The Root of the Forestry Movement in Pennsylvania: Joseph Trimble Rothrock

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The verdant forests characteristic of Pennsylvania’s current landscape are almost entirely second-growth forests, having existed for fewer than one hundred years.¹ Had it not been for the groundbreaking work of many conservationists in the late nineteenth and early twentieth centuries, Pennsylvania’s present terrain would differ dramatically. One of the most important of those visionaries was Dr. Joseph Trimble Rothrock, who made enduring contributions to both forestry and botany and who has been hailed as the “Father of Forestry in Pennsylvania.” Public awareness of his contributions, however, has been eclipsed by that of such figures as Gifford Pinchot and Theodore Roosevelt. Nevertheless, it was Rothrock who organized the public forestry agency in Pennsylvania and subsequently led the forestry movement.

Joseph Trimble Rothrock was born in 1839 in McVeytown, Mifflin County, Pennsylvania.² He attributed his love of botany to his mother, Phoebe Brinton Trimble, who was related to the famous Pennsylvanian botanist, William Darlington.³ Rothrock recounted how his mother would educate him about different plants when he was a young child, fostering in him an abiding interest in botany. Nearly all accounts indicate that he was a sickly child.⁴

After completing preparatory school, Rothrock entered Harvard University’s Lawrence Scientific School under the direction of renowned botanist Dr. Asa Gray.⁵ With the outbreak of the American Civil War, he was mustered into the 131st Pennsylvania Volunteer Infantry, Company D, on August 7, 1862, in Lewistown.⁶ Approximately one year later, at the age of 25, Rothrock rose to the rank of Captain of the 20th Calvary, Company E (181st Regiment) of the Pennsylvania Volunteer CALVARY.⁷ He fought in the battle of Antietam and was wounded in the Battle of Fredericksburg.⁸ In a letter from 1862, Rothrock’s father, Abraham, wrote to General Hale and, in seeking the general’s consideration of a promotion for his son, noted of his son’s character: “I would add that my son…has at all times so far as I could ascertain taken a firm stance in favor of what he deemed the right, denouncing the wrong.”⁹ This characterization would also apply to Rothrock’s commitment later in life to what he determined as right—forestry.

In 1864, he entered medical school at the University of Pennsylvania. However, shortly thereafter, he was appointed as a scientific explorer on a Smithsonian survey of British Columbia and Alaska, intended in part to determine the feasibility of installing a telegraph line to the Pacific coast.¹⁰ It is believed that the expedition played a significant role in the United States’ decision to purchase Alaska.¹¹ Returning to the University of Pennsylvania in 1866, he was awarded his M.D. the following year with a dissertation detailing the conditions, diseases, and treatment methods of the North American Indians he had observed on the excursion.¹²

Hired as a professor of botany and human anatomy/physiology at the Agricultural College of Pennsylvania, he married Martha E. May two years later. The couple moved to Wilkes-Barre in 1869, where he established a medical practice. He was also involved in founding the Wilkes-Barre Hospital.¹³ In 1873, Rothrock served as botanist and surgeon on the Geographical Survey West of the 100th Meridian (Wheeler Survey) with the Smithsonian and the U.S. Army Corps of Engineers.¹⁴ Rothrock compiled an account of the botanical findings of the survey in volume 6 of the Report upon U.S. Geographical Surveys West of the One Hundredth Meridian. George Wheeler complimented and heavily praised Rothrock for his hard work.¹⁵
Rothrock returned to Pennsylvania in 1875 and received an appointment to the University of Pennsylvania in 1877 as a professor of botany, a position he held until 1893. It was also in 1877 that Rothrock was elected a member of the prestigious American Philosophical Society, the nation’s first learned society, through which he delivered the Michaux Lectures on Forestry that were held until 1894. Designed for the benefit of the general public, each course consisted of seven lectures on the condition of the forests. At first, the sessions were poorly attended, perhaps the result of a lack of scientific knowledge in the general community, as well as widespread ignorance that the forests were threatened. He captured film images of ravaged forests that vividly depict such results as erosion, flooding, and fire damage, frequently using them during lectures and other educational activities. In “On the Growth of the Forestry Idea in Pennsylvania,” he wrote that after two centuries of tree-destroying tendencies, “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.” He warned at that time that “we cut and kept on cutting and shut our eyes to the fact that the end was approaching.”

