crouwells Company, Gardeners & Florists, in Philadelphia, advertised a list of plants in the *Virginia Journal & Alexandria Advertiser* in 1786.¹⁰⁸ They advertised the plants as an "...extensive variety of the most rare bulbous flowers, roots and seed, which have ever appeared in the country before." Minton Collins placed an advertisement in the *Virginia Gazette and Richmond Daily Advertiser*

¹⁰³ James R. Cothran, *Gardens and Historic Plants of the Antebellum South* (Columbia: University Press of South Carolina, 2003), 139.

¹⁰⁴ Ibid., 141.

¹⁰⁵ Ibid., 139.

¹⁰⁶ Ibid., 289. A list of the plants in the 1802 catalogue are printed in, Chappell, Southern Plant List, 77.

¹⁰⁷ Ibid., 142.

¹⁰⁸ Chappell, Southern Plant List, 46.

¹⁰⁹ Ibid.

on November 5, 1792 with a note informing readers the plants were "just imported."¹¹⁰ It is clear based on these two advertisements that their motives were to provide plants that were new to the country. Of the lists of plants, some of the bulbs were heirloom even then, but the lists do not provide cultivar names, stating only that there are "600 sorts of Hyacinths" and so on.¹¹¹

As some of the first nurseries closed in the mid-1800s, southern nurseries began to open, based on the premise that southern nurseries could better provide plants and information specific to the southern climate and environment. Through the 1800's additional nurseries and merchants grew and imported plants offering them via local newspapers, catalogues, and traveling salesmen. Starting with the earliest catalogues and newspaper advertisements, it is clear the objective was to provide new and rare plants. As domestic nurseries opened they began hybridizing plants, creating new varieties. Subsequently, European growers were creating new hybrids, which were imported and offered for sale.

William R. Prince & Company's 1844 & 1845 Catalogue of Dahlias, and Bulbous, and Tuberous Rooted Flowers offers over three hundred named varieties of single dahlias, and nearly as many double varieties. There are nearly 400 varieties of hyacinths and 300 of tulips. A review reveals there are historic or older varieties of narcissus, fritillary, leucojum, and tulips offered. With exception to a note regarding dahlias, there is no distinction made between new hybrids and older varieties. Instead, the concern seems to be more with offering the largest and most comprehensive collection of plant varieties. A study of early-twentieth century nursery catalogues is useful to discover if heirloom varieties are still being offered; and if so, are they promoted as such?

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¹¹⁰ Ibid., 51.

¹¹¹ Ibid., 46.

¹¹² Cothran, Gardens and Historic Plants, 145.

William R. Prince & Co., 1844 & 1845 Catalogue of Dahlias, and Bulbous and Tuberous Rooted Flowers, of the Most Splendid and Choice Varieties, Cultivated at Prince's Linnaean Botanic Garden and Nurseries, Flushing, near New-York (Flushing: Office of the Flushing Journal, 1844), accessed January 4, 2014, Biodiversity Heritage Library.

Twentieth Century Nurseries

The Currie Bros., Milwaukee, Wisconsin *Bulbs & Plants Autumn 1899* presents a variety of plants much like the William R. Prince & Company catalogue described above. The selection of varieties is less, but seems to be a mix of old varieties mixed with newer named hybrids. 114 When comparing the 1899 catalogue with Currie's *Bulbs & Plants Autumn 1929* catalogue it reveals important information. 115 The 1929 catalogue has fewer varieties of hyacinths and different kinds. Conversely, there are many more varieties of tulips present in the 1929 catalogue than in the 1899. Comparing the narcissus offered in both reveals that there are older or historic varieties in both, but there are less and different varieties offered in the 1929 catalogue. 116

These changes suggest that the motive of the company is not to provide the most extensive collection of bulbs because over the thirty years many new varieties were introduced



Figure 1: Currie Brothers Bulbs and Plants Autumn 1899¹¹⁷

¹¹⁵ Currie's Seed Store, *Bulbs & Plants Autumn 1929* (Milwaukee: Currie's Seed Store, 1929), accessed January 4, 2014, Biodiversity Heritage Library.

¹¹⁴ Currie Brothers Company: Milwaukee, Wisconsin, *Bulbs & Plants Autumn 1899* (Milwaukee: Currie Brothers Company. 1899), accessed January 4, 2014, Biodiversity Heritage Library.

¹¹⁶ This is partially due to the ban of Dutch imported narcissus into the United States; therefore, varieties offered were grown domestically.

¹¹⁷ Currie Brothers Company: Milwaukee, Wisconsin, *Bulbs & Plants Autumn 1899* (Milwaukee: Currie Brothers Company. 1899), accessed January 4, 2014, Biodiversity Heritage Library.

or made readily available for sale, and some varieties were lost for any number of reasons. The determining factor over which varieties stay and which ones are replaced with the newest kinds is most likely based on sales and availability from growers and importers. The favorite or best selling varieties were retained, while others were replaced with newer cultivars. In both Currie catalogues, there are only a few advertisements lauding the bulbs as 'new,' and none regarding status as old or classic. Instead, the catalogue writers were more focused on presenting them based on durability, color, form, and period of bloom.

Miss Martha Hiser's Autumn Book 1900 Beautiful Flowering Bulbs, Winter-Blooming Plants, and Seeds offers a slightly different perspective. The catalogue also provides a mixture of new and old cultivars and again varieties are detailed based on the traits above. However, the new hybrids and a few older varieties are advertised accordingly. A new type of tulip is advertised under the heading "New 'Darwin' Tulip," and others are advertised as "Curious and Rare." 118 Both of these phrases seek to tempt the reader using newness and rarity as a motivator. Additionally, they use the term 'Improved' to describe a grape hyacinth. 119 This tactic combines newness with alleged better growing habit or bloom. Conversely, this catalogue also recognizes certain bulbs as old.

The description of *Narcissus 'Van Sion'* alludes to its historic status even then; it is described as "The Famous 'Old Double Yellow Daffodil'." Having been in cultivation since 1620, Van Sion was still popular in 1900 and considered so by Hiser. This particular wording is different than purposefully presenting a bulb as an 'heirloom' or historic, but still useful to understand the attitude toward bulbs that we would consider historic by todays standards. The description of *Narcissus 'Rosa Plenissimus'* also alludes that it is old and describes it as "Now

Miss Martha Hiser: Urbana, Ohio, Miss Martha Hiser's Autumn Book 1900 Beautiful Flowering Bulbs, Winter-Blooming Plants, and Seeds (Urbana: Miss Martha Hiser, 1900), 8, accessed January 4, 2014, Biodiversity Heritage Library.

¹¹⁹ Ibid., 11.

¹²⁰ Ibid.

very rare and scarce."¹²¹ This recognition of rarity is different than that mentioned previously. Instead, it is rare or scarce in 1900, but was not always commercially rare. This is important to note because it uses scarcity as a justification for buying it, but does not necessarily mean that is the motivation for the company to continue growing and providing it to customers.



Figure 2: Narcissus 'Van Sion'122

From these two catalogues it is apparent that they were not providing bulbs for the sake of preserving them. Despite this, they each have what could be considered historic or heirloom bulb varieties for sale and the result is continuation if not preservation. The rationale for their continued production is most likely tied to their popularity and demand of buyers. This can be seen in the wording used to describe them. Terms and phrases including: 'favorite,' 'old favorite', and "[t]he best of the Jonquil section" suggest they are perceived popularly, if only by the nurserymen.

Popularity as a motivator to continue growing bulb varieties is often the demise of them in the long run. Many factors of taste and the constant introduction of new varieties means that many cultivars are grown for only a short period and then individuals are left to preserve them. However, preserving every variety would be impossible. Furthermore, it would be equally impossible for commercial nurseries to continue growing all of the older varieties plus newer

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¹²¹ Ibid.

¹²² "Heirloom Daffodil Bulbs: Van Sion," Old House Gardens.

hybrids. Popularity and a combination of other factors can work in the favor for some bulbs. As mentioned previously, the Van Sion daffodil was still popular in 1929, according to Currie's Seed Company, meaning it had survived for over 300 years. Nurseries may not have preserved it for that entire period, since inevitably taste changes, but Van Sion is listed in Prince's 1844 catalogue and Currie's 1929 catalogue. However, in 1940, at least one nursery catalogue felt Van Sion was not so desirable, and favored four improved double forms. They describe it as "not particularly attractive, because they sometimes produced greenish-yellow flowers." In 1942, they had reversed their critique and again advertised it as "...an old favorite so highly prized in old-fashioned gardens." Today, it is not offered in many nursery catalogues, but it can be found at many old home sites.

Evaluating *Henderson's Spring-Flowering Bulbs Autumn 1940* catalogue and F. W. Bolgiano & Company's 1962 and 1971 catalogues reveal the trends presented previously continue. New varieties appear in each catalogue replacing old varieties. New kinds of bulbs continued to be added as they are discovered and older varieties that had fallen out of favor returned. Also of interest, varieties that were new introductions around 1900 had come full circle and became the 'older' varieties. One such bulb was *Narcissus 'King Alfred*,' which was introduced in 1899 and was still among those listed in Bolgiano's 1971 catalogue. Despite this long-term popularity it too was replaced with a 1950's improved hybrid that was advertised as King Alfred or as a King Alfred type relying on the original's popularity to sell the newer hybrid. This 'improved' King Alfred type is still widely available today and is a 60 year old variety of it's

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¹²³ Peter Henderson & Company, *Henderson's Spring-Flowering Bulbs Autumn 1940* (New York: Peter Henderson & Company. 1940), 6, accessed January 4, 2014, Biodiversity Heritage Library.

¹²⁴ Peter Henderson & Company, Autumn 1942 (New York: Peter Henderson & Company, 1942), 8, accessed January 4, 2014, Biodiversity Heritage Library.

¹²⁵ "Heirloom Daffodil Bulbs: Van Sion," Old House Gardens, accessed January 4, 2014, https://www.oldhousegardens.com/display.aspx?prod=DA39.

¹²⁶ F.W. Bolgiano & Company, *Bolgiano's Fall List Seeds, Bulbs, Garden Supplies* (Washington, D.C.: F.W. Bolgiano & Company, 1971), accessed January 4, 2014, Biodiversity Heritage Library.

own standing even though it is not considered a historic daffodil by the American Daffodil Association.

The trends presented from the mid-nineteenth to the mid-twentieth centuries are meant to provide a broad and general understanding of how the commercial nursery industry contributed to the preservation of bulbs. Ultimately, a more comprehensive study would yield nurseries that offered bulbs contrary to the trends presented. Individual nurseries were used to convey specific information and build a general picture of the whole industry. Next the focus turns to the present and examines specific nurseries that offer and purposefully advertise both new and heirloom varieties, to determine their motivations and contribution to bulb preservation.

Continuation of New & Heirloom Bulbs by Nurseries Today

While reviewing nurseries that currently provide bulbs, several companies were identified that provide comprehensive collections of bulbs that are heirloom and new hybrids. Their catalogues and website listings also present detailed information, beyond the stock information of height, color, form, and bloom time. They provide extra information about the bulbs origins, whether it is a new hybrid or an ancient heirloom. This practice is not common among all bulb providers and importers. Providing more than a few of the most popular heirloom varieties is also not standard practice.

McClure & Zimmerman, in Randolph, Wisconsin is one of those nurseries that have dedicated themselves to providing "a veritable treasury" of bulbs including the "newest developments, time-proven favorites, and choice rare heirlooms." Another such company, located in Gloucester, Virginia is Brent & Becky's Bulbs, which has one of the largest collections of rare and heirloom bulbs, despite the fact that the owners are plant hybridizers. Two other companies that provide both old and new bulbs are John Scheepers, Inc., and their sister wholesale company, Van Engelen, Inc. located in Bantam, Connecticut. Neither company

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¹²⁷ McClure & Zimmerman, *McClure & Zimmerman Fall 2013 Flowerbulb Catalogue and Planting Guide* (Randolph: McClure & Zimmerman Quality Flowerbulb Brokers, 2013), 2.

specifically advertises in the catalogues or on their websites that they offer heirloom or older bulbs like McClure & Zimmerman. Van Engelen's *Fall 2013 Wholesale Price List* does denote the new bulb introductions for the year, but does not promote the extensive collection of heirloom bulbs offered. However, the individual listings of bulb varieties denote if they are an heirloom, and provide a date of introduction. Many of the new hybrids also have information about the hybridizer. Other companies' also record dates of introduction and heirloom varieties like de Jager Flower Bulbs.



Figure 3: Tulipa clusiana 129

McClure & Zimmerman take it a step further by referencing and quoting famous gardeners' descriptions. They provide a quote from Louise Beebe Wilder's book *Adventures* with Hardy Bulbs to describe Tulipa batalinii. For Tulipa clusiana, they reference the seventeenth century botanist Carolus Clusius, who grew it in 1606. Then they recognize several

¹²⁸ Van Engelen, Inc., *Van Engelen Inc. Fall 2013 Wholesale Price List* (Bantam: Van Engelen, Inc., 2013), 26.

