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Broadening Footpaths: Trail Ecology and Ethic

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Trail Ecology and Ethic

Miles H. Frank

Abstract

There is not always a clear distinction between what constitutes responsible use and what constitutes overuse with regard to recreation and the environment. Even on a small scale, outdoor recreation will always leave a footprint. This paper addresses the ecological impact that the growth of outdoor recreation has had on the environment. Using a multi-disciplinary approach, it provides a holistic analysis of the issue from the scale of local vegetation to that of national policy and wilderness philosophy. Chapter one focuses on the immediate impacts of the overuse of hiking trails and the subsequent environmental degradation of at-risk areas. It analyzes data published in the *Journal of Environmental Management* regarding soil erosion, bird and fauna biodiversity, and related matters. Chapter two examines the historical and philosophical background with regard to American conceptions of wilderness and recreation. It focuses on the foundational philosophical doctrines of federal conservation organizations, highlighting why they are problematic. Chapter three analyzes the impacts of the outdoor recreation industry and the incentives to cultivate economic growth at the expense of environmental stability. Chapter four focuses on the politics of public land management by analyzing the relationship between state and federal conservation bodies, and their relevant histories. Addressing the concerns of previous chapters, chapter five proposes a new Trail Ethic based on the biocentric principles of Leopold's Land Ethic.

Keywords: ecology, recreation, hiking, public lands, trails, Pinchot, conservation, Leopold, land ethic, biocentrism, NPS, NYNJTC

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Introduction: "Walking off the War"

In the early spring of 1948, Earl Shaffer started walking. He didn't stop for four months. He was looking for direction after returning home from the Pacific theater. And he found it: North. Earl left Georgia towards Maine with bare essentials and not even a tent. He was called crazy for attempting to hike the whole Appalachian Trail in one stretch. In what is now recognized as the first official "thru-hike" of the AT, he made it to Mount Katahdin in 124 days.¹ Half a century later, at nearly 80 years old, he did it again.² But this time he was not alone. Unlike his first trek, he was joined by a horde of hikers.

Today hundreds of people complete thru-hikes of the Appalachian trail every season. Thousands make an attempt. Trail capacity has been pushed to the brink as tens of thousands more participate in shorter trips. What was once pristine wilderness has largely been eaten up by private interests. Even federally protected lands are being harmed by outdoor recreation and the industries built around it. This paper will deliver a comprehensive depiction of the current problems posed by recreational backpacking in the United States. It will analyze the key aspects of this issue ranging from vegetation and biodiversity to philosophy and federal policy.

Chapter one will present quantitative data regarding the ecological impact of hiking and backpacking on particular regions. It will look specifically at the ways in which increased human presence can affect the ecosystems of remote areas. It incorporates studies on bird diversity, vegetation adaptability, and other factors in an effort to develop a holistic understanding of the impact of large numbers of hikers.

¹ Silas Chamberlain, *On the Trail: A History of American Hiking* (Yale University Press, 2016), 29.

² Douglas Martin, "Earl Shaffer Dies at 83," *New York Times*, May 12, 2002, <https://www.nytimes.com/2002/05/12/us/earl-shaffer-first-hike-length-appalachian-trail-both-directions-dies-83.html>

Chapter two will reflect on the history of outdoor recreation with an eye to shifting attitudes towards the wilderness; as an enemy, as a resource, and as a place for recreation. It will examine specific schools of environmental thought as they pertain to outdoor recreation. It will analyze the particular environmental philosophies of key figures in the history of recreation and conservation such as John Muir, Gifford Pinchot, Benton McKaye, and Aldo Leopold. Ultimately, it will reflect on the ways in which American economic and political institutions embody harmful environmental worldviews.

Chapter three will analyze the politics of conservation and trail maintenance. It will analyze the historical development and doctrine of the National Parks Service and will interpret how federal policy has played a role in the growth of outdoor recreation. It will contemplate the effectiveness of the NPS while considering its originally intended purpose by analyzing the perspectives of its foundational figures. It will also look at regional conservation practices by examining the relationship between the New York/New Jersey Trail Conference, the New York State Office of Parks and Recreation, and the National Parks Service in order to identify the roles that they play in maintaining New York's trail networks.

Chapter four will focus on the impact of the recreation industry. Over last several few decades, a massive industry has been built around "experiencing" the outdoors. This chapter will examine the ways in which businesses cultivate growth in this industry. It will argue that a profit-driven philosophy is inherently contradictory to the principles of environmental sustainability. It will investigate the role that the industry plays in shaping public environmental perspectives and the role of consumerism in relation to good outdoor etiquette.

Chapter five will synthesize the information and analysis presented in the previous chapters into policy proposals. Fundamentally, the chapter will argue that conventional

mitigation strategies are insufficient at combatting the relevant threats. It will advocate for a reorientation of the national attitude towards outdoor recreation. Drawing heavily from Leopoldian philosophy, it will propose a new “Trail Ethic.”

My time volunteering with the New York/New Jersey Trail Conference will serve as an important point of reference for this paper. As a trail maintainer, I am responsible for maintaining a 3-mile section of the Shawanagunk Ridge Trail. I have found this experience particularly useful for this paper: fieldwork has afforded me firsthand experience in identifying trail erosion factors and contemporary preservation methods. Having an internal view of the Trail Conference has allowed me to analyze regional conservation from a valuable perspective.

Chapter 1: Ecological Impacts on Highly Trafficked Areas.

The use of nature as a form of recreational commodity is resulting in its degradation. The National Parks are visited by millions of people annually and the National Parks Service is tasked with managing massive influxes of tourists and recreationalists. Millions more hike in state and local parks across the US, where the responsibility falls on regional conservation organizations with access to fewer resources. Traffic of this magnitude is not sustainable without major accommodation, both proactively on the part of conservation groups, and reactively by the ecosystems themselves. All forms of outdoor recreation have some degree of immediate impact on the environment in the short term. But these immediate impacts often have broad implications with much more long-term ecological consequences. This chapter will evaluate such threats by analyzing data on the immediate effects, their subsequent impact on the environment, and the current scale and scope of such problems in the United States.

Since its inception as a recreational hobby, backpacking has evolved to take many forms. The style of long-distance travel over an extended period of time—represented by that of Earl Schaffer—is termed “thru-hiking.” Although thru-hiking is exemplified by a cohort of devoted backpackers, the style makes up for a relatively small percentage of hikers generally. However, an increasing number of thru-hikers on-trail can be indicative of broader growth. And the number of attempted thru-hikes of the Appalachian Trail has more than doubled in the last seven years, from 1460 to 3735.³ More often, though, individuals on-trail are out for just a few days and most spend only an afternoon or a single night. There are rarely strict limitations or “waiting lists” to enter national parks. Backpacking’s growth in popularity has caused more people to crowd onto public trails.

Improved infrastructure is often required to accommodate more hikers. With increased traffic, trails which start as narrow pathways inherently grow widened. As time goes on and use increases, gravel may be installed to reduce erosion. And with prolonged and sustained use, tarmac or concrete may be installed for the benefit of park vehicles. This can radically change the composition of an area; a study done in Australia found that along “hardened” trails (gravel, concrete, etc.) there was understory differentiation of up to 80 percent as compared with controls in the area.⁴ This shows that the biological composition of the soil immediately surrounding these trail types is massively disturbed and impacted after hard-trail installation.

Public land maintainers are often inclined to sustain large numbers of hikers at the expense of the ecosystem, as long as the area maintains its aesthetic appeal. (This speaks to the environmental philosophy fundamental to many important American conservation organizations,

³ “2017 2000-Miler Listing,” Community, Appalachian Trail Conservancy, last modified March 2018, <http://www.appalachiantrail.org/home/community/2000-miler-listing>

⁴ Catherine Marina Pickering and Patrick Norman, “Comparing Impacts Between Formal and Informal Recreational Trails,” *Journal of Environmental Management* 193 (15 May 2017): 270-279.

which will be investigated more deeply in chapter two.) Growth in the popularity of a site can require additional infrastructure in order to support increased traffic to and from national parks, which are often situated in otherwise relatively remote areas. The construction of highways, parking lots, and other infrastructure have a colossal impact on the local environment, fragmenting habitats and introducing unnatural open corridors. Such infrastructure often cuts directly through protected land and can impact the ecology of a region significantly.

The construction of new roadways is particularly impactful. In an immediate sense, the landscape is dramatically changed through the felling of trees and the introduction of paved surfaces. But mere presence of a road has long-term impacts itself. These new corridors radically alter wildlife processes. Habitat ranges are suddenly intersected, impacting animal ranges and migratory patterns. And predatory birds gain far easier access to low-lying birds and rodents along, which aids in reducing both mammal and avian biodiversity.⁵ In a top-down effect, a marked change in the makeup of the bird population results in major impacts on local fauna diversity, continually furthering ecological change.

The construction of infrastructure is a most obviously harmful practice. But foot traffic has a major impact as well, and its degree of harm scales up with an increase in hikers. It is the nature of hiking and backpacking to create relatively wide trails, as a trail which may have been cut narrowly will eventually broaden with use. And hikers will often elect to take the path of least resistance, even if that path leads off trail, which results in a divergence of multiple paths over a particular section. Interestingly, as compared with horseback riding, hiking creates

⁵ Isabelle Wolf, Gerald Hagenlog, and David Croft, "Vegetation Moderates Impacts of Tourism Usage on Bird Communities along Roads and Hiking Trails." *Journal of Environmental Management* 129, 15 (November 2013): 224-234.

significantly wider trails.⁶ Combined with weather factors like heavy rainfall, trails can act as unnatural waterways which further deteriorate the area.

