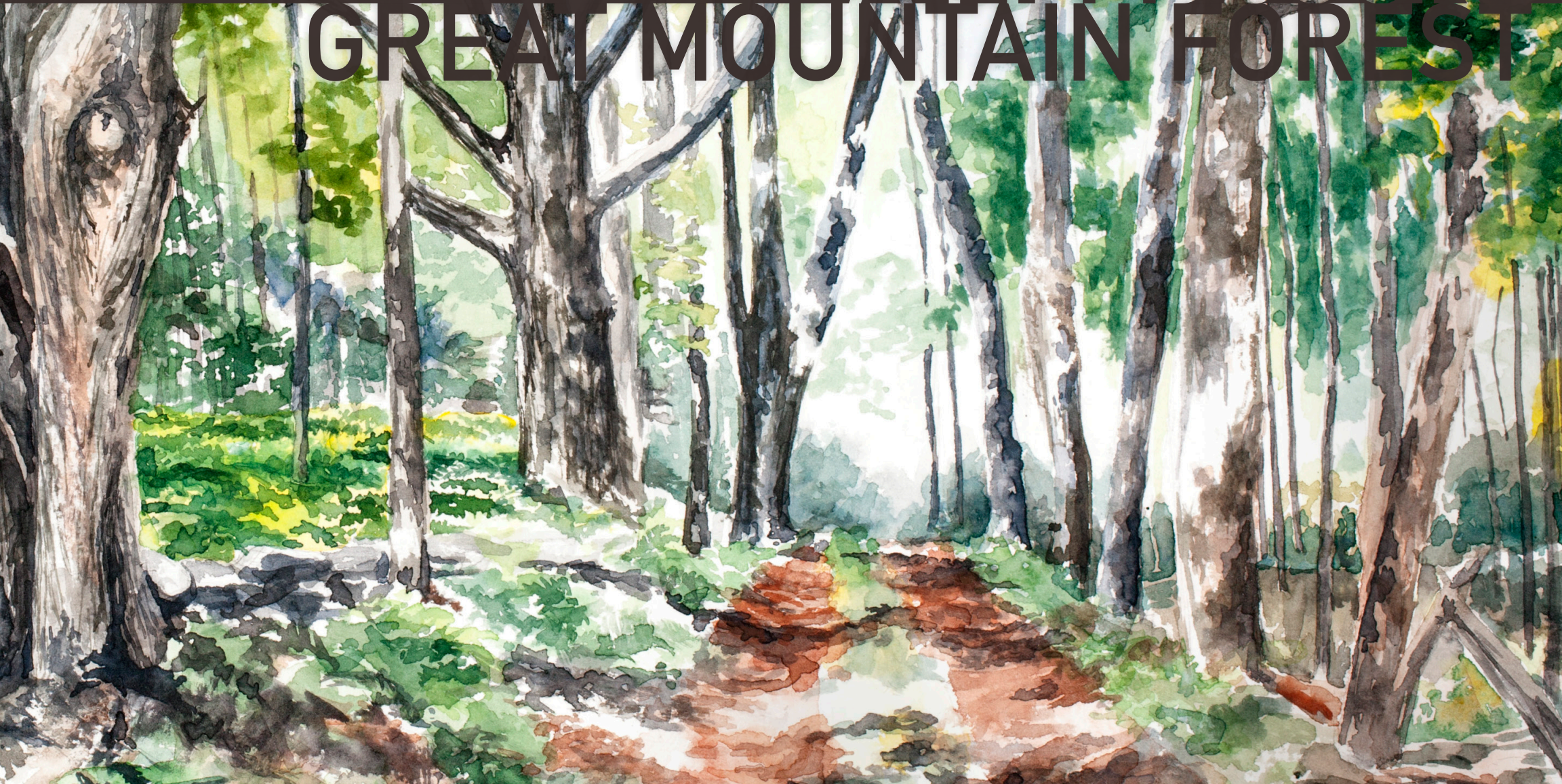


A FIELD BOOK
GREAT MOUNTAIN FOREST



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FOREWORD II

GREAT MOUNTAIN FOREST: LANDSCAPE AND LEGACY

HANS M. CARLSON PhD

Great Mountain Forest is 6300 acres of working conservation land, established more than a century ago in the hills of northwest Connecticut, and now protected under a Forest Legacy easement. It is a unique place, and this book is an in-depth examination of the forest's ecology and the land-use history that shaped that ecology. The book's focus is the call and response between humans and the natural world, and though specifically about GMF, it offers interpretive lenses which will be useful in many places. As you learn to read the forested landscape here, I encourage you to think beyond the boundaries of this one property, for this book's lessons are broader than any one tract of forest in southern New England. I also encourage you to think outside the ecology and land use as you look at GMF, for while the forest is a compelling set of ecological communities, Great Mountain is equally compelling as a set of ideas. The two are intimately linked in fact.

