EARLY IN THE United States' centennial year (1876) a small group of Minnesotans organized the nation's first state forestry association. For the ensuing half century the Minnesota State Forestry Association labored patiently to impress upon Minnesotans the benefits of tree planting and forest conservation. During the same fifty years, particularly after 1885, forestry interests in other states organized their own associations as well as the American Forestry Association. By and large, forest conservation won its first victories within individual states before governmental agencies, such as the United States Forest Service, were established. It seems appropriate, therefore, to study forest conservation through the history of a state, rather than a national, forestry association.

The program of the Minnesota State Forestry Association paralleled the aims of the other state and national forestry organizations. The two programs that distinguished American forestry before 1905 were planting trees on the prairies to encourage settlers and rainfall.

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Seedbed of Forest Conservation

and preserving tracts of uncut timberland to provide reserve wood supplies and to maintain stream flow. But, just as the forestry cause was capturing popular attention in the state, the Minnesota State Forestry Association was folding its tents and dissolving. By the time of its demise, about 1925, the cause of forestry was no longer a philanthropic crusade by a few zealous individuals but, instead, a routine, bureaucratic concern of the modern state.*

In 1875 an Ohio physician and amateur forester named John Warder published a notice for interested persons to convene a national forestry congress in Chicago that autumn. Organization of the American Forestry Association was started then under Warder and completed in 1876 at a meeting in Philadelphia. Another group called the American Forestry Congress was organized in 1882, absorbed Warder’s organization that year, and eventually was reorganized as the American Forestry Association — the name it continued to carry — in 1889. A few months after the Chicago congress in 1875, thirty-five prominent Minnesotans — among them Henry H. Sibley, William R. Marshall, Ignatius Donnelly, and Henry M. Rice — announced that a meeting would be held at the State Capitol in St. Paul on January 11, 1876, to organize a State Tree Planters’ Association. One hundred or more people showed up on that date in the house of representatives’ chambers and put together an organization whose name was changed to the Minnesota State Forestry Association.2

The organizers cannot be called conservationists. They considered the regulation of logging or the preservation of forests as visions of “socialists.” Businessmen such as James J. Hill, William Crooks, Charles E. Flindrau, Simeon P. Folsom, John S. Pillsbury, and others wanted the state’s lands and resources acquired and developed by individuals. They, and the public as a whole, subscribed to the idea that individual liberties and the public welfare were best promoted when private individuals acquired, exploited, and developed the nation’s resources in whatever fashion they saw fit. The government’s part of the social compact was to make lands and resources available on easy terms. Any public policy to withhold the land and its resources from private appropriation seemed a tyrannical violation of the social compact and a denial of an American’s right to pursue happiness. To expand opportunities for Minnesota’s settlers (and to provide more customers for their busi-

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nless). the forestry association’s founders promoted agricultural settlement in the prairie counties.3

Waving grasslands rolling to hazy horizons that were unbroken by treetops stunned and frightened settlers in the 1870s. As an inexpensive counter move to encourage settlers, Minnesota’s empire builders hit upon tree planting. Through the efforts of the Minnesota State Forestry Association, the state’s financiers, businessmen, and railroad builders hoped to foster the fullest measure of agricultural and commercial development.

To Leonard B. Hodges of the St. Paul and Pacific (Great Northern) Railroad belongs the credit for organizing the Minnesota State Forestry Association. Since 1872 Hodges had supervised tree planting along the St. Paul and Pacific’s right of way. From firsthand experience he knew the importance of trees to prairie settlers. “Without fuel, fencing or shelter,” he wrote Governor Cushman K. Davis in 1874, western Minnesota “must to a great extent forever remain a solitude.” Extensive tree planting would invite settlers to the prairies, and this, he suggested, would erase the effects of economic depression. Settlers would plant wheat, boxcars would roll the grain to the mills in Minneapolis, the mills would grind wheat to flour, and prosperity would return. Once “this treeless region turns out her hundred million bushels of wheat per annum,” he predicted, then Minneapolis and St. Paul would be “merged into one great city of two hundred thousand inhabitants.”4

THE INTELLECTUAL contours of the forestry movement during the late nineteenth century closely followed the writings of George Perkins Marsh. The year 1864 saw the publication of Marsh’s Man and Nature, or, Physical Geography as Modified by Human Action. In it, Marsh reviewed what American and European writers of geography thought on such subjects as climate, forests, waters, and soil. Throughout his classic study runs the theme of nature’s sensitive equilibrium and the consequences that follow from imbalances.

From many sources Marsh compiled evidence to show that man’s ignorance of natural harmonies had brought down civilizations as great as the Roman Empire. The history of Asia Minor, northern Africa, Greece, and Italy demonstrated to him how the operation of a cause “set in action by man has brought the face of the earth to a desolation almost as complete as that of the moon.” Although Marsh carefully qualified his conclusions, he was of the opinion that forests affected at least local climates by holding back arctic and equatorial winds, moderating temperatures, and producing rainfall by condensing moisture out of clouds passing over cool, tree-filled areas. He closed his chapter on forests by warning his readers that “the vengeance of nature for the violation of her harmonies, though slow, is sure, and the gradual deterioration of soil and climate is as certain to result from the destruction of the woods as is any natural effect to follow its cause.”5

