A Century of Forest Stewardship in New Jersey 1905-2005

Researched and written by Kevin Wright © Kevin Wright 2005

An Introduction to New Jersey's Natural Parks and Forest Reservations

Tucked between blue-hazed mountains and the ocean shore, the State of New Jersey occupies a full cross section of the Atlantic slope with terrains and habitats that vary remarkably mile by mile. The cultural landscape is equally picturesque; what began as the most ethnically and religiously diverse colony has become the most densely populated State in the Union. Consequently a wonderful variety of plant and animal life competes on a daily basis with a spreading suburban population for space and resources.

New Jersey's virgin forests vanished by 1860, having been repeatedly cut over. With such widespread deforestation, even the Highlands "presented a perfectly bare appearance." By 1900, about 46% of New Jersey's land area, amounting to two million acres, remained woodland, though its condition was generally poor. Though this forest area was close to lumber markets, its overall value was insignificant, due mainly to repeated and uncontrolled destruction by forest fires.

The first generation of professional American foresters, trained mainly in the carefully managed forest reserves of Germany, recommended the practice of scientific forestry to restore the exhausted condition of New Jersey's remnant woodlands after centuries of exploitation. They believed that even the poor sandy soils of the Pine Barrens might yield crops of "commercially valuable trees ... at a more rapid rate than is the rule on the average forest soil in the East, due to a favorable climate." They not only advocated the creation of an organized firefighting force, but also a system of state-owned demonstration forests to promote reforestation.

But the creation of a system of forest parks or reserves in New Jersey was never justifiable solely on the grounds of cultivating a profitable crop of trees for the lumber industry. By the start of the twentieth century, as the United States rose to the front ranks of the world's industrial powers, only Massachusetts and Rhode Island exceeded New Jersey in population density. From the outset, crowded smokestack cities and their commuter suburbs needed natural parks and state forests to protect their water supply and to provide accessible outlets for outdoor recreation and relaxation. As early as 1896, the

¹ "Caring for Jersey Forests. State Spending Money to Stop Fires and Promote an Industry," *The New York Times*, May 15, 1910, p. 20

Annual Report of the State Geologist addressed the need for urban parks and for "some restrictive legislation" to protect the forested watersheds of the Highlands. In 1907, State Forester Alfred Gaskill foresightedly connected the value of forest conservation to the greater well being of the people of New Jersey in his first report to the Forest Commission, noting, "In parts of this State forestry must always be associated with the park idea, with water problems, with large questions in which the individual is not apt to be deeply concerned." After a decade of thorough study and official inaction, Governor Edward Casper Stokes finally established New Jersey's system of forest park reserves in 1905. This is the story of its creation, retracing the origins of the Conservation Movement in New Jersey.

Vanishing Forests

The virgin forests of New Jersey were repeatedly cut over for charcoal to fuel the iron industry and for a wide variety of wood products, including firewood, charcoal, lumber, shingles, tan bark, poles, fencing, railroad ties, fruit crates, basket splints, packing boxes, barrel staves and hoops, and oyster stakes. The rate of deforestation was most rapid between 1830 and 1850 as an industrial revolution gathered steam. The primeval woodlands vanished by 1860 when even the steep rocky Highlands "presented a perfectly bare appearance," due to the large use of wood for charcoal. Expanding urban markets and high prices for farm products initially pushed agriculture from fertile valley bottoms onto cutover uplands.

The nation's great Civil War accelerated an already surging industrial revolution, speeding the shift of manufacturing from country waterpowers to the cities, which grew rapidly as transportation hubs and centers of population. Suburbs sprouted beyond the plume of their forest of smokestacks. Canals and railroads cheapened transportation costs and relieved the demand upon local woodlands by transporting coal to fuel factories and heat homes and by hauling lumber from distant sources. By 1850, rails slowly but surely carted the mineral wealth of the Jersey Highlands westward to huge furnaces and mills, situated closer to the coalmines that replaced local forests as the principal source of fuel. As the old charcoal furnaces and forges of our northern Highlands and southern bogs lapsed into obsolescence, the host of teamsters, woodcutters, charcoal burners and miners slowly disappeared from the mountains and woodlands.

A stock market crash in September 1873 weeded out many an outdated industry and slowed the expansion of agriculture onto marginal stony uplands, where forests had been cut over for cordwood. Widespread economic stagnation settled upon the country for nearly a decade, causing an unprecedented shrinkage of values and bankruptcy among farmers and manufacturers. The vast rolling plains of America's heartland opened cheap land suited to large-scale mechanized production. By 1900, the continental network of the railroads knitted together a national marketplace and the New Jersey farmer no longer enjoyed a decided advantage over his western competitor simply by proximity to New York City. Consequently farms in the immediate hinterland of the Atlantic seaboard

² Alfred Gaskill, "The Forester's Report," *The Third Annual Report of the Forest Park Reservation Commission of New Jersey*, 1907

either specialized in such perishables as orchard fruit, truck vegetables and market milk or they went under. Cleared farmland reached a maximum of almost two million acres in 1880, covering 43% of New Jersey's total area of 4.7 million acres.

Stumps sprouts and natural regeneration inevitably brought green to the hills and abandoned fields and a deciduous panoply of autumn color in due season. By 1866, however, railroad companies introduced coal-burning locomotives, which showered hot cinders upon surrounding woodlands, frequently setting them ablaze. Moreover, by the start of the twentieth century, New Jersey railroads required one and a half million oak or chestnut ties annually.

As late as 1920, nearly 70% of New Jersey's whole forest area of 1,400,000 acres had been recently cut over or so severely burned that the tree growth was too small to be considered merchantable. Of this area, 400,000 acres (three-fourths of which was in South Jersey) contained few trees large enough even for cordwood. Since New Jersey was not a lumber-producing State, forest protection was rightly perceived as essential to the quality and conservation of the State's water supply and for wildlife preserves. The first step in that direction was to reduce the constant devastation of forest fires through an organized effort at prevention and suppression.

Timber Poor

As forest fires swept the pinelands of Burlington, Camden, Ocean and Atlantic Counties in April 1893, the *New York Times* reported, "Every year brings a reign of terror to the people living on and about the pine lands, and each year from \$1,000,000 to \$2,000,000 worth of property is destroyed by fire." ³ John C. Gifford, of Mays Landing, considered "the best-posted man on forestry connected with the New Jersey Geological Survey, was temporarily employed by the state of Minnesota [at the time of the fires] and unavailable to survey the burned district and ascertain the damage." ⁴ In his stead, Professor John Smock, the State Geologist, noted,

³ "Forest Fires In New Jersey. The annual Loss Over \$1,000,000 --- Need of Legislation to Save Timber Lands," April 16, 1893, p. 10

⁴ John Clayton Gifford was born in Mays Landing, New Jersey, in 1870. He is regarded as New Jersey's first state forester. He was the founder and first editor of the magazine *American Forestry*.

John Gifford received a B. S. from Swarthmore in 1890. He took special courses at the University of Michigan and at John Hopkins, then studied forestry in Europe, receiving the degree of Doctor of Economics from the University of Munich in 1899.

Professor John Gifford secretly married Mrs. Edith D. McCarthy, of Plainfield, New Jersey, on May 18, 1896, at the bridegroom's home in Mays Landing. The bride was prominent in the women's rights movement and a New Jersey delegate to the Louisville meeting of the National Federation of Women's Clubs in June 1896, where she read a paper on "Forestry Destruction." Professor Gifford was then the secretary of the New Jersey Forestry Association and editor of its magazine. He met his wife while working for the Forestry Association, of which she was an active member. The new couple departed for a summer tour of Europe in July 1896.

John Gifford was a forestry professor at Cornell University in 1900. He published his first book, *Practical Forestry*, in 1901 and moved first to Miami in 1902 and then to Coconut Grove in 1905, where he and his wife Edith were active in saving the native royal palms on Paradise Key. He served with the United States Department of Agriculture in Puerto Rico, Cuba and the Canal Zone. He published *The Everglades of Florida* in 1911 and *Billy Bowlegs and the Seminole War* in 1925. He married his second wife, Martha Wilson, in 1923. Dr. John Gifford, Professor of Tropical Forestry at the University of Miami, died at Jackson Memorial Hospital on June 25, 1949, aged 79 years.

"It is needless to say that the forests are being depleted and no preparation has been made to restore them. The State has valuable lands covered with chestnut, oak, locust, and other timber saleable for railroad ties and telegraph and telephone poles, and excellent cedar wood for shingles. The annual product was worth \$5,000,000 a few years ago, but the product is smaller and smaller each year, and soon the State will be timber poor."

While the woodman's axe was chipping away the forests of northern New Jersey, forest fire was clearly the culprit in the south. Out of 54 forest fires that occurred between 1885 and 1893, locomotive sparks caused twenty-eight fires (52%), land clearing was responsible for seven fires (13%), malicious persons started seven fires (13%), hunters ignited six fires (11%) and charcoal burners were blamed for six fires (11%). Professor Smock estimated the loss in timber at a million dollars annually over the previous twenty years. Forest fire was also "a source of great danger to the cranberry plantations."

Several remedies were suggested. While some railroads cleared away 100 feet of timber on each side of their tracks, burning out the brush each fall and keeping the ground clear of vegetation in summer, other railroad companies simply ignored the problem. The proposed solution was a law requiring railroads to adopt 100-foot firebreaks on both sides of their tracks and to place spark arresters on their engines. At that time, it was common practice to fight fires by making a stand along the cross-country roads or by "back-firing" to stop a fire's progress by starving it of fuel. Often the narrow roadways were wide enough to act as a fire line, but it was felt that if legislation were enacted, requiring all country roads to be made four rods wide and to be kept clear of brush and timber by controlled burning in the autumn, then the backwoods lanes would become a deterrent to the spread of forest fires.

Forest fires caused extensive damage to New Jersey's woodlands again in 1895, destroying over 70,000 acres.⁵ In response, Professor John Smock of the State Geological Survey prepared a report to the Legislature, noting that New Jersey spent \$30,000 annually to protect fish and game, \$100,000 for stone roads and \$5,000 to replant oysters, yet it spent nothing to prevent or suppress forest fires. Conservationists took heart when Silas Petrick, of Petrickstown, Salem County, set a judicial precedent by winning a law suit for \$200 in damages to his timber caused by a fire, which his neighbor, John Norton, started. Beyond this small victory, however, John Clayton Gifford of Mays Landing, New Jersey's first professional forester, painted a bleak picture on the unchecked destruction of our forests by fire:

"In South Jersey the regions most seriously affected are in Ocean, Burlington, Atlantic, Cape May, and Cumberland Counties, and in North Jersey mainly in the region of Beaufort, Kittatinny, and Green Pond Mountains.

⁵ "Damage By Forest Fires, New Jersey Legislature to be Asked for Protection," *The New York Times*, January 5, 1896, p. 16

Ocean County suffered very little this year, in spite of the dryness. This short-lived immunity is due to the fact that almost all the combustible matter was destroyed by the great fires, which swept over it the year previous.

Cape May and Atlantic Counties suffered the most. The fires last year, owing to the extreme dryness, destroyed the humus in the swamps, which had been ages in accumulating, and which occasionally serves to stay the progress of fires.

In Ocean, Burlington, and Atlantic Counties about 60,000 acres were devastated and, owing to the nature of the property destroyed, including cranberry bogs, houses, fences, &c, the loss cannot fall short of \$10 an acre, to say nothing of the effects on the soil, the water flow, and other natural conditions. In the swamps, trees, which were not burned, have toppled over, forming large masses of decaying matter, which will breed millions of insects.

I do not know the exact damage in Cape May County, but it is very great. From what I have seen, I think 20,000 acres a low estimate, and the amount of damage in the neighborhood of \$100,000. This, however, is only my own estimation.

About 50 per cent of the fires have been caused by sparks and coals from locomotives --- mainly from coals falling from the grate. The rest are caused by carelessness and malicious people.

The most serious fires were caused during September and October, with a few in the early Spring.

The following, I think, are the most important facts: That fires, although they cannot altogether be stopped, can be reduced materially by a little effort and slight expense. There is no one to attend to them, and fires burn for some time without being noticed. One fire lasted over three weeks in the swamp last season.

The damage is beyond calculation. It is depopulating and rendering uninhabitable a large part of South Jersey. Parts of Atlantic, Cape May, and Ocean Counties look like deserts.

The steps toward prevention --- the methods must be preventive and not curative --- are briefly, in my opinion, as follows:

First --- To interest the public. This must be done by the employment of some one to canvass the State, lecturing and presenting facts and figures; the distributing of literature on the subject and getting schools interested, and especially in getting woodland owners to lend a hand. It should need no argument to convince every sane person that the reckless destruction of useful property is wasteful.

Second --- In constructing fire lanes along railroads 100 feet on each side, such as the West Jersey Railroad has made in Cape May County, and in clearing the sides of public roads of underbrush and combustible litter, but not destroying the large trees which shade the road. The trees ought to be of the deciduous kind. These lanes will then act as stays in preventing the progress of fires instead of being the sources of them. They are also vantage points in back firing.

Third --- Some one ought to be appointed for at least every twenty-five square miles of forest to apprehend and bring to court wood thieves and malicious and careless fire setters, and to superintend the burning of brush and the fighting of fires."

In his report, Professor Gifford offered the low estimate that timber losses from forest fires averaged a million dollars annually for the past fifteen or twenty years. He also noted the destruction of wildlife, especially birds, and their food supply. He estimated that forest fires swept over 197,000 acres in 1894. As to causes, he noted:

"There was a time when the charcoal burner was the greatest enemy of the forest owner. He, knowing that charred wood was only fit for charcoal, made it his secret duty to see that large areas were burnt at regular areas.

The pine-hawker frequently sets fire to the huckleberry bushes, to improve the berry crop he knowing that in a few years, the growth which follows the young vine bears larger and finer fruit.

Wood thieves frequently set fire to brush and stump to prevent detection. Sometimes a pine-hawker who has probably been chastised by a wood owner for stealing wood set fire to the tract for revenge.

A large share of fires is started by sparks from locomotives."

Lastly, Professor Gifford estimated that there were 2,069,819 acres of forest in New Jersey,⁶

The State Geological Survey: Report on Forests

The State Geological Survey began to record and study New Jersey's land formations and natural resources in 1854. When the Legislature recognized the need to determine the extent, condition and benefits of the State's woodlands, the Geological Survey was the natural choice. On May 1, 1894, the Legislature directed the State Geologist to employ an expert botanist to study the extent, quality and benefits of forested land in New Jersey.⁷

From the outset, the desirability of creating a State-owned system of "Natural Parks and Forest Reservations" was attached to the water supply and recreational needs of an increasingly urban population, rather than to the cultivation of a merchantable crop of trees for the lumber industry. The Administrative Report of the *Annual Report of the State Geologist for the Year 1896* directly addressed the State's priorities:

"The importance and value of reservations of tracts, marked by their natural features and situation, for purposes of public health and recreation, are appreciated more highly as the population of the cities and the suburban districts of the State increases, and the tastes and the necessities of crowded conditions call for more room and opportunities for the enjoyment of the beauties of natural scenery and for the study of natural conditions as yet uncontaminated or despoiled by the more utilitarian forces of civilization. The State is fortunate in the possession of many large tracts and districts near the cities, which are hardly affected by these agencies and which are well adapted to the purpose of parks and reservations for public use. These may be classified as parks for city use, as reservations whence the public water-supplies are obtained, and forest or timber-land reservations... As is well known, parks enhance the value of the real estate of a city, but the acquisition of large tracts of land adapted to such use is a subject of wise administration and comprehensive study of conditions, as well as financial consideration, in advance of the movement of population and the destruction of many elements of natural beauty...The Highlands, as a source of nearly all of the water which is used in the cities of the northeastern part of the State, should be protected against complete deforestation, and also from the clearing of woodland, which is on the steeper mountain-sides and hills. While it may not be possible, or even desirable, for the State to own any of these areas whence the cities obtain their

⁶ "Damage by Forest Fires, New Jersey Legislature to be Asked for Protection," *The New York Times*, January 5, 1896, p. 16. The forest acres, by county, divided as follows: Atlantic County, 271,638; Bergen, 56,625; Burlington, 331,697; Camden, 66,583; Cape May, 75,372; Cumberland, 172,987; Essex, 24,239; Gloucester, 126,319; Hudson, 713; Hunterdon, 39,481; Mercer, 15,829; Middlesex, 66,164; Monmouth, 89,711; Morris, 140,191; Ocean, 295,167; Passaic, 76,170; Salem, 50, 057; Somerset, 28,613; Sussex, 136,538; Union, 14,350; and Warren, 60,205.
⁷ Chapter CXX, Laws of 1894

water-supply, there may be occasion for some restrictive legislation to protect them and keep them in their present wooded condition. To this extent large parts of the Highlands may be, as it were, public reservations, and readily accessible to the inhabitants of the cities, and conducive both in the wholesome water-supply and in the facilities for contact with beautiful natural scenery to the valuable uses of health and pure recreation."