¹²⁹ "Heirloom Tulip Bulbs: Clusiana," Old House Gardens.

¹³⁰ McClure & Zimmerman, Fall 2013 Flowerbulb Catalogue, 10.

hybrids developed from *T. clusiana*. This practice is seen throughout the catalogue; many of the bulbs have information about the cultivars they were hybridized from. They also provide geographic information about where species are native. It is clear that McClure & Zimmerman seek to provide as much context about their plants as possible. Brent & Becky's Bulbs is also as diligent as McClure in their notation of each bulb. Van Engelen and John Scheepers too provide much more contextual information than most nurseries today. So why is this important?

It is relevant because these companies are not just selling bulbs, but they are using history as a marketing tool and subsequently selling the bulbs and their connected histories. This practice also suggests that the nurseries see these heirloom bulbs as resources connected with a larger gardening context. They are certainly using history to sell a product, but that suggests that the public is demanding it. If this presumption is correct, it holds that at least some facet of the gardening community is concerned with heirloom flowers, their associated history, and their connection to the past. So then is that the only motivation for these companies to provide heirloom flowers, while others do not? Providing rare and old varieties to a niche market is probably one reason, but they also sell and market the newest introductions. The last category of nurseries comprises those who make it their mission to sell only heirloom bulbs.

Heirloom Centric Nurseries

There are several nursery and bulb providers today that operate with the specific mission of providing and preserving heirloom bulbs by growing and distributing them to gardeners. They are markedly different than most of the companies presented thus far. Those detailed previously have been medium to large operations that purchase their bulbs from foreign growers, mostly the Netherlands. Alternatively, the following nurseries are small operations, started by one person with a distinct mission, and they grow part or all of their bulbs domestically.

The first company is Old House Gardens (OHG) located in Ann Arbor, Michigan, which started in 1993 when owner Scott Kunst sent a mail-order catalogue to 500 people offering 30

bulbs.¹³¹ The company's mission is simply to 'Save the Bulbs!' and they search the world for bulbs at risk of being lost. They research the bulbs history and recruit small farmers to grow them. Kunst tells that he had an epiphany after buying his first house; "I found a single white peony in the yard and some tiger lilies, and suddenly I realized that it wasn't just my yard. Gardeners before me had loved it, too." He eventually earned a Masters degree in Historic Preservation from Eastern Michigan State University in 1983, and worked as a landscape historian and teacher until 1996, when he quit to dedicate all of his time to OHG. He traces his motivation for starting the business to the will to preserve one of his favorite tulips 'Prince of Austria,' which was dropped by all commercial North American suppliers. "It was just too great a tulip to let it go extinct," says Kunst. His passion and love for old flowers is clear, armed with an education in preservation, and years of experience working with historic landscapes primed Kunst to start and continue a successful business today with his dedicated team.

As previously mentioned, the methods OHG uses to grow their heirloom bulbs are unique. In their ever-increasing quest to find at-risk bulbs they work with many overseas institutions and growers. They rely on some of these people to grow their bulbs, but they also grow bulbs themselves and partner with small farmers across the United States. After utilizing all of the free land around their Ann Arbor, Michigan office they turned to their neighbor's backyard. This eventually led them to use several other vacant or under-used parcels around their Old West Side Historic District neighborhood. Using these micro-farms they are able to grow many of their rare gladiolus, all of their iris, and seventy-five percent of their day lilies.¹³⁴

They also partner with twenty-two small growers in fourteen states to grow most of their peonies, dahlias, and a third of the daffodils and diverse other bulbs they offer. This approach

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¹³¹ "About Us," Old House Gardens, accessed January 8, 2014, https://www.oldhousegardens.com/AboutUs.aspx.

¹³² Ibid.

¹³³ Ibid.

¹³⁴ "About Us: Bulbs from America's Small Farmers," Old House Gardens, accessed January 8, 2014, https://www.oldhousegardens.com/AboutUs.aspx.

encourages and involves many others with a like-mind for preservation. It also improves freshness and allows them to provide bulbs better suited to the conditions where customers will grow them. This attitude is similar to the one mentioned previously held by Southerners in the 1840's who felt plants grown in the region would be better. This is essentially the implementation of this concept, with some exception. OHG provides many bulbs that are best suited for warmer climates of the South, Southwest, California, and West Coast. By partnering with farmers in these regions they can offer heirloom varieties that may not be hardy or easily grown in Michigan, but the growing conditions are more similar than those in the Netherlands or England.

In addition to the physical preservation of bulbs, OHG works to increase the appreciation of heirloom bulbs by providing information about the bulbs they sell and other resources where information can be obtained. In 1995, based on the suggestions of Greg and Pat Williams in *Hortideas*, they decided to offer histories and other information for the bulbs they offer in the hopes that the more people know about them the more they will value and seek to preserve them. This practice is the same as the companies detailed in the previous section, and offers another possible motivation. Owner Scott Kunst also networks tirelessly with cities, garden societies and organizations, historic sites, and anyone else promoting heirloom bulbs (and his business). OHG promotes themselves as "America's only mail-order source devoted entirely to heirloom bulbs," there are a few other companies that predominately sell and have a mission to save heirloom bulbs.

One of those companies is The Southern Bulb Company (SBC), which was started by Chris Wiesinger in 2004. SBC brought to fruition a business plan Wiesinger created as a senior

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Old House Gardens, Old House Gardens 1995 (Ann Arbor: Old House Gardens, 1995), accessed January 8, 2014, https://www.oldhousegardens.com/display.aspx?photo=1995CatCover.jpg.
 "About Us: Bulbs from America's Small Farmers," Old House Gardens, accessed January 8, 2014.

in the horticulture program at Texas A&M.¹³⁷ Wiesinger's mission is slightly more specific than Old House Garden's. "He sets out to recapture something that was once 'lost' to the Southern gardener: bulbs that thrive in warm climates many of which are rare, heirloom or both." The heirloom bulbs Wiesinger searches for are the ones that have flourished and reproduced in the southern climate without the care or attention of people. Wiesinger searches for these well-established plants and other hardy bulbs and then he and a small group of people grow and distribute them from their farm in Mineola, Texas.

Wiesinger spends much of his time on the road searching for bulbs in old towns, abandoned houses and vacant properties, where development has spared them. In a 2006 article, in *The New York Times*, he is quoted as saying "Most of the time you're not finding this stuff in the fancy neighborhoods around Dallas...but in places where people couldn't afford to plant new things." He has a strict policy of obtaining permission from owners before collecting bulbs, and never from cemeteries because he feels averse to removing flowers from graves. In *Heirloom Bulbs for Today*, Wiesinger relays many stories of his travels searching for bulbs. Of more importance, the book promotes and teaches Southerners practical information about bulbs that are appropriate for their garden's climate, soil, and light, based on his personal observations of where they were growing 'wild' and in their Texas nursery. With Southern Bulb we see the ultimate concern over regionalism, which was born of a frustration with not being able to find bulbs that will grow in the Deep South from commercial sources. 140 Thus, Wiesinger explored the Texas countryside and discovered many bulbs were thriving. While his major motivation is to provide bulbs to southern climates, preservation of heirloom bulbs is a major

¹³⁷ Ginia Bellafante, "The Bulb Hunter," *The New York Times*, July 6, 2006, accessed January 8, 2014, http://www.nytimes.com/2006/07/06/garden/06bulbs.html?pagewanted=all& r=1&.

¹³⁸ Chris Wiesinger, "About," *The Bulb Hunter Blog*, copyright 2014, accessed January 8, 2014, http://www.bulbhunter.com/about/.

¹³⁹ Bellafante, "The Bulb Hunter."

¹⁴⁰ Chris Wiesinger and Cherie Foster Colburn, *Heirloom Bulbs for Today* (Houston: Bright Sky Press, 2010), 6.

component. In *Heirloom Bulbs for Today*, one finds stories of how these bulbs have intertwined with local culture and site histories.

Southern Bulb Company does not print catalogues listing the plants they offer; instead relying on their website, and the telephone for those not comfortable with Internet. Because they grow most bulbs at their Mineola farm and offer limited supplies they choose to save costs and publish all information online. They, too, see their website as a platform for providing contextual history and stories about their bulbs.

Bayou City Heirloom Bulbs is another company that seeks to preserve and offer old and hardy bulbs to the Southeast. Operated by Patty Allen, the company's mission "is to track down and hunt out as many of the old hard-to-find specimens and old-time flowering perennials that our forbears grew and that require a minimum amount of care..." They also forego a printed catalogue and rely on their website.

Analysis of Nurseries

Whether small, like the companies discussed, or large, like Prince Nursery started in 1750, nurseries and bulb importers have existed in the United States for its entire history. They have ranged from small to large and were started for many different reasons, but a demand from plant lovers spurred their creation. Providing new, rare, and extensive collections of bulbs to early well-to-do Americans was certainly a motivation of importers and nurserymen. Their collections included old world favorites, new unknown exotics and hybrid forms. Providing new and improved varieties is a major motivation for companies through all periods and even today.

In the examination of late-nineteenth and early-twentieth century catalogues, a trend of new replacing old revealed itself, but many heirloom bulbs could be found alongside the newest introductions. Looking to popularity and simple supply and demand theory, this phenomenon seems rational. As long as older varieties are popular they are offered, and then when taste

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¹⁴¹ Bayou City Heirloom Bulbs, copyright 2014, accessed January 8, 2014, http://www.bayoucityheirloombulbs.com.

changes they are gradually replaced. However, some varieties obtain famous status and may be held for decades, or brought back at a later date. While this is not strictly preservation these companies are distributing bulbs to large numbers of people, thus increasing the quantity that can be grown by individuals or left to naturalize. Wholesale retention of all varieties by any one entity is ludicrous due to the ever-increasing introduction of new varieties and species. This assessment presents the general trends of the bulb industry and recognizes that not all companies strictly follow these practices.

In the second half of the chapter, several companies are presented that not only offer new and old bulbs, but use information as an advertising tool. They offer the newest introductions and collections of rare and old-favorite heirlooms. Their motivations may be simply to provide something for everyone, yet they recognize there is a niche market or demand for older varieties. The benefit is not only the continuation of heirloom bulbs, but providing historic context shows there is an understanding that their products are connected into a social and historic chronology.

Finally, the efforts of several smaller companies were discussed who's motivation for preservation are clearly stated in their mission statements, and common trends were revealed. They are small and the vision of someone with a specific goal to preserve bulbs. As they grow others with similar goals join, and their ability to preserve is increased. Their focus and methodologies are slightly different, but the ultimate result is preservation, and a willingness to provide modern gardeners with old bulbs.

Bulb providers, nurseries, and importers have contributed in varying degrees to the preservation of bulbs, but without their efforts many would not have made it to this country.

Furthermore, they would not be as widely distributed for the modern plant hunters, such as Chris Wiesinger and others, to resurrect and reintroduce to the current generation of gardeners.

CHAPTER 4

SOCIETIES

In the first half of the twentieth century, people with similar interests in plants organized and created garden societies. These plant societies may seem perfect organizations to preserve, or at least promote, heirloom bulbs; however, their mission statements indicate goals opposite to preservation. Plant hybridizers and growers interested in improving plant species formed these societies. The societies were interested in promoting and advancing plants, not necessarily preserving every plant variety. Despite these early attitudes, some expanded their organizational purview to include broader goals. For this reason, studying these societies is useful to discover how they have assisted with the preservation of heirloom bulbs. This chapter reviews the missions, archival information they provide, special committees and display garden programs of several societies.

There are many plant societies in the United States, the first being the Pennsylvania Horticultural Society, established in 1827.¹⁴² Starting in the early-twentieth century, however, national and North American 'specialty societies' were founded to promote and advance specific genera of plants. Many of these 'specialty societies' were founded specifically for bulb species. These national societies will be examined to determine how they have advanced the preservation of heirloom bulbs. Relevant societies, dedicated to bulbs and listed chronologically based on date of organization, are:

- American Peony Society- 1903
- The American Dahlia Society- 1915
- The American Iris Society- 1920
- North American Gladiolus Council- 1945
- American Hemerocallis Society- 1946
- North American Lily Society- 1947

¹⁴² "About," Pennsylvania Horticultural Society, accessed January 11, 2014, http://phsonline.org/about.

- American Daffodil Society- 1954
- Historic Iris Preservation Society- 1988, affiliate of The American Iris Society

Mission & Purpose

The mission of these societies is specific to a particular genus of bulb, and their broad goals are to promote improvement and public knowledge of the genus. The American Peony Society's mission is to "promote cultivated peonies and foster studies to improve its worth as a garden plant." The American Hemerocallis Society's mission is similar, "to promote, encourage, and foster the development and improvement of the genus Hemerocallis and public interest therein." The American Daffodil Society's mission is to "encourage scientific research and education on daffodil culture, breeding, diseases, pests, exhibiting, and testing; to encourage, coordinate, and sponsor shows and exhibitions of daffodils." Additionally, the society seeks to standardize naming practices and register cultivars according to international standards. These goals are not expressly concerned with preservation of heirloom or historic bulb varieties, but they do aim to preserve the genus as a whole.