Those who advocated forest conservation seized on Marsh’s statements, dropped his careful qualifications, and hardened his conclusions into dogmas that persisted into the twentieth century. They stretched Marsh’s ideas until forestry leaders and a large segment of the American public believed that tree planting provided an effective insurance against drought by causing rainfall. Given the farmers’ desire for predictably favorable weather — especially west of the Mississippi River — it was only natural that agrarian interests would be among the strongest patrons of early forestry projects. Hodges voiced the opinion of the times when he predicted that Minnesotans, by planting millions of trees, would prevent blizzards, grasshopper plagues, hailstorms, droughts, floods, and terrifying winters. Everyone judged the fertility of the soil by the trees growing on it, and Hodges could plausibly claim that tree planting would make the soil more fertile and crops more abundant, promote denser settlement, increase wealth and revenues, and thereby lower individual tax levies. To achieve this idyllic vision the Minnesota State Forestry Association aimed at the “redemption of this treeless solitude; [and] the conversion of its desert wastes into fruitful fields.”6

Little wonder, then, that the first forestry association meetings captured widespread public attention. Optimistic orations on the nation’s manifest destiny, the reclamation of the “great American desert” through agriculture, and the commercial rewards attendant upon the cultivation of vacant lands filled the programs of

many meetings. The state’s forestry spokesmen of 1876 looked upon the grasslands as a desert to be reclaimed by tree culture. Ignatius Donnelly declared that tree planting would cause a wave of settlement to “irresistibly sweep westward” and make glad the now uninhabitable wildnesses. Hodges told his listeners that planting trees in western Minnesota could “transform this desert solitude into what nature intended it for, one of the granaries of the world.” Without groves of trees, he warned, settlers “who are now scattered over our desolate prairies will be obliged to abandon their claims.”

As its first act, the forestry association proposed the state-wide observance of Arbor Day. It called upon the legislature to award premiums to the farmers who planted the most trees in each prairie county. This was welcome news. Even before the organization of the forestry association, the shortage of wood on the prairies generated considerable public discussion. In a typical comment, the editor of the Granite Falls Journal reminded his readers that “fuel is a matter of importance to those who have none” and urged them to “turn over a new leaf, and plant more trees.”

NEBRASKA PIONEERED Arbor Day in 1872, and other prairie states soon adopted the celebration. Minnesota enacted the nation’s first tree bounty law in 1867, followed by Kansas in 1868, Missouri in 1870, Illinois in 1874, and Nebraska and others in 1879. Within a few years the idea of Arbor Day, coupled with bounties and prizes for planting trees, became very popular. Whole communities organized for tree planting, and a Worthington schoolmarm regimented her pupils into Nobles County’s “Little Foresters,” exhorting them to win the “banner county” laurels.

The premium plan elicited public enthusiasm from the start. Hodges’ proposal had such strong appeal that association members put money into a fund to provide more premiums. The state legislature appropriated $2,500 for the forestry association’s work in 1876. Private citizens and institutions made their own contributions to “encourage, aid, and advance forest tree culture upon prairie lands.” Frank R. Delano of the St. Paul and Pacific Railroad gave $250 of his own money for five annual premiums of fifty dollars to the person who planted the most trees. The St. Paul Pioneer Press offered a year’s free subscription to the winner of the “Delano premium,” and the rival St. Paul Dispatch offered free subscriptions to those who planted the most trees in each of the ten prairie counties. Not to be outdone, the Minneapolis Tribune also offered 100 free subscriptions as premiums. To this, the St. Paul and Pacific added a free round-trip ticket to St. Paul for the winner of the “Delano premium.”

Arbor Day, 1876, passed successfully in Minnesota. Thousands of men, women, and children turned out to plant trees and cuttings. Hodges estimated that Minnesotans planted at least 1,500,000 trees in one spring day and a total of eight or ten million trees during the whole year. But, for all the effort of the “Little Foresters,” the banner county awards went to Martin County, whose residents set out nearly 190,000 trees on Arbor Day, and to Faribault County, whose residents planted more than one and a half million trees during the year. This feat was a graphic lesson. “Having thus in one year educated the people about what they can do in this direction,” Hodges wrote Governor John S. Pillsbury, “the necessity of placing so many premiums [before them] is not so pressing.” But, if the Minnesota State Forestry Association was “liberally aided by the State,” Hodges had no doubt that the organization would soon make the prairies habitable.

Success bred further success. After Arbor Day, 1876, the Minnesota legislature made further appropriations to encourage forest culture as well as to the association. In 1877 the lawmakers authorized $2,000 for counties under the 1867 tree claim act and other measures the forestry association “may deem as most desirable in promoting forest culture in this State.” With these funds the association published its proceedings and a multilanguage tree planters’ manual and sent seedling trees to the grasshopper-stricken counties of southwestern Minnesota.

For a few years, the public’s generous support of the forestry association’s program sustained Hodges’ feeling of confidence. With $2,000 in the treasury and ten million trees in the ground, he felt certain that his ideas, though often “intelligible to the masses,” would ul-

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7 *St. Paul Pioneer Press*, January 13, 1876, p. 4 (first quote). Hodges, “Forest Culture in Minnesota,” 3 (second quote); Minutes, January 11, 1876, (third quote), in Minnesota State Forestry Association Papers, owned by the Minnesota Historical Society (hereafter referred to as Forestry Association Papers).

8 Hodges, “Forest Culture in Minnesota,” 3: editorial note reprinted in the *New Ulm Herald*, December 24, 1875. See also the *Worthington Advance*, December 23, 1875.