John Clayton Gifford (1870-1949), a native of Mays Landing, New Jersey, was America's first graduate forester. Like many pioneer conservationists of his generation, including Gifford Pinchot, he studied forestry in Europe, receiving the degree of Doctor of Economics from the University of Munich in 1899. The professionally managed forests of Germany, which the first generation of American foresters carefully regarded, served as their models for state-owned forest reserves at home. Public support for the idea of creating a system of state forest reservations in New Jersey, however, rightly questioned whether the application of scientific forestry practices to timber production would ever make New Jersey a lumber-producing State, given its high and rising land values.

Gifford Pinchot, Chief of the Division of Forestry, United States Department of Agriculture, was appointed botanist to conduct the forest survey in southern New Jersey. He started fieldwork in February 1897 with assistance from Henry S. Graves, E. M. Griffith and U. F. Bender. The first object of their investigation was "to show by actual measurements the loss to the State of New Jersey from forest fires." Secondly, they studied the "the forest fires themselves" in order to suggest the best means for fighting them. Pinchot's final report, entitled "A Study of Forest Fires and Wood Production in Southern New Jersey," was published as an Appendix to the *Annual Report of the State Geologist for 1898*.

Pinchot and his colleagues recommended the creation of a State Forest Fire Service, not only to disseminate information about forestry and forest fire prevention, but also to rapidly and accurately locate forest fires and to provide the speedy response of a trained force of fire fighters. They recommended the employment of a Forester as executive officer, headquartered at Winslow, and four Assistant Foresters, placed in fire-watch stations at Whitings, Tuckerton, Egg Harbor City and Millville. These would have charge of one hundred fire wardens, each paid \$25 annually to respond to fires within their districts. Township and County officers would be given the title of Fire Commissioners and authorized to take charge of firefighting efforts in the absence of Foresters or fire wardens. Lastly, all Foresters, Fire Wardens and Fire Commissioners would be empowered to requisition the services of any citizen for the purpose of extinguishing a fire.

The Administrative Report for the State Geologist's 1898 *Annual Report* gave qualified support to the idea of creating a system of State Forest Reservations, but questioned whether they would ever pay for themselves through the application of scientific forestry

⁸ "NATURAL PARKS AND FOREST RESERVATIONS," Administrative Report, The Annual Report of the State Geologist for the Year 1896, Trenton: MacCrellish & Quigley, 1897, pp. xxii-xxiii

practices to timber production, saying:

"The question of forest protection in New Jersey is really included in the greater problem of the State's water-supply and its conservation. New Jersey is not a lumber-producing State. The areas capable of producing merchantable lumber are of inconsiderable importance in extent. In the southern part of the State the clearings for agriculture are encroaching upon the pines belt; in the northern part the value of land for residential purposes and for private parks and game preserves is too high for forestry. And it is doubtful if wood can be produced at a profit over any large areas. These conditions of the forested territory of the State are against forest reservations solely as wood-producing or for purely forest culture."

The value of protecting the forested Highlands watersheds was already recognized in 1898; by then, the City of Newark was taking 50 million gallons of pure water daily from its reservoirs in the Pequannock watershed and Jersey City was about to sign a contract entitling it to 70 million gallons daily from the Rockaway River. Based upon Cornelius C. Vermeule's report on "The Pine Belt of Southern New Jersey and Water-Supply," published in 1898, the State Geologist also recommended that unbroken tracts of forest in South Jersey be set aside as forest park reservations to protect the "great gathering-grounds for the unfailing supply of pure water to the many sea shore towns and settlements and the cities in the valley of the Delaware ..."

Distribution of Tree Species

Professor Arthur Hollick, of Columbia University, conducted pioneering studies on the distribution of tree species in New Jersey and their relation to geological formations and soil conditions. After first surveying the northern part of the State, he continued his explorations further south, between the coastline and the Delaware River. Reporting his preliminary results in November 1898, he divided New Jersey theoretically into three zones of vegetation: the northern or deciduous, the southern or coniferous, and an intermediate one, which he called the "tension zone," where the two floras meet or overlap, causing a constant state of tension in the struggle for advantage." In particular, Professor Hollick noted that *Pinus rigida Mill*, the common Pitch pine, existed over hundreds of square miles in Burlington and Ocean Counties, often to the exclusion of all other trees. Though it is the prevailing species throughout the Pine Barrens, it otherwise occurred as isolated groves or individual specimens, which, if destroyed, were generally replaced with deciduous growth. The groves and individual specimens growing further north were found to be, as a rule, larger and more vigorous than the average of the trees in the Barrens, not because the soil was more favorable to them, but because of its being less favorable for deciduous trees. Professor Hollick concluded that the pines dominated wherever they were free from competition, but that the stronger and more aggressive deciduous trees were able to dominate on soils where pines might otherwise prosper.

As Professor Hollick recognized and described, New Jersey's forest broadly comprises two distinct regions, with an intermediate transition zone: a hardwood region of about 750,000 acres lying north and west of a line running from Seabright to Glassboro to Bridgeton; and a pine region of about 1,250,000 acres lying south and east of the same line. The hardwood region contains mainly deciduous species such as oak, maple,

hickory, beech, tulip poplar, ash, birch, gum, and formerly elm and chestnut, with small quantities of conifers such as white pine, pitch pine, red cedar and hemlock. The South Jersey pine region contains principally pitch pine, shortleaf pine and white cedar, with considerable oak on the better soils. This oak growth became scrubby where it was frequently burned.

In 1899 the Geological Survey published a comprehensive *Report on the Forests*. Professor John C. Smock again emphasized the primary importance of protecting against forest fires, both on the Kittatinny Mountains in the north and in the great southern pine belt.

A Great Scheme of Preservation

The first surveys placed New Jersey's total forest coverage at 2,069,819 acres, of which 1,797,003 acres were in South Jersey. About 46% of New Jersey's northern hill country was covered with woodlands. New Jersey forests disgorged four million dollars in wood products, distributed into railroad ties, telegraph and telephone poles, pilings, fuel for domestic use and manufacturing, fencing, and milled lumber. Yet, the extensive pinelands were not considered worth protecting from fire and the forest of the northern uplands was useful for little more than kindling, charcoal making and beanpoles. If trees continued to be harvested at the current rate, the supply would only last from thirty to fifty years.

In May 1901, the Geological Commission proposed a great scheme to preserve and protect a vast forest range in New Jersey through a system of State Forest Reservations, similar to those in Germany. They particularly recommended the purchase of a forest reserve on Kittatinny Mountain and the employment of an expert forester to make an annual estimate of the loss and damages caused by forest fires. The Commissioners were Governor Voorhees, Colonel Roebling, Henry S. Little, ex-Senator Edward C. Stokes, Lebbeus R. Ward, and other prominent citizens. Former State Senator Edward C. Stokes thought, "the scheme can be made profitable to the State." Dr. John Clayton Gifford, Professor of Forestry at Cornell University, was a consultant. The Legislature responded favorably, appropriating funds in 1901 to continue the forestry investigation.

Creation of New Jersey's Forest Park Reservations

Advocates of forest conservation pushed for the adoption of a public policy amenable to the preservation and restoration of New Jersey's ravaged woodlands. Legislators were well informed of the need for state-owned forest park reserves, but took no definite steps in that direction. Edward C. Stokes, of Cumberland County, was swept into the governorship of New Jersey in November 1904 on the Republican landslide that elected Theodore Roosevelt to the Presidency. With the lumber industry at low ebb, due to the inferior quality of standing timber across the State, Governor Edward C. Stokes recognized the value of state forests in protecting watersheds and potable streams, and as

⁹ The "Report of the State Forester" for 1921 estimated that pine occupied 50% of this area; oak and hardwoods, 20%; cedar swamp, 4%, and brush (recently cutover or severely burned land) 26%.

¹⁰ "The State Forestry," Reprinted from the Exchange, The New Jersey Herald, May 2, 1901

game preserves, pleasure parks, camping grounds and picturesque retreats. He recommended the purchase of state forest reserves in his inaugural address of January 17, 1905, saying,

"We are just beginning to realize the importance of our forests and the necessity for their preservation. They do not only furnish timber and provide an important industry, but they beautify the country, temper the climate, hold the rainfall, fertilize the soil, furnish game preserves and conserve our water supply, an indispensable feature of our rapidly growing and congested civilization"

As a result of the Governor's advocacy, Assemblyman Alexander R. Fordyce, of Middlesex County, introduced a bill for the appointment of a State Board of Forest Park Reservation Commissioners. Both houses of the legislature unanimously approved and the bill was forwarded to Governor Stokes for his signature into law.

Governor Stokes approved the law creating the Forest Park Reservations on March 22, 1905. This act entrusted the care, management and preservation of forest parks to a five-member State Board of Forest Park Reservation Commissioners. The original commissioners were: Governor Edward C. Stokes, Ex-officio, President; State Geologist Henry B. Kummel, Executive Officer; Professor John C. Smock, of Trenton; Edward B. Voorhees, of New Brunswick; and William H. Chew, of Camden, Secretary. 12

The State Board of Forest Park Reservation Commissioners were to "observe, keep in view, and, so far as it can, put in operation the best method to reforest cut-over and denuded lands, to forest waste and other lands, to prevent injury of forests by fire, the administering and care of forests on forestry principles, the encouragement of private owners in preserving and growing timber for commercial and manufacturing purposes, and the general conservation of forest tracts around the headwaters and on the watersheds of all the water courses of the state ..."

The leading newspapers throughout New Jersey not only published the new forestry law, but also did "much to arouse public sentiment in favor of forest preservation" by emphasizing its importance to the state's general well being and economic growth. The Board of Forest Park Reservation Commissions first met in Governor Stokes' office in the State House on June 27, 1905. Their decision to adopt the cedar tree as the emblem on its seal was rescinded at their second meeting, held September 12, 1905, when, on Henry Kummel's motion, the Salem Oak was instead adopted as the official emblem of

¹¹ Chapter 47, Laws of 1905: An \$10,000 appropriation enabled the new State Board of Forest Park Reservation Commissioners to acquire, protect and restore forestlands through foresters, fire wardens, lookout watchmen and rangers. A supplement was enacted on March 22, 1907, to allow the Forest Park Reservation Commissioners to acquire "any land covered by a fresh-water lake or pond, or part thereof, within this State, and any land surrounding or adjacent thereto..."

¹² Elmer H. Smith, of Salem, was appointed April 11, 1907, to fill the vacancy on the Board. In 1906, Charles Lathrop Pack, of Lakewood, replaced John Smock as a commissioner in 1908.

¹³ First Annual Report of the Forest Park Reservation Commission of New Jersey for the Year ending October 31st, 1905, Trenton: MacCrellish & Quigley, 1906, p. 13.

New Jersey Forest Parks.¹⁴ The work of the new Forest Commission was threefold: First, to organize a means of preventing and extinguishing forest fires; second, to educate the public in forestry; and third, to acquire and manage forestlands.¹⁵

Throughout the summer of 1905, consulting foresters F. R. Meier and John C. Gifford investigated tracts of forest or wastelands suitable for purchase and re-growth as forest park reserves. They considered offers for sale of extensive mountaintop woodlands at High Point; 11,000 acres at Bamber Lake in Ocean County; woodlands near Hackettstown, Warren County, and Ironia, Morris County; 1402 acres in three tracts belonging to Alfred Cooper; a tract owned by Coleman F. Leaming in South Dennis, Cape May County; and ten tracts, amounting to 4,298 acres, belonging to J. F. B. Atkins, of Williamstown, Gloucester County. Numerous tenders of forestlands were made "at prices ranging from \$1.50 per acre to prohibitive figures."

The First Forest Parks

On October 4, 1905, the State of New Jersey took "the first step toward putting the new forestry preserve plan in operation," purchasing, or acquiring by gift, a total of 970.59 acres of woodland. The Mays Landing Reserve encompassed 373.59 acres of recently burned woodland, situated between Great Egg Harbor River and South River, about one and a half miles south of Mays Landing in Weymouth Township, Atlantic County. The Bass River Reserve initially comprised 597 acres in Bass River Township, Burlington County. These tracts were acquired "to demonstrate the best methods of refreshing cut-over and denuded lands; of showing how to prevent injury by forest fires, and the general administering and care of woodlands in a way to make them self-creating and self-sustaining." According to a special report in the *New York Times*, "the movement is regarded as of much importance in New Jersey, where forest fires and want of skill in care and cutting are fast wiping out the forests." ¹⁷

The Mays Landing Reserve

Dr. John Gifford of Princeton, former Forestry Professor at Cornell University, presented a tract of 104.65 acres, located two miles south of Mays Landing, to the State of New Jersey in 1905. The Commission thanked him, noting gratefully "there is no more ardent friend of forestry in New Jersey." He also recommended the purchase of an adjoining tract of 250 acres from R. D. Wood & Company at \$4 per acre. On December 6, 1905, the Consulting Foresters recommended the acquisition of 268.94 acres, adjoining the Gifford Tract at Mays Landing, from the Mays Landing Water Power Company for \$1,076. This purchase, together with the Gifford donation of land, formed the Mays Landing Forest Park Reserve. In its *Annual Report*, the Board stated:

_

¹⁴ Minutes of the Board of Forest Park Reservation Commissioners, New Jersey State Archives, Meeting of September 12, 1905.

¹⁵ Henry Kummel, Administrative Report, Fourth Annual Report of the Forest Park reservation Commission of New Jersey, 1908, (Paterson: The News Printing Company, 1909), p. 9

¹⁶ "Saving Jersey's Forests. State Buys Two Tracts of Land for Timber Experiments," *The New York Times*, October 6, 1905, p. 9

¹⁷ *Ibid.*, p. 9

"This tract seems to be admirably situated, for it lies along the Great Egg Harbor river, about two miles below May's Landing, and extends inward to the main highway, leading from Cape May to May's Landing. Such a location should reduce the danger of fire to a minimum, and, as there is already on the tract a fair growth of timber, it should prove a very good place for the State to begin its first actual work in forestry. Besides the soil, while sandy, is deep and moist and on it trees make excellent growth.

The location of this tract has also the added advantage of being accessible to a market, in a region inhabited by people who will take an interest in the experiment, and where labor may be easily obtained.

On this reservation it is the purpose of the Commission to start its first nursery, and this work will be inaugurated at the beginning of the spring season."

In his first annual report to the Legislature, delivered in January 1906, Governor Stokes spoke of negotiations "in progress for tracts of larger acreage," including 24,700 acres of well-timbered land at Weymouth, near Mays Landing and Egg Harbor City, which had been offered at \$5 per acre. The Weymouth tract also encompassed a pond of 200 acres with a water-powered sawmill, a paper mill, a store and twenty-four houses. There were also potentially valuable deposits of clay, gravel and stone. The Mays Landing Board of Trade protested the intended purchase of the Weymouth tract for a forest reserve, fearing the loss of a third of the taxable acreage of Hamilton Township. The failure to obtain more land in this vicinity frustrated the Forest Commission. In 1908, the State Forester pessimistically concluded, "The small area of this reserve makes it difficult to put under management except at a greater expense than seems warranted." Howard L. Roberts was employed at warden. This small forest reserve was sold in 1916 for \$8,264.

Two experimental plantings of Cottonwood (*Populus deltoids*), each a quarter acre in extent, were made near Mays Landing in April 1908, one on a piece of moist bog in the Mays Landing Reserve, the other on much drier land owned by George Wood. Cuttings from trees in the neighborhood were used. The intent was to test whether moist swamp borders were suitable for growing this valuable species.

The Bass River Reserve

The Forest Park Commission accepted an offer to purchase 597 acres in Bass River Township, Burlington County, from Charles W. Mathis, forming the original core of Bass River State Forest. At \$150 per acre, this land had little value, but, as was duly noted, "It is such land as this, however, that the State should acquire and develop. The Commission believes that it can be made a profitable investment, and perhaps make the nucleus of a large reservation"

The State of New Jersey agreed in June 1906 to buy 1,043 acres for the Bass River Reserve, bringing its total area to 1,633 acres.. W. W. Pharo, of Philadelphia, sold several tracts, including 400 acres of swamp and upland, located on the East and West Branches of Bass River and 254 acres of swamp and upland bordering the Falkinburg Branch, the Townings Branch and the Main East Branch of Bass River, for \$1350. He also sold 189 acres of upland, located one and a half miles to the west, for \$500. The Board also purchased a dwelling house on 9.5 acres, situated along the West Branch of the Bass River, from W. C. Irons, of New Gretna, for \$325, together with 180 acres of cedar

swamp and woodland on the Merrygold Branch of the Wading River for \$405. On December 3, 1906, Samuel Budd Allen was employed as caretaker and warden of the Bass River Forest Reserve for \$35 per month. The old Irons farm on the east side of Bass River was acquired for a reserve headquarters and residence for the forest warden, but Warden Samuel Budd Allen preferred to reside at his home in New Gretna. By 1908, upwards of seven miles of fire lines, varying in width from 8 to 30 feet, were constructed.

The Bass River Forest Reserve originally consisted of young pitch pine, oak sprouts, cedar swamp, and scrub oak; all of which, with the exception of some of the swamp, had been badly burned over at various times in the past. It was acquired with the intention of demonstrating "the possibility of maintaining commercial forests on our poorest sands, and the means by which that end is to be attained."