There are a host of additional problems inherent to the introduction of large groups of hikers into fragile areas, often stemming from ignorance. Uneducated or uncaring hikers may tend to wander off trail, trampling vulnerable vegetation and doing damage to flora. 28 vegetation types in North America have been catalogued by “hiking resistance indices.” This scale determines the number of passes required by a hiker to reduce vegetation cover by 50 percent.⁷ Vegetation with the lowest resistance indices are consistently native to high altitude.⁷ High altitude is often conducive to scenic views and is naturally home to some of the most popular hiking trails, placing fragile flora directly in harm’s way.

Human waste poses another serious problem. Irresponsibly disposed-of food scraps and garbage are inevitably retrieved by birds, rodents, and other animals, creating an unstable dependency on human presence. Many visitors and uneducated hikers will intentionally feed animals—often for a good photo—further conditioning these animals to approach humans in the expectation of food. Properly disposing biological waste is a crucial yet time-consuming task for park rangers and trail caretakers in the backcountry. But when disposed of improperly, or away from a designated relief area, human waste can have biological consequences on local flora, especially when in large quantities. Both feces and urine contain high concentrations of nitrogen and phosphorous which can harm plant life, particularly in areas with fragile vegetation.⁸

⁶ Anne Törn et al., “Comparing the Impacts of Hiking, Skiing and Horse Riding on Trail vegetation in Different Types of Forest,” *Journal of Environmental Management* 90, no. 3 (2009): 1427-1434.

⁷ Catherine Marina Pickering, Wendy Hill, David Newsome, Yu-Fai Leung, “Comparing Hiking, Mountain Biking and Horse Riding Impacts on Vegetation and Soils in Australia and the United States of America,” *Journal of Environmental Management* 91, Issue 3 (January–February 2010): 551-562.

⁸ Pickering et al., “Comparing Hiking,” 551-562.

Aside from the immediate and readily observable impacts like construction, trampling, and waste, are other, often more nefarious repercussions to hiking. Hikers often travel across distinct ecosystems relatively quickly. Cars effectively transplant hikers from one environment into another entirely, in a very short timeframe. National parks and other scenic hiking areas especially attract people from exceptionally far distances. In this way, hikers frequently introduce foreign pathogens, weeds, and invasive species to ecosystems accustomed only to a particular set of vegetation and animal life. One such pathogen is *Phytophthora ramorum*, which causes sudden oak death in numerous plant species native to the American Northwest.⁹ In a recent study, 40 percent of hikers whose shoes were randomly tested along a particular trail had samples of *Phytophthora ramorum*.¹⁰ Essentially, trails act as passageways along which foreign and harmful species are introduced to otherwise reasonably pristine areas. This process can be worsened with an increase in use and a broader range.

An increase in hiker mindfulness would certainly reduce levels of environmental disruption. Hikers who understand the environmental impact of their actions while in the outdoors are likely to have better backcountry etiquette and take more precautions. There exist a number of wilderness-education campaigns, most of which endorse the “Leave No Trace” principles. LNT promotes seven rules by which one can safely reduce their impact while hiking and camping.¹¹ Future chapters will discuss the history, philosophy, and hypocrisy of LNT. But generally, the advocacy for sensible hiker protocol can have a positive impact. If more recreationalists understood proper procedure, harm could be reduced per capita. Unfortunately, the problems faced by public lands are largely due to overuse, not improper use. Mitigating

⁹ David Newsome, *Natural Area Tourism*, (Channel View Publications, 2017), 137.

¹⁰ Newsome, *Natural Area Tourism*, 137.

¹¹ “7 Principles” Leave No Trace, accessed October 14, 2019. <https://lnt.org/why/7-principles>

overuse is more difficult mitigating than improper use.

The United Nations' 2005 Millennium Ecosystem Assessment evaluates public outdoor spaces as providing distinct ecosystem services.¹² Access to pristine outdoor space provides what are primarily cultural services. The subservices most applicable to the topic of this paper are listed in the UN's Ecosystem Assessment as recreation and ecotourism, which provide aesthetic value and a sense of place. Through overuse, exploitation, monetization, and unsustainable practice, the feasibility of universal access to pristine public outdoor space is degrading. We will continue to lose the important ecosystem services illustrated in the Millennium Assessment if the issues outlined in this chapter are not addressed.

In short, the harmful effects of backpacking can be broadly categorized as the result of overuse, improper use, and in many cases, both. Ecological impacts vary greatly depending on region and context, but there are identifiable trends and occurrences: the development of infrastructure, the widening of trail corridors, general erosion, decreases in biodiversity among flora and fauna, and the introduction of invasive species. Education is crucial in reducing the damage we inflict on the environment, but there are factors unimpeded by behavioral change on the part of recreationalists. There are large scale, systemic factors which generate the circumstances conducive to the exacerbation of these issues.

Chapter 2. History and Philosophies of American Outdoor Recreation

The United States has some of the most expansive public lands in the world. They encompass a wide array of biomes and provide some of the last havens from industry and

¹² Abhik Ghosh, Myrle Traverse. *UN Millennium Ecosystem Assessment: Cultural Services*. (United Nations, 2005)

infrastructure. Public lands are—theoretically—accessible to everybody in the United States, attracting hundreds of millions of annual visits and encompassing about 84 million acres.¹³ They offer the public access to serene natural landscapes and provide a much-needed escape from the commotion of industrial society. Yet they comprise not even 4 percent of total US acreage; their preservation is vital. The natural landscape is deeply valuable, both inherently and as a public resource; it should not be exploited for short-term capital gain, but rather be cherished for the enduring benefit of all.

This chapter will examine the history and philosophy of early recreation in the United States. It will analyze the historical and moral context in which the notion of “public land” was developed. By developing a coherent timeline of relevant events and figures, this chapter will provide a framework for analyzing the philosophies, economies, and social movements in subsequent chapters. Rooting the remainder of this paper in a historical context will help construct a larger narrative which will prove useful in analyzing the current state of recreational backpacking. This chapter will consist of two parts, each broken down by rough historical period. Part I will illustrate the philosophical background for the development of outdoor recreation (and specifically of hiking) as a form of leisure. Part II will provide a history of recreation in American consciousness. The two subjects overlap somewhat, but they are distinct in their development and in their significance and therefore they deserve separate focus.

I. Philosophies of American Recreation. American environmental thought is frequently in flux. Over the last few centuries, the popular perception of wilderness has evolved dramatically. Contemporary perspectives vary greatly and there are significant divergences of

¹³ “National Parks Service 2008 Director’s Report,” US Department of the Interior, accessed October 2018. <https://www.nps.gov/gewa/learn/management/upload/2008NPSDirectorsReport.pdf>,

opinion within the school of environmentalism. These competing worldviews both reflect and inform our approach towards environmental concerns. This section will analyze the philosophy of John Muir, Benton MacKaye, Aldo Leopold and J. Baird Callicott, as well as that of traditional conservationist Gifford Pinchot. It will engage in a crucial dialogue regarding notions of intrinsic value in nature and it will reflect how these concerns have shaped American recreation.

Environmental philosophy is not always expressed explicitly philosophical terms. A person's environmental worldview is rarely immediately discernable to others and is often not even clear to oneself. Even fewer people communicate their personal beliefs vocally. This can raise difficulties when retroactively analyzing the environmental philosophies of historical figures—as some of the most impactful environmental actors did not overtly articulate their perspectives. The environmental worldview of an individual is often distinct and does not always precisely reflect one school of thought. However, there are often broad similarities. Contemporary environmental philosophy considers most worldviews as falling somewhere amongst three main schools; “Planetary Management,” “Earth Stewardship,” and “Earth Wisdom.”^{14 15}

A planetary management worldview evaluates the Earth and its features primarily by means of their utility for humans. It is highly anthropocentric and places the needs of human beings as the sole concern. It holds that the needs of humanity are paramount, and that the consideration of other life forms is secondary, if relevant at all. Proponents of this worldview place faith in the notion that humans possess the ability to sustain themselves through the infinite

¹⁴ G. Tyler Miller, Scott Spoolman, *Living in the Environment: Principles, Connections, and Solutions, 17th ed.*, (Brooks/Cole Publishing, Belmont, CA 2011)

¹⁵ Donald Van DeVeer, Christine Pierce, *The Environmental Ethics and Policy Book: Philosophy, Ecology, Economics; 3rd edition*, (Cengage Learning, 2002) 174.

consumption of resources and that the advancement of technology will solve its problems. It holds that the Earth operates comparably to a highly complex machine, and that mankind can understand these functions and manipulate them for its benefit. In this way, planetary management stems largely from Cartesian thought, namely in that it regards plant and animal life processes principally as mechanic. Therefore, practically all ethical considerations of a planetary management worldview have to do exclusively with human welfare.

Environmental stewardship shares many key ethical principles with planetary management. The primary distinction here is that stewardship holds that humanity cannot sufficiently understand or influence the workings of the natural world in order to benefit humanity. It aims to utilize natural resources sustainably for the benefit of future generations. It is therefore inherently less consumptive than planetary management, but nonetheless recognizes non-humans solely by their use-value. In this sense it is possible to be an environmental conservationist and simultaneously hold a worldview of environmental stewardship. Indeed, the entire model of American conservation is based in this sort of worldview. Conservation practices are driven by practicality, not by ethical responsibility. Like earth management, stewardship is highly anthropocentric.