The societies' interests are similar to the commercial bulb nurseries previously discussed, in that their major focus is 'improvement' through hybridizing. These societies help connect individuals that hybridize and fund research to produce new varieties with improved or new color, shape, form, duration of bloom, diseases resistance, climatic hardiness, etc. The societies do have other concerns, one of which is to collect and standardize the naming of all cultivars. These societies hold flower shows, where members bring flowers to be judged. Additionally, most hold annual conventions and meetings to discuss and learn more about flowers. While the major focus of these societies is public education and scientific advancement or improvement, several address preservation of historic and heirloom varieties.

¹⁴³ "About the American Peony Society," American Peony Society, copyright 2014, accessed January 11, 2014.

¹⁴⁴ "About the AHS," American Hemerocallis Society, Inc., copyright 2012, accessed January 11, 2014, http://www.daylilies.org/AHSinfo.html.

¹⁴⁵ "Information about the American Daffodil Society," The American Daffodil Society, Inc., copyright 1995-2012, accessed January 11, 2014, http://www.daffodilusa.org/info.html.

<u>Informational Resources & Archives</u>

Many of these societies assumed the task of standardizing the naming process and regulated the registration process for all new varieties. Today, they maintain this function, and the results are important historic archives. When physical preservation is not possible, documenting a resource is important, and these archives perform that function. When a new cultivar is registered, basic information about who, when, and where it was hybridized, physical descriptions based on the standard nomenclature, parent plant stock, and photographs are generally required.

All of the listed societies have websites, and provide varying amounts of archived material online. The Historic Iris Preservation Society offers a Photo Gallery of the most common historic varieties to non-members, while members have access to a larger gallery in addition to other archived nursery catalogues and information. He American Peony Society is the International Cultivar Registration Authority for peonies, but does not provide access to the archives online. He American Hemerocallis Society has an Online Daylily Database that allows anyone to search all registered daylilies. He database provides photographs in addition to dates of registration, hybridizer information and physical descriptions. The American Daffodil Society sponsors a similar resource called DaffSeek – Daffodil Photo Database, which was created in 2006, for online users. He currently holds records for approximately 23,300 daffodil varieties, with 27,500 photographs. The Society encourages daffodil growers to submit photographs; so many photographs are taken from people across the world.

¹⁴⁶ "Iris Photos," The Historic Iris Preservation Society, accessed January 11, 2014, http://www.hips-roots.com/visitors/v-photos/vp-topframe.html.

¹⁴⁷ "APS New Cultivar Registration," American Peony Society, copyright 2014, accessed January 11, 2014, http://www.americanpeonysociety.org/administration/cultivar-registration-info.

¹⁴⁸ "Online Daylily Database," American Hemerocallis Society, Inc., copyright 2012, accessed January 11, 2014, http://www.daylilies.org/DaylilyDB/.

¹⁴⁹ "DaffSeek – Daffodil Photo Database," The American Daffodil Society, Inc., accessed January 11, 2014, http://daffseek.org.

These databases and query systems are important resources for the preservation of information related to bulbs. The databases also provide an excellent tool for people who wish to identify bulbs, with color photographs and search tools based on physical attributes. They also provide incredible amounts of information about the cultivars. The motivation of the societies to provide this information is simple – public education. Most of the society's missions include aspects of public education, and some such as the American Daffodil Society, specifically include information collection in their mission.

Historic Iris Preservation Society & Daffodil Committee

Archives of cultivar information are not the only contribution these societies offer to bulb preservation. Several recognize the importance of historic varieties and the need to promote and protect them. The Historic Iris Preservation Society (HIPS) was founded in 1988, "to help preserve our iris heritage by locating at risk irises and bringing them together with irisarians who want to grow and perpetuate them." HIPS is an affiliate of The American Iris Society, with international membership. Their secondary mission is to collect reference material of historic iris culture. Members have access to a database that contains non-commercial sources for over 4,000 irises that are historic (varieties registered thirty years ago or more). They also assist people trying to identify a particular iris, and obtain historic varieties that may not be commercially available. HIPS also sponsors annual sales and auctions, to help connect people with historic irises that need saving or protection. Their Cultivar Preservation chairperson, currently Jean Ricter, helps redistribute large collections of historic and rare iris when their owners can no longer care for them. They take a proactive approach to ensure large personal collections of iris are not lost or destroyed when their patrons cannot care for them. Ricter works with the owner and finds appropriate persons that will continue preserving them.

¹⁵⁰ The Historic Iris Preservation Society, accessed January 11, 2014, http://www.hipsroots.com/visitors/v-main.html.

¹⁵¹ Ibid.

¹⁵² Ibid.

The motivation of HIPS to provide these resources is linked to their mission, but the reason why HIPS was created may reveal more useful answers. In a 2005 article, "On the Importance of Iris Preservation," HIPS member Mike Unser provides at least three possible reasons. He identifies sentimental reasons, much like those discussed in Chapter Two, regarding inheriting and personal trading. Second, are those irises that were important to the development of iris species because they were progenitors for many later hybrids or new types. He also points to the proven hardiness, durability, and disease resistance of historic iris that are suited for current use, and for their potential to transfer those traits to new varieties to create improved specimen. These three reasons—emotion, history, and science—are an important distillation, yet also comprehensive set of motivations that may be applied beyond the Historic Iris Preservation Society.

The American Daffodil Society (ADS) recognizes daffodil cultivars developed before 1940 as historic. ADS, HIPS, and other societies use the term historic instead of heirloom to describe older bulb cultivars. This practice is rational because they are determined 'historic' solely based on age without considering social and cultural connections that are associated with the term heirloom. A Historic Daffodil Committee was established to identify, research and promote old cultivars. Since 1989, members of the Committee have collected, researched and exchanged old varieties in order to correctly identify and verify cultivars. By growing exchanged cultivars, in close proximity, they can better understand the effects of growing conditions and better verify cultivars are correctly named. The result of their efforts is a list of several hundred pre-1940 historic daffodil cultivars, published in 2011.

Members of the Historic Daffodil Committee also petitioned for the addition of a Historic section to ADS sanctioned daffodil shows. This allows older varieties to be displayed alongside

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¹⁵³ Mike Unser, "On the Importance of Iris Preservation" (The Historic Iris Preservation Society, 2005), accessed January 12, 2014, http://www.hips-roots.com/visitors/v-reading-room.html.

 ^{154 &}quot;ADS List of Historic Daffodils Pre-1940," The American Daffodil Society, Inc., accessed January 12, 2014, http://www.daffodilusa.org/references/adshistorics.html.
 155 Ibid.

the newest cultivars, and increases the number of people who will be introduced to them. Shows are a method of exhibiting the various varieties, and awards are given based on individual flower blooms. The Historic section was added in 2001; subsequently, a Classic section was added in 2012, for daffodils introduced between 1940-1969. As a result of these two new sections, many pre-1969 daffodils have received awards. 156 This again elevates them to the attention of the garden, and especially the daffodil, communities. The more people who know about historic daffodils, the more that are apt to be grown.

Based on the mission and activities of the Historic Daffodil Committee, the motivation is purely preservation. That is to correctly identify old varieties, save them, and promote them to the public so they will continue to be grown and preserved. However, this does not account for the personal motivations of the actual people involved; these are more complex, and differ among individuals.

Display Gardens: 'Zoos' for Flowers

The current Historic Committee chairperson of the ADS, Sara Van Beck, explains that preservation of old daffodils is more the domain of the ADS Display Garden Program, headed by Jason Delaney.¹⁵⁷ Display garden programs are used by several of the societies discussed in this chapter. They can be public or private gardens that showcase a number of varieties of a particular species, and are approved by the corresponding society of meeting minimal standards. These partnerships provide additional opportunities for public education of the bulb species.

In addition to ADS, the American Hemerocallis Society and Historic Iris Preservation Society have similar display garden programs that partner with private and public gardens. Each society has specific standards for display gardens. All generally require that the public have access to the gardens during peak bloom season, a sufficient number of varieties, a well-

¹⁵⁷ Sara Van Beck, email to author, January 11, 2014.

¹⁵⁶ Old House Gardens, "Historic and Classic Daffodils Win Big at Shows," Old Bulbs Gazette, October 24, 2013, accessed January 12, 2014, http://www.oldhousegardens.com/news/Oct13_late.html.

maintained garden, and that varieties are properly marked with labels. Each society has approved display gardens listed on their respective websites with descriptions, best times to visit, and best method of contacting the sites, since many are private gardens.

ADS Display Garden criterion number seven suggests that large public display gardens have a minimum of one hundred varieties; and that larger collections "include as many divisions as are easily grown for the climate, and ideally provide a balanced display of species, 'historics' and commercially available popular garden and show cultivars." Although this criterion is specifically for public gardens, clearly there is an acknowledgement that historic varieties are important. The Program's purpose is to promote and advance the full gambit of the genus, but this criterion is important because it encourages the direct preservation of historic varieties by public gardens. It also presents them to the public so individuals may then seek them to grow for themselves. This is the dual benefit that is applicable to all such programs, no matter the bulb genera. These two are not the only benefits though.

The American Hemerocallis Society (AHS) also has a Display Garden Program, which predated, and served as a model for, ADS's program. AHS has three types of garden designations in their program. The first is AHS Display Garden that promotes a wide variety of modern hybrid cultivars. The second is AHS Daylily City, and the last is the Historic Daylily Display Garden. AHS determines a historic daylily as any hybrid registered before 1980.¹⁵⁹ This date will change to 1990 in the year 2020, 2000 in 2030 and so on, using a thirty-year period that updates every decade. The main qualifying requirement for Historic Daylily Display Garden is that the garden contains at least fifty historic cultivars.¹⁶⁰

Considering anything only thirty years old historic would surprise many, but seems to be an attempt to be more inclusive. HIPS has a similar thirty-year rule, which changes each year,

¹⁵⁸ "ADS Display Garden Program," The American Daffodil Society, Inc., accessed January 12, 2014, http://www.daffodilusa.org/displaygardenprogram/displaygardenoverview.html.

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 ^{159 &}quot;AHS Display Gardens and Historic Display Gardens," American Hemerocallis Society, copyright 1995-2013, accessed January 15, 2014, http://www.daylilies.org/AHSDGarden.html.
 160 Ibid.

so any cultivar registered thirty years prior to the current year is historic. If the point of the AHS and HIPS are to promote the respective *Hemerocallis* and *Iris* genera, then the newest introductions, species types, oldest cultivar hybrids, and those in the middle range are included in that purview. Their dating practice suggest they take this seriously and understand that varieties even thirty or forty years old can quickly become at-risk when commercial suppliers stop growing them. When this happens, preservation becomes dependent on individuals and a few niche growers. AHS & HIPS's definitions of historic are bold and progressive attempts at proactive preservation, before cultivars become at-risk.

The other society with a display garden program of note is the Historic Iris Preservation Society. Their program's focus is historic iris, more than thirty years old, but they do not require a minimum number of iris varieties to be a display garden. The Longfellow National Historic Site is a display garden that has only fourteen historic irises in their collection. HIPS's website provides detailed information about each display garden. Many listings include an approximate number of historic versus modern varieties grown. The number of historic iris the display gardens grow ranges from just a few to several thousand. HIPS's website also denote whether the gardens sell iris. This is another benefit of display gardens. Not only are they educating and promoting historic bulbs to interested people, some actually sell them. Inevitably, there is also trading and swapping that occurs also aiding in their distribution.

Because information is available online, display garden programs are efficient networks that connect interested people. One motivation for a private garden to become a display garden is advertisement. This may not be the only reason, since growing bulbs on the small scale is rarely very profitable. A secondary reason may simply be preservation. Sara Van Beck (who started the ADS Display Garden Program) discussed giving rare historic daffodils to trusted

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^{161 &}quot;Display Gardens," The Historic Iris Preservation Society, accessed January 15, 2014, http://www.hips-roots.com/visitors/v-dg-frame.html.

friends across the country as an 'insurance policy,' in case the few she has die. 162 By distributing historic bulbs, whether by selling or giving to others, there are assurances that the variety is more likely to survive. Larger public and private gardens may also be motivated by advertisement when they join a display garden program. Garden societies are the perfect audiences to solicit visitors, and visitors provide the money stream to keep them running. The personal interests of those who govern and run gardens must also be considered because the direction these gardens take is often highly influenced by those who head them.

Analysis & Contributions

Despite these garden societies being founded with intentions to promote, advance, and improve their respective genera of bulbs, some realize the importance of old and heirloom bulb varieties. From a purely historic information perspective, these societies have done much of the work to document the who, when, where, what for new cultivars. These databases do not contribute to direct or physical preservation, but they are incredible tools that can be used by preservationist in their efforts. They allow users to identify unknown bulbs, which hopefully increases the likeliness that someone will view them as important. Many of the societies also collect other pertinent historic material that can help researchers understand how bulbs were used, and where they were distributed. Old catalogues, garden publications, and personal letters can be used to understand the broader historic context regarding when and how bulbs were used.