Silvicultural work began on the Bass River Reserve in April 1907 with the establishment of a small nursery, containing eighteen beds, 4 by 20 feet, occupying about one-sixteenth of an acre, enclosed by wire fence. By September 1907, the nursery contained 24,300 seedlings of Jack Pine, Western Yellow Pine, Scotch Pine and Locust. The Western Yellow Pine failed, while the Jack Pine prospered. A new nursery was established in another part of the Bass River Reserve in the spring of 1908. It consisted of thirty-six beds, each 4 by 24 feet, on a tract of loamy sand. After one year, the nursery beds nourished 15,000 Loblolly Pine, 2,000 Scotch Pine and 900 Douglas Fir. Attempts at broadcasting the seed of Loblolly Pine on ten sample plots proved disappointing.

On February 8, 1908, the Forest Park Reserve Commissioners authorized Professor John B. Smith, the State Entomologist, to cut white oak sprouts on the Bass River Reserve as part of a "necessary experiment" in silkworm culture. For the purpose of demonstrating improvement thinning, the State Forester marked six acres of fifteen-year-old oak for cutting.

The great savings banks of nature

In regards to future policy, the Forest Park Reservation Commission noted how the first appropriation of the New Jersey Legislature for forest preservation was "woefully inadequate." Their *Annual Report* for 1906, noted with great foresight:

"With States all around us spending large sums annually on this most important work, and setting aside forested areas amounting in the aggregate to hundreds of thousands of acres, our own State could well afford to be liberal in protecting for the future its fast-disappearing woods. Moreover purchases can now be made at reasonable figures, whereas each year the prices are advancing. Should not the State get the advantage of this advance, especially when it is saving for the future a valuable asset which, when once destroyed, can never be restored no matter how great the expenditure of money? Time alone can replace our forests, and is it not the highest duty of the State then to preserve our timber while there is any left? Some one has said that the forests are

'the great savings banks of nature' from which we have been taking the interest and reducing the capital."¹⁸

State Forester

The Board of Forest Park Commissioners employed F. R. Meier as Consulting Forester at the rate of \$5 per diem in December 1905. Henry Kummel, the Executive Officer, personally evaluated offers of woodland in various parts of the State, but the Commission quickly decided that they needed a trained forester's opinion on a full-time basis to set the proper policy guidelines for the forest reserves, to investigate land offers, and to provide valuable advice to private citizens who might wish to undertake scientific forest management practices on their own account. Since the United States Forest Service was training foresters for this kind of work, they sought a candidate from its ranks. Alfred Gaskill, of Washington, D. C., a member of the United States Forest Service, was appointed State Forester on February 1, 1907, with an annual salary of \$2,500. He replaced William H. Chew as Secretary to the State Board of Forest Park Reservation Commissioners on September 30, 1907.

Alfred Gaskill was born in Philadelphia, Pennsylvania, on November 6, 1861, the son of Quakers Joshua W. and Caroline (Lippincott) Gaskill. He received his primary education from Philadelphia public schools and the Friends' Central School. In 1881, at twenty years of age, he was employed at a large Millville glass factory, where he eventually rose to the rank of superintendent. He moved to a Philadelphia glassworks in 1891.

Alfred Gaskill decided upon a career change in 1898 and went to the Biltmore Forestry School, housed on George Vanderbilt's Biltmore estate in Asheville, North Carolina. He continued his study of forestry at Harvard University and at the University of Munich, completing his fieldwork in Europe. The U. S. Bureau of Forestry employed him as a Field Assistant in 1901. By 1905, when the United States Forest Service was formed under Gifford Pinchot, he rose to the rank of Assistant Forest Inspector. He married Marion E. Nickerson, the daughter of Theodore and Kate M. Nickerson, of West Newton, Massachusetts, at Peterboro, New Hampshire, on May 19, 1906. Their daughter, Margaret N. Gaskill, was born August 31, 1907.

The Forest Commission's support staff included Eleanor H. Lea, known as Laura, who was paid for clerical services in December 1906, being the first women employee. She received \$35 in December 1907 for stenography. In June 1907, John Wanamaker was paid \$33.97 for camera and camera supplies.

Forest Fire Service

Forest fires repeatedly swept New Jersey forests, especially in the southern pine belt. The state's fire laws were "lamentably ineffective" and there was no organized effort or systematic method of protecting timberlands from destructive conflagrations. The State

¹⁸ First Annual Report of the Forest Park Reservation Commission of New Jersey for the Year ending October 31st, 1905, p. 17.

Geological Survey annually reported the great damage that forest fires caused, noting how 226 fires burnt over 226,426 acres, causing damage conservatively estimated at \$668,480 for the years 1902, 1903, and 1904. Soon after the creation of the Forest Park Reservation Commission, Henry Kummel, its Executive Officer, clearly enunciated their priority:

"The prevention of forest fires is to-day the most important problem in forestry before the people of the State. Until fires can be controlled, it is idle to spend money in planting trees, it is useless to urge private owners to practice forestry, and it is hopeless to even dream of improving the condition of our forests."

As regretfully noted in their first annual report, the 1905 law establishing the Board of Forest Park Reservation Commissioners made it impossible "to establish fire protection on any lands not already acquired by the State for forest reserves." Having clearly identified forest fires as the most persistent threat to the health and value of New Jersey's recovering woodlands, the Forest Park Reservation Commissioners immediately prepared to remedy the situation by preparing a bill for the appointment of fire wardens and the prevention of forest fires. Governor Stokes signed the new State Forest Fire Law on April 18, 1906. The Commission appointed Theophilus P. Price, of Tuckerton, Ocean County, as the first State Fire Warden. At the outset, the Commission decided to apply the law only to eighty-one townships, which had compact wooded areas of 4,000 or more acres. During the relatively quiet summer months, the new local fire wardens were given shovels and basic instruction on fighting forest fires.

The actual cost of fire fighting during the rainy summer and fall from July 1st through November 1st, 1906, only amounted to \$5.30, one-half of which was paid from the State Treasury and the remainder by the Township of Shamong, Burlington County, where a four-acre fire, attributed to a passing locomotive, occurred on July 26, 1906.

The Forest Fire Service was not only expected to extinguish fires, but more importantly to prevent them. The principle causes of forest fires were locomotive sparks, carelessly discarded matches and cigar ends and poorly extinguished campfires. A law requiring permits to burn brush or to set other fires between March 10th and May 31st was enacted in 1907. These permits largely controlled brush fires and upwards of five thousand permits were issued during the first year after the law took effect.

By 1908, the organized force of forest firefighters comprised 99 township wardens, 120 district wardens and an auxiliary force of 81 unpaid railroad wardens, who had jurisdiction only along railroad rights-of-way. The township and district fire wardens received respectively \$20 and \$10 annually. They were practically volunteers, being paid per diem only for the actual time spent fire fighting and not for their watchfulness on fire patrols. The State and the townships equally shared the cost of the wardens' pay and firefighting bills. The wardens were empowered to require the service of any able-bodied citizen, with his horse or other property, as needed to fight fires. They were authorized to plow land to check a fire without being liable for damages.

Several methods were used to extinguish fires. Whipping with a wet bough or brush to sweep the embers back towards burnt ground proved effective. Sprinkling with a watering pot was successfully practiced in the mountains, near springs and brooks. Shoveling sand constituted the approved means in south Jersey. As a last resort, back firing proved very efficient means of checking a raging forest fire by burning the fuel supply in its advance.

A Railroad Fire Law

The Forest Commission strongly recommended the passage of a law requiring railroad companies to construct wide firebreaks wherever their tracks traversed woodlands. State Senator Minch introduced such a bill in 1907, which passed the State Senate, but which the General Assembly defeated during its closing hours, under pressure from the railroad companies. The Commission renewed its efforts and a new state Railroad Fire Law was enacted on April 12, 1909. In a major setback, the Court of Chancery ruled the railroad firebreak law unconstitutional on June 18, 1913, deciding it an uncompensated taking of private property.

Taking the cause to private woodland owners

At the outset, the Forest Commissioners thought, "it would be impossible for the State to own more than a fraction of the forest lands of New Jersey." Consequently they worked to introduce scientific forestry methods to private owners of small and large woodland tracts, offering professional advice and assistance in the principles of woodlot management. Among the first to avail of this co-operative service were the Water Commissioners of East Orange, whose wells were located on 900 acres of woodland and fields, and the City of Newark, which owned 9,000 acres in Passaic, Morris and Sussex Counties for its water supply. Citing the experience of the United States Forestry Bureau, the Forest Park Reservation Commissioners believed there could be "no successful divided authority" in the management of private woodlands and thought "the entire management, so far as forestry is concerned, must be in the hands of the State Commission."

The Commission inaugurated a plan of cooperation with the East Orange Water Board, sending an expert forester to view their tract in Milburn Township, Essex County, to make recommendations for its management. The consultant forester felt that a judicious cutting of mature trees would not only pay for administering the tract, but it would also improve the condition of the remaining timber. Under a proposed agreement, the Forest Park Reservation Commission would take over "the entire direction and management" of any part of the Milburn tract set aside for forestry purposes, allowing a professional forester to supervise the cutting and selling of "such timber on this tract from time to time as may be necessary or wise in order to remove worthless trees, mature trees, and trees which are crowding or shading more valuable or promising individuals." It would also allow State foresters to establish a tree nursery to replant waste tracts. The receipts from

¹⁹ Chapter 74, Laws of 1909

²⁰ First Annual Report of the Forest Park Reservation Commission of New Jersey for the Year ending October 31st, 1905, p. 17.

selling timber would be used to offset the cost of cutting, fire protection, nursery and reforestation expenses. In return, the East Orange Water Commissioners were asked to appropriate \$150 annually to defray the cost of forestry operations on their lands.

After the agreement was signed, the State Forester established a small nursery in April 1908 with plantings of Norway spruce, Austrian pine and Scotch pine. Twenty-two thousand two-year old saplings of these same species were also planted. No definite agreement was made for forest management on the Newark watershed lands and a small nursery established there soon failed. Plantings of young locusts, white ash and elm, made in 1907, did reasonably well, while plantings of Norway spruce and Scotch pine did poorly.

The State Forester used every opportunity to awaken an interest in forestry, to explain its principles and purposes and to induce every citizen to join in its work. He spent many days giving lectures to interested groups, using colored lantern slides loaned by the United States Forest Service, His audience included Farmers' Institutes, clubs, boards of trade, school boards, schoolteachers, student assemblies. Women's Clubs in the northern part of the State were among the most ardent listeners and supporters. Gaskill encouraged the teaching of forestry in schools in connection with economics and nature study. He promoted the proper observation of Arbor Day and wrote advice to private owners, inspecting their woodlots and preparing woodland management plans.

An Experimental Forest in New Brunswick

Professor John Smock was responsible for the purchase of the thirty-acre Conger Tract, adjoining the State Agricultural College Farm at New Brunswick, for the establishment of an experimental forest. He began planting this plot of ground with a large shipment of trees from Germany in April 1907. This experimental forest soon included Sycamore Maple, European Beech (set by themselves and mixed in a grove of Chestnut Oak), European Ash, Pedunculate Oak, Sessile Oak, Red Oak, Locust, Norway Spruce, White Pine and Douglas Fir. Shellbark, mocker nut and pignut hickory nuts and tulip poplar seeds were also planted. Professor Smock added to the great variety of trees on the College Farm, establishing an Arboretum in the spring of 1908, which featured thirty-one species, including exotics and Western and Southern species. These were either set in groups or as individual specimens. Professor Smock also planted a quantity of ornamental shrubs for the decoration of the grounds. On July 17, 1908, the trustees of Rutgers College signed a formal agreement for the systematic conduct of the New Brunswick Experimental Forest.

By agreement with Rutgers College, a 32-acre woodlot bordering the State Experiment Stations, which James Neilson of New Brunswick donated, was dedicated in 1914 as a demonstration forest. This tract made a valuable addition to the adjacent area that was planted to forest eight years earlier under gift of Professor John C. Smock.

Potential Public Ownership for Freshwater Lakes

In 1906, Governor Stokes recommended that, "where practicable," New Jersey's 108 freshwater lakes, covering 14,000 acres, "be set apart as public parks and carefully

preserved for the use of the people of the state. He thought," they should become the property of the state in connection with its forestry reservations," noting that the State "could acquire these lakes and through the ownership of forestry reservations the sources of our potable streams."

This supplement to the powers of the Board of Forest Park Reservation Commissioners was primarily intended to restore public access to Swartswood Lake, where Andrew Albright had successfully fought off every scheme to open the lake for the free use of the public since he purchased the lake and its shore lands from James L. Smith, of Newark, at foreclosure sale in August 1888. Albright was an avid fisherman who made a fortune by inventing a process to cover harness hardware with hard rubber and later with celluloid, which he used profitably at his Newark factory. After purchasing the 181-acre Philip Grover farm on the ast side of Swartswood Lake in 1898, he posted notice forbidding all persons "from entering and trespassing upon Swartswood Lake for the purpose of taking fish therefrom, under penalty of law, without a permit first obtained." One-day fishing permits were available for \$1. Albright ordered the arrest of a young man for fishing without a permit in July 1899. In June 1899, the Sussex Register predicted, "the next political or social issue will be the control o flakes and other large bodies of water by individuals or clubs for sighing. The State should stop this 'hoggish' business by stringent laws as there is now scarcely a spot in Sussex County where a poor man can fish without paying a dollar, or running the risk of imprisonment." The Court of Errors and Appeals upheld Albright's property rights in March 1900, ordering Joseph Courtright to pay damages for trespassing on the lake.

Noting how "the profitable business of entertaining summer guests in and around Swartswood has practically ceased," Assemblyman Theodore M. Roe, of Branchville, introduced a bill in February 1901, which would allow each county to establish a Lake and Park Commission by referendum, such commissions having the power to acquire public fishing rights in any freshwater lake by use of eminent domain. The Lake and Park Act became law in March 1901. Sussex County voters approved the creation of a Sussex County Lake and Park Commission in November 1901, with 3,036 in favor and 1,924 opposed. The New Jersey Supreme Court upheld the constitutionality of the law in November 1902, but the Court of Errors and Appeals reversed the ruling in February 1904, declaring "that the right to fish in an inland lake of New Jersey cannot be separated from the ownership and taken under the power of eminent domain."

Andrew Albright, owner of Swartswood Lake, died at Sea Breeze, Florida, on March 17, 1906, two days after suffering a stroke. In March 1907, the Legislature passed a supplemental law allowing the Forest Park Reservation Commissioners to acquire "any land covered by a freshwater lake or pond, or part thereof, within this State, and any land surrounding or adjacent thereto...."

E. C. Stokes Forest Reserve

On March 29, 1907, the Board of Forest Park Reserve Commissioners approved the payment of \$5,000 to Branchville lumber merchant Noah H. Hopkins for 5,432 acres of

rough land on the crest of Kittatinny Mountain, near Culvers Gap, for a forest preserve.²¹ The Kittatinny Mountain Reserve was the largest that the State had yet acquired. It was "renamed in recognition of the services of former Governor Stokes to the cause of forestry" in 1908.

The forest atop Kittatinny Mountain had been culled repeatedly, first for tan bark and then for lumber and railroad ties. It also had frequently burned. The State purchase was subject to a six-year cutting lease, which allowed the former owner to remove all merchantable trees ten inches or more in diameter on the stump. The State Forester recognized "the unsatisfactory nature of the cutting from a silvicultural standpoint," but felt that it had "done the forest no material harm." Natural reproduction was vigorous and could be depended upon to maintain and restore this mixed hardwood forest, in which chestnut (or rock) oak and chestnut predominated. In 1907, the chestnut blight was confined to lawn and park trees, and had not yet invaded the wild woods. It was however "spreading with rapidity throughout the State." At that time, chestnut was the commonest tree in the northern half of New Jersey, and an important member of the forest in parts of the south. It was extensively cut for railroad ties and for electric poles. Pitch pine and scrub oak prevailed on the summit of the Kittatinny Ridge. The property was also valued "as a water conserver," its slopes and streams feeding lakes and tributaries of the Delaware and Hudson Rivers. Noah H. Hopkins was appointed warden of the E. C. Stokes Reserve on October 2, 1908.

From the start, the Stokes Reserve was considered the most suitable for recreational park development. A fire line was cut around the tract and along the crest of the main ridge, furnishing a lane from which to attack any fire that gained headway in the forest, while providing "many fine outlook points" for tourists. Good campsites were found at a number of points, adjacent to streams containing trout. New roads, trails and campsites were to be opened as fast as resources permitted.

With the expiration of the cutting rights on the original Hopkins' purchase, the State sought additional properties to make the forest easily accessible from the State Highway through Culvers Gap. The Forest Park Reservation Commissioners bought 180 acres from the widow and heirs of John E. Coursen, of Sandyston Township, on December 17, 1914. Buying 1,183 acres of land from Asher E. Snook, of Culvers Lake, in September 1916, the Department of Conservation and Development soon brought up its real estate holdings in Sussex County to a total of 6,523 acres.²³ Their latest purchase covered the Rutherfurd, Layton, Lead Mine, Tibb Meadow, and Smith lots in Sandyston Township.

