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CONNECTICUT'S NATIVE PEOPLES: 13.500 YEARS BEFORE THE PRESENT (YBP) - PRESENT

Connecticut's human history began after the northward retreat of the Laurentian ice sheet. By 13,500 ybp the southern extent of the glacier had moved completely into northern New England, leaving all of Connecticut an ice-free tundra. The low-growing vegetation in this environment supported a wide variety of mega-fauna, such as the American mastodon, giant ground sloth, and caribou, which sustained early native groups. People moved into southern New England from New York, either from the west, northwards from Long Island, or up from the mid-Atlantic region. The sheer amount of water taken up in the mass of the glaciers caused worldwide ocean levels to lower, so that Long Island Sound did not exist. There was contiguous land connecting Long Island with the southern Connecticut coast, which permitted easy access into the newly de-glaciated landscape (south of present day Long Island, the Connecticut coast extended and additional 60+ miles onto the Atlantic shelf). The Sound filled in later when ice sheet melting accelerated, but it is likely that archaeological evidence of habitation from the migration northwards into New England exists beneath the water there, awaiting discovery.

The earliest evidence of human habitation in the state is the Templeton site in Washington, Connecticut, about 30 miles south of Great Mountain Forest. The site is a temporary encampment that has been radiocarbon dated to around 10,200 ybp, and contains an assortment of

HUMAN HISTORY

OF THE GREAT MOUNTAIN FOREST REGION

¹ Habitation likely began much earlier south of the mainland on the Atlantic shelf. Sacred origin stories of the Narragansett tribe tell that they were always here in southern New England, living south of the glacier.

chert, quartz and quartzite stone tools. They are suggestive of a society which relied on both hunting and the preparation of plant material for sustenance, and already possessed the ability to process wood to create a variety of useful implements.

From an ecological context, it is interesting to note the habitat types these early groups preferred. Unlike later Indian communities whose subsistence cycles generally located them along coastal lowland waterways and floodplains, evidence from all of the Paleo-Indian archaeological sites in Connecticut suggests that people from this time period lived in inland regions, and often at higher elevations. Acceleration of glacier melt caused water levels in river valleys to rise so rapidly that they didn't accumulate the sediments required for marsh formation or healthy streamside vegetation. This turbulent environment could not support the populations of many of the plant and animal species that were traditionally thought to be a key source of sustenance during this time period, and were likely avoided by early peoples for this reason. Over the succeeding millennia as the climate stabilized and ice melt slowed, population centers shifted towards coastal regions and large river valleys where the formation of salt marshes and rich riparian zones afforded new abundances of plant and animal life.

The climate warmed dramatically during the early Archaic Period from about 10,000-8900 ybp. Evidence from fossilized pollen cores suggests that a forest of white pine with oak and birch predominated over the spruce, larch, and fir, which could support more species of wildlife. The development of new technologies throughout the Archaic Period allowed greater utilization of newly available natural resources. Visitors to Great Mountain Forest today can visit the nearby Robbins Swamp, a glacial lake basin that was a major center of settlement during this period. The mosaic of forests and wetlands in this area along the Blackberry River would have been an ideal dwelling place—supporting important game animals such as moose, deer, black bears, and beavers, as well as important food plants such as cattails, Indian cucumber root, and bulrushes. One archaeological excavation within the swamp revealed the remains of an old workshop, where jasper for tool implements was extracted from quartzite rocks through a complex process of intense heating and hammering. There have been no artifacts discovered in Great Mountain Forest itself other than several scattered spear and arrow points and a marble stone that may have served as source material for tools (see Land Use 7: Dean Farm), but it is likely that people living in the Robbins Swamp area roamed there regularly as territory for hunting and plant foraging. As struggling European farmers



Quartzite arrowhead found at Great Mountain Forest.

would discover thousands of years later, the wavy topography and thin, rocky soils of the Forest region make it a very difficult place to make a living. However, a detailed archaeological study of Great Mountain Forest has yet to be conducted, which could well reveal evidence of more permanent settlements.

The trend of heating and drying continued into the middle Archaic Period between 8,000-6000 ybp, which increased the relative density of oak species in forest canopies. By 4,000 ybp, the climate had reached more or less current conditions, and promoted the northward migration and growth of new food plant species. Human populations began to migrate from dry uplands to river valleys, where they developed new Neville points, axes, and gouging tools to make dugout canoes. These were usually made by carving out trunks of rot resistant chestnut trees, as opposed to the lighter birch bark canoes of northern New England Indian groups.

Broader fishing capabilities and an increasingly favorable climate that promoted new food plant species—particularly with the development of salt marshes in New England, some 2500 ybp—led to the refined development of annual subsistence rounds. These were regular cycles of

food resource gathering activities that followed their availability across seasons and landscapes. Each spring there are new abundances of edible leafy plants to gather, such as wild leeks, thistles, violets, and watercress. During the summer new plants become available, as well as tubers and wild fruit. By fall, various seeds, nuts, and acorns have developed, which could be stored for use during the coming winter. Some resources, such as fresh and saltwater fish, could be gathered during all three of these seasons, while other animals, such as deer and hibernating bear, could be hunted all year round. Communities would move fluidly into larger and smaller groups across the landscape as resources shifted in availability. In this way, important kinship connections were maintained and strengthened within the larger units of tribes and confederacies.

Maize cultivation, believed to have originated some 9,000 years ago in the Tehuacan Valley, Mexico, was adopted only recently in the Connecticut region—some 950 ybp during the late Woodland Period. The non-agricultural tribes of northern Maine continued to depend heavily on hunting to get them through the cold parts of the year. However, in the south, the ability to grow food that could be stored through the winter months made people less reliant on other forms of sustenance during times of scarcity. This allowed for much greater population densities in the Connecticut region, as suggested by the abundance of archaeological sites located along the Atlantic coastline and the Connecticut River.

Communities living during the Woodland Period also utilized fire regularly as a means of creating more favorable landscapes for subsistence activities. When it was time to clear new fields for agriculture, women piled fuel at the bases of all the live trees in an area and set them alight. The small fires were hot enough to burn through the bark and kill standing canopy trees, even very large ones. These would fall over in successive years, where they could be reduced to cinders by repeated burnings. In this way, large areas could be opened up for spring planting, in nutrient heavy soil enriched by the ashes of the incinerated forest. Such fields could be farmed intensively for 8-10 years while sustaining good yields, with prolonged fertility provided by the nutrient fixing bean crops that were planted among the squash and corn. After that point, the community would move and continue the land use sequence elsewhere, leaving the abandoned field to return slowly to forest. Through patterns of mobility with periods of intensive land use, the ecological integrity of the overall landscape was sustained in a patchwork of different successional stages.