9 Minnesota, Laws, 1867, p. 60-61; Kinney, Development of Forest Law, 4-5, 182-92; *Worthington Advance*, April 6, 1876.

10 *St. Paul Pioneer Press*, January 13, 1876, p. 4; Minnesota, Laws, 1876, p. 120; Frank R. Delano to Leonard B. Hodges, January 19, 1876 (quote); Minutes, March 3, 1876, both in Forestry Association Papers; Leonard B. Hodges to John S. Pillsbury, reprinted in *The Forest Tree Planters’ Manual*, 153-53 (St. Paul, 1879).


12 Minnesota, Laws, 1877, p. 246 (first quote), 254 (second quote); Minutes, January 25, 1577, in Forestry Association Papers.

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timately prevail.” And, although the association received no money from the legislatures of 1878, 1879, and 1881, the state did provide $3,500 and $5,000 to pay bounties under the tree claim act. The absence of additional appropriations did not immediately halt the forestry association’s programs. It had already abandoned its premium program in 1878 because most farmers ignored the association’s tree planting specifications. Consequently, it distributed only $135 of $1,800 as premiums in 1878. 13

The association’s leaders decided that a tree planters’ manual “will probably be of as much service to forest culture in Minnesota as the same amount would be if distributed in premiums.” Into this project went the unexpended balance of the 1877 appropriation. Ten thousand copies of the manual were prepared, published, and distributed in 1879. Demand for the pamphlets was great, and nearly 800 were mailed in a single month in 1880. 14

The legislature made no further appropriations to the forestry association for many years. Although this undoubtedly discouraged Hodges, he calmly noted: “The Association is out of funds, but not yet dead.” The secretary’s notes for 1882, which looked even bleaker than 1881, simply stated:

“No annual meeting held.
No Legislature this winter.
No funds in Treasury.
No interest manifest among the members of the Association.”

In the face of discouragement, Hodges kept up an extensive correspondence with persons most interested in forestry. They doubtless reinforced his conviction that the interest of the people generally in the cause of Forestry is increasing and that the importance of the subject will yet make itself felt.” 15

Hodges resigned as secretary of the forestry association in January, 1883, and died shortly thereafter. The death of the association’s organizer “was a very serious blow to forestry interests in the State,” a member remarked, because “Mr. H. was about the only one of the prominent members who had a practical acquaintance with forestry.” Without an energetic leader the association drifted. Between 1883 and 1891 the Minnesota State Forestry Association existed largely because its leaders held joint meetings with the Minnesota State Horticultural Society. 16

BY THE EARLY 1880s, widespread changes in American society made many Americans uneasy. The anxieties of the 1890s coincided with the first victories of conservationists. The general air of uncertainty gave impetus and direction to certain phases of the conservation movement. Historians have noted that, in this restless decade, many Americans suddenly realized how inappropriate to an urban society, a polyglot population, and an industrial economy were the agrarian institutions and

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14 Hodges, Forest Tree Planters’ Manual, 170 (quote); Minutes, February 11, 1880, in Forestry Association Papers.
15 Minutes, March 8, 1881 (first quote), January, 1882 (second and third quotes), in Forestry Association Papers.
16 Minutes, March 9, 1883, January 13, 1885 (quote), March 30, 1886, January 8, 1887, April 30, 1889, in Forestry Association Papers.
values established by the founding fathers. Nothing less than democracy itself seemed to be at stake. In the agrarian past, universal property holding had guaranteed opportunities and liberties that were roughly equal for all. Until the 1880s Americans thought of themselves as members of a large community, more alike than different in its parts, and quite distinct from European societies. But now millions of individuals in the nation’s cities owned no property, spoke little English, worshiped in non-Protestant churches, and had no idea how the democratic system operated. These new social realities seemed to be the very European ailments to which Americans had long believed themselves immune. The result was a sense of cultural crisis that lasted until the Spanish-American War of 1898.¹⁷

Sensitive American thinkers and writers like Frederick Jackson Turner and Josiah Strong noted these changes in American life and set about searching for their causes, consequences, and antidotes. Strong portrayed the nation’s cities as the powder kegs of American civilization, a threat to the nation’s welfare. Turner professed that the frontier experience had given American civilization its democratic character and strength. Many American intellectuals set out to preserve the national heritage with crusades to limit immigration, acquire overseas colonies, regulate monopolistic industries, reform political institutions, or conserve natural resources. The conservationists shared the anxieties of the era and believed that preserving a bit of the wilderness in national parks and forest reserves would help to secure and perpetuate the nation’s frontier heritage.¹⁸

The nation’s commitment to forest conservation also accelerated after Charles S. Sargent published a Report on the Forests of North America in 1884 as a part of the tenth census. In 1886 a German-trained forester named Bernhard Eduard Fernow became chief of the United States Forestry Division within the Department of Agriculture. The division was reorganized as the United States Forest Service in 1905. Congress established three national parks — Sequoia, Yosemite, and General Grant — in California in 1890 (the only earlier national park, Yellowstone, had been established in Wyoming in 1872). Congress also passed a forest reserve act in 1891, set up an administrative system for the forest reserves in 1897, and provided funds for forest administration and protection in 1898. The forest reserves were transferred from the Department of Interior to the Department of Agriculture in 1905 and called national forests.¹⁹