²¹ Sussex County Deed Book H-10, p. 467; 18 may 1907, Lands in Townships of Sandyston and Frankford, parts of Lots 3, 4, 39, 43, 44, 45, 46, 47, 48, 49, 52, and 53 of the Sussex Allotments from Noah H. Hopkins and Susan Hopkins, his wife, of Branchville, New Jersey, to the State of New Jersey for \$5,000.

²² Alfred Gaskill, The Forester's Report, Fourth Annual Report of the Forest Park Reservation Commission of New Jersey For the Year Ending October 31st, 1908, p. 33

²³ Sussex County Deed Book Q-11, p. 218; Asher E. Snook and Rosetta, his wife, of Frankford Township, to the State of NJ for \$1,375.65, three lots, the first containing 100 acres in Great Lot 50, the second containing 112.22 acres in Great Lot 49, including the Stoll Lot and the Kittle Field, the third lot containing 9.34 acres in Great Lot 49, comprising the Falls Lot.

Reforestation and Scientific Forestry

Experiments in reforestation, including pine studies and the trial introduction of loblolly pine, were undertaken in cooperation with the United States Forest Service and the Forest Department of the Pennsylvania Railroad. Young trees raised in the railroad company's nurseries at Morrisville, Pennsylvania, were set out in the State Forest Reserves. The United States Forest Service provided seed.

Concern grew in 1907 over numerous reports of dying chestnuts and white pines, especially in the northern part of the state. Dr. W. A. Murrill, of the New York Botanical Garden, studied a fungus blight, originally confined to chestnut trees in lawns and parks throughout northern New Jersey, southeastern New York and western Connecticut. There was fear that the disease would soon spread uncontrollably into wild woodlands. The United States Department of Agriculture investigated the white pine blight spreading through the northern half of the state, which manifested itself first by the browning of the leaves, then a growth of shorter needles. The planting of Norway pine, Scotch pine, Austrian pine and shortleaf, or "two-needle" pine, was promoted as a substitute for the vulnerable native species.

By 1908, New Jersey possessed an estimated two million acres of forest, of which 9,899 acres were reserved for forest parks. Forester Alfred Gaskill recognized, "the aesthetic part of forestry must be dominant here because a large portion of the people live in towns and cities and consider the forests as their playgrounds." He noted: "Forestry in New Jersey is mainly a problem of woodlots, of watersheds, of playgrounds; only locally and in a limited way are lumbermen concerned ... Playgrounds, or park forests, are needed everywhere for the relaxation of the people, but especially are they wanted near the large cities." By 1912, the State Forest Reserves grew to 13,720 acres.²⁴

Shade trees

New Jersey was "the pioneer in the maintenance of shade-tree commissions, whose sole function is to look after the trees that border the streets of our municipalities." Several cities and towns established Shade Tree Commissions under the enabling legislation of 1893. These communities and many individual property owners naturally sought the advice of the State Forester when planting shade trees along streets and roads. The Forest Commission responded in 1908 through the preparation and publication of several technical pamphlets on their planting and care.

The Forest Park Reservation Commissioners offered to extend their work to shade tree planting, if the public so desired and the Legislature so approved. A new Shade Tree Law was enacted in 1915, replacing eleven confusing and conflicting statutes. By then, at least sixty communities had shade tree commissions.

²⁴ Mays Landing, 373 acres; Bass River, 1,633 acres; Lebanon, 3,498 acres; Mount Laurel, 20 acres; e. C. Stokes, 5,432 acres.

²⁵ Annual Report For the Year Ending June 30, 1920, Department of Conservation and Development, (Trenton: 1920), p. 15

²⁶ Chapter 325, P. L. 1915

Personnel Changes

The Board of Forest Park Reservation Commissioners was fairly stable over its first decade. On May 1, 1908, Charles Lathrop Pack, of Lakewood, was appointed in place of Professor John C. Smock.²⁷ On January 15, 1909, the State Forester's salary was fixed at \$3,000 per annum. Charles P. Wilber was appointed Assistant Forester at a salary of \$1,000 per annum on October 22, 1910. James O. Hazard, of Trenton, was listed as the Assistant Forester in 1912, with Charles P. Wilber as State Firewarden. Dr, Edward B. Voorhees resigned from the Board on March 28, 1911, due to ill health and was replaced by William W. Smalley, of Bound Brook.

Lebanon Forest Reserve (Brendan T. Byrne State Forest)

On February 29, 1908, the Board of Forest Park Commissioners purchased 2,439 acres of pineland with small patches of young cedar and numerous tracts of oak, surrounding the old Lebanon Glassworks on Cooper Branch in Woodland Township, Burlington County. The Lebanon Reserve (now Brendan T. Byrne State Forest) was "used largely as a demonstration in fire control under particularly difficult conditions." The priorities were to clear out roads for fire lines, to build a fire lookout tower near Woodmansie and to makes the best arrangement possible for the sale of cranberries produced on the new forest reserve. A fire line, 140 feet wide, was cut on either side of the track of the New Jersey Southern Railroad. On May 1, 1908, Elmer Inman was appointed warden at \$30 monthly salary and the rental of a house at Woodmansie. Victor Bush was appointed warden on April 21, 1909.

Mount Laurel Reserve

Mount Laurel is a small, rounded hill in the cuesta ridge that extends southwest from Atlantic Highlands to Mullica Hill, dividing the Inner and Outer Coastal Plains. Standing 173 feet above sea level, a signal tower on this height was used before the invention of the telegraph to communicate important information concerning the financial markets between Wall Street and Philadelphia.

Fearing the imminent sale of its timber, the citizens of Moorestown persuaded the Forest Park Reservation Commission to acquire 20 acres of woodlands on Mount Laurel from J, W. Nicholson and others in 1908 for development as a demonstration forest. This tract contained a mixed growth of hardwoods, chiefly oaks and chestnuts, with some Jersey pine, all about forty years old. On February 2, 1909, the Forest Park Reservation Commissioners appointed H. Lindley Gardiner, of Moorestown, the warden on the Mount Laurel Reserve and a special district fire warden. Thinning trees in 1912 netted \$3,000 and improved the quality of the standing timber.

²⁷ He resigned on April 1, 1914. The 1914 report includes the following endorsement of his service: "Upon the retirement of Mr. Pack, at the conclusion of two full terms, the holdover members adopted the following resolution: Resolved, that in the retirement of Mr. Charles L. Pack the Forest Commission loses a member who ranks as a leader in forestry and conservation throughout the country, and who by his widespread activities has made New Jersey prominent. For six years the State and the Commission have enjoyed his counsel and at times his material help. To his interest is in large measure due to the advanced position of forestry in New Jersey."

Because of its small size, its location and physical characteristics, Mount Laurel State Park proved more valuable for recreation than for forestry purposes. The lack of available water originally limited its use to a local population. A caretaker was appointed on January 1, 1940, to make weekly visits to Mount Laurel to guard against vandalism.

Penn Forest Reserve

The Board of Forest Park Reservation Commissioners acquired 2,764 acres of woodland in Burlington County from Edwin A. Pue on February 11, 1910. This tract of pine and cedar forest, situated at Penn Place "in one of the wildest regions of southern New Jersey," and at the head of canoe navigation on the east branch of the Wading River, was a favorite stop for canoeists familiar with South Jersey's streams. Lawrence E. Terhune replaced George L. Iman, resigned, as warden at Penn State Forest in 1920.

Penn State Forest includes Bear Swamp Hill, standing 165 feet high and forming one of the unusual elevations on the coastal plain. Its northern portions adjoined "the Plains," a region of strangely stunted pitch pine and scrub oak. Lake Oswego, covering 90 acres, was developed with picnic and bathing facilities in 1942.

The Priority: Fighting Forest Fires

In May 1910, State Forester Alfred Gaskill regarded fighting forest fires as the top priority, announcing, "The Forest Commission is giving most of its effort and the greater part of the money appropriated to the organization of a fire service covering the whole woodland and intended to protect the forests without regard to ownership. The State now owns 14,000 acres of forest land which it is developing as examples of forest management, yet for the present this is only an incident in the larger task." The State Forest Fire Service was enlarged and reorganized in 1911, not only to improve its ability to suppress forest fires, but also to deal with the growing burden of investigating the causes and aiding the prosecution of culprits who set forest fires. As restated in the Annual Report for 1912, Gaskill felt that the Forest Park Reserve Commission's policy of giving forest fire control precedence over all other lines of effort was "proving its own advocate."

On June 12, 1911, Gaskill informed the Board of an offer of Federal funding under the "Weeks Law" to underwrite the cost of a forest fire patrol to protect the watersheds of navigable streams. As interpreted, the Weeks Law only applied to northern New Jersey. Consequently, the \$2,000 annual Federal appropriation made it possible to maintain a fire patrol in northern New Jersey, which detected and extinguished an average of 18 fires monthly. The Postmaster General's order, making 55,000 rural mail carriers auxiliary fire wardens in states having an organized forest fire service, was originally proposed in 1912 by the New Jersey State Firewarden. Consequently, about 300 rural mail carriers became fire patrolmen in New Jersey.

The state Forest Fire Service's use of motor vehicles was regarded as a "particular advance" in 1912. Two Division Wardens were paid at a fixed rate of mileage to use motorcycles and another to use an automobile, which greatly "increased their scope of influence." The Forest Fire Service included 110 township wardens and 151 district and

deputy wardens who, with three fire watchers that the State employed, made a total of 264 men engaged in fire control, covering 111 townships. In 1915, fire warden service was installed in an additional twenty-four townships, mostly in northern New Jersey, and the force of local fire wardens grew from 277 in 1914 to 310 in 1915, serving 142 municipalities.

The Annual Report for 1914 noted how the State was annually "set ablaze" during the deer-hunting season, reporting, "the hunters were in the woods, the fires followed their trails, and what is almost conclusive, the bad fires began with the deer season (November 2) and were brought under control as soon as it closed ..." Consequently, the Commission recommended that all protection be removed from deer and rabbits and that their pursuit be legalized at all times of the year.

Construction of Forest Reserve Cabins

The erection of cabins was another means introduced to help control forest fires. One was built on the Lebanon Reserve (Brendan T. Byrne State Forest) and another on the Penn Reserve near points from which a good lookout could be had, convenient to a telephone. At a cost of \$150 to construct and equip, each cabin was outfitted with a pump to furnish water for forest fire fighting and with tool storage.

On November 11, 1913, the State Forester reported that the cabin for the warden at the E. C. Stokes Reserve on Kittatinny Mountain was practically completed. He described it as "a good structure and can be occupied with comfort winter or summer." The total cost of the building and its equipment, including labor, was about \$400. The Big Spring Cabin on the E. C. Stokes Reserve not only provided a headquarters for the warden, but also shelter to anyone who might be working on, or visiting, the reserve.

The Swartswood Reserve: A Change in Focus

By the start of the twentieth century, the country was coming to the city, where the promise of wage employment drew off a labor force long tied to the soil. The recreational and inspirational value of natural parks, especially in an increasingly urbanized environment, was understood from the beginning. In 1908, State Forester Gaskill observed how "the aesthetic part of forestry must be dominant here because a large proportion of the people live in towns and cities and consider the forests as their playgrounds. Notwithstanding our two million acres of forest land, New Jersey outranks all the states but Rhode Island and Massachusetts in density of population."²⁸

Swartswood Lake in Sussex County became New Jersey's first State park when Andrew Albright, Jr., and Elizabeth Spurr, the children and heirs of Andrew Albright, sold 534 acres, covered by the waters of Swartswood Lake, to the Forest Park Commission for \$30,000 in August 1914. The property was added to the State Forest Park Reserves under the supplemental act of March 22, 1907, which allowed the Forest Park Reservation Commissioners to acquire "any land covered by a fresh-water lake or pond, or part

²⁸ Alfred Gaskill, Report of the Forester, Fourth Annual Report of the Forest Park reservation Commission of New Jersey, 1908, (Paterson: The News Printing Company, 1909), p. 17

thereof, within this State, and any land surrounding or adjacent thereto..." The new Swartswood Reserve was not acquired because of its potential contribution to forestry, but because the Legislature wanted it.

The Forest Park Reservation Commission declined to consider the Albright heirs' original offer, because it included only the lake itself and one approach. Negotiations then turned to acquiring an adjoining piece of upland. A preliminary agreement was reached at a meeting of the Forestry Board in the Foresters' Cabin on the E. C. Stokes Reserve in June 1914. The sale, concluded in August 1914, encompassed 534 acres covered by the lake waters, except for Dove Island and Albrights Cove, on the southeast shore, nearly opposite Dove Island, and the small rock islands, known as Perch Rock, Pike Rock and Hog Back Island. The State also acquired a right-of-way on the northeast shore for a public road, leading from the Newton-Swartswood Road along Indian River to the waterfront.

The deeds conveying Swartswood Lake, including 20 acres of upland for nine landing places, as well as public picnic and pleasure ground, were filed on June 30, 1915. The purchase also included the right-of-way for a boulevard, which the State Forestry Board proposed to build on the east shore of the lake, allowing several access roads to connect with fairly elaborate public docks. George M. Emmons donated his 12.5-acre picnic grove on the southeast shore, known as Emmons Grove, in February 1916, for use "as a public park forever." A number of attractive campsites were established for transient campers or to public organizations for more permanent occupancy under lease. The Board of Forest Park Reservation Commissioners expected the lake to be stocked with fish for public use, remarking that it was their intention "to make the property useable for all citizens by the establishment of boat liveries, landing places, picnic grounds, etc." In short, they intended "to make Swartswood reserve a public playground."

The 1915 Annual Report duly and almost apologetically noted that a new era was dawning for the forest park reservations, saying,

"By the acquisition of the Swartswood area a departure from the practice followed heretofore in respect to forest reserves is recorded...Those who criticize the Commission for undertaking to assure control of a property that can contribute nothing to forestry, the answer is that the Forest Commission acted as the executive of the Legislature, which has clearly expressed its will in the matter. It is intended to make Swartswood a public playground. Boat liveries and picnic shelters to be maintained under proper control will make it available to a large number of people. With respect to the other reserves the established policy is continued. Each is expected to serve as a park as well as a demonstration forest to the extent that its location and condition warrant."

Looking Back Over the First Decade

In their tenth Annual Report, covering the year ending October 31, 1914, the Board of Forest Park Reservation Commissioners reflected upon their first decade, making an honest assessment of their goals and accomplishments. Although their purpose was to acquire state forest park reserves and to encourage reforestation, they quickly came to

appreciate that the practice of forestry was impossible without preventing and controlling continuous forest fires that ravaged the state's woodlands. Consequently, they had to subordinate their mission of acquiring and reforesting public reserves "to the prosecution of a vigorous campaign against the fire evil." With the acquisition of Swartswood Lake as a "public playground, new emphasis was added to the recreational value of all state forest parks. A whole new state agency with a broad mandate to manage the State's natural resources dawned on the horizon.

The State Forester's Report for 1914 noted that the forest reserves covered 13,656 acres. The total cost of these properties was \$45,277 for an average of \$3.31 per acre. The forest reserves are described as follows:

SWARTSWOOD RESERVE

If this property shall be acquired as proposed, the State reserves will be augmented by 544 acres of water and eight adjacent pieces of upland varying in area from a quarter of an acre to twelve acres. The tract is located in Sussex County, 7 miles from Newton, on the Lackawanna Railroad, half a mile from the village of Swartswood, and three miles from Swartswood station or from the Stillwater station on the N. Y. S. & W. R. R. It is expected that the lake will be stocked with fish for public use and it is the intention of the Forest Commission to make the property usable for all citizens by the establishment of boat liveries, landing places, picnic grounds, etc. Necessarily the use of the lake will be subject to reasonable regulations.

BASS RIVER RESERVE

1,633 Acres. Warden, S. B. Allen; P. O. New Gretna.

This reserve, six miles from Tuckerton, and only two miles from the shore boulevard at New Gretna, is typical of what is commonly known as the Pine Barrens. It is also demonstrating the value of South Jersey soils for the production of pine, oak, and cedar timber with no other help than the control of fires, from which it has been immune since it came into the possession of the State in 1906. A small quantity of timber is now salable and probably will be utilized during the coming winter. A number of experimental plantations are yielding valuable data.

Early in the fall a proposition was made to divert the traffic on the shore boulevard over a road through the reserve while the bridge across Bass River was under construction. A perfectly amicable arrangement was made with the County Freeholders by which the road has been reconstructed and is being maintained in such a way that the risk of fire is minimized.

LEBANON RESERVE

3,498 Acres. Warden, Victor Bush; P. O. Pemberton

This property, located nine miles southeast of Pemberton, has suffered seriously from fire, though during the past year only about thirty acres were burned over. But notwithstanding this handicap the forest, chiefly of pitch pine, on many portions is thriving. The reserve affords good opportunity to contrast unburned areas with those that have been sacrificed to forest fires. The chief reason for the injury suffered is that the tract is almost surrounded by properties on which careless logging is conducted and by swamp-areas under conversion to cranberry bogs. On a portion of the reserve a colony of feeble-minded boys connected with the Vineland Training School is located. Another

portion is devoted to experimental plantations. During the year the reserve has been surveyed and mapped and every part placed under control.