In 1886, Rothrock was contacted by two prominent Philadelphians, Mrs. Lundy and Mrs. Brinton Coxe, who were concerned about Pennsylvania’s forests. Together they formed the Pennsylvania Forestry Association (PFA) to promote scientific forestry, with Rothrock serving as the group’s first president. Their objectives included advocating for the acquisition and preservation of forest lands, educating the public about forests and water supplies, and promoting legislation to protect forests. Unfortunately, early efforts to create forestry-related legislation often were delayed by political maneuvering. Rothrock often personally drafted bills or spoke directly with politicians and governors, and wrote that he was “in religious faith an Episcopalian, and politically a Republican, when my conscience will endure it.” His fortitude in this resistant environment is illustrated by a newspaper article that described his voice as “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.”

A bill establishing a Forestry Commission in Pennsylvania was finally passed by the legislature in 1893. According to Rothrock, passage represented “recognition of the broad fact that we as a young people have been wasteful in the use of all our resources.” Consisting of one botanist and one engineer, the commission was to investigate the condition of forests in Pennsylvania, search for suitable land for the state to acquire, and report its findings to the legislature by March 15, 1895. Rothrock was appointed commission botanist, and left his professorship at the University of Pennsylvania. During the next two years, Rothrock and engineer William Shunk surveyed Pennsylvania’s woodlands and returned with a report consisting of 361 pages with 44 full-page illustrations. The report demonstrated that “the safety of the State and of its interests required a change in existing method.” The pair presented their report to the Pennsylvania House on March 15, 1895.

In his section of the report, Rothrock emphasized the need for the state to provide for its continued existence; writing that “a primal, fundamental law is that the first duty of the State is to provide for its own prosperous perpetuity.” He then identified several geographic sites he believed should be acquired by the state, with a goal of securing areas of importance to watersheds. He explained the problems inherent in rapid deforestation; outlined forestry laws from 1700; and discussed timber production, land value, wastelands, taxation issues, ways to educate the public on the propagation of trees, and possible restorative measures.
the importance of the emerging movement, the legislature decided to make the Commissioner of Forestry into a permanent position in the Division of Forestry, which was placed under the auspices of the Department of Agriculture. Rothrock was appointed commissioner.\textsuperscript{xxxiii}

Shortly after the commission filed its report, the Commonwealth purchased 415 acres in Beech Creek Township, Clinton County, for $30.70 under the tax sale Act of 1897.\textsuperscript{xxxiv} This purchase began the process of land acquisition for state forest reserves. Rothrock believed that the forests could be restored only by state action, because of the resources required to do so and because the state had the impetus in assuring its perpetuity and the public good. The principal reasons for the reserve purchases included worsening of the lumber industry, lack of clean and pure 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 the barren lands.\textsuperscript{xxxv}

Rothrock maintained a unique perspective on taxation of forested areas, positing that taxes were one of the primary and earliest factors that encouraged landowners to strip the timber from their lands.\textsuperscript{xxxvi} He therefore sought to have timberlands freed of taxes, because they contributed to the public good; this economic freedom would thus encourage growth of forests by landowners. He believed that timber should be taxed, but not growing forests.\textsuperscript{xxxvii} However, because of Constitutional tax-law restrictions, Rothrock proposed that timberlands be classified as a separate class of land, for which the legislature could then alter specific taxes.\textsuperscript{xxxviii} His ideas on taxes were never fully accepted and often were stringently opposed, yet remain a focal point of his ideas on forestry. There remains today no solution to the forest-taxation issue.\textsuperscript{xxxix}