Between 1885 and 1900, fourteen states established forestry boards and commissions, but only the boards in New York, New Hampshire, Maine, Oregon, Pennsylvania, and Minnesota possessed the funds and statutory muscle to protect and promote forestry. The bellwether state was New York. Its citizens proposed a forest preserve in the Adirondack Mountains in the 1880s, and the


state legislature established the Adirondack Forest Preserve — now Park — in 1885. With it New York enacted the most comprehensive forest laws and protection system then existing in the United States.20

Meanwhile, the Minnesota State Forestry Association slowly emerged from hibernation under the wing of the Minnesota State Horticultural Society. A new group of men took charge in the late 1880s and became active in both the state and national forestry associations. These new leaders were middle- and upper-class gentlemen — among them, Judson N. Cross, Christopher C. Andrews, and Samuel B. Green — who were engaged in businesses and the professions. Most of them were well educated. Many were former Civil War officers, some were engaged in social reform activities, and most of them believed in a civil service based on merit. Ever mindful of their class responsibility to govern for the masses, these men, in short, espoused values that later found expression in "progressivism."21

In papers, reports, and speeches, forestry leaders displayed a learned layman's understanding of scientific forest management as practiced on George W. Vanderbilt's Biltmore estate in North Carolina or the Black Forest in Germany. They knew of and deplored the loggers' prodigal practices from Maine to Minnesota. For most laymen, practical forestry meant systematic planting and harvesting of forest "crops." But forestry was more than just raising timber. It was then a general ecological science. The use and conservation of wood, water, wildlife, and soil resources were embraced under "scientific forestry."22

By the early 1890s the Minnesota State Forestry Association's position was expressed in a few basic arguments: Widespread deforestation affected the soil, water, and climate adversely; the state, not individuals, possessed the capability to care for forests in the long run; public lands and resources belonged to all the people in perpetuity; and forests should be "cropped" and managed in conformity with appropriate scientific and economic principles. For its time, the forestry association's program harmonized the commercial and nonutilitarian aspects of forest use.23

Throughout the 1870s and 1880s agrarian ideas about forestry predominated because prairie tree plantations benefited the farmers. Agrarian spokesmen returned to the conclusions of George Perkins Marsh during the droughts of the 1880s and 1890s. Marsh's ideas, coupled with the air of impending crisis that impregnated the 1890s, imparted a sense of restrained anxiety to the utterances of forestry spokesmen. They decried white pine logging as wholesale deforestation of northern Minnesota. The Minnesota State Horticultural Society solemnly reported that the "cyclones, storms, and floods" of 1884 had their cause in "the depletion of our timber and forestry supplies." In a later report, the society concluded that, unless the government checked the "devastations of our native forests," deforestation would transform our naturally rich lands into desert conditions, by drying up our springs and depleting our lakes and rivers to the injury of navigation and all other industries."24

Joseph O. Barrett, the forestry association's secretary, ran for the office of lieutenant governor on the Farmers' Alliance ticket in 1892. On the stump, he elaborated upon the consequences of deforestation. Denuding the land of timber (which grossly overstated the extent of logging in Minnesota) removed moisture from the air, he claimed. Crops failed in the droughts, and farmers' families went hungry. Tariff reform or any other nostrum was only a "miserable shift of responsibility" as long as the government ignored the "most vital of all reforms — forests on our waste lands, forests on our farms." A careful study of history had convinced him that "a people retrogrades in wealth, in production, in patriotism, in stamina of citizenship, with the recession of their forests!"25 These notions circulated as common currency as late as 1911 when Gifford Pinchot, chief of the Forest Service from 1898 to 1910, remarked that "disaster and decay in every department of national life [would] follow as a matter of course" the depletion of a

20Kinney, Development of Forest Law, 6-19.
21For a profile of leading national forestry figures during this period see Larsen, in the Iowa State Journal of Science, 34:521-44 (1960). Hofstadter, in Age of Reform, 131-73, suggests that reformers were motivated by a desire to maintain social status and that reform movements offered them a means by which to retain their social power.
22B. E. Fernow, What Is Forestry? (Washington, D.C., United States Department of Agriculture, Forestry Division, Bulletin no. 13, 1891); Proceedings, 1887, p. 3-4; George H. Parsons, "Forest Administration — Federal or State?" in American Forestry Association, Proceedings, 1893, p. 123-32 (hereafter referred to as Proceedings). George S. Rafter, "Stream Flow in Relation to Forests," in Proceedings, 1897, p. 139-65. The broad view of forestry as a general resource science can be found in the Department of Agriculture, Annual Reports, 1911, p. 59-90, wherein the secretary defined forestry as the "intelligent control of the processes of nature, in order to reap the largest advantage"; and the Forest Service Report of 1919 (United States Department of Agriculture, Annual Reports, 1919, p. 194) stated that the aim of forestry is the "orderly development of all resources."
25St. Paul Globe, February 3, 1891, p. 4 (quotations); Walter C. Brower, Water Disappearance in Minnesota, (St. Paul, 1896?), offered as a "practical remedy" for droughts the planting of pine tree groves.
nation's resources.\textsuperscript{26} Congress lent the rainfall theory credence in 1891 and 1892 by directing the Division of Forestry to add rain-making experiments with cannons to its existing responsibilities.\textsuperscript{27}