In 2003, the Childs family, who then owned GMF, sold the development rights on the forest and put ownership under a nonprofit foundation (NGO) which now carries on its management. These changes were new ideas in

the history of this place, and there is an interplay of ecology and human thinking here worthy of your consideration, for both the easement and the symbiotic relationship between forest and nonprofit continue to shape the land. So, while this book is focused on the physical forest, and one of its central themes is that the history of human work has shaped natural communities, I also want to highlight the important legacy of human ideas here. At Great Mountain Forest, things like values, policies, and institutions have always defined the physical place, and this too is broader than our one piece of forestland in northwest Connecticut.

Human thinking has shaped this forest since the end of the last ice age, in fact, and ties GMF to a wider history. Before the early eighteenth century, Native people used and stewarded this forest, and archeologists are still piecing together the full ecological effect of pre-contact Native land use in places like GMF. We know they altered forests with fire, as well as by selecting for desired trees and plants; Native peoples also changed the forest with agriculture and hunting. And since we know that humans never do anything without conceptualizing

their actions, we know too that there was a whole intellectual context which underpinned Native use here. The Eeyou people with whom I work in northern Quebec often call the boreal forest “their garden,” and this metaphoric understanding of Native land use and stewardship applies historically to the forests of New England. There are only a few sites on GMF that can be definitively identified as Native, but their land use and thinking helped create the original conditions found all across the northeast. Their presence should still be felt in looking at this forest.

Connecticut colonials claimed sovereignty over this region from first settlement of coastal areas, though Euro-American occupation began here only in the early 1700s. In Connecticut’s northwest corner, as everywhere during the period, this was largely agricultural settlement, focused on clearing the best land first. Colonials built farmsteads, and put land into crops or grazing for sheep and cattle. Higher terrain, including most of GMF, was not particularly good for agriculture, but those who farmed here often ran sawmills or made charcoal for the local iron industry as ways of compensating. Charcoal was a local variant on clearing and settlement, and the centrality of agriculture was overshadowed by ironmaking in the early industrial revolution. Much of what became GMF was owned directly by iron manufacturers, and these parcels particularly were cut over four or five times in the nineteenth century. The result was a largely deforested landscape, swaths of it burned over and ecologically impoverished by overuse.

Much of this Euro-American use is still visible on the ground and this book will help you see that our forest is the result of all this work. Remnant cellar holes and overgrown farms left ecological changes in their wake. Meekertown, in the southern part of GMF, though fully reforested now, is the site of milldams, a cemetery, and the glacial erratic boulder known as Townhouse Rock, where resident colliers held community gatherings. There are also hundreds of colliers’ hearths around the forest, where Meekertown residents smoldered logs into charcoal. GMF and surrounding lands are scattered with these leveled areas where altered soil chemistry continues to shape ecology. All that human action represents the first dramatic post-settlement change to GMF’s ecology, and a walk through Great Mountain Forest, then, is very much a walk through culture and time, as well as through ecology. This will be made clear by what follows in this book.

Here, however, it is worth noting again the power of human thinking, for all of this settlement activity, and the altered ecology, was

an outgrowth of the ways people thought about the land as well as their actions. The English who settled this region divided land into private plots as quickly as they could, reshaping Native tenure. Private property carried with it the full weight of centuries of thinking about the rights and responsibility of ownership. True ownership meant “improvement,” by which settlers meant farming and building, and this in turn was driven by understandings of what it meant to be “civilized” and Christian. In the industrial period, work was carried out in the name of industrial progress and national manifest destiny, and these two ideas were particularly powerful narrative forces in the dramatic nineteenth century reshaping of this land. Settlers and industrialists used these concepts and values to alter the forest, just as they used axes, saws, and colliers’ fire.