The work of the Division of Forestry had grown to the extent that remaining a division of another department was no longer feasible.\textsuperscript{xli} On February 25, 1901, the legislature and governor approved a plan to create a Department of Forestry, separate from the Department of Agriculture, with Rothrock continuing as its commissioner.\textsuperscript{xlii} 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.\textsuperscript{xliii} By December 10, 1902, the reserves totaled 305,851 acres, in addition to 266,871 acres under consideration for title transfer, making the total 572,722 acres.\textsuperscript{xl}

By 1903, under the leadership of Governor Samuel W. Pennypacker, Rothrock noted that the state “has purchased 622,576 acres of land…There remain under consideration, 86,448 acres, making a total of 709,024. There is in sight and to be offered shortly, we think, that we now have intimation of, about 100,000 acres more.”\textsuperscript{xlv} In comparison to the holdings of just a year earlier, it is clear that the Forestry Division was rapidly purchasing land for reserves under Rothrock’s leadership. Notably, from 1898 to 1910, 924,798 acres, nearly half of today’s state forest-reserve acres, had been obtained, much as the result of Rothrock’s involvement in forestry.\textsuperscript{xlv}

With this growing reserve, Rothrock realized there was a need for trained forest rangers and outlined an idea for a forestry school.\textsuperscript{xlvi} Only recently, in fact, had a few forestry schools been established within the United States; there were roughly only twenty U.S. citizens with forestry training and two had obtained their education in Europe.\textsuperscript{xlvii} In 1903, Rothrock charged his colleague George Wirt with creating the school; Wirt became the first director of the State Forest Academy at Mont Alto, serving there until 1910.\textsuperscript{xlviii} Rothrock wrote that “the Pennsylvania State Forest Academy is unique. It is the only institution of its kind in the western Hemisphere carried on by…Government. It is admitted by those who know to be the most promising institution of its kind in America.”\textsuperscript{xlix} Rothrock directed that the school teach practical skills such as how to handle axes and saws,\textsuperscript{i} as well as academic subjects including chemistry,
German, silviculture, and zoology. Eventually the academy merged with the Department of Forestry in the School of Agriculture (established 1907) at the Pennsylvania State College (which would become The Pennsylvania State University). Today, the institution is the School of Forest Resources and remains part of Penn State.

While Rothrock was to serve as Commissioner of Forestry until 1905, he appealed to Governor Pennypacker in 1903 to accept his resignation because of his deteriorating health. His request, however, caused a minor uprising. Numerous individuals and organizations contacted Pennypacker, asking that he 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.” This sentiment underscores the esteem with which Rothrock was held within Pennsylvania.

While Rothrock was persuaded to stay on as commissioner, in 1904 he wrote once more to the governor, seeking acceptance of his retirement no later than June 1. Numerous messages were again sent to the governor conveying deep sadness over Rothrock’s resignation. Some of the strongest words came from the State Forestry Reservation Commission, which stated 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.” Although the governor accepted the resignation, Rothrock was immediately appointed to the Forest Reservation Commission, on which he served on and off until his death in 1922.

Toward the end of his tenure as Commissioner of Forestry, Rothrock, who was a firm believer in open-air treatment for tuberculosis patients, founded the White Pine Camp, later South Mountain Sanatorium, in the mountains of Mont Alto. Rothrock relayed to Governor Stone in 1902 that the plans for the camp had 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 the institution received $8,000 from the legislature and another $15,000 for 1905-1907. Rothrock later reported that after June 1, 1903, 61 of the 89 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 1907, when it was transferred to the newly created Department of Health. Rothrock’s devotion to nature, it seems, was linked to his views on healthful living as well as the benefits of living and exercising within the outdoors. When faced with health issues himself, Rothrock generally retreated to the outdoors to recuperate.