The garden societies discussed also provide assistance to people searching for historic bulbs. The people in these societies often know where to find historic bulbs that are not commercially available. They know what small grower or personal gardener grows particular varieties. They are perhaps the best sources for historic gardens, historic sites, or private individuals looking for period varieties.

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¹⁶² Sara Van Beck, interview with author, January 14, 2014.

The flower shows and events that showcase flowers and present awards also contribute to preservation. Flower shows are often a major focus of the societies, and where most members participate. Flower shows are much like an animal show; people bring their best 'specimens' to be judged based on definite standards. Shows are broken into classes corresponding to variations in the plant species and age ranges. When the shows include historic varieties, like ADS has started to do in the past decade or so, the benefit is showcasing them to the public again. Also, to a subset of people, ribbons and awards are reason enough to grow bulbs, historic or modern. Therefore, when you create a category for historic varieties, people will increase production so they can showcase them. Increased numbers mean an increased likelihood of survival in the long-term. Shows also reintroduce old varieties to people who may have never heard of or seen them before. This promotion also increases the likelihood that more people will grow them and contribute to their preservation.

An examination of display gardens revealed many of the same benefits as flower shows. Display gardens in private and public gardens have the potential to reach a broader audience than society flower shows, which a proportionally smaller sector of the population attend. Greater numbers of people visit botanic and private gardens, which help to showcase historic bulbs to even more people. Because these gardens generally provide labels and cultivar information people can subsequently acquire them, assuming they are not too rare. The other direct benefit that these display gardens provide is growing and thus preserving many varieties of heirloom bulbs. The motivations behind why they do this may be completely personal, and independent of their association with the display program. Regardless, inclusion in the respective programs allows them to share their gardens with more interested people.

Whether directly or indirectly, specialty garden societies have assisted with preservation of historic bulbs. The individual bulb lovers accomplish the direct propagation and preservation of the bulbs, but these societies help to promote and connect members and the public. Their

collective work and programs help promote and influence the greater flower industry to see once forgotten bulb cultivars anew.

CHAPTER 5

PUBLIC GARDENS & HISTORIC LANDSCAPES

Thus far, various methods of preservation by individuals, nurseries, and societies, has been discussed. This chapter reviews several case study gardens emphasizing the efforts of gardeners, their collections, and work by subsequent people to preserve and restore those gardens. The first garden is located outside of the United States, and is the gene bank of spring-flowering bulbous plants. The remaining gardens and landscapes were chosen because they have significant collections of heirloom bulbs, to display a variation in ownership and management types, and diversity of sizes and designs. The second garden is a community memorial garden, which carries out their original mission today. The remaining gardens are private estates and gardens that had significant collections of bulbs, and have transitioned to public gardens today. These gardens reveal some new information about preserving original bulb material, and restoring gardens to a historic period. The preservation and restoration of these gardens illustrates many of the methods and groups discussed previously, and show how the various elements work collectively and simultaneously as a system.

Hortus Bulborum

The Hortus Bulborum is located in Limmen, in the province of North Holland, in The Netherlands. Although it is located outside the United States, which is the primary focus of this thesis, it is the only museum garden dedicated to old bulbs in the world. The Hortus Bulborum was started in 1928 when two men, Pieter Boschman and Dr. Willem Eduard de Mol, combined their collections of historic bulb varieties on a friend's donated land. ¹⁶³ In 1924, Pieter

¹⁶³ "About Hortus bulborum," Hortus Bulborum, (2010), accessed January 18, 2014, http://www.hortus-bulborum.nl/about-hortus-bulborum.

Boschman, headmaster and horticultural teacher at an elementary school, noticed that many bulb varieties were threatened by extinction. He started collecting historic bulbs and planted them in the garden around the schoolhouse and headmaster's house in Limmen. After only four years, the garden was full, with over 400 varieties of tulips and some daffodils. Boschman fortuitously meet Willem de Mol, who was a hyacinth hybridizer and also a collector of historic hyacinth varieties. The two became friends, and in 1928 the Hortus Bulborum was established when they combined their collections on a plot of nursery land offered to them by Boschman's friend, Nicolaas Blokker.

After fifty years of growth on the land donated to them, they moved the entire collection fifty miles to the village of Heiloo, with the rest of the Van 't Hof & Blokker nursery. In 1988, they were asked to participate in the Dutch Botanic Garden Collections Foundation (DBGCF), which seeks to gather "all the important botanical collections of The Netherlands." ¹⁶⁴ The Foundation's primary goals are conservation and improvement of "the living plant collections that are of scientific, cultural, historic and/or social importance, and safeguarding the biodiversity." ¹⁶⁵ This dual goal is interesting because it is similar to that of the national societies discussed in Chapter Four. Hortus Bulborum and DBGCF both seek to preserve existing plant varieties, but also advocate for their improvement. The historic varieties are not only seen as important for their connection to history and culture, but also for their potential to aid in species improvement. This motivation was identified in a 2005 article written by Mike Unser, HIPS member, referenced to previously. This rationale helps explain why Dr. Willem de Mol, who was a hyacinth hybridizer, also had a collection of historic varieties.

The mission and goals of the DBGCF are exemplified by Hortus Bulborum's two founders and the efforts of volunteers. In 1992, Hortus Bulborum moved back to the village of

¹⁶⁴ Ibid.

¹⁶⁵ Ibid.

Limmen, where Boschman started his collection. ¹⁶⁶ Today, their collection contains over 2,600 cultivars of tulips, around 1,100 daffodils, some 130 hyacinths, some 110 crocuses and a few dozen fritillaries. ¹⁶⁷ Many of these cultivars have no value to commercial growers (they're commercially extinct), and exist only in their collection. Even though they aid and support professional growers, their fundamental goal is preservation of heirloom bulbs. Their collection is perhaps the largest in the world; and they have been instrumental in not only preserving rare bulbs, but also reintroducing them to the United States. Kunst, the owner of Old House Gardens, offered three tulips from Hortus Bulborum in his company's 1997-1998 catalogue, and by 2004 they offered fifty additional 'extra-rare' tulips for sale. ¹⁶⁸ Today, the Hortus Bulborum is a major tourist attraction, and a premier patron of historic bulbs. Despite this, they remain a small operation, but with a worldwide influence.

Presby Memorial Iris Garden

Presby Memorial Iris Garden in Montclair, New Jersey is much like Hortus Bulborum, but focuses primarily on irises. Today, the garden has approximately 3,000 varieties totaling over 14,000 irises. The reason for its creation is different than Hortus Bulborum, but the result is one of the largest collections of iris in the United States. The garden was started as a memorial to Frank H. Presby, who was one of the founding members of the American Iris Society, and an iris hybridizer. Before his death in 1924, he intended to donate a collection of his irises to the new Mountainside Park in Montclair. He died before fulfilling this wish, but three years later, Katherine Inness, the first curator of the Montclair Art Museum, proposed a project to the

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¹⁶⁶ Ibid.

¹⁶⁷ Ibid.

Old House Gardens 1997-98, Old House Gardens, (Ann Arbor: Old House Gardens. 1997), https://www.oldhousegardens.com/display.aspx?photo=1997-98CatCover.jpg; and Old House Gardens- Heirloom Bulbs For Every Garden Fall 2004 & Spring 2005, Old House Gardens, (Ann Arbor: Old House Gardens, 2004), https://www.oldhousegardens.com/OurFirst20Years2.aspx.

¹⁶⁹ "Garden Information," Presby Memorial Iris Garden, (2014), accessed January 19, 2014, http://presbyirisgardens.org/wordpress/?page_id=348.

¹⁷⁰ "History of the Gardens," Presby Memorial Iris Garden, (2014), accessed January 19, 2014, http://presbyirisgardens.org/wordpress/?page_id=49.

Montclair government to create an iris garden in memory of Presby.¹⁷¹ Secondary goals included attracting visitors and providing opportunities to teach about iris care, history and hybridization. In 1927, due to the combined efforts of the Montclair Town Council, Parks Commission, the Garden Club of Montclair, and the American Iris Society, the Presby Memorial Iris Park and a Citizens Committee were created.¹⁷²



Figure 4: Presby Iris Memorial Garden¹⁷³

The first irises planted came from several hundred supporters that brought iris to the dedication meeting. Included in those first irises were some from Presby's own collection, donated by his children.¹⁷⁴ Others were donated from the American Iris Society, Kellogg Gardens, and international admirers from Great Britain, Germany, and Japan.¹⁷⁵ The Citizens Community, which incorporated in 1963, became responsible for managing the garden.¹⁷⁶ The

¹⁷¹ Ibid.

¹⁷² Ibid.

¹⁷³ Presby Memorial Iris Garden. "Garden Information." 2014. Accessed January 19, 2014. http://presbyirisgardens.org/wordpress/?page_id=348

¹⁷⁴ Ibid.

¹⁷⁵ Ibid.

¹⁷⁶ Ibid.

City supplied labor and materials, and the Garden Club donated money to acquire new iris each vear.¹⁷⁷

Today, the collection includes a full range of iris cultivars from the 1500s to the newest hybrids. They are an approved HIPS Display Garden, and work with them and private collectors to replace lost cultivars. Presby Memorial Iris Garden started as a public garden that "would act not only as place of remembrance, but would also draw in visitors and encourage educational projects such as teaching the care, history, and hybridization of iris." After eighty-five years of operation, it is a true iris museum that continues this original mission of education and preservation. It is significant to this study because it represents the collective efforts of many different people working together. This contrasts with many gardens that have large bulb collections, which are generally the result of one or two dedicated private gardeners with the means, connections, and expertise to acquire large numbers of bulbs.

Additionally, their focused efforts on one plant genera, the iris, has allowed them to obtain and preserve an incredible number of bulb cultivars that is often not possible even in large botanical gardens. Because botanical gardens focus on the macro-level, they often do not specialize in old and rare bulb species. This generalization is not representative of all botanical gardens certainly because their focus is often aligned with management, so when a decision maker is interested in bulbs, there is greater opportunity for bulb preservation. Personal interest and focus on particular plants (bulbs) are important factors that seem to increase the breadth of bulb preservation. This idea is displayed in the focused approaches of the Hortus Bulborum and Presby Memorial Iris Garden. This principle applies also to individual gardeners who can follow their personal interests. By using the resources detailed in the previous chapters, they can obtain and preserve both new and very rare historic bulbs. The rest of this chapter considers

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¹⁷⁷ Ibid.

¹⁷⁸ "Garden Information," Presby Memorial Iris Garden.

¹⁷⁹ "History of the Gardens," Presby Memorial Iris Garden.

several of these private gardens, and details how they have evolved, and work to preserve, and restore, their bulb collections.

Monticello & Thomas Jefferson Center for Historic Plants

One of the best-known historic gardens in the United States is Thomas Jefferson's Monticello, in Charlottesville, Virginia. Jefferson experimented with many plants at Monticello to advance his rural agrarian ideals. He also grew many bulbs imported from Europe and bought from early nurserymen like Bernard McMahon. 180 In his journal, Jefferson describes many of the bulb species planted, but does not provide names for the many varieties of each type. Some varieties are known because of letters from nurserymen or among family, which describe specific cultivars of tulip and hyacinth. 181 Unfortunately, few of these original bulbs survive, including the Tassel Hyacinth (Muscari comosum, syn. Leopoldia comosum), which has naturalized in many of the gardens. 182 After Jefferson's death in 1826, people came to Monticello seeking souvenirs and took bulbs among other plants. His granddaughter, Virginia Randolph Trist, wrote to her sister in 1827, "Mama's choicest flower roots have been carried off ... and everything and any thing that they fancied." 183 Whatever bulbs remained appear to be ravaged by time. However, the garden visitors see today is one filled with historic and heirloom plants. The gardens have been replanted based on historic records that detail plants Jefferson grew or received. 184 The Garden Club of Virginia restored the oval bed plan and winding flower walk between 1939 and 1941, based on sketches produced by Jefferson. 185 Additional site

¹⁸⁰ Peggy Cornett, "Thomas Jefferson's "Belles of the Day" at Monticello" *Twinleaf Journal Online*, (Charlottesville: Thomas Jefferson Center for Historic Plants, January 2001), accessed January 20, 2014, http://www.monticello.org/site/house-and-gardens/thomas-jeffersons-belles-day-monticello.

¹⁸¹ Ibid. Plant orders from Bernard MaMahon in 1806 and 1812 and a remembrance from Jefferson's granddaughter Ellen Randolph Coolidge after his death. Additional study and reference to Jefferson's personal journals limited due to availability of access and time.

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¹⁸³ Ibid.

