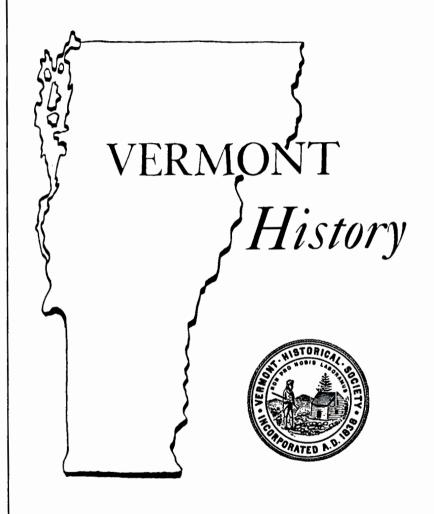
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"As Vermonters used governmental powers to help redirect and enhance the local economy, they demonstrated a new and different value concerning the environment. . . ."

Prospective for a National Forest: Economic Influences on Vermont's Efforts to Manage Forest Resources

By John Aubrey Douglass

After twelve years of formal requests and negotiations, the state government of Vermont in 1932 convinced federal officials to establish a national forest in the Green Mountains. Using a funding mechanism provided by the 1911 Weeks Act, the United States Forest Service began an acquisition program to establish a land base and to pursue a policy of multiple-use through programs in watershed protection, timber improvement and production, wildlife management, and the creation and maintenance of natural recreation areas and facilities. These programs helped inaugurate a new period in Vermont's history in which the state actively sought the means to influence the fate of forest resources.

While federal legislation made the Green Mountain National Forest possible, the political process for its establishment resulted from the initiative and persistence at the state level. The first proposal to include substantial portions of the Green Mountain range under federal management originated in Vermont and dated back to 1905. Public support for a national forest increased during the next decade. By the 1920s state officials had presented a series of invitations and proposals to induce federal purchase of upland acreage, including a 1925 enabling act, which approved and invited the Forest Service to purchase forest land in Vermont. For many reasons, however, a federal commitment to establishing an acquisition program did not occur until 1928, and four more years passed before President Hoover signed an official proclamation which included the Green Mountains as part of the national forest system.

Vermont support for a national forest in the Green Mountains rested almost exclusively on economic factors. Specifically, it was perceived by a coalition of interests that two of the state's leading industries, wood products and tourism, would derive substantial benefits from a federal reserve. Infusion of federal capital to purchase acreage and to develop forest and recreation programs promised both to stabilize declining wood industries and to provide an important boost for tourism. Combined with Vermont's efforts to develop a state forest system and incentives to improve forest resources in the private sector, state officials, business leaders, and conservation and professional forestry groups viewed the establishment of a national forest as an important element for future economic growth.

A state known for its strong sense of independence, Vermont sought federal assistance as one means to alleviate a long-term problem of forest degeneration. Years of vigorous logging often brought prosperity to the industry, but they had also resulted in a serious depletion of resources by the turn of the twentieth century. From the early years logging had radically changed the composition of the region's forests and, in turn, negatively affected watersheds and reduced the number of productive timber areas. The state forest programs and the establishment of a federal reserve came in reaction to the depletion of resources essential to the health of the Vermont economy.

As early as the 1840s, George Perkins Marsh warned fellow Vermonters that their treatment of forest resources was exploitive and perilous. In Marsh's day, loggers and farmers — often one and the same — employed clear-cutting techniques which devoured large tracts of timbered acreage. The advent of wood-burning locomotives on the new railroads further decimated local forest resources. Short-term, maximum yield use of forest resources was the norm in Vermont and throughout the United States. Such activity neglected the consequences of erosion and laid no plans for the regeneration of stands. The impact on Vermont's forest resources was significant early in the nineteenth century. In 1847 Marsh warned that the ecological consequences of clear-cutting timber were "too striking to have escaped any observing person. Every middle-aged man who revisits his birthplace after a few years absence looks upon another landscape than that which formed the theater of his youthful toils and pleasure." ¹

Establishing farms and grazing fields for sheep and logging the woods for lumber, potash, and fuel formed an economic base in the early 1800s. Many saw the obvious changes as taming the land. But, as Marsh noted, the "signs of artificial improvement are mingled with tokens of improvident waste." Extensive logging promoted soil erosion and watershed deterioration which contributed to an increase in flooding. Watershed deterioration also contributed to an increase in the number of large fires in the 1800s. One of Vermont's first large fires burned Mt. Hunger, White Rock, and Burnt Mountain in 1825 (destruction repeated in a 1903 fire). In 1857 fire destroyed the east range of Manchester and Sunderland, and an 1869 fire burned the town of Sherburne and Pico Peak.

