

*“Something akin to a second birth”:
Joseph Trimble Rothrock and the
Formation of the Forestry
Movement in Pennsylvania,
1839–1922*

PENNSYLVANIA'S VERDANT LANDSCAPE might look entirely different had it not been for the efforts of conservationists in the late nineteenth and early twentieth centuries. Devastated by logging and fires by the end of the nineteenth century, the vast majority of the commonwealth's forests today are second growth. Forests were an essential resource for early Americans. Before widespread development of coal and petroleum products, timber was the primary fuel source for heating, lighting, and motive power. By 1840, some calculate that 95 percent of these energy needs were supplied by wood. Many landowners cut down wooded areas on their property to supplement their income. In addition, farmers burned woodlands to make more space for pastures, while expansion undertaken by the rail systems further depleted timber supplies. During colonial times, Pennsylvania, or “Penn's Woods,” had been densely covered in old-growth forests. Over time, however, nearly all forested areas were harvested and left barren by various industries. By 1895, Pennsylvania had experienced a sharp decrease in the percentage of forested areas, from 90 percent of the state's acreage to approximately 36 percent. Of the state's land base of 44,817 square miles, at least 4,716 had become wastelands or worse and an additional 4,000 square miles of farmland had been abandoned because of degradation.¹

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¹ Donald J. Pisani, “Forests and Conservation, 1865–1890,” *Journal of American History* 72

One of the most important early conservationists was Dr. Joseph Trimble Rothrock. Considered the “Father of Forestry in Pennsylvania,” he made enduring contributions to both forestry and botany by organizing a forestry movement within the state and paving the way for creation of a state forestry agency. Rothrock became, as the National Association of State Foresters noted, part of “that small band of a dozen or so who endowed America with a ‘conservation conscience’ at a time when its physical wealth had been sorely ravaged.” Rothrock’s extensive influence on Pennsylvania forestry is evident in the policies and practices adopted under his leadership: the creation of state-owned forest reserves, the development and promotion of educational programs to raise public awareness of the importance of forestlands, and increased focus by the state on public health and well-being. These many achievements attest to his influence on Pennsylvania’s forestry policy and conservation history. Under Rothrock’s direction, forestry in Pennsylvania became a professional field, controlled by educated experts. While his name and life may have been widely forgotten, especially in comparison to figures such as Gifford Pinchot, his accomplishments in creating an organized and professional forestry network are visible throughout the commonwealth. The creation of a state-supported forestry division, led by a scientific and educated elite, allowed trained individuals such as Pinchot to command political power. A complex political figure, Rothrock exuded Progressive notions of the ability of man to control and improve his environment, and he sought to build a political and professional network to support his efforts to save Penn’s Woods.²

Conservationism, often coupled with and like Progressivism, became an important movement in early twentieth-century politics. Proponents of environmental protection, however, did not all share the same fundamental philosophy. On one side of the divide were conservationists, who deplored the rapid depletion of natural resources and the squandering of related goods because such resources should be used efficiently and responsibly. This perspective was a utilitarian one (shared, e.g., by noted

(1985): 342, 343–44; Lester A. DeCoster, *The Legacy of Penn’s Woods: A History of the Pennsylvania Bureau of Forestry* (Harrisburg, PA, 1995), 7; Peter Linehan, “Saving Penn’s Woods: Deforestation and Reforestation in Pennsylvania,” *Pennsylvania Legacies* 10 (2010): 20; Ralph R. Widner, *Forests and Forestry in the American States: A Reference Anthology* (Missoula, MT, 1968), 21.

² DeCoster, *Legacy of Penn’s Woods*, 7.

politician and forester Gifford Pinchot). Others, labeled preservationists, advocated conservation on more philosophical, aesthetic, and transcendental grounds. Preservationists advanced forest protection and preservation because they believed in the natural world's intrinsic value, apart from its usefulness to man. In line with the conservationists and many Progressives, Rothrock promoted primarily utilitarian forestry ideas. However, despite his proclivity to view the forests in economic and material terms, Rothrock also shared preservationists' respect and appreciation for nature on its own terms. Both ideology and politics influenced Rothrock's environmental opinions, decisions, and policies.³

Rothrock displayed both conservationist and preservationist tendencies, but more importantly he was able to make the connection between the rhetoric of reform and political policy. Because Rothrock was able to translate complex scientific knowledge into lay terms through a Progressive filter, he was able to persuade both the public and policymakers and to enact change. Many citizens and politicians saw Rothrock as someone experienced with and knowledgeable about environmental issues to whom they could turn. He was able to bridge these two publics—the lay audience and legislators—and he spoke in ways that allowed him to accomplish his goals during this transitional period. Rothrock was a gentle and educated expert; he reassured Pennsylvanians that while the world needed to change—and that change may have been frightening to some—he and others educated in and experienced in forestry would help to guide them through the change and help them adjust to efforts to tackle the deforestation issue within Pennsylvania. As a member of the new scientific elite, Rothrock commanded respect from average citizens and ushered in the professionalization of forestry. Progressivism, which was fundamentally the belief in the manageability of the world, heavily influenced this transition, and conservation programs became a major staple of the Progressive political movement. The programs Rothrock espoused were intended to manage the landscape for the public's benefit, and he worked to achieve his goal by making these

³ Roderick Nash, "John Muir, William Kent, and the Conservation Schism," *Pacific Historical Review* 36 (1967): 427. Also see Char Miller, *Gifford Pinchot and the Making of Modern Environmentalism* (Washington, DC, 2001), 4–12. The term "conservation" in this context originated with Pinchot and a colleague. See John M. Meyer, "Gifford Pinchot, John Muir, and the Boundaries of Politics in American Thought," *Polity* 30 (1997): 270, 274–80.

changes and ideas appealing. He imbued the work with a beauty that politicians could not.⁴

In *Conservation and the Gospel of Efficiency: The Progressive Conservation Movement, 1890–1920*, Samuel Hays argues that conservationism was largely a scientific movement, through which scientific elites used their authority to shape environmental-resource policy and ultimately to attempt to reform the political system so that it would be guided by educated technicians in the furtherance of efficiency. Rothrock fits Hays's model, using his influence to enact legislation, including legislation that led to the creation of professional institutions. Rothrock seems unique, however, for his strong desire to educate the public for reasons that went beyond his efforts to create public support and political pressure for his goals.⁵

The few published works on Rothrock limit themselves to biographical surveys.⁶ In addition, the scholarship on forestry and preservation in Pennsylvania in the nineteenth and twentieth centuries is sparse. Such works occasionally mention Rothrock, though they tend to focus on political and national figures such as Pinchot and Theodore Roosevelt, while mentioning Rothrock infrequently in comparison (an example being *American Forestry* by William Robbins, which references Rothrock three times and Pinchot approximately twenty-five). Pieces specifically detailing forestry history in Pennsylvania are few in number, but authors typi-

⁴ John F. McClymer, *War and Welfare: Social Engineering in America, 1890–1925* (Westport, CT, 1980), 5; Donald Worster, *Nature's Economy: A History of Ecological Ideas* (New York, 1985), 262.