¹⁸⁴ "The Flower Gardens at Monticello Today," Monticello, accessed January 20, 2014, http://www.monticello.org/site/house-and-gardens/flower-gardens-monticello-today. ¹⁸⁵ Ibid.

investigation also revealed original border layouts confirming documentary sketches.¹⁸⁶ Other plants are also used from the era of Jefferson's time. Much like a display garden, many of the plants have labels; however, they provide not only name but also whether Jefferson grew it and the date it was referenced, if known.¹⁸⁷

Many of the bulbs described by Jefferson are again in his garden, reintroduced based on his journals and various other written accounts. An accurate landscape restoration is often hard when historic records do not exist. Jefferson's importance assured that many of his personal records were saved. The gardens at Monticello were restored to recapture the design and feeling that Jefferson experienced when alive. This garden shows how bulbs are just one component in the larger designed landscape. At Monticello, the goal was not necessarily preservation of individual bulbs, but to preserve the original landscape design of which bulbs were a component. The indirect result is still preservation of heirloom bulbs.

Preservation of bulbs is not only confined to the gardens at Monticello. The Center for Historic Plants (CHP) also holds several historic plant collections at one of Jefferson's original satellite properties, Tufton Farms located near Monticello. Established in 1987, CHP focuses on Jefferson's plant interests, and "collects, preserves, and distributes historic plant varieties and strives to promote greater appreciation for the origins and evolution of garden plants." CHP has three collections of historic plants on the farm including dianthus, roses, and bearded iris. Of specific interest, is their collection of bearded iris. A list, last updated in 2010 on the Center's website lists over 60 bearded iris varieties and species. With exception of a few clumps of iris, in the gardens at Monticello and at Tufton, most are grown in designated raised beds. The collection was established in 1995 when Mike Lowe and Cameron Hall of Virginia donated many

¹⁸⁶ Ibid.

¹⁸⁷ Ibid.

 ^{188 &}quot;Thomas Jefferson Center for Historic Plants," Monticello, accessed January 20, 2014, http://www.monticello.org/site/house-and-gardens/thomas-jefferson-center-historic-plants.
 189 Ibid.

of the irises to CHP.¹⁹⁰ Their motivation is specifically in line with the Center's mission, to "preserve them, study them, enjoy their beauty, and make them available to like-minded gardeners and institutions."¹⁹¹

The Thomas Jefferson Center for Historic Plants is a unique model for several reasons. First, it is concerned with plants of interest to one individual, and those linked with gardening history of America throughout the nineteenth century. Second, its mission and purpose is to research and preserve only historic garden plants. This type of institution is different than any other discussed thus far. CHP is similar to Hortus Bulborum because they also have a predominant focus on preservation. The National Park Service's Olmsted Center for Landscape Preservation has a Historic Plant Preservation program with a similar mission. The Olmstead Center collaborates with the Arnold Arboretum of Harvard University and Historic New England to collect and propagate historic plant material for NPS historic sites and cultural landscapes. Their focus is on herbaceous plants more so than bulbous plants.

The importance of Thomas Jefferson prompted the restoration of his beloved Monticello and its gardens. The result was preservation of heirloom bulbs and the opportunity for millions of people to view and learn about them. They also provide a selection of them for sale at the welcome center and online, yet another method of preservation. Jefferson's legacy also inspired the creation of a unique institution with the express mission to identify, grow, and distribute historic plants with the ultimate goal of preservation. 193 Jefferson's Monticello is perhaps the archetype; but many other historic sites also seek to restore and preserve their living plant collections, each with slightly different motivations.

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¹⁹⁰ Ibid.

¹⁹¹ Ibid.

 [&]quot;Historic Plant Preservation," Olmsted Center for Landscape Preservation, (National Park Service, Department of the Interior), accessed January 20, 2014, http://www.nps.gov/oclp/hist_plant_pres.htm
 "Thomas Jefferson Center for Historic Plants," Monticello.

Cincinnati Nature Center: Krippendorf Estate

Another historic garden, placed on the National Register of Historic Places in 2011, is the estate of Carl and Mary Krippendorf in Perintown, Ohio. Krippendorf was heir to his father's shoe company Krippendorf-Dittman. He bought 97 acres of land in 1898 to save it from becoming tobacco fields near Perintown where he had spent summers. He built a house in the middle of the property where he lived with his wife for 64 years. During this time he filled the virgin stands of hardwood forest with tens of thousands of bulbs, and millions of daffodils. Many accounts tell of Carl giving daffodils and *Lycoris* to every visitor. His correspondence and bulb trading with Elizabeth Lawrence is made famous in two of her books *The Little Bulbs: A Tale of Two Gardens*, and *Lob's Wood*. In *The Little Bulbs*, Lawrence describes many of the bulbs that she and Krippendorf grew in both of their gardens.

The estate eventually grew to 175 acres, with an estimated 40 acres of planted daffodils and jonquils. 197 Krippendorf imported thousands of bulbs each year and planted as many as 15,000 annually. He introduced some 300 species of plants to the property, and 500 varieties of daffodils. 198 His goal was to have something blooming each month of the year, something Lawrence discusses in *The Little Bulbs*. 199 Krippendorf's financial means allowed him to achieve this on a truly grand scale. Following the death of Carl and Mary, in 1965, a group of twelve individuals headed by Stanley M. Rowe, Sr. bought the property from the Krippendorf's daughter with intentions to create a wooded preserve to teach children. 200 This vision resulted in the Cincinnati Nature Center (CNC), which opened to visitors in 1967 with the Krippendorf's shingle style house as the visitor's center.

Dennis Camp, Krippendorf Lodge: Lob's Wood, (Rowe Woods: Cincinnati Nature Photography Center, Copyright 2014), accessed January 20, 2014, http://krippendorf.rowewoods.org
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¹⁹⁶ Lawrence, *The Little Bulbs*; and Elizabeth Lawrence, *Lob's Wood* (Cincinnati: Cincinnati Nature Center, 1971).

¹⁹⁷ National Register of Historic Places, Krippendorf Estate, Perintown, Clermont, Ohio. 2011.

¹⁹⁸ Ihid

¹⁹⁹ Lawrence, *The Little Bulbs*, 25.

²⁰⁰ "About Us: History," Cincinnati Nature Center, (Legend Web Works, LLC, Copyright 2014), accessed January 20, 2014. http://www.cincynature.org/aboutus/history%2C_mission%2C_vision-2



Figure 5: 1910 View of Krippendorf Lodge with daffodils²⁰¹

Today the mission of the Cincinnati Nature Center is "to enrich lives by inspiring passion for nature through experience, education, and stewardship."²⁰² The Krippendorf's estate was first identified as a perfect site for a nature center because Carl saved the property from becoming agricultural land when he bought it. Krippendorf's addition of a botanical menagerie changed the landscape from a purely 'wild' or natural landscape, but did not significantly impact the original mature hardwood forest. His entire 175-acre estate has significantly been preserved including the house, structures, landscape features, designed landscapes, and a majority of the original plant material. CNC is not only concerned with stewardship of natural biodiversity and ecosystems, but also cultural stories from the past land owners.

The result of this consciousness means that many of the original plant species and cultivars Krippendorf planted survive to educate visitors today. In fact, Krippendorf's daffodils

²⁰¹ National Register of Historic Places, Krippendorf Estate, Perintown, Clermont, Ohio. 2011.

²⁰² "About Us: History," Cincinnati Nature Center, 2014. (Legend Web Works, LLC, Copyright 2014), accessed January 20, 2014. http://www.cincynature.org/aboutus/history%2C_mission%2C_vision-2.

make CNC famous, drawing second and third generation visitors each spring.²⁰³ The National Register of Historic Places nomination lists the Krippendorf Estate as significant for its association with Krippendorf, or architecture and landscape architecture.²⁰⁴ A study of existing plants compared to all known plant species historically introduced revealed that 69 percent remain, or 103 of the original 150 species. These numbers do not account for the hundreds of varieties of daffodils that were grown, but CNC has worked to identify the remaining varieties and procure select lost varieties. Additionally, a display plot of the various daffodil varieties were planted with proper labels allowing visitors to gain a better understanding of the plant and their use on the property.

CNC's motivation to preserve this landscape, and other historic sites on lands they own, can be attributed to their mission. CNC was created to prevent the Krippendorf's estate, then known as Lob's Wood, and the landscape from being broken apart by development. Additional estates and historic properties were acquired by CNC in an effort to prevent loss of important natural and cultural features. Another possible and undeniable reason for preserving the bulbs, and especially the daffodils, is public popularity. Even during Krippendorf's time his daffodils and other bulbs were big draws for people. Their local and regional popularity ensure annual spring visitors.

Lastly, it is possible that many of the historic bulb species and varieties survived because they naturalized, just as Krippendorf intended, and no one disturbed them. Indirectly, CNC aided because they sought to conserve the land and did not disturb the bulbs. This 'hands-off' approach allowed the hardy and perennial bulbs to continue and reproduce naturally. This was Krippendorf's intention and CNC has preserved his legacy. This was possible not because of unintentional efforts to protect them but, by intentional efforts to conserve the landscape, by not disturbing it. CNC has aided in the preservation of millions of plants and bulbs simply by

²⁰³ National Register of Historic Places, Krippendorf Estate, 2011.

²⁰⁴ Ibid.

their acquisition of the property, which prevented it from further development. Now that the original Krippendorf Estate is listed on the National Register of Historic Places it has national recognition and opportunities for funding and assistance for future preservation projects.

Wing Haven: Elizabeth Lawrence House & Garden

The scale of Krippendorf's estate is much larger than the suburban garden of Elizabeth Lawrence, in Charlotte, North Carolina. Lawrence purchased a modest .362-acre residential lot in 1948.²⁰⁵ She built a house and laid out the garden in 1949, the year after her first major work, *A Southern Garden*, was published.²⁰⁶ She used the garden as a laboratory until 1984, when she moved to Annapolis, Maryland. The plants she grew in her garden form the basis of her two other classic garden works, *The Little Bulbs: A Tale of Two Gardens* and *Gardens in Winter*.²⁰⁷ Additionally, she wrote hundreds of weekly columns in the *Charlotte Observer* from 1957 to 1981, and many articles for various horticultural magazines while there.²⁰⁸ The garden was where she studied, and experimented with, plants and various varieties. Similar to Krippendorf, she sought to find plants and varieties that would grow in her garden, located in the middle south. In *The Little Bulbs*, she describes many bulb varieties that failed and provides possible explanations. Her goal was not to collect and preserve every old or rare bulb like Hortus Bulborum, but to find those that would thrive and grow in her climatic zone. This living laboratory theme continued with the garden's patrons after Lawrence sold the property in 1984.

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²⁰⁵ "Elizabeth Lawrence House & Garden," Wing Haven, accessed January 25, 2014, http://www.winghavengardens.com/GardensHistory.asp

²⁰⁶ Elizabeth Lawrence, A Southern Garden (Chapel Hill: The University of North Carolina Press, 1991).

²⁰⁷ Elizabeth Lawrence, *The Little Bulbs: A Tale of Two Gardens* (Durham: Duke University Press, 1986); and Elizabeth Lawrence, *Gardens in Winter* (Baton Rouge: Claitor's Law Books and Publishing, 1973).

²⁰⁸ "Survey and Research Project On The Elizabeth Lawrence House and Garden," Charlotte-Mechlenburg Historic Landmark Commission, accessed January 25, 2014, http://www.cmhpf.org/S&Rs%20Alphabetical%20Order/surveys&rlawrencegarden.htm

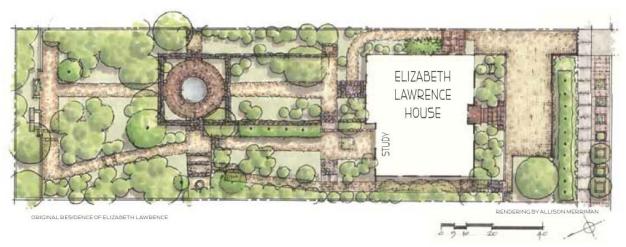


Figure 6: Plan of Elizabeth Lawrence's Garden²⁰⁹

James B. Sommers bought the property in 1984 and made no major changes to the house or garden.²¹⁰ The garden suffered from neglected maintenance and overgrown plants from the final few years that Lawrence lived there, and from Sommers ownership.²¹¹ Sommers sold the property to Mary Lindeman "Lindie" Wilson in 1986, who became the next long-term patron. Wilson, a knowledgeable and lifelong gardener, set out to reclaim the garden from overgrown, unwanted, and invasive plants.²¹² Hardscape features were repaired based on Lawrence's plans. Wilson also obtained the help of Steve del Vecchio, who worked in the garden for Lawrence.²¹³ del Vecchio's knowledge of the garden and its plants aided Wilson in her effort to maintain and preserve the garden. Wilson also turned to Lawrence's books and weekly columns to understand her garden theory, and plants that she successfully grew. Using this knowledge, Wilson was able to make sensitive plant reintroductions.²¹⁴

Wilson's motivation for purchasing and preserving Lawrence's legacy is not known, but her diligent and respectful work seem to stem from her personal interest in gardening. Her

²⁰⁹ "Elizabeth Lawrence House & Garden," Wing Haven, accessed January 25, 2014.

²¹⁰ "Survey and Research Project On The Elizabeth Lawrence House and Garden," Charlotte-Mechlenburg Historic Landmark Commission, accessed January 25, 2014.

²¹¹ Ibid.