Lower intensity brush fires were also used on a yearly or bi-yearly

basis to clear out the shrub layer while leaving the tree canopy intact. This created open, park-like forests, and promoted the growth of a rich herbaceous layer. Among these were many plants useful to people as sources of food and medicine, but they also served as important forage for grazing mammals such as deer, which themselves were easier to hunt in the open environment. Besides altering the forest structure, this burning activity also altered the composition of the canopy in areas where it was practiced regularly, promoting species more tolerant to fire. These tended to be thick barked hardwoods that are better insulated against high temperatures, such as oaks, hickories and chestnuts. These are all masting species that produce high quantities of protein and lipid-rich nuts, and selecting for them meant greater abundances of this important food resource.

When European travelers first explored the New England region, they thus found a landscape that was not pristine but in fact already deeply modified by people in a number of sophisticated ways. Explorers like Giovanni de Verrazano—whose 1524 journey from the New York harbor along the southern Long Island shoreline into Narragansett Bay is the first documented European voyage in the Long Island Sound region—wrote of expansive, open forests and broad areas of sparse vegetation all along the coastline. The first permanent settlement in the region was established by Henry Hudson in 1609, which was followed several years later by the opening of a trading post for the Dutch East India Trading Company along the Hudson River. Subsequent Dutch settlement on Manhattan Island and Long Island opened the Connecticut river-ways to trading with local Indian communities.

All the tribes from the Connecticut region belong to the broader Algonquian language group, whose territory extended from the Powhatan on the Chesapeake, to the Innus in Quebec and Labrador, and the Anishenabe around the Great Lakes. In Connecticut, these lands were arranged into various distinct tribal territories, which all shared general language and lifestyle practices, but differed regionally with regard to spoken dialect and political structure. Litchfield County, where Great Mountain Forest is located, comprised some or all of the tribal homelands of the Mahicans, Tunxis, Weantinock, and Pootatuck peoples. Adjacent Paugussett homelands extended to present Waterbury, in New Haven County.

Initially, relations between Connecticut Indians and early European traders were largely positive. Brisk trade networks developed between these two groups, the Indians providing various animal furs in exchange for iron tools and bolts of cloth. For a brief time, indigenous societies adapted to incorporate new elements bartered in trade to enhance their traditional lifestyles and cycles of subsistence.

Before long, however, Indians throughout New England were overwhelmed by the combined effects of land encroachment, resource depletion, disease introduction, and forcible expulsion by the European-Americans. Pressure from over-hunting and the fur trade caused the extirpation of many important animals from southern New England by the beginning of the 18th century, including the beaver, turkey, white tailed deer, elk, black bear, and lynx. Europeans in Connecticut spread westward quickly following the establishment of the first formal settlement in the state at Windsor in 1633, which forced Indian communities to reconfigure into denser village structures. These were by new necessity increasingly sedentary, as opposed to the fluid, mobile societies of previous generations. The tribes of New England were further devastated by the introduction of infectious diseases, which were unknown in the region beforehand. It is thought that the initial migration into North America across the Bering Land Bridge, where people lived in frigid temperatures and widely dispersed communities, acted to functionally sterilize many human transmitted pathogens over the course of successive generations, with the result that they did not spread into the continent. Additionally, most infectious disease is created through a relationship with domesticated animals, and the Native peoples of this region crossed into North America before pastoral practices were established elsewhere in the world. As a consequence, the Indian populations of New England possessed no genetic immunity to many of the diseases brought in by the Europeans, which soon decimated Indian communities across the landscape. An epidemic that started in Massachusetts in 1616 (likely hepatitis, spread by French fishermen), soon spread westward across indigenous trade networks into the Connecticut region, decimating native populations. In 1634, a smallpox epidemic erupted in the Connecticut Valley and radiated in all directions, killing 90% of the Indians living near the new Windsor settlement alone. Small pox also spread throughout the Hudson Valley region in Mahican territory, and eastward into Great Mountain Forest region.

Indian communities were thus already in disarray when settlement in the Connecticut colony increased dramatically during the second half of the 17th century. Many Puritan pioneers regarded the epidemics as an act of providence; God was sweeping away the indigenous population to favor the enterprises of the chosen Christian people. In a number of cases, their new settlements were founded directly upon Indian villages whose inhabitants had all died from disease. Larger swaths of entire tribal territories were obtained by technical trade agreements, using various means of trickery, lies, and threats to force the increasingly desperate Indian communities to sell their ancestral homelands. In 1640, the entire territory of the Tunxis, a large constituency in northern Connecticut just east of Great Mountain Forest region, was sold to English colonists by the sachem of a neighboring tribe. The legality of this act was contested by the Tunxis into the second half of the eighteenth century, but to no avail. By that time, the Mahicans to the west were contesting outright illegal settlement in the town of Sharon, located in Litchfield County, south of Great Mountain Forest. In spite of an aggressive petition filed by the Sharon Mahicans in 1742, they, like the Tunxis, were forced to abandon their lands and move westward.

Two large scale armed Anglo-Indian conflicts resulted in the further dispossession of Connecticut Indians' tribal homelands. The Pequot War was waged by the English in 1637, who accused the Pequots of harboring the murderer of the trader John Oldham, found dead the year before. The colonists were aided in their attacks by several native tribes, including the Narragansetts, Niantics, and Mohegans. After a year of armed skirmishes, the English and their allies attacked Mystic, the main village of the Pequots. They there killed hundreds of people and razed all standing buildings. The fleeing survivors were pursued westward, many later killed or enslaved, with a few who escaped to safety in the then sparsely settled northern reaches of the state. The Pequots who remained were finally granted a reservation in 1651, but their lands would be subsequently relocated and severely reduced over the next two hundred years.

King Philip's War, (1675-1676) was waged by the Wampanoag Indians and their allies against the colonists in Plymouth, after two men from the tribe were unjustly executed. Exasperated with colonial demands for allegiance and the continual encroachment on native lands, the Wampanoags under the leadership of Metacomet (Philip), joined by the Podunks, Nashaways, and later the Narragansetts, went to war on settlements in southeastern New England. The bloody and destructive conflict that followed over the course of a year highlights the often confusing and divergent relationships between native tribes and their varying responses to the ascension of colonial power. Some groups, notably the Mohawks of eastern New York, joined the colonialists in attacking Philip and the Wampanoags, possibly under the will and influence of then

governor Edmond Andros. The Mohegans of southern Connecticut also assisted in defeating Philip's rebellion. The Pequots, still severely reduced from their own war with the English fifty years earlier, attempted to remain neutral, hoping to be left in peace. Other neutral tribes, like the Nipmucks, were nonetheless threatened and attacked on multiple occasions by the English as a part of their backlash against the rebelling tribes of the region. The war ended in August of 1676 with the death of Philip, and a severe reduction of the organized tribal lands of the Wampanoag, Narragansett, Nipmuck, and Podunks. Many Indians captured during the conflict from these and other groups were consigned into slavery, either domestically or sold to plantations in Barbados. King Philip's war would be the last major Indian uprising in New England, ushering in a new era of accelerated land loss and de-legitimization of Indian sovereignty as the English colonists continued to multiply across the countryside.