With the waning of the iron industry, and the abandonment of many upland farms, two wealthy New York businessmen, Starling W. Childs and Frederic C. Walcott, began buying land in Norfolk. Here they established a game preserve, eventually calling it Great Mountain Forest, and applying principles of conservation in order to regrow game populations. This began the second great transformation of this landscape, for this is when the forest returned. I’ve said that the nonprofit conservation organization is new to GMF, but the legacy of conservation thinking which is its mandate, began with Walcott and Childs. This was built upon by Childs’ son Edward C., better known as “Ted,” who took over for his father after he graduated from the Yale Forest School, in 1932.

Ted Childs, in 1952, bought out the Walcott interest and with forest manager Darrell Russ, refocused efforts on working forestry, research, and land conservation. This more-holistic approach continues to define our working relationship with the land at GMF, and the forest you experience has been shaped by a century of this kind of stewardship thinking. Conservation is thus part of the historicized landscape and, like reading the history of cellar holes and colliers’ hearths, this book will help you identify and understand forest cuts, plantations, and research sites. It will help you put them into relation with the farming and charcoaling that preceded them, for these activities form a continuum of human activity.

That said, conservationism represents an attempt to rethink land use, and this was a break with the past. Forests regrew in many places across the northeast when farms were abandoned and the iron and timber industries moved west, but only a few places became the focus of active forest management and conservation planning. During the period in which GMF was established, forest conservation was happening largely on western

federal land, rather than private land. New England, though it was one of the birthplaces of American conservation thinking, was late to implement large conservation efforts. So while many wealthy individuals like Childs and Walcott bought properties away from eastern cities, most were managed as country estates, not as forests or game reserves. In this regard, GMF is special, because while the two men bought land as a place to hunt, Great Mountain Forest was also established as a laboratory for conservation thinking.

As you walk through Great Mountain Forest, then, keep in mind that you are traversing a landscape of Walcott¹ and Childs' conservationism, which was begun "to see what [might be] adapted to Connecticut waste woodlands."² Or, as Walcott described it to a friend:

Tobey Pond looks like a lake in a Zoological Park. We have from two to five hundred ducks there all the time now; they have stopped over on their way South, attracted by our own ducks, numbering now more than two hundred and representing fourteen different varieties. The deer from fall feeding have become quite tame and from three to five are in sight from the house every day. We saw one swimming across Tobey Pond yesterday afternoon. The pheasants are flourishing and we have quite a large number of them now – breeding stock for next spring.³

Forest management here is a continuation of that effort, and while methods have evolved greatly, Walcott and Childs' idea that land could be conserved and still offer public value is still a large part of our philosophy.

Theirs was a private endeavor, but it was carried out with public benefit in mind. As Walcott wrote to William T. Hornaday, then at the New York Zoological Society, in 1912, "there are about 150,000 acres, roughly speaking, of land that should be taken up by the State for the benefit of the public. They should be stocked with birds and deer, and intelligent forestry carried on throughout these tracts."⁴ Connecticut lagged in this kind of

conservation thinking, but the two men worked to shape public policy. Again, in Walcott's own words:

The entire State of Connecticut is gradually waking up to the importance of conserving its forests and wildlife and rehabilitating its wild land, as a result of a campaign of education that Star and I have been carrying on for nearly a year, and the culmination of this campaign came this last week-end when the new Forest, Fish & Game Commission - consisting of eight men recently appointed by the Governor in place of the old Commission (all the direct result of our persistent efforts to clean things up) – spent the whole weekend with us. The new Commissioners are so enthusiastic over what can be accomplished, as shown by our place, that they have determined to set aside a large area of State land for a game refuge.⁵

Walcott became a public champion of both public and private game preserves, giving lectures and publishing on the subject. "I am going to show them what we have been doing in reclaiming land and preserving game"⁶ at GMF, he wrote, and all of this led one local official to note Great Mountain Forest's "considerable importance to students of natural history."⁷

Walcott became Connecticut's U.S. Senator in 1929, serving until 1935. He was a Republican and did not win re-election during the New Deal, but during his term he worked on a progressive wildlife agenda as a member of the Agriculture Committee. He won approval for a subcommittee on Wildlife Resources Conservation and was made its chair, serving in this capacity until 1935. He supported the creation of the Civilian Conservation Corp in 1933, largely because FDR promised that CCC projects would include recovery of wetlands for migratory waterfowl. Walcott was central in creating the Duck Stamp program – a way of funding habitat preservation and restoration that continues to this day.

