THE WORLD IN A TOMATO SEED:

HISTORIC AGRICULTURAL SITES & PLACE-BASED ENVIRONMENTAL ETHICS

by

SEAN WILLSON DUNLAP

(Under the Direction of Eric MacDonald)

ABSTRACT

During the course of the last century, 'place-based' philosophies and perspectives were developed and drawn upon by scholars, educators, planners, and others in an attempt to offer potential avenues for establishing ethical and meaningful relations with the world around us. This thesis builds upon this effort, and seeks to answer the following question: *can place-based philosophies be applied to the management and interpretation of public-access historic agricultural sites in order to foster and promote an ethic relevant to modern concerns and trends related to human interactions with the natural world?* This thesis suggests that when people view and engage with public-access historic agricultural sites as localized natural *and* cultural habitats over time, a place-based environmental ethic grounded in local environments and communities may become established.

INDEX WORDS: Adaptive Management, Agrarianism, Agroecology, Bioregionalism, Civic Agriculture, Conservation, Cultural Landscapes, Ecology, Environmental Ethics, Habitat, Historic Agricultural Sites, Historic Preservation, Historic Interpretation, National Park Service, Place-based Education, Place-Based Ethics

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DEDICATION

This project is dedicated to the person who shaped the way I view and interact with the natural world more than any one person: To my grandmother, Mrs. Anne Day Himley, a.k.a. “Bama,” lover of birds and Muir, nature walks and talks.

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CHAPTER 1

INTRODUCTION

"If you don't know where you are, you don't know who you are."

- Wendell Berry

During the course of the last century, 'place-based' philosophies and perspectives were developed and drawn upon by scholars, educators, planners, and others in an attempt to offer potential avenues for establishing ethical and meaningful relations with the world around us. These philosophies have been applied to privately-owned farms, ecosystem restoration, regional planning, public education, and other various endeavors. This thesis builds upon this effort, and seeks to answer the following question: *can place-based philosophies be applied to the management and interpretation of public-access historic agricultural sites in order to foster and promote an ethic relevant to modern concerns and trends related to human interactions with the natural world?*

This thesis suggests that when people view and engage with public-access historic agricultural sites as localized natural *and* cultural habitats through repeated visits over time a place-based environmental ethic grounded in local environments

and communities may become established.[1] Such an environmental ethic therefore draws upon the principles provided by bioregional frameworks, Aldo Leopold's 'land ethic', agrarianism, and similar place-based perspectives concerning human-environment relations. I hypothesize through the management and interpretation of historic agricultural sites as natural and cultural habitats rooted in local contexts, the public is presented the opportunity to develop an environmental ethic that may be transferrable to their own backyards.

Like other historic landscapes, historic farms contain numerous cultural and natural resources, and other resources that are simultaneously natural and cultural, aptly termed biotic cultural resources.[2] Additionally, historic farms possess and manifest non-material intangible qualities, such as community identity, that are as valuable as tangible resources, although they are harder to document. These varied resources provide managers an excellent opportunity to interpret for the public the unique human-nature interactions and histories pertaining to one particular place. In turn, this opportunity allows the public to draw connections between historic farms and the other more familiar landscapes in their own lives. These connections, when successfully established, allow for a richer, deeper experience of every place, and may result in an amplified personal relationship with the world.

The potential for new meaningful associations is the crux of the interpretative model that Freeman Tilden developed and articulated for the

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[1] David Smaldon, Charles Harris, and Nick Sanyal, "The Role of Time in Developing Place Meanings," in *Journal of Leisure Research* 40, no. 4 (2008): 499.

[2] Ian Firth. *Biotic Cultural Resources: Management Considerations for Historic Districts in the National Park System*, *Southeast Region* (U.S. Department of the Interior, National Park Service, Research/Resources Management Report SER-82, 1985), 1.

National Park Service (NPS) during the 1950s. In *Interpreting Our Heritage*, Tilden stated, "[i]nterpretation is the revelation of a larger truth that lies behind any statement of fact," and furthermore interpretation "should capitalize mere curiosity for the enrichment of the human mind and spirit."[3] Later in life, Tilden encapsulated his six-principal interpretive framework with one singular word: love.[4] According to Tilden, for successful interpretation to occur, an interpreter should possess a love for communication, the natural world, and one's own life. In this sense, fostering love within others for the world around them could be said to represent a primary goal of interpretation. Additionally, love can then in turn serve as the basis for ethical relationships with the environment to arise. As conservationist Leopold pointed out, "[w]e can be ethical only in relation to something we can see, feel, understand, love, or otherwise have faith in."[5] Yet, in order to love something or some place, one must have an understanding of it, or a personal connection to it.

It is local environments that are most accessible, touchable, and relatable to the public, as they are fixtures of daily life. Environmental historian William Cronon has proposed a connection to our own local environment could serve as the impetus for a new environmental ethic to take shape, whereby local landscapes provide the space for ethical relationships with the natural world to flourish.[6] In this way we view ourselves as part of nature—connected to it and dependent on it. The

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[3] Freeman Tilden, *Interpreting Our Heritage, 4th Edition* (Chapel Hill: University of North Carolina Press, 2007), 33.
[4] R. Bruce Craig, "Introduction," *in Interpreting Our Heritage, 4th Edition*, (Chapel Hill: University of North Carolina Press, 2007), 19.
[5] Aldo Leopold, *A Sand County Almanac* (New York: Ballantine Books, 1970), 251.
[6] William Cronon "The Trouble with Wilderness; or, Getting Back to the Wrong Nature," in *Uncommon Ground: Rethinking the Human Place in Nature*, ed. William Cronon (New York: W. W. Norton & Co., 1995), 89.

environmental ethic would thus be focused on local environments and histories; places where there is a merger between human and nonhuman processes and activities.

More "wild" than a ball field and more accessible than a mountaineering expedition in Alaska, historic farms can serve as the premier entry-level outdoor space for establishing such connections. On a farm, nature is usually not deemed "off-limits" such as in a federally-designated wilderness area. Instead, on a farm, rocks and logs can be turned over to reveal fascinating creatures. The ground can be plowed to plant crops. Flowers can be picked, and trees identified. Here, history merges with the present, within both cultural and natural habitats.

Relevancy and Timeliness

This section discusses the relevancy and timeliness for understanding how public-access historic agricultural sites can help foster and promote an environmental ethic. This thesis identifies several topics of discussion based on present-day trends and concerns that involve the environment such as sustainable agriculture, land conservation, and ecological literacy. First, I will discuss current concerns about human-environment interactions related to natural areas, agricultural areas, and historic sites in general. I will then discuss particular community groups attempting to address such concerns.

The first issue involves children's time spent outdoors and interacting with nature. While some research findings seem to suggest outdoor play time has

declined significantly in the last several decades,[7] results from a recent national survey suggest that children are in fact still spending a fair amount of time outdoors, but the activities that occur outdoors are primarily not nature-based activities such as tree-identification, bird-watching, or hiking.[8] Instead, outdoor activities include organized sports and simply "hanging out." In terms of this thesis, nature-based activities and interactions will constitute the focus.

In *The Last Child in the Woods*, Richard Louv proposes this disconnect between children and nature-based activities has contributed to the increase of depression, obesity, and attention-deficit disorders, among other health problems.[9] "Nature-deficit disorder," Louv's term for such lack of engagement, has implications that go beyond human health. This lack of interaction with outdoor environments also may result in a reduced environmental literacy.[10] The environmental ethic this thesis investigates requires such an environmental literacy.

The ethical perspectives of humans do not always take into account the lives and habitats of other species, including our own.[11] We are a highly influential agent on the Earth, with the ability to transform whole ecosystems and human societies overnight. Often these alterations to the landscape are justified by beliefs, philosophy, economics, and legal systems. Such transformations have become

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[7] Randy White, "Young Children's Relationship with Nature: Its Importance to Children's Development & the Earth's Future," *Taproot* 16, no. 2 (2006).
[8] Lincoln R. Larson, Gary T. Green, and H. K. Cordell, "Children's Time Outdoors: Results and Implications of the National Kids Survey," *Journal of Park and Recreation Administration* 29, no. 2 (2011): 1.
[9] Cheryl Charles, "The Ecology of Hope: Natural Guides to Building a Children and Nature Movement," *Journal of Science Education and Technology* 18, no. 6 (2009): 468.
[10] David W. Orr, "Ecological Design Intelligence." Center for Ecoliteracy, http://www.ecoliteracy.org/essays/ecological-design-intelligence.
[11] A. Leopold, 240.

staggering in scale during the last two hundred years. In that time, technologies have allowed for whole mountains to be destroyed, oil to be drilled in areas never thought possible, and fully modern towns to be built in the middle of waterless deserts.

The second set of issues revolves around agricultural production, knowledge, and landscapes themselves. Agriculture, even on an industrial scale, is wedded to the cycles of nature. Weather, water, insects, and the sun are all fundamental to agricultural activity. Yet, many agricultural practices are extremely damaging to ecological processes—from nonpoint source pollution of watersheds to the destruction of woodlands and grasslands for field expansion—resulting in dead zones[12] and ecological sacrifice zones[13] across the United States. A working knowledge of agricultural practices that do not rely on fossil fuels and synthetic chemicals has been largely replaced by unsustainable farming methods based on the application of synthetic pesticides and herbicides. Monocrop agriculture has replaced the historic crop diversity once found within the farmlands of America.[14] This portrait of contemporary agricultural practices is not meant to vilify farming, but identify the perceived problems related to agricultural endeavors that environmental and agricultural activists seek to correct.

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[12] Monica Bruckner, "The Gulf of Mexico Dead Zone." Microbial Life Educational Resources, http://serc.carleton.edu/microbelife/topics/deadzone/index.html.
[13] Dana L. Jackson, "The Farm as Natural Habitat," in *The Farm as Natural Habitat: Reconnecting Food Systems with Ecosystems*, eds. Dana L. Jackson and Laura L. Jackson (Washington: Island Press, 2002) 14.
[14] James R. Veteto, "The history and survival of traditional heirloom vegetable varieties in the southern Appalachian Mountains of western North Carolina," *Agriculture and Human Values* 25 (2008): 121.

Another issue related to farming pertains to age and interest. The average age of the American farmer is approaching sixty years old, and youth are seemingly not interested in following in their predecessors' vocational footsteps.[15] This creates a knowledge vacuum, whereby agricultural literacy is reduced. Additionally, the lack of interaction between people and agricultural landscapes further reduces a broader environmental literacy, as farm-based human-nature interactions go unnoticed and unknown.[16] This lack of awareness of agricultural landscapes places food production, the land, and farming ways of life further out of sight and mind of the public.

Over the last half-century, hundreds of various environmental interest groups and movements have focused on counteracting the effects stemming from such issues. The rapidly expanding "Green," "Local," and "Good Food" movements demonstrate a growing concern for healthy environments and communities. With often overlapping interests such as ethically-produced food, economics, and sustainability, these movements all put forth agendas that seek to minimize harmful impacts on human and nonhuman communities. Direct-trade business models, organic food production, ecological restoration projects, locally-based currency, and community supported agriculture all demonstrate the various ways these movements promote engaged and ethical living on Earth. The popularity of such trends has become widespread, global even, and has become institutionalized in many countries.

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[15] NPR Staff, "America's Future Farmers Already Dropping Away," *NPR*, February 27, 2011. http://www.npr.org/2011/02/27/134103432/Americas-Future-Farmers-Already-Dropping-Away

[16] See Lyson (2004) and Winne (2010) for discussion of ways to develop agricultural literacy.

How then, given these conditions and trends, are historic agricultural site managers adjusting to meet the environmental interests and concerns of the modern world? Are they doing so at all, and should they have to? I intend to show in this thesis these considerations warrant a reassessment—although not a total abandonment—of traditional historic agricultural site management and interpretation. This reassessment would place the teaching and fostering of a place-based ethic alongside other tenets of historic site managerial and interpretive strategies, such as material conservation and living history demonstrations.

The proposed method presented by this thesis concerns viewing, managing, and interpreting historic agricultural sites as natural and cultural habitats. I name this strategy the "habitat approach." The habitat approach, and its composition, benefits, and applicability will be discussed in depth later in this thesis. For now, I will describe it as a dynamic, multi-dimensional approach to cultural landscape stewardship that incorporates concrete actions towards instilling in the public a place-based ethic.

Literature Review

I have identified and analyzed the works of various fields or cultural movements that could help answer the question of this thesis. For this purpose, I chose to focus on the particular insights of (1) cultural landscape theory, (2) place-based ethics, (3) ecological theory and practice, (4) the sustainable agriculture movement, (5) environmental history, and (5) place-based education theory. In brief, through a research of various literatures, I chose fields or movements that

focus on small-scale units of place, and that address the complex interrelationships between the inhabitants of such places in both historic and present-day contexts. This literature review first provides a brief synthesis of the often overlapping major themes and ideas belonging to the fields as applied to my question, and offers a summary of how particular findings may help answer the question of my thesis.

Cultural Landscape Theory

Cultural landscape theory is useful for understanding how landscapes simultaneously contain both cultural and natural features, as well as human-nature interactions through time at a small unit of scale. Scholars of this field seek to identify the ways in which humans view and engage with landscapes. Therefore, cultural landscape theory lends itself to analyzing the human-nature interactions of historic agricultural sites, as agricultural sites often contain easily identifiable natural and cultural resources, as well as histories concerning human-nature interactions. Identified here are three relevant scholars, all of which belong to the cultural geography field: Carl O. Sauer, D.W. Meinig, and Yi Fu Tuan. The following analysis examines the ideas related to ethical relationships with the lived-in environment posited by these authors.

Pioneering geographer Carl O. Sauer is credited with introducing the concept of 'cultural landscape' in 1925, whereby "[c]ulture is the agent, the natural area is the medium, the cultural landscape is the result."[17] The term 'cultural landscape' encompasses a wide variety of places, that include humans and human culture,

[17] Carl O. Sauer, "The Morphology of Landscape," in *Life and Land: A Selection of from the Writings of Carl Ortwin Sauer*, ed. John Leighly (University of California Press, 1967): 343.

nonhuman ecological communities, buildings, roads, rivers, mountains, and all other cultural or natural features and resources. Sauer supposed an understanding of human culture may be ascertained through an analysis of the cultural landscape. Such an analysis should be conducted at an "areally localized" unit of scale.[18] This localized unit of scale could be a forest, farm, or other small piece of the larger landscape.

Sauer refers to this bounded unit of space as a 'habitat.' In this sense, the concept of 'habitat' pertains to both a physical environment with which humans interact, and also pertains to a reflection of human values pertaining to preferable environments. Habitats supply the setting and resources that provide sufficient support for the lifeways of a community at any given time. Sauer writes "the habitat is revalued or reinterpreted with every change in habit."[19] This ability and tendency of humans to revalue and reinterpret the local habitat around them is central to the question of this thesis. Like Sauer, fellow geographers Yi-Fu Taun and D.W. Meinig, also focus on the way humans perceive the localized cultural landscape.

In "The Beholding Eye: Ten Versions of the Same Scene," D.W. Meinig offers ten ways of viewing the landscape.[20] This essay is based on the premise that "any landscape is composed not only of what lies before our eyes but what lies within our heads."[21] While the essay contains nine other intriguing notions about the way humans can perceive and in turn interact with the environment, Meinig's discussion

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[18] Carl O. Sauer. "Foreword to Historical Geography," *Annals of the Association of American Geographers* 31, no. 1 (1941): 7.
[19] Ibid., 7.
[20] D.W. Meinig, "The Beholding Eye: Ten Versions of the Same Scene," in *The Interpretation of Ordinary Landscapes: Geographical Essays*, ed. D.W. Meinig (New York: Oxford University Press, 1979): 33-48.
[21] Ibid., 34.

of "landscape as habitat" is the most useful for the discussion of public historic agricultural landscapes as addressed in this thesis. Meinig proposes that this perception of the cultural landscape includes ideas concerning the inherent goodness of nature, as well as 'home' and 'harmony' within the landscape.

According to Meinig, viewing landscape as 'habitat' means to perceive harmonious relations between humans and the natural world, which is represented by an idyllic domesticated landscape. "Every landscape is therefore basically a blend of man and nature," he proposes.[22] Meinig states that in this view, "[m]an must adjust to nature, but nature is basically benign and good and when properly understood will provide a comfortable and enduring home for humanity."[23] Viewing nature as "good," and finding "home" within it, denotes a useful starting point for establishing an environmental ethic grounded in one's own everyday experience. Harmonious and engaged relations with the local landscape are central to place-based thought and theory. Additionally, Meinig's 'habitat view of the landscape,' in its reference to long-term working of the land, is akin to the agrarian philosophical ideals of long-term land stewardship, knowledge of the land itself, and engaged citizenship will be discussed later in this review.[24]

Similar to Meinig's statement about the subjective quality of landscapes, Yi-Fu Taun offers the idea that landscapes are "a construct of the mind and of feeling," and that "[i]mages of landscape are potentially infinite, yet they have a family

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[22] Ibid., 36.
[23] Ibid., 36.
[24] Evan T. Leonard, "Embedded Within Landscapes: Agrarian Philosophy and Sustainable Agriculture" (Masters Thesis, University of North Texas, 2005), 80.

likeness."[25] Tuan states we are capable of viewing the landscape in two distinct but conjoined ways—the vertical view and the side view.[26] The vertical view, characterized by objectivity, empiricism, and documentation, is exemplified by the work of geographers, cartographers, and ecologists. The side view, characterized by emotion, memory, subjectivity, and contemplation, is exemplified by the work of artists and poets. While epitomized by these professions, all humans are capable of viewing the landscape in both of these ways.