After King Philip's War the history of Native people in New England is one of surface accommodation and adaptation, and determined maintenance of cultural beliefs and practices. This quiet resistance lasted through the eighteenth, nineteenth, and most of the twentieth centuries, as Native people held on to what land they could, until legal decisions in the 1980s gave tribes new recognition and control of land. The American Indian population in Connecticut today is around 11,000. Most of them belong to one of the five remaining, state recognized tribes: the Schaghticoke, Paucatuck Eastern Pequot, Mashantucket Pequot, Mohegan, and Golden Hill Paugussett, each with its own sovereign governing structure. These distinct cultures endured centuries of dislocation, discrimination, and brutal living conditions on marginal reservation lands. Native people in Connecticut continue to endure, as many challenges continue to this day.

During those centuries following King Philip's War, the character of the landscape was completely transformed from a functioning ecological system into a patchwork of European-American agriculture, settlement, and industry. From the middle 17th century onwards, the repeated exploitation and collapse of natural resources from colonial enterprise would be the primary narrative governing the ecosystems of Connecticut, the greater New England region, and beyond.

THE SETTLEMENT OF LITCHFIELD COUNTY, CONNECTICUT (1719 - 1909)

Litchfield County was relatively late to be settled by Europeans, when compared with New Haven to the south and Windsor to the east, both of which had dense populations by the middle of the seventeenth century. For many years, it was known to early colonists only as part of the "Western Lands", which so far as they knew contained only scattered, undocumented settlements until the official founding of Litchfield in 1719. Early European colonists in the region found Mahican communities near the new settlements of Sharon, Kent, Salisbury, and Canaan. Many of these were refugees from other regions who had been forced from their original homelands. They would be similarly dispossessed of their homes in Litchfield County once settlement in the region accelerated. An increased demand for timber, which was growing scarce in southern Connecticut, fueled the initial upsurge of settlement in the Western Lands starting in the 1720s.

The Connecticut General Assembly approved and laid out the boundaries for the towns of Norfolk, Canaan, Goshen, Cornwall, and Kent in 1732. Proprietary shares in each of these were scheduled for sale by way of public auctions in 1737-1738. Canaan and Norfolk, the two towns that contain between them the entirety of the current expanse of Great Mountain Forest, were first settled in this way. Throughout the 1740s, initial populations in Canaan were concentrated in fertile areas to the north by the Blackberry River, as well as current day Falls Village, with little to no initial activity in Great Mountain Forest itself. In Norfolk, it took until 1754 to sell all the rights to property shares of the town, and even then only after multiple failed auctions and the reduction of the minimum bid to \$20 per unit. The only ("legal") inhabitant in Norfolk until that point was a man named Cornelius Brown, who later built the first sawmill in the village. Once the rights of each town were bought, the proprietors proceeded to collectively divide the land into lots of between 50 and 210 acres for settlement, depending on the relative quality of each holding. In Norfolk, an additional 98 acres containing high value white pine were split among each of the proprietors, in addition to their existing holdings.

It is important to note the scale of the human timeframe in this section. Virtually all the intensive Euro-American land use history that occurred in Great Mountain Forest—from initial settlement to the acquisition of the first GMF properties by Starling W. Childs and Frederick Walcott in 1909—took place in the span of about 150 years. During that

brief window of time, dramatic changes to the landscape were wrought, following patterns of resource use and abandonment similar to prior regions of settlement, but at a far more rapid pace.

The first order of business for owners of these new land holdings was to clear large patches of existing forest, primarily to open land for pasture or agriculture. Evidence from early written accounts of the region, proprietor surveys, and existing biological legacies suggest that the forest of that time was fairly continuous, covering most of the landscape in a patchwork of climax and mid-successional elements. Clearing land holdings to create shelter and acreage for subsistence farming was an arduous task. It required the girdling of standing trees and repeated burnings to eliminate the stumps and standing snags, similar to the agricultural practices of the American Indians. Some of the timber would be used for local use, but demand during the earliest period of settlement was so low that in general, burning was the preferred practice.

Though the original arrangement of land holdings was designed with agriculture in mind, it quickly became apparent that the landscape was generally ill-suited for growing crops, with the exception of certain fertile patches in Canaan and Salisbury. By late in the eighteenth century, many farms were converting some or all of their land to raising sheep, or cows for dairying operations. These markets were profitable ventures in their day; populations swelled in urban areas along the Eastern Seaboard as society grew more industrialized, creating demand for specialty products that did not exist during earlier waves of New England settlement. This shift would of course come with special consequences for the surrounding forest environment. In some cases, the animals were pastured on former agricultural fields, while in others, animals were set loose in previously unused woodlots where they slowly opened up the canopy by eating and trampling the regenerating trees, and girdling or uprooting pole sized ones. In this way, large tracts of hitherto undisturbed forests would be functionally eliminated by the dawn of the 1800s.

As the towns and farms of Litchfield County grew more industrialized, timber usage gradually transitioned from subsistence purposes to various domestic and export markets. The number of sawmills in the region grew in number as populations swelled throughout Litchfield county. Between 1756 and 1830, the population of Canaan more than doubled from 1,100 to 2,301. The increase during this period was even more striking in Norfolk—from only 84 to 1,485. Sawmill production became more profitable as demand went up for domestic timber to build

new houses. Later, more specialized markets developed to create cheese boxes for expanding dairy enterprises, and hemlock bark for use in tanning sheep hides. A number of the early "up and down" sawmills operated in the current day Great Mountain Forest, such as the one built by Elisha Mansfield in 1806, along Meekertown brook. Steam engine powered mills and circular saws, both of which became more common later in the nineteenth century, dramatically increased the capacity for daily lumber production, even as the number of sawmills in Canaan and Norfolk decreased starting in the 1860s.

Exhibiting behavior similar to dam building beavers (see Natural Communities 10: Beaver Ponds), settlers held to a systematic hierarchy of preferred tree species, shifting harvest priorities only once the more favored species was exhausted. Old growth white pine was always the first to be cut for timber, particularly for use in house framing and flooring in the growing settlements. Never particularly abundant in the pre-colonial forest, timber-quality white pine was virtually eliminated from the forests of Litchfield County by the beginning of the 1800s. Clapboards made from oak species were also common lumber material, used in building construction wherever white pine did not exist. As nearby old growth forests continued to shrink in the region, colonists eventually turned to hemlock as a major source of timber, in spite of its lower quality and the tendency for older trees to contain unworkable defects.