Despite his age, Rothrock continued to contribute to Forest Leaves and to serve on the Forest Reservation Committee, demonstrating the depth of his commitment to forestry. In 1914, a group of Rothrock’s friends bestowed upon him a loving cup. On April 11, 1919, Arbor Day, there was a special planting of 80 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, in addition to the earlier designation of Rothrock State Forest in Forest District #5, near Huntington, Pennsylvania, underscore the appeal and influence Rothrock had on forestry and its adherents.

On June 2, 1922, Rothrock passed away at his home in West Chester, Pennsylvania. He was 83. Despite his vast contributions to Pennsylvania’s history, his name largely has been forgotten, despite numerous memorials to celebrate his life and accomplishments. While it may be important, from a historical perspective, to preserve and recognize those accomplishments,
one contemporary of Rothrock’s wrote that, “his was a wonderful life, full of experience and deeds, the latter of which will live long after him and be the best sort of a memorial.” That “best sort of memorial” arises from the path he created for future generations to follow, through his organizational leadership, legislative advocacy, and drive to educate the public over the plight of the forests.

A commission dedicated to his honor erected a boulder-monument in Rothrock’s hometown of McVeytown on November 1, 1924. In an address at the monument, Governor Gifford Pinchot stated that Rothrock was one of the “greatest public servants in the history of our Commonwealth,” and was “wholly unselfish to the point of extreme self-sacrifice, capable to the level of the brilliant achievements which distinguished his career.”

Despite his significant accomplishments, Rothrock remained very 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.” Though both humble and focused on helping his fellow Pennsylvanians, Rothrock received several additional recognitions after his death. A plaque was erected at West Chester and two memorials established in Harrisburg: His name was emblazoned on the top of the Forum building along with other great Pennsylvania scientists and a plaque was placed in the Capitol. Arranged by the Pennsylvania State Forest Commission and funded by his friends, this plaque was unveiled on October 29, 1923. It lists all of the titles he had held during his lifetime, his accomplishments, and characteristics in full. In addition, the alumni of the Pennsylvania State Forest Academy erected a stone monument at the camp in Mont Alto for Rothrock as founder of the academy.

A unique memorial to Rothrock was established by proclamation by Governor David L. Lawrence in 1961. The proclamation amended the already existing act of June 19, 1941 (P.L. 143), to pay homage to Rothrock’s contributions to Pennsylvania forestry by changing one of the days designated as Arbor Day to April 9, Rothrock’s birthday. In addition, a week designated as Dr. J.T. Rothrock Memorial Conservation Week was established in April as well. It seems clear, however, that once Rothrock and his colleagues and acquaintances had passed away, his name and contributions began to fade from the public consciousness. That failure to accord Rothrock the public awareness his role as the “Father of Pennsylvania forestry” deserves to be corrected.

The establishment of an organized Forestry Department was a momentous achievement, along with his other botanical, medical, and legislative accomplishments. While, as a contemporary noted, the forests that grace Pennsylvania’s landscape are a better memorial to him than any plaque, monument, or history, this article is one small attempt to underscore the importance of remembering Rothrock and his vision. While “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 our well-being and survival. In the age of the destructive timber barons, his foresight recovered and ensured Pennsylvania’s prosperity.

Rothrock possessed a wealth of leadership skills, a wise and practical approach to issues, an emphasis on legislation to enforce change, a vast knowledge through both education and experience, and a complete devotion to the cause of forestry. He “agitated” the public into awareness of forestry issues and through his lobbying helped to enact many forestry-protection laws. It is to him and other faithful individuals within such organizations as the Division of Forestry that we owe gratitude for the tree-covered hills and mountains of Pennsylvania.


Ibid., p. 86.


Civil War Muster Roll, 131-D Muster-Out Roll, RG 19.11, PSA.

Civil War Muster Roll, 20-E Calvary Muster-Out Roll, (181st Regiment), RG 19.11, PSA.