State and national forestry organizations could do little for forestry in the 1880s. They could only compile information on logging and the extent of remaining forest resources or appeal for park and forest reservations. But public opinion changed after 1885, and public action became manifest. In 1888, for the first time, the Minnesota State Forestry Association turned its full attention to preserving standing timber. A year later the association urged the federal government to preserve, protect, and rebuild the nation's forests by undertaking forestry in the same way it had undertaken agricultural, horticultural, and waterway improvements. Many forestry leaders around the nation heard and echoed the words of Iowa Congressman John F. Lacey. We "have not been content with improving upon nature," he told the American Forestry Association, "but have acted the spendthrift part in wasting her stores." His remedy was simple: "We must give up some part of our country to nature in order to keep the remainder for ourselves."\textsuperscript{28}

**GIVING UP PART** of the country to nature was easier said than done. Most timberland belonged to lumber companies or the United States government. Lumbermen turned a deaf ear to the pleas of forest conservationists, contemplated existing white pine prices, and continued cutting. State and federal land-office clerks cynically participated in fraudulent timber sales.\textsuperscript{29} Forestry associations weakened their case through ignorance of logging methods and market conditions. Their pleas for restraint in cutting were both vague and ineffective. They simply asked for something that was outside the nation's previous experience, something that the existing market would not allow the lumbermen — as individual operators — to do. Either all lumbermen must be compelled to exercise restraint or none would. The only agencies capable of forcing uniformity and restraint were the state and federal governments.

When Minnesota's forestry association members realized that state laws and a forestry commission were their best tools for ensuring forest protection, the organization came to life again. The new spokesmen in the forestry association pressed the state to regulate timber cutting and urged public ownership of forest lands. They wanted nothing less than a government forestry bureau staffed by scientifically trained experts who were imperative to the wiles of lumbermen and to political patronage.\textsuperscript{30}

Not until 1894, when the devastating Hinckley forest fire compelled the public to attend to the question of forest protection, did the Minnesota State Forestry Association's program make substantive gains. By 1905 public opinion, through legislative action, had accepted and supported the salient features of the forestry association's program.

Public control of Minnesota's remaining timberland was the first objective of the forestry association. During the last quarter of the nineteenth century, newspapers and government reports had recorded widespread "raids" on the wealth of the public domain. As secretary of the interior (1877–81), Carl Schurz had vainly urged Congress and President Rutherford B. Hayes to reserve from sale the nation's forest lands. For more than a decade his and similar pleas were ignored. A few Minnesotans joined in lamenting the "waste, the extravagance, the unpardonable sin of sheer neglect" that had brought about the deplorable ruin of the nation's forests. They criticized the government's disposal, or donation, "or sale for a song, of vast wood lands" to railroads and lumber companies that had "no regard for the sad consequences of their deforestation of the country." Forest protection was a question "too important to be left to the irregular, spasmodic action of individuals; [therefore] it must be the protege of the state."\textsuperscript{31}

To start a state forestry program, the Minneapolis Journal of February 4, 1891, suggested creating a park at the headwaters of the Mississippi River for "sanitary,
commercial, and agricultural reasons." The same year, Congress authorized the president to "set aside and reserve" from sale forest lands (an authority that Presidents Benjamin Harrison, Grover Cleveland, and Theodore Roosevelt used to the fullest). A few weeks after Congress granted this authority, the Minnesota legislature petitioned the president to reserve not less than 40,000 acres along the international border at Rainy Lake as a national park to "promote rainfall and humidity in our atmosphere and add to the beauty of the state and healthfulness of the climate." (Congress created Voyageurs National Park there in 1971.) A few weeks later, the lawmakers established a state park of nearly 20,000 acres at Lake Itasca to protect the Mississippi River's headwaters and river navigation.\(^2\)

Although elated with the newly established park at Lake Itasca, the forestry association members were disappointed when President Harrison ignored their petition for a national park. They addressed another petition to President Grover Cleveland in 1893 and requested a total reservation of two million acres at the headwaters of the Mississippi, Red, St. Louis, and St. Croix rivers (all the headwaters of which are now in state or national forests). Again, nothing happened. Despite apparent failure, the national park proposal gave the forestry association a tangible goal around which to rally support. The public discussion for, as well as against, the proposed parks was interpreted as "an omen of national success."\(^3\)

Opposition to the national park proposal came swiftly from several quarters. A few days before the state fores-


\(^3\)St. Paul Pioneer Press, January 16, p. 4, 5, January 19, p. 5, January 21, 1892, p. 6; Mississippi Valley Lumberman, January 22, p. 2, February 5, 1892, p. 1; Minutes, January, 1892, January 18, 1892 (quote), January 11, 1893, in Forestry Association Papers; Minneapolis Tribune, January 13, p. 4, January 19, p. 4, January 26, 1892, p. 5.
try association held its annual meeting in 1892, the St. Paul Pioneer Press published an interview with two men reputedly well acquainted with the Rainy Lake region and opposed to the park. They reported that the area contained too much potential wealth to be locked up. Canadians had recently discovered mineral ores a few miles north of the border (near Atikokan, Ontario), and gold “in paying quantities” was also known. Undoubtedly, iron lay buried there for the finding, along with great white pine forests and rich agricultural lands “of vast importance.” Rainy River was navigable, and the Canadians were then constructing (but never completed) locks around International Falls, which held vast power potential for manufacturing. (The falls were acquired by Edward W. Backus, a Minneapolis lumberman, in 1900. His plans to harness the whole Rainy Lake watershed for hydroelectric power so outraged conservationists a generation later that they brought about wholesale protection of the region’s water levels with the Shipstead-Newton-Nolan Act of 1930). In short, the park “would be disastrous if it should be successful” because it “could only be pernicious to the interests of Minnesota.” The Pioneer Press referred to the area as one “destined to be a rich inheritance for the people of Minnesota” and praised the report because it taught Minnesotans “what possibilities of wealth lie buried there” and thereby forestalled “[their] perpetual alienation from our common life.” Similar opinions rumbled forth from the offices of lumbermen, land brokers, and others opposed to wholesale land reservations.34