⁵ Samuel P. Hays, *Conservation and the Gospel of Efficiency: The Progressive Conservation Movement, 1890–1920* (1959; repr., Pittsburgh, PA, 1999), 1–4.

⁶ Three brief biographical articles were published in the early twentieth century, two by colleagues of Rothrock: Joseph S. Illick, "Joseph Trimble Rothrock: Father of Pennsylvania Forestry," *Pennsylvania German Society* 34 (1929): 84–94; Henry Pleasants Jr., *Three Scientists of Chester County* (n.p., 1936), 37–49. A third, an autobiographical sketch, appeared in a larger text: "Joseph Trimble Rothrock," autobiographical sketch in *Some American Medical Botanists Commemorated in Our Botanical Nomenclature*, ed. Howard A. Kelly (Troy, NY, 1914), 202–13. More recently, Susan Dudley and David R. Goddard published a 1973 article about Rothrock and forest conservation that succinctly outlines his work in establishing forestry as a government division in Pennsylvania: "Joseph T. Rothrock and Forest Conservation," *Proceedings of the American Philosophical Society* 117 (1973): 37–50. Elizabeth H. Thomas of the Pennsylvania State University at Mont Alto wrote an article on Rothrock in 1977 focusing on his forest protection efforts and founding of the Mont Alto Forestry School: "Forest Protection and the Founding of Pennsylvania's First Forestry School, 1901–1903," *Pennsylvania History* 44 (1977): 291–315. The most comprehensive and recent scholarship on Rothrock was completed by Eleanor Maass in 2003, *Forestry Pioneer: The Life of Joseph Trimble Rothrock* (Lebanon, PA, 2003). While this piece is the most detailed and the only full biography to date, its citations are sparse.

cally make satisfactory reference to Rothrock. Few authors, however, have drawn substantial conclusions about Rothrock's life. Rothrock is a difficult figure for historians to analyze because of his complex character and transitional role.

The recognition of the importance of forests and concern about deforestation were not new to the late nineteenth century. James Fenimore Cooper in *The Pioneers* in 1823 and *The Prairie* in 1827 decried the growing destruction of trees, and André Michaux's influential *North American Sylva* was published in English in 1849. Most nature-conservation sentiments that predated the Civil War, however, focused on aesthetic, poetic, and devotional aspects of nature, as well as upon the connection between the human and natural worlds. These were the sentiments that informed Romantic writers in the mid-nineteenth century. By 1850, however, the scientific community had begun to evolve from a collective group of amateurs into a professional body linked with institutions.⁷

This article explores Rothrock's role in the development of the forestry profession, looking at Rothrock's education and early experience with environmental issues, his role as a teacher and organizer within both the forestry movement and the larger community, his work and achievements in professionalizing the field of forestry, and his importance as a political figure involved in problem solving and lobbying on forestry-related issues. The final section discusses Rothrock's lasting legacy.

Becoming a Forester

Dr. Joseph Trimble Rothrock was born April 9, 1839, in McVeytown, Mifflin County, Pennsylvania. He attributed his love of botany to his mother, Phoebe Brinton Trimble, who was a relative of the famous Pennsylvanian botanist William Darlington. In later life, Rothrock recounted how his mother taught him about different plant species when he was a child, fostering in him an abiding interest in and enthusiasm for botany. Nearly all accounts of Rothrock's life indicate that he was a sickly child; in an autobiographical sketch, he explained, "my education in early life was greatly interfered with by lack of vigorous health rather than by actual disease; open air was an absolute necessity to me, and throughout

⁷ Pisani, "Forests and Conservation," 342; Richard W. Judd, "A 'Wonderfull Order and Balance': Natural History and the Beginnings of Forest Conservation in America, 1730–1830," *Environmental History* 11 (2006): 30, 13.

my entire life, I have sought the 'out of doors' as a refuge against impending physical ills." Whether or not this sickliness, which manifested itself sporadically throughout Rothrock's life, was the result of an underlying medical condition, it seems likely that Rothrock's love for the outdoors, as evidenced in his writings, alleviated bouts of depression and stress.⁸

After completing his primary education, Rothrock attended Harvard and, in 1864, entered medical school at the University of Pennsylvania. Very shortly after his enrollment, Rothrock was chosen by the Smithsonian Institution to be a scientific explorer on a survey of British Columbia and Alaska. This expedition was sent to the Northwest primarily in the interest of the telegraph and cable companies considering the establishment of a telegraph line to the Pacific coast. The journey and his findings, principally detailed in his publication *Sketch of the Flora of Alaska* (1867), established Rothrock's scientific reputation. The excursion was the first major study of the region and its report played a significant role in Secretary of State William Seward's decision to purchase Alaska. In 1866, Rothrock returned to the University of Pennsylvania, and he received his medical degree the following year. The expedition, however, marked the beginning of a pattern of training for Rothrock; he would acquire his expertise not only through academic study, but through empirical observation. Through his surveying work, Rothrock began to gain respect within the scientific community as he further specialized his botanical interests and education.⁹

After completion of medical school and the Smithsonian expedition, Rothrock developed a medical practice in Wilkes-Barre, Pennsylvania. Rothrock's holistic approach to medicine incorporated his faith in the restorative properties of forests. Forests benefited both public health and individual well-being. When faced with his own health problems, for example, Rothrock always retreated to the outdoors. Rothrock's great-grandson, Joseph Rothrock III, noted that it was well-known in the family that Rothrock simply *could not* stay indoors. Many of his retreats, however, involved exercise and strenuous activity, such as climbing and

⁸ Illick, "Joseph Trimble Rothrock," 85, 86; "Joseph Trimble Rothrock," in *Some American Medical Botanists*, 203.

⁹ Pleasants, *Three Scientists of Chester County*, 39; Clara Whiteside, "Still Fighting for Our Forests at Eighty-Three," unidentified newspaper clipping, c. 1922, box 5, John M. Phillips Papers, 1891–1966, MG 161, Pennsylvania State Archives, Harrisburg; Samuel T. Wiley, *Biographical and Portrait Cyclopaedia of Chester County, Pennsylvania* (Philadelphia, 1893), 446–50; Dudley and Goddard, "Joseph T. Rothrock and Forest Conservation," 45.

hiking, despite his physical weaknesses. Rothrock always claimed these trips were healing. He believed that the outdoors held many benefits for people in general and especially for those who were sick or frail. The fact that deforestation could contribute to poor health—such as through the increased chance of disease from high water levels or floods—served to strengthen Rothrock's determination to restore the nation's forests for the public good. "Remove the forests and you remove the factor that makes the air fit to breathe," he wrote. Rothrock's devotion to conservation likely had philosophical roots in his health-orientation. This strong link between forests and health led him to advocate for conservation as a public benefit from a Progressive political and utilitarian perspective. Rothrock's faith in the healing and revitalizing powers of the outdoors strongly influenced his later work to rehabilitate Pennsylvania's forests.¹⁰