Out of Congress, Walcott remained active in conservation organizations and was recognized as one of the movement's founders. Importantly in the history of GMF, he also began to think beyond the

1 I am indebted to Mark Jones, retired Connecticut State Archivist, for sharing the source material related to Frederic Walcott which I have used here. Mark is researching a biography of Walcott, which will be out in the near future.

2 Frederic Collin Walcott Collection #529 at the Manuscripts and Archives department at the Sterling Memorial Library, Yale University. 4 September 1912, FCW to William T. Hornaday, New York Zoological Society, FCW Coll. #529, Box 2, Folder 10.

3 9 December 1912, FCW to Dr. William H. Welch, FCW Coll. #529, Box 2, Folder 11.

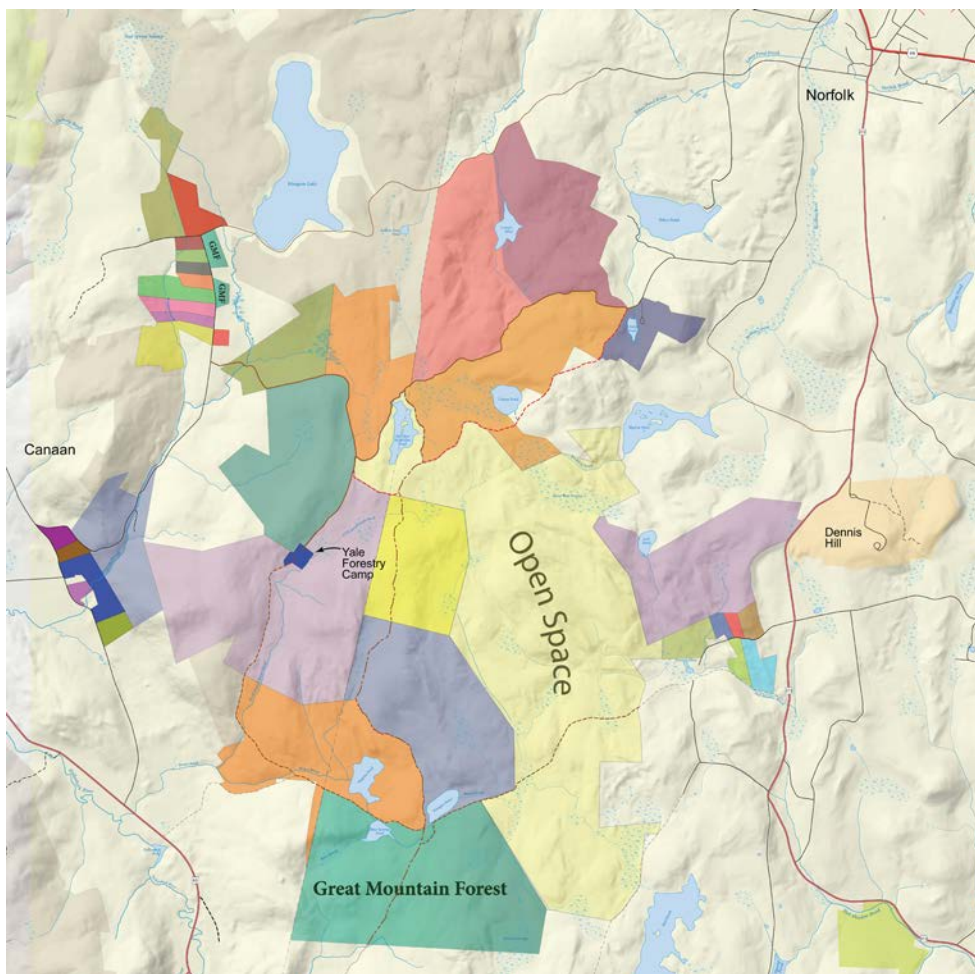
4 Frederic Collin Walcott Collection #529 at the Manuscripts and Archives department at the Sterling

Memorial Library, Yale University. 4 September 1912, FCW to William T. Hornaday, New York Zoological Society, FCW Coll. #529, Box 2, Folder 10.