Earth wisdom, however, is non-anthropocentric in that it recognizes the intrinsic value of all living things. It does not place the needs of humanity above those of the rest of the biotic community. It is fundamentally non-consumptive and aims to cooperate with the rest of the natural world rather than exploit it. It holds that a recognition of every organisms' inherent value should influence all economic, political, and personal choices.

The underlying philosophy of the outdoor recreation industry has little to do with real environmental considerations. Essentially, it is planetary management masquerading as Earth

wisdom. Some companies employ marketing campaigns that depict their products or business model as “environmentally conscious” or “eco-friendly.” However, these companies have an inherent interest in increasing their profits through whatever sales or services possible. The broader impacts of the outdoor recreation industry will be examined in further detail in chapter 4, but the influence of this philosophy on the public must not be overlooked. Consumerism plays a large role shaping the public’s perception of the outdoors and is in that way a colossal threat.

Federal conservation organization do not share precisely the same motivations as industry. But American conservation regards of the economy of nature as a means to bolster the human economy. George Perkins Marsh’s landmark book, *Man and Nature or The Earth as Modified by Human Action* first brought the significance of ecological degradation to the public conscience. He articulated concerns about the degree to which humans have impacted the natural world. Based largely on these concerns, Gifford Pinchot, the founder of the Yale School of Forestry, developed modern American conservation. As the first United States Chief Forester and close personal friend of Theodore Roosevelt, Pinchot was hugely influential in developing conservation practices in the United States. His legacy largely set the course for the US Forestry Service and subsequently, the National Parks Service, shaping the federal approach to wilderness. Pinchot’s philosophy remains the dominant worldview in federal conservation today.

Pinchot considered the natural world purely in terms of its utility to humans. He attributed it no greater significance whatsoever. In 1947 he wrote, “There are two things on this material earth, people and natural resources.”¹⁶ The entire purpose of Pinchot’s conservation was to promote development. He held that “the first great fact about conservation is that it

¹⁶ Gifford Pinchot, *Breaking New Ground* (Island Press, 1947) 325.

stands for development.”¹⁷ Pinchot’s philosophy echoed utilitarian sentiments, aiming to distribute benefits amongst all people. He held that fundamentally, resources should be managed for the “greatest good to the greatest number for the longest time,”¹⁸ directly echoing Mill and Bentham.

Environmental philosopher J. Baird Callicott notes that Pinchot conservation inherently supports the utilization of the natural world for industrial or commercial purposes.¹⁹ Fundamentally, Pinchot’s conservation stands for “the efficient exploitation of natural resources.”²⁰ This philosophy is directly in line with the tenets of an environmental stewardship worldview. It holds that we have a sufficient understanding and the ability to manage wildlife unendingly. When adopted as the status quo, the impact of this philosophy broad. Callicott writes, “Pinchot’s philosophy dominated conservation in the public sector of the United States—the Forest Service, the Fish and Wildlife Service, the Bureau of Land Management, and state departments of natural resources.”²¹ Thus, the philosophical underpinning of American conservation is one of environmental stewardship.

This viewpoint opposes that of preservationists like John Muir, who was once an ally of Pinchot before philosophical differences resulted in a political rivalry.²² Muir’s philosophy of preservation advocated not for the responsible use of nature, but rather the complete safeguarding of it. Muir’s preservation was largely disregarded by public institutions, where conservation had already become the institutional norm. Muir’s policies represented a threat to profitability for those with an interest in economic development. Muir’s style of preservation

¹⁷ Pinchot, *Breaking New Ground*, 263.

¹⁸ Channing Kury, “Gifford Pinchot’s Philosophy – What did Pinchot Mean by ‘The Greatest Good to the Greatest Number for the Longest Time?’” *Journal of Forestry* 73, issue 3 (March 1975): 154-155.

¹⁹ J. Baird Callicott, *A Brief History of American Conservation Philosophy* (1993) 11.

²⁰ Callicott, *Conservation Philosophy*, 11.

²¹ *Ibid.*

²² Roderick Nash, *Wilderness and the American Mind* (Yale University Press, 1967).

first came into direct conflict with Pinchot's conservationism over a proposal to dam the Hetch Hetchy Valley in order to provide water for San Francisco. While conservationists argued that the damming of Hetch Hetchy was the most efficient use of the land—echoing utilitarianism—preservationists saw this as disgraceful degradation. Muir called supporters of the project “temple destroyers, devotees of ravaging commercialism.”²³

Conflict between the philosophies of preservation and conservation continue to this day. Ultimately, preservation was adopted—in small part—by the federal government with the signing of the Wilderness Act of 1964. However, the effects of this act are miniscule in comparison to the legacy of conservation. Callicott points out that the contemporary American landscape itself reflects the unequal political power dynamic: “The United States eventually became segregated into large development zones dotted here and there with wilderness preserves adding up to only two or three percent of the total.”²⁴ Of the roughly four percent of public land, little of it is truly safe from development.

Although conservation organizations were founded on a doctrine which relegated nature to utility, many influential figures in the public sector did not follow this rationale. Aldo Leopold serves as the premier example of such a philosophical defector. Leopold worked in the Forestry Service for fifteen years, largely as a wolf-hunter. Population-control of the sort in which Leopold partook is very indicative of conservation's top-down approach towards nature. It implies tremendous arrogance and reflects the cold brutality of applied utilitarianism. How many wolves were killed for the “greater good?” And to what actually positive effect? Ultimately, Leopold came to a dramatic change in perspective after seeing the “fierce green fire

²³ Steven Stoll, *U.S. Environmentalism Since 1945* (Bedford/St. Martins, 2006), 9.

²⁴ Callicott, *Conservation Philosophy*, 12.

dying” in the eyes of a she-wolf.²⁵ His subsequent environmental thought emphasizes flaws in both Pinchot’s conservation and in Muir’s preservation. He delivers an eloquent and searing criticism of Pinchot’s conservationism: “The emergence of ecology has put the economic biologist in a peculiar dilemma: with one hand he points out the accumulated findings of his search for utility in this or that species; with the other he lifts the veil from a biota so complex, so conditioned by interwoven cooperation and competitions that no man can say where utility ends or begins.”²⁶

Leopoldian philosophy differs from that of both Pinchot and Muir in that it interprets humankind as neither the sole inheritor of the Earth, nor strictly as its enemy. It recognizes human beings as an integral part of the natural world and argues for a harmony between man and nature (to the degree that the two can even be considered truly separate entities). It urges humans to live symbiotically with the rest of the biosphere. Leopold articulates his Land Ethic concisely; “A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise.”²⁷ This has profound implications for outdoor recreation, a tradition which is supported by institutions founded on economic development, and which is preyed upon by profit-seeking industries.

Benton MacKaye, who conceptualized and oversaw the creation of the Appalachian Trail, outlines his own ideas of what constitutes an “outdoor culture.” In a 1927 essay by that title, MacKaye draws themes from several disciplines, ultimately culminating in a fascinating “philosophy of through trails.” In a lighthearted and somewhat self-deprecating fashion, he invokes the downfall of ancient Rome, “From all accounts, Rome must have been getting on

²⁵ Aldo Leopold, *A Sand County Almanac: And Sketches Here and There* (Oxford University Press, 1949), 130.

²⁶ Aldo Leopold, “A Biotic View of Land,” *Journal of Forestry* (1939): 727.

²⁷ Leopold, *A Sand County Almanac*, 224.

toward the ultimate of over-civilization. But she was lucky: for she had the barbarian at her back gate.”²⁸ MacKaye recognizes the (symbolic) downfall of Rome at the hands of “barbarians” as a positive outcome and holds that the United States may meet a similar fate at the hands of the coming “American Barbarian.”²⁹ Yet MacKaye’s American barbarian is not a destructive force. On the contrary, the barbarian has a deep understanding of natural processes. MacKaye alludes to the battle between conservation and preservation over the damming of waterways; “[The Barbarian] knows that each [waterway] demands its outlet. You cannot dam *all* the water... The Puritan would build a dam; but the Barbarian would build a sluiceway.”³⁰

MacKaye’s philosophy is a counter to the expansion of metropolitan and industrial society, which he considers an invasion. He calls on modern American Barbarians (“members of the New England Trail Conference”) to meet the expansion of metropolitan society with stiff resistance. He considers the Appalachian Mountains as the hinterlands of Atlantic urbanization—the barbarian forests to Rome. The recapture of wilderness areas is of utmost importance. MacKaye states explicitly that it matters not whether such areas are held by State governments or the Federal government, so long as they are held immune to further “metropolitanism.” The ultimate goal of the Barbarian revolution is to restore a balance between the “natural and the artificial” in the land and in our way of living. For MacKaye, this fight to reestablish harmony is of utmost importance; “it is the ‘why’ of the Appalachian Trail.”³¹

The battle for public lands and their ecological integrity is very much a battle of worldviews. Considering the historical, political, and economic dynamics laid out hereafter,

²⁸ Benton MacKaye, “Outdoor Culture: The Philosophy of Through Trails” *Landscape Architecture Magazine* 17, no. 3 (1927): 168.

²⁹ MacKaye, “Outdoor Culture,” 168.