Public opinion still preferred the benefits of expanding agricultural, mineral, lumber, and manufacturing enterprises to the benefits of “scenery.” But, as the Minneapolis Journal noted on January 26, 1892, there is a “decided change in public sentiment touching the matter” of forest protection. Minnesotans began to “seriously consider the economic and commercial and sanitary advantages of state supervision which shall prevent reckless waste of timber.” Forest protection enjoyed public support as long as it did not prevent “the fullest practical use of the timber thereon for commercial purposes, and without interfering [sic] with the appropriation by actual settlers of any agricultural lands in that region, or with the development of its mineral wealth.” Most forestry association members fully shared these sentiments. Forests, they argued, would be established only on lands classified as unfit for agriculture and would remain open to mining, regulated logging, hydroelectric power, and other developments.35

The forest reserve plan proposed by the forestry association in Minnesota was literally a carbon copy of a proposal set down about 1891 by Fernow and the American Forestry Association. Recognizing the public’s antagonism toward public reservations of unappropriated resources that could be exploited for profit, Fernow shrewdly modeled the forest reserve plan along commercial lines so as to give loggers the greatest amount of timber possible without surrendering governmental control of the lands and remaining timber. By establishing the forest reserves, the government did not propose to withdraw lands from use but, rather, “to increase their usefulness” and thereby increase the productivity of the region by “making each acre do its utmost for the benefit of our people.”36 In a sentence, Fernow cast the doctrine of “highest use” that colored forest and resource planning for many decades after. In the place of private

35 St. Paul Pioneer Press, January 18, 1892, p. 4 (quotes); Minneapolis Tribune, January 26, 1892, p. 5.
36 Minneapolis Tribune, January 13, 1892, p. 4; emphasis added by author.

LOGS LOADED on railroad cars in about 1900 are ready to be hauled to the mill by this steam locomotive. Stumps and slash left after logging were a common fire hazard.
exploitation and its often haphazard results, he deftly substituted a plan for orderly development and exploitation under government supervision. Justification for forest reserves rested entirely on economic grounds. Reserves would prevent a needless waste of resources. They would prevent forest fires, provide raw materials for a permanent lumber industry, promote railroads and other wood-using industries, preserve water supplies essential to agriculture and navigation, and assure that cutover land would be reforested or settled wherever appropriate. Fernow's plan set the tone for the Minnesota State Forestry Association's program to protect forest lands "as a source of continual revenue and forest products to the public." 37

THE HINCKLEY forest fire of September 1, 1894, gave an unexpected thrust to the forestry association's plans. At the end of a summer remembered for its heat and low rainfall, a series of forest fires broke out in central Minnesota. Gale winds whipped these into racing fire storms that engulfed a dozen communities in northern Minnesota, Wisconsin, and Michigan. Smoke hung so heavily across the region that navigation on Lakes Superior, Huron, and Michigan was impeded. In all, the fire consumed, aside from vast acreage, more than four hundred men, women, and children near Hinckley. The earliest reports registered shock: "Hinckley Is in Ashes," headlined the Pioneer Press; and "A Cyclone of Wind and Fire," cried the Minneapolis Tribune. From Hinckley to Ironwood, Michigan, forest settlers watched "a ghastly yellow glare like that of some old paintings of the Last Judgment." 38

The flames moved so rapidly that hundreds fell in their tracks before they could flee. Flames advanced in "huge leaps" as they rolled along on cyclonic winds of their own making, twisting off treetops and hurling blazing branches before them. From Pine City a reporter telegraphed: "The disaster is full and complete and sad enough to dismay the stoutest heart. Relief, temporary, substantial and immediate is needed, and needed bad [sic]." 39 On September 2 came the further message: "The walls of the school house, the iron fence about the town hall property, the bank vault and one absolutely uninjured out house is [sic] all that is left to mark the site of Hinckley." Residents of the town sought refuge in water-filled gravel pits and shallow lakes or boarded trains to Duluth and Pine City. "A man going insane, a patient groaning life away, a woman giving premature birth, a heap of cinders representing a human form" were only a few of the melancholy sights after the fire. 40

Public response to the Hinckley victims was immediate and generous. City mayors and Governor Knute Nelson issued proclamations appealing for assistance. Aid came from every county of Minnesota, all over the United States, and from Europe. An English lord contributed $5,000, and smaller sums came from Canadian and American citizens. Individuals and businesses do-


39 St. Paul Pioneer Press, September 2, p. 1 (quote), September 3, 1894, p. 3; Minneapolis Tribune, September 3, 1894, p. 1. Most of the major papers around the state carried extensive accounts of the fire, the grisly deaths, and breathless escapes of its victims. For a comprehensive treatment of forest fires see Stewart H. Holbrook, Burning an Empire: The Story of American Forest Fires, especially 13-30 (New York, 1943).

nated food, clothing, medicine, and supplies. But, beyond that, public thinking about forest protection had unalterably changed.