Aside from timber, many tree species in Litchfield County were felled to create specialty products for export markets, such as sugar maples to make rifle stocks, white ash for canoe paddles, and various species for turned wooden bowls. Perhaps most importantly for the region, a booming dairy industry necessitated the mass production of boxes and circular casks for the shipment of cheese and butter products to urban markets to the south and east. This economy was strongest in Goshen, which was already producing 400,000 pounds of cheese per year by the beginning of the 19th century. Though not quite as industrious in terms of outright production, Norfolk still boasted a lively pastoral economy with over 2,000 heads of dairy cattle distributed among farmers there by the 1820s. It was common during this period for sawmills in the region to have auxiliary cheese box shops, exclusively for their manufacture. When the Erie Canal was officially opened in 1825, it allowed for easy access across the Appalachian Mountains between coastal cities and the Midwest. New England farmers were soon unable to compete with the increased settlement and production in the western lands, particularly in Wisconsin and western New York state.



Cream Hill in Cornwall CT, at the height of dairying operations. Note the landscape, almost completely denuded of tree cover.

As a result, dairy product output in Litchfield County declined steadily through the early 20th century.

Sheep raising was another pastoral activity that had a strong impact on the ecology of the region. Merino sheep, renowned for their incredibly soft wool, were introduced from Europe to New England in 1802. The so called "Merino Craze" swept the region, a boom-bust enterprise that had many farmers in Litchfield county convert all or part of their land holdings into sheep pasture. The industry expanded greatly during the years just prior to the War of 1812, when the British introduced an embargo on all wool product exports to the U.S. This had a great impact on the forests of the region, accelerating overall land clearing and the specialty harvests of hemlock trees. With the extremely high tannic acid content of their bark, hemlocks were the ideal species used to tan sheep hides for the markets to the east. During the five years following the end of the war, from 1815-1820, wool prices collapsed. Despite a slight recovery of the industry in Norfolk after this period, a final plummeting of prices in 1845 brought an end to most commercial sheep raising in the region. As with the dairy industry, increased pastoral activity to the west—following the construction of the Erie Canal—brought new competition that crushed the sheepish enterprises of farmers in New England.

With all this in mind, the most dramatic landscape transformation, by far, came from the iron industry—particularly in the land that would one day constitute Great Mountain Forest. The first iron works in the county was established in Salisbury around 1734. Its various forges and blast furnaces were unknown to the British, and so were decisive in supplying the various munitions and war machines that helped the colonists win the Revolutionary War. Owing in part to the generous quantities of raw ore that could be mined in the area, Salisbury became the most significant iron producer in the thirteen colonies in the eighteenth century.

The rich iron deposits in Salisbury follow a narrow band underground some 100 miles more or less northwards to southern Vermont. Canaan straddles this underground source, and became the primary producer of the immediate Great Mountain Forest region. Three blast furnaces were eventually built along the Blackberry River by the middle 1800s. These specialized in the production of pig iron—bars of iron refined from impure sources (the bars that spill through the feed channel look like piglets nursing on their mother, if you use your imagination), which would then be shipped to different forges and there be shaped into all manner of useful objects. The process, and hence the viability of the furnaces themselves, depended on three main ingredients: raw iron ore,



A 19th century collier's hearth in action.

slabs of limestone to act as a flux to draw out the elemental impurities, and charcoal as the fuel source that could heat these materials up to the required temperatures. Where wood to produce charcoal was growing scarce in Salisbury by the 1840s, it was still to be found in abundance in Canaan, where the region as a whole—and Great Mountain Forest in particular—was only sparsely populated, and hence still held many thousands of acres of hitherto un-harvested trees.

The two major iron manufacturers in the Canaan region bought up huge tracts of nearby forest, in anticipation of the time when demand for wood to make charcoal was at a premium. The coalition of Hunts, Lyman & Co. built the Buena Vista blast furnace in 1847, along the Hollenbeck River in Lower City, to the south of Great Mountain Forest. A few years later in 1853, the Barnum and Richardson Company purchased the Beckley furnace, northwest of the Forest on the blackberry river in Canaan. The majority of the charcoal harvested from Great Mountain Forest was used to fuel these two furnaces. Trees were clear cut in every direction, approximately two acres for every charcoal hearth pile. It is estimated that the Buena Vista furnace alone required 356,000 bushels of charcoal per year to operate, which translated to cutting between 300 and 600 acres of forest. Because young trees were preferred for charcoal production, tracts of forest were often re-cut on a rotational basis—as many as 4 times in certain areas.

The decimation of vast forest tracts was further compounded by the frequent wildfires that sprang up in association with the practice of charcoaling itself. Colliers would pile huge stacks of cut wood chunks on site and smolder them there to create the prized fuel. All too often, stray sparks would escape from these piles and ignite nearby forest—already prone to fire outbreak from the dry slash and dense thickets of young trees left from the act of clearcutting in the first place.

The iron industry reached its heyday in the 1870s in Canaan, followed by a precipitous collapse throughout the end of the century. The Bessemer process, patented in 1856, offered the first commercially viable method for producing steel from molten pig iron, using an oxidation process instead of lime to remove impurities. Its widespread adoption in succeeding decades was a major cause for the decline of the blast furnace iron industry towards the end of the 19th century. In 1903, Hunts, Lyman and Co. sold all its land holdings in Canaan to the town for taxes. Barnum and Richardson soon sold most of its charcoaling lands as well, after becoming heavily mortgaged in 1898. The Beckley furnace continued to operate with



The still active limestone quarry in North Canaan, now operated by Conklin Limestone Co. No longer mined for furnace flux, the limestone materials are sold as landscape supplies and soil amendments.

decreasing output until it was shut down permanently in 1919. In 1999, the furnace was restored and stabilized, and designated a Connecticut Industrial Monument. Visitors can go on a guided tour of the site, which details the rise and fall of the iron industry in Litchfield County.

The death of iron production marked the closing of a chapter in the history of Great Mountain Forest. In less than two centuries, the land went from nearly continuous mature tree cover to a broadly denuded scrubland. Pasturing on steep slopes, intensive logging, and fires ignited from charcoaling all contributed to severe soil erosion and nutrient leaching throughout much of the forest. Farm abandonment was ongoing since the 1850s, and by the end of the century, only a few active homesteads remained. Locals in in Canaan and Norfolk came to regard the cut over, burned over forest as a haunted place, and avoided traveling through it if at all possible.