Like Sauer and Meinig, Taun writes about the importance of viewing the landscape in terms of habitat and home. Tuan writes, "[y]earning for an ideal and humane habitat is perhaps universal. Such a habitat must be able to support a livelihood and yet cater to our moral and aesthetic nature."[27] Here, Tuan incorporates Meinig's view of habitat in terms of making a living off the land, but includes the 'moral nature' of humanity into a discussion of an ideal habitat. By this inclusion, Tuan brings us closer to finding a language and a view of the landscape with which to incorporate an environmental ethic into human perception of, and interaction with, both localized agricultural landscapes and as well as an idea of home.

These three scholars provide potential avenues with which to answer the question of this thesis. First, the localized unit of scale referred to as "habitat" is generally analogous to the size of historic agricultural sites. This local unit is part of

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[25] Yi-Fu Tuan, "Thought and Landscape: The Eye and the Mind's Eye" in *The Interpretation of Ordinary Landscapes: Geographical Essays*, ed. D.W. Meinig (New York: Oxford University Press, 1979): 89.
[26] Ibid., 90.
[27] Ibid., 101.

a larger bioregion, and therefore bioregionalism, with its focus on ethical living at local *and* regional scales, warrants analysis. Secondly, all three scholars posit human cultures are able to change the way they view the landscape around them. For instance the perception of nature can change from being a frightening wilderness to being a benevolent provider of sustenance and home. Additionally, this ability of humans to revalue the landscape offers a way to introduce a place-based environmental ethic into human culture where it may not have existed before.

Place-Based Ethics

Within the field of environmental ethics, various opinions exist about what constitutes a proper environmental ethic. Anthropocentric-based ethics as opposed to biocentric-based ethics represent the main schism within the field. Anthropocentric-based ethics place humans at the center of the dialogue, arguing that humans are the only creatures with intrinsic value, or capable of applying values to the world around them.[28] Biocentric writers counter this by contending that *all* elements of the environment have intrinsic value.

Variations of the anthropocentric view range from trying to strike a balance (e.g. prudential anthropocentrism, where what is good for the environment is good for humans) to strict anthropocentrism (e.g. biblical literalism, where earth was made for man).[29] Anthropocentric views about the world have dominated Western

[28] Carl Leopold, "Living with the Land Ethic" in *Bioscience* 54, no. 2 (2004): 152.
[29] Andrew Brennan and Yeuk-Sze Lo, "Environmental Ethics" in *Stanford Encyclopedia of Philosophy* (Stanford University, ed. Edward N. Zalta, Fall 2011, <http://plato.stanford.edu/archives/fall2011/entries/ethics-environmental/>..

politics, culture, and society for millennia.[30] Only recently have people defended the intrinsic worth of nonhuman life, and this position is exemplified by place–based ethics.

Place-based ethics is a broad field of philosophy and practice that focuses on ethical living within distinct localized geographical areas of culture, society, ecology, and economics.[31] Dorothy A. Borrelli classifies place-based ethics as an ethical framework that acknowledges the influence particular localities have on human culture, yet also recognizes how humanity ultimately decides what these places mean to the community.[32] This idea is akin to Sauer's definition of cultural landscapes, as well as ideas concerning changing perceptions of the local habitat.

This section analyzes two fields of place-based ethics in order to answer the question of this thesis: bioregionalism and agrarianism. Bioregionalism concerns ethical living at a regional scale that is defined by natural systems and features, and agrarianism focuses on ethical relations within the landscape at a smaller farm-sized scale. Both fields of thought however share many of the same tenets and aims, and their perspectives can often be applied interchangeably. I will first discuss bioregional thought and practice, before moving on to agrarian-based ethics.

Bioregionalism focuses on the bioregion as a unit of analysis, learning, and ethical living. Robert L. Thayer Jr., a leading bioregional scholar, describes the bioregion, which he also calls a "life-place," as "a unique region definable by natural

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[30] David W. Ehrenfeld, Biological Conservation (New York: Holt, Reinhart, and Winston, Inc.): 215.
[31] Kirkpatrick Sale, *Dwellers in the Land: The Bioregional Vision with a new preface* (Athens: University of Georgia Press, 2000): xix.
[32] Dorothy A. Borrelli, "Filling the Void: Applying a Place-Based Ethic to Community Gardens" *Vermont Journal of Environmental Law* 9, no.2 (2005): 296-297.

(rather than political) boundaries with a geographic, climatic, hydrological, and ecological character capable of supporting unique human and nonhuman living communities."[33] Various government agencies at the federal and state levels are currently in the process of identifying and mapping such areas (which they term ecoregions instead of bioregions) across the United States.[34] The Southern Inner Piedmont of Georgia, the Puget Sound in Washington, and Upper Oconee River watershed are all examples of eco- or bioregions.

Other than when discussing particular localized landscape features or conditions, the bioregion may be referred to as either the "local" or "regional" area interchangeably, as both of these terms essentially concern bringing human awareness of place, production, and consumption closer to home.[35] This unit of geographic scale is indeed larger than that of "habitat" discussed earlier. Yet, these bioregions are conceptually similar to the local habitat because bioregions also provide the resources, both tangible and intangible, needed for supporting human and nonhuman community lifeways.

In terms of intangible resources, a bioregional approach incorporates "meaning" into its perspective of the landscape. Like Tilden, bioregional theorists purport there is a vital need to establish meaningful associations with places and the inhabitants within these places. As scholar Timothy Beatley states "[b]ioregionalism believes in the primary importance of reestablishing deep place

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[33] Robert L. Thayer Jr., LifePlace: Bioregional Thought and Practice (Berkley: University of California Press, 2003): 3.
[34] Griffith, G.E., Omernik, J.M., Comstock, J.A., Lawrence, S., Martin, G., Goddard, A., Hulcher, V.J., and Foster, T., 2001, Ecoregions of Alabama and Georgia, (color poster with map, descriptive text, summary tables, and photographs): Reston, Virginia, U.S. Geological Survey (map scale 1:1,700,000).
[35] Timothy Beatley, *Native to Nowhere: Sustaining Home and community in a Global Age* (Washington D.C.: Island Press, 2004): 51.

connections and awareness."[36] Thayer hypothesizes that this sort of awareness leads to the development of an environmental ethic, and proposes the following axioms of a bioregional or 'life-place' framework:

> People who stay in place may come to know that place more deeply. People who know a place may come to care about it more deeply. People who care *about* a place are more likely to *take better care of it*. And people who take care of places, one place at a time, are the key to the future of humanity and all living creatures.[37]

These axioms show place-based philosophies such as bioregionalism focus on the individual, the community, one's home, and the region of which it is a part. Kirkpatrick Sale repeats this sentiment, and states, "by living closer to the land one necessarily lives closer to the community, able to enjoy the communitarian values of cooperation, participation, sodality, and reciprocity that enhance individual development."[38] Agrarianism similarly focuses on "living closer to the land" through an agricultural perspective.

Agrarianism, as a place-based ethical philosophy, dates back to 700 BCE Greece.[39] Paul B. Thompson defines an agrarian framework as a perspective that,

> emphasizes the idea that farming practices have the power to shape the moral character of the individuals who engage in them, and that society's farming culture—its means of subsistence—reverberates through all of its

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[36] Thayer Jr., 34.
[37] Ibid., 5-6.
[38] Sale, 47.
[39] Paul B. Thompson, the Agrarian Vision: Sustainability and Environmental Ethics (Lexington, Kentucky: University of Kentucky Press, 2010): 36.

> intuitions. Agrarian ideals are moral and aesthetic ideals. They describe a life as it ought to be lived.[40]

This farm-based life has been championed by Thomas Jefferson, inspired university educators such as the Vanderbilt Agrarians, and has become part of the basis for the sustainable food movement.[41] Like bioregionalism, the foundational tents of agrarianism relate to both the individual and the larger community.

Wendell Berry's agrarian-focused writings on community, sustainable agriculture and land stewardship are particularly useful in terms of understanding how agrarianism, as a place-based philosophy, lends itself to the task of answering the question of this thesis. In *The Agrarian Vision: Sustainability and Environmental Ethics*, Thompson states "[f]or Berry, the communities that have come closest to achieving true community (and true stewardship of the environment) are traditional farming communities."[42] Berry, who has been farming one piece of land since 1965, champions and identifies with such a farming way of living as a means to live ethically in the world.

Stewardship of the land is a foundational principal of agrarianism, and Berry posits farmers are the best stewards of the landscape.[43] Berry states, "the farmer lives and works in the meeting place of nature and the human economy, the place where the need for conservation is most obvious and most urgent."[44] Farming activity then may, through engaged and dynamic stewardship of the farm

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[40] Ibid., 5.
[41] Ibid., 3.
[42] Ibid., 38.
[43] Ibid., 14.
[44] Wendell Berry, "Conservationist and Agrarian," in *Farming and the Fate of Wild Nature*, ed. Daniel Imhoff and Jo Ann Baumgartner (Healdsburg, California: Watershed Media, 2006): 8.

environment, provide a foundational stepping-stone towards introducing a place-based ethic at public-access historic agricultural sites.

Following Thayer's axioms, allowing historic agricultural sites to be managed and interpreted as potential habitats for instilling a place-based ethic may result in increased stewardship of the sites themselves. Furthermore, expanding this place-based ethic beyond specific historic sites, and to the natural world at large, Paul Thompson writes that,

> A public motivated and guided by agrarian ideals will have better philosophical resources with which to articulate our relationship with the natural world and our dependence on the continuing viability and integrity of natural ecosystems. We will, in short, be better equipped to debate and work at sustainability.[45]

The concept of the 'viability and integrity of natural ecosystems' comes directly from the field of conservation ecological theory and practice.

Ecological Theory and Practice

The origin of ecology as a field of research and practice is found as far back as the career works of Charles Darwin.[46] Since that time, the field of ecology has grown into an influential scientific area of research pursuing various areas of inquiry. Dan L. Perlman and Jeffery C. Milder define ecology as "a wide-ranging scientific discipline that seeks to examine, explain, and predict how species interact with one

[45] Thompson, 17.
[46] Dan L. Perlman and Jeffery C. Milder, *Practical Ecology for Planners, Developers, and Citizens* (Washington D.C.: Island Press): 24.

another and with the nonliving world."[47] The relationships between inhabitants and features within specific localities, a key concept of ecological theory, have been addressed by writers from various fields and professions.

This section outlines these writings, and relates them to place-based ethics as applied to historic agricultural sites. Thus, I discuss the ideas of conservation ecology, the field of agroecology, the writings of Buddhist monk Thich Nhat Hahn, and return to the insights of Wendell Berry. This analysis therefore focuses on intersecting scientific, intellectual, ethical, as well as spiritual notions of community interconnectedness.

Leopold, a founding figure of conservation ecology field, wrote that "[c]onservation is the state of harmony between men and land."[48] Leopold's fairly simple-sounding definition of conservation can be further understood by defining the field of conservation ecology, which is "the study of the relationships of living things to the environment, how those relationships change through time, and how human activities augment or impair those relationships."[49] Thus, conservation ecology is based on understanding the relationships between members of ecosystems over time, and the human interactions with those ecosystem processes.[50]

Three important findings arising out of the field of ecology address interactions and relationships between the members of ecosystems summarized as

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[47] Ibid., 24.
[48] A. Leopold, 243.
[49] Sterling College, "Conservation Ecology," http://www.sterlingcollege.edu/conservation-ecology.html.
[50] Dan L. Perlman and Jeffery C. Milder, 75.

follows: (1) ecosystems are dynamic, (2) the interactions between species within ecosystems are often quite subtle, and (3) these interactions are always occurring. In an agricultural context, as Ruth Beilin, Regina Lindborg, and Cibeke Queiroz have noted, "[i]n a system, the flow-on effects of small changes cannot always be understood or even experienced at the time they occur. This complexity encourages us to re-examine the idea of nature and its relationship to agriculture."[51]

A re-examination of agricultural lands based on ecological principals allows farmers, researchers, educators and others to develop new ways of 'reading' their land, and in turn, interpreting the agricultural landscape to the public. As we learn more about the role of wildlife within the farmscape, a more detailed picture of agricultural landscapes emerges, one that contains a level of biodiversity that is seldom recognized, or taught to the public. Crop genetic diversity, wild plant diversity, livestock diversity, aquatic diversity, soil biodiversity, arthropod diversity, and associated biodiversity are all represented within this view of agricultural ecosystems.[52] During the last several decades, conservation ecologists have explored how ecological studies may apply to agricultural lands, resulting in the field of agroecology.

The University of California, a leading institution in the study of agroecology, defines the field as:

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[51] Ruth Beilin, Regina Lindborg, and Cibeke Queiroz, "Biodiversity and Land Abandonment: Connecting Agriculture, Place and Nature in the Landscape," in *Landscapes, Identities and Development*, eds. Zoran Roca, Paul Claval, and John Agnew (Burlington, Vermont: Ashgate Publishing Company, 2011), 243.

[52] Stefanie Aschman, "What are the Benefits of Agricultural Biodiversity?" Accessed December 22, 2012, http://www.ulrmc.org.ua/services/binu/prmaterials/Benefits_of_AB.pdf.Aschman, 1-4.

> a scientific discipline that uses ecological theory to study, design, manage and evaluate agricultural systems that are productive but also resource conserving. Agroecological research considers interactions of all important biophysical, technical and socioeconomic components of farming systems and regards these systems as the fundamental units of study, where mineral cycles, energy transformations, biological processes and socioeconomic relationships are analyzed as a whole in an interdisciplinary fashion.[53]

The interdisciplinary and holistic nature of agroecology requires long-term study of the landscape.

Leopold and other ecology-minded theorists propose that through exploring the landscape over time, the interrelationships between community members are revealed. This connection with the land results in an intimate knowledge of its features and processes, or in other words, an increased ecological literacy. To increase ecological literacy, Leopold advocated for the phenological study of the local environment, which focus on the annual cycles of wildlife and how they relate to climate and other environmental conditions.[54] Ecological literacy therefore builds upon book-learned information about the environment, as well as understandings derived from personal engagement with the natural world. Thus, ecological literacy encompasses both cognitive and emotive dimensions.[55]

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[53] "What is agroecology?" in *Agroecology in Action*, http://nature.berkeley.edu/~miguel-alt/what_is_agroecology.html.
[54] "The Study of Phenology," in the Aldo Leopold Foundation, http://www.aldoleopold.org/programs/phenology.shtml.
[55] Daniel Goleman, "Becoming Ecoliterate" in *Center for Ecoliteracy*, http://www.ecoliteracy.org/essays/becoming-ecoliterate.

The emotive dimension of ecological literacy, through engagement with natural systems and features, promotes "a sense of caring that is not restricted to other human beings but extends to all forms of life."[56] The development of a 'sense of caring' leads one, as Leopold proposed, from ecological study to ethical interaction with the natural world. Based on an understanding of ecological principals, a conservationist perspective and belief in the importance of sustained engagement with the land, Leopold developed an environmental ethic that influenced a countless number of scholars, land planners, and landowners, among others. Leopold called this framework, simply, the "land ethic."

According to Leopold, the land ethic represents the third phase of human ethical development. The first two phases of ethics dealt specifically with human interrelations, or in other words, how to live together as a community of human individuals. Leopold stated "[t]he land ethic simply enlarges the boundaries of the community to include soils, waters, plants, and animals, or collectively: the land."[57] As environmental ethics scholar Michael P. Nelson writes, "[t]he Land Ethic is the ethical response correlative to our perception of nature as a biotic community, the ethic corresponding to our most recent realization that land is likewise organized as a community."[58]

At its core, this land ethic rests upon having respect for the land-community as a whole, as well as for individual members of the community. As part of the land

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[56] Ibid.
[57] A. Leopold, 239.
[58] Micael P. Nelson, "Aldo Leopold, Environmental Ethics, and The Land Ethic," *Wildlife Society Bulletin* 26, no. 4, Commemorative Issue Celebrating the 50thAnniversary of "A Sand County Almanac'' and the Legacy of Aldo Leopold (1998): 744.

community, humans are automatically included in any draft of ethical principles, and should extend respect toward one another. The land ethic furthermore calls for humans, as "fellow-members" of this community, to strive toward harmony with the landscape in which they are a part. Leopold's land ethic, and ecological principals related to interconnectivity and perennial change, aligns very closely with the Buddhist philosophy, and especially the concept of "interbeing." [59]

Buddhism's perspective of nature aligns closely with that of conservation ecology, environmentalism, and environmental ethics. "Nature" for the Buddhist encompasses biotic and abiotic things, is continuously-dynamic, beautiful, and worthy of respect.[60] Buddhist scholar Lily de Silva writes, "Buddhism believes that though change is a factor inherent in nature, man's moral deterioration accelerates the process of change and brings about changes which are adverse to human well-being and happiness."[61] Thus, a Buddhist perspective of nature places humans as a part of the natural world, as agents and recipients of change.

Vietnamese Buddhist monk Thich Nhat Hanh writes eloquently about the connection between humans and the rest of the world in his discussion of "interbeing." Hahn writes,

> If you are a poet, you will see clearly that there is a cloud floating in this sheet of paper. Without a cloud, there will be no rain; without rain, the trees cannot grow; and without trees, we cannot make paper. The cloud is

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[59] Thich Nhat Hahn, in *The Heart of Understanding: Commentaries on the Prajnaparamita Heart Sutra*, ed. Peter Levitt (Berkley, California: Parallax Press, 2009): 3-4.
[60] Lily de Silva, "The Buddhist Attitude Towards Nature," *Access to Insight* 5 (June 2010) http://www.accesstoinsight.org/lib/authors/desilva/attitude.html.
[61] Ibid.