Less than a fortnight before the Hinckley catastrophe, Christopher C. Andrews addressed the American Forestry Association on the subject of forest fires. They are an annual occurrence in Minnesota, he explained, and "are treated as a sort of nine-days' wonder — deeply lamented and quickly forgotten." Americans showed they were "only semi-civilized" for allowing such preventable calamities to occur. If it was then August, and the public paid scant attention to Andrews' remarks. A day before the Hinckley fire, the Mississippi Valley Lumberman, a trade publication, reported that leading sawyers considered the reports of forest fires to be "greatly exaggerated" so they were not "worrying any." Platt B. Walker, editor of the Lumberman, took up the subject of fires, deplored them, urged strict enforcement of existing laws, applauded Andrews' speech, and prophetically concluded that "the agitation of this great question will soon result in some good to the fire stricken areas of forest in this country." 43

The great fire spurred hundreds of editorial responses around the nation. A contributor to the staid North American Review observed that the necessity of reform is rarely admitted until "the significance of the danger is brought home, in terrorem." 44 Walker commented that no one could have predicted the exact date of the fire, but year after year "an inconceivable quantity of the most highly inflammable [sic] material" lay strewn across northern Minnesota, Wisconsin, and Michigan "without the slightest precaution against fire being taken." Naturally, the lumbermen would bear their share of the blame for the "careless system" of cutting timber. "The only wonder," Walker continued, "is that the whole region has not met with such disasters long ago." 45

The lumbermen themselves took no united stand toward preventing fires. Some urged the enforcement of existing fire laws. A few argued that pine is a natural fire hazard and should be cut as quickly as possible to forestall further disasters.46 Others, together with some of the newspapers and the forestry association, championed the idea of "an intelligent system of forestry" to supervise timber cutting and the removal of "balsamic offal and debris." Minnesotans suddenly realized there was "nothing new" in the results of these fires. Each previous fire tolled a "terrible warning of the fate that overhung those forests and their inhabitants" if logging practices were not changed. While the blackened trunks "clad in mourning" seemed to bespeak the "improvidence of the system," the public lamented the destruction as a "terrible penalty" to pay for the "neglect of the simplest precautions in our methods of timber cutting." One editor asked, "What is to be done about it?" and then answered his own question by urging the state to use its power to protect persons and property by regulating timber cutting and refuse disposal.47

As September blended into October, a broad spectrum of public opinion reached a consensus on the subject of forest fires. The state can and must prevent them. Members of the St. Paul Commercial Club, led by C. C. Andrews, convened a forest fire conference on October 4, 1894. Among persons to sit down and discuss the fire were representatives of the Minneapolis and Duluth commercial clubs, a few lumbermen, members of the Forest Fire Relief Commission, H. B. Ayers of the United States Forestry Division, W. A. Jones of the United States Corps of Engineers, Samuel B. Green of the University of Minnesota, and members of the Minnesota State Forestry Association. They recognized the "terrible problem" before them and urged public action while the "memories of loss of life and destruction of property is [sic] still fresh in our minds." 48 C. A. Graves of Duluth assured the delegates that the state legislature would listen to them. In his opinion, "Pecuniary interests and vested rights and all that may stand in the way [of fire prevention] should be brushed aside." The delegates agreed, and Andrews brought forward a forest protection plan for consideration. 49

Andrews' plan was modeled on forest protection systems already working in New York, Maine, and New Hampshire and owed much to Bernard E. Fernow. Under this plan a state fire warden or forestry commission would be appointed to supervise the work of local wardens, who were the regularly elected township clerks, supervisors, and constables. Special rangers would be appointed in dangerously dry seasons, watchtowers would be constructed from which to spot fires, and telegraph lines would be laid for reporting fires. Lumbermen would be compelled to burn their debris early in the spring, and railroads would be forced to clear their rights of way and install spark arresters on all loco-

41 See St. Paul Pioneer Press, September 2, 3, 4, 5, 1894: Minneapolis Tribune, September 2, 3, 4, 5, 1894; Minnesota State Commission for the Relief of Fire Sufferers, Report, 1895, for details of relief.
43 Mississippi Valley Lumberman, August 31, 1894, p. 7 (first quote); p. 9 (second quote).
45 Mississippi Valley Lumberman, September 7, 1894, p. 7.
48 St. Paul Pioneer Press, October 4, 1894, p. 8; Minneapolis Tribune, October 4, 1894, p. 5 (quotes).
motives. Fernow suggested that the protection system be financed by special taxes levied on railroads and lumber companies. Members of the St. Paul forest fire conference were unanimous in adopting a resolution urging the state to establish a fire protection system.50

Such a system had been proposed to the legislature in 1893, but it had provoked only laughter from the senators. No one laughed now. At first, editor Platt B. Walker had taken "no stock whatever in the expensive and impractical scheme" devised by Fernow. After the 1895 legislature enacted into law the salient features of such an "expensive and impractical scheme," however, he and other lumbermen gave it whole-hearted support. In 1899 the opposition of the lumbermen prevented the repeal of the forestry law. If there are changes to make in the law, Walker commented then, let the law be strengthened.51

TWO FIRE PREVENTION plans were presented to the legislature in 1895. One was advanced by the St. Paul Commercial Club and Andrews and the other by the state forestry association. After conferences and compromise, an amended forestry association bill was introduced into the legislature and enacted on April 18, 1895. The bill provided for a chief fire warden to be appointed by the forest commissioner (the state auditor) and local wardens (elected township and municipal officials) to suppress fires. The bill imposed modest fines for setting fires and provided a small operating appropriation. Wisconsin also passed a fire prevention law in 1895, but compromise weakened it and further amendments crippled it entirely. The Minnesota state auditor chose Andrews as chief fire warden, and he quickly assumed his responsibilities. His annual reports, sixteen in all, were praised for their literary and scientific merits. For a few years the elderly chief fire warden was a national figure in forestry circles.52