³⁰ *Ibid.*

³¹ *Ibid.*, 171.

recreational principles must be viable at scale. Chapter five will revisit the philosophies of Leopold and MacKaye in an attempt to synthesize them with these pragmatic concerns.

II. History of Recreation in American Consciousness. Many factors contribute to the collective worldview of a community. There are difficulties in identifying the general sentiments of an entire nation, not in the least due to the fact that such sentiments are constantly changing. Indeed, American outlooks towards the environment have shifted greatly over the course of the nation's history. Deeply complex intersections of events, individuals, philosophies, and religious doctrines contribute to these ever-evolving attitudes. Part II of this chapter will attempt to identify the origins of recreational backpacking in the collective American consciousness, and to track it to the present. It will focus on specific events, individuals, and texts in order to provide a framework with which to apply the philosophies articulated in Part I. As in Part I, Part II will break down this history roughly by period.

Wilderness as Enemy. Roderick Nash's 1963 article "The American Wilderness in Historical Perspective" reflects on the attitudes of early European settlers, which were foundational for the subsequent development of American environmental attitudes. Nash holds that "the first settlers arrived in the New World with ideas and intentions totally incompatible with appreciating wilderness. They came either to squeeze a quick fortune from the virgin continent or create it into an exemplary Christian community."³²

Key tenets of Christian doctrine reference the natural world explicitly in terms of a foe to be conquered; as in Genesis 1:28, "Be fruitful and multiply, and replenish the Earth, and subdue

³² Roderick Nash, "The American Wilderness in Historical Perspective" *Forest History Newsletter* 6, no. 4 (Winter 1963): 3.

it: and have dominion over... every living thing that moveth over the Earth.”³³ Many of the earliest European colonists in North America acted accordingly. Nash quotes Pilgrim William Bradford of the Plymouth Plantation, who held that New England in 1620 was “but a hideous and desolate wilderness, full of wild beasts and wild men.”³⁴ Early colonists considered the subjugation and domestication of the wilderness to be in their best interest. They required productive agricultural land in order to support themselves. And biblical canon clearly promoted an attitude of conquest. Wilderness in this period was considered an adversary, an impediment to the welfare of civilization, an obstacle in the path towards the realization of scripture. In the earliest days of the American experience, there was no inclination to experience the natural landscape through leisure or recreation whatsoever.

Romanticism and the Sublime. Between the mid-eighteenth and mid-nineteenth centuries, there was a marked departure from the attitude of wilderness as enemy. Environmental historian Steven Stoll writes, “painters, poets, and essayists began to regard forests and mountains... not as empty, barren, and desolate places where they felt confused and afraid, but as places of contemplation and refuge from the stresses of rapid social and economic change.”³⁵ As pioneers worked their way westward, many developed a distinct appreciation for the wilderness. In a clear departure from the cultural norms of the previous century, Daniel Boone adoringly reflects on the wilds of Kentucky: “no populous city... could afford so much pleasure to my mind, as the beauties of nature I found here.”³⁶ Boone was a frontiersman, and his enjoyment of the woods was not born solely from recreation. But here is a distinct moment

³³ Nash, “Wilderness in Historical Perspective,” 3.

³⁴ Ibid.

³⁵ Stoll, *U.S. Environmentalism Since 1945*, 6.

³⁶ Nash, “Wilderness in Historical Perspective,” 4.

in American history as it pertains to environmental perception. Boone finds the wilderness valuable not as one would find it in conquest, or in monetary profit, but as in pleasure.

Henry David Thoreau, perhaps the best known of the American romantics, wrote of Mount Katahdin in Maine, “It was vast. Titanic, and such as man never inhabits. Some part of the beholder, even some vital part, seems to escape through the loose grating of his ribs as he ascends. He is more lone than you can imagine. There is less of substantial thought and fair understanding in him, than in the plains where men inhabit. His reason is dispersed and shadowy, more thin and subtile, like the air. Vast, Titanic, inhuman Nature has got him at disadvantage, caught him alone, and pilfers him of some of his divine faculty. She does not smile on him as in the plains. She seems to say sternly, why came ye here before your time? This ground is not prepared for you. Is it not enough that I smile in the valleys? I have never made this soil for thy feet, this air for thy breathing, these rocks for thy neighbors.”³⁷ Thoreau’s dramatic reflection embodies the romantic aesthetic of the “sublime,” a sensation of awe prompted by the terror and beauty of the wilderness. His experience of the sublime is certainly not leisurely or one of light recreation, but it expresses a tone of deep respect and admiration which is a distinct departure from earlier representations of the wild.

Thomas Cole, who painted for privileged American aristocrats, embodied in many of his works a representation of this sublime, a combination of terror and greatness in wilderness. In his landscapes he often depicted windswept mountains with ragged peaks, seemingly inhospitable yet glorious and beautiful. Romantic artists, painters and writers alike represented the wilderness in an entirely different manner than their predecessors. Notions of nature as having intrinsic value separate from its utility to mankind were rare in this period, but its

³⁷ Henry David Thoreau, *The Maine Woods* (Boston: Ticknor and Fields, 1864).

depiction in art and literature represents a significant shift in interpretation. The romantic tradition helped bring about a new way of looking at the wild; fear of the wild was no longer a reason to avoid or destroy it, but rather a reason to respect it and experience it. This shift set the stage for the growth of recreation.

The Sierra Club and Early Recreation. Eventually, an adversarial view of wilderness slowly gave way to one of appreciation. Environmental historian Ron Watters writes that by the late 1800's, "national strength no longer came from conquering the remnants of wilderness, but rather from the enjoyment of the remaining wilderness."³⁸ Among the pioneers of this attitude shift was John Muir, who famously strove for the preservation of the American West. As noted earlier in this chapter, Muir was a high-profile advocate for environmental preservation—not conservation, and certainly not environmental exploitation. But his aspirations were not to rope off the wilderness from the public. On the contrary, Muir organized and led numerous backpacking trips through his outdoor recreation organization, The Sierra Club. Although not the first to lead trips into the wilderness, the Sierra Club is arguably the first modern recreation organization in the United States.³⁹

Clearly by Muir's day, the roots of a tradition of outdoor recreation had taken hold. Founded in 1892, the early Sierra club would lead trips into the Yosemite Valley and what was subsequently named the "John Muir Wilderness" in California. Membership in the club was relatively low in the first two decades. In 1908 it consisted of only 1000 members.⁴⁰ However, it is fair to assert that the rising popularity of the Club's outings was indicative of a broader attitude-shift towards the outdoors. Muir died in December 1914, shortly after the club's last

³⁸ Ron Watters, "Historical Perspectives of Outdoor and Wilderness Recreation Programming in the United States," (Conference on Outdoor Recreation, 1985) 104.

³⁹ Michael P. Cohen, *The History of the Sierra Club, 1892-1970* (Sierra Club Books, 1988) 62.

⁴⁰ "Timeline," History, Sierra Club, accessed November 2019, <http://vault.sierraclub.org/history/timeline.aspx>

hike of the famous Hetch Hetchy Valley before it was flooded and converted into a reservoir. In 1915, the State of California passed legislation appropriating \$10,000 dollars for the construction of the John Muir Trail.⁴¹ It was the first of five such appropriations undertaken by California in this period and is an early example of government heavily investing in public recreation through the creation of hiking trails.

The Post-War Boom. Convention conceptions of the “greatest generation” hold that after the war, American soldiers came home, married, and settled down in suburbia. But a quiet, sedentary lifestyle of this sort was not feasible or even desirable for many returning stateside. Millions of young men like Earl Schaffer returned home with training in wilderness survival, experience in the outdoors, their own gear, and little in the way of a job lined up. That is not to imply that their time in war even remotely resembled outdoor recreation. Quite the contrary; it is doubtless that many young men were inflicted with some sort of post-traumatic stress disorder or mental turmoil upon their return home. And in Schaffer’s case, he felt a need to “walk the war out of [his] system.”⁴²

When the Appalachian Trail was completed in 1937 it was quite dissimilar from the recreational hotspot it has become today. The trail at that time was an amalgamation of farmland and wilderness areas, many of which were privately held.⁴³ Trail maintenance was done entirely by volunteer labor. And despite a fair bit of regional use, the trail had little national notoriety. Certainly, the project was groundbreaking—a foot trail spanning virtually the entire eastern seaboard. But despite the significance of its completion, it was still threatened by a variety of

⁴¹ Sierra Club “Timeline.”

⁴² Glenn Scherer, Don Hopey, *Exploring the Appalachian Trail: Hikes in the Mid-Atlantic States: 2nd Edition* (Stackpole Books 1998) 87.

⁴³ “History,” About the Trail, Appalachian Trail Conservancy, Accessed Oct 4th, 2019. <https://web.archive.org/web/20110429032220/http://www.appalachiantrail.org/about-the-trail/history>

external factors. A growth of industrialism, increase automobile transportation, and the sprawl of suburbia all threatened the continuity of the trail's solitude and even existence.