Natural phenomena like floods and fire destroyed many acres of forested land and damaged the soil, hindering the regeneration of healthy stands, but, proportionately, human activities brought the greatest amount of damage to forest resources. By the 1850s farms and open fields had almost



George Perkins Marsh was a well-known conservationist and an early advocate of the preservation of Vermont's forest resources.

entirely replaced the timber resources in Vermont's lowlands. As a result local wood industries rapidly declined, their success dependent on their ability to cut and haul timber in the Champlain and Connecticut River valleys for shipment to markets in Massachusetts and New York. With no efficient manner to transport timber in significant amounts from upland areas, timber in the Green Mountains remained fairly inaccessible. The once prosperous lumber industry came to a virtual halt, contributing to a general decline in the Vermont economy and to the huge exodus from Vermont. The decline in the wood industries was so extensive that for a brief time Vermonters imported lumber from Quebec — a reversal of an old lumber trade. 4

The extension of railroad lines in the state helped agriculture, stone, and wood industries make a strong recovery in the 1870s. Timber in upland areas of Vermont, previously protected by their distance from water transportation routes, was hauled by locomotive to mills and finally to Eastern cities and their markets. At the same time Burlington became the nation's third most active lumber port, based primarily on the volume of Canadian lumber it milled and reshipped by railroad. The depletion of forest reserves throughout the East made Vermont's wood industries increasingly profitable. By 1900 wood products in Vermont had a value nearly ten times as great as in 1850, 5 and the number of wood businesses doubled. 6

While loggers had become more effective in reaching wood resources and in improving technologies for cutting and processing wood, they took no steps to renew timber resources. Vermont's mature softwood stands of white pine and spruce sought so eagerly by loggers were the evolutionary result of hundreds of years of growth. Natural regeneration of logged areas and thousands of acres of abandoned farms did not provide new stands of softwoods. Instead, crowded stands of hardwoods like pin cherry, poplar, beech, and birch took their place, trees inferior to softwoods from a market standpoint. Uncultivated hardwoods did not provide the volume nor the quality of timber that mature softwood species did. Mature softwood timber brought a higher price because it was less susceptible to rot. The hardwoods, far from useless, provided, along with softwoods, wood for pulp, potash, fuel, and charcoal production.

"The havoc of deforesting is not stayed, nor like to be while forest tracts remain," Vermont historian Rowland Robinson protested in 1882. He, along with a growing number of Vermonters, felt that the degree of prosperity enjoyed by the state in the late 1800s had a temporal and negligent quality. Robinson named the culprits: "The devouring locomotive, spendthrift waste thoughtless of the future, the pulp mill, and kindred wood consumers gnaw with relentless persistence upon every variety of tree growth that the ooze of the swamp or the thin soil the moun-



Lumbering had a dramatic impact on the landscape as these two scenes attest. Note the barren hillsides around the lumber camp portrayed above.



tain side yet nourishes." In 1894 Governor Urban M. Woodbury spoke before the legislature with similar alarm. "Owners of timberlands in our state are pursuing a ruinous policy in the method used in harvesting timber," Woodbury warned.9

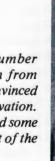
The visible effects of logging alarmed many Vermonters. Clear-cutting techniques left large tracts of upland acreage populated only by exposed stumps and slash. These open areas came to dot the Green Mountains, providing glimpses of an environment which contradicted claims of unspoiled charms in promotional literature designed to attract tourists. Further, the disease prone second-growth of hardwoods in clear-cut areas and acreage burned by forest fires required many years to reach maturity.

The depletion of softwood reserves, of more importance to the economy of Vermont, spelled an insecure future for the state's wood industries. While farming provided the majority of Vermonters with a livelihood, wood industries emerged as the state's leading producer of goods and the largest industrial employer. "There is no more valuable crop," Governor Woodbury observed, "produced from the land than timber. Every decade will see timber more valuable and it is of great importance to the state as a whole. . .that some measure should be adopted to lessen the wanton destruction of our forest resources." 10

The concept of "Scientific Forestry," which conceived of managing forest resources as a renewable and multi-faceted resource, was relatively new to Americans in the late nineteenth century. State officials and concerned citizens latched onto this European method of managing forest resources as a possible answer to Vermont's problems. Woodbury urged wood industries to help reduce soil erosion by ceasing their method of clear-cutting large areas and to treat timber as a crop rather than moving from one stand to another leaving slash as future kindling for forest fires. The governor argued, "By the preservation of spruce trees ten inches in diameter and under, when the large timber is cut, a good crop can be cut every fifteen years."11 Such procedures seemed a minimal effort that might greatly enhance future timber supplies. But the state had no legal power to force scientific forestry techniques upon a largely indifferent private sector. Further, the state had no land base on which to practice such methods. As major holders of timber rights and mountain acreage, logging companies and small operators could act freely under the guise of "private domain," maintaining an astonishingly high rate of production principally by means of clear-cutting techniques.