> essential for the paper to exist. If the cloud is not here, the sheet of paper cannot be here either. We can say that the cloud and paper *inter-are.*

He further states:

> Looking even more deeply, we can see we are in it too. This is not difficult to see, because when we look at a sheet of paper, the sheet of paper is part of our perception. Your mind is in here and mine is also. So we can say that everything is in here in this sheet of paper. You cannot point out one thing that is not here—time, space, the earth, the rain, the minerals in the soil, the sunshine, the cloud, the river, the heat. Everything coexists with this sheet of paper. That is why I think the word inter-be should be in the dictionary. To be is to inter-be. You cannot just *be* by yourself alone. You have to inter-be with every other thing. This sheet of paper is, because everything else is.[62]

Having such an awareness of the interconnectedness of the world, a responsibility to the betterment of one's surroundings may be instilled.[63] Buddhist philosophy, cognizant of such connectivity, has drafted for itself guidelines that seek to minimize harm to the natural world, such as vegetarian diets, respect for wildlife, and an aversion to polluted environments.[64]

Aldo Leopold's son, Carl Leopold, echoes this Buddhist perspective and states, "[a]wareness of the natural world and its resources, and subsequent concern for their preservation, can be generated by nurturing a knowledge of and affection

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[62] Hahn, 3-4.
[63] Nancy D. Rottle and Julie M. Johnson, "Youth Design Participation to Support Ecological Literacy: Reflections on Charrettes for an Outdoor Learning Laboratory," *Children, Youth and Environments* 17, no. 2, Pushing the Boundaries: Critical International Perspectives on Child and Youth Participation - Focus on the United States and Canada, and Latin America (2007): 485.
[64] de Silva, no page.

for the land."[65] This perception may then lend support to the "nonviolent land use" Aldo Leopold called for, whereby human use of the land continues, but focuses on creating win-win situations instead of zero-sum outcomes.[66]

Conservation ecology and Buddhist philosophy stress the importance of understanding and respecting the relationships between all members of land community. Berry in *The Unsettling of America: Culture & Agriculture* applies this perspective to local farm, and asserts,

> we and our country create one another, depend on one another, are literally part of one another; that our land passes in and out of our bodies just as our bodies pass in and out of our land; that as we and our land are part of one another, so all who are living as neighbors here, plant and animal, are part of one another, and so cannot flourish alone; that therefore, our culture must be our response to our place, our culture and our place are images of each other and inseparable from each other, and so neither can be better than the other.[67]

This passage demonstrates how the place-based philosophy of agrarianism mirrors the awareness of microcosm-macrocosm connections offered by Buddhist thought. In this way, through the increase in ecological and agricultural literacy, and recognition of interbeing of all things, one can perceive how, as the title of this thesis asserts, the world is in a tomato seed.

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[65] C. Leopold, 150.
[66] J. Baird Callicott, "A Critical Examination of "Another Look at Leopold's Land Ethic,'" *Journal of Forestry*, 96, no. 1, (1998): 23.
[67] Wendell Berry, The Unsettling of America: Culture & Agriculture 3rd Edition (San Francisco: Sierra Club Books, 1996): 184., 22.

This section has shown how certain tenets of conservation ecology, agroecology, Leopold's land ethic, and Buddhist philosophy relate to the question of this thesis concerning place-based ethics. As place-based ethics entail harmonious relations within specific localities, conservation agroecology offers a method for studying what is required for such harmony to occur within historic agricultural landscapes. The land ethic and concept of interbeing provide intellectual and personal connections to the expanded idea of community. Revealing the historic farmscape as existing within a local land community that is simultaneously both human and nonhuman may help to advance a place-based ethic at historic agricultural sites. Sustainable agriculture as a movement and activity seeks to advance such an ethic.

The Sustainable Agriculture Movement

Viewing the farm as an agroecosystem, a place where culture, heritage, and nature meet, represents the foundation of a sustainable agriculture approach. Thomas A. Lyson, Liberty Hyde Bailey Professor of Development Sociology at Cornell, defines sustainable agriculture as,

> a set of production practices that are economically profitable for farmers, that preserve and enhance environmental quality, and that contribute to the well-being of farm households, while nurturing local community development.[68]

[68] Thomas A. Lyson, *Civic Agriculture: Reconnecting Farm, Food, and Community* (Medford, Massachusetts: Tufts University Press, 2004): 79.

Similarly to agrarianism, in this approach to agriculture, the individual, community, and habitat are interconnected.

Today, numerous sustainable agriculture-focused groups exist across America, and focus on a plethora of issues, topics, and causes, such as workers' rights, pesticide use, and food deserts. While most of these non-profits, government agencies, or friends groups and agencies have some connection to the topic of this thesis, the groups that focus on "natural farming" practices will be the focus of this particular section. After detailing this approach to farming, an application of sustainable agriculture to historic agricultural sites is provided.

The sustainable agricultural approach to ethical relations with the natural environment focuses on promoting a "natural" style of agriculture. Farmer-authors such as Berry,[69] Dana L. Jackson,[70] and Masanobu Fukuoka[71] have written extensively on how the farm is, as agroecology also posits, a natural habitat, as well as a cultural one.[72] As the Wild Farm Alliance, a nonprofit advocacy group whose mission is to "reconnect food systems with ecosystems," states:

> (1) Agriculture must be conducted in ways that are compatible with preservation of native plants and animals; (2) Sustainable family farms and ranches nourish healthy human communities and help safeguard natural communities; (3) The current biodiversity crisis calls for a new conservation

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[69] Wendell Berry, "Conservationist and Agrarian," in *Farming and the Fate of Wild Nature*, ed. Daniel Imhoff and Jo Ann Baumgartner (Healdsburg, California: Watershed Media, 2006): 3.
[70] Jackson, 14.
[71] Masanobu Fukuoka, *The One-Straw Revolution: An Introduction to Natural Farming* (Rodale Press, 1978): 33-34.
[72] In fact, my initial discovery of the word 'habitat' and its connotations for historic agricultural sites came from the collection of essays found in the book entitled *The Farm as Natural Habitat.*

> ethic that promotes ecological recovery within agricultural lands and across the entire landscape.[73]

Agricultural practices that mirror, support, and respect the natural processes of such a habitat represent the aims of sustainable agriculture.

The specific practices of "natural farming" vary from farm to farm, both domestically and internationally. To an outsider the differences may seem subtle. U.S. Department of Agriculture organic standards are different from biodynamic standards, which are themselves different that Certified Naturally Grown standards. Yet all three systems are based on limited outside farm inputs, limited or no application of synthetic chemicals, and a goal of preserving ecosystem functions. The specific differences distinguishing these natural farming approaches are not the focus of this thesis however, and this brief snapshot is meant to show the importance natural farmers place on experimentation with different ways to protect the farm environment.

In terms of historic agricultural landscapes, in an analysis of the groups involved in the sustainable agriculture movement, one is able to identify overlap in both agricultural practices and in philosophy between this modern movement and historic small-scale farms. The sustainable agriculture movement incorporates many of the tenets found at historic, self-sufficient farms and within bioregional and agrarian philosophy: local economies, community engagement, care for the land, sustainable agricultural practices, and responsible citizenship. These groups, because of their similarity to historic agricultural philosophy and practice, and

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[73] Wild Farm Alliance, "About WFA," http://wildfarmalliance.org/about/index.htm.

place-based ethics, may serve as perfect candidates to become long-term stewards of public historic agricultural sites.

The following section of this literature review discusses the field of environmental history, and in particular how work, nature, and local environments are viewed. The implications of such perspectives have implications for place-based ethics and historic agricultural sites.

Environmental History

Scholars from the field of environmental history have added their insights to the conversation about environmental ethics and humanity's place in nature. This field's historical perspective is additionally applicable to this thesis. Two environmental historians especially useful in this analysis are Richard White and William Cronon. In a collection of essays complied by Cronon entitled *Uncommon Ground: Towards Reinventing Nature*, we find two articles that pertain to this thesis' central question about place-based ethics at historic agricultural sites. The first, written by Richard White, explores the separation between humans and nature via the lens of labor.[74] In the second, Cronon offers a way to connect with the nature in our local environment. These authors' works will be related back to writers already addressed in this literature review.

White's conceptualization of nature is one where 'nature' is a cultural construct attached to real things in the world, and additionally has culturally-

[74] Ibid., 171-185.

established "borders."[75] White also posits environmentalists typically perceive this depiction of nature as a place of leisure that is best used by humans for passive viewing. White warns against focusing on nature as a place of bounded leisure. White states this focus, championed by many environmentalists, "condemn[s] ourselves to spending most of our time outside of nature, for there can be no permanent place for us inside."[76] White proposes this disconnect deprives us of meaningful connections to both nature and one another.

White instead calls for "nature" to be considered more through the lens of 'work' than that of 'leisure.' He postulates people who work in natural resource-based industries, such as logging and farming, have a significantly different idea of nature than those who do not. According to White, such workers are particularly suited to "recognize the tangled complexity" of Earth.[77] Reframing nature in this way, through the lens of labor, elucidates connections between places of great aesthetic beauty and environmental degradation, between the food we eat and the land, and between the forest and the paper mill. In this way, the conversation about proper environmental ethics cannot take refuge in prosaic arguments that nature should be reserved for only leisurely pursuits, or only exists within such confined places.

However, White posits this disengagement from viewing nature as a place of work will not be fixed by simply "working the land." White in fact argues that bioregional and agrarian approaches to bridging nature and work ultimately fail on

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[75] Ibid., 173.
[76] Ibid., 185.
[77] Ibid., 185.

account of their inapplicability to the modern age. Instead, White stresses the need to incorporate modern technology, work, and consumption into the argument, something which he states Berry and others do not.[78] White, though not offering any concrete solutions, grounds his argument in the need to revalue and conceptualize the relationship between nature and work. Cronon's essay offers a similar conceptual-based approach to fixing the division.

Cronon in his provocative essay, "The Trouble with Wilderness; or, Getting Back to the Wrong Nature," examines the *local* consequences of separating ourselves from nature. In this essay, Cronon dissects the American attitude toward nature and wilderness, and suggests these views are rooted in historic cultural precedent and actually cause more harm than good. By viewing nature as "out there" we run the risk of devaluing the nature that is all around us. Cronon writes, "[w]e need to honor the Other within and the Other next door as much as we do the exotic Other that lives far away."[79] Cronon encourages a way of viewing nature and wilderness that follows a middle ground, a way that finds the wild in our backyards, and the domesticated in the wilderness area. Cronon concludes that by recognizing the nature around us we can "get on with the unending task of struggling to live rightly in the world—not just in the garden, not just in the wilderness, but in the home that encompasses them both."[80]

Cronon's essay proves beneficial in the attempt to establish a place-based ethic at historic agricultural sites for several reasons. First, it recognizes American

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[78] White, 179-181.
[79] Cronon, 89.
[80] Cronon, 90.

attitudes about nature stem from historic cultural precedent. Second, this perception is changeable. And third, changing the perception of nature to include backyard and other commonplace nature is advantageous to the establishment of ethical relationships with the natural environment. Therefore, Cronon's findings, while not a concrete roadmap, introduces a way to evaluate the landscape that begins from 'square one': nature is all around us, we are made up of it, and it is made up of us.

White's analysis of work and nature is similarly useful in that he forces the reader to think about such a very important topic to environmental ethics. As White rightly points out, work, whether it is harmful to nature or not, leads to knowledge of the landscape. White also correctly states that just because one knows about the landscape, those who profess that such knowledge leads automatically to ethical relations with the environment "have a great deal of history against them."[81] What White does not fully explore is how a culture of conservation education could address work in the landscape. Instead White writes off the small-scale agriculture of bioregionalism and agrarianism as trivial and essentially a hobby.

Though White does not think place-based philosophy provides an answer to the issue of working within nature, he overlooks other factors that remove people from working landscapes. In other words, the divide between work and natural areas does not solely happen with relation to places of leisure. Following ecological and agrarian thought, farms contain an abundance of nature. Therefore, another way they may become separated is through the loss of farmland or through the

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[81] White, 171.

consolidation of farmland into massive industrial farms. The consequences of this disconnect results in the withering of farm-based economies, and subsequently farming communities. Berry laments the "country-to-city migration" that has resulted in the reduction of agricultural literacy, and thus a loss of love for the local farmscape.[82]

Thus, through teaching and interpretation of conservation ecology principals related to local landscapes, historic agricultural sites may be able to provide the setting and the means of introducing Cronon's suggestion concerning the re-evaluation of nature to include commonplace landscapes. The public in turn can take such a lesson home with them, and apply it to their own environment. In this transmission of an environmental ethic based in the everyday landscape, the issue of working within nature may remedy itself.

Place-based Education

Place-based education is an educational strategy that utilizes local environments, history, and community as a classroom. By connecting students with their local environment through experiential learning activities, such as water-quality testing, story-collecting, and community gardening, place-based education seeks to instill a responsibility toward local places. As a National Park Service report on the subject states "[p]lace-based education helps students learn to take care of the world by understanding where they live and taking action in their own

[82] Berry, 44.

backyards and communities."[83] The website for the Detroit Boggs Educational Center, a school that specializes in place-based education, lists the foundational principals of place-based education as follows:

- Learning takes place on-site, in the schoolyard, and in the local community and environment.
- Learning focuses on local themes, systems, and content. Learning is personally relevant to each learner.
- Learning experiences contribute to the community's vitality and environmental quality and support the community's role in fostering global environmental quality.
- Learning is supported by strong and varied partnerships with local residents, organizations, businesses, and government.
- Learning is interdisciplinary.
- Learning experiences are tailored to the local audience.
- Local learning serves as the foundation for understanding and participating in regional and global issues.
- Learning is grounded in and supports the development of a love for one's place.[84]

While not the norm in public education today, place-based education has nevertheless existed in America for over a century. According to education scholars,

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[83] Place-based Education Evaluation Collaborative, "Thee Benefits of Place-based Education: A Report from the Place-based Education Evaluation Collaborative, Second Edition," 2008, http://tinyurl.com/PEECBrochure.
[84] "Place-Based Education" in Boggs Educational Center, http://www.boggseducationalcenter.org/place-based-education.

"[l]ocally responsive or 'place-based curriculum' is, and always has been, a feature of rural schools, in part out of necessity and in part out of desire."[85] Lacking the funding and being isolated from urban educational centers, rural schools had to use their surroundings to teach basic lessons, and those lessons in turn benefitted their communities. Early twentieth-century educator Liberty Hyde Bailey stressed the importance of agricultural education, and the positive impact such education had on local communities, nature, and personal fulfillment.[86] Berry College (unaffiliated to Wendell Berry), Foxfire, and the Rabun Gap-Nacoochee School, all located in Georgia, are notable historic examples of place-based educational programs located in rural areas, and additionally ones that incorporated agriculture and utilized local areas of educational activities in their curriculums.[87]

During the late nineteenth and early twentieth centuries, the place-based educational approach became popular in various schools across the United States. A highly influential early proponent of localized, experiential education was John Dewey. During the late 1900s in Chicago, John Dewey taught the importance of project- and place-based arts and sciences education for children. Dewey believed standard approaches to education in early twentieth century education did not result in a "meaningful connection" to the larger world because such education

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[85] Nancy Jennings, Steve Swidler, and Christopher Koliba, "Place-Based Education in the Standards-Based Reform Era—Conflict or Complement?," *American Journal of Education* 112, no. 1 (2005): 44.
[86] Scott J. Peters, "'Every Farmer Should Be Awakened': Liberty Hyde Bailey's Vision of Agricultural Extension Work," *Agricultural History* 80, no. 2 (2006): 192.
[87] Charles Elfer, "Place-Based Education in Georgia: Imagining the Possibilities for Local Study in the Contemporary Social Studies Classroom," *The Georgia Social Studies Journal* 2, no. 2 (2012): 47.

divided people from their local environment.[88] For Dewey the importance of humans recognizing their relation to nature was paramount, as he stated, "[w]henever the bond that binds the living creature to his environment is broken, there is nothing that holds together the various factors and phases of the self."[89]

This view is shared by many educators today, a hundred years later. As Cory A. Buxton and Eugene F. Provenzo Jr. state, "Dewey's criticisms resonate strongly with the condition of contemporary science education in the United States with its overemphasis on generic standards and teaching to a single high-stakes assessment."[90] Today, various types of place-based teaching takes place across the country, with a number of programs emphasizing the local natural environment, from "A Forest in Every Classroom" programs to watershed restoration and sustainable agriculture projects. However, as social-science educator Charles Elfer states,

> [p]lace based educational programs have accelerated sharply in the sciences within the past two decades, particularly in the fields of ecology and environmental science, yet only a handful of scholars have sought to make the connection to the social studies.[91]

Historic farms can serve as the bridge between social studies and environmental studies in place-based education, as these farms contain both cultural and natural resources, historic and current.

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[88] Cory A. Buxton and Eugene F. Provenzo Jr., *Place-Based Science Teaching and Learning: 40 Activities for K–8 Classrooms* (New York: SAGE Publications, Inc., 2011), 2.
[89] John Dewey, quoted in Herbert Reid and Betsy Taylor "John Dewey's Aesthetic Ecology of Public Intelligence and the Grounding of Civic Environmentalism," *Ethics and the Environment* 8, no. 1.(2003): 83.
[90] Ibid., 2.
[91] Elfer, 47.

In summary, a place-based educational strategy, through its focus on the health and vitality of local environments and communities has a role to play in the establishment of a place-based ethic. Additionally, historic agricultural sites, by containing both natural and cultural resources, present a way to teach about these resources in historic and modern day contexts.

Literature Review in Summary

It appears the fields discussed in the literature review have much to offer in terms of answering the question of how public historic agricultural landscapes through management of interpretation can promote a place-based ethic. Below, I summarize these points for clarity.

1. Cultural Landscape Theory
    a. Localized unit of scale referred to as "habitat" is generally analogous to the size of historic agricultural sites.
    b. Human perception of, and values pertaining to, the landscape is malleable.
    c. The cultural geography-based view of the landscape as 'habitat' provides a way to view the historic farmscape as a home to nature and humanity.