²¹² National Register of Historic Places, Elizabeth Lawrence House & Gardens, Charlotte, Mecklenburg County, North Carolina, 2006, section 7, 10.

²¹³ Ibid.

²¹⁴ Ibid.

efforts also suggest that she realized the importance and connection of the physical garden to Lawrence's garden literature. The publication of Two Gardeners: A Friendship in Letters in 2002 rekindled an interest in Lawrence, and her contribution to horticultural literature.²¹⁵ Emily Herring Wilson published an autobiography of Lawrence's life titled No One Gardens Alone: A Life of Elizabeth Lawrence in 2004.216 In the same year, The Friends of Elizabeth Lawrence was created in an effort to acquire and preserve the house and garden. Wilson worked with The Garden Conservancy to plan for the property's preservation, and in 2006 it was listed on the National Register of Historic Places.²¹⁷ In 2008, Wilson sold the property to the Wing Haven Foundation, and The Garden Conservancy placed a conservation easement on the property.²¹⁸ The Wing Haven Foundation operates the Elizabeth Lawrence House and Garden and the Wing Haven Garden and Bird Sanctuary, which are adjoining properties. Wing Haven worked with The Garden Conservancy to develop a maintenance plan and they made major repairs on the house and garden hardscape. Today, the gardens are open to the public and serve as a living and working landscape, just as they were in Lawrence's time. "The House and Garden are being rehabilitated as the personal, intimate expression of Elizabeth Lawrence, with focus placed on the integrated design of her house and garden."219

Heirloom bulbs started by Elizabeth Lawrence, continued by Lindie Wilson and later Wing Haven, have ensured their preservation. Additional lessons can also be revealed from this garden's history. One of these lessons is that private individuals can preserve the integrity of a garden, and by extension the plant materials. Allen Lacy wrote, "Time is not always kind to the gardens that passionate gardeners bring into being and lovingly tend" in the introduction of the

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²¹⁵ "Survey and Research Project On The Elizabeth Lawrence House and Garden," Charlotte-Mechlenburg Historic Landmark Commission.

²¹⁶ Emily Herring Wilson, *No One Gardens Alone: A Life of Elizabeth Lawrence* (Boston: Beacon Press, 2004).

²¹⁷ National Register of Historic Places, Elizabeth Lawrence House & Gardens, Charlotte, Mecklenburg County, North Carolina, 2006.

²¹⁸ "Preservation Project Gardens: Elizabeth Lawrence Garden," The Garden Conservancy, accessed January 25, 2014, https://www.gardenconservancy.org/

²¹⁹ "Elizabeth Lawrence House & Garden," Wing Haven.

1986 reprint of *The Little Bulbs*, portending an uncertain future for Lawrence's garden.²²⁰ Nevertheless, Lindie Wilson served as a faithful steward from 1986 to 2008. Her efforts are the epitome of intelligent preservation, not often seen outside of federally managed and protected sites.

Wilson's treatment of the garden follows many of the NPS standards for treatment of Cultural Landscapes. For example, her first efforts were to identify, and then maintain and repair the main design elements in the garden. Because of Lawrence's unique connection between her garden and writings, Wilson was able to consult a plethora of primary sources regarding plant species and cultivars used in the garden. This case is especially unique because so much written information was available, but none-the-less serves as an example of responsible treatment and preservation of a garden. With Elizabeth Lawrence's garden, the focus is not necessarily on bulbs, but instead on all of the plants, the original design, and their connection to her as a person and garden writer. However, bulbs were an important element of her design, so they play prominent roles in her garden laboratory. The continuation of Elizabeth Lawrence's garden legacy cannot be attributed to one individual, but instead to a network of dedicated people including Lindie Wilson, The Friends of Elizabeth Lawrence, The Garden Conservancy, and Wing Haven.

Montrose

Another garden using the resources of The Garden Conservancy, but as a method for future planning, is Montrose. Montrose is a sixty-one acre estate in Hillsborough, North Carolina, which was once home to William Alexander and Susan Graham.²²¹ Graham was a North Carolina senator, governor and secretary of the Navy. The first gardens are attributed to landscape architect Thomas Paxton, who was a gardener at the University of North Carolina,

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²²⁰ Lawrence, The Little Bulbs, xii-xiii.

Anne Raver, "A Life's Profusion of Blooms," *The New York Times,* March 7, 2012, accessed January 26, 2014, http://www.nytimes.com/2012/03/08/garden/nancy-goodwins-montrose-garden-blooms-in-a-mild-winter.html?pagewanted=all&_r=1&

between 1852-1853.²²² Three generations of Graham's lived on the property until selling to Nancy and Craufurd Goodwin in 1977.²²³ Under the stewardship of Nancy Goodwin, the gardens were resurrected, respected, yet reinvigorated with new plants and designed features. In Goodwin's 2005 book *Montrose*, she explains of her family's gardening tradition, "[i]f you had land, you had a garden."224 After outgrowing their garden in Durham, they looked for a larger garden with the perfect soil and site to start a "final garden." 225 Goodwin describes Montrose as a dream that was not for sale, but a decade later they were able to purchase Montrose and moved in the summer of 1977.²²⁶

Montrose was already an old and established garden in 1977. Goodwin spent the first year exploring and identifying the many ephemeral plants, of which many were heirloom bulbs. She also brought her own favorite plants and bulbs from family and gardens past. After accessing the current garden, she started to add and build upon the existing land, with a wish to "grow as many different plants" as she could, including "all the little bulbs, the winter-flowering crocuses, and every species of cyclamen."227 She was unable to find the rare plants she was looking for in catalogues, so she started buying seed, growing them and soon had plants producing their own seeds in a few years.

Goodwin started Montrose Nursery in 1984, thinking it would be "the perfect excuse to spend more time in the garden."228 As the nursery grew, she quit teaching piano, worked full time and hired staff to help her with the business. After ten years, she closed the business so she could once again return her interest to the garden.²²⁹ Since then she has collected seeds and propagates tens of thousands of cyclamen, snowdrops, hellebores, and many other little

²²² National Register of Historic Places, Montrose, Hillsborough, Orange County, North Carolina, 2001, section 7.4.

²²³ Nancy Goodwin, *Montrose: life in a garden* (Durham: Duke University Press, 2005), 5.

²²⁴ Ibid., 2.

²²⁵ Ibid.

²²⁶ Ibid.

²²⁷ Ibid., 7.

²²⁸ Ibid.

²²⁹ Ibid.

bulbs. Her efforts have respected the original landscape and its plants, moving a plant if necessary, but adding her own vision. Elizabeth Lawrence's vision of her garden as a changing and dynamic landscape, applies to Montrose and most other private gardens. This is especially true with historic gardens; with each new owner elements are added and changed. This is an important concept to consider because it does not necessarily mean old plants are destroyed in favor of new, just that they are places of evolution. At Montrose, Goodwin had an appreciation of the site's history and plants. She chose to preserve the heirloom daffodils in the woodland, and the unknown rhizome she found which turned out to be a ginger lily. ²³⁰ Goodwin saved the ginger lily, planted it in a new spot, and it has survived with a little additional mulching of juniper branches. In addition to simply saving bulbs, she worked to increase the numbers of some. After discovering a clump of *Narcissus moschatus*, she divided it over many years creating a few drifts. ²³¹



Figure 7: Woodland Path with Naturalized Drifts of Snowdrops at Montrose²³²

²³⁰ Ibid., 209.

²³¹ Ibid.

²³² Jeremy M. Lange for The New York Times

Montrose today is a synthesis of the original owners, the Grahams, and Goodwin. Goodwin has been respectful and a proactive steward of the property, by utilizing many of the same resources that have been discussed previously. In 2001, Montrose was listed on the National Register of Historic Places, and a conservation easement was placed on 50 acres with Triangle Land Conservancy.²³³ In 2003, The Garden Conservancy designated Montrose a Preservation Project. They have worked with the Goodwin's to plan how to convert the property into a public garden, and the house into an art museum. In *Montrose*, Goodwin discusses the importance of planning for the garden's care, realizing that they cannot tend to it indefinitely. Goodwin describes the struggle of planning for future management because they want to retain "absolute control over the direction of the garden as long as possible," but she sees "the Garden Conservancy as an oversight organization to help ensure that [their] vision is realized."²³⁴ They have proactively worked to determine financial requirements and expenses of opening a museum, and discussed options to create a non-profit organization and advisory board. The work of The Garden Conservancy is again worth mentioning, their efforts ensure that Montrose is preserved when its current patrons can no longer tend to it.

Analysis

In this chapter, six gardens were introduced that were each started and maintained for various reasons. They each have preserved heirloom bulbs in some form. At Hortus Bulborum, preservation of threatened historic bulbs was the mission of its two founders. Their mission is still carried out even after having moved the entire collection several times to different sites. Even though they are outside of the United States, they have worked with American growers like Scott Kunst, owner of Old House Gardens, to reintroduce commercially extinct bulbs back into this country. Another interesting motivation, and secondary mission, of the garden is to

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²³³ National Register of Historic Places, Montrose, Hillsborough, Orange County, North Carolina, 2001; and "Preservation Project Gardens: Montrose," The Garden Conservancy, accessed January 26, 2014, https://www.gardenconservancy.org/

²³⁴ Goodwin, *Montrose*, 207.

preserve old bulbs for their potential to improve and create new cultivars. This explains why a hybridizer may preserve historic varieties, to use a parent stock to create new cultivars.

Preservation of bulbs can also be the result of a memorialization of an individual. The Presby Memorial Iris Garden was created as a memorial to Frank Presby, who was an avid iris collector and hybridizer. Started in his honor and with intentions to teach the public about all things concerning iris, the garden has grown to include one of the largest collections of historic irises in the country, preserving thousands of varieties. Its continuation over seventy-five years is due to a collaboration of committed individuals, support from local garden club members, and the local city government.

The association of a place with an important individual can also serve as motivation to preserve the garden, and restore it based on archival evidence. Thomas Jefferson's Monticello, and Elizabeth Lawrence's garden, were both preserved and restored, each to varying degrees. In both cases, original designs were preserved or restored, and then known plant varieties were replaced based on written materials describing the gardens. In both cases, bulbs were preserved, but the major motivation was to preserve the overall design implemented by the designer. These two gardens are unique because they had more written material than is generally available, for most gardens. Jefferson's 'Founding Father' status ensured many of his writings were preserved, and Elizabeth Lawrence published her writings in a series of books, columns and magazines.

The Krippendorf Estate, another private garden, was preserved by a conservation-based organization, the Cincinnati Nature Center. CNC, realizing the importance not just of natural landscapes but also of culturally manipulated ones, preserves Krippendorf's house, landscape and plants. Fulfilling Krippendorf's goal, the bulbs have been allowed to grow and reproduce without intensive care. In the process, they have become an important and famous part of many local's spring season.

The last garden discussed, Montrose, reveals how a historic garden with heirloom bulbs can be preserved while simultaneously growing and evolving. It represents how most gardens work, since they often last decades or hundreds of years; each new person is a steward, passing it along to the next. The result is not always preservation, but Montrose is an example of how the existing landscape can be respected whilst evolving and representing the vision of the current owner. Montrose and the Elizabeth Lawrence Garden also show the important role that The Garden Conservancy has or will play in their preservation. Ultimately, it is the collective efforts of individuals and groups that have continued and ensured the preservation of their respective plant collections and garden designs. Without a doubt each was partially motivated by a shared love of gardening and plants.

CHAPTER 6

ANALYSIS

Chapters Two through Five have detailed various methods of preserving bulbs based on common approaches, and possible motivations were provided to answer the main thesis question. This chapter analyzes the motivations presented in the previous chapters to provide a comprehensive and synthesized set of answers as to why heirloom bulbs are preserved. Additionally, this chapter will show how motivations have resulted in preservation and their relevance to the theory and practice of historic preservation.

Gardening for Love

'Gardening for love' is the reason Elizabeth Lawrence provides for those who use the market bulletins to exchange plants. A love of gardening and plants is perhaps more broadly applicable, and possibly the one motivator that is shared, among every person mentioned or involved with an organization discussed. This common interest in plants is the foundational motivation that drives people to garden, buy, sell, trade, create organizations, visit gardens, and connect with others with the same interest in plants. A love for plants drove immigrants to bring plants with them to the continent, and trading of plants among friends. It also encouraged the importation of bulbs from abroad, the creation of Prince Nursery in 1750 and every nursery thereafter, and the organization of social plant societies. However, this basic motivation does not always drive people to preserve heirloom bulbous plants. Generally, a love for plants is only a basic motivation that drives people to involve themselves with some facet of gardening.

A love of plants and gardening, as a sole motivator, can still be argued though. Elizabeth Lawrence was perhaps the first to identify the market bulletins as a resource that preserved heirloom plants. The bulletins facilitated bulb trading and selling among people from all over the

South, who connected over the common interest of plants. Many of these plants were heirloom bulbs, resulting in preservation. This same principle is also applicable to other forms of trading of bulbs among friends, via organized plant swaps and Internet garden forum websites. A possible reason for trading or selling plants using these methods is simply because people love, and wish to obtain, different plants. Buying bulbs from nurseries may be motivated by a similar love or interest in bulbs. A review of nurseries revealed that many have historically carried a mixture of heirloom and newer bulb varieties. The motivations of the various nurseries are not relevant to this point, but they have none-the-less provided heirloom bulbs to interested consumers who purchased and nurtured them, thus aiding in their continuance.