By the early 1870s, Rothrock found his health compromised, most likely the result of stress from developing his medical practice. As was his habit, he sought to recover in the outdoors, and he applied to serve on another expedition, the Geographical Survey West of the One Hundredth Meridian (Wheeler Survey) with the Smithsonian and the U.S. Army Corps of Engineers. During this expedition in 1873, Rothrock worked as both botanist and assistant surgeon. Rothrock compiled a richly detailed publication about the botanical findings of the survey in volume 6 of the *Report upon U.S. Geographical Surveys West of the One Hundredth Meridian*. The volume is a meticulously composed informational text. Rothrock's report garnered him additional respect and credentials. Two years after his return to Pennsylvania from the expedition in 1875, he received an appointment to the University of Pennsylvania as professor of botany, a position he held until 1893.¹¹

In 1880, Rothrock took a nine-month leave from the University of Pennsylvania to study in Germany under renowned botanist Anton

¹⁰ Joseph Rothrock III, interview by author, June 26, 2009; J. T. Rothrock, "Relations of Forests to Public Health and Prosperity," 8, box 5, George H. Wirt Papers, 1878–1959, MG 135, Pennsylvania State Archives; "Sketch of the Forestry Movement in Philadelphia," *Forest Leaves*, July 1886, 2.

¹¹ Rothrock most likely was given this position because of his previous experience with the Smithsonian, but it is still somewhat surprising that at his young age Rothrock was able to receive such prominent appointments. Rothrock stated that the date for his resignation from the University of Pennsylvania was 1891, but other sources indicate that it occurred when the Forestry Commission began in 1893, which seems the more likely date. Mira Dock, chronology for J. T. Rothrock, , box 6, folder 62, Dock Family Papers, 1865–1951, MG 43, Pennsylvania State Archives; *Report upon U.S. Geographical Surveys West of the One Hundredth Meridian* . . . , 6 vols. (Washington, DC, 1875–89): 6:xiv; "Joseph Trimble Rothrock," in *Some American Medical Botanists*, 210.

DeBary at the University of Strasbourg. His goal was to learn advanced German forestry techniques. During his time abroad, Rothrock studied scientific forest management; German forestry techniques were principally focused on economic interests, promoted through the mathematical ordering of the forests. As the historian Henry Lowood has argued, “the German forest became an archetype for imposing on disorderly nature the neatly arranged constructs of science.” Scientific forestry was not yet practiced within the United States in the late nineteenth century, and his experience in Germany and heightened forestry knowledge furthered Rothrock’s reputation as an expert.¹²

In 1893, Rothrock left his position at the University of Pennsylvania to undertake what would become his most significant scientific expedition. That year, the Pennsylvania legislature established a two-man commission consisting of Rothrock as the botanist and his associate engineer, William Shunk, to investigate the factors, both human-caused and natural, affecting Pennsylvania’s forests. The surveys of 1865 and 1873 had prepared Rothrock for this two-year project. The legislature charged the commission with investigating the condition of forests in Pennsylvania and reporting its findings, as Rothrock had done for three decades.

Rothrock opened his section of the commission’s report on Pennsylvania’s woodlands by explaining the problems of deforestation; outlined all previous laws from 1700 that were related to forests; and discussed timber production, land value, wastelands, taxation issues, ways to educate the public on the propagation of trees, and forestry-restorative measures that could be undertaken. Forests regulated and protected streams, reduced the height of floods and moderated extremes of low water, and protected mountain slopes against increased soil wash. As a result, deforestation had a substantial influence on many natural resources integral to the state. Through his report, Rothrock hoped to induce farmers to increase the number of trees on their land and to convince Pennsylvania government to “buy back and restore to timber the land that had been sold with all its wealth of timber for twenty-six and two-thirds cents an acre.”

¹² Pleasants, *Three Scientists of Chester County*, 39; Widner, *Forests and Forestry in the American States*, 27; Henry E. Lowood, “The Calculating Forester: Quantification, Cameral Science, and the Emergence of Scientific Forestry Management in Germany,” in *The Quantifying Spirit of the Eighteenth Century*, ed. Tore Frängsmyr, J. L. Heilbron, and Robin E. Rider (Berkeley, CA, 1990), 341, 340–41.

Rothrock wrote about the devastation that fires caused, whether ignited by timber thieves to hide evidence of their work, railroad sparks, lightning, or farmers who set fires to prepare the land for feeding pastures. He lobbied heavily for fire legislation throughout his tenure as the state's forestry commissioner; he viewed such legislation as the principal preventive "essential" to forestry. Rothrock argued that "almost every forest fire is the result of ignorance, carelessness, or crime, and that there is some one to punish for it." He believed that fires that ravaged forests and left the soil barren were a crime against the people of Pennsylvania and future generations.¹³

To make clear the effects of deforestation, Rothrock frequently employed photography. Destruction of forested areas by industrial activities continued throughout the state in the late 1800s. In fact, between 1860 and 1870, Pennsylvania was the leading state in the nation for sawtimber production. Rothrock captured many of the devastated areas, previously unseen to many, on film. His images depicted the destruction that deforestation and such natural results as erosion, floods, and fires had on the Pennsylvania landscape. Rothrock characterized destruction of forested areas as "barbarism." In a paper published by the American Philosophical Society in 1894, he wrote that two centuries of American inhabitation had "matured the tree-destroying tendency into an instinct . . . we furnish an illustration of a nation lapsing into the extravagance of barbarism because of the abundance of our supplies, so far at least as our use of the trees is concerned."¹⁴

The pair presented their report, consisting of 361 pages with forty-four full-page illustrations, to the Pennsylvania House of Representatives on the deadline, March 15, 1895. Their findings were not intended to demonstrate methods of restoration, but to show that "the safety of the State and of its interests required a change in existing method." While Rothrock continued to be a leader in the forestry movement throughout his life, this report was the climax of his work within Pennsylvania

¹³ "Report of Forestry Commission for House of Representatives 1894–1895," Records of the Department of Environmental Resources, RG 43, Pennsylvania State Archives; Dudley and Goddard, "Joseph T. Rothrock and Forest Conservation," 39; *Statement of Work Done by the Pennsylvania Department of Forestry, during 1901 and 1902* (Harrisburg, PA, 1902), 26–28; J. T. Rothrock, *Areas of Desolation in Pennsylvania* (Harrisburg, PA, 1915), 19, 20; Gifford Pinchot, *The Training of a Forester* (Philadelphia, 1914), 21.