2. Place-Based Ethics
    a. Place-based ethics disciplines provide the philosophical foundations of active stewardship of, and accountability to, the natural world and local community.
    b. Bioregional approaches focus on the bioregion / lifeplace / ecoregion as a unit of scale.
    c. Agrarian approaches focus on the farm as a unit of scale.
    d. Thayer's Axioms posit that long-term engagement with a local, near-by place leads to knowledge of that place, and as a result, stewardship and care for the place.
3. Ecological Theory and Practice
    a. Ecological approaches focus on the ecosystem as a unit of scale.
    b. Ecosystems are dynamic.
    c. The study of interactions between members and features of ecosystems is a foundational method of ecology.
    d. Buddhist philosophy likewise addresses these connections through the concept of interbeing.
    e. The "Land Ethic" extends the idea of community to the land and its members.
4. The Sustainable Agriculture Movement
    a. Sustainable agricultural approaches focus on community engagement with agricultural production.

   b. The movement addresses the social, environmental, and economic dimensions of agriculture.
   c. The farm is viewed as an agroecosystem, full of both biotic cultural diversity and biodiversity.

5. Environmental History
   a. Richard White offers the idea that modern conceptions of nature should allow a place for work, and not just leisure.
   b. William Cronon offers the idea that nature should not be considered as something "out there."
   c. Cronon posits that by recognizing the nature that is all around us, such as that in our own local environment, may help inform a new environmental ethic to develop.
6. Place-Based Education
   a. Experiential and place-based education provides a model with which to accomplish the goal of increasing ecological and agricultural literacy.
   b. Students engage with local environments through hands-on projects.
   c. The goal of place-based education is both personal education and community service towards the betterment of the local community and environment.

The promotion of such a place-based philosophy by public-access historic agricultural sites will surely face challenges. How exactly humans live without

harming fellow members of the land-community is under constant revision and critique.[92] Additionally, the issue of "historic" designation related to the protection of historically-significant site resources precludes certain activities from occurring. However, it is through an ongoing dynamic conversation about, and experiment with, such an ethic that we can arrive at an answer of how best to apply this ethic to the modern world and at these sites. This thesis intends to carry this conversation forward into an area not discussed in the literature directly.

Most discussions of place-based ethics in the literature focus on privately-owned lands. Occasionally, parks are mentioned, but not necessarily *historic* parks or sites, nor *historic agricultural* sites. In other words, many ideas, concepts, and methods that could relate to the management and interpretation of historic agricultural sites as centers of place-based ethics exist in the literature, yet simply have not been applied to this type of place. This thesis intends to fill this gap in the literature, and provide a way that historic agricultural sites can promote place-based environmental ethics and meaningful connection to all things.

Research Methods

My research methods included an analysis of the literature previously discussed, as well as historic and modern agricultural practices, historic preservation frameworks, agroecology, environmental education, heritage philosophy, and park planning among other fields of study. Additionally, I conducted internet searches of publically-owned historic agricultural sites, as well

[92] Boris Zeide "Another Look at Leopold's Land Ethic" in *Journal of Forestry* 96, no.1 (1998): 13- 19.

as those owned and operated by non-profit entities. From reviewing these farm's websites, information was gathered concerning their management, interpretation, and engagement with the public. Additionally, over the course of my degree program, I visited and studied several historic farms and plantations, both derelict and "living," from which I have drawn conclusions pertaining to interpretation and management of such sites. These finding have been incorporated into the scope of this thesis.

This analysis of both historic agricultural sites and the literature pertaining to place-based ethics at historic agricultural sites has revealed the ways in which management and interpretation at these sites is conducted, as well as opportunities for re-evaluation. This thesis therefore, takes the findings of the research, and applies it directly to the question of this thesis: *can place-based philosophies be applied to the management and interpretation of public-access historic agricultural sites in order to foster and promote an ethic relevant to modern concerns and trends related to human interactions with the natural world?*

Definitions

Before continuing further, defining particular terms would assist the reader in the chapters that follow. Other terms warranting definition will be defined in the section in which they are first discussed.

Small-scale: This term has various definitions in the literature. It refers to both size (typically below 500 acres) and scale of production (non-industrial scale output). '

Historic Agricultural Site: A public-access park, outdoor museum, heritage farm, or similar space that has been set aside from development based on its historic significance as defined by either national standards, or other evaluation such as age, or reflection of community history. These sites are owned by local, state, and federal agencies, as well as non-profit groups. Private farms are not included in this use of the term historic agricultural site.

Sustainable Agriculture: The definition used in this thesis includes the social, economic, and environmental aspects of sustainable agriculture, instead of solely using it in terms of "natural" ways of farming. The specific aspects of sustainable agriculture this thesis refers, will be made within individual topics of discussion.

Thesis Organization

This thesis begins by detailing the managerial and interpretive methods and frameworks applied to public historic agricultural landscapes. This discussion is not exhaustive, but will outline the broad developmental histories pertaining to these theoretical and managerial paradigms. The next chapter, chapter three, introduces the habitat approach. There I discuss the origins of the habitat approach, its validity, and how this view of the landscape applies to historic farmscape management. The following chapter, "The Habitat Approach Applied," provides concrete steps to institute the habitat approach at historic agricultural sites. Chapter five discusses the potential challenges to applying the habitat approach to historic agricultural site

management and interpretation. Chapter six synthesizes the arguments and findings of the thesis, concludes the thesis, and offers direction for future research.

CHAPTER 2

HISTORIC SITE INTERPRETATION AND MANAGEMENT

This chapter outlines the history of historic agricultural sites, as well as the common interpretive and managerial principals and processes employed at these sites. Although the various historic agricultural sites in the United States contain different resources, general managerial and interpretive principals and processes are identifiable. These principals and processes are based on precedent, agency funding, cultural views, institutional guidelines, and site resources among other factors.

First, this chapter discusses historic cultural landscape preservation. Second, the chapter provides an analysis of the history of farmland conservation, both historic and non-historic, and the rationale and precedents for such conservation. Third, an analysis of guiding managerial frameworks is offered. The chapter concludes with a discussion of the origins, institutionalization, and methods of environmental and cultural education and interpretation programs within public parklands. Additionally, this chapter does not present a critique of management or interpretive paradigms, but rather focuses attention on particular topics that concern the question of this thesis. Additionally, because of the substantial influence the NPS has had on such paradigms, this analysis relies heavily on NPS history and managerial and interpretive frameworks.

Historic Cultural Landscape Preservation

To understand historic agricultural landscapes, we have to understand what makes something 'historic' in the first place. U.S. historic preservation law, theory, and practice provide a system of evaluation in order to make such decisions. Based on the National Historic Preservation Act of 1966 and the National Register of Historic Places, a researcher must be able to demonstrate the significance of a place (building, site, district, structure, and object) associated with a historically important person or people, event, design, or the place's potential ability to reveal information (i.e. through archaeology).[93] Additionally, such a place must retain a high degree of integrity of historic design, workmanship, feeling, association, setting, location, or materials that relates to the period of historic significance. If the site or object has not retained a necessary amount of historic integrity in order to reflect the period of significance, it is deemed unable to be included in the National Register of Historic Places.

While early historic preservation activity focused primarily on the "bricks and mortar" aspects of history, such as architecturally-significant houses, a number of landscapes were nevertheless set aside and protected. From historic gardens, to battlefields, to Williamsburg and Stratford Hall in Virginia, various examples of historically-significant landscapes were preserved through either government action or by citizen interest groups, such as the Mount Vernon Ladies Association. However, many preservation activities overlooked the common, vernacular cultural landscapes of America.

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[93] U.S. Department of the Interior, *National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation* (Washington, DC: DOI, 1995), 1-48.

The appreciation and study of vernacular cultural landscapes, as perpetuated primarily by cultural geographers, continued under the radar of preservationist interest. Writers such as J.B. Jackson wrote extensively on the ordinary cultural landscapes of everyday life in the 1950s and 1960s. Landscape studies picked up steam during the 1970s with a collection of essays compiled in *The Interpretation of Ordinary Landscapes*, published in 1979. However, the study of cultural landscapes does not mean their preservation, and according to Richard Longstreth the concept of cultural landscapes, "is still relatively new to the field of historic preservation, and while it has made a substantial contribution, it remains marginalized in many quarters."[94]

It was not until 1984 that landscapes as a distinct area of historic preservation began to become institutionalized. In that year, the NPS published *Cultural Landscapes: Rural Historic Districts in the National Park System* by Robert Melnick.[95] The following year, Ian Firth produced a report for NPS entitled *Biotic Cultural Resources: Considerations for Historic Districts in the National Park System, Southeast Region*.[96] This report attempted to clarify the differences and overlaps between cultural and natural landscape features. During the 1990s, the NPS subsequently published other guides and updated existing ones that addressed the evaluation and classification of historic landscapes.

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[94] Richard Longstreth, "Introduction: The Challenges of Cultural Landscape for Preservation," in *Cultural Landscapes: Balancing Nature and Heritage in Preservation Practice,* ed. Richard Longstreth (Minneapolis: University of Minnesota Press, 2008), 1.
[95] Robert Melnick, Daniel Sponn and Emma Jane Saxe, *Cultural Landscapes: Rural Historic Districts in the National Park System* (Washington, DC: DOI, 1984), 1-80.
[96] Firth, 1-75.

During the last several decades the historic cultural landscape preservation field has expanded in the U.S. and abroad. Room has been made within this field for deeming particular landscapes significant for intangible and ethnographic reasons, primarily related to indigenous peoples.[97] While still having to be attached to physical items or features in the landscape, intangible values and perceptions nevertheless were incorporated into preservation management practices and evaluation in NPS-published documents, such as *A Guide to Cultural Landscape Reports* published in 1998.[98] The NPS has additionally provided guidance on the evaluation and preservation of specific landscape features, such as designed hiking trails.[99]

Today the field of historic landscape preservation is faced with the question of relevancy. As cultural landscape professional Cari Goetcheus elucidates,

> The central imperative for the field of historic landscape preservation is to incorporate an understanding and respect for the historical and cultural values of landscape into the social, ecological, economic, and political lives of individuals and communities. In other words, preservationists need to more effectively define the relevance of historic landscapes to people's everyday lives.[100]

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[97] U.S. Department of the Interior, *National Register Bulletin 38: Guidelines for Evaluating and Documenting Traditional Cultural Properties* (Washington, DC: DOI, 1990).
[98] Robert R. Page, Cathy Gilbert, and Susan Dolan, *A Guide to Cultural Landscape Reports: Contents, Process, and Techniques*, (U.S. Department of the Interior, National Park Service, Cultural Resource Stewardship and Partnerships, Park Historic Structures and Cultural Landscapes Program, 1998).
[99] Margie Coffin Brown, "Historic Trails" in *A Guide to Cultural Landscape Reports: Landscape Lines*, (U.S. Department of the Interior, National Park Service, Cultural Resource Stewardship and Partnerships, Park Historic Structures and Cultural Landscapes Program, 1998).
[100] Cari Goetcheus, "What's Next for Historic Landscape Preservation?" in *Exploring the Boundaries of Historic Landscape Preservation: Proceedings of the Twenty-ninth Annual Meeting of the Alliance for*

This issue of relevancy is also imperative to fostering an environmental ethic by means of these historic landscapes. Farmland protection and conservation has proven to be a relevant topic in both preservation circles as well as general society.

Brief History of Farmland Protection

Ranging in scale from small parcels along rivers to vast plantation estates, many thousands of acres of farmland have been protected from development across the United States during the past several decades through farmland preservation strategies. These strategies can take the form of conservation easement programs for private land owners, accolades such as a farm's placement in the National Register of Historic Places or state centennial farm lists, stand-alone public-access historic sites, or farming areas within a larger park. It takes a large amount of money, people, and time to institute such programs and activities. This large undertaking indicates the public good that farmland preservation is perceived to achieve.

However, like other common landscapes, vernacular farms once were not valued in the same way that they are today. As the authors of *Tilling the Earth: Georgia's Agricultural Heritage – A Context* write, "because these resources are, or were, common, there is a tendency to undervalue them."[101] Small-sale farms often were overlooked in the inventories of historic resources conducted by the Historic

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Historic Landscape Preservation 2007, eds. Cari Goetcheus and Eric MacDonald (Clemson University Digital Press at the Center for Electronic and Digital Publishing, College of Architecture, Arts and Humanities, Clemson University, Clemson, South Carolina): 193.

[101] Denise P. Messick, J. W. Joseph, Natalie Adams, "Tilling the Earth: Georgia's Historic Agricultural Heritage--a Context," (Stone Mountain, Georgia: New South Associates Inc., 2001): 2.

American Building surveys of the 1930s, because they were seen as ubiquitous, common, and not as historically significant as grand estates or plantations. This neglect changed as suburban sprawl ate away at rural lands, and American attitudes about the disappearing countryside elicited calls for farmland preservation. The antecedents to such concerns and their responses can be traced back further than the rise of suburbia, to the late nineteenth and early twentieth centuries.

Rural preservation during the transition into the twentieth century was as much about preserving rural culture as it was about saving rural lands.[102] Due to the concerns of "urban agrarians" pertaining to the migration of farmers to the city, the large influx of Eastern European immigrants, and the burgeoning natural resource conservation field, this period of time saw much interest in the rural American countryside. The response to these trends resulted in the Country Life, Populism, and scientific farming movements.

A mythology of America's agrarian beginnings, as well as views concerning the wholesome and righteous values represented by rural living, were established in American culture at this time by writers, professors, journalists, politicians, and others.[103] As noted by historian Dennis Roth, "[urban agrarians] wanted to resurrect a mythologized rural past, while at the same time advocating ideas that would inevitably bring urban influences into the countryside."[104] This myth-building followed the "closing of the frontier" during the 1890s, the hardships of

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[102] Dennis Roth, "The Country Life Movement," in *Federal Rural Development Policy in the Twentieth Century*, eds. Dennis Roth, Anne B. W. Effland, and Douglas E. Bowers (Washingon, DC: USDA, 2002), 2.
[103] Ibid., 2.
[104] Ibid., 2.

Reconstruction in the Southern states, and the massive changes in demographics, food prices, land ownership, politics, and culture that America experienced during the early 1900s. The push to preserve rural landscapes and lifeways was an attempt to slow these forces of change, or at least guide them in certain directions. Roth describes this sentiment by stating, "[f]or the first time in American history, [urbanites] perceived a deterioration in the conditions of 'country life' as a potential source of problems for the Nation as a whole."[105]

At the same time rural lifeways were in flux, the treatment of nature and natural resources experienced transformation. During the late nineteenth and the early twentieth centuries, nature occupied two broad roles in the minds of Americans: utility and aesthetics.[106] Those who found nature to be aesthetically pleasing, spiritually fulfilling, and personally transformative often took a preservationist position on the protection of natural areas. Typically these areas were grand and majestic, such as Yellowstone or Yosemite National Parks, or possessive of great antiquity and other appealing qualities such as the Casa Grande site. On the other hand, the conservationist camp possessed a more utilitarian view of nature. The conservationists did not necessarily dislike nature, but they saw it primarily as something to be used for human good. The conservationists focused on all landscapes, not only 'wildernesses'. While both approaches were progressive in that they departed from the typical unsustainable practices of this time period, it was conservationists who applied their approach to farms across America.

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[105] Ibid., 1.
[106] Roderick Nash, "The Potential of Conservation History," in The American Environment: Readings in the History of Conservation, ed. Roderick Nash (Reading, Massachusetts: Addison-Wesley Publishing Company, 1968), *xiii.*

The conservationist approach to farmland focused on soil conservation, fertilizer application, and other scientific farming practices of the day. Liberty Hyde Bailey, professor of horticulture and Country Life Movement proponent, thought that by "awakening the farmer" through the newly created Extension Service and other educational outreach programs, the farmer essentially would become improved, mirroring the farm itself.[107] Understanding of nature, rural living, and self-sufficiency were championed by Bailey. However, other than the creation of the Extension Service, the immediate results of this agricultural overhaul were scatter-shot. Roth writes:

> [t]here was much talk during the Country Life movement. There was less action. The time was not yet ripe for ambitious government programs. Most country-lifers were relatively conservative and did not favor the creation of structured government programs, knowing that the even more conservative and independent farm population would have resisted them.[108]

Americans did not increase action in terms of farmland preservation until the late twentieth century. The first attempt to institute conservation tax credits for agricultural protection in the United States occurred in 1964. Ten years later, New York initiated the first purchase of development rights program. Today, grant programs through the U.S. Department of Agriculture's various agencies provide funding for conservation-related activities, projects, and easements.

While anthropologists and geographers had studied the folkways and material artifacts of various cultural groups and landscapes since the early

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[107] Peters, 192.
[108] Roth, 2.

twentieth century, it was not until the 1970s and 1980s that scholarly inquiry in the vernacular aspects of American life, as well as public interest in historic farmscapes, became firmly established. Groups such as The Association for Living History, Farm and Agricultural Museums (founded 1970), Alliance for Historic Landscape Preservation (founded 1978), and Vernacular Architecture Forum (founded 1980) began the task of documenting, preserving, and interpreting vernacular landscapes, which included agricultural landscapes. Universities held conferences, scholars published books, and academic journals pushed for more inclusive histories to be presented in the literature as well as at historic sites. This activity was paralleled at the federal level within the National Park Service, which began defining and documenting the variety of cultural landscapes within its units. Much of this revisionist history was heavily influenced by postmodern critiques of historiography, authority, and interpretational presentation.