5 15 September 1913, FCW to Mrs. F[rederick] S. Kellogg [sister], New York Mills, New York, FCW Coll. #529, Box 2, Folder 15.

6 23 September 1915, FCW to Mrs. F. S. Kellogg [sister], New York Mills, N. Y., FCW Coll. #529, Box 3, Folder 23.

7 23 June 1913, G. C. Warner to Hon Donald T. Warner, Salisbury, Conn., FCW #529, Box 2, Folder 13.



From the development appraisal, 2001 (LandVest project #3198), produced for Elisabeth Childs, as part of the easement negotiations. The colored areas are the “kingdom lots” and smaller building lots which represented highest market value of the forest. The appraisal was meant to put a value on the development rights.

conservation of game species and move toward a broader understanding of natural resources, even ecosystems. By the 1940s, he was arguing that broader protection would help all specific efforts, though earlier he and Childs hired hunters to kill all “varmints” [predators like foxes] at Great Mountain Forest, in order to protect favored species. In all these ways Walcott came to see the necessary interconnections in nature, a development in thinking he shared with other conservationists like Aldo Leopold, with whom he corresponded.

Importantly, Walcott also began to believe that governments should increase the scope of conservation policy and public conservation education. Here he was prescient, for while earlier conservation was arguably driven by elites, ever-increasing public understanding has been the hallmark of the post-war period. I will say more below about Great Mountain Forest’s part in this period, but first I want to highlight the fact that policy and public support have everything to do with the current forest about which you will learn in this book. Great Mountain Forest has been, and continues to be a model for public action, but only because of decisions made outside the forest by lawmakers and bureaucrats. Here is where you want to keep values and ideas in mind again, and particularly how they have manifested themselves in policy.

As you investigate the forest, you will learn to think of GMF as a territorial whole, becoming familiar with the woods road running between the main gates, and the Chatleton Road and Number Four Trail running to the south end of the forest. Tobey Pond, in the north part of GMF, will be connected naturally in your mind with Wapato and Wampee Ponds, in the south; Meekertown will be connected with The North Forty, though they are miles apart. You will learn to understand the various places highlighted in the write-ups and field descriptions, and get used to seeing the shape of GMF’s ten square miles on a map. This block of land may even begin to seem a foregone historical conclusion, but just as you will learn not to think of a coppiced oak tree in the forest as simply a natural fact – seeing it instead as a clear sign of human activity – neither should you think of GMF as simply “natural.” Things like easements and nonprofit institutions are also landmarks that locate you culturally and historically in the landscape, and these are the culmination of a century of conservation thinking.

Take the map on the left as an example, because here is another kind of “natural” outcome of human thinking, and one that is more in line with common use than are easements and nonprofits. When the Childs family sold the development rights to the forest, in 2003, the land’s potential had to be established, and the map shows its highest market value. The plan called for the majority of the land to be split into “kingdom lots,” and some of the peripheral land broken into smaller building lots. None of those features, with which you will become familiar as you read this book, would have been connected by ownership or management practice anymore, only by the history of what had once been Great Mountain Forest. Only the southern portion, already held by Ted Child’s private foundation, set up to support research, would have remained, and GMF would have been six hundred acres, not six thousand.

The fact that there was never any intention to proceed with this development plan takes nothing away from the importance of this picture or the ideas it represents. It highlights that the forest which seems like a natural fact is

very much not the “natural” outcome of the way our society generally thinks about real estate. Remember, the map illustrates our collective ideas of highest and best use – the dominant set of ideas used to manage most land in this country. Remember too that it was within the system of private ownership that Childs and Walcott bought land and established their private preserve. They urged the state to put certain lands into public ownership and management, and they modeled a different kind of land use, but GMF remained subject to all the forces working on all private property.