Frederic C. Walcott

Starling W. Childs

HISTORY OF GREAT MOUNTAIN FOREST (1909 - PRESENT)

The Childs and Walcott Era: 1909-1932

The genesis of Great Mountain Forest (as we know it today) came about with the purchase of the first parcel of land by Starling W. Childs and Frederic C. Walcott in 1909. The two men were old friends, both Yale graduates and members of the Boone and Crockett Club—a hunterconservationist organization established by Teddy Roosevelt in 1887. They were seeking land where they could establish a game preserve—primarily for hunting and recreation, but also with an eye towards the broader goal of sustaining a natural landscape for future generations to enjoy. Though their sights were initially set on property somewhere in the Adirondacks, Walcott persuaded Childs to look at land in northwest Connecticut. The early successional scrublands of pin oak and gray birch, left behind from a solid century of clear-cutting under iron industry ownership, were just what they were looking for in terms of wildlife habitat. The Barnum and Richardson Company was eager to sell off such parcels at very low prices, now that producing charcoal was no longer a profitable venture. Convinced of the landscape's potential, Childs and Walcott bought several thousand acres from them between 1909 and 1919, concentrated in western Norfolk in the area surrounding Tobey Pond.

Walcott was a businessman from New York who would go on to hold a number of political offices, which he often infused with his conservation ethics. After moving to Norfolk permanently in 1910 following his first land parcel purchase with Childs, Walcott served as president of the Connecticut Board of Fisheries and Game, chairman of the Connecticut Water Commission, and was eventually elected as a member of the U.S. Senate from 1929-1935. Conservationism was still in an early stage in those days—epitomized by figures like President Teddy Roosevelt and Gifford Pinchot (the first chief of the U.S. Forest Service in 1905), who were primarily concerned with the careful protection and management of natural spaces to promote continuous yields of game and timber. In addition to his passion for maintaining privately owned wildernesses, Walcott was an early proponent of "game in the commons", the belief that public lands should be preserved in every locality for people to utilize as hunting grounds, and thereby serve to ensure a common, steady food source for the community. Even as he tinkered with game management on his new Norfolk property, Walcott spent much of his energy as senator, and member of various other public offices, in encouraging these socially oriented goals.

Childs' primary role in the project was as chief financier of the various land parcel purchases. He had married the daughter of Charles Albert Coffin, founder of the General Electric Company, and together with his wife they provided more than ample capital for funding the enterprise. Childs also belonged to a long lineage of Swedenborgians, a sect of Christianity whose adherents believe in the spiritual unity of God and the natural world. As a well-known example, Jonathan Chapman, later known as Johnny Appleseed, was an early missionary for the movement, and spread its teachings as he traveled and created apple plantations across the Midwest. Childs' religious upbringing may likewise have provided inspiration for his own conservation ethic, as well as his collaboration with Walcott. Something of the family tradition would continue on in his son Edward, who would in time become the primary molder of GMF as a forestry-centered organization.

The early years on the property were a whirlwind of activity. Walcott and Childs were eager to experiment, and demonstrate how a landscape could recover and provide ample animal habitat, given time and proper management. The pair hired professional gamekeepers to assist in introducing animals into the various habitats of the property. Deer and pheasants were released strategically into young forests, and various species

of waterfowl were specially imported from Canada to establish populations in Tobey Pond. One can visit the pond today and still find remnants of the original feeding pens used for the various wood ducks, pintails, redheads, pheasants, and canvas backs imported to their new home. In an effort to speed up the process of forest regeneration and provide cover for woodland creatures, Walcott and Childs also planted various shrubs and conifers throughout the grounds. One of these plantings, a Norway spruce plantation established in 1919, is still standing to this day (see Forest Management 1: Plantations).

For Walcott in particular, the goal of these efforts was not just to see what could be done on the property, but to use its success as an educational resource for communities and lawmakers at large. In correspondences from those early years, he describes the bucolic scene over at Tobey Pond. In his words, it had become something like a "zoological park" with ducks flocking from all over to mingle with the imported ones, and plentiful pheasants inhabiting the young woodlands, breeding prolifically to swell the population year by year. Excited by their progress, in 1915 Childs and Walcott invited the State Parks Commission to tour the property, as part of their effort to convince the newly formed government organization to purchase a 15,000 acre tract of land for public use. Throughout his life, Walcott continued to give lectures and write articles on the merits of game reserves, including a chapter on the topic in William H. Hornaday's "Wildlife Conservation"—a collection of presentations by a former professor of the Yale Forest School.

The Ted Childs Era: 1932-1996

Though planting and game management activity was ongoing throughout the 1920s, no new land parcels would be acquired until the following decade. By this time, S.W. Childs' son, Edward (known as Ted), was grown to adulthood, and began to take an active role in managing the property. Ted graduated from the Yale Forest School in 1932, whereupon he took on a string of illustrious land management jobs. After getting a second master's degree in mining and mineralogy from Columbia University in 1933, Ted worked for the Beryllium Mining Corporation, and took a six- month field operations appointment in the Mississippi Civilian Conservation Corps to oversee the creation of a battlefield national park outside of Vicksburg. Starting in 1942, Ted worked for the U.S. Army in Costa Rica, where he was charged with establishing cinchona tree

plantations, a species used at the time to produce anti-malarial medication for military activities abroad. It was only after his discharge in 1946 that he returned permanently to Norfolk. Even from a distance, however, Ted proved to be very active in the management of the property during this period. With his new background in forestry, Ted was interested in shifting the focus of property management towards fostering a holistic, productive ecosystem—a great expansion of the earlier mission which had been centered upon the stewardship of individual animal species.

Shortly after graduation, Ted took over his father's half share in the property. Together with Walcott, the two spent the next twenty years aggressively buying up new parcels, expanding the forest, more or less, to its current expanse of approximately 6,500 acres. Many of these tracts were more cut-over iron industry lands held by Hunts, Lyman & Co. and Barnum & Richardson, though a number, including the Root, Mansfield, Dorman, and Chattleton properties, were abandoned homesteads, with different lasting human legacies and forest compositions. To oversee their varied management objectives, Ted hired a sequence of foresters, beginning with a man named Eckels in 1934. Bill Preuss, followed him the year after, and worked from 1935-1940, creating many of the ponds that exist on the property to this day, including Wapato Pond (in 1936) and Wampee Pond (in 1937). These were former wetlands, strategically dammed to create year-round bodies of water to provide new habitat for fish and waterfowl.