This brief history sheds light on the rationale for extending protection to historic agricultural sites. They were preserved to save some of the last remaining tangible fragments of pre-World War II rural landscapes.[109] Farms such as Cades Cove and Historic Johnson Farm in North Carolina, Shields-Ethridge in Georgia, and the famous Colonial Williamsburg all represent these sorts of landscapes. These farms represent a tangible history and link to the past that in the last several decades has undergone development at a staggering rate.[110] These historic farm sites now represent a past way of life, or in other words, serve as a history lesson

[109] Denise P. Messick, J. W. Joseph, Natalie Adams, 2.
[110] American Farmland Trust, "Threatened Farmland: What's Happening to Our Farmland," http://www.farmland.org/resources/fote/default.asp.

about historic American lifeways. The ability to teach this lesson is at the core of managerial principals and methods.

Management Principals and Methods

Like other public historic sites, historic agricultural landscapes are managed by municipal, state, and federal authorities, as well as by non-profit groups. While these agencies and their individual units have differing budgets and institutional resources, these sites nevertheless are managed quite similarly. This similarity is based on the historic preservation procedures, methods and treatments that are stated in laws and published guidelines. Furthermore, emotional connections, such as civic pride and nostalgia, also influence the value ascribed to the landscape. Speaking of the management of cultural landscapes, Arnold Alanen and Robert Melnick state "[w]e must strike a reasonable balance between the blind application of regulation and purely emotional responses to historic and cultural landscapes."[111]

In terms of law, the National Historic Preservation Act of 1966 codified the rationale, procedures, and processes related to preservation activity in the United States. In terms of guidelines, various "historic contexts" have been published by state and federal agencies that provide information about specific historic trends, events, or period of history, such as the development of subdivisions in Georgia and the establishment of orchards in America. Additional guidelines such as the *Preservation Briefs* series of publications provide preservation advice on topics

[111] Arnold R. Alanen, and Robert Z. Melnick, "Introduction," in *Preserving Cultural Landscapes in America*, eds. Arnold R. Alanen and Robert Z. Melnick (Baltimore, Maryland: The John Hopkins University Press, 2000): 18.

ranging from eligibility for the National Register of Historic Places to the restoration of historic windows.

Integrity represents one of the central tenets within the historic preservation field. However, the concept of integrity as related to landscapes is potentially more difficult to manage given the natural growth, changes, and mortality of natural features. The difficultly of applying preservation standards originally designed for the architecture of buildings to living landscapes has spurred much debate and conversation. In 1998, the NPS published a guide for the evaluation of historic cultural landscapes. This report defined historic integrity in terms of historic cultural landscapes as:

> (1) The authenticity of a cultural landscape's historic identity, evidenced by the survival of physical characteristics that existed during its historic or prehistoric period. (2) The extent to which a cultural landscape retains its historic appearance.[112]

The management of historic landscapes thus has been focused on retaining or reinstating the historic *appearance* of the site. This appearance, it is thought, provides the link to the past that serves as a history lesson for the public.

The appearance of each historic cultural landscape relates directly to its function and use. The NPS identifies four types of cultural landscapes: historic sites, historic designed landscapes, historic vernacular landscapes, and ethnographic landscapes.[113] Cultural landscapes are delineated as such for management and

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[112] Robert R. Page, Cathy A. Gilbert and Susan A. Dolan, *A Guide To Cultural Landscape Reports: Contents Process, and Techniques* (Washington, DC: DOI, 1998), 137.
[113] Alanen, and Melnick, 8.

evaluation purposes. Most often, historic agricultural sites are considered historic vernacular landscapes.

The National Park Service's *Preservation Brief 36: Protecting Cultural Landscapes: Planning, Treatment and Management of Historic Landscapes* defines a historic vernacular landscape as,

> a landscape that evolved through use by the people whose activities or occupancy shaped that landscape. Through social or cultural attitudes of an individual, family or a community, the landscape reflects the physical, biological, and cultural character of those everyday lives. Function plays a significant role in vernacular landscapes. They can be a single property such as a farm or a collection of properties such as a district of historic farms along a river valley. Examples include rural villages, industrial complexes, and agricultural landscapes.[114]

This definition exemplifies how cultural landscapes exhibit both cultural and natural features, and furthermore how historic agricultural landscapes are the result of the interactions between nature and culture.

Management of all cultural landscapes begins with its initial protection. After this point, cultural landscape scholar Charles Birnbaum offers the following interdependent steps for their further protection and management:

- historical research;
- inventory and documentation of existing conditions;

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[114] Charles A. Birnbaum, *Preservation Brief 36: Protecting Cultural Landscapes: Planning, Treatment, and Management of Historic Landscapes*. (Washington, DC: Preservation Assistance Division, National Park Service, U.S. Department of the Interior, 1994): no page.

- site analysis and evaluation of integrity and significance;
- development of a cultural landscape preservation approach and treatment plan;
- development of a cultural landscape management plan and management philosophy;
- the development of a strategy for ongoing maintenance;
- preparation of a record of treatment and future research recommendations.[115]

The cultural landscape cannot speak for itself however, and therefore as part of the cultural landscape management plan, an interpretive program is developed in order to relate information and stories about the landscape to the public.

Brief History of Interpretation

The history of interpretation at historic and natural sites in America does not have a definitive beginning, as it sprang up via various media over a period of time beginning in the second half of the nineteenth century. Landscape photography and paintings, newspaper accounts of distant parks and places, guide books, cultural precedent and mythology, and word-of-mouth helped to create themes that guided attitudes and activities concerning historic and natural sites into the twentieth century. The history of interpretation within parks can be separated into two general areas: the interpretation of natural resources and interpretation of cultural resources.

[115] Ibid., no page.

The interpretation of environmental or natural features and landscapes became increasingly ingrained in public land management during the last decades of the nineteenth century and into the twentieth century.[116] John Muir, Josiah Dwight Whitney, and James Mason Hutchings all contributed to the first stages of nature interpretation during the 1870s-1890s. During this time, soldiers stationed at the newly-created Yellowstone National Park gave talks on the park's unusual natural features. Teachers were recruited by early operators of Yellowstone to provide lectures and talks for the enjoyment of the visiting public. Enos Mills became well known for his interpretive nature walks through the Rocky Mountains, as well as his 1920 book, *Adventures of a Nature Guide*, which influenced early interpretive methods.[117]

In 1911, as national parks were becoming more popular, Laurence F. Schmeckebier, the Department of the Interior's clerk in charge of publications, requested park superintendents draft written guides detailing the features of the parks, as well as information concerning lodging and access. This public-interpretation push became a major focus of Stephen T. Mather, the first director of the National Park Service. In 1918, the first policy directive of the new agency was written, and stated,

> [t]he educational, as well as the recreational, use of the national parks should be encouraged in every practicable way. University and high-school classes in science will find special facilities for their vacation period studies.

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[116] Barry Mackintosh, "Before the National Park," in *Interpretation in the National Park Service: A Historical Perspective Service* (Washington, DC: DOI, 1986), http://www.nps.gov/history/history/online_books/mackintosh2/notes.htm#f_1_9
[117] Craig, 16.

> Museums containing specimens of wild flowers, shrubs, and trees and mounted animals, birds, and fish native to the parks, and other exhibits of this character, will be established as authorized.[118]

Thus, from the beginning of park management, education was promoted. This directive itself did not gain much traction within Congress, and outside professionals had to aid in this mission.[119] Despite this initial stumbling block, during the 1920s, the NPS instituted the Education Division of the agency, and hired its first chief naturalist, Ansel Hall. This act helped to establish the profession of nature interpretation, and trained naturalists began careers within the parks.

Based on the burgeoning ecology field, and its findings concerning ecosystems and community interrelationships, during the late 1960s nature interpretation began to transition into environmental interpretation. Environmental education linked the natural features of the parks to larger concerns about habitat conservation. In 1970, the NPS instituted the Environmental Education Task Force, which aimed for fostering a nation-wide environmental ethic, and created Environmental Study Areas throughout many parks, including historic sites.[120] By the 1980s, this program was shelved by a new park director, Russell E. Dickenson. Dickenson favored interpretation that focused on park resources alone,

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[118] Letter from Secretary Franklin K. Lane to Stephen T. Mather, May 13, 1918, in Barry Mackintosh, "Before the National Park," in *Interpretation in the National Park Service: A Historical Perspective Service* (Washington, DC: DOI, 1986) http://www.nps.gov/history/history/online_books/mackintosh2/origins_nps_assumes_responsibility.htm.

[119] Mackintosh, http://www.nps.gov/history/history/online_books/mackintosh2/origins_nps_assumes_responsibility.htm.

[120] Mackintosh, http://www.nps.gov/history/history/online_books/mackintosh2/directions_environmental.htm.

and not tangential causes or issues, especially in terms of historic parks where, in his view, natural features did not warrant interpretation.

Before the 1930s, NPS historic sites received less support for interpretive programs than the nature-based parks. Even until the 1980s, historic interpretation at historic sites was rife with problems and controversies involving methods of preservation and interpretation.[121] While NPS administrators recognized the importance of historic sites, and added more units to the NPS system, the nature-based parks received the bulk of attention. Of the challenges pertaining to historic site interpretation, park historian Barry Mackintosh writes,

> [i]n historical park interpretation, the present resources were more often unspectacular; their value derived largely or solely from what had occurred in the past. The interpretive focus thus had to be on the past—on subjects that were not always fully understood, whose significance was not always closely tied to or illustrated by the sites in either their past or present state.[122]

Park interpreters have constantly revised and updated methods of interpretation to account for this interpretive challenge. However, the core of the NPS interpretive method remains largely the same and dates to the mid-twentieth century.

In 1957, the University of North Carolina Press first published *Interpreting Our Heritage* by Freeman Tilden. This text has gone on to become, in the words of R. Bruce Craig in the introduction to the fourth edition, "a classic that has influenced

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[121] Mackintosh, http://www.nps.gov/history/history/online_books/mackintosh2/branching_challenges.htm.
[122] Ibid., no page number.

interpretation more than any other single work."[123] In this work, Tilden outlines six principals of the interpretive method to be adopted by NPS:

1. Any interpretation that does not somehow relate what is being displayed or described to something within the personality or experience of the visitor will be sterile.
2. Information, as such, is not Interpretation. Interpretation is revelation based on information. But they are entirely different things. However, all interpretation includes information.
3. Interpretation is an art, which combines many arts, whether the materials presented are scientific, historical, or architectural. Any art is to some degree teachable.
4. The chief aim of Interpretation is not instruction, but provocation.
5. Interpretation should aim to present a whole rather than a part, and must address itself to the whole person rather than any phase.
6. Interpretation addressed to children (say, up to the age of twelve) should not be a dilution of the presentation to adults, but should follow a fundamentally different approach. To be at its best it will require a separate program.[124]

These principals were written with the intellect and emotion of the visitor in mind. Tilden knew interpretation was best when it provoked connections to be made, and relationships to form between the visitor, places, and each other.

[123] Craig, 1.
[124] Craig, 18.

Additionally, citing the environmental problems of the era, Tilden was in favor of the NPS environmental education program of the 1970s discussed previously, and thought it should be expanded to include adult education as well. While Tilden's suggestions were not accepted at the policy level, his ideas did reach park interpreters who in turn spread the message of environmental awareness to adults.[125] This holistic approach to interpretation, through which nature and culture are both revealed to the visitor, fits well with historic agricultural landscapes, as these sites contain both forms of resource.

Interpretation of Historic Agricultural Sites

The NPS system contains farms that are managed and interpreted to specific periods of significance—from Cades Cove within the Great Smoky Mountains National Park, to Carl Sandburg's Connemara, to Point Reyes and Sleeping Bear Dunes. Numerous state or municipal historic agricultural sites also dot the countryside of America. These farms all seek to preserve and reflect a past period of time. Based on this managerial and interpretive goal, agricultural activities that occur within these sites are almost always more limited in scope and scale than one would find occurring during the historic period. This is partly due to changed economics from the historic period, as well as concerns about conservation of historic integrity, user preference, and carrying capacity.[126] In short, these sites are

[125] Ibid., 14.
[126] Richard Westmacott, *Managing cultural landscapes: Agriculture in the national park*s (Washington, DC: USDI, NPS, Cultural Resources, Park Historic Structures and Cultural Landscapes Program, 1999), 124-161.

managed as outdoor museums. These important issues and their implications for instigating a habitat view of the landscape will be addressed later in this thesis.

According to my research, historic agricultural sites in the United States are as diverse as the agricultural systems the sites present to the public. Truck farms, large plantation estates, self-sufficient homesteads, dairy operations, examples of scientific farming, and hobby farms are all represented. Many farms display heirloom crop varieties of fruits and vegetables, or heritage livestock breeds.[127] Land-use practices of the historic era are typically featured, such as plowing with mules or antique tractors. Additionally, depending on the farm, historic homesteading activities are showcased typically through living history interpretation.

The interpretive method known as 'living history' became popular during the 1960s at historic agricultural sites. In this model, costumed actors represent people of the period being interpreted—military personnel, farmers, midwives, American Indians, politicians, slaves, and so on. Demonstrations are typically either first- or third-person-based and follow some form of script, and consequently they may be compared to theatre performance. The goal of the living history method is to add to the overall atmosphere of the historic period, while providing a more 'personal touch' to historic information than informational waysides along a trail.[128]

Most farms that have some element of "working farm" written into their mission and operation plan utilize living history interpretation. My research

[127] Notable examples include, Mountain Farm Museum, Strawbery Banke Museum, Monticello, Redcliffe Plantation, and Latta Plantation.
[128] "Living History," The Association for Living History, Farm and Agricultural Museums. http://www.alhfam.org/?cat_id=153&nav_tree=153.

indicates the level of agricultural activity and community involvement with the activity differs, however. Most, though not all, living history farms are hands-off environments for visitors, and involve watching demonstrators engage in some historic practice such as plowing with a mule or horse. Special "event days" are often the preferred outlet for such activities. During these events, visitors come out, eat food, and/or listen to music. Visitors may discuss guns with military demonstrators, watch a blacksmith pound metal, or buy some handmade soap. Hands-on engagement with the landscape itself is limited in most cases, but not always. Some special event days do allow the public to help process agricultural products, such as milling sugar cane or milking cows.

Chapter Summary

This discussion of the history, principals, and methods concerning the interpretation and management of cultural landscapes and historic agricultural sites has attempted to provide a basis upon which to build a place-based ethic. Through this analysis, several important aspects of management and interpretation of historic agricultural sites become clear. First, historic integrity is integral to site operations. Any program or activity that might harm this integrity requires extensive review and may not be allowed at all. Second, historic farmlands serve as important areas of teaching American history. Therefore, as historic agricultural sites are essentially educational areas that teach history lessons, these sites could provide the outlet for place-based education programs to become part of the interpretive program. Third, interpretative methods continue to evolve to meet the

evolving sentiment of the era. This re-evaluation and revaluation of history and the landscape may allow for additional, new meanings to be revealed and transmitted to the public.

CHAPTER 3

THE HABITAT APPROACH

Habitat: (n)

1. the environment in which an animal or plant normally lives or grows

2. the place in which a person, group, class, etc., is normally found[129]

This thesis proposes the "habitat approach" as a means of viewing, managing, and interpreting historic agricultural landscapes in a manner that encourages a place-based ethic to take shape. The habitat approach, in effect, serves as the operational means of applying Thayer's lifeplace axioms, the land ethic, and other place-based approaches to a "real world" context. This chapter discusses the underlying and guiding premises of the habitat approach. The next chapter provides applicable concrete, actionable steps for instituting such an approach.

I developed this strategy based in part on the ideas of Sauer, Meinig, Tuan, and Jackson related directly to the word "habitat" cited in the literature review of this thesis. To summarize, for these writers, the habitat is the view of the landscape in which humans and nonhuman nature coexist, and in which human strive towards harmonious relations with nonhuman nature. As such, "habitat" effectively

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[129] *Collins Dictionary, web edition,* s.v. "definition of habitat," http://www.collinsdictionary.com/dictionary/english/habitat

corresponds to the proposed approach of fostering a holistic place-based ethic at public-access historic agricultural sites.

In order to successfully institute a place-based ethic through the management and interpretation at historic agricultural sites, the habitat approach is based on the following premises:

1. Long-term engagement with a place leads to respect, caring, and stewardship of this place, and all places.[130]
2. The idea of community must expand beyond humanity to include nonhuman nature.[131]
3. The separation of nature and culture as separate entities does not advance a responsible environmental ethic in the modern age.[132]
4. Love must serve as the foundation of all interpretive programs.[133]
5. Education and interpretation programs at historic agricultural sites must be based on the teaching of local ecological, cultural, and historical contexts.[134]
6. Civic engagement is instrumental to creating and sustaining community and the environment.[135]
7. Management should mirror the dynamism of nature, and be adaptive to both change in the landscape as well as change in society.

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[130] Thayer, 5-6.
[131] Leopold, 239.
[132] Cronon, 89.
[133] Craig, 19.
[134] Buxton and Provenzo, 2.
[135] Joan Gibb Engel, "Who Are Democratic Ecological Citizens?," *The Hastings Center Report* 28, no. 6 (1998): s23

Furthermore, the habitat approach builds upon pre-existing methods, frameworks, and strategies found within the management and interpretation of historic agricultural landscapes. The habitat approach is therefore about a shift in the way of viewing, engaging, managing, and interpreting the landscape; shifting focus from a dichotomous nature vs. culture perceptive to an inclusive nature-plus-culture perspective. However, perspective entails paying attention. And in modern fast-paced transient society, the habitat approach may seem inapplicable to the realities of the present day. However, the habitat approach seeks to change this short attention span society. By providing an opportunity for place-attachment to develop, historic agricultural sites may be able to help instill a place-based ethic in spite of modern–day transience and disconnection from place.