In this context, the map of private development represents the latest variation of our society’s conceptualization of that system, and Great Mountain Forest might have been simply an interlude between nineteenth century industrial/agricultural use and twenty first century exurban subdivision. This has been the pattern in most of central and southern New England since the end of World War II: large parcels of land – mostly former farms – subdivided for residential and vacation homes, or commercial use. This subdivision has been the driving force behind forest fragmentation and the decline of habitats and ecosystems across the region. The family sold the development rights and changed the forest’s legal status to avoid this fate, and a different set of ideas now applies to GMF. This was thanks to land-use and tax policy structures which allowed the sale of rights to the U.S. Forest Service and the State of Connecticut, and also allowed the expansion of the nonprofit to its current form.

The history of both easements and nonprofits is important here, since both are departures from standard thinking in ownership and management. Starting in the late 1880s, early easements were used to protect the Boston parkways designed by Frederick Law Olmstead. The National Park Service used easements to protect some of its own parkways in the 1930s too. Similarly, Wisconsin used easements to protect riversides and parkways in the 1950s, but up to that point these were the only easements in the country used for conservation efforts. This was because even Massachusetts and Wisconsin had no specific statutory authorization for their use. Without legislation giving easements specific legal status, they were of dubious legitimacy, for they hinder development, and this is still disfavored in common law. It goes against that historical understanding of highest and best uses of private property.⁸

Easements need special authorization to hold up in court, and starting in 1954, Massachusetts passed legislation specifically giving them

legal status for government use. In 1969 the state gave that same legal right to private owners, and by 1984, twenty-nine states had written similar land protection into their laws. Meanwhile, changes in the federal tax code made it more and more desirable for landowners to sell development rights to offset the rising tax burden that came along with owning large pieces of land. With government and foundation money available to purchase easements, this kind of conservation has grown exponentially. According to the National Conservation Easement Database, there are now more than 114,000 easements nationally, covering 23 million acres. The legal and financial benefits given for protection, thus, have dramatically changed land use in some places, and represent a major shift in thinking about the land.⁹

Great Mountain Forest gained its easement in 2003 under the Forest Legacy program during this surge in easement use. The program was a feature of the omnibus 1990 Farm Bill, and aimed specifically at protecting working forestland from conversion to non-forest uses. This was the same year GMF became a private operating foundation. The growth of nonprofits follows a similar historical trajectory to easements, with numbers and popularity increasing with the same changes in tax policy. Nonprofits became an even more important feature of the American landscape with the conservative move away from government, beginning in 1980 and continuing to the present. Whether it’s local land trusts or The Nature Conservancy, nonprofit status allows engagement with conservation efforts while easing personal or corporate tax burdens, and today, more than 36,000 easements are held by NGOs like GMF.

While Great Mountain Forest is still private property, the use of these two legal structures means that ownership here is not the typical fee simple control common to most U.S. private property. This represents a rethinking of land in the name of conservation, and means that Great Mountain Forest did not form a bridge between the nineteenth century ownership of iron-makers and twenty first century development. Instead, the conservationism planted here in 1909 by Childs and Walcott, found its way forward in history, and back onto the land in this forest. These changes tied the forest and nonprofit into the relationship they now share, and linked the early conservation movement with the development of Great Mountain Forest as an institution. They also tie earlier conservation together with the working forestry and management practiced at GMF, and this is the final aspect of human thinking that should inform your

8 Zachary Bray, “Reconciling Development and Natural Beauty: The Promise and Dilemma of Conservation Easements,” *Harvard Environmental Law Review*, Volume 34, 2010: 124-131.

9 <http://conservationeasement.us/>

investigation of the ecology and land-use history of GMF.

At the beginning I said that this was a working conservation forest, and the Forest Legacy program was designed specifically to protect both what we do on this land, and how we conceptualize it. Landscape restoration was the initial motivation behind conservation here, but Ted Childs and Walcott in turn shifted the management focus at GMF, away from game management and toward management of the whole forest. When Ted Childs took full control of the forest, and hired Darrell Russ to manage it, forestry, research, and education also became part of the GMF program. Here the growth of professional forestry, embodied in Child's and Russ's graduate educations, built on the growth of Walcott's conservationism and his belief in public education in conservation.

We are now decades into this development of land-use thinking. While the central idea continues to be that human activity can conserve and improve, specific human actions have to be done within a holistic understanding of the forest, guided by scientific research and an aesthetic sense of the forest. And here is where the story of Great Mountain Forest is something special in the latter half of the twentieth century, and where we should pick up the historical thread that we left with Walcott.