The signing of the National Trails System Act in 1968 was a major step forward in the protection and expansion of the AT. Promptly thereafter, the Appalachian Trail Conference hired its first two employees.⁴⁴ The sixties and seventies represent a high-water mark in terms of positive federal involvement in outdoor recreation. The Johnson, Nixon, and Carter administrations each made significant contributions in preserving the wilderness for responsible use. And in large part these administrations were motivated by public demand. These decades marked significant changes in American's feelings towards nature and the environment.⁴⁵

Chapter 3: Politics of Recreational Public Land Management

I. The National Parks Service. The National Parks Service is a subservice of the Bureau of Land Management within the Department of the Interior. Operating under executive authority, it is responsible for the preservation of national parks and monuments. With an annual budget of nearly 3 billion dollars, it employs over 21,000 people.⁴⁶ Since its inception in 1916 the Parks Service has grown significantly to incorporate vast swaths of land, many monuments, and ever more responsibilities. What began as a relatively small administrative body is now responsible for supervision of millions of acres and millions of visitors. Many of the nation's hiking trails fall under its domain. As by far the federal government's most heavily staffed and well-funded outdoor-oriented organization, it plays a crucial role in addressing environmental

⁴⁴ Ibid.

⁴⁵ Clayne R. Jensen, Steven P. Guthrie, *Outdoor Recreation in America – 6th ed.*, (Human Kinetics 2006) 31.

⁴⁶ Nathan Rott, "National Parks have a long to-do list but can't cover the repair costs," *NPR*, March 8, 2016. <https://www.npr.org/2016/03/08/466461595/national-parks-have-a-long-to-do-list-but-cant-cover-the-repair-costs>

concerns with regard to recreation. And it plays a large role in shaping the national wilderness narrative. Therefore, its history and its doctrine deserve close inspection.

Over the past century the Parks Service has had to adapt to an increase in ecotourism, outdoor recreation, and trail-traffic.⁴⁷ It has evolved significantly in order to maintain responsible stewardship over newly introduced federal lands. Initially a union of small, local conservation organization, the Parks Service has developed into a massive federal bureaucracy all its own. In following this development, it is useful to analyze by period.

The Pre-Park Service Era. High in the Sierra Nevada Mountains rests the incredible landscape of the Yosemite Valley. Today it serves as the quintessential natural monument, almost sardonically so. Certainly, it is beautiful. But its role in the development of public lands is more significant. Senator John Conness of California was so impressed by the aesthetic beauty of Yosemite that he requested it be allocated to the state so as to “be used and preserved for the benefit of mankind.”⁴⁸ On June 30, 1864, President Lincoln obliged the Senator and signed the Yosemite Grant Act, setting an important precedent for subsequent environmental protection endeavors. The act stipulated that the valley and surrounding region would become state property under the “express conditions that the premises shall be held for public use, resort, and recreation; shall be inalienable for all time.”⁴⁹ This was the first time in American history that a section of land was deemed state property for the explicit purposes of recreation and preservation.

The first official national park was established on March 1, 1872 in Wyoming and Montana under the Yellowstone National Park Act. Like Yosemite, Yellowstone is praised for

⁴⁷John Isne, *Our National Park Policy: A Critical History* (Routledge, 2013), 5.

⁴⁸Jannet McDonnell, Barry Mackintosh, Harpers Ferry Center, *The National Parks, Shaping the System* (U.S. Department of the Interior, 2005), 12.

⁴⁹*Yosemite Grant Act*, 1864

its aesthetic beauty. As John Muir writes, it is “a big, wholesome wilderness on the broad summit of the Rocky Mountains, favored with abundance of rain and snow, --a place of fountains where the greatest of the American rivers take their rise.”⁵⁰ As the region became increasingly settled, its reputation for beauty grew and legislation was introduced. The act orders that the region be “dedicated and set apart as a public park or pleasuring-ground for the benefit and enjoyment of the people.” As a federally protected area, it was thereby immune to sale, settlement, or development.

The Yellowstone National Park Act followed the precedent set eight years early. But it was more significant in both its scope and in its function. The sheer size of the region protected here was vast, more than two million acres; far greater than previously protected regions like Yosemite. The size of a protected region is important considering that outside industry and settlement can have a profound impact on the interior functions of a biome. And the scope of the area which this act concerns set an important standard for later protective measures. But perhaps more significant was the method by which the region was protected. As distinct from Yosemite, Yellowstone was placed under the jurisdiction of the Secretary of the Interior, thereby deeming it federal—not state—property. This set an important precedent for the future dedication other land to federal authority.

As an advocate of wildlife protection and personal friend of John Muir, President Theodore Roosevelt played a key role in expanding environmental protection measures. In 1906 he signed the Antiquities Act which, which, rather than protecting a specific area, broadened the powers of the President to protect “historic landmarks, historic and prehistoric structures, and

⁵⁰ John Muir, *Our National Parks* (Houghton, Mifflin, 1901)

other objects of historic or scientific interest.”⁵¹ This effectively allowed Roosevelt and future presidents the ability to proclaim lands as federally protected on the basis of historical significance or value. This proved to be a valuable tool in the future requisitioning of land; nearly a quarter of protected areas now under the administration of the National Parks System were acquired through the Antiquities Act.⁵²

Early Organization. By the First World War, twenty national monuments and thirteen national parks were managed by the various bureaus of the Department of the Interior without any real central organization or authority. A collaboration of stakeholders, headed largely by the National Geographic Society, lobbied President Woodrow Wilson to pass the Organic Act of 1916, also known as the National Park Service Act. The act consolidated all public holdings under the management of a new organization called the National Parks Service. Although it provided little concrete structure, the Act specified the salary for the Director of the Service, from which all else was initially built.⁵³

The foremost principles and doctrines of the NPS are still largely result of its original function. But again, it has evolved considerably since its inauguration in 1916. Among the most crucial changes was the result of a major reorganization under the Roosevelt administration in 1933.⁵⁴ Through executive orders, the NPS inherited all national parks and monuments held by both the War Department and the Forest Service. With this it became the sole federal body with the capacity to regulate recreation on public lands. This greatly increased the scope of its responsibilities and obligations. The Roosevelt administration introduced the Preservation of

⁵¹ *Antiquities Act*, 1906

⁵² “National Parks Service Timeline” National Parks Service, accessed Oct 12th, 2018, https://www.nps.gov/parkhistory/hisnps/npshistory/timeline_annotated.htm

⁵³ “Organic Act of 1916” National Parks Service, accessed Oct 15th, 2018 <https://www.nps.gov/grba/learn/management/organic-act-of-1916.html>

⁵⁴ McDonnell and Mackintosh, *Shaping the System*, 28.

Historic Sites Act in 1935, which again broadened the Service's responsibilities with an emphasis on the growth of preservation and conservation on the basis of historical significance.

Early-Modern Expansion. Between 1964 and 1968, several important acts were passed. The Wilderness Act of 1964 established the National Wilderness Preservation System. Through this act, Congress designated numerous "wilderness areas" to be set aside solely for the purpose of preservation and conservation.⁵⁵ This act provided crucial justification for the designation of new conservation areas and also bolstered the Parks Service legal defense against possible threats to conservation. The Land and Water Conservation Fund of 1965 designated a distinct federal fund allocated for the acquisition of new recreation and conservation lands. In 1968, the Johnson administration passed the National Trails System Act.⁵⁶ It established the Appalachian Trail and the Pacific Crest Trail as national scenic trails, protected by the Parks Service, setting an important precedent for the future of hiking. Most perhaps most significantly, this act enabled Congress to establish future scenic trails. To date, there are 11 National Scenic Trails, totaling nearly 19,000 miles.

With a series of expansion-focused legislative precedents and a capable administrative body, the NPS's most expansive period was during the Nixon administration. And in the period between 1973 and 2004, the NPS added one hundred thirty-one new parks.⁵⁷ Many of these parks are in Alaska, however. In 1980, President Carter signed into law the Alaska National Interest Land Conservation Act, the largest single federal protective measure in United States history. It placed more than 47 million acres of protected land under NPS jurisdiction.⁵⁸

⁵⁵ Ibid, 69.

⁵⁶ Ibid, 77.

⁵⁷ Ibid, 84.

⁵⁸ Ibid, 97.

Contemporary Period. Following the Carter administration, however, public land holdings remained relatively stagnant through the Reagan, Clinton, and both Bush administrations. This period of stagnation came to an end under the Obama administration. Between 2008 and 2016, President Obama pursued a policy of expansion, utilizing the Antiquities Act to create new monuments, expand others, and install new protective measures. Through his terms in office, he designated 29 new national monuments, more than under any previous administration.⁵⁹ As an aside, the Obama administration had a generally positive environmental record. He vetoed a congressional bill aimed towards approving the Keystone XL pipeline and ultimately rejected it citing the possibility of harmful environmental effects.⁶⁰ Between 2008 and 2016, federal policy was relatively pro-conservation.

The Trump administration has pursued a policy of major reversal. President Trump, making claims along the lines that Obama-era environmental protection policies amounted to an “expensive hoax,” is the first President in history to take concrete steps towards repealing a national monument designation. Executive Order 13792 advised the National Parks Service to “review all national monument designations since 1996” with an aim at finding grounds for reduction, and to “suggest ways of modifying or canceling previous monument proclamations under the 1906 Antiquities Act.”⁶¹ No presidential administration has ever embraced such a vehemently aggressive policy towards the protection of public lands. The Trump Administration poses a clear threat to the NPS and public lands themselves.

The philosophy foundational to federal conservation policy is fundamentally flawed. It is based on outdated conceptions about ecological realities and considers non-humans merely as

⁵⁹ Norman J. Vig and Michael E. Kraft, *Environmental Policy: New Directions for the Twenty-First Century* (CQ Press; 8th edition, 2017), 104.

⁶⁰ Norman and Vig, *Environmental Policy*, 104.