"Many leisure scholars have argued that place attachment consists of two components: place identity, which is a symbolic or affective attachment to a place, and place dependence, which is related to the functionality of a place for a recreational activity," writes Tsung Hung Lee.[136] The habitat approach calls for the establishment of meaningful connections with historic agricultural sites (place-attachment) through engaged activity with specific features of the site (place-dependence) such as garden plots and nature trails. Various studies have shown that through repeated visitation to outdoor places, place-attachment and place-dependence have the opportunity to become established. Furthermore, it has been

[136] Tsung Hung Lee, "How recreation involvement, place attachment and conservation commitment affect environmentally responsible behavior," *Journal of Sustainable Tourism* 19, no. 7, (2011): 898.

shown that these attachments may result in "environmentally responsible behavior," which is akin to an active environmental ethic.[137]

Furthermore, in terms of environmental ethics, Thayer's Axioms posit that long-term engagement with a local, near-by places leads to knowledge of that place, and as a result, stewardship and care for the place. Through sustained engagement with the landscape and educational programs focused on teaching the interconnectedness of culture and nature, history and the present, historic agricultural sites can serve as a stationary and dependable place for teaching such an ethic. Historic agricultural sites, barring destruction or closure of the site itself, are not going anywhere. They will remain in place, allowing for perennial interactions by school children and adults.

In summary, the habitat approach is tailor-made for application to historic agricultural sites. The habitat approach builds upon the theoretical premises of cultural landscape theory, place-based ethics, ecological theory and practice, sustainable agriculture, environmental history, and place-based education as listed in the literature review summary offered earlier in this thesis. The next chapter demonstrates how these premises and frameworks can be filtered through specific actions and activities related to historic agricultural site management and interpretation.

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[137] Ibid., 21.

CHAPTER 4

THE HABITAT APPROACH APPLIED

Through research of management and interpretive principals, modern cultural trends, and educational methods, four actionable steps have been identified that may allow historic agricultural sites to foster the place-based ethic this thesis is investigating. These actionable steps were identified for both their connection to the premises of the habitat approach listed in the previous chapter, as well as for their pre-existing status in contemporary society or historic agricultural site management and interpretation. The application of the habitat approach calls for historic agricultural site personnel to…

1. Interpret the natural, as well as cultural, habitats of the farmscape;
2. Provide place-based educational programs;
3. Encourage community engagement through civic agriculture, and
4. Institute "adaptive management" strategies for decision making.

These steps are not necessary sequential, or linear, and rather these steps build upon one another, and are dependent on one another.

Furthermore, the habitat approach does not represent a means of finding an end-point, or reaching a final goal in terms of establishing a place-based ethic. In other words, the habitat approach is just that, an *approach towards* living responsibility within the land-community. The habitat approach embraces

dynamism and long-term exploration and learning. The natural evolution of the landscape, and human relationships with it, will surely change over the decades and centuries to come, just as they both have in the preceding millennia. The habitat approach is focused on promoting the evolution of such relationships.

Interpretation of Farms as Natural and Cultural Habitats

Nature does not change,

although the way of viewing nature invariably changes from age to age.[138]

Most Americans rarely think of farms, historic or otherwise, as natural areas, and they are even more seldom regard them as containing any wildness. Farms can be carved *out of* wild nature, but the farm itself is a human-made landscape and therefore is usually considered tame, domesticated, and less natural. This view of the farmscape is not a complete understanding of domestication however, as the process of domestication is not so clear-cut. Scientists are now gaining a greater understanding of this process. In a recent article published in *National Geographic* magazine, journalist Evan Ratliff writes,

> [T]he borders between domesticated and wild are often fluid. A growing body of evidence shows that historically, domesticated animals likely played

[138] Fukuoka, 21.

> a large part in their own taming, habituating themselves to humans before we took an active role in the process.[139]

Aldo Leopold was cognizant of the awkward dichotomy between wild and tame, and stated such a position was the result of "imperfections of the human mind."[140]

Domestication displays itself in the genes of numerous plants and animals, and should be considered a real phenomenon. However, to use domestication as the test for whether something is considered "natural" or "not natural" is problematic. Ecosystem and evolutionary processes are more complex than this dichotomous perception allows. Viewing a farmscape as more than just "wild" or "tame" allows for a more holistic appreciation of varying and overlapping farm habitats, and can lead to benefits to both human and nonhuman populations. The benefit to wildlife results from an increase in biodiversity and protected habitat zones through managing the landscape as a natural habitat. Humans in turn gain assistance in farm production through various wildlife and ecosystem functions, such as habitat for native pollinators and the regulation of agricultural pests.

It should be stated up front that farm-based activity does not always result in a benefit to wildlife or their habitats. The switch by humans from small-scale subsistence-based agricultural practices to large-scale industrial-model agriculture devastated many such habitats.[141] Wetlands have been drained, dead zones have

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[139] Evan Ratliff, "Taming the Wild," National Geographic, March 2011, http://ngm.nationalgeographic.com/2011/03/taming-wild-animals/ratliff-text

[140] Aldo Leopold quoted in Frederick Kirschenmann and David Gould, "Tame and Wild" in *Farming and the Fate of Wild Nature: Essays in Conservation-Based Agriculture*, eds. Daniel Imhoff and Jo Ann Baumgartner Healdsburg, California: Watershed Media, 2006), 14.

[141] Daniel Imhoff and Jo Ann Baumgartner, "Introduction," in *Farming and the Fate of Wild Nature: Essays in Conservation-Based Agriculture*, eds. Daniel Imhoff and Jo Ann Baumgartner (Healdsburg, California: Watershed Media, 2006), vi.

been created in the Gulf of Mexico, and woodlands have been timbered for field expansion. Today, many concerns about the natural world and its health are tied to farmlands. Pollution of rivers from pesticide and fertilizer runoff represents a primary concern. Yet, as suburban encroachment increasingly limits suitable non-farm habitat, wild plants and animals look to agricultural landscapes for subsistence and shelter.

Despite human-caused alterations to the land, a farm is still, or is capable of being, habitat for many various species of plant and animal. Woodlots, hedgerows, abandoned terraced fields, and river banks can support incredible biodiversity, arranged into distinct niches, which intersect in particular ecotones.[142] Viewed in this way we may understand farms as agro-ecosystems, wherein agriculture is seen as supporting, interacting with, and serving as an ecosystem. Within this agro-ecosystem, both humans and nonhuman biotic communities have the potential to benefit from one another. As Jo Ann Baumgartner, director of the Wild Farm Alliance, asserts, there is a "need to conserve both our farm heritage and the native species with the necessary functions they provide in our agricultural landscapes."[143]

One such way historic site personnel can initially approach the interpretation and management of both cultural and natural habitats is through the application of a "biotic cultural resources" concept. As previously mentioned, the concept of biotic cultural resources was developed by landscape scholar Ian Firth for the NPS

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[142] Michael A. Godfrey, *The Field Guide to the Piedmont: The Natural Habitats if America's Most Lived-in Region, from New York City to Montgomery, Alabama* (Chapel Hill: University of North Carolina Press, 1997), 46.

[143] Jo Ann Baumgartner, "Making Organic Wild" in *Farming and the Fate of Wild Nature: Essays in Conservation-Based Agriculture*, eds. Daniel Imhoff and Jo Ann Baumgartner (Healdsburg, California: Watershed Media, 2006), 106-107.

Southeast Office during the 1980s. This concept is useful for understanding the overlap between nature and culture in historic landscapes. Firth states,

> [b]iotic cultural resources are communities of plants and animals associated with human settlement and land use in historic districts. Such landscape features as garden, orchards, woodlots, fields, ponds and pastures are biotic resources as distinct from the buildings, structures and objects of a historic district which are abiotic resources. Because these biotic features are products of land use and management, they are cultural resources; they are distinct from the native vegetation and wildlife of a historic district, which are natural resources.[144]

In this document, Firth stresses the importance of managing these biotic cultural resources as one would manage any cultural resource—in other words, in accordance with the U.S. Secretary of the Interior Standards for the Treatment of Historic Properties.

The guidelines of the National Register for Historic Places outline seven aspects of historic integrity: location, design, setting, materials, workmanship, feeling, and association. To account for the different nature of biotic communities, Firth substitutes species composition, community organization, and management techniques for material, design, and workmanship. Firth's reformulation of the aspects of historic integrity emphasizes the importance of biotic communities within the historic landscape and the importance of their preservation in order to maintain historic authenticity and integrity of the site.

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[144] Firth, 1

The usefulness of viewing the historic farmscape in terms of cultural biotic resources is threefold. First, at a managerial level, because park-farms often are managed with historic integrity taking precedent over other considerations, Firth offers his assessment of biotic cultural resources in the language and policies of the historic preservation field. This allows managers to stay within established guidelines in managerial treatment. Second, and important to environmental ethics, is the view that cultural biotic resources reveal humans as part of nature, rather than entirely separate from it. Additionally, recognizing the need of humans to understand the living biotic communities of the site increases ecological and agricultural literacy. Lastly, Firth recognizes the fleeting nature of biotic life, and the dynamic nature of landscapes. He writes, "like Hailey's Comet, a particular historic scene may return perhaps once in a lifetime."[145] This lesson is valuable in terms of teaching about human impacts on the land, evolution, and long-term stewardship.

Viewing the farm as a natural habitat is only one step in the process of fostering place-based ethics at historic agricultural sites in the twenty-first century. Such an ethic takes interaction with a site, over a period of time, for certain connections that lead to an environmental ethic to emerge.[146] Most people will have to dedicate him or herself to understanding the natural environment, its workings, and its pieces. The interpretive programs of historic agricultural sites can provide a structure for such learning pursuits. Figuring out how to place ourselves within the natural environment in a way that is not hands-off or overbearing, and in a way that exemplifies respect towards self and others may be an additional challenge.

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[145] Firth, 15
[146] Smaldon, 499.

Nevertheless, we should strive to understand our own naturalness in the face of our own creations in the landscape. We should strive toward a nonviolent land use, towards interbeing, and embracing our place in the natural scheme of all things.

Place-Based Education

As discussed in the literature review, place-based education concerning the local environment was popular in the United States during the first half of the twentieth century, as demonstrated by the writings of Leopold, Bailey, and Dewey. Since that time however, place-based education concerning natural history of places has been reduced, in the words of education scholar David A. Gruenewald, to inclusion mostly within "field guides and nature writing"[147] Gruenewald states it once was routine educational practice for "students and teachers [to] have regular and direct contact with the plants, animals, and natural features of their local environments."[148] He writes this absence of educational activity within local environments limits our ability to recognize and respect "the biotic and cultural diversity of our own space."

The habitat approach therefore, as a means of arriving at a place-based ethic, calls for historic agricultural sites to be managed as centers of place-based education. Place-based education, through its focus on utilizing local historical, contemporary, cultural *and* ecological contexts in teaching, represents the

[147] David A. Gruenewald, "Foundations of Place: A Multidisciplinary Framework for Place-Conscious Education," *American Educational Research Journal* 40, no. 3 (2003): 637.
[148] Ibid., 637.

educational model necessary to instill a place-based ethic into the interpretation and management of historic agricultural sites.

Two farms identified in the research for this thesis deserve mentioning: Sunrock Farm in Northern Kentucky and Historic Johnson Farm in Henderson County North Carolina. The mission of both of these farms is based on education, community outreach, and historic cultural and agricultural lifeways. Historic Johnson Farm is one of the only historic agricultural sites listed on the National Register of Historic Places to be owned and operated by a county school board.[149] The site was willed by the owners, who were deeply invested in the education of the local citizens, upon their passing to serve the needs of such educational outreach.

Sunrock Farm, also teaches about local history, and historic agricultural practices, but also adds a naturalist-perspective to its educational program. As the website for Sunrock Farms states,

> We are an educational farm dedicated to providing children and other visitors with a rich and varied experience emphasizing the senses and the realization that we are deeply connected to the natural world. We wish to cultivate a sense of wonder, adventure, and respect for the diversity of life in the world around us through intimate and joyful hands-on experiences in the out-of-doors.[150]

Historic farms have all of the right resources and features for supporting such an educational strategy. Agricultural activity is strongly influenced by local

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[149] Historic Johnson Farm, Online Video, http://www.wheretomorrowbegins.org/ateam/JohnsonFarm/JohnsonFarm.html.
[150] "Sunrock Farm." http://www.sunrockfarm.org/

conditions and history, both cultural and natural. Farms, as natural habitats, have much to teach about regional ecosystems and local natural features. Farms, as community habitats, can serve as the ideal place to teach such social and ecological history, cultural traditions and change, and interactions between humans and the environment. Ecological, agricultural, and historical literacy is increased through hands-on projects that serve the locality in which the farm is based. Furthermore, citing the last principal of place-based education offered by the Boggs School referenced in the literature review of this thesis, the place-based education approach is "grounded in and supports the development of a love for one's place." This statement sounds akin to Tilden's summation of the ultimate point of interpretation at public lands, where love is both a guiding philosophy and an outcome.

The advancement of a place-based ethic grounded in reoccurring interactions with natural and cultural features of the farmscape through public education takes a community of people to instigate and support. Across the country many ecological- and agricultural-related community groups are poised and ready to help promote and propagate such interactions.

Civic Agriculture

The fate of the land is finally not separable from the fate of the people of the land (and the fate of country people is finally not different from the fate of city people).

-Wendell Berry[151]

A working group comprised of historic preservation professionals recently acknowledged that, "[s]erving the needs of the local community (not the tourist audience) is the most valuable and most sustainable goal for most historic sites."[152] This is an important finding, with implications for both local communities and historic sites. While tourists and the money they contribute to the operation of historic sites should not be ignored, the habitat approach calls for particular attention be paid to establishing and sustaining connections with the local population. While the authors of this report were likely referring solely to human communities, if viewed in terms of the land-community, the statement fits squarely within a place-based ethical framework.

Like other outdoor parks, historic agricultural sites may serve the needs of the local community in various ways. Yet, as historic agricultural sites, these parks must take into account the impact visitor use has on park resources. As such, it is unlikely that a historic farm would be graded to build a tennis court, for instance. Instead, historic sites typically only allow activities related to the historic period of

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[151] Wendell Berry, *What Matters? : Economics for a Renewed Commonwealth* (Berkley, California: Counterpoint Press, 2010), 16.
[152] Jim Vaughn. "The Call for a National Conversation" *in Forum Journal* Spring (2008). http://www.preservationnation.org/forum/library/journal-marketing/spring-2008/

significance to occur or be interpreted. As agricultural landscapes, the management of historic agricultural sites permits farming activities, albeit in differing scales of production. The particulars of balancing resource protection and agricultural production are discussed in the next chapter in terms of carrying capacity. This section first focuses on the ideas place-based frameworks have about community engagement in general, and concludes with examining historic agricultural sites as areas of civic agriculture as a means of furthering a place-based ethic.

Ideas concerning civic engagement occur throughout place-based literature. Leopold, Dewey, Berry, and other place-based thinkers all discuss civic engagement within local communities as a vital piece of their philosophical frameworks. These ideas concerning civic engagement are fueled by an expanded view of community, and a responsibility towards, and respect for, local human and nonhuman community members and habitats. "Civics," by definition, entails locally-focused citizen activity. A wide range of activity falls under the banner of "civic engagement," including local education, community activism, and participatory politics.

Leopold's land ethic incorporates an expanded idea of community and citizenship. He writes "a land ethic changes the role of *Homo sapiens* from conqueror of the land-community to plain member and citizen of it."[153] Environmental writer Joan Gibb Engel expands Leopold's interpretation of "citizen" into a list of characteristics of, what she terms, "democratic ecological citizens." Engel states this type of citizen respects nonhuman life, acts in terms of the locality

[153] A. Leopold, 240.

in which they live, and promotes environmental justice, access to nature and nature-based experiences.[154]

Agrarianism likewise posits a connection to the land leads to a civic responsibility that extends to the local community and participatory democracy.[155] This "farmer-citizen ideal" was championed by notable figures such as Thomas Jefferson and Liberty Hyde Bailey. Berry writes, "[i]n the mind of Thomas Jefferson, farming, education, and democratic liberty were indissolubly linked."[156] For educator Liberty Hyde Bailey, an "awakened" and contributing farmer citizenry represents the best chance of attaining American prosperity and democracy.[157]

The view that education and being rooted in local communities helps facilitate a more robust democracy was also shared by experiential education proponent John Dewey.[158] Education scholars Jim Garrison, Stefan Neubert, and Kersten Reich discuss the importance of this view today in their recent book *John Dewey's Philosophy of Education: An Introduction and Recontextualization for Our Times.* They write,

> Dewey's insistence that the prosperity of local communities is a necessary condition for the prosperity of democracy at large poses a crucial challenge that still seems topical today for many reasons. In a time of increasingly

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[154] Engel, s23.
[155] Thompson, 188.
[156] Berry, 143.
[157] Peters, 196.
[158] Jim Garrison, Stefan Neubert, and Kersten Reich, *John Dewey's Philosophy of Education: An Introduction and Recontextualization for Our Times* (New York: Palgrave Macmillan), 91.

> globalized economies, societies, and politics, there is the standing (and maybe growing) danger that people turn their backs to democracy.[159]

Dewey's call for localized educational contexts to facilitate democratic ideals is echoed by bioregional writers.

Bioregionalism maintains that civic engagement at the bioregional level is essential to promoting 'the bioregional vision' of harmonious human-nature cohabitation.[160] Thus, according to bioregionalism writers such as Kirkpatrick Sale, the geographic focus of democracy and expanded community should be this bioregion. Bioregionalism, with its biocentric focus, finds political boundaries inapplicable to its framework. As environmental historian Dan Flores states, "[i]t ought to be agreed that with rare exceptions, the politically-derived boundaries of county, state, and national borders are mostly useless in understanding nature."[161]

Moreover, Thayer proposes a civically-active bioregional framework improves democracy, not only by its inclusion of nonhuman nature, but also by transcending the contentious politics of "left" versus "right." Thayer writes,

> "broadly enfranchised, local, grassroots efforts to identify with and care for natural regions are so powerful, so ultimately democratic, and so basically popular with the American people they threaten the huge, entrenched political organizations on both sides."[162]

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[159] Ibid., 91.
[160] Sale, 191.
[161] Dan Flores, "Place: An Argument for Bioregional History," *Environmental History Review* 18, no. 4 (1994): 6.
[162] Thayer Jr., 66.