The products are ordinarily small quantities of firewood, sphagnum moss and cranberries. This year 370 crates of cranberries gathered from wild bogs were sold, chiefly to State institutions and State officials. It is observed that though cranberry culture is no part of forestry, the harvest of wild berries is an acceptable source of income. It is probable that the Commission will find it advisable to make some arrangement, either by lease or exchange, under which these cranberry lands shall be productive of a greater income than they ever can be under forestry.

MAYS LANDING RESERVE

373 Acres. Warden, Ellsworth Duberson; P. O. Mays Landing.

This tract of pitch pine and oaks lies about one and a quarter miles from the town of Mays Landing and has been devoted since its acquisition to a demonstration of the practicability of creating a forest simply through fire protection. The effort to keep fires off has been successful for eight years, and the forest, though by no means ideal, indicates at every point the value of such simple methods. A number of experimental plantations have also been located within it.

MOUNT LAUREL RESERVE

20 Acres. Warden, Harvey Darnell; P. O. Moorestown.

This little reserve still has much attention through its location in the midst of a farming community three miles from Moorestown, and on account of the demonstration in woodlot management that has been carried on there. The beneficial results of the improvement felling made in 1912 are apparent everywhere, and the demonstration has had a widespread recognition. The bulletin descriptive of the work done, "An Example of Woodlot Forestry," is still available for distribution.

PENN RESERVE

2,764 Acres. Warden, Elmer Inman; P. O. Chatsworth.

This tract, in the heart of the wilderness six miles from Chatsworth, on the New Jersey Southern Railroad, affords another example of the effect of fire protection upon a pitch pine forest. One-half the area is young volunteer pine growth, now giving promise of developing into forest form, and one-quarter is mature pine forest, which it is intended to utilize as soon as the ground shall have been thoroughly restocked. The rest is in less satisfactory condition. Only one small fire (in 1912) has burned on the property within five years since its purchase. A small income is derived from sphagnum moss and wild cranberries.

E. C. STOKES RESERVE

5,368 Acres. Warden, Jay Gould; P. O. Branchville.

This reserve differs from all the others, in that it occupies high, rocky ground and carries a forest of almost pure hardwoods, chiefly oaks. The tract is much more suitable for recreation than are any of the South Jersey reserves. It is most readily reached via Branchville, on the Lackawanna Railroad, from which its nearest point is distant about three miles. Since the conclusion of the cutting contract, given as part of the purchase price, active measures for the improvement of the property have been undertaken. For the time being these consist in nothing more than protection from fire and trespass, though a beginning has been made in the construction of trails, which will open up the whole

reserve as a public playground. When connection with similar trails across adjacent properties shall have been made, the people of the State will have an upland path, with outlooks whose beauty is unappreciated, extending from the New York line to the Delaware Water Gap. Two camping sites have already been located, and others will be made available if the public cares to take advantage of them.

Though the area of the reserve has been reduced by 64 acres, through the elimination of an adverse holding, it is expected that substantial additions will be made during the coming year, and that portions of the property may be found suitable for the location of colonies of some of the State's dependents.

Department of Conservation and Development

To consolidate related activities and to develop the State's natural resources for the greatest public benefit, the Board of Forest Park Reservation Commissioners, the State Water Supply Commission, the State Geological Survey, the Washington's Crossing Commission²⁹, the State Museum, and the Fort Nonsense Park Commission, were folded into a Department and Board of Conservation and Development on April 8, 1915³⁰ The new Department was subdivided into three administrative divisions: the Division of Geology, under Dr. Henry Kummel, which included the State Museum; the Division of Forestry and Parks; and the Division of Water Supply. State Forester Alfred Gaskill assumed the duties of overall Director of the new Department. He immediately recommended that the Governor designate a day, to be known as New Jersey Day, to acquaint New Jersey people with their state, its history, resources and advantages.

At the creation of the Department and Board of Conservation and Development in 1915, the state forests and parks totaled 14,396 acres, described as follows:

- 1. **BASS RIVER RESERVE**, Warden, S. B. Allen, 1,633 acres. Typical of the so-called "pine barrens," a number of experimental plantations on it.
- 2. **Lebanon Reserve**, ³¹ Warden, Victor Bush, Pemberton, 3,498 acres. Used largely as a demonstration in fire control under particularly difficult conditions. Considerable fire damage has been suffered, but the property is in better shape than when it was acquired.
- 3. **MAYS LANDING**, Warden, Ellsworth Duberson, Mays Landing, 373 acres. Exhibits the value of effective fire control for 10 years. Several experimental forest plantations may be expected to yield results in the near future.
- 4. **MT. LAUREL RESERVE**, Warden, Harvey Darnell, Moorestown, 20 acres. A tract of hardwood and pine, about three miles from Moorestown, that affords a practical demonstration in forest management.

27

²⁹ The Washington Crossing Commission had acquired title to a 100-acre farm at the historic crossing in 1913, but with no money for its development into a memorial park, this project fell into dormancy.

³⁰ See Chapter 241, P. L. 1915. The first Board of Conservation and development comprised: Alfred Gaskill, of Lawrenceville, State Forester and Director; Henry B. Kummel, of Trenton, State Geologist; Charles P. Wilber, of New Brunswick, State Firewarden; Edward S. Savage, of Rahway, president; Walter J. Bigby, of Atlantic City; Nelson B. Gaskill, of Trenton; Simon P. Northrup, of Newark; Charles Lathrop Pack, of Lakewood; Stephen Pfeil, of Camden; George A. Steele, of Eatontown; and Henry Crofut White, of North Plainfield.

³¹ Now Brendan T. Byrne State Forest

- 5. **PENN RESERVE**, Warden, Elmer Inman, Chatsworth, 2,764 acres. A tract of almost pure pineland in the heart of the wilderness, six miles from Chatsworth, that has proved the value of fire protection and the availability of a common type of land for timber growth.
- 6. **E. C. STOKES RESERVE**, Warden, Jay Gould, Branchville, 5,548 acres. This reserve is typical of absolute forestlands in North Jersey. Under fire protection alone the property is developing rapidly in value. The reserve is the most suitable for recreation of all those owned by the State and the desire is to have it used in that way. A trail along the crest of the mountain suitable for pedestrians is now under construction.
- 7. **SWARTSWOOD RESERVE.** This property, which came into possession of the State this year, consists of lake with an area of 544 acres and eight adjacent pieces of upland embracing 16 acres. It is maintained for the use of the public.

The administration account provided: \$345.99 for the Bass River Reserve, \$494.86 for the Lebanon Reserve, \$176.96 for the Mays Landing Reserve, \$25.40 for the Mount Laurel Reserve, \$332.08 for the Penn Reserve and \$770.72 for the Edward C. Stokes Reserve. The Swartswood Reserve was only recently acquired and no appropriations were available for Washington Crossing Park or for the Fort Nonsense Park project. The small Mays Landing Reserve was sold in 1916 for \$8,264, with the understanding that the purchaser would maintain the forest plantation until it outgrew its experimental value. In compensation, the new Jackson Reserve was acquired and a large addition made to the Stokes Reserve in 1916.

State Dependents

A Colony for Feeble-Minded Males was established at Four Mile on the Lebanon Reserve in 1914 as a Burlington County enterprise. The potential for "maintaining colonies of dependents" was now considered "an important use to which parts of several reserves can be put…" As the 1915 Report suggested:

"The necessary seclusion is found and as much land as may be needed for several truck farms can be cleared and worked by inmates. The inmate can also be helpful in protecting and maintaining forests."

The State took over administration of the Feeble-Minded Colony at Lebanon in 1916 and enlarged its facilities to accommodate 45 boys. Jurisdiction was transferred to the Department of Institutions and Agencies in 1920.³²

First View To Tourism: New Jersey as the Nation's Playground

In his "Forester's Report" for 1915, Alfred Gaskill, now the Director of the new Department of Conservation and Development, emphasized that the State Forest Reserves were "not reserved in any way, but have been acquired primarily to be maintained as demonstrations in *practical forestry*, and secondarily as public *outing grounds*. The first object is being attained, the second will come with increased

28

³² 87 acres

accessibility and greater need." If anyone missed the point, the new Division of Forestry and Parks was assigned "the administration of the forest reserves and Swartswood Lake, all of which may be considered state parks."

Since the purview of the Department and Board of Conservation and Development comprehended the potential value and use of all New Jersey's natural resources, it immediately recognized the growing market for nature-lovers, outdoor sportsmen and all-season vacationers, remarking in its 1916 Annual Report:

"The resorts of New Jersey attract more visitors than those of any other state. The entire coast from sandy Hook to Cape May, a reach of 125 miles, is the chief summer playground of the country. Some of these seaside cities have a worldwide reputation. It is less well known that there are also numerous quiet communities, and ample room for many times the number of visitors now provided for. About the lakes and on the hills of Morris, Passaic and Sussex Counties are resorts of quite another character. Less well known than those along the coast, they attract people who love hills, the woods and quiet vistas. In the pines of Burlington, Monmouth and Ocean counties is still another class of resorts, most attractive in the winter."

With tourism and outdoor recreation in mind, the Department first recommended the acquisition and development of state lands in Sussex County in 1917 as a forest park, especially for the recreational enjoyment of the urban population of northern New Jersey. Stokes State Forest was considered particularly well adapted for greater use as recreational grounds, with a good road connecting the forest headquarters with the county highway through Culvers Gap.

First Consideration of the Wharton Tract

On April 21, 1909, Alfred Gaskill reported an interview with Harrison H. Morris, the executor of the Joseph Wharton estate, relating to the sale of the vast Wharton holdings in South Jersey, an area covering about one hundred thousand acres in Burlington, Camden and Atlantic Counties. Acquisition of the large aquifer underlying this sandy territory for public use was an investment worth negotiating, though it might potentially benefit southern municipalities and shore resorts more than those in the north, provoking sectional political resentments.

In October 1915 the Legislature conditionally authorized the State Water Supply Commission to spend \$1,000,000 to purchase the Wharton Tract "for the purpose of appropriating and conserving the potable water thereon to the general and common use of the inhabitants of the State." The Wharton estate could provide an estimated 350,000,000 gallons of water a day to the municipalities south of Trenton. Since the State Constitution restricted the State from incurring any debt in excess of \$100,000 without voter approval, the purchase was conditional upon a popular referendum,

When the newly created Department of Conservation and Development took over the powers and duties of the Water Supply Commission on July 1, 1916, it attempted unsuccessfully to find out the precise merits of purchasing the Wharton Tract,, particularly whether or not the property was worth the asking price. Replying to

Governor James Fielder's request for their informed opinion on the matter, the Board of Conservation and Development recognized that "on its face the project was attractive, but that definite information bearing upon several vital points was lacking." ³³ Governor Fielder published the Board's conclusion that the absence of sufficient information rendered "the proposition so uncertain as to indicate its rejection to be the part of caution." Voters apparently concurred and the referendum went down to defeat at the general election in November 1915 by a vote of 125,000 to 105,000.

Jackson Reserve

Forty-three acres of woodland near Cassville in Ocean County was purchased on December 11, 1915, for forestry demonstrations and research purposes. The nearly pure pine forest on this tract dated to about 1880. Charles H. Thompson, of Cassville, was appointed warden of the new Jackson State Forest.

Forest Fire Divisions and Lookout Towers

In 1915, New Jersey experienced the driest March since 1885 and an unusually dry spring. Forest fires raged over 55,000 acres in March and April 1915. By year's end, 150,258 acres burned, the greatest total since 1885, when fires swept 128,000 acres. In a systematic effort to spread out into new territory, fire warden service was installed in twenty-four additional townships in 1915, mostly in northern New Jersey. The force of local wardens grew from 277 in 1914 to 310 the following year. Mounted fire patrolmen began service in parts of Passaic, Sussex and Somerset Counties in April 1915. Supplements to the Forest Fire Law in 1915 helped to correct the careless use of steam tram roads in woodlands and the dangerous accumulation of slash-and-logging debris in land clearing through the enactment of compulsory slash disposal and fire patrol bills..

For the purpose of more effectively fighting forest fires, the State of New Jersey was reapportioned in 1916 from four into three Forest Fire Divisions, thereby relieving one Division Warden. The new divisions and their personnel were as follows:

- 1. DIVISION A, North Jersey, from the northern State boundary to the Raritan River: 63 Township Fire Wardens, 55 district Fire Wardens
- 2. DIVISION B, Central Jersey, from the Raritan River to the Mullica River: 37 Township Fire Wardens, 1 Forest Fire Lookout, 53 District Fire Wardens
- 3. DIVISION C, South Jersey, from the Mullica River to Cape May: 45 Township Fire Wardens, 1 Forest Fire Lookout, 73 District Fire Wardens

Atlantic County built the first permanent Forest Fire Lookout Tower in South Jersey at McKeetown in 1917. At this time, Forest Fire Lookouts were also maintained at Batsto in Burlington County and at Cedar Pond in Passaic County.

³³ "Wharton Project," *Annual Report For the Year Ending October 31, 1915 Department of Conservation and Development,* (Trenton: MacCrellish & Quigley Company, 1916), pp. 11-12

Using \$2500 from the annual Federal appropriation under the Weeks Law, a fire lookout tower was built in 1918 on the Stokes Forest Reserve, complete with a telephone connection and a shelter for tourists.

Forest fires remained a serious threat. In 1919, Penn State Forest suffered a serious fire, which destroyed or badly injured 700 acres of young pine. Fire gravely threatened Lebanon (Brendan T. Byrne) Forest and burned 200 acres. Two small fires at Stokes State Forest were brought under control before doing any great damage.

The Legislature appropriated \$3,000 in 1919 to build four new fire towers. A lookout room, built on the tower of the Batsto mansion through the cooperation of the executors of Joseph Wharton's estate, was put in service on April 1, 1920. A steel tower, 45 feet high, was built at Edison on Sparta Mountain on the property of the New Jersey Zinc Company and outfitted with a phone connection three miles long. A lookout room was built into the 80-foot stone tower at Kinnelon on the property of Messrs. Kinney and connected by two miles of phone line. Another steel tower, 45 feet tall, was erected at Windbeam on the property of the Ringwood Iron Company and connected by two miles of phone line.

Stokes Reserve Grows

The State purchased the Coursen farm, an interior holding consisting 180 acres with a good house and barn, for the Stokes Reserve in 1915. This provided a forest headquarters and warden's residence on the main road, with the possible future use as a state dependents' colony. A large addition of 1,183 acres was made in 1916, increasing state-owned property on the mountain crest above Culvers Gap to 6,731 acres.³⁴ Roads, trails and camping sites were being provided in 1916 "as fast as facilities permit." Marcus F. Howell, of Branchville, was the supervising warden at Stokes and at Swartswood Lake.

A professional forest ranger, H. Milton Stults, who lived in the Big Spring Cabin, was employed in 1917. About eight miles of easily traversed new pedestrian trails, running along the crest of the Kittatinny Mountain, afforded a means of reaching the highest land in the State with scenic overlooks comprehending the most attractive views of New Jersey and adjacent portions of Pennsylvania and New York. Lateral trails, leading from the mountain crest trail, provided easy connections to the Headquarters station, the Forester's Cabin and several springs of pure water. Another 307 acres was acquired for Stokes State Forest in 1917, through condemnation proceedings, bringing the total to 7,036 acres.

The new forest fire lookout tower built on the Stokes reserve in 1918 included a shelter for tourists. Not only did trail construction and road improvements continue, but a number of campsites were constructed alongside brooks and adjacent to waterfalls were ready for occupancy by 1918. Paul B. Haines was listed as the Forest Ranger at Stokes

³⁴ This was 1,183 out of 1,500 acres previously contracted for, with the transfer of the remaining 317 acres coming soon afterwards.

and Swartswood in 1919.

Scotch and red pines were planted on five acres of old fields at Stokes State Forest in 1920 for experimental and demonstration purposes. The Department of Conservation and Development purchased a right-of-way across the properties of Mrs. H. C. C. Snook, Floyd Kinney, and Paul B. Haines on July 3, 1920, for the purpose of building a public road along the east side of the Stony Brook, connecting with the Flatbrook Road at the mill of Hiram C. C. Snook and with the road across the Stokes State Forest leading to Culvers Gap.³⁵ Two garages and other outbuildings were built between 1923 and 1927. A supervisor and two rangers comprised the permanent staff in 1927.

A War To End All Wars

On March 27, 1917, Director Alfred Gaskill summoned the first State conference on the food supply. The conference identified and addressed the chief needs for "farm labor and a local Food Commission in each community, which should provide guidelines for an army of enthusiastic food gardeners and food conservers." Thereafter, the Departments of Conservation and Development, Agriculture, Public Institutions and Labor actively cooperated in producing and distributing emergency publications, promoting home gardening.