⁶¹ *Ibid*, 107.

resources. It employs a philosophy of environmental stewardship and, as will be explored in the concluding chapter, it must be replaced at large. However, a policy of conservation is far superior to that of unrestricted industrialism. The history of the NPS is one of expansion, which is certainly a net-positive for recreationalists.

II. Regional Politics of Conservation – New York. A significant portion of recreational land is not protected by federal authority. It is the responsibility of state governments to manage the many smaller public parks and preserves. The New York-New Jersey Trail Conference (NYNJTC) is responsible for the maintenance and upkeep of over 2,000 miles of recreational trails in the greater New York-New Jersey metropolitan area.⁶² It provides a range of essential trail services and does preservation and conservation work, often in conjunction with other organizations like the Appalachian Trail Conservancy.⁶³ The NYNJTC is a non-profit and is volunteer based, with relatively few salaried positions.

As compared with the NPS, the NYNJTC serves as a sort of “bottom-up” conservation organization. It is separated into regional districts, each with distinct responsibilities. It is heavily reliant on volunteer work. Each region is administrated by a single supervisor who appoints trail maintainers to various local trails. A trail maintainer is then responsible for the maintenance and upkeep of a designated length of trail. It is through this collective pool of volunteer labor that the trail conference is successful in the upkeep of thousands of miles of trail.

⁶² “2017 Annual Report,” NYNJTC, last modified August 15, 2018, https://www.nynjtc.org/sites/default/files/Annual%20Report%202017%20Digital_1.pdf

⁶³ “Appalachian Trail Local Management Plan: Orange/Rockland Counties,” NYNJTC, last modified August 5, 2005, <https://www.nynjtc.org/book/ny-local-management-plan-lmp>

The budget for the year-round maintenance on such a scale would be entirely untenable if it relied solely on salaried workers.

This highlights an important distinction between small, regional groups like the NYNJTC, and large, federal organizations like the NPS. The NPS is a sprawling administrative body, steeped with bureaucracy, comprised of thousands of salaried employees. It is heavily reliant on federal funding and the executive administration. The upkeep of the infrastructure comprising the National and State Parks themselves is a serious undertaking which requires considerable time and capital. The New York State Office of Parks and Recreation is saddled by similar of drawbacks. Though not nearly on the scale of the NPS, it is a relatively large administration beholden to a state budget. The responsibility of maintaining many of the trails themselves therefore falls to regional, volunteer-based groups like the NYNJTC.

The New York State Office of Parks, Recreation, and Historic Preservation administers 180 state parks and historic sites covering nearly 350,000 acres of public land.⁶⁴ Unlike the NYNJTC, which focuses its energy entirely on public trails, the Office of Parks and Recreation has a broad range of responsibilities, a large workforce, and a massive budget. In addition to administering state parks, it oversees 35 historic sites, 67 developed beachfronts, 29 golf courses, 817 cabins, 8,355 campsites and many other sites.⁶⁵ It employs 1,737 people permanently and over 4,500 seasonally.⁶⁶ It is a massive organization with an annual budget of nearly 400 million dollars.⁶⁷ Trail maintenance is tedious, time consuming and requires a large, dedicated work

⁶⁴ “2017 Annual Report,” New York State Council of Parks, Recreation, and Historic Preservation, last modified February 2018. <https://parks.ny.gov/state-council/documents/2017StateCouncilAnnualReport.pdf>

⁶⁵ NYS Council of Parks and Recreation, 2017 Annual Report, 7.

⁶⁶ Ibid, 7.

⁶⁷ “Fiscal Year 2017 Executive Budget,” New York State Office of Parks, Recreation, and Historic Preservation, <https://www.budget.ny.gov/pubs/archive/fy17archive/eBudget1617/agencyPresentations/appropData/ParksRecreationandHistoricPreservationOfficeof.html>

force. The Office of Parks and Recreation relies on the volunteer work of the NYNJTC to maintain its 2000-plus miles of trails as a matter of fiscal and temporal practicality.

Trails within New York state parks are public land, the property of the state government. The NYNJTC's 990 tax form identifies that it is a separate entity from the New York State Government but operates under a framework of responsibilities agreed upon between the Trail Conference and the Office of Parks and Recreation. Its 2017 990 tax form states, under Schedule, D Part 2, Line 9: Policy Regarding Conservation Easements; "The [NYNJTC] has a conservation agreement with the grantor of the easement property [NYS Office of Parks and Recreation] which outlines their responsibilities and rights as grantee pertaining to the property."⁶⁸ It also specifies that the Trail Conference is responsible solely for conservation and maintenance work. Public trails in New York State are administered, supervised and policed by the state government and are maintained through the volunteer work of the public.

The NYNJTC has a distinctly different structure from the Office of Parks and Recreation. A 15-member board is responsible for directing the general policy and large-scale undertakings. And the entire conference is staffed by just 23 paid members.⁶⁹ They cover a range of positions essential to the workings of the conference. There are multiple field managers and regional program coordinators responsible for the planning of restoration projects, surveying, et cetera. An analysis of the conferences paid positions reveals the primary focuses of the organization. There is a full-time cartographer on payroll as well as an invasive species projects manager.⁷⁰ These positions, being two of a select few, highlight two of the primary responsibilities of the

⁶⁸ "990: Return of Organization Exempt From Income Tax," NYNJTC, last modified December 31, 2017. <https://www.nynjtc.org/report/fy-2017-form-990>

⁶⁹ "How We Work: Committees," NYNJTC, accessed November 27, 2018, <https://www.nynjtc.org/content/committees>

⁷⁰ NYNJTC, "How We Work."

conference—proving up-to-date maps of the region, and confronting invasive species. The small size of the conference’s staff is its key to functionality. It maintains 2,250 miles of protected trails annually, with only 23 members on payroll. This emphasizes the degree to which the organization relies on volunteer labor to function, and the degree to which volunteer labor is effective.

The NYNJTC is a nonprofit organization and is therefore exempt from federal income tax under section 501(c)(3) of the Internal Revenue Code. While it takes in revenue from several sources, any surplus income is used to further realize the organizations mission. Their mission is stated as “Committed to developing, building and maintaining trails, protecting trails through support and advocacy, and educating the public in the responsible use of trails and the natural environment; and in connection therewith, publishes trail guide books and maps.”⁷¹ In order to maintain its tax-exempt status, the NYNJTC is legally refined to applying funds within the confines of these aims.

In 2017, the NYNJTC received several grants from the state governments of New York and New Jersey.⁷² It received 240,883 dollars from the New York State Department of Environmental Conservation, 230,431 dollars from the New York State Office of Parks, Recreation and Historic Preservation, and 60,434 dollars from the New Jersey Department of Environmental Protection.⁷³ Combined with other smaller grants, the NYNJTC received 549,085 dollars in state funding in 2017.⁷⁴ This is substantial, and it shows that the projects undertaken by the conference are not entirely self-funded. Importantly, though, state funding

⁷¹ NYNJTC, “2017 990 Tax Form.”

⁷² “Audited Financial Statements,” NYNJTC, last modified December 31, 2017. https://www.nynjtc.org/sites/default/files/NYNJTC_2017_Audited_Financials.pdf

⁷³ NYNJTC, “2017 Audited Financial Statements,” 11.

⁷⁴ *Ibid*, 11.

does not make up the majority of the conferences revenue. The conference is funded primarily through charitable contributions (\$825,543), membership dues (\$266,836), the sale of maps, books, etc (\$256,183), and private contracts (\$211,764).⁷⁵ Total revenue for 2017 measured at 2,644,451 dollars.⁷⁶ As of December, 2017, the NYNJTC's total net assets were valued at 11,791,301 dollars, up from 11,621,637 dollars in December, 2016.⁷⁷

The small faculty size of the NYNJTC allows it more discretionary spending than an encumbered government body. This is a crucial factor aiding in its flexibility and success in conservation work. The lack of a large employee base allows for greater concentration and organizational focus. While there are hundreds of volunteers who maintain local sections of trail, such volunteers do so in their free time and are not reliant on the conference for salary or benefits, granting the conference far more freedom in both financial and procedural strategies. The coupling of a larger, crowd-funded budget, with a small staff proves a very important factor in the success of the organization. The fact that the vast majority of the NYNJTC's revenue comes from membership dues, merchandise sales, and donations, sets it apart from federal bodies like the NPS. Although it benefits from the State, it is not completely reliant on government and therefore its survival as a conservation organization is not dependent on governmental policy or executive authority.

The relationship between the New York/New Jersey Trail Conference and the New York State Office of Parks and Recreation serves as an excellent model for recreational conservation efforts at the regional level. Through a reliance on volunteer labor, the state is free to designate funds to other conservation projects. The local scale of conservation organizations like the

⁷⁵ Ibid, 3.

⁷⁶ Ibid, 3.

⁷⁷ NYNJTC, "2017 990 Tax Form."

NYNJTC allows for a small group of experts to narrow their focus on a particular region and to address local problems without the bureaucracy of large state or federal bodies. As demonstrated in New York, protective efforts are observably most effective when government authority is combined with grassroots organization of regional conservation groups.