Aside from a one-off salvage operation of dying chestnut trees in 1918, no timber harvests or inventories were conducted on the properties until the 1940s. As providence would have it, the dawn of their forestry efforts coincided with a re-unification, of sorts, between Ted and his alma mater, the Yale School of Forestry. In 1938, a hurricane leveled the Yale-Myers Forest in eastern Connecticut, which had only just begun to be used during summers for their annual field training intensive. Forests in the northwestern corner of the state were relatively unaffected by the storm, so Ted offered to donate seven acres of his and Walcott's land to the school so they could continue their yearly program, and even established a fund for the construction and continued maintenance of a permanent camp there². The camp buildings were completed in 1940, and, in the summer of 1941, hosted the first cohort of Yale Forestry School students, where they learned about forest inventory, land surveying, harvesting, and conservation.

Just a few years later, in the summer of 1943, GMF conducted

² The fund was dedicated in the name of Ted's chauffer, Joseph Taylor

their first ever timber cruise—a quick, property-wide survey to estimate standing timber volume. Art Hart, Ted's hired forester of the time, led the assessment, and was assisted by students from the Forestry School. Alone and in pairs, the team collectively reconnoitered the entire forest, sampling tree diameter and height along randomized, pre-selected transects. ³

After assembling and analyzing the collected data, Art estimated the total board feet of merchantable timber in the forest (a board foot is a unit of lumber measurement, often applied to standing trees in timber potential assessments. It is equal to the volume of a one-foot board that is one foot wide, and one inch thick). It proved to be a considerable amount,

³ One of these transects led two of the students unexpectedly to the site of a downed army aircraft. It had crashed onto the western slope of Blackberry Hill just a month earlier, and no one knew what had happened to it until their discovery. Once informed of its whereabouts, a military crew removed the wreckage in a single day. The family of the pilot who had died in the crash erected a memorial stone on the site in his honor. Though no path leads there, the obelisk with its inscription still stands for wandering travelers to find.

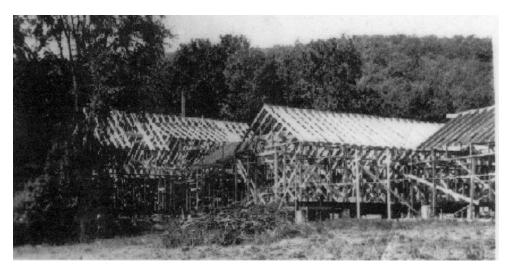


Ted Childs, circa 1950s.

when one considers that most of this land was recently either aggressively logged, charcoaled, farmed, or pastured just a handful of decades earlier. It was also the beginning of a great collaboration between GMF and the Yale School of Forestry. Every summer for the next 25 years or so, students assisted with various inventory analyses and other projects as a component of their required field training.

Ted's donation of the 7 acre Yale Camp is but one example of his generous spirit, and his desire to utilize his land as a means to reach out and collaborate with other groups. In 1946, after years of travel and working in different places, Ted moved permanently back to his family's Coolwater Estate along the eastern edge of the forest, ushering in an era of yet heightened activity and involvement. In 1950, the year after Walcott's death, Ted bought out the half share from his heirs to become the sole owner and proprietor of the forest. It was at this time that the property officially became known as Great Mountain Forest, so named for the large peak it contains near the southwestern boundary, along Under Mountain Road (once known to early settlers as Canaan Mountain, hence the name of the intersecting Canaan Mountain Road where the GMF administrative office currently sits). After a succession of short stinted forest managers, Ted hired George Keifer, who worked from 1947 to 1952. George's first task was to create Tamarack Pond, around which the interpretive Tamarack Trail would eventually be constructed. From 1948 onwards, he and his subsequent forester successors would be in charge of Ted's newly created forest internship program. Every summer, (up through the present day) several forestry students from around the country are hired to come live at GMF and work as members of the crew. Besides being a great help in accomplishing the diverse tasks of managing the forest, it offers a great opportunity for these interns to learn practical forestry skills, and fosters deeper engagement between GMF and the various communities to which it belongs.

In 1950, during the middle of George Keifer's tenure as land manager, Ted hired a second forester, Darrell Russ, to assist with timber inventory, the establishment of red pine plantations (see Forest Management 7: Red Pine Salvage) and other duties. In a career that lasted 42 years, Darrell was the longest running employee in GMF history. Sam Hawley was hired as a forest technician shortly thereafter in 1953, and would work alongside Darrell for almost the entire extent of his tenure. Given this consistent management leadership, and the fact that Ted was by now permanently settled in Norfolk, the stage was set for the undertaking



Initial Yale Camp construction, circa 1940.

of some of GMF's most ambitious, far-reaching initiatives, such as the expansion of Ted's maple syrup production operation, "Coolwater Maple Syrup" (Forest Management 8) the establishment of many unique exotic conifer plantations and Christmas tree orchards (Forest Management 1), the support of dozens of research projects in the forest (see Research Sites), and the establishment of the GMF Corp.

Outside of his life at Great Mountain Forest, Ted also set down deep roots within the greater Norfolk and Connecticut community. From 1947 to 1971, he served as Park and Forest Commissioner for the state of Connecticut, and as chairman of the Connecticut Tree Farm Committee, an organization charged with certifying privately owned lands that practice sustainable forestry methods. In an initiative closer to home, in 1956 Ted used his own money to fund the creation of the Norfolk Curling Club, which is still active, and even hosts regional championships. He and his wife Elisabeth raised four children in Norfolk: Elisabeth, Starling, Anne, and Edward Jr. Continuing a family tradition, Star, Ned, and Anne's future husband, Chip Collins, all attended the Yale School of Forestry & Environmental Studies, thereby strengthening its ties with GMF. In 1962, Ted created the Great Mountain Forest Corporation as a way to fund research and other projects in the forest. The private foundation became the technical owner of certain parts of the forest, including the weather station, Tobey Beach and the surrounding "North Forty" property, and timber sections 13 and 14 at the southernmost portion of GMF (since Ted owned the corporation, these lands still de facto belonged to him). In



The completed camp buildings, shortly thereafter.



The Yale Camp today, following recent renovations.

creating this organization, Ted was able to fund research that occurred there without any tax consequences. The GMF Corp operated with its own governing board which met on a yearly basis, consisting of Ted, his son Star, and former Yale School of Forestry dean Francois Mergen, a plant geneticist who oversaw several plantation experiments in Great Mountain Forest (see Research Sites 4: Mergen's Pinetum). In the 1980s, Childs had deed restrictions put on sections 13 and 14. As a result, this section of

the property would not be part of the later easement agreement that was finalized in 2003.