The withdrawal of manpower from rural sections for military service and industrial employment, combined with competition from prevailing high wages, made it very difficult to find adequate crews of competent forest fire fighters. The war not only aggravated the labor shortage on farms, but it recommended the use of "trustworthy prisoners and reformatory inmates" for work upon the highways, in mosquito ditches, as free labor in state institutions and for developing the State forests and parks.

The war effort commanded the nation's attention and all resources were committed to final victory. According to the State Forester's Report for 1920, the First World War created an extraordinary demand for timber: pine to build cantonments, oak for ships, spruce and ash for airplanes, walnut for gun stocks and airplane propellers. Huge quantities of cordwood were consumed for fuel. The demand for wood products was large enough to create a paper famine during and after the war. Thus, the postwar years marked "the beginning of a new era in forestry." "National necessity," opined State Forester Alfred Gaskill, "has awakened public interest, and the importance of forestry practice as part of a National program is realized."³⁶ A gypsy moth infestation was discovered in the neighborhood of Somerville in 1920.

The postwar years also saw the rapid growth of the recreation industry, founded upon the growing affordability and popularity of the family car. In the years immediately following the Armistice of November 11, 1918, State Forests became popular destinations for vacationers and tourists. The Department of Conservation and Development published an attractive circular in July 1919, inviting the public to use the

³⁵ Sussex County Deed Book Y-11, p. 225.

³⁶ "Report of the State Forester," Annual Report for the Year Ending 1920, Department of Conservation and Development, Trenton: State of New Jersey, 1920.

State Forests for their pleasure and relaxation. Hundred of inquiries came from all parts of the State. Most of the interest was attached to Stokes State Forest "as South Jersey forests are less attractive in summer." Upwards of 300 persons used campsites at Stokes State Forest during the 1920-21 season, with trout stocked mountain streams being a major attraction. By 1920, the New Jersey Division of Forests and Parks grew to include the State Forester and two Assistant Foresters, six rangers in charge of State Forests, a State Firewarden and four Assistants, seven forest fire watchmen for five lookout towers and nearly 400 local firewardens.

Washington Crossing

On March 21, 1910, the Legislature authorized the Governor to appoint a Washington Crossing Commission, consisting of fifty persons, with the power to select and locate lands at McKonkey's Ferry in Mercer County for the creation of a state historic park. When this body proved too cumbersome, the Legislature created a new commission in 1912, comprised of the Governor, State Comptroller, the State Treasurer and five persons named by the Governor. They were empowered to acquire not more than 100 acres at the historic crossing.

The Washington Crossing Commission employed landscape engineer Charles W. Leavitt to make a survey and plan. His original design, published in January 1913, featured a memorial bridge across the Delaware River, which the Federal government was to finance and construct, thereby connecting various historical features and park improvements in New Jersey and Pennsylvania.³⁷ At that time, those familiar with the area believed that Washington's troops had marched along an old farm lane, later styled "Continental Lane," in December 1776 for their attack upon Trenton. This old road (or so they thought) was supposedly abandoned when the present Pennington Road was opened. Accordingly, Leavitt's plan envisioned the acquisition of land on each side of the so-called Continental Lane, including the old ferryman's house.

The Washington Crossing Commission purchased the 108-acre Blackwell farm in 1912 from Ira J. Blackwell for \$18,000. This purchase, however, included neither the old Ferry House nor the old lane. The Department of Conservation and Development took over management of the tract, leasing it to a farmer on an annual basis to provide for its maintenance. The Department heard very little expression of interest in the project from outside Mercer County and suggested the creation of an organization outside the Department to collect a fund from schoolchildren for the development of a suitable memorial park on the site. The State of Pennsylvania, however, revived its effort to create a historic park on its side of the river, forming a commission in 1917. Consequently, the New Jersey Department of Conservation and Development appointed a Special Committee, comprised of Alfred Gaskill, Nelson B. Gardiner and Charles L. Pack, to reconsider the idea of an appropriate historic memorial at Washington Crossing.

The Special Committee's proposal for a memorial park encompassing about 350 acres aroused considerable interest and discussion. In 1918, the Board of Conservation and

³⁷ The present Outlook, near the Ferry House, was originally intended for the east abutment of the bridge.

Development determined that acquisition and improvement of the Ferry House and the land in its immediate vicinity to be "indispensable to the plan." The following year, the Board noted how Pennsylvania had taken the first steps to create a memorial on its side of the river and urged the New Jersey Legislature to appropriate \$50,000 to acquire the old Ferry House and enough land to constitute a worthy memorial park, saying.

"Now that thought is being given to memorials to those who performed great deeds in the Great War [i. e., the First World War], the State is in danger of once more failing to rise to its opportunity, if it neglects longer to provide a worthy, lasting memorial to an action which has gained, rather than lost, in importance during the hundred and forty-two years since it was performed."

The Legislature stipulated in 1919 that Washington Crossing State Park was "not to exceed 350 acres." ³⁸ An appropriation of \$10,000 was authorized in 1922 to purchase the Ferry House and to develop ten acres at Washington Crossing. The old Johnson Ferry House and a narrow frontage on the Delaware River were therefore purchased and long deferred improvements undertaken. Landscape engineer Charles W. Leavitt prepared an attractive plan and the Mercer County Freeholders initiated the necessary highway changes. Leavitt described his plan for a nine-acre park as follows:

"My design provides an entrance to the park at the intersection of the Pennington Road [Route 546] with the state Highway [Route 29], which is the first warning coming up from Trenton of the crossing, and here I propose a treatment of Colonial gates and walls with a commemorative tablet."

"Through the park a road 18 feet wide curves to the crest of the bluff where an Overlook is provided; thence it falls, past the Ferry House, to the upper, or Lambertville gate. Appropriate shrubbery and plantations are proposed. And having in mind the possibility of a National bridge spanning the river, provision is made to convert the Overlook to a bridge approach without affecting the integrity of the park."

More money was needed to acquire three riverfront lots. It was also necessary to purchase the strip between the highway and the canal, included in the landscapist's plan (but not within the scope of the original appropriation), as well as the land between the railroad and the river, which Leavitt considered "most essential, from an historic and sentimental standpoint," since "the water's edge and the ferry house were the stage on which this most important drama was enacted."

The Legislature further appropriated \$50,000 in 1923 to improve Washington Crossing Memorial Park and to restore the historic Ferry House in time for the approaching American Sesquicentennial celebration in 1926. Four small parcels of land, including waterfront property, were acquired, making 237.5 acres in all. Fifteen acres were landscaped in the front part of the park and on the river and canal frontage. The Ferry House was renovated as a museum. A large stone house on the property was repaired for a headquarters and comfort stations. Picnic facilities and public water supplies were installed. A State Tree Nursery was established on ten acres and one hundred acres of open fields were planted. The Daughters of the American Revolution installed a garden

34

³⁸ P. L. 1919, p. 349

and the Sons of the American Revolution donated a flagpole, an old style pump and a historical marker. The Federal War Department and the State National Guard gave five old cannons. Washington Crossing was officially dedicated and opened to the public on June 4, 1927.

High Point: A Living Memorial to Veterans

Director Alfred Gaskill proposed the creation "on the Kittatinny Mountain in Sussex and Warren counties [of] a great forest park for the benefit of the whole people," extending from the Delaware Water Gap to High Point on the New York border. After a year's careful consideration, the Board approved Gaskill's recommendation as "a project of inestimable worth" and suggested that provision be made for the gradual acquisition of 32,500 acres (in addition to the 7,500 acres already held in the Stokes Reserve).³⁹ As justification, the 1918 Annual Report noted, "The necessity for extensive and varied playgrounds for all classes of people is generally admitted." Recognizing the coastal resorts as one of New Jersey's greatest resources, the Board now recommended the development of the recreational and scenic values of the State's woods and mountains. The proposal met with considerable public approval.

Early in the spring of 1920, Gaskill's proposed park along the crest of the Kittatinny Mountain acquired new meaning. On June 6, 1920, he formally proposed "that the park be established as the State's memorial to its sons who had made the supreme sacrifice in the Great War." Gaskill waxed poetic:

"The underlying thought is that no more fitting memorial can be established than one which, in a manner, springs from the heart of the home State and is built of its rocks, its woods, its waters --- the eternal things to which the heart of man always turns."

With the concurrence of Governor Edwards and the State Board of Conservation and Development, his plan to honor veterans with a "living memorial" forest park was presented to former servicemen through the American Legion for an expression of their opinion. Introduced in 1921, State Senate bill 260 authorized the acquisition of Anthony Kuser's High Point estate for the development of a soldiers' hospital or home and the transfer of the surrounding wild lands to the Department of Conservation and Development as part of the Veterans' Memorial Park. The Board of Conservation and Development agreed with the Governor that the need for such a proposed home or sanitarium was questionable, but lent its strong support to the concept of purchasing the wild land by degrees, if necessary, and creating the mountaintop park. In the Department's Annual Report for the Year Ending June 10, 1921, Director Alfred Gaskill again explained his plan:

"In proposing that New Jersey's memorial to her fallen soldiers take the form of a forest park, the thought is that there shall be created out of the heart of the home State a monument that shall not be subject to decay, but be everlasting. The plan lends itself easily to the erection of Organization, or Post, memorials of many kinds — monuments

³⁹ Charles Lathrop Pack's term on the Board of Conservation and Development expired July 1, 1918, and John L. Kuser succeeded him.

of stone or bronze, shelter houses, observation towers, so built and so dedicated that the region shall become a place of pilgrimage."

The proposal for a veterans' memorial park was temporarily derailed when it was found that a fund raised by New Jersey schoolchildren could only be used to erect a memorial theater on the grounds of the State House in Trenton and not to purchase real estate. Consequently, the Trenton War Memorial was erected with this fund. An unequalled act of private generosity suddenly rescued Gaskill's plan. In November 1922, Colonel Anthony Kuser, of Bernardsville, and his wife, Susie Dryden Kuser, a daughter of the late Senator John F. Dryden, offered their High Point estate, including the highest mountain in New Jersey, together with the adjoining Blue Ridge Tract, to the State as a gift. The donation covered sixteen square miles or about 10,400 acres of largely unspoiled wilderness.

At his office in the Public Service Terminal in Newark, Colonel Kuser said: "We hope to have the state hold the property forever as a public park or reservation for the free use of the people. We make only one condition, namely: That it be restricted as to the shooting of birds, excepting those known as vermin. We suggest the name be 'High Point Park.' The large house can be used as a sort of tea or rest house where light luncheons can be served during the spring, summer and fall months." About 85% of the entire tract was woodland, which particularly appealed to students of nature, and there were about five miles of roads of stone and shale on the property, the shale taken from quarries on the place.

A nine-foot woven wire fence, surmounted with a continuous barbwire, enclosed nearly all of the 2,200 acres surrounding High Point, with gates situated at convenient points. The 8,400 acres of the Blue Ridge tract, also known as the Rutherfurd property, adjoined the High Point estate on the west. This tract included about eight farms and several miles of the Little and Big Flat Brooks, also ponds, and beautiful waterfalls issuing from Lake Rutherfurd.

Day workers built the great house of stone and wood over a massive steel framework, covered with shingles, in 1911. It enclosed thirty-seven rooms, nine bathrooms, lighted by electricity and acetylene, heated by steam, and furnished with a number of large fireplaces. The basement, entirely above ground, consisted of a kitchen, servants' dining room, storeroom, laundry and four additional rooms with lavatory and a bath. The first floor had a large living room, 31 x 47, dining room, 25 x 31, billiard room 25 x 31, also breakfast room, pantry, library, telephone room and gunroom. The second floor had eleven master bedrooms and seven bathrooms. The third floor had three master bedrooms and bathrooms, also eleven servants' bedrooms and bath. There were two main stairways leading to the second floor and one stairway from the second to the third floor.

A wide veranda encircled the house, affording not only a fine opportunity for promenades but also a magnificent view in all directions. It was very substantial, broad and ample, and added no little to the architecture of the structure. The house and veranda were lighted by electricity from a plant on the eastern end of the lake, where was also located

the garage, icehouse and pumping plant.

Below the house, at the foot of the mountain, lies Lake Marcia, the highest natural spring lake in New Jersey. It is five-eighths of a mile in length, one-quarter of a mile wide and in some places fifty feet deep. It was stocked with breeding trout and no fishing was permitted there after 1910.

There was a stone road running from the lower end of the lake to Cedar Park, a distance of nearly two miles to that wonderful formation of spruce, cedar and rhododendrons, covering 115 acres, a growth so thick that one had to crawl on hands and knees to get through. This was a sanctuary for wild birds of the game order.

The High Point Park Commission was to preserve and improve the new park as a nature reservation, with the power to layout and construct roads or pathways. They were also to provide for the pleasurable public use of the grounds for general park purposes, subject to rules and regulations, and also by campers and vacationers, provided that there was no shooting or trapping a birds.

High Point State Park features a high elevation ridge-top with pitch pine and scrub oak forest, exposed rocky outcrops, and chestnut oak forests. There is also an inland Atlantic white cedar swamp and red maple swamp forest.

Improvements

A private one-mile extension to furnish telephone service to Bass River State Forest was completed in 1921 and a small forest nursery for loblolly pine was started there in the spring of 1922. The old house on the French Farm in Bass River State Forest, previously leased, was renovated in 1922 to make a suitable residence for the forest ranger and a helper.

In 1921, the new county road from New Lisbon to Four Mile opened up Lebanon State Forest to greater use. Silviculture experiments, studies and demonstration plantings at Mount Laurel, Lebanon, and Stokes, proved the value of thinning. The experimental plantations at Stokes, made in 1919, did so well that 8,000 more Norway Spruce, Scotch Pine and Black Locust were added in the spring of 1921.

Hopatcong and Other Canal Reservoirs

In consequence of the abandonment of the Morris Canal in 1922, the State retained Lake Hopatcong, Lake Musconetcong, Cranberry Lake, Bear Pond, Saxton Falls Pond, and Greenwood Lake, for public use, acquiring 351 acres for Musconetcong State Park and 328 acres at Cranberry Lake and Lake Hopatcong. New dams with modern spillways were built at Lakes Hopatcong and Musconetcong, Saxton Falls and Greenwood Lake. Musconetcong State Park encompassed the surface area of the lake and a few small strips of land along its shore, the largest being two acres between the dam and the highway. The lake was dredged in 1932 to remove stumps and deepen the water. This work also provided 20 acres with a lagoon for public use, making the lake available for boating, bathing, fishing and picnicking. At Cranberry State Park, 42 acres with a water frontage

of 1,000 feet provided public access. Because of the expense of building an access road, crossing a railroad right-of-way, park development was delayed.

The State of New Jersey took ownership of Lake Hopatcong, New Jersey's largest freshwater lake, for "an aquatic public park for boating, fishing and winter sports," agreeing to maintain it "at the normal high water mark as now established, natural elements permitting." Additional parkland adjoining the new Lake Hopatcong dam was purchased in 1928. An attractive fountain spouted the headwaters of the Musconetcong River. A turbine from a Morris Canal Inclined Plane was set up in a concrete shelter with a descriptive tablet. The old dam and a millstone from the Brooklyn Forge and Grist Mill were also preserved. The work was completed in 1929.

Prolonged drought and forest fires sweep New Jersey

A prolonged drought, commencing in the latter half of June 1921, triggered an exceptionally destructive season of forest fires, especially at Bass River and Stokes, and emphasized the need for a Fire Service capable of dealing with any emergency. The most serious fire loss in recent years occurred when a fire that extended over nearly 35,000 acres burned 400 acres of young timber in Bass River State Forest. A new fire lookout tower was erected at Penn State Forest in 1921.

Forest fires raged over 150,000 acres for two days in Ocean and Monmouth Counties causing three million dollars worth of damage, on April 27-28, 1922. 40 On the morning of the second day, after the conflagration had largely burned itself out, flames burst forth at Lower Squantum, two miles north of Lakewood, and pushed northeasterly ten miles on a front estimated at two to five miles wide, passing four villages and several large estates and farms. Between five hundred and a thousand men battled the flames, which consumed vast stretches of woodland, several isolated barns and outhouses, but no homes. Volunteer firefighters rushed from hot spot to hot spot in automobiles, starting "back fires" in the path of the onrushing flames. This method saved Greensville, Lane's Mill, Laurelton and Osbornsville. It was a close call, however, with flames coming within 50b feet of a church in Greensville. Backfires also saved the 400-acre farm of John D. Rockefeller, a few miles north of Lakewood, and Arthur Brisbane's estate at Lane's Mill, where hundreds of trees and some shrubbery were destroyed. The fires never reached closer than four miles from George J. Gould's estate, known as Georgian Court. Due to the absence of hydrants, only chemical apparatus from the neighboring towns were of any avail. After passing the Brisbane estate, the flames leaped a thirty-foot State highway and continued northeast, leaping State Highway No. 4, running between Lakewood and Point Pleasant. Just when it was feared that the fire would advance to Point Pleasant, the wind shifted to a southerly direction and the fire burnt itself out against the banks of the Metedeconck River. Other fires were reported near Atlantic City. The forest fires were attributed to bonfires set by farmers burning rubbish as part of their "Spring housecleaning."