Chapter 4: The Outdoor Recreation Industry

Outdoor recreation has been highly commercialized in the United States since the late 1940's. Following World War II, huge amounts of military surplus gear became cheaply available on the consumer marketplace. Contemporary outdoor recreation was in its infancy during this period and those with a proclivity for spending time in the woods made due largely with whatever boots, backpacks, and materials they had at home. Today, practically every community in the United States has a nearby outdoor retail depot. Hundreds of name brands offer a wide array of outdoor gear, from sub-zero mountaineering boots, to ultralight trowels. This massive business developed naturally alongside the growth of outdoor recreation as a pastime. But the companies which comprise this business are motivated by profit above all, and they are often pitted at odds with the overall welfare of the environment which they promote.

The National Park Service itself has a long history with profit-driven development. In many instances, national parks were commercialized early. Large-scale tourism was seen as an economic opportunity for marketing concessions, for goods vendors, and for larger endeavors like hotels. The installation of these attractions brought significantly more traffic than the parks themselves had the capacity to responsibly manage. This led to overuse and widespread degradation.⁷⁸ Actions since taken by the National Parks service to limit this form of

⁷⁸ Rachel Cox, "Protecting the National Parks," *CQ Researcher* 10, no. 23 (June 2000)

development have been crucial in stemming the commercialization of public lands. But the issue is certainly still relevant. Reliance on the federal government for funding can be a somewhat precarious. Government shutdowns pose a real threat to the efficacy of the system of public protection. And working within a profit-driven system reaps negative effects on the welfare of the National Parks. There is a somewhat paradoxical relationship that arises through the maintenance of these public spaces. With a lack of substantial government funding, the National Parks Service and related organizations are forced to generate their own revenue by growing interest in the parks, their services and their products.⁷⁹ This drives more traffic to the parks, generating more revenue for maintenance and conservation efforts, but simultaneously increasing the threats posed to the environment.

By participating in the commercialism of the outdoor recreation industry, groups like the National Parks Service and the Appalachian Mountain Club validate the consumerism propagated by outdoor gear businesses. Business is not limited solely to those entities working within the traditional consumer marketplace. The financial benefits of generating interest in the outdoors are obvious; an increase in public interest results in more revenue. And even conservation organizations need revenue to in order function. Groups like the Appalachian Mountain Club, for example, have active advertisement campaigns that promote the use of their trail systems.⁸⁰

There is a great deal of hypocrisy within even the most reputable “environmentalist” organizations. The notion of “leave no trace” or “LNT” is one of the most influential and widespread conservation campaigns. It encourages the responsible use of outdoor space through

⁷⁹ Cox, “Protecting the National Parks,”

⁸⁰ “Annual Report 2014” AMC New York-North Jersey Chapter, accessed December 14, 2018. <https://www.amc-ny.org/wp-content/uploads/2015/11/AnnualReport2014.pdf>

the promotion of principles which aid in minimizing environmental impact. But even Int.org has an extensive online store.⁸¹ The Sierra Club remains one of the United States' most influential and important environmental advocacy groups. Nonetheless, the club has a significant stake in consumerism. From the Sierra Club website: "Become a monthly donor and we'll send you our exclusive Insulated Cooler Tote [Bag] – FREE."⁸² A utilitarian argument can be made that the funds raised by the sale of merchandise ultimately work to benefit the environment and public lands—that the ends justify the means. But this is a precarious argument and difficult to demonstrate. Fundamentally, this participation in consumerism serves to bolster the most harmful effects of the commercialization of the outdoors. It supports a wilderness-as-commodity narrative and reduces important ethical concerns to mere merchandising.

The sheer size of the outdoor recreation industry is massive. According to the U.S. Bureau of Economic Analysis, the outdoor recreation industry was evaluated at \$427 billion in 2019—2.2 percent of national GDP.⁸³ The outdoor recreation industry is an economic powerhouse with substantial resources at its disposal. Through advertisement and social media campaigns, it is capable of informing national discussion and framing the outdoors in a particular light. Companies like Patagonia publically portray generally pro-environmental policies and employ campaigns like "The President Stole Your Land," and "#monumentalmistake" in favor of the National Parks Service and of public lands.⁸⁴ Campaigns with these messages are helpful shaping discussion, in crowd-sourcing support for conservation efforts, and eventually in

⁸¹ "Featured Products" Leave No Trace, accessed December 14, 2018. <https://Int.org/shop/featured-products>

⁸² "Donate" Sierra Club, accessed November, 2019, https://act.sierraclub.org/donate/rc_connect__campaign_designform?id=7010Z0000027AT7QAM&formcampaignid=70131000001LjZ2AAK&ddi=N18ZOTF007&_ga=2.75913621.1272173910.1576777285-1966872143.1576777285

⁸³ "Outdoor Recreation" Bureau of Economic Analysis, accessed December 6, 2019. <https://www.bea.gov/data/special-topics/outdoor-recreation>

⁸⁴ "Protect Public Lands" Patagonia, accessed December 4, 2018. <https://www.patagonia.com/protect-public-lands.html>

combatting threats to public lands. But ultimately, they are motivated by profit. As is also exemplified by REI's campaign "#optoutside,"⁸⁵ the outdoor recreation industry depicts the outdoors largely as a place to test out gear.

As more people spend time in the outdoors, the demand for gear grows. And in an already oversaturated market, an increase in demand for products is obviously beneficial for the seller. Outdoor gear companies therefore benefit greatly from an increase in outdoors traffic, which culminates in increased profits. Large outdoor retailers therefore put significant effort into promoting the outdoors as a space for recreation, often through advertisements and social media campaigns. The primary goal here is to increase interest in the outdoors in order to sell more products and cultivate business. National Parks and other outdoor spaces are marketed as places to play around with new gear. Therefore, retailers work fervently to grow the pool of consumers with interests in recreation, in a situation where the National Parks are already largely overrun with hikers and recreationalists. Outdoor recreation retailers act out of self-interest, but while economic growth is good for businesses, it is bad for the environment.

Outdoor gear brands have a vested interest in identifying as "green, eco-friendly, or environmentally conscious." And a fleece-jacket made out of 50 percent "post-consumer products" is hailed as a great achievement. An "environmentally conscious" consumer is likely to feel better purchasing an article made from partially "recycled" material than a non-recycled one. The real environmental impact of this repackaging is negligible.⁸⁶ Brands are inclined to label themselves as environmentalists in order to appease the moral conscience of consumers. The existence of outdoor gear brands is predicated on the continuation of consumption. (Both

⁸⁵ "#optoutside" REI, accessed December 4, 2018. <https://www.rei.com/opt-outside>

⁸⁶ Olivia Hagman, Ida Segerqvist, Sofie Wahlström, "Credibility of Green Marketing in the Fast Fashion Industry," *Jönköping University* (May 2017)

L.L. Bean and REI recently revoked their long-standing policy of lifetime warranty.) Rather than shifting towards truly sustainable business models centered on low-consumption, these companies merely mask the ecological impact of their operations with throw-away phrases like “green.”

This environmental window-dressing is known as greenwashing, and it is highly prevalent in the industry. A study conducted by environmental consulting firm TerraChoice found that of 2,219 products making “green” claims, 98 percent were responsible of greenwashing.⁸⁷ The purported “green” philosophy of the outdoor recreation industry is a thin veil hiding the reality of harmful practices. Ultimately, the first consideration of businesses in outdoor recreation is turning a profit. Corporations have stockholders to appease and even small businesses have employees to pay. Concerns about the environmental impacts of a set of actions undertaken by a competitive business are likely to take a back seat to more pressing economic concerns.

The commercialism of the recreation industry plays a role in shaping the way the public evaluates the outdoors. Chapter two tracked the changing perception of wilderness in American consciousness, culminating in the establishment of the National Trails Act in 1968. Today the American public generally views the outdoors through a lens of recreation, as a place for enjoyment. But of course, there have been significant changes in the last several decades. To a large degree, wilderness has itself become a commodity. The industry has a vested interest in pushing a narrative which solely emphasizes recreation, without an accompanying moral philosophy. Commercial recreation functions to relegates the outdoors exclusively as something to be enjoyed. This is a very shallow form of appreciation, which neglects any valuation of the

⁸⁷ Richard Dahl, “Green Washing” *Environmental Health Perspectives* 118, no. 6, (2010).

greater biotic community, or any ethic whatsoever. Ultimately, it results in isolation from the land; the consumer evaluates the outdoors in merely the same way he would another commodity.

This message is not forced on consumers directly, but subtly and perhaps inadvertently. The recreation industry does not have an interest in embracing a harmful wilderness ethic. On the contrary, the preservation of the outdoors ensures continued business. But the promotion of a holistic environmental worldview is not conducive to the continuation of consumption. The marketing of consumerism through advertising and social media campaigns aims solely to increase profit and attention, not to directly discourage Leopoldian philosophy. Yet the effect is the same: by advocating for consumptive anthropocentric practices, the recreation industry opposes a more biocentric philosophy.

Chapter 5: Trail Ethic and Recommendations

As outdoor recreation grows, so too do the threats that it poses to the environment. The overuse of trail systems on public lands stems directly from the growth of hiking as a popular pastime. In brief, the problem is clear; there are too many uneducated hikers on too few trails. The problem is one of biology, aesthetics, and morality. The history of how we view nature informs our current predicament. The philosophy supporting our conservation institutions is problematic. Our mitigation practices are inadequate. And businesses and economic incentives simply worsen things. Addressing one aspect in isolation would be insufficient. A holistic approach must be taken towards remedying the pressures posed by recreation. We must replace our current recreational philosophy. This chapter proposes the adoption of a new Trail Ethic.