Until 1940, work at GMF was part of the mainstream of conservation thinking and action in the United States. This was a national movement, and members of both parties worked to create policies implemented by government agencies and private citizens alike to protect and manage public and private lands. Beginning with WWII, however, the booming economy pushed into the country's resource base, particularly in the west, which had been the focus of conservation efforts in the decades before the war. The U.S. Forest Service, created by Theodore Roosevelt and Gifford Pinchot for the purpose of stewarding the nation's forests, became increasingly focused on maximizing use. The same was true of water and mineral resources in the west, which were developed at an increasing rate. With the memory of the Depression and the war close at hand, the nation largely forgot the lessons learned a generation earlier and focused instead on economic expansion and increased prosperity.

The eventual reaction against this wave of resource extraction was the modern environmental movement, born out of fights to protect western wilderness areas, like the Grand Canyon, as well as against the suburbanization of the American hinterland, and the increasing pollution that came with industrialization. These spawned David Brower's Sierra Club campaigns, Rachel Carson's *Silent Spring*, and Gaylord Nelson's

Earth Day. This also drove the passage of clean air and clean water laws in the 1960s and 1970s, and was the beginning of the global vision of the environment that we take for granted today. Since the birth of modern environmentalism, people have become focused on ozone depletion, the devastation of Amazon forests, and protecting the Arctic National Wildlife Refuge, but this has also affected their relationship to more local places like GMF.

In one respect modern environmentalism was an heir to earlier conservation, but there was also a difference between the two movements' understandings of that call and response between land and people. In reacting to massive, modern damage, environmentalists often argued that caring for the land meant leaving it alone. They took their inspiration from wilderness prophets, like Thoreau and Muir, not from conservationists like Pinchot and Walcott, and often painted all modern human action as inherently destructive. There continues to be a great deal of evidence to back this perspective. But there is also an inherent irony, in that many people who consider environmental issues important do not have any working understanding of the land, or our continued need for resources.

In the half century since the movement started, Americans have increasingly lived apart from anything other than a recreational relationship with the outdoors, even as they have become invested in global efforts to save "the environment." In many respects Walcott's worries about future conservation have been fulfilled, in that few people have any education in working with nature. Aldo Leopold once wrote that there were "two spiritual dangers in not owning a farm. One is the danger of supposing that breakfast comes from the grocery, and the other that heat comes from the furnace." Arguably the same danger arises in thinking that wood comes from the lumberyard.

While Americans have learned much about the environment as a whole, and we have done some to preserve it, we have forgotten that careful and caring use of the land is necessary. The only other option is to push our use over the horizon where lack of public oversight leads to a great deal of global environmental damage. We have forgotten that there was a time when we had to get our timber from places like GMF, and that the mistake was not in using the land, but in overusing it.

Protected by Ted Childs' financial ability to carry on private conservation, and situated in a region protected from both industrialization and suburban sprawl, largely by the money created by the booming economy, GMF stood apart from a good deal of this history. It's not that

GMF was isolated from environmental issues or policy: Childs served as Forest and Parks Commissioner for twenty four years, for example, and he and Darrell Russ instituted the Tree Farm Program in Connecticut. Childs gave Yale University its forestry camp at GMF, underwrote his own intern program, and funded dozens of research projects, all as a way of engaging with education and environmental issues. In all these ways GMF was important in civic and political activity. But here in the forest ideas about working forest conservation that most of the country left behind with WWII were carried forward. These ideas continue to underpin the belief that people can engage with the land, and if they do it with intelligence and caring, then they can make something for themselves and make the land better too.

We will continue to work with the land here with internal conservation ends in mind, and this will continue to affect the nature of the forest – the stands of trees that we harvest, the ones we leave, the sap we collect from the sugarbush, the habitats we manage. I would also like to believe that Great Mountain Forest, and the way we manage it, will continue to contribute to conservation beyond our boundaries. I hope this especially now, when the global environmental perspective is shifting, to remind us that we all live in one another's backyards. Thinking about and working this forest is the educational as well as the conservation legacy which we carry forward. It is a legacy that I hope you will come to value as you investigate this forest, its ecology, and its history.

Enjoy your time in the woods.

— HANS M. CARLSON PhD
Great Mountain Forest Director
October, 2015