There were notable exceptions to the practice of clear-cutting. Marshall Hapgood, owner of several mills near Mount Peru specializing in semi-crafted wood products such as chair stock and piano sounding boards, believed in the regeneration of timber and openly criticized the logging methods of lumber and pulp industries. Hapgood and other Vermonters were influenced by Gifford Pinchot, European trained forester and head of the United States Division of Forestry since 1898, who had become the main spokesman for managing America's forest resources for economic purposes. His concept of multiple use of forest resources for watershed, timber, wildlife, and recreation provided a sophisticated argument for the management of forest resources which apparently had an impact on many Vermonters. 12

Pinchot visited Vermont on numerous occasions around 1900 and spoke



Marshall Hapgood, a lumber magnate and businessman from Peru, Vermont, became convinced of the need for forest preservation. His estate eventually provided some of the land that became part of the Green Mountain Forest.

publicly on the merits of proper forest management and on the efforts of other states to influence logging industries. His visits and the general movement to promote resource management affected Hapgood, who became convinced that only government action could stem the tide of forest exploitation. Speaking of the dwindling acreage holding mature timber, the mill operator stated in 1907 that "there should be no risk run that some day they will be devastated for pulp and charcoal purposes."13 State or federal management, according to Hapgood, promised the best means to preserve and enhance the state's economy. The forests, he urged, "should be absolutely reserved as public property for combined watershed, game, scenic and lumber uses."14

As early as 1905 Hapgood offered a substantial portion of his holdings near Bromley Mountain for sale at a low price to both federal and state governments. 15 However, at the federal level no legislation, and thus no funds, yet existed to purchase land for inclusion into the federal reserve system (later named national forests). All reserve acreage had thus far been designated on land already owned by the federal government in the West. In Montpelier Hapgood's offer and a similar offer by Joseph Battell, owner of mountain acreage around Middlebury Gap, prompted Vermont officials to investigate the establishment of a state park system.

In addition to insufficient funding, a persistent problem reflective of Vermont's small and relatively meager tax base, questions regarding the propriety of the state purchasing acreage helped delay the founding of the park system. 16 In Vermont, as in other states, the two decades following the turn of the century proved an important period in the growth of public services. State and local government, at the behest of concerned Vermonters, increasingly recognized the need for an expanding government role in protecting vital resources. At first this role came in the form of cooperative government programs which avoided the question of public ownership of forested land.

A large fire in 1903 provided stark evidence of problems to come, in turn fostering state legislation which created an initial governmental framework for resource management. In 1904 the state legislature passed a fire protection program that entailed cooperation with town selectmen. In addition the legislature established an experimental reforestation program, a program that would later include research and the production of seedlings by the University of Vermont. Reforestation legislation authorized the appointment of a member of the Board of Agriculture as Vermont's first Forestry Commissioner and a tax incentive plan providing that any uncultivated land planted with softwood seedlings would become eligible for a ten-year exemption.¹⁷

Devastating forest fires in 1906 and 1908, dwindling reserves, along with the visible effects of clear-cutting throughout the state helped prod the legislature to expand its conservation activity. Vermont also felt the influence of a growing national concern for forest resources. Conservation had become an important political issue in the United States which resulted in expanding programs at both the state and federal level. The concept of public ownership of vital resources gained favor as an acceptable means to promote the general welfare. Many states, such as New York, Ohio, and California, had already established state park systems and agencies to facilitate management.

In 1909 which also witnessed another large forest fire, the legislature created the Vermont state forester's office to act in conjunction with the commissioner. The state forester had the responsibility of initiating a state park system in an effort to gain a land base for public management and an opportunity to preserve watersheds, provide recreational areas, and demonstrate the advantages of modern forestry techniques to logging interests. ¹⁸ Austin F. Hawes, the first state forester, recommended in 1910 that the state should purchase at least 100,000 acres for the state forest program. The first attempts at managing forest resources did not bring immediate results.

Vermont simply did not have the resources to buy an adequate land base for the park system, nor the influence to change the practices of loggers. In 1912 during the early stages of the state acquisition program, a report by a special Committee on Conservation and Natural Resources appointed by the legislature assessed the economic impacts of logging. Sadly the committee reiterated Woodbury's previous frustration with wood industries. "Our forests, by reason of mismanagement," the report lamented, "are so rapidly disappearing that any estimate of the wealth possessed in them will be valuable tomorrow only as the record of a condition already changed." State Forester Hawes, with acquisitions coming

slowly for the state program, remarked in 1914 that the destructive activity of loggers in many sections of the Green Mountains forced the state to choose between asserting "its right to regulate the cutting of these mountain forests" or embarking "more expansively upon the policy of state ownership." While Hawes and others pushed for more funds for the state acquisition program and for various incentives to promote forest improvement and management, their efforts had little impact. Increasingly state officials looked toward the federal government for financial and technical assistance.