^{40 &}quot;\$3,000,000 Forest Fire Sweeps Jersey," *The New York Times*, April 28, 1922, p.1

Forest fires swept 2,000 acres at Lebanon, destroying a large part of the best pine in the forest, 200 acres of oak and pine at Bass River and 200 acres of the same at Penn State Forest in April and May 1922. Two new fire towers were erected that year (1922): a 60-foot steel tower, one mile north of Belle Plain, and another two miles west of Millville. A 60-foot steel tower top the Kittatinny Ridge, seven miles west of Blairstown, was built in 1923 and supplied with an eight-mile telephone connection. With the cooperation of the United States Navy, a suitable observation house for forest-firewatchers was built on the roof of the hanger at the U. S. Naval Air Station at Lakehurst.

A greater number of responsible State fire wardens were needed to control and direct the semi-volunteer township wardens whereupon the service depended. The Federal government recognized the State's efforts and needs by increasing its annual contribution from \$2,500 to \$6,550, though the use of these funds was restricted to North Jersey. Based upon these circumstances and recommendations, the Legislature doubled the appropriation for forest fire protection in 1923 to \$35,000, allowing for the reorganization, enlargement and equipment of the Forest Fire Service, but especially the completion of the fire tower system and the employment of extra firewardens. The whole state was divided into 29 sections of about 85,000 acres each and the new position of Section Warden was created. Each Section Warden was equipped with tools and apparatus for about 30 men. The Divisions remained the same. Eight fire towers were constructed between 1923 and 1927: at Belle Plain, Mizpah, Cedar Bridge, Farmingdale, Budd Lake, Retreat, Batsto, and near Catfish Pond.

Charles P. Wilber takes the helm

At his earnest request, Alfred Gaskill was relieved of his duties as State Forester and Director of the Department of Conservation and Development on February 1, 1922, and Henry B. Kummel, the State Geologist, was chosen to fill the unexpired term. Gaskill officially retired on June 30, 1922, and Henry Kummel was elected to a four-year term as Director. The Department occupied its new quarters in the State Office Building in October 1922. Charles P. Wilber succeeded Gaskill as State Forester and Leonidas Coyle became the State Firewarden on July 1, 1923.

State Park Service organized

In 1923, the State Forests aggregated 16,402 acres. Eighty acres of experimental plantations, varying in age from one to fifteen years, were established for public demonstration purposes and market studies. The State Forests were made fully available for recreational purposes, such as camping, fishing and hunting. Stokes State Forest, the most popular, attracted several hundred persons to its campsites in the summers of 1922 and 1923.

The work of the Forest Service divided into five main areas of responsibility: (1) statewide forest fire protection, through the Forest Fire Service; (2) the administration and development of the State Forests; (3) the promotion of forestry practice on privately owned lands, by advice and assistance; (4) the conduct of studies, experiments and demonstrations of means and methods for the best forest and market practice; and (5) a general educational effort to arouse an informed public consciousness of the need for and

practicability of forestry practice. The State forestry program cultivated public interest and support through forestry lectures and radio broadcasts, by initiating a forestry course for agriculture students at Rutgers College, taking forestry exhibits to fairs and association meetings, and by preparing special articles, press releases and special publications.

Between 1923 and 1927, 490 acres were planted with more than 300,000 saplings: Red Pine, Shortleaf Pine, Norway Spruce, Loblolly Pine, European Larch, White Pine and Scotch Pine (given in the order that each species was used). A State Forest Nursery was established at Washington Crossing in 1926.

The State Park Service was organized in 1923 and a new force of permanent employees was engaged for the three state parks, including "four new employees in supervisory capacity and five others as helpers in subordinate positions." Between two and six additional laborers were used for special seasonal work from time to time. A permanent ranger headquarters was established at Lebanon (Brendan T. Byrne) State Forest in 1923, in a house leased from the State Feeble-Minded Colony.

A team of mules and an automobile truck were put into use at Stokes State Forest in 1923 and a considerable amount of equipment such as wagons, plows, shovels, spray tanks and other tools were purchased for Stokes, Lebanon and Bass River. Properties were zoned for "transient camping." Under this system, six permanent campsites were established in Stokes State Forest and two in Lebanon. Then fifteen transient campsites and four attractive picnic sites were built in Stokes and one picnic site in Bass River. In 1927, the Legislature appropriated \$5,000 for recreational funding.

Swartswood Lake was improved by a number of conveniences between 1923 and 1927, such as fireplaces, comfort stations, tables and benches installed at Emmons Grove.

The acreage and growth figures from 1923 to 1927 were given as follows:

State Forest	July 1, 1923	June 30, 1927	Gain
Stokes	7,231	9,274	2,042
Lebanon	4,809	6,742	1,933
Penn	2,764	2,764	0
Bass River	1,534	2,044	510
Jackson	43	43	0
Mt. Laurel	21	21	0
Total	16,402	20,888	4,486

The Appalachian Trail

At the invitation of the Palisades Interstate Park Commission and the New York-New Jersey Trail Conference, about four hundred forestry and park experts, recreational leaders, and hiking and camping enthusiasts gathered at a conference in the Bear

Mountain Inn on October 27, 1923, to begin preliminary work on the Appalachian Trail.⁴¹ Raymond H. Torrey, of *The New York Evening Post*, who opened the conference, credited the idea of developing a hiking trail, running two thousand miles from Maine to Georgia, to Benton Mackaye. The New York-New Jersey Trail Conference, which launched the meeting of trail advocates, is an informal federation of delegates from the original outdoor enthusiasts and hikers. Automobile clubs and outing clubs in Maryland, the District of Columbia, Virginia, West Virginia, Tennessee joined with those in New Jersey and New York to back the idea. Speakers included: Franklin W. Reid, Federal District Forester, District 9; Charles P. Wilber, New Jersey State Forester; William G. Howard, Assistant Superintendent of the New York State Department of Forestry; Allen Chamberlain, of Boston, representing the Appalachian Mountain Club; Willis Holly, Secretary of the New York City Department of Parks; Miss Gertrude Stein, of the Hudson Guild; Miss Ruby Jelliffe, Secretary of the Camp Department of the Palisades Interstate Park; Dr. George F. Kunz, President of the American Scenic and Historic Preservation Society; and Alfred M. Turner, Secretary of the State Park and Forest Conservation Commission. The trail was discussed from the point of view of forest fire prevention, historical associations and scenic values. The conference included an all-day hike featuring field demonstrations on how the trail was to be cleared and marked.

The Gift of Hacklebarney State Park

Adolph Edward Borie donated 32 acres at Hacklebarney to the State of New Jersey, which the Legislature accepted in 1924. He also provided a handsome entrance to the grounds. Borie's donation was subsequently enlarged by purchase and gift to 286 acres. The unusual beauty of the site, which encompassed the scenic gorge of the Black River, attracted more than 66,732 visitors in 1932. Its forest cover included stands of old hemlock and mature hardwoods, set off by dense masses of dogwood, laurel, and azalea. Consequently, the property was maintained in its natural condition, with every effort to preserve the native vegetation as unspoiled as possible. Because the topography was unsuited to roads, extensive nature trails were developed. Besides ample parking facilities, a large number of picnic sites were constructed, including thirty-five equipped with stone fireplaces. The entrance was marked with stone pillars and a memorial tablet placed by the park's donor.

Hacklebarney State Park was completely reconditioned in 1938-40, chiefly with the aid and assistance of CCC workers from the camp at Voorhees. A new parking area for 350 cars was completed and extensive landscaping undertaken. Sixteen new drinking fountains were installed, a combination contact station and concession stand was erected, all fireplaces were rebuilt, and all foot trails were relocated and reconstructed. Work started on a combination garage and equipment building in 1940 and electricity was brought into the newly renovated Headquarters house.

The Gift of Voorhees State Park

Former Governor Foster McGowan Voorhees gave his High Bridge farm of 323 acres on Willoughby Brook, known as Hill Acres, to the State of New Jersey "for forestry and

⁴¹ "Plan Long Trail Over Appalachians," The New York Times, October 28, 1923

similar purposes" upon his death in 1927. The park offers striking views of the Raritan valley. About 150 acres of open fields were quickly planted with evergreens, meeting the donor's desire for the establishment of experimental and specimen plantations for forestry purposes. Roads, trails, fireplaces and picnic grounds were laid out in 1939. CCC workers demolished the old barns at the Voorhees estate in 1940 and landscaped the area. Work began on a contact station.

Belleplain State Forest

The first purchase of land for Belleplain State Forest was made on February 29, 1928. This tract of 5,565 acres of woodland was intended for recreation, wildlife management, timber production, and water conservation. The East Creek Lodge at East Creek Pond was built as a group cabin with nine bedrooms to sleep 16 persons. Equipped with electric lights, electric refrigerator, gas cook stove and hot-water heater, its cooking and dining facilities could accommodate 24 persons.

Green Bank State Forest

The State of New Jersey purchased 1,614 acres of pine, oak and cedar forest along the Mullica River on February 2, 1930, forming the core of Green Bank State Forest in Burlington and Atlantic Counties. Except for the area in the vicinity of Green Bank, the greatest part of the forest consists of inaccessible southern white cedar swamps.

Stokes plantations

A crew of fourteen men planted 100,000 trees in Stokes State Forest in April 1930, consisting of 70,000 red pine, some Norway spruces, Japanese larches, Scotch, jack, pitch, and white pines. The latter was planted with red pine to lessen the danger of white pine weevil. The majority of the plantings were made on the recently purchased Dan Johnson place. Some 300 Japanese chestnut were planted with Japanese larch as foresters tried to find a partial substitute for the blighted native chestnut.

The High Point Veterans Monument

Colonel Anthony Kuser not only donated his magnificent mountaintop estate at High Point as a public park forever, but he also provided \$500,000 to erect a granite-clad obelisk on New Jersey's highest peak to honor the veterans of all wars

The Hoffman Construction Company, of Bernardsville, began construction of the High Point Veterans Monument in August 1928. In preparing the site, the hardness of the rock required drills to be re-sharpened after only four inches of work. Frank Moreno supervised Italian stonecutters quarrying a fine-textured granite from the Hinchcliffe Quarry at Glenwood in Vernon Township, which foreman Albert Bensley managed to haul on mammoth trucks by way of Tri-States. Washed sand was carted from Huguenot, near Port Jervis, and heaped in piles at the base of the foundation. A narrow gauge tramway conveyed the stone blocks and building materials to the summit. The huge reinforced concrete pedestal was poured before the onset of cold weather halted work for the season. With the base of the monument completed, Governor Morgan F. Larson laid

the cornerstone with a silver trowel on June 8, 1929.

In July 1929, a steel mast and hoist was erected. With the rising exterior wall of granite blocks, ten to twelve inches thick, serving as a form for pouring concrete, the monument began to grow at the rate of three feet per day. When the cost of cutting local granite proved prohibitive, it was replaced with granite harvested from a New Hampshire quarry. The bronze door and tablets were installed on June 13, 1930.

The High Point Veterans' Monument was dedicated to the "Glory and Honor and Eternal Memory of New Jersey's heroes by land, sea, and air, in all wars of our Country" on June 21, 1930. As an airplane dropped flowers from overhead, Assemblyman Dryden Kuser, of Somerville, officially presented the monument to the people of New Jersey. Major-General Charles P. Summerall, Army Chief of Staff, the principal speaker, praised New Jersey's patriotism during the Nation's wars.

As designed by architects M. S. Wyeth and F. R. King, the High Point Monument is a granite-clad obelisk, 218 feet tall, measuring 34 feet square at its base and 20 feet square where the apex begins. It is capped with a rock-faced dimension stone, 3 feet square, securely doweled to its supporting walls. The four corners of the shaft are built with rough hammer-dressed rock-faced quoins. A beacon originally shone through the four windows at the top and exterior floodlights lit the entire memorial.

The obelisk surmounts a parapeted platform, 20 feet wide, reached by a broad staircase. Centered at the base of the shaft, bronze doors emblazoned with the Great Seal of the State of New Jersey open into an octagonal chamber about 21 feet in height with a patterned flagstone floor. The shaft with its hollow core rises above the concealed groined arched ceiling of the entry chamber. The shaft is faced with granite, but quartzite quarried in the Park was used for the back courses or filling.

A new ticket office was erected near the High Point Monument, on the right hand side, in May 1931. It is very neat and substantial and will hold cash registers, tickets and a place for various pieces of literature. The admission to the monument is 25ϕ for adults and 10ϕ for children. Nearly 700,000 people visited High Point State Park in 1932.

Contractor Joseph L. Judd, of Montague, built a large cafeteria and restaurant, of Old English design, measuring 181 feet long and 46 feet wide, at High Point in 1931, using varicolored cut stone quarried at the south end of the park. The western porch of the building, enclosed in glass, offered a magnificent view of the Delaware valley. E. J. Gage, of Ridgewood, a well-known New York caterer, provided the food services. A large plaza and parking lot were erected around the building. It became known as the Grey Rock Inn, from a large glacial erratic boulder at its corner.

The Boy and Girl Scouts submitted applications for permission to locate permanent summer camps in High Point State Park. A Mess Hall was built for the Girl Scouts at High Point in 1931, with a fieldstone fireplace and hard wood construction for the main building. John J. Stanton, Executive Secretary, published the High Point Park

Commission's ninth annual report in February 1932, informing the public of work accomplished:

"The past season more people have visited the park than ever before in its history. The attendance has more than doubled, on week days; Sundays and holidays. It has severely taxed the present facilities and employees to meet this inroad of visitors and tourists."

"There are many reasons for this. The attractions and comparatively easy access to the monument, which when lighted at night draws thousands of people from all over the country. This with better roads, wider fields of parking space and finer and better park roads and drives, on lines outlined by the Olmstead brothers, natural park engineers, not only through the park, but to its approaches, have made it now a convenient drive to the park from the populous cities and centers of the state."

"The attractions are now centered in the monument, the administration building, containing the wonderful museum, that is being enlarged and greatly increased in number of specimens that are added from week to week and the large wide porch on all parts of the building, from which such magnificent views in all directions are afforded. This feature seems to grow in popularity and almost every day, and particularly on holidays and Sundays is crowded to its utmost. The museum is now receiving more attention than ever. An effort is being made to enlarge by numbering the rooms and cabinets and cataloging the contents in such a way that all visitors can return home after their visit with a printed knowledge of the contents of the cabinets, rooms and contents in general. This work is now underway."

"At the north end of this building a most wonderful view presents itself of the Delaware Valley and Pike County and in the distance the Catskill range, while on the south side a view of the Delaware Water Gap and intervening territory and a good section of the park is afforded. The museum comprises eight rooms and some twenty-four cabinets. The main room is 47x31. The next largest on the same floor is 32x26."

"The museum has been open since 1923. Beginning in a modest way, the commission has made it the second largest museum in the state, only excelled by the State Museum at Trenton. It contains a great amount of local specimens and animal heads, nicely mounted. Many of these were from the collection of the late Colonel Kuser. Included in the collection are some marvelous and rare specimens furnished by Harold L. Benedict, of Milford, Pa., who is a frequent visitor at the park. Mr. Burnett is an extensive traveler in all parts of the world, especially during the winter months, and delights in bringing very rare curios to High Point. This year the commission is rearranging the museum and its collections, and will make it more attractive than ever to visitors, and it is hoped all articles will be catalogued and re-marked. The library consists mostly of the story of the birds of New York and New Jersey."

An article in the *Paterson Call* in April1932 provided further description of the interior furnishings and layout of the former Kuser Mansion.⁴² A room on the second floor was furnished with tables, chairs and desks as a meeting room for the Pica Club, the

⁴² "Pica Club Honored at High Point Park," Reprinted from the *Paterson Call* in the *Sussex Independent*, April 15, 1932.

newspapermen's organization of northern New Jersey, with headquarters in Paterson. Photographs of prominent writers, including George Wurts, former New Jersey Secretary of State and editor of the *Paterson Daily Press*, hung on the walls. A gun used in every war since colonial days were displayed in the Gun Room. Several photographs of Colonel Kuser hung in the picture gallery. Another room displayed miniature reproductions of the famous steamers, which plied North American waters. The Music Room was outfitted "with every detail of this art worked out to perfection." A suite of rooms was available to the Governor. The High Point Park Commission also had a meeting room. Another room was devoted exclusively to the rare birds of Sussex County.

More than 35,000 visitors climbed to the top of the High Point Monument during the 1931 season, paying 25 cents each. Between 600,000 and 700,000 people visited High Point State Park in 1931, an increase of 200,00 over the preceding year. Many of these visitors came from Passaic County, judging from the "P" on their license plates. A new lake and new drives were in course of construction in February 1932. Numerous games, swings and other playground equipment were set out on the grounds. The park opened for the season on Sunday, April 10, 1932.