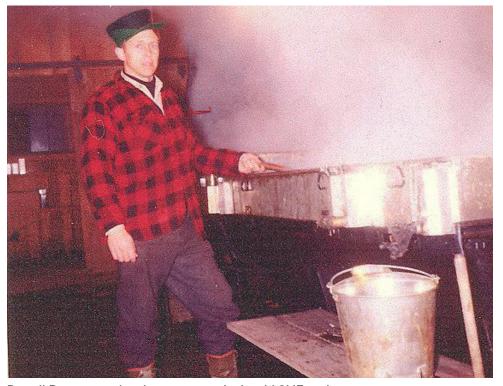
That same year, 1962, Ted installed a sawmill on the grounds near the current forestry office (which was then a barn, that burned in 1990). Unlike the maple syrup, timber harvests, and Christmas tree plantations, all of which existed to produce consumer products, this mill was used only to process wood for buildings and bridges within Great Mountain Forest. It stands accompanied by a nearby wood working shed, where the lumber is dried and finished, and from there used for various construction projects. Many of the later buildings, such as the current day sap house and forestry office, were built with wood entirely harvested and processed at GMF.

Even as activity ramped up elsewhere in the forest, the forestry students at the Yale Camp spent their last summer field training there in 1967. At that time, enrollment was down in the school, and priorities were shifting to encourage students to do internships elsewhere during their summers. The Yale president of the time, Kingman Brewster, wanted to sell the camp back to Ted, and even offered to foot the bill for its demolition. Ted, however, insisted they hold on to it for the time being. From 1972 to 1982, the camp was leased to the University of Hartford for their yearly 2-week summer ecology course. Ted's son, Star, attended Yale FES from 1978-1980, and was instrumental in getting students to return to GMF as a component of the new student orientation program (called modules, or MODS). The first MODS was in 1977, and at the time consisted of field exercises in the New Haven area. Star pushed hard trying to persuade the school to return to GMF, which they finally did starting in 1983—initially as a one day excursion that eventually became the four day long MOD that exists today. Though Star would go on to create his own forestry consulting company (EECOS) in Norfolk, his connection to GMF remains deep and profound. He has been a fixture of the MODs curriculum for many decades now, uniting generations of students with his wisdom and humorous spirit. When not in use by Yale, the camp is leased back to GMF, who have used it over the years to host a great many different school groups and adult workshops.

Through the 1970s, Great Mountain Forest continued to grow larger through successive parcel acquisitions, which afforded opportunities for more complex and expansive timber prescriptions. Though inventory had been ongoing for some decades by this point, harvests in the 1950s and 60s were mostly focused on white pine thinning on abandoned pasture lands. By the 1970s, however, they began to do more ambitious

oak shelterwood cuts on the Number 4 Trail region in the heart of the forest. Darrell Russ was responsible for the delineation of Great Mountain Forest into different harvest zones—a system still used by the current GMF foresters. By 1976, he also oversaw the planting of over 200 acres of various exotic conifer species for use in his ongoing quest to discover the perfect Christmas tree, which at the time was still a thriving business at GMF (See Forest Management 1: Plantations).

That same year, a young man named Jody Bronson joined the summer crew, fresh from the forest technician program at Unity College. He continued to work seasonally at GMF throughout his undergraduate studies at Keene State College. In 1978 he joined the staff as a full time member, and, except for a one year stint elsewhere as a contract logger in 1981, has been working at GMF ever since. It was also around this time, in the mid to late 1970s, that Ted began to step back from the day to day operations in the forest. He became fascinated with rock gardening, and created magnificent arrangements in the garden next to his Coolwater Estate, complete with strange stones and various small alpine plants. It was so impressive that members of the New York Botanical Garden came up to



Darrell Russ, operating the evaporator in the old GMF saphouse.

see it on weekend tours. By this time of course, Russ had a good handle on what needed to be done, though the two still continued to meet for coffee every morning to discuss matters concerning the forest.

Darrell Russ worked steadily and faithfully at GMF until his retirement in 1992, when Jody Bronson became the forest manager. Bronson kept up the various forestry operations, bringing his own mixture of practical and aesthetic sense of forestry to the organization. Darrell's son, Russell, who also began his GMF career as a summer intern in 1988, eventually joined the official staff in 2001.

EASMENT NEGOTIATIONS AND THE NGO ERA: 1996 - PRESENT

With Ted's passing in 1996, the Childs family had to make some difficult decisions about the future of Great Mountain Forest. The property went completely to his wife Elisabeth, who assumed ownership unencumbered. However, they knew that when she herself passed away, there would be a huge tax burden on the children in order to retain the land. The family's wealth, though substantial, was already heavily invested in Great Mountain Forest. Had the lands remained in private ownership, the family would have been forced to sell off much of the property. A land buying craze was in progress in Norfolk at the time, and the parcels would have fetched high prices from eager developers.

Star Childs and Chip Collins began discussions with the family about putting the land under an easement agreement. The 1990 federal farm bill had established the Forest Legacy Program to protect forested land holdings by buying up the development rights and holding them in perpetuity, even if the land itself changes hands. The Childs family decided this would be their best route to take, though it would not be an easy process. Getting federal money to buy the development rights requires a series of applications and negotiations with officials at the state and federal level, who had to be convinced of the merits of the property in question.

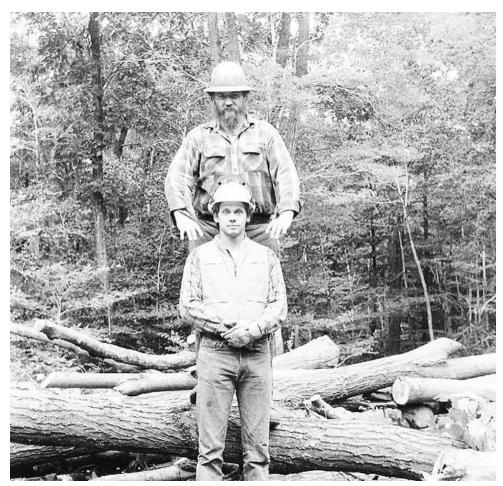
The process also precipitated important internal conversations within the family about how an easement agreement would change the relationship between the forest and the public at large. Though in its history GMF had played host to multitudes of interns, school groups, workshops, clubs, and researchers, these had always been authorized under the discretion (and benevolence) of Ted and his kin, as the sole owners and proprietors. To convince the state to buy the conservation easement rights, however, they were asked to consider some form of public access in the



Starling and Ted Childs, standing by the frame of the new Forestry Office, circa 1990.

agreement, as their argument hinged on the great value of the space to the community at various levels. Understandably, determining the scope and magnitude of that access was a difficult process. For almost a hundred years prior, the forest had been private, and all involved felt the same strong sense of attachment towards the land, as well a burden of responsibility to ensure that its unique and often fragile ecosystems would not be overrun by an influx of unmonitored visitors.