¹⁴ Widner, *Forests and Forestry in the American States*, 24; J. T. Rothrock, "On the Growth of the Forestry Idea in Pennsylvania," *Proceedings of the American Philosophical Society* 32 (1894): 333.

forestry—the goal toward which he had worked.¹⁵ Observing the magnitude of the effort and the extent of recommendations, the legislature created a Division of Forestry within the Department of Agriculture, which reported to the Pennsylvania Forestry Commission and appointed Rothrock commissioner of the division. Such a complex subject needed translators for both the public and government, trained experts such as Rothrock. Once the legislature created the division, it enacted laws allowing the state to purchase lands sold for taxes. Rothrock and the Forestry Commission purchased tax-forfeiture lands and other titles to create forest reservations, especially at the headwaters of the important rivers in Pennsylvania: the Delaware, the Susquehanna, and the Ohio.¹⁶

Throughout his career as leader of the Pennsylvania forestry movement, Rothrock expanded his knowledge and disseminated his findings by examining, surveying, and reporting. In the process, he established his credentials and built his reputation within the scientific community and won the trust of both the general public and political bodies.

Educating and Organizing

Rothrock understood that any real progress toward addressing the problems of deforestation would require the support of the citizens of the commonwealth. Rothrock, therefore, took it upon himself to educate Pennsylvania's citizenry. His ability to appear to the public as both approachable and knowledgeable and also to work quietly behind the scenes of government proved to be indispensable qualities.

In 1877, the prestigious American Philosophical Society appointed Rothrock, then a professor of botany at the University of Pennsylvania, as lecturer for its Michaux Lectures on Forestry. Rothrock delivered these lectures between 1877 and 1894. Named for the French botanist François Michaux (son of André Michaux), who had left a legacy to the Philosophical Society, these lectures were intended to educate the public.

¹⁵ Whiteside, "Still Fighting for Our Forests at Eighty-Three"; Maass, *Forestry Pioneer*, 80–81; "Report of Forestry Commission for House of Representatives 1894–1895"; J. T. Rothrock, "History of Forests in U.S.," box 5, George H. Wirt Papers.

¹⁶ DeCoster, *Legacy of Penn's Woods*, 27; "Report of J. T. Rothrock, Botanist Member of the Pennsylvania Forestry Commission," 2, Records of the Department of Environmental Resources; Maass, *Forestry Pioneer*, 83; *Statement of the Work Done by the Pennsylvania Department of Forestry*, 12; Andrew Denny Rogers, *Bernhard Eduard Fernow: A Story of North American Forestry* (Princeton, NJ, 1951), 214.

Generally, each course consisted of seven lectures on the conditions of the forests within Pennsylvania, the nation, and even other regions of the world. Few attended the first lectures, perhaps because there was a general lack of scientific knowledge in the community and little public awareness of the threat to forests.¹⁷ Rothrock used his lectures to inform the public of the damages occurring to Pennsylvania's forests, explaining the science behind botany and forests, and demonstrating through his own photographs the extent of deforestation. Rothrock also stressed the beauty of natural surroundings and attempted to instill within others his own dedication to botanical subjects. In his 1892 lecture notes, he wrote:

This is a beautiful, bountiful earth; but because it is so, is no reason why we should squander its resources. Before mankind and the globe are done with each other the former will probably acquire all that the latter can produce. Economy in use of what we have is as much a duty as enjoyment in a privilege. The one is the counterpart of the other.

Combining conservationist and preservationist perspectives, Rothrock told the public that the earth was to be used, responsibly, but also to be cherished and enjoyed. He tied respect and appreciation for the beauty of the outdoors to his Progressive focus on efficiency and responsibility in resource use and a duty to protect and use resources wisely. Rothrock paid little attention to the philosophical dichotomy between conservation and preservation; it was irrelevant to him. His statement employed a language and tone that conveyed a belief in the efficacy of human action guided by an expert hand. Mankind had depleted the earth of its resources, but educated experts could correct this problem and educate the citizens.¹⁸

In 1886, Shortly after Rothrock returned to the United States from his German forestry training, two prominent Philadelphia women, Mary Scott Linton Lundy and Maria Middleton Fisher Coxe, concerned about the condition of Pennsylvania's forests, approached Rothrock about holding a meeting to consider the formation of an association for the promotion of "Scientific Forestry." These wealthy women sought to enlist

¹⁷ Illick, "Joseph Trimble Rothrock," 87; Widner, *Forests and Forestry in the American States*, 25–26; J. R. Schramm, "Influence—Past and Present—of François-André Michaux on Forestry and Forestry Research in America," *Proceedings of the American Philosophical Society* 101 (1957): 339–41.

¹⁸ Dudley and Goddard, "Joseph T. Rothrock and Forest Conservation," 38; J. T. Rothrock, Michaux Forestry Lecture, "What Is Economic Botany?" (1892), Records of the Department of Forests and Waters, RG 6, Pennsylvania State Archives.

Rothrock's support because of his scientific renown within the community and his efforts to promote scientific forestry management and public awareness of forestry issues. They named the new organization the Pennsylvania Forestry Association (PFA), and the membership elected Rothrock president in November 1886. The objectives of the PFA were clear and concise. Its mission was to advocate for state forest acquisition and maintenance, educate the public on the benefits of forestry, raise awareness of deforestation, water-supply conditions, climate change (it was believed that forests regulated climate), and deforestation's effects on industry, and to promote legislation. This body represented the beginning of the organized forestry movement in Pennsylvania, and its educational and legislative agenda reflected a belief in the necessity for expert knowledge and leadership.¹⁹ Through activities with the PFA, his Michaux lectures, and his written work, Rothrock worked to convince the public that care of the forests mattered on an individual and collective level.

Part of the reason for Rothrock's focus on education was his belief that public support for forestry laws would create political pressure and was necessary for such laws to be effective. In his article, "Forests of Pennsylvania," Rothrock articulated this understanding: "here we come back to the most general of all principles under a popular government, that laws are strong and effective only when backed by public sentiment, and this may only be surely attained by an appeal to individual interests." He knew, however, that he worked against a deeply ingrained mindset. "Twenty years ago I began agitation upon the forestry question," he wrote in 1901. "I have kept at it ever since; I propose to keep at it as long as I live, for we will need all the legislation and all the help to bring about the results which are now in sight. But you have no idea of the amount of work it requires to change a generation from tree destroyers to tree restorers; it is something akin to a second birth."²⁰

¹⁹ Mrs. Lundy was the wife of Protestant Episcopal minister Joseph P. Lundy, who served as president of the Pennsylvania Forestry Association. Mrs. Coxe was the wife of Brinton Coxe, a lawyer who served as president of the Historical Society of Pennsylvania from 1884 until his death in 1892. Invitation to event honoring Rothrock, Apr. 15, 1914, and Dr. J. T. Rothrock chronology, box 5, George H. Wirt Papers; Thomas, "Forest Protection and the Founding of Pennsylvania's First Forestry School," 292–93; Maass, *Forestry Pioneer*, 60, 62; Pisani, "Forests and Conservation," 348; "Constitution of the Pennsylvania Forestry Association," *Forest Leaves*, July 1886, 3.