“A tribute to Dr. Joseph Trimble Rothrock by his Friends,” Mira Lloyd Dock Papers, MG 43, p. 7, PSA.

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Clara Whiteside, “Still Fighting for our Forests at Eighty-Three” (Newspaper Clipping), MG 161, Box 5, J.T. Rothrock folder, PSA.


Ibid.

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Mira Dock Chronology for J.T. Rothrock, Mira Lloyd Dock Papers, MG 43, PSA.


* The Michaux Forestry Lectures were named for French botanist François Michaux who left a legacy to the American Philosophical Society. François’ father, André Michaux, was also a prominent botanist who traveled in North America from 1785 to 1794.


J.T. Rothrock, Areas of Desolation in Pennsylvania, (Philadelphia: Herbert Welsh, 1915), MG 135, Box 5, p. 6, PSA.

Dr. J.T. Rothrock chronology, George H. Wirt Papers, MG 135, Box 5, PSA.


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Ibid.


xxxvii J.T. Rothrock, “Relation of the Teachers to Forestry in this Commonwealth,” MG 135, Box 5, p. 11, PSA.
xxxviii Report of J.T. Rothrock, Botanist Member of the Pennsylvania Forestry Commission, RG 43, Roll #1, 4236, p. 2, PSA.
x Report to Gov. William Stone from J.T. Rothrock, State Forestry Reservation Commission, December 1st, 1902, MG 181, Box 1, Forestry Dept. Folder, PSA.
xxi “A tribute to Dr. Joseph Trimble Rothrock by his Friends,” MG 43, p. 9, PSA.
xxii Ibid.
xxiii Report to Gov. William Stone from J.T. Rothrock, State Forestry Reservation Commission, December 1st, 1902, MG 181, Box 1, Forestry Dept. Folder, PSA.
xxiv Letter from J.T. Rothrock to Governor Pennypacker, March 3, 1904, Samuel W. Pennypacker Papers, MG 171, Box 24, J.T. Rothrock Folder, PSA.
xxv Lester A. DeCoster, The Legacy of Penn’s Woods: A History of the Pennsylvania Bureau of Forestry, p. 27.
xxvi Report to Gov. William Stone from J.T. Rothrock, State Forestry Reservation Commission, December 1st, 1902, MG 181, Box 1, Forestry Dept. Folder, PSA.
xxxi Ibid., p. 38.
xxxiii Letter from J.T. Rothrock to Governor Pennypacker, March 3, 1903, MG 171, Box 24, PSA.
xxxi Letter to Governor Pennypacker from John Fulton, March 7 1903, MG 171, Box 24, PSA.
xxxv Letter from J.T. Rothrock to Governor Pennypacker, February 15, 1904, MG 171, Box 24, PSA.
xxxvi Ibid.
xxxix Report to Gov. William Stone from J.T. Rothrock, State Forestry Reservation Commission, December 1st, 1902, MG 181, Box 1, Forestry Dept. Folder, PSA.
x lb J.T. Rothrock, “Statement about Sanatorium in Forest Reserve,” MG 135, Box 5, PSA.
xxl ii Letter to George H. Wirt from Robert S. Conklin, MG 135, Box 5, PSA.
xxlv John Wirt, Letters to George H. Wirt from Robert S. Conklin, MG 135, Box 5, PSA.
xxlvii Letter from Robert S. Conklin to George H. Wirt, MG 135, Box 5, PSA.
xxlviii Letter from F.L. Bitler to Mira Dock, June 23, 1922, MG 43, PSA.
xxlix Dedication Speech of the Rothrock Memorial by Governor Gifford Pinchot, November 1, 1924, MG 135, Box 5, PSA.
Lx Letter to Walter Ludwig from J.T. Rothrock, February 17 1914, MG 135, Box 5, PSA.
Lx George H. Wirt, “A tribute to Dr. Joseph Trimble Rothrock by his Friends,” MG 43, p. 7, PSA.
Lxiv Ibid., pp. 73-74.