Given these and several other inherent difficulties, the process dragged on for years, driven always by the looming threat that Elisabeth would pass away before the easement could be secured. The chief negotiators were Star Childs, Chip Collins, and Deputy Commissioner of the Department of Environmental Protection, David Leff. Leff served as the chief negotiator for the easement on the part of the state. Childs, a long serving director of the Connecticut Forest and Park Association, was friendly with a number of state level politicians and environmental leaders, and his education in the environmental sciences and work at EECOS gave him the knowledge and language to describe the GMF landscape in a compelling way. Collins was the director of the Forest Land Group, a timberlands management and investment organization, and so similarly had a strong background in negotiating property sales. Though Leff and many others in the department were in strong favor of a deal being struck, it took a long time to figure out the difficult details.



Jody Bronson and Russell Russ, circa. 1988.

In the end, the emergence of GMF as an NGO was a two-step process. In 2003, the state of Connecticut finally agreed to match federal forest legacy funding with their own funds and purchased the development rights to the bulk of GMF—some 5,500 acres—though ultimately 75% of the funds for the purchase came from the federal farm bill. Simultaneously with the filing of the legacy easement in the towns of Canaan and Norfolk, Elisabeth Childs donated her title in fee to those same lands to Ted's earlier established Great Mountain Forest Corporation. In the year that followed, the formerly private GMF Corp. was converted to a private operating foundation. This is a more specialized 501-c3 tax exempt designation, and essentially functioned as step towards making GMF more of a public entity. Elizabeth put almost all of her land, including the 5,500 acres of the easement, under the GMF Corp., thereby transferring that vast bulk into NGO status. Upon her passing in 2009, Elisabeth Childs deeded several additional unrestricted forested parcels in her will. Among these was the Mountain House, which currently serves as GMF's administrative headquarters. The proceeds of the sale of the easement were placed in a charitable remainder trust, with the main purpose of creating an endowment for the organization. A small portion of the trust's income was used to support Elisabeth in the final years of her life between 2003 and 2009.

In many ways, things at GMF after the easement agreement have gone on much as before. Timber harvesting and habitat improvements are still permitted on most of the property, so long as no new permanent structures are built. The forestry staff still keeps up these operations, as well as a number of other projects. However, the non-profit designation has enabled them to expand greatly in terms of outreach opportunities. It enabled the funding of additional staff positions to develop programs and foster broader connections with other organizations. With the official transition of property and endowment funds in 2009, they were able to hire Paul Barten as a director of operations, to begin building up the social base of the new (yet in some ways, very old) GMF entity. Jean Bronson, a former cook at the Yale Camp and tax collector in nearby Falls Village, had previously done children and adult programs at GMF on an ad-hoc basis. In 2012 she came aboard the staff full time to do this work, as well as manage book-keeping of the various salaries, expenses, and donations. In 2014, Paul stepped down, and Hans Carlson came aboard as the new director. All four of Ted and Elisabeth's children serve on the board of directors, ensuring that the history of the family remains an important part the mission and lasting legacy of Great Mountain Forest, even as it grows in exciting, new directions.

CURRENT OPERATIONS AND PROGRAMS

Though it has grown into a private non-profit organization in recent years, the underlying mission of Great Mountain Forest is the same now as it has been for the past century: to serve as a model for how a working forest can benefit both natural and human ecosystems. The endowment provides some of the resources to allow for additional staff and programs, expanding the reach and influence of the organization. This is augmented by annual giving by the supporters of Great Mountain Forest, as well as grants from foundations and the government.

GMF is fully accessible to the public during daylight hours for hiking as well as cross country skiing and mountain biking on select trails. The space is also available to larger groups for private events, though the staff appreciates being notified ahead of time before such events.

GMF offers a variety of programs and workshops throughout the year which cater to people of all different age groups. The Great Mountain Forest Lecture Series features book authors and lecturers who come to speak about their areas of expertise. GMF director Hans Carlson often gives presentations on the history of landscape use and forest stewardship practices in the region, drawing from his years of training as a historian and experience in the woods of the northeast.

Other events are more hands on, and make wide use of GMF's stewardship practices and natural landscape to provide learning experiences for the broader public. Many programs are hosted in conjunction with experienced professionals, such as the workshop on birds in the working forest, or the field walk with the Connecticut Department of Energy and Environmental Protection (DEEP) on the future of the New England cottontail rabbit (see Forest Management Sites 10). Others, like the winter wreath making workshop, maple syrup demonstrations, native dye workshop, and myriad interpretive hikes, are led by members of the GMF staff themselves. The Yale Camp, well-known within the School of Forestry and Environmental Studies for the MODS orientation every August, allows GMF to host various groups for more extended periods of time. The Christodora Summer Ecology program brings low income high school students from New York City to spend two weeks at the camp, where they learn about the forested landscape and design and conduct their own field

studies. GMF, in association with the Connecticut Cooperative Extension Forester, hosts the Connecticut Coverts Project, whose mission is to educate private landowners about managing their properties sustainably. Thanks to the facilities made available by the existence and generous leasing of the Yale Camp, GMF is able to host long-term programs that allow for deeper engagement with the property.

Children from nearby Norfolk, Canaan, and Falls Village are frequent visitors to the Childs Center, coming in school field trips and summer day camps throughout the year for hands on experiences in nature. These varied programs, organized by GMF's Jean Bronson, include interactive art projects using natural materials found in the forest, interpretive hikes along some of the many trails, and maple syrup production demonstrations. GMF also hosts the Project Learning Tree "Children's Literature and Nature Project", which provides workshops for school teachers on methods for integrating nature-based education activities into their curriculums, including discussions on reading materials and walks in the woods with GMF staff members.

The GMF Field Day is a family-oriented annual event, bringing together the local Litchfield County community as well as affiliates from all over the region. Attendees are treated to a picnic lunch, tour of the historic Stone Man Trail, and various demonstration booths. The culminating event of the day is the canoe raffle. Every winter, Jody and a group of dedicated volunteers obtain and fully restore a collectible canoe, which they raffle off at this event to raise funds for further GMF programming.

As alluded to already, many of these structured events are in some way related to the working forest aspect of GMF operations. Jody Bronson, Russell Russ, and forest technician Wes Gomez all work hard throughout the season to manage the forest sustainably for timber, habitat, and human access. GMF hires three interns every summer to assist in these efforts, which provides aspiring land resource managers with valuable experience in the forestry arts.



Star Childs, demonstrating the sugar maple tree growth form to a group of visiting school children. Maple syrup operations are a source of great entertainment for people of all ages.

GMF director Hans Carlson, leading a presentation for the Christadora Summer Ecology Program students.

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The GMF Smokey Bear Story Hour at McMullen Pond.



Smokey pictured among adoring fans.



The 2015 summer forestry interns, hard at work repairing the bridge on the Number 4 Trail.



Raffle for restored canoe in progress at the 2015 GMF Field Day.