<u>Sentimentality</u>

Beyond a general love of plants and gardening, sentimentality drives many to preserve heirloom bulbs. Sentimental is defined, by Merriam-Webster, as "based on, showing, or resulting from feelings or emotions rather than reason or thought." This definition reveals the true impetus suggested by the term sentimental. Sentimentally driven preservation of bulbs is the result of associated emotional memories or feelings. These human imposed emotions on physical objects drive people to preserve and pass them from generation to generation, as 'family heirlooms.' Bulbous plants are ideal heirlooms because they are generally easy to divide and move over great distances. Because of this fact, there are greater chances for bulbs to be preserved due to emotionally imposed associations to people, memories, and events.

Bulbs brought by the first colonists to the continent served as connection to their past lives and family. In Chapter Two, a story from Elizabeth Lawrence's book *A Southern Garden* revealed that her friend from the garden club, Mrs. Calvert, grew a rare iris that moved with her family and passed to her through three generations.²³⁶ The motivation to take the iris as the family moved, and bequeath it to subsequent generations suggests a strong emotional

²³⁵ "Sentimental," Merriam-Webster.com, accessed February 22, 2014, http://www.merriam-webster.com/dictionary/sentimental.

²³⁶ Lawrence, A Southern Garden, 34.

connection. In *Passalong Plants*, authors Steve Bender and Felding Rushing support the notion that memories drive people to grow heirloom or 'passalong' plants over newer, 'improved' varieties.²³⁷

Sentimentality as a motivation to preserve bulbs is not exclusive to trading among friends and family. It may be argued that the restoration of Monticello's gardens is partially due to nostalgic or sentimental notions about Jefferson. The restoration of the gardens attempts to allow people of the present to experience it as Jefferson did. There are many reasons to preserve places associated with important people; at Monticello one reason is driven by a desire to experience the past because of an idealized conception of Jefferson, as well as the past. Wanting to experience and connect with the past is a unique condition of the human psyche, which is irrational and probably impractical. Arguing the possibility of recreating the past aside, many historic gardens, like Monticello, preserve heirloom bulbs.

Sentimental feelings about history and historic landscapes can drive people to buy historic properties and consequently preserve its various historic fabrics. Although no evidence was found confirming that Lindie Wilson bought Elizabeth Lawrence's house and garden for these reasons, her efforts to sensitively alter the house and restore the gardens suggests she understood and appreciated them as an important cultural landscape. Perhaps Wilson bought the property for its location and beauty, but why then did she research and restore the gardens based on historic records? Her actions suggest she had an appreciation of history and preservation theory, and many heirloom bulbs were preserved as a result. Similarly, Nancy and Craufurd Goodwin's purchase of Montrose in Hillsborough, North Carolina was the fulfillment of a lifelong curiosity that Nancy had with the property, since driving past the walled property as a child.²³⁸ After seeing the house, other buildings, and mature landscape they knew they had to

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²³⁷ Bender, *Passalong Plants*, 3.

²³⁸ Goodwin, *Montrose*, 1.

have the property that was not for sale.²³⁹ A shared past relative convinced the owner to sell, and then the Goodwins' worked to create a garden of their own, yet respected and preserved the historic structures and plant materials.²⁴⁰ Sentimental conceptions of the past motivate some to buy historic properties, who then work to preserve or recreate a vision they associate with the past. The reasoning for doing this may be associated with a person, event, or general interest in history. The result is preservation of heirloom bulbs.

Profit

Companies and nurseries have supplied the demand of people who want plants since European colonization of the North American continent. These profit-driven companies have aided in the continuation and preservation of heirloom bulbs in different ways over time. Nursery catalogues of the late-nineteenth century and early-twentieth century included both new and old bulb varieties. Some started using newness and supposed 'improved' flowering and growth habit to market bulbs. Simultaneously, rareness and 'oldness' were used to describe select bulbs. This is an interesting practice because it was an intentional marketing strategy that used age to favor both old and new varieties. Profit is clearly the main motivation behind this dichotomous marketing strategy, not preservation. Popularity and garden taste determined which varieties were sold each year. Some heirloom bulbs achieved a great enough popularity and persisted for many decades. However, time eventually consumed or replaced even the most popular. One example is Narcissus 'King Alfred,' introduced in 1899, that was completely replaced by an improved hybrid, advertised as a King Alfred type, by the 1950s.²⁴¹ The motivation of these nurseries is to sell bulbs, not necessarily to preserve them. Regardless, for a select number of popular historic varieties the result of the nurseries' practice is continuation, if not preservation.

²³⁹ Ibid., 4.

²⁴¹ "Heirloom Daffodil Bulbs: King Alfred," Old House Gardens.

The practice of offering and advertising both the newest bulb introductions and heirloom varieties continues today with companies including Van Engelen, Inc., McClure & Zimmerman, de Jager Flower Bulbs, and others. This combined approach seems to be an attempt to offer something for everyone, realizing that there is a market for heirloom and historic bulbs. They are not only preserving heirloom bulbs, but also distributing them across the country increasing their chances for long-term survival. Additionally, they are providing and using history to market them. Old House Gardens and Southern Bulb Company are both 'for profit' businesses, which seek to make a profit, but perhaps more to support their efforts to fulfill their company missions, than to get rich. Other than the physical preservation of bulbs, this does not necessarily have any application for a preservationist except that they can be useful resources for plants, information, and a model for how to use history to market plants. Regardless, profit as a motivator still plays a role in distributing and contributing to the continuation of heirloom bulbs.

Education

Educating people about plants, gardening, and specifically heirloom bulbs is another motivation that contributes to the preservation of heirloom bulbs. Education, or dissemination of information about heirloom bulbs, is a part of the mission of many of the organizations discussed, and is accomplished in a myriad of ways.

One method is to provide information about individual heirloom bulbs and connect them with a broader social context. This is accomplished via Internet websites, such as GardenWeb.com, and digital databases. Old House Gardens provides brief information about each bulb they sell on their website. Additionally, they provide links to other resources pertinent to heirloom bulbs. Their hope is that this will increase the appreciation of bulbs, and the likelihood that customers will properly care for them once planted. Chris Wiesinger, owner of The Southern Bulb Company, provides similar information about the Deep South bulbs he sells. Additionally, in *Heirloom Bulbs for Today*, Wiesinger describes how he obtained them, and

connects each within the social history and context of Texas, and the broader south.²⁴² His strategy is to reintroduce bulbs that many would consider common, by showcasing how they are connected to culture and place. This is important because often it is hard for people to appreciate something they have seen their entire lives and consider common. However, history and context can help to change that perception. This is applicable to not just flowers, but to all historic resources.

Another Internet-based resource used to provide information about heirloom bulbs are databases that contain official identification information about registered plant cultivars. The national societies discussed in Chapter Four create, or provide access, to these databases. The primary purpose of these databases is to provide information that allows people to identify, verify, and learn about specific bulb cultivars.

Promoting and educating people about heirloom bulbs is also accomplished by providing public access to collections of live and flowering plants. This preserves heirloom bulbs, but also help to introduce them to more people, with the intention that people may learn about and cultivate them. To accomplish this, the plants must be properly identified. Display garden programs, created by national plant societies, utilize this method by partnering with independent gardens to promote and educate people about their respective plant genera, which include historic varieties. The display garden programs differ in their rules, but all require bulb varieties to be labeled with information including: name, hybridizer, date of introduction, registration identification, etc. While this information is rather scientific, and generally does not include any historic context, the benefit is that it reintroduces the public to unknown heirloom bulbs, and preserves many in the process. In addition to display gardens, some of the national societies have also added sections to their flower exhibits and shows, for historic varieties. This is yet

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²⁴² Chris Wiesinger and Cherie Foster Colburn, *Heirloom Bulbs for Today* (Houston: Bright Sky Press, 2010).

another method in which heirloom bulbs are reintroduced to people that may have never seen them, and encourages others to grow them.

Many public gardens also seek to educate people about bulbs by providing opportunities for the public to view bulbs in bloom with corresponding information. Presby Memorial Iris Garden is a display garden with the Historic Iris Preservation Society, but they also seek to teach the public about iris history, hybridization, and use through a collection of historic iris that range from the 1500s to present day. Other gardens, such as Monticello, display labels with dates of introduction, and indicate whether Jefferson actually grew them. By doing this, they are relying on the importance of Jefferson to promote heirloom plants and bulbs. The Cincinnati Nature Center has collected many daffodil varieties found in the woodlands of the original Krippendorf Estate, into a small garden, and provided information about each. The collection of daffodil cultivars allows visitors to see them up close with associated names, and CNC has an opportunity to tell about how they were used in the landscape. The benefit of these gardens are two-fold, they preserve heirloom bulbs, but also promote them to the public, who are then armed with the necessary information to obtain them.

Preservation for Modern Use

Purposeful preservation of heirloom bulbs for current use is another common motivation observed. This is an important discovery that is rational since plants are objects of purpose that are to be grown and enjoyed. However, the intention of those who are preserving bulbs is not just to be planted and enjoyed. Plant hybridizers, nurseries, plant societies, and public gardens share another major intention. They see heirloom bulbs as resources for genetic material that can be used to 'create' new varieties.

Nurseries and public gardens see heirloom bulbs for their usefulness in todays garden.

Nurseries preserve heirloom bulbs by growing them for gardeners to grow, which contributes to additional preservation, from more people growing them. This is the mission or motivation of Old House Gardens, The Southern Bulb Company, and others that offer heirloom bulbs. They seek

to preserve heirloom bulbs, but with the mindset that they have a modern purpose. This is a significant consideration because heirloom bulbs can simultaneously be preserved and useful.

Public gardens also preserve heirloom bulbs to show how they have been used historically, which is applicable today. This motivation overlaps with the educational missions discussed previously. For instance, daffodils planted by Krippendorf at the Cincinnati Nature Center are left to naturalize in their woodland setting just as they were originally planted to show park visitors how to naturalize drifts of various daffodils together. The many varieties are combined and labeled in a small garden so people can properly identify them. Elizabeth Lawrence's garden at Wing Haven is interpreted as a 'living laboratory,' just as Lawrence used it. The garden design and original plant materials are preserved to show visitors how they were used, while the garden also teaches how it is an evolving landscape, which cannot grow every plant because of climatic and conditional restrictions. Showing proper use and acknowledging limitations are both important lessons for visitors to learn. These gardens are just two examples of how heirloom bulbs are simultaneously preserved and used to promote their use in gardens today.

Others also see heirloom bulbs as a resource to improve and create new varieties. This reasoning has contributed to the preservation of many heirloom bulbs. Hortus Bulborum's main mission is to preserve heirloom bulbs, but they also see one benefit to preserving them for their usefulness to hybridizers, to create new and improved plants. This idea also explains one motivation national plant societies have to promote the preservation of historic cultivars. The 'specialty plant' national societies exist to promote and improve their respective species of plants. This concept is interesting because advancement and improvement actually encourages preservation of old and antiquated bulbs. This motivation also extends to private gardeners, and hybridizer who collect old varieties to use as parent stock for new cultivars.

Modern or future uses can be a motivator for many to preserve heirloom bulbs, whether to use in a garden or provide genetic material for new varieties. Both result in preservation of

many bulbs, but using gardeners to preserve them ensures a greater chance for their long-term preservation. While a few gardens seek to preserve thousands of heirloom bulbs, such as Hortus Bulborum, most are preserved in individual gardens, and this is the purpose of cultivated flowers, to be grown and enjoyed by people.

Regionalism

Even though most bulbs grown in the United States, in the past and today, are nonnative, they have adapted to the varying climates of the United States. Bulbous plants are living
organisms that can only live in certain climatic zones due to heat, cold, and weather. As a result,
starting at least by the 1840's, Southerners were citing this reason as a rationale to create
southern nurseries to grow plants better suited to the conditions of the South. A concern for
plants that are regionally grown and suited to a particular place, presents itself as a motivation
and consideration for some to preserve heirloom bulbs.

Nurseries have responded to this sentiment, by growing plants domestically and marketing their plants purposefully as hardier and better than imported stock. This trend is significant because many heirloom bulbs are plants that have survived for decades because they are hardy, and/or easily propagated. Not all heirloom bulbs are hardy and easily grown, but many naturalize and reproduce freely via sexual reproduction and vegetative cloning. For this reason, heirloom bulbs are often touted by those concerned with hardiness and regionally suited plants.