In 1911 Congress passed the Weeks Act to provide funds for the acquisition of land as part of the national forest system and for states to establish or enhance fire protection programs. All acreage acquired under the program had to meet various criteria, principally that they be an important watershed area for navigable waters. ²⁰ Congress also intended the act to improve forest resources for the primary purpose of timber production. "The emphasis on protecting stream flow was deliberate, intended to avoid the issue of unconstitutionality by linking the acquisition of forest land to the constitutional authority of the federal government to regulate commerce." ²¹

In the short run the Weeks Act gave an important boost to Vermont's forest programs. The year of its passage officials in Montpelier received technical advice from forest service personnel and two thousand dollars to enhance the innovative and fairly successful fire detection cooperative begun in 1904. In the following years federal funds came in increasing allotments, paying for the construction of access trails on mountain ridges (including segments of the Long Trail), observation posts, and watchmen. ²² In the long run the Weeks Act provided the mechanism by which Vermont would gain a national forest, but the process took twenty-one years.

Federal legislation did not provide a blank check for the purchase of land or unlimited labor for the forest service. The yearly allocation of funds by Congress restricted the establishment and acquisition of forested acres. Congress initially allocated \$9 million in 1911 for the purchase of land in the southern Appalachians and in the White Mountains of New Hampshire. In the following eleven years additional funds provided for the establishment of thirteen eastern national forests. The forest service repeatedly by-passed Vermont as a potential national forest site, focusing its attention in the Northeast on acquiring acreage for the White Mountain National Forest and the Allegheny National Forest in Pennsylvania. ²³

Noting the success of lobbying efforts made by the Appalachian National Park Association and the Society for the Protection of New Hampshire Forests in establishing the White Mountain National Forest in 1916, influential Vermonters, including the president of the University of Ver-

mont, the publisher of the *Burlington Free Press*, and members of the Green Mountain Club (established by James Taylor in 1910) around 1919 organized to discuss a federal reserve in Vermont. ²⁴ Vermont Senator Frank L. Greene emerged as the leader of the movement. In 1920 he persuaded federal officials to investigate earlier land offers by Hapgood and Battell as well as other acreage which met the requirements of the Weeks Act. ²⁵ The forest service completed a report and submitted it to the National Forest Reserve Committee (NFRC), the advisory committee making all recommendations for the establishment of national forests to Congress and to the President. The report identified two areas for possible inclusion: the "Nulhegan Unit" in Essex and Caledonia Counties containing roughly 240,000 acres; and a "Southern Unit" in Bennington and Windham Counties with 100,000 acres. ²⁶

Despite Senator Greene's personal appeal, and apparently on the recommendation of the forest service, the NFRC decided not to investigate a reserve in Vermont further. While the state and the surrounding area would have undoubtedly benefitted from the establishment of a national forest, Edward A. Sherman, associate chief of the forest service, reasoned that other parts of the nation had greater need of federal assistance. William Greeley, chief of the U.S. Forest Service, voiced a similar opinion several years later after repeated requests by Senator Greene for another NFRC review. "Why should a national forest be established in Vermont?" Greeley asked the senator. "Thanks to the natural conditions, the common sense and conservative temper of the people, and the effective work of the state department of forestry, Vermont is in splendid shape in comparison with other states." 27

The 1920 NFRC decision did not daunt the interest of Greene and his fellow Vermonters. By 1925 state representatives H. S. Windsor and E. S. Brigham sponsored an enabling act designed to give Vermont's permission for federal acquisition of forest acreage. While state permission was a prerequisite for federal purchases, the unusual aspect of the enabling act was that the federal government had expressed no intention of planning a reserve. The proposed legislation tendered another invitation by the state to federal officials to purchase land and establish a forest reserve. The enabling act gained considerable political support in Vermont and passed easily. The support rested on growing public opinion in Vermont that a national forest would provide an important boost to ailing wood industries and growing tourist related businesses. By 1925 the decline in the forests and the wood industry was too apparent to be ignored.

Since the 1870s wood products represented the single most important industry in the state economy. While agriculture remained the major source of livelihood for most Vermonters, wood industries provided the largest

M. J. HAPGOOD

of Peru. Vt.

is a candidate for the United States Senatorship. He is deeply interested in the matter of

CONSERVATION.

especially of our Forests.

Mr. Hapgood was one of three who received from President Roosevelt a special invitation to attend the three days national Conservation Congress at the White Honse in 1907, and duly attended. Every Governor and two state delegates from each state attended and great work was done

A short time before he died Roosevelt made complete perations to visit Mr. Hapgood for a week at his famous 'LODGE' in the vast wilderness, which visit might, possibly, have saved his life and thus have saved the world from its terribly destructive war.



Although Hapgood failed in his senate bid, Vermont's conservation interests were nonetheless served by Congressman (later Senator) Frank L. Greene of St. Albans (above). The efforts of Hapgood, Greene, and others fundamentally altered the economic role of lumbermen like those below.