²⁰ Joseph T. Rothrock, "Forests of Pennsylvania," *Proceedings of the American Philosophical Society* 33 (1894): 126; J. T. Rothrock to Mr. Frederick Schoening, Jan. 2, 1901, box 5, George H. Wirt Papers.

By 1902, Rothrock was confident enough in the support the forestry movement had garnered to claim that the public as a whole was “in favor of the state taking back under its own management a very considerable portion of the mountain land which has been alienated by sale to corporations or individuals. It had become apparent to all thinking persons that there were certain natural laws which must be observed.” His words reflected a Progressive concern about corporate activities that endangered the public and the monopolistic control of resources and implied that opponents of state forestry practices were ignorant.²¹

Organization and efficiency were the twin supports of Rothrock’s political ideas. He believed that “every acre of ground in every country should be devoted to the very best use it is capable of, and it should be made useful constantly, if possible.” He reprimanded Pennsylvanians for their squandering of natural resources and called upon them to make amends:

The citizens of this State have much to repent of in their dealings with the generous soil which would have spontaneously restored these forests to perpetuate our industries and to glorify the landscape, if we had simply protected it. We have also much to be thankful for, because our repentance can be of the effective sort, which rights a wrong.

At the same time, Rothrock expressed an aesthetic appreciation for the forests (“glorify the landscape”).²²

Rothrock was heralded for his educational efforts. As one newspaper article from later in his career reported, “his was a voice crying in the wilderness of indifference and ignorance for years, but all the time the seed which he sowed was falling upon soil where it sprouted and finally grew into a strong public sentiment in support of the trees.” By establishing his reputation and creating a strong base for conservation within the population, Rothrock ensured that political pressure would be placed on the legislature to enact change. In addition, he was adept at organizational efficiency in his plans and proposals. Through his leadership in nearly all of the Pennsylvania forestry organizations in the late nineteenth and very early twentieth centuries, he advanced comprehensive strategies to estab-

²¹ *Statement of Work Done by the Pennsylvania Department of Forestry*, 9.

²² J. T. Rothrock, “What Forestry Is,” and Rothrock, “Relation of the Teachers to Forestry in This Commonwealth,” 8, box 5, George H. Wirt Papers.

lish forestry as a professionalized field in the commonwealth.²³

Professionalization

On February 25, 1901, the Pennsylvania legislature and governor approved Rothrock's idea of establishing a Department of Forestry as a separate entity from the Department of Agriculture and appointed Rothrock commissioner. This action accorded the cause of forestry significant status, and the newly created body grew larger and purchased more land for state reserves. When Governor William A. Stone came into office in 1899, Rothrock calculated that the state owned 18,904 acres of land that had been purchased at tax sales for forestry reservations. By December 10, 1902, the reserves totaled 305,851 acres, with an additional 266,871 acres under consideration for transfer to the commonwealth, making the total 572,722 acres. By 1903, under the leadership of Governor Samuel W. Pennypacker, Rothrock reported, the state "has purchased 622,576 acres of land . . . there remain under consideration, 86,448 acres, making a total of 709,024." From comparison to the holdings of just a year earlier, it is clear that under Rothrock's leadership the Department of Forestry was rapidly purchasing land for reserves. Notably between 1898 and 1910 the state bought 924,798 acres, nearly half of today's forest-reserve acreage, thanks in large part to Rothrock's active involvement.²⁴

Rothrock believed that with the expanding acreage of state reserve acquisitions, professional forest rangers were needed to care for the reserve and guard against thieves and fires. He outlined his idea for training such a cadre of forestry experts in a report to Governor Stone in 1902:

It is therefore of the first importance that at Mont Alto . . . a school of Forestry should be started. . . . The students, not to exceed twenty in number, during this period, would conjoin actual labor upon the reservation with study, doing all the necessary work upon the ground and becoming in the best sense practical foresters.

²³ Newspaper clipping, 1914, box 5, George H. Wirt Papers.

²⁴ *A Tribute to Dr. Joseph Trimble Rothrock by His Friends* (n.p., n.d.), 9, box 6, folder 62, Dock Family Papers; DeCoster, *Legacy of Penn's Woods*, 31, 27; Report to Gov. William Stone from J. T. Rothrock, State Forestry Reservation Commission, Dec. 1, 1902, box 1, William A. Stone Papers, 1895–1903, MG 181, Pennsylvania State Archives; J. T. Rothrock to Gov. Pennypacker, Mar. 3, 1904, box 24, Samuel W. Pennypacker Papers, 1703–1916, MG 171, Pennsylvania State Archives.

The curriculum of the school, as Rothrock envisioned it, would reflect his own training from the western surveys and combine hands-on experience with academic study. Because of the absence of a forestry school in Pennsylvania and other considerations, the legislature accepted his proposal. Only recently had a few forestry schools been established across the nation; in the entirety of the United States, there were only about twenty U.S. citizens with forestry training at the time, and two of them had obtained their education in Europe. In 1903, George Wirt was assigned to establish a forestry school in Mont Alto, Franklin County, to train the foresters who would be needed to manage the forests of Pennsylvania. Wirt became the first director of the State Forest Academy at Mont Alto, and he held that position until 1910.²⁵

Many Pennsylvanians viewed the Pennsylvania State Forest Academy with great pride and interest. In a synopsis of the forestry department's accomplishments soon after the academy was established, Rothrock boasted, "The Pennsylvania State Forest Academy is unique. It is the only institution of its kind in the western Hemisphere carried on by State or National Government. It is admitted by those who know to be the most promising institution of its kind in America." Reflecting his commitment to practical or utilitarian forestry methods, Rothrock directed that the school teach practical skills, such as how to handle axes and saws, in addition to academic subjects. Academic subjects included chemistry, German, physics, algebra, silviculture (the selective cutting of trees on a parcel of land), and zoology. Upon completion of their training, graduates were required to work for the Forest Reserves Commission for a period of time. Eventually, the Forest Academy at Mont Alto merged with the Department of Forestry in the School of Agriculture (established in 1907) at the Pennsylvania State College (later the Pennsylvania State University).²⁶

Through his leadership in establishing forestry organizations such as the Department of Forestry and the Forest Academy, Rothrock advanced the professionalization of the discipline in the commonwealth. The creation of the Department of Forestry gave the movement a strong institu-

²⁵ Report to Gov. William Stone from J. T. Rothrock, Dec. 1, 1902; Henry D. Gerhold, *A Century of Forest Resources Education at Penn State: Serving Our Forests, Waters, Wildlife, and Wood Industries* (University Park, PA, 2007), 13; DeCoster, *Legacy of Penn's Woods*, 33.

²⁶ J. T. Rothrock, "Synopsis of Facts Relating to Pennsylvania State Forest Reserve Work," ca. 1906, box 5, George H. Wirt Papers; DeCoster, *Legacy of Penn's Woods*, 37, 38; Gerhold, *Century of Forest Resources Education at Penn State*, 29.

tion and ensured its representation in government; the establishment of the Mont Alto forestry school produced trained and experienced foresters to oversee state-acquired reserve lands. The forestry school essentially solidified the professionalized field of forestry in Pennsylvania; for one to be educated in forestry and considered an expert forester, formal training would now be necessary.