Grassroots, locally-focused civic activities, beyond having the ability to transcend political ideology, also has the ability to influence the way we think about, grow, purchase, and consume food. This section now turns to an analysis of civic agriculture as a potential link between place-based ethics and historic agricultural sites.

"Local" has become a popular prefix in recent years—local food, local business, local money, local citizen engagement. In terms of economics, Main Street programs stress the importance of keeping money spent locally. It has been found that "buy local" campaigns result in a recognizable uptick in money spent locally.[163] Berkshares and Ithaca Bucks, two types of locally-created and circulated currency, can only be spent at locally-owned "mom and pop" businesses, thus keeping money local. One way agriculture is included in such "local" branding and activity is through civic agriculture.

Thomas A. Lyson, the authority on civic agriculture, defines civic agriculture as a "[l]ocally-based agricultural and food production system that is tightly linked to a community's social and economic development."[164] Civic agriculture shares many of the same foundational principals as sustainable agriculture and place-based philosophies, such as harmony with nature, expanded diversity, and community interaction.[165] While all three aspects merit attention, the focus of the remainder of

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[163] Andrea L. Dono, "Shop Local" - Does it Really Work?" *Main Street Story of the Week*, May 6, 2009, http://www.preservationnation.org/main-street/main-street-news/story-of-the-week/2009/shop-local.html.
[164] Lyson, "Moving Toward CIVIC Agriculture," 42.
[165] Lyson, Civic Agriculture, 80.

this section will be on community interaction with agricultural production and activity.

Civic agriculture shares the democratic-community aims of the place-based frameworks discussed above. On this topic, Lyson writes, "[c]ivic agriculture flourishes in a democratic environment," and furthermore "citizen participation in agriculture and food-related organizations and associations is a cornerstone of civic agriculture."[166] Participation in agricultural production is exemplified by the local food movement, which is a popular term describing the local-production, preparation, and consumption of food.

In terms of the local food movement, several burgeoning outlets for citizens to become connected to food are identifiable. First, Community Supported Agriculture programs (CSAs) have become a viable way for small-scale sustainable farmers to make a living, while connecting and expanding local communities of individuals. As Suzanne DeMuth states for a U.S. Department of Agriculture publication, a CSA program,

> consists of a community of individuals who pledge support to a farm operation so that the farmland becomes, either legally or spiritually, the community's farm, with the growers and consumers providing mutual support and sharing the risks and benefits of food production.[167]

In other words, a CSA is a subscription program in which community members pay up-front for farm products such as vegetables, meat, and/or dairy, and because of

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[166] Lyson, *Civic Agriculture*, 77.
[167] Suzanne DeMuth, *Community Supported Agriculture (CSA): An Annotated Bibliography and Resource Guide*, (USDA, National Agricultural Library, 1993). http://www.nal.usda.gov/afsic/pubs/csa/csadef.shtml.

this pre-payment, the farmer has secured the money needed to begin or continue agricultural operations without relying on bank loans.

Second, recent agriculture-based activities in public education suggest a community- and school-garden movement is occurring.[168] While these gardens typically exist on school grounds or within city limits, they nevertheless point to a desire for sustainable agriculture and food education to be incorporated into pubic curricula. This experiential education aspect of civic agriculture and the local food movement links directly to place-based educational frameworks.

Third, farmers' markets have seen resurgence in popularity and use during the last several decades. Before their decline during the 1970s, farmers' markets served as community fixtures, and "provided customers with a wide array of fresh, local produce."[169] Farmers markets provide economic benefit to part- and full-time farmers, as well as other community businesses such as artisan bakeries or local coffee roasters.[170]

Lastly, the local food movement has given rise to, or is connected to, various community groups focused on vibrant communities and agricultural economies. These groups, mostly non-profit organizations, have various roles in their local communities. Some groups, such as Georgia Organics who "believe food systems should be community-based, not commodity based," are vocal advocates for local

[168] Lyson, *Civic Agriculture*, 26
[169] Ibid., 91.
[170] Ibid., 92-93.

food in area school cafeterias, the needs of young and beginning farmers, and sustainable farming methods related to Georgia communities.[171]

Other organizations, such as the Madison-Morgan Conservancy, are even more locally-focused, and integrate cultural history, habitat and farmland conservation, and education of the public into their mission. The Madison-Morgan Conservancy stresses the importance of community connections to the land through the promotion of locally produced food, conservation easements, educational sessions about history and ecology, farm-based suppers, and "rambles" around the county.[172] Presenting farms as a mixture of culture, ecology, and history particularly aligns with the habitat approach to historic agricultural landscape management and interpretation.

The various manifestations of civic agriculture in this section all reflect an investment in promoting place-based principals. Based on their varied roles in the agricultural community, these type of groups may serve as useful consultants concerning implementing civic agricultural activities within historic agricultural sites. Outside of civic agriculture-related groups, many other groups would be well-suited to engage with historic agricultural site. Religious groups, recreational clubs, student groups, and the artistic community may all benefit from active interaction with such places. If these groups derive benefit from the landscape, these sites gain new community stewards. Or as Mark Winne states, "if one is to use food as a bridge to a richer world of possibilities—nature and the land, gardening, and heritage of

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[171] "Georgia Organics Overview," Georgia Organics. http://georgiaorganics.org/about-us/georgia-organics-overview/.
[172] "About," Madison-Morgan Conservancy. http://www.mmcgeorgia.org.

farming and ranching, family meals, spiritual and religious practices—then a variety of doors are flung open that can lead to new pathways."[173]

Instigating these new pathways towards linking society with civic agriculture and other tenets of place-based frameworks requires planning, assessment, and management. Furthermore, to be responsive to modern concerns, trends, and interests, as well as to increase and sustain interest, the management and interpretation of historic agricultural sites must be adaptable. Adaptive Management strategies have proven useful for ecological conservation efforts, and recently such a decision-making process has been applied to historic sites.[174] This management strategy is the last component of the habitat approach.

Adaptive Management

The managerial strategy called Adaptive Management (AM) developed out of natural resource conservation and management fields as a way to effectively respond to changing on-the-ground conditions of the resources of study. As Lawrence Susskind, Alejandro E. Camacho, and Todd Schenk summarize,

> "[r]ather than making a single definitive decision despite information gaps or uncertainty about the systems involved, AM emphasizes learning via the

[173] Mark Winne, *Food Rebels, Guerrilla Gardeners, and Smart-Cookin' Mamas: Fighting Back in an Age of Industrial Agriculture* (Boston: Beacon Press, 2010): 19.
[174] Cultural Landscape Laboratory, *Developing an Adaptive Management Process for the Stratford Hall Cultural Landscape: Founders House, Athens, Georgia, October 3-5, 2012.* (Cultural Landscape Laboratory, College of Environment and Design, Universy of Georgia, 2012).

careful monitoring of provisional strategies and changing conditions, and incremental adjustments in the light of new information."[175]

This approach has also been applied to management of park visitation. The same principals of cyclical decision making, where a goal and the process of achieving the goal are revisited, and amended as needed. AM's "power for visitor use management stems from it is ability to both respond to observed conditions and work proactively toward desired conditions. Leveraging this power requires sustained commitment."[176]

As its name implies, adaptive management, adapts, as needed, to changing conditions. In natural resources conservation disciplines, "ecological management" or "adaptive environmental management" are two terms that are often used instead of adaptive management. These terms, in effect, mean the same as adaptive management, as they both employ dynamic, continuous approaches to management and decision making. All three terms lend themselves to sustainability and resource protection. This thesis opts to employ "adaptive management" based on its use by various fields, not solely natural resource conservation.

Before the creation of such the adaptive management approach, Dewey was advocating for a similar method as applied to education. Dewey's perspective of education was that,

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[175] Lawrence Susskind, Alejandro E. Camacho, and Todd Schenk, "A critical assessment of collaborative adaptive management in practice," *Journal of Applied Ecology* 49, no. 1. (2012): 47.
[176] Nathan Reigner, Steve Lawson, Bret Kiser, Bret Meldnim, Davis Pettebone, and Adam Gibson, "Adaptive Management of Visitor Use on Half Dome, An Example of Effectiveness," *Journal of Park & Recreation Administration* 30, no. 3 (2012): 65.

> [e]ducation must, among other things, release the imaginative powers of learners to respond in constructive and critical ways to the changing challenges of social and individual life and to realize new possibilities of observation, participation, and action in experience.[177]

Here, more than sixty years before AM strategies were codified by C.S. Holling in 1978, Dewey argued for what essentially represents the root of the AM approach to management.[178] AM strategies are founded on learning—managing in order to learn, learning in order to manage.[179] Through place-based approaches to education, place-based ethics are linked to Adaptive Management.

In terms of Adaptive Management as applied to agricultural landscapes, research is just now beginning to be published.[180] In her report on adaptive management and resiliency in the face of climate change, Brenda B. Lin, fellow of the American Association for the Advancement of Science, finds small farmers, with their ability to quickly implement diverse crops, are more resilient than industrial-scale farming operations.[181] Furthermore, Lin writes, "the ecological processes of these more complex systems could be used to protect farmers from climatic change and improve food security."[182] The role in the community as resilient fixtures of food security may root these privately-owned small-scale farms within the local 'foodshed.' How might AM strategies apply to public-access historic agricultural sites?

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[177] Garrison et al., 89.
[178] Susskind et al, 78.
[179] Eric MacDonald. (associate professor) in discussion with the author, March 2013.
[180] Brenda B. Lin, "Resilience in Agriculture through Crop Diversification: Adaptive Management for Environmental Change" in *BioScience* 61, no. 3 (2011): 183.
[181] Ibid., 191.
[182] Ibid., 191.

While an AM approach to historic site management are emerging slowly, the approach shows promise of being able to respond to issues concerning both natural and cultural resources, as well as public visitation and community engagement.[183] In 2000, landscape architect and historic landscape scholar Catherine Howett proposed that interpretation of historic sites should be "open to experiment and innovation, to critical discourse and debate."[184] Howett goes on to caution against linear-track models of interpretation that stifle evolution and adaptation. Howett writes that,

> [a] disciplining set of "do nots" ("Not Recommended" has the force of "Do Not" among those who are seeking to follow the highest standards) will in the end produce an orthodoxy with respect to the treatment of historic landscapes that inhibits the development of new and better ways of recovering the past as a visible and meaningful presence in the lives of people today.[185]

This warning that Howett offers can serve as the rationale for instituting AM approaches at historic sites.

For historic agricultural sites implementing the habitat approach, managers must be able to objectively judge the effectiveness of civic agriculture and place-based education programs. AM approaches appear well-suited to judging and responding to such evaluations. Additionally, AM approaches may better

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[183] Cultural Landscape Laboratory, 8.
[184] Catherine Howett, "Integrity as a Value in Cultural Landscape Preservation," in *Preserving Cultural Landscapes in America*, eds. Arnold R. Alanen and Robert Z. Melnick (Baltimore, Maryland: The John Hopkins University Press, 2000): 207.
[185] Ibid., 207.

accommodate on-going consultation with various community groups who can report directly about community desires, needs, and interests related to civic agriculture, place-based education, and other programs.

Chapter Summary

In summary, these four steps, if concurrently applied within historic agricultural site, provide the means of fostering a place-based environmental ethic. First, through the interpretation of farms as natural, cultural, and biotic cultural habitats, the borders between nature and culture begin to disappear. Additionally, this view of farmlands may result in more respectful interactions with fellow members of the land-community, as humanity finds itself a part of and dependent on the health of the landscape.

Second, through place-based education programs, the public becomes engaged with the landscape in ways they may not have been able to before. Place-based education therefore provides people the opportunity to connect meaningfully with the land. Again, Thayer's axioms propose that this engagement with particular places leads to ethical relations with the world at large. This approach to education increases ecological, cultural, and agricultural literacy.

Third, civic agriculture provides another vehicle through which the community becomes engaged with the local landscape, as well as the community itself. Through various means, such as farmers markets, educational talks, or CSA programs, the community is directed connected to the production and consumption

of agricultural products. The rising popularity of such activities in recent years hints at the relevancy civic agriculture may provide to historic agricultural sites.

Forth, adaptive management represents a strategy that reflects the dynamism of nature and culture, and focuses on long-term learning opportunities through management. While adaptive management approaches to farms and historic sites are only recently becoming established, they do show promise as a means of sustainably managing historic agricultural sites. Adaptive management epitomizes a way to incorporate both community and nature into a continuous managerial dialog.

CHAPTER 5

POTENTIAL CHALLENGES TO THE HABITAT APPROACH

This chapter outlines the potential challenges to utilizing the habitat approach at historic agricultural sites. These challenges stem from the managerial and interpretive paradigms discussed earlier, as well as issues concerning carrying capacity and access, and societal issues concerning ecological and agricultural literacy and interest. The identified issues are broken into the following sections: museumification, relevancy, and carrying capacity.

Instead of proving as roadblocks to the habitat approach, the issues identified below are mere hurdles to be addressed on the way to the fostering of a place-based ethic within the management of historic agricultural sites. Additionally, the identification and discussion of these issues is not meant to be a damning critique of historic agricultural management. Rather this analysis is only meant to reveal issues that warrant extra attention. Thus, this chapter outlines three challenges, and provides potential solutions to each.

Museumification

Etymologically, a museum exists as "a seat or shrine of the Muses."[186] Thus, the central purpose of museums, as the word implies, is to inspire people, and to instill a sense of wonder and reflection. For this reason, while not uniformly distributed in subject matter, number, or geography, in America there seems to be a museum for everything and everyone. Colonial-Revival houses, rural homesteads, cultural movement epicenters, small town histories, Indian massacre sites, restored urban nature, and so on are subject to public protection and presentation. Tourists traverse this American museumscape with a desire to spend time learning more about, and meaningfully connecting to, specific places or topics of personal interest and importance. It makes sense then that historic agricultural sites, as part of the museumscape, also inspire and educate the public.

The museumscape does include outdoor open-air museums, such as historic agricultural sites, as well as places not often thought of as museums, such as nature preserves and conservatories. The preservation of such outdoor spaces into publicly protected and interpreted areas can be referred to as a process of *museumification*:

> [m]useumification is a process in which places or subjects of the everyday world are transformed in ways that can lead people to think and act toward them as if they had been placed in a museum. Museumification can be accidental or intentional and its aim might be to conserve or commodify, but

[186] Douglas Harper, "museum," Online Etymology Dictionary. http://www.etymonline.com/index.php?term=museum.

> the end result is a shift in the meanings, behaviors, and experiences people have in relation to a place or subject.[187]

This museumification approach to interpretation might be expected as a standard process by both the public and by the preservation community. Museumification allows for the "permanent" protection of these sites, while serving the public via educational programs—a win-win for preservation and educational interests.

For some people however, this process is disconcerting. Cultural geographer, Pierce Lewis argues caution against the dogmatic application of this sort of treatment. "[O]ne cannot preserve history by putting velvet ropes around a few rare places, however important they may be," he writes.[188] In doing so, Lewis argues, history amounts to a collection of "punctuation marks," divorced from the surrounding local area.[189] Lewis's concern about cultural meaning represented by this collection of historic sites, is echoed by those who worry that cultural identity may become misrepresented through museumification processes.

According to heritage scholar Paulette Dellios, sequestering a landscape and deeming it off-limits to interactions that may compromise the historic status of a site also may affect cultural identity. Dellios states,

> [i]n the interpretive medium of museumification, everything is a potential 'artefact'—entire villages, or abstractions such as 'ethnicity' and 'nation', or

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[187] Paul H. Gobster, "Urban Park Restoration and the 'Museumification' of Nature," *Nature and Culture* 2 no. 2 (2007): 100.
[188] Pierce Lewis "Taking Down the Velvet Rope: Cultural Geography and the Human Landscape," in *Past Meets Present: Essays about Historic Interpretation and Public Audiences* ed. Jo Blatti (Washington, DC: Smithsonian Institution Press, 1987), 16.
[189] Ibid., 16.

> human beings. Yet, reality cannot be represented: museumification distorts inverts and subverts meanings.[190]

In other words, the museumification process may, by portraying a static representation of such a group and roping off areas from change and evolution, misrepresent the cultural identity of the visitor and/or the cultural group being interpreted. The interpretation program and the interpreter must make a point to address this issue.

Critical museology, as a field of museum studies focused on addressing the changing nature of public opinion, professional practice, and museum representations, does aim to deal with the issue of misrepresentation of cultural heritage.[191] One way the field has approached this issue is by interpreting the history of certain cultural groups "usually considered marginal to or invisible in traditional exhibitions and audiences," such as slaves, American Indians, and women.[192] Critical museology does not call for the cessation of museum interpretation or representation. However, for the sake of cultural heritage protection and respect, the managerial treatment of museumification of historic sites should be evaluated carefully for such potential negative effects.

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[190] Paulette Dellios, "The Museumification of the Village: Cultural Subversion in the 21st Century," *The Culture Mandala: Bulletin of the Centre for East-West Cultural and Economic* Studies 5, no. 1, (2002): 1.
[191] Marouf Hasian & Rulon Wood, "Critical Museology, (Post)Colonial Communication, and the Gradual Mastering of Traumatic Pasts at the Royal Museum for Central Africa (RMCA)," in *Western Journal of Communication* 74, no. 2, (2010): 128–149.
[192] Robert F. Berkhofer Jr., *Fashioning History: Current Practices and Principles* (New York: Palgrave Macmillan, 2008), 171-172.