TABLE 1
Number of Establishments and Workers in Vermont:
Wood Industries, 1890-1929

						0%
	1890	1900	1909	1919	1929	Change
WOOD RELATED INDUSTRIES						
# of Estab.	831	731	671	525	279	-33%
% of all State Industry	27	15	34	29	30	
# of Workers	7,898	5,504	6,939	7,572	6,127	-22%
% of all State Industry	32	19	20	23	20	
ALL INDUSTRIES IN VERMONT						
# of Estab.	3,031	4,817	1,958	1,790	927	-69%
# of Workers	24,894	29,575	33,788	33,491	30,540	23%
				-	* * * *	

Source: U.S. Census

single source of income to the state. The most important wood products fell into three general categories: lumber and similar products like posts, shingles, and fencing; pulp and packaging products; and semicrafted goods like chair stock and wood refrigerators. The industry peaked around 1890, when wood products constituted almost thirty percent of Vermont's total dollar value of goods produced and provided thirty-two percent of all jobs available in the state. Twenty-nine years later, much to the worry of state officials and Vermonters in general, wood industries had declined significantly both in terms of production level and their contribution to the local economy. While still a major industry in Vermont, wood related businesses in 1919 provided only 18 percent of the dollar value of goods and provided about 13 percent of all jobs (See Tables 1 and 2). Dwindling reserves of quality timber, specifically softwoods, were the main cause for the decline. The logging of timber in the state had dropped seventy-six percent from 384 million board feet (MBF) in 1889 to only ninety-one MBF by 1925. (See Table 3.) The introduction of technological advances like the internal combustion engine and other mechanical devices increased the level of production per worker and accounted for some of the decline in the number of jobs.

Between 1890 and 1929 Vermont experienced a loss of one-third of the wood firms, a situation reflective of both the depletion of timber and the consolidation of mills and logging enterprises into larger companies principally concerned with lumber and pulp production (See Table 1).

TABLE 2

Dollar Value of Wood Industry Products:
Vermont, 1890-1929
(In Thousands of Dollars)

	1890	1900	1909	1919	1929	Change
LUMBER Value of Products	6,958	6,131	8,598	8,362	7,291	5%
% of Wood Industry	62	49	79	28	30	
% of all State Industries	18	10	12	5	5	
PULP & PACKAGING Value of Products	2,449	3,384	3,943	14,080	8,555	249%
% of Wood Industry	22	27	28	46	35	
% of all State Industries	6	6	6	8	6	
SEMI-CRAFTED Value of Products	1,868	2,598	1,617	7,821	8,527	356%
% of Wood Industry	16	21	11	26	35	
% of all State Industries	5	4	2	5	6	
TOTALS Value of Wood Prod	11,276	12,395	14,159	30,263	24,374	116%
% of all State Industries	29	21	21	18	17	
Value Of all Industries In Vermont	38,351	57,849	68,310	168,108	142 522	274%

Source: U.S. Census

TABLE 3

Production of Timber: Vermont, Select Years 1889-1932 (By Million Board Feet (MBF))

1889	1899	1909	1919	1923	1925	1928	1932
384	376	352	218	120	91	107	61

Source: Statistical Abstract of the United States, U.S. Census.

TABLE 4
Logging of Major Species and National Rank:
Vermont, 1919 and 1929
(Cut in MBF)

	-1919-		- 19	% Change	
	Total Cut	Nat. Rank	Total Cut	Nat. Rank	In Cut
Spruce	58,059	5th	32,592	5th	-44%
White Pine	30,344	11th	12,784	10th	-58%
Maple	33,289	8th	23,618	8th	-29%
Birch	26,394	4th	19,440	9th	-26%

Source: U.S. Census

Major components of the industry came to include large inter-state operations like the International Paper Company, Great Northern, and the New England Power Company. ²⁸ These large companies developed management structures to purchase new types of equipment, land, and secure timber rights, activities that required large capital investments beyond the means of most small operators.

Despite their general decline, the contribution of wood industries to the local economy remained important in large part because of sharp increases in the value of wood. The deforestation of much of America's forest resources and the demand for particular woods maintained Vermont as a major producer of highly prized timber. While the logging of spruce declined 44 percent in Vermont between 1919 and 1929, Vermont remained the fifth largest producer in the nation (See Table 4). High prices for spruce, pine, maple, and birch, fueled by the scarcity of high quality timber, brought sizeable profits to lumber industries. In addition pulp products produced by many of the same large lumber concerns provided significant sales, the value of production varying depending on volatile market changes and the availability of low cost timber.

Legislators understood the role of wood industries in Vermont's history as a major source of state income, and they considered the industry essential to the future of the local economy. After years of public debate on the decline of forest resources in the state, government leaders were also cognizant of: a) changes in the composition of the industry; and b) how a national forest could assist wood industries and other segments of the economy.