Problem Solving and Lobbying

While Rothrock maintained his public presence, he also worked behind the scenes in the legislative process. In fact, Rothrock's educational endeavors were usually meant to exert political pressure in this manner. He worked with political figures both indirectly and directly. He drafted bills and spoke with politicians on behalf of various forestry organizations, and he was fully aware of the political barriers, such as efforts by timber lobbyists, that prevented many goals of the forestry administration from being quickly realized. A true Progressive, Rothrock placed his trust in professionals and exhibited a visible disgust at political appointments and partisanship. Despite his distinct dislike for politics, however, he was knee-deep in the political process during his time within the Forestry Division and Department of Forestry.²⁷

Rothrock took a pragmatic approach to politics. In concert with other conservationists, Rothrock worked to convince the timber industry to support conservation efforts. He assured them that "the whole object of the forestry agitation is to perpetuate the lumbering interests and in protecting them." As scholars such as George Gonzalez have argued, "practical" or utilitarian forestry dominated national policy because it was embraced by the timber and railroad industries, which were able to profit from forest conservation. Practical forestry was compatible with the American capitalist culture because it encouraged profit and was congruous with the interests of the economic elites. Rothrock, however, identified with utilitarian forestry because of its efficiency and benefits for civilization. "Trees are certainly intended to be cut as they are to be planted," he wrote, and, elsewhere, "the forest is for use, and must be used. To realize one part of its value it must be cut. There is no other way. It is better that it should be cut than that it should decay."²⁸

²⁷ Maass, *Forestry Pioneer*, 87.

²⁸ J. T. Rothrock, "A Plain Statement of an Important Problem," 7–8; Rothrock, "What Forestry

Rothrock worked closely with the legislature on several forestry-related issues. After several failed attempts to pass bills to establish a forestry organization, Rothrock's strong influence—he largely drafted the bill—helped the Pennsylvania legislature to approve the bill that created a Pennsylvania Forestry Commission in 1893. The knowledgeable and gentle scientist was also a mover and shaker. According to Rothrock, passage of that bill indicated a “reform in other directions than appears on the surface. It is a recognition of the broad fact that we as a young people have been wasteful in the use of all our resources.” Rothrock emphasized the bill's importance as a break from the old methods of dealing with forestry issues.²⁹

As forestry commissioner, Rothrock continued the practice of surveying and reporting, and he used his reports to convince the legislature and people of Pennsylvania of the necessity of creating state-owned forest reserves, as well as of the need to rely on trained and professional foresters to lead the way. In his 1894 commission report, Rothrock emphasized the responsibility of the state to provide for its own continued existence and prosperity. The state forest reserves were an important part of that future. “A primal, fundamental law is that the first duty of the State is to provide for its own prosperous perpetuity. If it fails to do this, it fails to secure the cheerful co-operation of the citizens.” His concern over the state's ability to sustain itself and its resources for future generations appeared in many of his pieces. In the 1894 article “On the Growth of the Forestry Idea in Pennsylvania,” he wrote, “It is for this reason that we submit to legal control; for without perpetuity, the strong inducement to thrift, in the interest of our children, is lacking.” Rothrock's vision was that both forethought and legislation (protection for forests and government-owned reserves) were necessary for the well-being of future generations. Rothrock echoed critics who condemned America's obsession with short-term profit. The historian Donald Pisani has observed that “writer after writer concluded that the violation of nature's laws threatened the material and spiritual foundation of American civilization. [For] Americans . . . the obsession with short-term profit blinded them to the truth that the essence of civilization was its debt to future generations.” Rothrock often admonished

Is”; and Rothrock, “Relation of the Teachers to Forestry in This Commonwealth,” 8, all box 5, George H. Wirt Papers; George A. Gonzalez, “The Conservation Policy Network, 1890–1910: The Development and Implementation of ‘Practical’ Forestry,” *Polity* 31 (1998): 292, 272.

²⁹ Rothrock, “On the Growth of the Forestry Idea in Pennsylvania,” 339–40, 342.

citizens for blindly utilizing forest resources for their own gain while leaving the land barren and scarred for future generations.³⁰

After the commission surveyed and filed its report on the condition of Pennsylvania forests, the state purchased its first lands under an act passed in 1897 that authorized the purchase “of unseated lands for non-payment of taxes for the purpose of creating a State Forest Reservation.” The first purchase, made in 1898, was a tract of 415 acres in Beech Creek Township, Clinton County, sold at tax sale, for which the commonwealth paid \$30.70. Rothrock explained the rationale behind the support of state-reserve ownership, arguing that, “In general it is unwise for the State to enter upon any business where it will compete with its citizens. The forests could be restored only by state action because of the resources required and because the state had the duty to assure its perpetuity and the public good. The state could also assure, he believed, that the right type of people—trained professionals—were in charge of the process. The impact of forest destruction—worsening of the lumber industry, lack of clean mountain water for municipal purposes, lack of water to produce electricity, erosion from the significant decrease of forest cover and the resultant vulnerability to floods, and the loss of revenue from barren lands—justified state reserve purchases. Rothrock quoted a prominent preservationist on state forestry legislation: “as John Muir once said, ‘Such legislation hurts no one, helps everyone, and pleases God.’”³¹

Recognizing the motivating power of self-interest, Rothrock advocated enactment of laws that would solve significant social problems by influencing individual behavior. He supported taxation policies that would encourage the preservations of forested areas. He believed that taxes were one of the primary and earliest factors encouraging landowners to strip timber from their lands. Rothrock, therefore, sought to have timberlands freed of taxes, since forested lands contributed to the public good. Rothrock proposed that timberlands be designated as a separate class of land, on which the legislature could then decide specific, lower, tax levels.

³⁰ *Laws of the General Assembly of the Commonwealth of Pennsylvania, Passed at the Session of 1897* (Harrisburg, PA, 1897), 11–12; “Report of J. T. Rothrock, Botanist Member of the Pennsylvania Forestry Commission,” 2; Rothrock, “On the Growth of the Forestry Idea in Pennsylvania,” 335; Pisani, “Forests and Conservation,” 351.

³¹ Rothrock, “Synopsis of Facts Relating to Pennsylvania State Forest Reserve Work”; Rothrock, “Relation of the Teachers to Forestry in This Commonwealth,” 12; and Rothrock, “Growth of the Forestry Idea in Pennsylvania,” 5, all in box 5, George H. Wirt Papers.