This has translated to preservation of heirloom bulbs by plant nurseries that seek to provide bulbs grown domestically or regionally, which are better able to survive when bought, and planted, by customers. Southern Bulb Company and Old House Gardens are two niche nurseries that take credence in this belief. However, most commercial bulb nurseries do not practice this ideal, and they import a majority of their bulbs from The Netherlands. There the bulbs are grown en mass and cheaply, but in completely foreign climatic conditions. However, many heirloom bulbs cannot be commercially 'reintroduced' without the assistance of Dutch

bulb growers because only they have the technology and skill to grow them in large enough quantities necessary to fulfill national demand, year after year. This duality between niche grower and the Dutch bulb 'factories' is the reality of today's bulb industry. Each plays a role in the preservation of heirloom bulbs today and historically. Regionalist niche bulb growers can perhaps provide better plant stock, but as their companies grow and demand increases, they risk not being able to supply that demand.

The impetus and implementation of nurseries that are concerned with hardy plants grown domestically vary. Owner, Chris Wiesinger started the Southern Bulb Company to find bulbs that would grow in the Deep South. Certainly, many exist, but mainstream commercial suppliers sell few. Wiesinger found bulbs that had naturalized in the Deep South, mostly heirloom bulbs that had been planted and forgotten. After acquiring them, they were taken to the company's farm in Mineola, Texas to cultivate more for sale. Another nursery is Old House Gardens, who, despite their northern climate in Ann Arbor, Michigan, work to preserve heirloom bulbs suited to all climatic zones. They accomplish this by working with farmers all across the country, so bulbs that will only grow in warmer climates are grown in compatible places. While both of these companies work with international bulb growers, and provide imported bulbs, they predominantly offer bulbs that are grown domestically.

A concern over regionally adapted plants has also extended to gardeners. Carl Krippendorf and Elizabeth Lawrence each sought plants that were adapted to their respective locations, and subsequent preservation recognizes this fact. With Krippendorf, he sought out plants that were hardy, and would perennialize or naturalize. This design goal resulted in the planting of hundreds of species, of which many were heirloom. This connection between 'naturalized' and heirloom is important. Hardy bulbs that are well suited to an area perennialize; thereby, preserving themselves for generations, so long as they are not disturbed. Because of this fact bulbs that easily naturalize often are heirlooms, or eventually obtain such status with

enough time. This somewhat obvious connection explains in part why Krippendorf's estate is an important landscape where heirloom bulbs have been preserved.

Elizabeth Lawrence also sought out bulbs, and other plants, that would survive in her North Carolina garden. In her writings, she describes many that were not suited to the climate or specific locations in which they were planted. However, many hardy plants did survive, in part, due to efforts of knowledgeable stewards after her. As described previously, Lawrence's purpose for the garden was as a living laboratory, testing plants for their compatibility to the location, and this motivation has carried forth to the interpretation and preservation of todays garden.

<u>Importance of Specific Cultural Landscapes</u>

Bulbs are just one component of a landscape. Bulbs are used with trees, shrubs, herbaceous perennials, and annuals which are set in a larger built environment. For this reason, preservation of bulbs can hardly be separated from preservation of the other plants and features, in a particular landscape. The importance of cultural landscapes, which possess or once had heirloom bulbs, often contributes to the preservation of bulbs. Whether vernacularly or formally designed, the overall scheme, and connection to people and events in history is often the motivation to preserve a landscape. The discussion of Monticello, Krippendorf's estate, and Elizabeth Lawrence's garden revealed how different motivations promoted their preservation, but all were concerned with the overall design scheme. At each garden, bulbs were an important part of the landscape, and the result was preservation of extant plant material and replacement of known historic bulbs. These are just three cases where important landscapes have preserved bulbs because they were integral to the understanding of the landscape.

The 'Sum is Greater than the Parts'

The seven motivations discussed in this chapter represent trends of the various people and organizations that have contributed to the preservation of heirloom bulbs. These seven motivational themes are not independent of each other. Many of the people, organizations, and

gardens are discussed in multiple motivational themes. The 'true' motivation to preserve heirloom bulbs is multi-faceted, and is comprised of an aggregate of the seven themes presented, and others as well.

CHAPTER 7

CONCLUSION

Why do people preserve heirloom bulbs, and how have individuals and groups achieved this goal in the United States since the late-nineteenth century? The results of the research discovered seven possible trends to answer why people have preserved heirloom bulbs: a love of gardening, sentimentality, profit, education, modern use, regionalism, and the importance of cultural landscapes. A general love of gardening and plants is perhaps the most important because it drives people to grow and deal with heirloom bulbs in any number of capacities. This motivation includes many of the intangible aspects that make certain people fascinated with plants, whereas some people have little interest in plants. This somewhat unquantifiable interest in plants, the need to connect with nature, and the joy of watching something grow and flower from nothing, are all included in this over-arching motivation. It is from this basic motivation that the other six motivations originate.

The second identified reason why people preserve bulbs is due to sentimental associations with past memories and experiences. Heirloom bulb's unique characteristics, ease of propagation, and transportation allow them to be vessels to store and remind people of the past. Almost opposite to sentimentality, the quest for profit is a motivation that has dispersed and aided in the continuation of heirloom bulbs since the mid-eighteenth century. Educating people and providing information about all bulbs, specifically heirloom bulbs, has physically preserved many varieties in gardens and introduces them to a greater number of people. Complimenting this reason is purposeful preservation, for use in gardens today, and as parent stock to create new varieties. The demand for regionally grown and hardy bulbs has also inspired the preservation of heirloom bulbs in gardens, and their reintroduction into the market.

The historic significance of landscapes that feature bulbs is the final reason that explains why heirloom bulbs have been preserved. Although the individual reasons discussed have contributed to bulb preservation, a combination of several motivations provides a more complete answer to why individuals preserve heirloom bulbs.

In each chapter, various methods of preservation have been discussed, but they rarely work completely independent of each other. Instead, the methods, people, networks, and organizations work simultaneously as a system resulting in preservation. For instance, commercial nurseries and bulb importers introduce and sell bulbs to the public. Over time, many heirloom varieties are dropped in favor of newer varieties. Then, individuals grow, trade, 'passalong', and inherit the bulbs. Some also naturalize, preserving themselves contentedly waiting to be 'rediscovered' and again grown by someone interested in preserving and reintroducing them, for example Chris Wiesinger. Individual gardeners and collectors trade among friends and use market bulletins, plant swaps, and forums to connect with other enthusiasts. Gardeners may also use the resources of plant societies to identify, obtain, and eventually ensure their heirloom bulbs are preserved when they no longer are able. Niche bulb growers not only help distribute to individual gardeners, but with historic gardens working to reintroduce in-kind or specific rare cultivars. Informational resources provided by national plant societies can also aid in plant identification and location of varieties. Other historic materials, including catalogues, market bulletins, letters, garden magazines, and literature can help provide a context for how bulbs and plants were historically utilized.

Long-term preservation of heirloom bulbs is often only accomplished because of this interconnected web of people, networks, and organizations. Individual bulbs may have short lives compared to humans, but their effective means of reproduction by cloning ensures they survive for generations if conditions allow. Therefore, it is the combined efforts of individuals trading, inheriting, bulb nurseries, national societies, and the many parties who act as patrons at private and public gardens who contribute to the preservation of heirloom bulbs in the United

States. The individual efforts of each method and group are interconnected, just as their motivations are multi-faceted. Although not investigated in detail, changing attitudes to gardening design adds another layer of influence for the use of heirloom bulbs. Both the 'wild garden' and Colonial Revival movements promoted the use of 'old-fashioned' plants. No matter the motivation, heirloom bulbs followed early explorers to the continent, moved around with us, and convinced new patrons to seek them out and care for them. They not only have a place in every garden for their beauty, but also for the many stories they collect and recount with each years bloom.

Heirloom bulbs, and all other biotic resources, are significant to the understanding of a cultural landscape. Flowering bulbs perhaps play a relatively small role in their design, but they are still critical to the understanding of many historic landscapes. The National Park Service recognizes the importance of properly identifying, documenting, and replacing biotic resources like bulbs. *Landscape Line 4: Historic Plant Material Sources* specifically addresses replacement of older plant cultivars with exact varieties, were possible, and in-kind types where necessary.²⁴³ A secondary goal of this document is to provide resources of information and plant sources to guide and aid park managers and other interest individuals. Replacing heirloom bulbs, as part of a treatment for a project, with true heirloom stock, versus newer hybridized versions of the same type is important because they vary significantly in appearance and habit. Many heirloom bulbs may be less 'showy' than their modern counterparts, but they may have a fragrance that newer hybrids do not, in addition to other qualities. Understanding not just what varieties were used, but how they were planted is also important.

Although NPS documents identified in the literature review, such as *The Secretary of the Interior's Guidelines for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes, NPS-28: Cultural Resources Management Guideline,* and Landscape Line

²⁴³ Robert R. Page, Cathy A. Gilbert, and Susan A. Dolan, A Guide To Cultural Landscape Reports: Landscape Lines, "Landscape Lines 4: Historic Plant Material Sources" (Washington D.C: United States, National Park Service, Park Historic Structures and Cultural Landscapes Program, 1998).

4: Historic Plant Material Sources, are intended for use by Park Managers, they are applicable to individuals who own or manage private historic landscapes. These resources provide a framework for documenting an existing landscape, researching, determination of significant resources, and identifying the most appropriate treatment: preservation, rehabilitation, restoration, or reconstruction. Listing a landscape on the National Register of Historic Places ensures it's historic significance is recognized, provides some protection, and opportunities to aid in preservation activities. National Register Listing does not prevent destruction or insensitive development, but does provide federal grants that require adherence to the Secretary of the Interior's Standards. Federal monies assist with preservation efforts and work to ensure sites are sensitively treated.

Landscapes that have significant collections of biotic cultural resources, should include them in the nomination to the National Register to ensure they are recognized, which will help to get financial assistance with their management, and prove their importance if threatened. The Krippendorf Estate Nomination specifically details all known plants introduced by Carl Krippendorf, and denotes which are extant.²⁴⁴ It can be an expensive and cumbersome task to identity plants by genus, species, and variety, but is an essential step to ensure they are recognized and protected. Comparing extant plants to those historically grown, and other contextual history, helps determine if the property has historic integrity, and what treatment is most appropriate.

Once plants are identified and recognized, appropriate management and interpretative decisions can be made. Managing living plants requires routine and persistent maintenance, as with abiotic resources, but with unique challenges as detailed in Firth's *Biotic Cultural Resources: Management Considerations for Historic Districts in the National Park System, Southeast Region.* Bulbs are ephemeral in nature, susceptible to inappropriate landscape management, have differing life spans, levels of hardiness, and rates of reproduction. These

²⁴⁴ National Register of Historic Places, Krippendorf Estate, 2011, 14.

unique characteristics require knowledgeable staff to ensure they are properly cared for, and to ensure long-term preservation.

The main purpose of this thesis is to understand why people have preserved heirloom bulbs, yet the data also reveals practical information that concerns these issues. Many of the other Plant databases, maintained by national or international plant societies, are useful in that they allow unknown varieties to be identified by using physical attributes and photographs. Additionally, contextual information can be obtained or verified, to help garden managers properly notate and document their collections. For gardeners seeking in-kind replacements, for a specific time period, these databases can be used to identify the varieties that existed on or before that date.

Providing information about heirloom bulbs, beyond name and date of introduction, may also increase appreciation of bulbs as more than just 'flowers.' Consulting personal letters or journals to find notes about plants, and where they originated, is an excellent way to add to their story. People connect with stories and histories, so they are more apt to appreciate a plant if they can understand its connection with a broader context. Often information about plants is hard to find if no written records remain, or are hard to substantiate. However, when records do exist there is incredible potential to show how plants are important not just because they are old, but also for the many stories they have to tell.

Thinking about bulbs and plants on a scale larger than one site may also reveal important social themes. Plants can be a catalyst that connects people and facilitates social interaction. For this reason, plants are often traded among neighbors, which can result in a neighborhood that is marked by a unique collection of a plant, or many plants. In these cases, plants offer an opportunity to add social context to the story of a historic district or neighborhood. Additionally, the connection of plants shows how the street or city is more than just a collection of independent houses, but a neighborhood with unique history and culture.

Where this occurs it adds to the historic context of the area, and should be included in any national and local historic district nominations.

This thesis only reviews preservation of heirloom bulbs in the United States, with a regional focus of the South and Mid-Atlantic regarding garden literature, market bulletins, and case studies. While many of the people and methods discussed have national applicability, a study of the other resources and methods in the North East and West Coast would hopefully support the data gathered and provide additional insights. Although the United States was the larger focus of the thesis, the connection between gardeners and bulb growers is inherently connected with foreign nations. Research into international efforts to preserve heirloom bulbs would support this thesis and provide additional resources, methods, and motivations.

A regional inventory and context study of heirloom bulbs is another research tangent that would help in the identification of individual bulbs, and more importantly with justifying that they are important as independent resources. Compiling regional and sub-regional lists of the most significant bulbs, where they came from, who and how they were grown, would help develop the story of bulbs. Pieces of this puzzle have already been compiled by authors discussed, but a more comprehensive thematic study would provide a context to support their significance, and to promote their greater appreciation and preservation.

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