According to state proposals to the NFRC, a national forest promised to address industry problems by purchasing mountain acreage and financing timber programs. Vermont expected these programs to preserve and manage forest areas with mature softwood timber for a sustained-yield program of logging and to return utility to areas suffering from soil erosion, disease, and crowded hardwood stands through silviculture tech-

niques. Pursuit of these objectives by both state and federal programs was seen as a way to stabilize both lumber and pulp industries by ensuring a steady source of timber in future years. But perhaps more important, a reserve promised quality timber for the growing semi-crafted businesses, that segment of the wood industry that was largely locally owned, consumed moderate amounts of timber compared to lumber and pulp production, and promised more jobs and a brighter future for the state's economy. 29 From 1890 to 1919 the value of semi-crafted goods produced and sold in Vermont increased by 319 percent. Over the following ten-year period the value of products sold from this segment of the industry grew another nine percent, while lumber fell thirteen percent and pulp fell forty percent. Until the mid-1920s the desire for watershed and fire protection and the economics of the wood industry served as the major forces behind the strong movement toward a national forest in Vermont. However, with the advances in transportation, and a dramatic increase in leisure time for a large portion of America's middle class, the prospect of a booming tourist industry gained in political importance.

A national forest with recreational attributes promised to act as an important draw for tourists. The popularly based tourist industry offered a relatively new market for Vermonters. Previously the tourist industry had been restricted primarily to those from high income groups who could afford long train trips and the costs of an extended stay in the Vermont mountains and in grand hotels along Lake Champlain. Accessibility afforded by the automobile and increased interest by urbanites in camping and natural areas, including water skiing, promised Vermont a significant boost in income. But Vermont needed, so supporters of a national forest argued, to provide the acreage facilities and image to accommodate this new breed of tourist.

Because of the multi-use benefits of a national forest, the enabling act and subsequent efforts to acquire a reserve gained a broad spectrum of political support. ³⁰ Private sector organizations like the Vermont Forestry Association, which represented mill operators, farmers and tourist interests, the Vermont Chamber of Commerce, and the Brattleboro Club officially endorsed state efforts to secure the support of the NFRC. ³¹ Professional and public groups like the New England section of the Society of American Foresters, the Vermont Commission on Conservation, the Green Mountain Club, and the Vermont Botanical and Bird Club also backed state attempts to acquire a federal reserve. ³²

Although they talked little about them, Vermont officials also anticipated other economic advantages would follow their proposals for state and federal review. Robert M. Ross, Vermont Commissioner of Forestry and one of the leading proponents of a national forest within the state government, certainly knew that Vermont would gain federal subsidies

for the building and maintenance of the roads so vital to a largely rural state. A federal reserve would produce a steady source of tax income for many townships (although, as some townships have since learned, federal contributions have not kept pace with potential tax income). ³³ As designated by section thirteen of the Weeks Act, counties, or in Vermont's case townships, containing national forest property received compensation for lost property taxes by payment of 25 percent of all forest income derived from timber sales and permits.

The issue of watershed protection dramatically returned to the forefront in 1927. Heavy rains converted mountain streams into torrential rivers, wreaking havoc on clear-cut hills, washing away many upland communities and partially submerging basin towns like Rutland and Montpelier. The flood of 1927, one of the greatest natural disasters in Vermont history, caused roughly thirty-five million dollars in damage. ³⁴ While a vibrant watershed and proper river and stream control might not have prevented the flood, most observers thought it would have reduced the damage. Watershed protection became an important rallying cry for renewing NFRC interest in Vermont's proposal. ³⁵

Shortly after the flood Senator Frank Greene, now retired, returned to Washington to renew Vermont's case for establishing a national forest. In coordination with Greene's efforts, Governor John E. Weeks authorized Commissioner Ross to initiate a study for presentation to the NFRC. In December of 1928 after consultation with the NFRC and Forest Service personnel, Ross traveled to Washington and offered a document titled "Proposed National Forest Purchase Units in Vermont." The report suggested two units with roughly 300,000 acres, each similar in location to the findings of the forest service study of 1920, as appropriate for federal purchase. However, this proposal offered a much larger southern unit (essentially equivalent to the current Manchester district) because of its accessibility to major population centers.