The first step toward the long-awaited park and forest reserves came in 1896. Judson N. Cross, who became president of the association in 1899, designed a bill whereby the federal government, individuals, or corporations could donate lands to the state as forest reserves. Although the bill failed to pass in 1897, it became law in 1899. The legislature established a Minnesota State Forestry Board to care for the anticipated state reserves. Not long thereafter, former governor John S. Pillsbury conveyed a thousand acres of cutover land to the state for its first reserve. Within a decade the state owned about 40,000 acres of forest reserves.53 The Cross bill laid the first stone in Minnesota's state forest system.

The most substantial contributions of the Minnesota State Forestry Association fell between 1891 and 1896. In these five years the association had carefully tilled the fields of public sentiment until the body politic was ready for a national park (in 1891 and 1893), a fire warden system (1895), and state forest reserves (1897–99). Unfortunately for the forestry association, the fire warden law isolated it from the limelight of popular forestry. It was further sidetracked by the 1893 legislature which provided the association with funds to be used only for continuing prairie tree plantations. The association lost its semiofficial educational responsibilities in 1895. A new law of that year directed the chief fire warden, not the forestry association, to "investigate the extent of the forests in the state, together with the amounts and varieties of wood and timber growing therein . . . the method used, if any, to promote the regrowth of timber, and any other important facts relating to forest interests." When the legislature again appropriated funds to the forestry association, in 1897, it specified that the money was to be spent only for prairie afforestation.54

The fire warden law marked the decline in the fortunes of the Minnesota State Forestry Association in other ways, too. Andrews was very busy as chief fire warden and very much in the public eye. His numerous speeches, essays, and annual reports captured more popular attention for the forestry cause than the forestry association did. When a second national park proposal caught public attention in 1899, other groups — particularly the Minnesota Federation of Women's Clubs — seized the initiative. After three years of controversy, Congress passed the Morris Act in 1902, creating a federal forest reserve that eventually became the Chippewa National Forest. The press and public leaders applauded Andrews and the Women's Federation, not the forestry association, for this accomplishment.55

50St. Paul Pioneer Press, October 4, 1894, p. 8; Minneapolis Tribune, October 4, 1894, p. 5.
52Minutes, January 16, April 18, 1895, in Forestry Association Papers; Minnesota, Laws, 1895, p. 472-77; Vernon Carnstensen, Farmos or Forests: Evolution of a State Land Policy for Northern Wisconsin, 1850–1932, 21 (Madison, 1958); Mississippi Valley Lumberman, June 7, 1895, p. 10. See C. C. Andrews Papers, owned by the Minnesota Historical Society, and the Forestry Division Correspondence, 1895–1910, in the Minnesota State Archives, for the many requests Andrews received from foresters wanting copies of his annual reports.
54Minnesota, Laws, 1893, p. 396–97; Laws, 1895, p. 472-77 (473, quote); Laws, 1897, p. 396.
WHY DID the Minnesota State Forestry Association start to fade away just at a time when conservation was a part of popular political programs? More than anything else the association dimmed in the shadows of its own successes. It had induced the public to demand and expect state action on behalf of forest conservation. The state responded by creating the offices of chief fire warden, forest commissioner, and the forestry board. To fill these, Minnesota's governors chose knowledgeable men, most of them association members. Within a few years these state appointments withdrew from the association the time and energies of its most resourceful leaders. Men such as Andrews, Cross, Samuel B. Green, and Sidney M. Owen carried on the association's aims from their public offices. In many respects, the association underwent a metamorphosis.

The forestry association might have remained an energetic organization had it received the funds to work as an auxiliary of the state forestry agencies. The circumstances surrounding the association's demise were unwittingly expressed by Andrews in 1903 in a letter to

George W. Strand, the association's secretary. Strand had written Andrews and asked him to request state funds for the association. "I should be glad to have an appropriation for the Forestry Association," Andrews replied, "but I fear that to ask it would prejudice the two bills now before the legislature, both of which call for increased appropriations for forestry [board] purposes."

After 1903 the Minnesota State Forestry Association lived a hand-to-mouth, fits-and-starts existence. For the rest of its days it was closely associated with the University of Minnesota's School of Forestry. It published *Minnesota Forester* from 1908 until 1911, and *North Woods* from November, 1911, until December, 1923, as the official magazine of the association and the newly organized Minnesota Forest Service. In articles and editorials the association's spokesmen successfully championed an experimental forest for the University of Minnesota's forestry school (1908–10), establishment of a regular Minnesota State Forest Service (1911), and an amendment to the state's constitution to provide for the creation of state forests (1914). In later years the association advocated game refuges (1916) and vainly protested the widespread drainage of peat marshes in advance of settlement (1919). During the early 1920s, new conservation organizations, such as the Izaak Walton League, took up many of the causes advanced by the association. By 1925, the tents were folded and the Minnesota State Forestry Association passed out of active existence. In passing, it left Minnesota with the legacy of a strong and comprehensive state forestry program.

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C. C. Andrews to George W. Strand, February 20, 1903, in Forestry Association Papers.


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ALL PHOTOGRAPHS are from the Minnesota Historical Society's picture collection. Alan Ominsky drew the map on page 24.