This tax policy would encourage landowners to grow or preserve forests. Taxes on timber would have the same effect: "It is easy to see that taxing timber when cut would induce the owner to hold it as long as possible." His ideas on taxes were never fully accepted and often were stridently opposed, but they remained a centerpiece of his vision for preserving Pennsylvania's forests. Late in his life, Rothrock did witness the enactment of the Auxiliary Forest Reserve Act, which altered taxes on forested lands. However, the law was declared unconstitutional shortly after its enactment, and, today, there remains no resolution of the forest-taxation issue.³²

While scholars have focused on Rothrock's work in the forestry realm, he also had a substantial impact on Pennsylvania through his work as a medical doctor and his ideas regarding forests and health. As noted above, Rothrock's own health and medical training led him to make a strong connection between forests and individual and public health. Rothrock had distinct empathy for tuberculosis patients, and he used his influence to harness private and government support for their treatment. Rothrock was a firm believer in open-air treatment for tuberculosis patients, noting that people recovered much more quickly in the air of the mountains than they did in cramped and less-sanitary city conditions. He knew of "regions, healthful regions in Pennsylvania, where monied interests have combined to bar out those who suffer from this disease [tuberculosis], where no compromise is considered and no division of God's gift of fresh air allowed."³³

Rothrock advocated for the establishment of a sanatorium at Mont Alto, in Franklin County, for tuberculosis patients, and his proposal was widely accepted and supported. The camp received donations from private individuals, and Rothrock began construction of the facility's camp on the upper grounds of Mont Alto. He discussed progress of the camp in a 1902 letter to Governor Stone, writing that "the plan has been eminently successful and attracted wide attention, not only in this State, but in other States." The camp was maintained solely on private funds until June 1, 1903, when, through Rothrock's influence, the institution received

³² DeCoster, *Legacy of Penn's Woods*, 24, 26; Rothrock, "Relation of the Teachers to Forestry in This Commonwealth," 11; "Report of J. T. Rothrock, Botanist Member of the Pennsylvania Forestry Commission," 2.

³³ Maass, *Forestry Pioneer*, 112–14; *Statement of Work Done by the Pennsylvania Department of Forestry*, 42; "Joseph Trimble Rothrock," in *Some American Medical Botanists*, 213.

eight thousand dollars from the legislature and another fifteen thousand dollars for 1905 through 1907. Rothrock later reported that after June 1, 1903, sixty-one of the eighty-nine patients at the State Consumptive Camp at Mont Alto had been cured or greatly restored to health, while many of those who did not survive were in the latter stages of the disease and had little chance of recovery. The camp remained part of the Department of Forestry until it was transferred to the newly created Department of Health in 1907. One of Rothrock's sons, Dr. Addison Rothrock, who also had attended medical school at the University of Pennsylvania, served as camp physician until the facility was turned over to the Department of Health.³⁴

Rothrock's devotion to nature was linked to his holistic views on healthful living and on the benefits of living and exercising within the outdoors. He also held that the state should aid those suffering from disease. He wrote in his notes that "a citizen's health and its maintenance is important—a resource" and that, "the State can and should help well people stay well and rehabilitate those who have been weakened by disease, work or other cause." In addition, he believed that the goals of sanatoriums mirrored those of foresters and lumbermen, as all benefited from reforestation and proper forestry management. In one of his articles, Rothrock posed the rhetorical question: "How long will it be before the lumberman, the sanitarian and the forester discover that their highest, most enduring interests can best be served by a policy which they should have in common?" Rothrock saw the forests not just as a "tree farm," but as healthful places that citizens should use and appreciate, especially for their well-being.³⁵

Despite Rothrock's stated dislike for politics, he was an adept political player. In part because of his lobbying and drafting work, the legislature acknowledged the forest-depletion issue and created the Forestry Commission and, later, the Department of Forestry. Rothrock's expertise commanded a significant amount of authority among legislators. In addition, Rothrock worked consistently to educate the public on deforestation and related forestry issues and to enlist its support for state protection of forested areas. Rothrock was able to accumulate sizable state funds to sup-

³⁴ Report to Gov. William Stone from J. T. Rothrock, Dec. 1, 1902; DeCoster, *Legacy of Penn's Wood*, 39; J. T. Rothrock, "Statement about Sanatorium in Forest Reserve," ca. 1906, box 5, George H. Wirt Papers; Maass, *Forestry Pioneer*, 116–17.

³⁵ J. T. Rothrock Forestry Notes, and Rothrock, "Relations of Forests to Public Health and Prosperity," 14, box 5, George H. Wirt Papers.

port both the forestry school and sanatorium at Mont Alto. While he may have appeared an apolitical expert, Rothrock clearly was adept at working within the political sphere, convincing the legislature and various other political bodies to support the forestry movement's goals.

The Centrality of Rothrock

In March 1903, Rothrock wrote to Governor Pennypacker asking to leave office by June 1. His health had deteriorated and, at the request of his family, he appealed to Pennypacker to accept his resignation as Commissioner of Forestry. The response to his request—a minor uprising against his proposed resignation—underscores how important and respected Rothrock was in Pennsylvania for his forestry efforts. Both individuals and organizations contacted Pennypacker asking him to find a way to persuade Rothrock to stay. One individual wrote, “I regret to learn of any effort on the part of Dr. Rothrock to resign, as he is so familiar with the large number of details in this work it . . . would be very difficult to find a man to replace him who could take up the work intelligently.” Rothrock had created a system of professionalized forestry with himself at the center of it and few could imagine the forestry movement moving forward without him. He had been the head of every subsequent forestry organization since the formation of the PFA in 1886.³⁶

Rothrock was persuaded to stay on as commissioner until his health became too great an issue. In 1904, he again wrote to Pennypacker asking that his resignation be accepted. The strongest response came from the Pennsylvania State Forestry Reservation Commission, which stated that the organization was “affected with a keen sense of regret and deeply deplores the retirement of Dr. Rothrock from public service.” The commission went on to note that:

The creation of the Pennsylvania Department of Forestry and . . . [its] successful conduct . . . are directly attributable to the untiring energy and labor of Dr. Rothrock. He it was who laid the permanent foundations for the Department and enunciated the principles of public policy within which the future life and usefulness of the Department are to be firmly grounded.

³⁶ J. T. Rothrock to Gov. Pennypacker, Mar. 3, 1904, and John Fulton to Gov. Pennypacker, Mar. 7, 1903, box 24, Samuel W. Pennypacker Papers.