Besides the arguments for the preservation and improvements of watersheds, Ross made four major points in the proposal. He argued first that upland areas within the two units had a heavy second growth of hardwoods and few denuded tracts, making Vermont a good location for timber improvement programs which avoided the expensive costs of large reforestation programs. He also pointed out that "a national forest in Vermont would serve as a demonstrational area of proper forest management," and that the national forest would offer an important resource for local wood industries. Finally Ross concluded that a national forest in Vermont would provide an important recreation area for "over thirty million people within a radius of two hundred miles." ³⁶

The Vermont proposal was well-timed. Circumstances had changed for the NFRC since the early twenties. The long-term upswing in the nation's economy and new federal legislation expanded the funding base for federal conservation activity. The Clarke-McNary Act of 1924 extended federal purchases to the preservation of valuable timberland, and the 1928 Woodruff-McNary Act increased appropriations for purchases. In addition, federal policy placed new emphasis on providing recreation areas. As a result, after a long period of concentrating funds on the original eleven Weeks Act forests, the NFRC embarked on a program that would establish twenty-six new reserves in the East by the end of the 1930s.

On December 12th, 1928, the NFRC concluded that conditions warranted a national forest in the Green Mountains. The persistence of Vermonters initiated a five-year process in which the forest service studied the state's proposal, made various boundary modifications, and won both Congressional and presidential approval. A boundary was set in 1929 which encompassed roughly 370,000 acres, or 6.3 percent of the state's land mass, in the area now known as the Manchester Unit of the Green Mountain National Forest. The total acreage, only half the size of what the state proposal envisaged, did not include the northern section. After repeated requests by Vermont, the forest service set up the Middlebury Unit in 1934, expanding the reserve to 9.9 percent of the state's land mass. As with all national forests established under Weeks Act legislation, only a portion of the land within the boundaries was planned for purchase. Forest service officers, however, originally believed that around 80 percent of the 370,000 acres within the original boundary could be purchased through a long-term acquisition program. 37 (Eastern national forests are characterized by private and public ownership of acreage. To date approximately 50 percent of all the land within these Eastern reserves has been purchased by the federal government. 38 Of the roughly 629,000 acres within today's Green Mountain National Forest, approximately 44 percent is under federal ownership.)

From 1928 to 1932 the forest service established a central office in Rutland and temporary offices in Peru and Weston under the direction of personnel in Laconia, New Hampshire (the main office for the White Mountain National Forest). Officers examined tracts, completed title searches, assessed land values and negotiated terms for the purchase of land. ³⁹ After the government secured acreage in and around the Hapgood Estate and had developed plans for timber improvement programs and trail and road construction, President Hoover signed federal legislation in April of 1932 proclaiming the establishment of the Green Mountain National Forest. Although the nation's economy had taken a drastic downward turn since the 1928 NFRC decision, Hoover still provided the necessary support.

State officials, business interests, and conservation groups viewed the Green Mountain National Forest as an important element in Vermont's

long-term effort to strengthen its local economy. The emergence of the depression helped reinforce this viewpoint for both Vermonters and forest service officials. After 1932, the year of Roosevelt's election, forest service programs in timber improvement, replanting and disease control, wildlife management, recreational planning, road construction, and the building of water control dams played a dual role as conservation activity and economic relief. The New Deal provided significant increases in funding for both Vermont and federal forest service programs which resulted in a massive increase in the number of public works projects, the purchase of equipment and services from local businesses, numerous jobs, and the infusion of capital through the acquisition of land.

The long process of gaining support at the state and federal level which led to the creation of the Green Mountain National Forest marked a decisive transition in the use of Vermont's forests. The state ended its history of large scale and exploitive logging, based primarily on selling lumber and pulp to Eastern urban markets. In achieving this transition, Vermont turned to centralized state and federal authority. Vermonters used governmental powers to help redirect and enhance the local economy, demonstrating a new and different value concerning the environment which placed equal importance on the aesthetic quality of forested land, watershed capabilities, and timber production. This was the utilitarian value Hapgood, Senator Greene, and others held during their successful attempt to establish the Green Mountain National Forest. Nurturing and conserving major sections of Vermont's environment not only ensured a serene and beautiful setting but also a basis for long-term economic growth.

NOTES

¹George Perkins Marsh, speech before the Rutland Agricultural Society, 1847 (Rutland Historical Society).

² George Perkins Marsh, speech at the Rutland Fair, as quoted by Ronald Rood, "The Beginning of the National Forest," *Rutland Herald* supplement, June 1982.

³ Ralph Widner, ed., Forest and Forestry in the American States: A Reference Anthology (Washington: National Association of State Foresters, 1967), p. 134.

⁴H.N. Muller, "Floating a Lumber Raft to Quebec City, 1805: Journal of Guy Catlin of Burlington," Vermont History, Vol. 39, No. 2 (Spring, 1971) 116-118.

⁵U.S. Census, Special Report on the Lumber Industry, 1900, V. 9, pp. 803-897.

⁶U.S. Census, Reports on Manufacturers, 1900.

⁷ Rowland E. Robinson, *Vermont: A Study of Independence* (Boston: Houghton, Mifflin and Co., 1882), p. 364.

⁸ Ibid.