The museumification process also has been applied to "natural" areas in both urban and rural settings. Research social scientist with the U.S. Forest Service, Paul H. Gobster, writing about the ecological restoration of urban parks, states,

> [b]y truncating landscape history and restricting how the sites are used, and by treating nature as a museum object that is created and presented as a finished product, [these sites] limit the range of experiences that urban nature can provide.[193]

These experiences include tree-climbing, flower-picking, frolicking, firefly catching, and generally learning about how humans can co-exist within nature. While these sites offer urban residents opportunities to experience nature in other ways they might not have been more of before, the possibility of creating static museums of nature also warrants managerial consideration before application.

Finally, focusing on how the museumification process relates to historic farms and their interpretation, we find, ironically, museumification may not mesh with the opinions and interests of the people visiting the parks, and for whom heritage may be represented in the interpretation program. Through his research Gobster found that:

> [a]dults with recent agrarian and subsistence roots saw nature in a much more interactive and functional way, and to them collecting flowers, walking off paths, and using park space for more active uses seemed perfectly appropriate nature-related behavior. Children seemed especially out of place in this postcard view of nature, and climbing, digging, and other unstructured

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[193] Gobster, 107.

> explorations of nature through play activity were instead construed as vandalism.[194]

On the one hand, museumification of historic agricultural lands protects the farm from damage caused by the public, either through real vandalism or simply by "loving it to death." On the other hand, this method may rob us from interactions with the natural world. This is a balance that will be addressed later in terms of carrying capacity, but first, an understanding of the lack of interaction at a societal-level is necessary.

Relevancy and Public Engagement

Since the creation of public-access parklands, increasing the relevancy and relating the importance of historic and natural sites to the public has been a part of the interpretive and managerial scope of work. Great strides have been made during the last several decades in terms of expanding interpretive themes and narratives, reflecting the influence of critical museology. Despite these efforts, visitation to historic sites has *appeared* to have declined significantly over the last thirty years.[195] The issue of relevancy is therefore critical to the very existence of historic sites.

Efforts to increase the relevancy of parks continue today. Public-access site managers realize the need to link site activities, interpretation, and programs to the present day. As a NPS recent report regarding relevancy of parks states,

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[194] Gobster, 98.
[195] Cary Carson, "The End of History Museums: What's Plan B?," in *The Public Historian* 30, no. 4 (2008): 9.

> [n]umerous opportunities to enhance relevancy can be found in current societal trends and challenges, including declining historical and cultural literacy, the disconnection of youth from nature, a more urbanized and diverse population, concerns over obesity and health, and the use of increasingly sophisticated technologies.[196]

Other authors have also identified the need to focus on modern contexts, and "current societal trends and challenges" in order to engage the public through public-access places, such as historic agricultural sites.

Catherine Howett posits that "the present as the vantage point from which the past is discovered and made more real and accessible should be the focus of interpretation."[197] When the present is used as the fulcrum on which we interpret historic landscapes, the sites become immediate and part of the present, while still reflecting the past. Thus, relevancy is also about public perception, whether that perception regards public-access historic agricultural sites as important or not, engaging or boring. Interaction with the site through the use of modern technologies has been proposed as a way to increase relevancy and engagement.

In his 2011 article "The End of History Museums: What's Plan B?," Cary Carson, former vice president of the Research Division, Colonial Williamsburg Foundation, believes historic sites are entering into a "brave new world." Carson proposes a strategy where television, film, and technology are utilized to create a

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[196] National Park Service Conservation Study Institute and the University of Vermont, *Beyond Outreach Handbook: A Guide to Designing Effective Programs to Engage Diverse Communities* (Woodstock, Vermont: United States Department of the Interior, National Park Service, Conservation Study Institute, 2011), 1.
[197] Howett, 206.

"superstory" that connects different regional historic sites. This high-tech strategy that would turn historic sites into pop-stars of sorts is an attempt to increase relevancy and public engagement. In addition to this regional superstory, Carson proposes that visitors bring their own technology (B.Y.O.T.) in order to document, discover, and share the historic site with others through popular social media and alternative reality outlets.

Carson admits that the online-streaming soap operas set within these historic sites would be expensive, and this idea in the end might be a bit fanciful. Expenses and flights of fancy aside, Carson's brainstorming exercise nevertheless brings up two particularly applicable place-based approaches for the management and interpretation of historic agricultural sites: (1) the idea of a regional superstory and (2) allowing management and interpretation programs of historic sites to adapt to modern times. First, creating a regional "superstory" does not need to play out like a soap opera to gain viewers or visitors. Rather, grounding this story in modern contexts, issues, and trends may provide the level of importance required to gain community engagement and interest. Second, adapting management to evolving societal trends and concerns is the basis of adaptive management.

In terms of historic agricultural sites, utilizing civic agriculture as the thread that links the regional, or potentially *bio*regional, historic sites together may not only increase the importance of the historic farm itself, but by extension potentially the mid-town house museum, recreational greenway, historic courthouse, or other public-access site serving the needs of the public. As an example, interpretation of each site could also contain a component where these links are revealed. For

instance, one could pick-up the C.S.A. shares produced by a historic agricultural site at the local historic courthouse. The local house museum that hosts community functions could incorporate not only the food produced by historic agricultural sites, but also creative ways to illustrate the historic connections between the house and the regional historic agricultural landscape.

Adaptive management techniques allow managers to more quickly address and accommodate the dynamic local conditions, trends, economies and so forth pertaining to the site and larger bioregion. This ability to adapt quickly to visitor preference and desires may lead to increased relevancy and community engagement, as not only would the site be reflecting the visitor's personal thoughts and feelings, but the visitor may also feel like his or her voice is actually being heard and accommodated within a real-world situation.

However, not all the wishes and desires of the public can be accommodated. The concept of carrying capacity seeks to understand the allowable amount of visitor use at any given site. The next section explores this issue as it pertains to historic agricultural sites.

Carrying Capacity

Carrying capacity is an issue that managers of all parks must take into account in an attempt to protect site resources. As Mustafa Selcuk Sayan and Meryem Atik, professors of agriculture and landscape architecture, say of carrying capacity,

> two aspects of recreational use are integral to the definitions of carrying capacity: protection of resources and the quality of recreation experience. In its most generic form, carrying capacity refers to the amount and type of use that can be accommodated in parks and related areas without unacceptable impacts to park resources and/or the quality of the visitor experience.[198]

Thus, carrying capacity serves as a means of understanding, and managing, the amount of activity these areas or resources can withstand, while still serving the needs of the park, chiefly recreation and human visitation.[199]

Each site has its own particular carrying capacity, and because of this fact this thesis is unable to make any specific statements about the carrying capacity of all historic agricultural sites. Some sites might be able to support special event days with a large visitor use one or two days a year. Other sites might not be able to, but could support numerous light-use visitation days, such as school field trips, or gardening demonstrations. Therefore, this section provides a general discussion and applicable solution to the issue of carrying capacity at historic agricultural landscapes. This issue is differentiated from "crowding," which is the visitor's perception of human density in parks. The concern of this section concerns the issue of carrying capacity, and "crowding" will not be discussed here.

Finding a balance between visitor desires for particular permitted activities and resource conservation can be quite tricky. Disagreements between park staff

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[198] Mustafa Selcuk Sayan and Meryem Atik, "Recreation Carrying Capacity Estimates for Protected Areas: A Study of Termessos National Park," *Ekoloji* 20, no. 78, (2011) 67.
[199] The National Park Service, *Roosevelt-Vanderbilt National Historic Sites General Management Plan* (Department of the Interior National Park Service Northeast Region Boston, Massachusetts 2010), 132.

and the public about permitted activities or access may occur. For instance, some members of the public may expect that the site, as a publicly-owned park, should be open year-round. Other visitors might prefer only passive activities, such as bird watching, to occur within a park, instead of more active uses such as mountain biking or all-terrain-vehicle use.

Other issues involving carrying capacity have to do with visitor use across seasons, and over a long-period of time. For instance, a trail running across a grass meadow may cause little problem to site resources in the short term, but over time, as a result of visitor usage, the trail may get rutted, trash may build up along the trail, or side trails through sensitive areas may be created by shortcut-seeking visitors. Can the needs of resource protection be balanced with such a visitor engagement? Again, this issue must be addressed on a case-by-case basis, but I suggest the answer is 'yes'.

Park managers are trained in determining the balance between visitor use and resource protection. Park management plans determine carrying capacity and implement control measures in various ways. In some cases, managers issue a limited number of visitation permits over the course of a particular season. In other cases, management enacts the temporary closure of specific areas for ecological recovery. Some parks can support summer youth-camps, while others cannot. As most agricultural practices are inherently more land-use intensive, the amount of such visitor and land use activity must become more limited in scale, even if this deviates from historic activity.[200]

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[200] Westmacott, 124.

Landscape historian Richard Westmacott drafted a report for NPS, which offers suggestions for agricultural activity within national parks entitled *Managing Cultural Landscapes: Agriculture in the National Parks*. In this report, Westmacott finds that an attempt to preserve the historic authenticity of a farm may clash with managerial policies that require non-detrimental impacts on the historic integrity of natural and cultural resources.[201] For example, Westmacott identifies the new tillage practices attempting to stop erosion at Gettysburg National Battlefield has altered the historic form and integrity of the pasturelands there.

This report also supports an agroecology and sustainable farming approach of viewing and managing the historic farmscape. As such, management must take into account relationships between wildlife, natural habitats, plowed fields, human needs, economic factors, and so on. Therefore, agricultural activity itself is an important factor in determining carrying capacity, yet in doing so can also encourage an expanded view of community within the historic farmscape.

In terms of addressing carrying capacity in public-access sites, today the NPS and others utilize a mathematical system to gauge carrying capacity, termed Visitor Experience and Resource Protection (VERP).[202] This formula defines acceptable limits of visitor use in consideration of resource protection requirements. As Jeffrey L. Marion, researcher for the U.S. Geological Survey explains, "[t]hese limits define the critical boundary line between acceptable and unacceptable conditions, establishing a measurable reference point against which future conditions can be

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[201] Ibid., 142.
[202] Jeffrey L. Marion and Karen Hockett, *Frontcountry Recreation Site and Trail Conditions: Haleakala National Park* (Washington, DC: DOI, 2006), 13.

compared through periodic monitoring."[203] The VERP therefore is focused on long-term data collection toward a goal of long-term stewardship of resources.

Per official NPS directive, the protection of park resources represents the number one priority of all park management decisions.[204] While, this policy may at times clash with the wants of the visiting public, in order to safeguard park resources for future generations, park managers reserve the right to place limits on visitor access to park areas based on the VERP analysis. This approach to park planning may be difficult to implement at smaller parks due to lack of funding and human resources. However, in seeking a balance between use and protection, a permitting approach can be used as a tool for educating the public about conservation-related matters, as well as protecting the resources of the landscape.

Another aspect of park management already established in the field of historic landscape preservation and management that can address carrying capacity issues is the organization of the landscape into units called cultural landscape 'character areas'. *The Guide to Cultural Landscape Reports* defines character areas based on an analysis and understanding of "the physical qualities of a landscape (such as landforms, structural clusters, and masses of vegetation) and the type and concentration of cultural resources."[205] The management of character areas is based on the existing condition of the resources that define and illustrate the significance of the landscape. A NPS cultural landscape report for Alcatraz Island National Historic Landmark describes these areas further by stating,

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[203] Ibid., 13.
[204] Robert Stanton, "Directors Order #17: National Park Service Tourism" (NPS 1999), http://www.nps.gov/policy/dorders/dorder17.html.
[205] Page et al., 75.

> "[e]ach character area is defined by its physical qualities—topography, type and concentration of cultural resources, and land uses visible through landscape features. The boundary of each character area is based on the existing condition of the characteristics and features that define and illustrate the significance of the landscape."[206]

Character areas are useful in the intensive study of particular features belonging to specific habitat zones, and the cultural and natural resources therein. Instead of broad-brush treatment of the historic farmscape, individual components within a specific character area can be thoroughly studied, inventoried, and managed. While in map-form, character area boundaries may seem to create too severe a separation between one area of the landscape and the next, it is acknowledged that these areas "represent a continuum of subtle change."[207] These areas of change or overlap, especially if along hedgerows, fences, or woodland edges, may contain an abundance of farm biodiversity.

In a managerial sense, character areas help delineate which areas may support certain visitor uses based on concerns for historic integrity, ecological integrity, or other carrying capacity issues. For example, this method can identify which areas are suitable for community gardens, wetland restoration, or nature trails. Through character areas, historical understandings of past land use, and the varied needs of the present, room is made for both resource protection as well as active engagement by the public.

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[206] Mundus Bishop, *Alcatraz Island National Historic Landmark Cultural Landscape Report* (Washington, DC: DOI National Park Service, 2010), 3-4.
[207] Ibid., 3-4.

In terms of instilling a place-based ethic at historic agricultural sites, the management considerations outlined by Westmacott lends itself toward holistic understanding of the farmscape. Furthermore, based on the park directive requiring the safeguarding, health, and vitality of all park resources, a sustainable agriculture model appears to serve as a viable agricultural approach within public-access agricultural sites. The management of character areas, as delineated based on an understanding of carrying capacity, historic integrity, particular resources and history therein, are useful for regulating the intensive land use that agricultural activity entails.

Chapter Summary

The concerns presented in this chapter should not be viewed as deterrents to instituting the habitat approach. Through adaptive management, the application of character areas, and sustainable agriculture, damage to site resources are mitigated. Adaptive management can also alleviate concerns about potential negative side-effects related to museumification. Through rooting interpretation in the present day, and employing place-based educational programs and civic agriculture, the relevancy of historic agricultural sites, and possibly other near-by historic sites, is increased.

CHAPTER 6

CONCLUSION AND FUTURE DIRECTIONS

Well, I can tell you about the river / or we could just get in

- *Bill Callahan "Rivers and Oceans"*

The place-based ethic investigated in this thesis rests upon the central premise that being physically and culturally attached to a specific place over time[208] offers the best opportunity for an environmental ethic to blossom.[209] Thus, this thesis has attempted to show that through place-based education, civic agriculture, adaptive management, and the interpretation of both natural and cultural habitats, historic agricultural landscapes are able to foster a place-based ethic in the public. By utilizing the proposed habitat approach—a view and approach to the world where humans exist in harmony with fellow members of the interconnected land community—a combination of the land ethic Leopold first proposed in 1933, Thayer's lifeplace axioms, and other influence, place-based principles become attainable.

Environmental ethics that seek to divorce humans from the natural world have proven ineffective in enlarging our concept of community toward this end.

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[208] David Smaldon et al., 499.
[209] Anna L. Peterson, Being Human: Ethics, Environment, and Our Place in the World, (Berkley, California: University of California Press, 2001), 126.

Setting aside land to protect it from unsustainable land use activities is a wholly worthwhile endeavor. However, humanity needs an ethic that allows humans to be part of nature. Historic agricultural site provide this sort of opportunity.

While discussing the NPS system during his interviews for Ken Burn's documentary series on the national parks, William Cronon stated,

> When you're asked, "Well, what is coherent about a system that contains natural wonders and birthplaces of famous people?," I think the answer you come to is that they are all finally about a vision of where the United States comes from. We come from nature, but we also come from our own past, and so the interpretation of nature and history together is not a distraction that the parks face. It is the very core of the enterprise. They are all about where we come from.[210]

The 2012 revision of the NPS Leopold Report echoes Cronon's suggestion that parks should exist as places of conjoined culture and nature, and states, "[p]arks exist as coupled natural-human ecosystems" and furthermore "[a]rtificial division of the National Park System into 'natural parks' and 'cultural parks' is ineffective and a detriment to successful resource management."[211]

If parks were to be managed as both cultural and natural habitats, the view of the landscape proposed in this thesis, the habitat approach, appears practical, worthwhile, and realistic. Concerns about carrying capacity and resource protection provide opportunities for learning, and do not represent serious

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[210] *The National Parks: America's Best Idea*, directed by Ken Burns (PBS Home Video, 2009).
[211] National Park System Advisory Board Science Committee, *Revisiting Leopold: Resource Stewardship in the National Parks*, (National Park Service, 2012), 9.

obstructions. Public-access historic agricultural sites should embrace a role in contemporary society as an ethical compass concerning our total environment; aiding and sustaining human enrichment while simultaneously respecting non-human nature.

This thesis has attempted to demonstrate how through a change in perception, nature can be viewed as connected to human culture. Through this change in perception, the idea of community expands to include nonhuman nature. By doing so, ethical relations with such nature becomes attainable. Through striving for a lived awareness of interbeing and interconnectedness, we see how the world is indeed in a tomato seed, and how our lives, all lives are directly attached to the world and the seed itself.

While all this may seem idealistic, or utopian, let me remind us all that it was not long ago that women could not vote, certain couples could not marry, people were enslaved, and in terms of nature, environmental protections did not exist. The evolution of ethics to include *all* living things in a system of respect is ongoing. The expansion of ethics to include nonhuman life is inevitable, and historic agricultural sites, I feel, could serve as the epicenter for such development to blossom.

Suggestions for Future Research

The exploration of the possibilities related to revealing and connecting to the natural and cultural habitats of public-access historic agricultural sites has really yet to begin. This thesis intended to lay the ground work for such studies to begin in earnest. The next steps of this research should be based on the application of the

suggestions of this thesis to individual historic farm sites. These studies could include the following:

1. Empirical testing the sustained applicability of placed-based education, civic agriculture, and adaptive management strategies at historic agricultural sites.
2. Determining the length of time necessary for people to develop a place-based ethic at historic agricultural sites. This should be analyzed across demographics.
3. Investigating how the habitat approach can be written into existing managerial and guidance documents for historic agricultural sites.
4. Determining a system of historically-accurate sustainable agricultural practices.
5. Investigating funding possibilities for historic agricultural sites experimenting with the habitat approach. Such possibilities could include grants, workshops, and dinner fundraisers.

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