Trail Ethic. The Trail Ethic is an application of Aldo Leopold’s biocentric principles to the field of recreational backpacking. It is a synthesis of Leopold’s Land Ethic with Benton MacKaye’s “barbarian invasion.” It incorporates the former’s concerns for biotic integrity with the latter’s aesthetic sensibilities and political responsibilities. The Trail Ethic is a new outdoor culture in the likes of what MacKaye envisions. It does not value the biotic community in terms of utility, nor by its aesthetic beauty, nor by the pleasure one can take from it. Rather, it recognizes the biosphere as home. MacKaye had a clear conception of what was “natural versus artificial.” The line between the two has become less clear in contemporary environmental philosophy.^{88 89} But ultimately, the Trail Ethic is an attempt to establish harmony between hikers and the environment.

The Trail Ethic pertains not to government officials, or corporate tycoons, but to the individual hiker—the “American barbarian.” In practical application it calls for the minimization of biotic harm. The hiker must act as a counter to the expansion of metropolitan society and the continual degradation of land. The hiker must develop an understanding of natural processes so as to better inform their own Leopoldian cost-benefit analysis. Crucially, the hiker must engage in broad political involvement. Sufficient environmental protection cannot be achieved through the top-down methods employed by the federal government. And a change in philosophy will not start at the top.

The reorientation of our recreational ethics will largely be a reorientation of our priorities. Let us consider our current priorities by again referencing the guiding philosophy of our federal institutions, Pinchot’s conservation, which emphasizes development above all else. It does so

⁸⁸ Steven Vogel, "Environmental Philosophy After the End of Nature," *Environmental Ethics* 24 (1999): 23-39.

⁸⁹ Matthew Auer, "Environmental Aesthetics in the Age of Climate Change" *Sustainability* 11 (2019): 5001.

quite literally; of the four principles articulated in Pinchot's *The Fight for Conservation*, "development" is first. Conservation is a tool used to achieve continual, infinite economic growth. The entire basis for the practice is to ensure the future exploitation of nature. "The first duty of the human race is to control the Earth it lives upon."⁹⁰ This is the status quo.

The guiding principles of Leopold's Land Ethic could not be more distinct from those of the school of conservation. They are a response to it, in a sense, particularly given Leopold's background with the Forestry Service. They do away with valuations of nature based on potential development or economic growth. When practically applied, they would replace contemporary cost-benefit analyses with an evaluation of the effects on biotic integrity. Should these principles be adopted by institutions like the NPS and the Forestry Service, the impact would be broad. Were they adopted by the outdoor recreation industry, it would be even broader if. But fundamentally, they must be adopted by the public.

Individual Impacts. As articulated in chapter one, large numbers of hikers can result in a significant negative ecological impact. Trail erosion necessitates wider trails and more infrastructure, which can greatly impact the biotic makeup of an area. Hikers also contribute to the introduction of invasive species and parasites into vulnerable areas, resulting in a decrease in biodiversity. The problems generated by the number of hikers is exacerbated by harmful on-trail behavior, which in itself represents a threat to environmental stability. Uneducated or misinformed hikers who do not operate under LNT principles can prove devastating to an area. The improper disposal of garbage and human waste along trail corridors aids in the degradation of the area, both aesthetically and biologically. Improper interaction with wildlife can condition

⁹⁰ Gifford Pinchot, *The Fight for Conservation* (New York: Doubleday, Page & Company, 1910) 45.

local animal populations to rely on the presence of hikers as a food source, greatly disrupting stability.

The threats posed by recreationalists can be broadly categorized by overuse and improper use, but ultimately stem from the individual. Conservation organizations like the NPS and the Appalachian Trail Conservancy advocate for responsible conduct and promote healthy trail practices. But their outreach is limited and programs like Leave No Trace are insufficient in that they do not provide a greater moral framework for justifying their tenets. The hiker who has been indoctrinated with an anthropocentric worldview is unlikely to abandon that worldview simply by reading a 7-point poster. A person who fails to recognize the value of nature outside of its utility will fail to recognize the importance of reducing his impact.

Yet the education system in the United States places very little emphasis on the environment, let alone environmental ethics.⁹¹ Much of the American youth lacks the tools for developing an informed environmental perspective. They are influenced by industry and media to consume and to see the outdoors as frivolous and fun, like that of any other commodity. Ultimately, the mitigation of individual hiker impact can be best addressed through the promotion of a productive environmental worldview. Leopoldian ethics ought to be promoted in public schools for the benefit of the public lands and the intellectual development of the youth.

The Outdoor Recreation Industry. There are powerful institutions which have a vested interest in maintaining the status quo. The outdoor recreation industry exacerbates environmental problems. It encourages more hikers to get on-trail without proper education on responsible conduct. Businesses simply want to sell more products, regardless of the

⁹¹ David A. Gruenewald, "How No Child Left Behind limits and distorts environmental education in US Schools" *Environmental Education Research* 13 (2007).

environmental implications. In this way they contribute to both overuse and improper use: they aim to increase the number of hikers but fail to promote responsible principles in doing so. As a multibillion-dollar industry, outdoor recreation greatly influences the public outdoors narrative. It proliferates an attitude of consumerism in the pursuit of revenue and its guiding principles are entirely void of a code of environmental ethics. It operates merely to profit from the environment without contemplating the harm it causes. The sheer size of the industry makes it even more imperative that it operates in accordance with sensible environmental values. Nonetheless, it functions unregulated by environmental concerns, spreading an already prevalent anthropocentric philosophy.

Consumer-activism is a strategy of questionable efficacy. In many instances, a reorientation of consumer preferences simply results in more consumption.⁹² The consumption of “green” products is consumption nonetheless and is simply consumerist behavior with the moral pretext of surface-level environmental concerns. Consider the metal straw fad. The movement to ditch plastic straws is very ethically and practically sound. But simply replacing them with a new commodity is problematic and ineffective. Rather than engaging in shallow consumer activism by embracing “eco-friendly” products, hikers must attempt a general withdrawal from the marketplace.

Politics of Conservation. The top-down approach of the National Parks Service is fundamentally flawed. The entire foundation of federal conservation is based on Pinchot’s utilitarian conceptions of human duty. It fails to recognize any value in non-humans other than

⁹² Connie Roser-Renouf et al., “The Consumer as Climate Activist,” *International Journal of Communication* 10 (2016)

use-value, in this way relegating the entire planet to mere “natural resources.” Even the term “non-human” is a negative valuation and problematic in that it reflects linguistic anthropocentrism. Conservation is a morally unsound institution, entirely focused on the utility of nature for human purposes. But it is also insufficient on practical grounds. It implies that mankind possesses an understanding of natural processes sufficient to support itself through the manipulation of nature. This borders on an Earth management perspective, yet it promotes a degree of temperance predicated on future exploitation. Nonetheless, this is a doctrine of stewardship which is no longer viable, especially at the federal level.

Small, local, volunteer-based conservation groups represent a much more viable trail maintenance strategy. However, while organizations like the NYNJTC take some proactive measures, such as building new trails in order to disperse the concentration of hikers. Their work is generally reactive. They are more focused on reducing the impact of hikers through trail repair, garbage removal, and invasive species elimination. Such actions inherently take place after the fact, and merely resolve the damage, rather than preventing it or confronting the cause of the issues. Volunteer-based organizations like the NYNJTC are effective in their defensive conservation strategy; but as the problem grows, a more offensive strategy must be adopted. In order to fundamentally solve the issues posed by overuse, proactive measures must be taken to lower the concentration of hikers on-trail and to promote environmental education.

As MacKaye advocates, the hiking community must lobby for further protection of public lands. It is illegal for the government to restrict any individual from their right to access public lands.⁹³ And it is also deeply immoral to do so; access to outdoor space should be afforded to all. This policy does not propose to build new trails on already existing public

⁹³ Marla E. Mansfield, “On the Cusp of Property Rights: Lessons from Public Land Law” *Ecology Law Quarterly* 1, no. 2 (January 1991): 52.

lands—which would create further harm—but rather to utilize those which already exist on newly acquired public land. The acquisition of new public land would effectively rescue it from the ambitions of development interests. Fresh trails would open new areas to hikers and would help relieve the pressure on already existing public trails. An expansion of trail networks, crucially coupled with environmental education and trail etiquette on the part of hikers, would relieve concentration and mitigate the issues presented by overuse.

As demonstrated in chapter two, there are strong precedents and a long history supporting the acquisition of public land by the federal government. Under the Antiquities Act and other key pieces of legislation, the executive has the ability to requisition land for public purposes. The general public must lobby for a public policy which favors the appropriation of more public land wherever possible. Through executive action, public lands may be delegated to the authority of state governments. Chapter four focused on the effectiveness of the regional model of trail conservancy and the importance of volunteer work. And as seen in New York State, state governments have the ability to manage land essentially however they deem appropriate. New public lands should be protected under the authority of the state government and maintained by community members.

Community-based trail management is cost-effective and ensures a degree of community engagement. But more importantly, it helps maintain a biocentric appreciation of nature. The Leopoldian ideal promotes the notion that mankind is a member of the biotic community, not separate from it; the result is a moral obligation to care for the community. The Trail Ethic places responsibility on the public to enact the cultural and political shift MacKaye outlines. The people themselves must inherit the responsibility to maintain the land, which should be framed in terms of moral and civic duty. Broad philosophical change must originate amongst the hikers

themselves, to be built from the bottom-up. The “barbarian invasion” must be led by the barbarians.

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