Governor Urban M. Woodbury, "1894 State of the State Address," cited by Perry H. Merrill, History of Forestry in Vermont: 1909-1959 (Montpelier, Vt.: State Board of Forests and Parks, 1959), p. 10.

¹¹ Ibid.

¹² Arthur F. Stone, in his *The Vermont of Today: With its Historic Background, Attraction and People*, Vol. 4 (New York: Lewis Historical Publishing Co., Inc., 1929) discusses Pinchot's numerous friends in Vermont and his visits and influence.

¹³ Marshall Hapgood, as cited in Arthur F. Stone, The Vermont of Today, p. 327.

14 Ibid.

¹⁵ J. Allen Taylor, "Creation of the Green Mountain National Forest," Green Mountain National Forest history file, date unspecified.

16 Perry H. Merrill (former Director of Vermont State Forests and Parks), interview held in Mont-

pelier, Vt., October 3, 1979.

¹⁷ Merrill, History of Forestry in Vermont; Harold Fisher Wilson, The Hill Country of Northern New England: Its Social and Economic History, 1790-1930 (New York: Columbia University Press, 1936), pp. 243-244.

18 Ibid., U.S. Department of Agriculture, Forest Service, "Background on Establishment of the Green

Mountain National Forest," Green Mountain National Forest history file, 1951, p. 6.

19 "Committee on Conservation and Natural Resources," as cited by Merrill, History of Forestry, pp. 8-10.

20 As cited in Widner, ed., Forests and Forestry in the American States, p. 227.

²¹ Weeks Law, Act of March 1, 1911 (36 Stat. 961; 16 U.S.C. 480); U.S. Department of Agriculture, Forest Service, *The John Weeks Story* (Washington, D.C.: Government Printing Office, 1961).

²² William Shands and Robert Healy, *The Lands Nobody Wanted: A Conservation Foundation Report* (Washington, D.C.: The Conservation Foundation, 1975), p. 15.

23 Merrill, interview and History of Forestry, p. 11.

²⁴ J. Allen Taylor (former GMNF CCC member and Administrative Clerk), interview held in Rutland, Vt., Oct. 4, 1979; and Shands and Healy, *The Lands No One Wanted*, p. 15.

²⁵ H. Tabbut, "Green Mountain Established," *The Courier*, U.S. Department of Agriculture, Forest Service, Region 7 Newsletter, Feb. 26, 1932.

²⁶ J. Allen Taylor, "Creation of the Green Mountain National Forest."

27 Ibid.; and Taylor, interview.

²⁸ William B. Greeley (U.S. Forester), letter to the Hon. Frank L. Greene dated March 19, 1928, GMNF history file. Efforts by both the state and private concerns to protect forests from fires and generally improve Vermont's forest resources are briefly outlined in Ralph R. Widner, ed., Forest and Forestry in the American States, pp. 225-229.

²⁹ Taylor, "Creation of the Green Mountain"; and Lloyd C. Irland, Wildlands and Woodlots: The Story of New England's Forests (Hanover: University Press New England, 1982), pp. 27-29.

³⁰ Gerald S. Wheeler (former GMNF Supervisor), interview in Laconia, N.H., Oct. 26, 1979.

³¹ The multi-use doctrine of the Forest Service also explains why Vermont interest in federal programs was limited to a National Forest, and thus excluded the idea of a National Park which was essentially limited to recreation and preservation.

³² Winder, ed., Foresis and Forestry in the United States, p. 225. According to Albert Gottlieb's section, "Vermont: Keeping the Mountains Green," support for the 1925 Enabling Act also came from the Greenfield, Massachusetts, Chamber of Commerce which anticipated tourist dollars from people traveling to a National Forest in Vermont.

33 Taylor, interview; and Merrill, History of Forestry, pp. 10-15.

34 Wheeler, interview

35 R. E. Atwood, Stories and Pictures of the Vermont Flood: November of 1927 (Montpelier, Vt., by the author, 1927).

³⁶ Vermont Forest Service, "Proposed National Forest Purchase Units in Vermont," Montpelier, Vt.: State Forest Service, 1928; and W. W. Ashe, "A National Forest for Vermont," *The Vermonter*, Vol. 36, No. 3, March, 1931.

37 Taylor, interview.

38 Shands and Healy, The Lands Nobody Wanted, p. 201.

³⁹ Wayne W. Mong, "Legal Aspects of Land Acquisitions," Green Mountain National Forest history file, 1965. The acquisition process was an arduous task. The federal government purchased land only on a voluntary basis — after examining and appraising acreage and achieving an agreement with the owner on a price. On a normal purchase, federal law required that deeds go back to the original grants of King George to guarantee that there were no conflicting land claims. Unfortunately, many deeds did not go back so far. An alternative on appropriate cases was to use the federal power of eminent domain, resulting in condemnation proceedings. Such a process was used only on those occasions when title was uncertain, and then only on friendly terms with the owner in which an equitable price was paid.