The governor accepted Rothrock's decision to retire, but he and the rest of the forestry community lamented the end of Rothrock's career as head of the Pennsylvania forestry movement. It was from his direction that the major forestry organizations had derived their focus and ideas. Upon his retirement, Rothrock was immediately appointed to the Forest Reservation Commission, on which he served, intermittently, until his death in 1922. Notably, Pennsylvania was one of the only states able to adopt a state reserves policy and forestry department, achievements largely attributable to Rothrock.³⁷

In 1909, Rothrock, now age seventy, sold his vast herbarium and library to the Field Museum of Natural History in Chicago. The collection reportedly contained 22,207 specimens. According to Louis Williams, who served as chairman of the Department of Botany at the Field Museum, the herbarium was the most valuable one of its kind in America and perhaps the world. Despite the decline in his health that accompanied increasing age, Rothrock continued to contribute to the PFA's magazine, *Forest Leaves*, and served on the Forest Reservation Committee for several terms. Both before his death and after, Rothrock received numerous awards. In 1914, a collection of friends arranged a luncheon and award celebration and bestowed upon him a loving cup. On April 11, 1919, Arbor Day, there was a special planting of eighty white oak trees at Caledonia State Park to honor the recent eightieth birthday of Rothrock. That same year, a bronze marker honoring Rothrock was placed at the Mont Alto Sanatorium. These honors were in addition to the earlier designation of Rothrock State Forest in Forest District #5, near Huntingdon, Pennsylvania. Rothrock, through his leadership and organization of the forestry movement, in a way became the forestry movement. The movement and his persona were inextricably connected.³⁸

³⁷ J. T. Rothrock to Gov. Pennypacker, Feb. 15, 1904, box 24, Samuel W. Pennypacker Papers; Resolution of the Pennsylvania State Forestry Reservation Commission, Jan. 2 1914, box 5, George H. Wirt Papers; John William Larnier, ed., *The Papers of Joseph Trimble Rothrock, M.D.: Guide and Index to the Scholarly Resources Microfilm Edition* (Wilmington, DE, 2001), 22–23; Pisani, "Forests and Conservation," 341.

³⁸ Joseph Rothrock III has a collection of his great-grandfather's personal items, including the loving cup, his microscopes, and camera. My sincere thanks to him and Susan Ellis for their interview and willingness to help me explore his life and see their collection. Dudley and Goddard, "Joseph T. Rothrock and Forest Conservation," 49; Report from Rothrock Memorial Committee, May 12, 1914, and George H. Wirt to All Foresters, Apr. 4, 1919, box 5, George H. Wirt Papers; Larnier, ed., *Papers of Joseph Trimble Rothrock, M.D.*, 23.

Rothrock had a deep pride in and affection for his home state and sincerely desired the best for his fellow citizens. "It will require . . . many more [years] to fully establish the work of timber restoration," he wrote in 1900, "but we are working in a State of which we are proud and which we believe is to outlast the centuries." Rothrock maintained his deep belief in the power of government to do good despite his distaste for politics. Throughout his life, Rothrock remained modest. He wrote that "I often wonder why I have received so much consideration. I am not conscious of having done any thing remarkable. I simply have had an honest desire to be of some use in this big world of ours." Forestry, to him, would preserve the state and human welfare. In reassuring those concerned about the future of the forestry movement, he announced with distinct clarity that "we will have wise laws, and righteously execute them. We will have clean politics, filter plants, pure water supplies, and reservoirs which will hold water. Just take hope." As lasting as his political accomplishments was Rothrock's success in establishing a professionalized and educated workforce in Pennsylvania forestry. By the end of his tenure as forestry commissioner in 1904, the commonwealth was in possession of nearly seven hundred thousand acres of land on which to develop its forestry system. These purchased and rehabilitated lands became the core of Pennsylvania's state forest system, and the commonwealth has continually added to these lands over the past century.³⁹

On June 2, 1922, Rothrock passed away at his home in West Chester, Pennsylvania, at the age of eighty-three. Despite his contributions to Pennsylvania's history, his name has largely been forgotten, though a few memorials remain. In his hometown of McVeytown, a boulder monument was completed on November 1, 1924. Several prominent forestry workers gave tribute speeches at its unveiling, including Governor Pinchot, who stated that Rothrock "was one of the greatest public servants in the history of our Commonwealth. . . . He was wholly unselfish to the point of extreme self-sacrifice, capable to the level of the brilliant achievements which distinguished his career." George Wirt, Rothrock's protégé, informed the crowd that "it was [Rothrock's] deliberate plan to live his life for what he believed to be an essential to the continued wel-

³⁹ J. T. Rothrock to Editor of *Mifflintown Sentinel and Republican*, Apr. 4, 1900; J. T. Rothrock to Walter Ludwig, Feb. 17, 1914; Rothrock, "Relations of Forests to Public Health and Prosperity," 2, all in box 5, George H. Wirt Papers; *Tenth Annual Report of the Pennsylvania Department of Agriculture, 1904* (Harrisburg, PA, 1905), 468; Linchan, "Saving Penn's Woods," 24.

fare of his fellow Pennsylvanians—the perpetuation of her forest resources.”⁴⁰

Once Rothrock and his colleagues and acquaintances had passed away, however, his name and contributions began to fade from public consciousness. The establishment of an organized Department of Forestry, along with his other botanical, medical, and legislative accomplishments, were significant achievements. While, as historian Roderick Nash has noted, “only later did a few persons begin to realize that one of the most significant results of the establishment of the first national and state park had been the preservation of *wilderness*,” Rothrock viewed preservation of forests as integral to the public’s well-being and survival. In the age of destructive timber barons, his foresight recovered and ensured Pennsylvania’s prosperity. As he wrote in one of his texts, “we must understand that the land is ours to use, to enjoy, to transmit; but that it is not ours to desolate, that we are bound to leave it in as good condition for those who follow us as we found it for ourselves.”⁴¹

Countless acquaintances, friends, historians, and forestry personnel have bestowed on Rothrock the title of forestry “pioneer.” The idea of identifying Rothrock as a forestry pioneer is undoubtedly attractive, but the word does not capture his strategic genius. Rather, Rothrock was a transitional figure. As a highly educated, politically savvy person who appealed to multiple audiences, Rothrock exercised significant power. Throughout his early life, he established scientific credibility and reputation through research and surveying. Rothrock used his experience and expertise to translate the urgencies and goals of Progressive forestry into something that nonexperts could understand and care about and to win both the public’s confidence and admiration and the legislators’ trust.

Rothrock oversaw the development of professional forestry in Pennsylvania and the transition from a period of lax forestry laws primarily promulgated by landowners or amateur conservationists to one characterized by state-owned forest reserves, stricter laws, and an educated forestry elite. With his long white beard and kindly appearance, Joseph Trimble Rothrock conveyed the impression of a gentle expert. But to ignore his tactical erudition and work in professionalizing the field of

⁴⁰ Larner, ed., *Papers of Joseph Trimble Rothrock, M.D.*, 23; Rothrock Memorial invitation; Speech at the Rothrock Memorial by Gov. Gifford Pinchot, Nov. 1, 1924; and address on memory of Joseph T. Rothrock by George H. Wirt, Apr. 4 1923, all in box 5, George H. Wirt Papers.

⁴¹ Roderick Nash, *Wilderness and the American Mind* (New Haven, CT, 1967), 108; Rothrock, *Areas of Desolation in Pennsylvania*, 30.

forestry within Pennsylvania only reinforces the notion that turn-of-the-century environmentalism emerged as a coherent and fully matured movement. In fact, Rothrock's life demonstrates the complexity of the era in which he worked. Rothrock's multiple characteristics as educator, physician, surveyor, and politician underscore his importance and position as a transitional leader in the forestry movement at the turn of the twentieth century.

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