Parvin State Park

Parvin Lake is an old sawmill pond upon Muddy Run, a west branch of the Maurice River. Stands of swamp cedar, pines, oaks, holly, and laurel at the lake's outlet comprise Union Grove, a popular summer resort and picnic grove for many years. Because of the complete absence of State Park property in the southern two-thirds of the State, the New Jersey Legislature made a special appropriation for the acquisition of 921 acres, encompassing Parvin Lake, in 1931. It was maintained in its previous use as a bathing beach and picnic resort. Landscape architects planned the park to make it a standard for the South Jersey Coastal Plain. It includes some of the finest remaining tracts of old swamp cedar, which were considered valuable relics.

The wooded upland, covered with pine and oak forest, masses of old-growth laurel and holly of unusual size and beauty, made a perfect park setting. Two miles of Muddy Run, flowing above the lake through dense swamp cedar, was admired as a scene of unusual natural beauty. Under State ownership and protection, the park immediately began to attract waterfowl, upland birds and other wild life, offering nature lovers an opportunity for a rich out-of-doors experience.

By 1938, Parvin State Park offered a wider variety of recreational attractions than any other State Park, except for High Point. Sunday and holiday crowds frequently exceeded 10,000 persons and on one occasion in 1940, the attendance exceeded 14,000 people for the day, severely over-taxing the accommodations and personnel. Facilities were provided for bathing, boating, fishing, camping, picnicking, and hiking. Several new facilities were added in 1939 at Parvin Grove, including a brick bathhouse accommodating 2,200 bathers. Other improvements included a new diving platform, a canoe and boat livery, and parking spaces for 700 cars. In 1940, a new masonry footbridge was constructed to facilitate circulation of visitors around the shores of Parvin Lake. Over a half-mile of foot trails were opened to make the wilderness area accessible

to the public. On September 1-2, 1940, a severe flood greatly damaged the dam at Parvin Lake, necessitating extensive repairs. A new dam, spillway and bridge, finished in May 1942, considerably enlarged the usable lake frontage.

A new recreation area was developed at Thundergust Pond. The pond was deepened, two bathing beaches were developed, and a contact station was constructed. Seven cabins were completed in 1940 and construction of ten more was started (seven of these being finished in 1941). Work on the Thundergust Picnic Area began in 1940. Parking facilities, walks, a playfield, softball diamond, bathing beach, and 16 picnic tables were installed. A large shelter, drinking water, sanitary facilities and bath house were part of the plans. The area was used as a day camp for underprivileged children in 1941. When completed, it was also to serve as a reserved area for large organized picnics. A boat dock was built on Thundergust Lake, but the State Highway Department completed the dam and bridge after the departure of the Civilian Conservation Corps in 1942. The State leased the CCC buildings at Parvin in 1942 to the Deerfield Packing Corporation to house war emergency employees.

Jenny Jump State Forest

The first purchase of 843 acres of mountain woodland, stream and lake, comprising Jenny Jump State Forest, was made on February 20, 1931. Located on a spur of the Western Highlands, with elevations ranging from 399 feet at Mountain Lake to 1,108 feet near the Forest Headquarters, its forest roads and trails offered magnificent views of the Delaware Water Gap, about 12 miles distant, and of the Great Meadows of the Kittatinny Valley.

Recreational Potential

Writing in 1932, State Forester Charles P. Wilber explained the growing appreciation of the recreational potential of the State Forests:

"Taken primarily as timber properties and managed for the protection of their forest values and possibilities as they are, their development for recreation uses in no way interferes with their future as woodlands. Their greater areas as single units than the average park and their maintenance as forest, make them of especial interest and value to those to whom the wilderness appeals. Their inevitable inclusion of beauty spots, of streams and ponds, of ridge and plain provide beauty and natural features of use for the recreationist of the same character but of greater variety and extent than most parks. In their administration this has been recognized and they now serve a great number as favorite picnic and camp sites, as fishing and hunting grounds, as retreats or as transient objectives afoot or awheel."

An Economy Move

Reflecting his inaugural pledge for "ruthless" economy in government, Governor A. Harry Moore sent an economy program to the General Assembly in February 1932, urging the abolishment of fourteen independent commissions and the consolidation of their powers and authorities. Several bills spelled out the transfer of the duties of the

Washington Rock Park Commission, in Somerset County; the Dey House Washington Headquarters Commission, at Preakness; and the Monmouth, Princeton, and Trenton Battle Monument Commissions to the Department of Conservation and Development. Governor Moore's bills also transferred the duties and unexpended balances of the commissions created to mark historical sites, and the duties of the Old Steuben House Commission in Bergen County; the Old Tavern House Commission at Haddonfield; and the Hancock House in Salem County, to a newly created Historic Sites Commission within the Department of Conservation and Development.

Washington Bicentennial Memorial Arboretum

In November 1930, Charles L. Pack, president of the American Tree Association, began urging Americans to plant ten million trees in all parts of the United States to honor the approaching Bicentennial of George Washington's Birth (1732-1932). By May 1, 1932, a total of 16,284,761 memorial trees were registered on the Honor Roll. Berks County, Pennsylvania, was a leader with two million trees planted. The Wisconsin Federation of women's Clubs planted 640 acres. The public schools of Dayton, Ohio, were credited with planting 53,000 trees. The District of Columbia chapter of the Daughters of the American Revolution started a memorial grove on Hains Point.

Governor A. Harry Moore accepted the gift of a Washington Bicentennial Memorial Arboretum at Washington Crossing State Park, donated by Charles Lathrop Pack, of Lakewood, president of the American Tree Association, and his son Arthur Newton Pack, of Princeton, on May 19, 1932. The memorial arboretum on eight acres comprised a thousand trees and fifteen hundred shrubs native to the State, representing fifty to sixty varieties. Arthur Newton Pack made the presentation and his children, Eleanor, eight years old, and Vernon, six years old, unveiled the bronze memorial plaque affixed to a large fieldstone. Charles P. Wilber, state Forester and Chief of the Division of Forests and Parks, and Dr. Charles H. Elliott, State Commissioner of education, spoke on behalf of the State. Colonel Henry L. Hoeller, president of the State Department of Conservation and Development, and Dr. Henry B. Kummel, Director, presided.

The Works Progress Administration worked for several years at Washington Crossing, doing landscape work along Steele's Run and building eleven picnic areas with fireplaces and tables. The replaced the old footbridge with a more permanent structure and built the dam and pond on Steele's Run. They remodeled the Nelson House as a contact and comfort station. They also completed the new office building and equipment depot in the Sullivan Grove section and rebuilt a playing field, including a baseball diamond.

The Civilian Conservation Corps

From 1932 to 1941, twenty-two Civilian Conservation Corps camps in New Jersey engaged in making improvements in seven State Parks and eight State Forests, covering 51,374 acres. Specifically, the CCC operated seven camps within five State Forests, as well as camps within two State Parks. Several other CCC camps were shared jointly by the State Parks and other public agencies. The program spent 226,897 man-days on State

⁴³ "Topics of the Times, Washington Crossing Arboretum," *The New York Times*, May 19, 1932, p. 20.

Forest work alone in 1939. At that time, the average annual cost of operating a camp, including materials purchased for work projects, amounted to \$180,000. In 1941, its final season, the Civilian Conservation Corps provided 178,193 man days of enrolled labor to the State Forest properties, consisting of 168,167 man days on the State Forests and 10,026 man days for the Forest Fire Service on fire control projects on private lands. By that time, camps were not operating at fully authorized enrollment due to the shortage of enrollees.

The CCC enrolled unmarried and unemployed citizens, 17 to 24 years of age, in sixmonth programs and up to two years of job training. Enrollments were received in April and October, allowing farm boys to sign up for the winter months and return home for spring planting. Workers earned approximately \$30 per month. After camps had their full quota, several hundred additional enrollees were sent to the Ninth Corps area in the far West, to New York State and to Delaware.

Enrollees engaged in erosion control, nursery work and reforestation. They constructed park roads, trails, bridle paths, vehicular bridges, ponds for fish and waterfowl, lookout towers, observatory shelters, picnic fireplaces, campgrounds, recreational lakes, and landscaping.

Two Civilian Conservation Corps camps, S-51 and S-71, were established in Stokes State Forest. Workers from C. C. C. Camp No. 51 constructed Lake Ocquittunk (from the Lenape word for "crescent") in the summer of 1934. The new lake, covering about eleven acres, was developed with parking spaces, picnic tables, fireplaces, sanitary facilities and a wading pool for children. A bathing beach, a shelter and bathhouses were built on the south shore in 1936, close to the parking spaces. Eleven log cabins were erected in 1936-37 on the west side of the lake in a grove; each was outfitted with a large living room with a fireplace, and a small kitchen. A shady grove to the east was set aside for 24 picnic fireplaces, tables and benches, two shelters and two comfort stations. Ten trailer camps and additional campsites were opened near Lake Ocquittunk.

A group camp was constructed at Skellinger Lake in Stokes State Forest in 1939-41, including sleeping quarters, washhouse and infirmary, an administration building, latrines, mess hall, craft-house, water-system pipelines and reservoir. The Skellinger dam was raised in 1941. By the time the CCC ended in 1942, the enrollees constructed and hung 33 shutters and 11 doors for the new State Group Camp. They laid hearths for four fireplaces and completed various unfinished work in the craft building and staff quarters.

A caretaker's residence, garage and supply building were erected at Lake Ocquittunk. Beach improvements and an auxiliary spillway were also completed. The bottom of Shay Lake was cleared and work began there on construction of a dam. A new double-arch bridge over the Flatbrook was built in 1939-40. A shelter, fireplaces, a bridge, well shelter, and other facilities were completed in 1939-40 at Kittle Field. An equipment building and garage were built at the Stokes Headquarters in 1940. Fifteen cabins were ready for use at Lake Ocquittunk by 1943.

The CCC workers also developed foot trails, trailside benches, parking facilities, shelters and picnic sites at Tillman Ravine, an area of about eight acres of mixed hardwoods and conifers. Its central feature, Tillman Brook, cascades over glacial rocks and huge boulders, between precipitous banks, canopied by a magnificent hemlock grove, and faced with masses of rhododendron. The area includes hardwood groves and a fine stand of white pine.

CCC workers also constructed the Sunrise Mountain Road in 1936 to provide access to a scenic view of the valley below Culvers Gap from the summit of the Kittatinny ridge. They built the Observatory Shelter at an elevation of 1653 feet on Sunrise Mountain in 1937-38, at a site along the Appalachian Trail. A manually operated railroad was used to bring carloads of building materials along 400 feet of track on a 45° grade up the steep side of Sunrise Mountain.

CCC workers from Stokes also built new fireplaces and picnic tables, made beach improvements, and installed a sewage system at Swartswood State Park, where the land area of only twelve acres was already taxed to capacity. A much-needed addition of 168 acres from the adjoining Emmons farm was made to Swartswood State Park in 1941, enabling an expansion of its picnic facilities. Fifteen new picnic tables were installed in 1940. A new water pump was installed at the Emmons Grove concession stand. An old stone farmhouse on the recently acquired land was renovated as a park helper's residence in 1941. Other buildings, part of the old farm, were razed. Electricity for power and lighting was introduced in 1941.

The Civilian Conservation Corps set up three camps at Belleplain. CCC workers converted Meisle Cranberry Bog into Lake Nummy in 1939, complete with a bathhouse, boathouse, parking lot and other facilities. They also constructed the original forest headquarters, maintenance building, a road system, bridges, and dams.

Camp Kuser of the Civilian Conservation Corps stood at the northern end of Lake Marcia in High Point State Park. It inhabitants built rustic picnic pavilions; twenty miles of park roads; Monument Trail with its quarter-mile stone staircase; the Sawmill Lake dam and campground (1934-36); bathhouses; shelters along the Appalachian Trail; two cabins at Steenykill Lake (1941); campsites and stone fireplaces. They also began construction of the Iris Inn in 1940 for visitors' lodgings; it was completed in 1955 and became the Park Headquarters in 1969 when Kuser Lodge was abandoned.

Workers from CCC Camp 58 made considerable improvements at Jenny Jump State Forest, completing the road over the mountain in 1935 that connects the Forest Headquarters to the main road between Hope and Great Meadows. A new equipment depot was completed and additional parking facilities were developed in 1939.

Workers from the CCC Camp S-55, Company 225, at Bass River, completed a recreational area, including construction of an 800-foot earthen dam with clay core and concrete spillway for a new 67-acre Lake Absegami with sand bathing beach and diving platform at Bass River between 1939 and 1941. Construction of a contact station, latrines,

five camp shelters, three overnight cabins, began in 1940. Six cabins with fireplaces were built alongside the lake. Managed intensively under forestry principles, Bass River offered many forestry demonstrations to visitors.

Two CCC camps were located within Lebanon State Forest. Their workers excavated the Deep Hollow Pond for a recreation area and developed Pakim Pond, building a spillway and log cabin colony. The CCC completed two bathhouses, three overnight cabins, an equipment depot and one workshop. A well-equipped sawmill operated at Lebanon State Forest, supplying a large share of the rough lumber needs of the State Forests and Parks.

The dam at Lake Oswego in Penn State Forest was rebuilt in 1938-39 and additional landscaping completed at the recreation center. An airplane landing filed was completed for the Forest Fire Service at Penn State Forest in 1940. A new spillway was also built there and the dam repaired.

The Civilian Conservation Corps Camp located in Voorhees completed a new parking lot for 350 automobiles at Hacklebarney State Park in 1939. They started an extensive landscaping project, installed a new drinking water system and built a combination contact station and concession stand. They also installed recreational facilities at Voorhees. By the time the Hacklebarney CCC Camp closed in July 1941, the enrollees had constructed a comfort station, 69 fireplaces and drinking fountains of native stone. Stone steps were placed leading to Trout Brook picnic area and a bridge erected. One hundred picnic tables were assembled on concrete bases. A new garage and workshop were built at Voorhees in 1942-43.

By 1935, the Division of Forests and Parks managed eight state forests, covering 50,000 acres, located at Stokes, Jenny Jump, Jackson, Lebanon, Penn, Bass River, Green Bank and Belle Plain. At that time, the State parks comprised: High Point, Hacklebarney, Washington Crossing, Swartswood, Musconetcong and Cranberry Lakes, Hopatcong, Voorhees, Mount Laurel, and Parvin.

CCC Fire Fight

About 80 CCC workers fought forest fires at Cedar Run and Mayetta on Sunday night, May 25, 1936, and another 100 boys battled the flames Monday the 26th until nearly 3 A. M. the next morning. A Complaining of insufficient rest after almost continuous hard fire duty, about 170 of the 260 enrollees at the CCC Camp in Manahawkin refused to resume their regular forestry work at 8 o'clock. on the morning of Wednesday, May 28, 1936. Fearing trouble, Lieutenant William J. White, camp commander, called the Tom River barracks of the State Police for troopers. Trooper Joseph Mack responded, but "found nothing to do" upon his arrival. Lieutenant White and his assistant, Lieutenant George L. Martin, quelled the "rebellion," as they called it, by immediately discharging thirty-one "militants" among the CCC strikers, who were put aboard a train at Barnegat with railroad tickets for home. Strike leader Leroy Wells, of Trenton, told the *New York Times*

⁴⁴ "Jersey Fire Duty Causes CCC Strike, 170 Demand Day's Rest After 24-Hours of Fighting Blaze in Wooded Areas," *The New York Times*, May 28, 1936, p 14.

that many of the boys had been on 25-hours continuous duty up to 3 A. M. Tuesday, when the fires were put out. Since a large number of the enrollees had only been in camp for a few weeks, they were not inured to such prolonged labor. He told his superiors "the strikers would respond to fire or any other emergency duty, but that they thought cutting down dead trees could wait another day."

According to news reports, James Cullen of Tuckerton, another discharged worker, said that he returned from fire duty at 3:30 A. M on Tuesday and was roused out for kitchen duty two and a half hours later. Henry Kamiski of Camden felt physically unable to do even a part of a day's work because of sore muscles and feet. All those discharged, speaking to reporters at the train station, "complained of poor food, overwork, and said the officers were harsh."

A heavy shower at noon on Wednesday extinguished the last smoldering embers. State Fire warden Coyle estimated the destruction of more than 18,000 acres of woodland between Asbury Park and Atlantic City, from Chatsworth to New Gretna. Warden Coyle also order division Fire warden Weston Davis to investigate the fire, which started near Chatsworth on Saturday and which claimed five lives, including two CCC workers. The bodies of Edward Sullivan and John La Sala, both 20 years old, were sent to their parents' homes in New Brunswick. The other victims were Ira Morey of West Creek, Stanley Carr of Waretown, and Kingsley White of Whitesville.

Charles Lathrop Pack (1857-1937)

Charles Lathrop Pack was born in Lexington, Michigan, on May 7, 1857, the son of lumber baron George Willis Pack and Frances Farman. After attending Brooke School in Cleveland, he became a familiar figure in Cleveland business circles, founding the Cleveland Trust Company. He also attended to his father's business interests in Asheville, North Carolina, where he came into contact with foresters on the Biltmore estate. At Theodore Roosevelt's invitation, he attended the Governors' Conference at the White House, where a national policy on forest conservation was first formulated. With Walter Hines Page and Dr. Charles W. Eliot, of Harvard University, he founded the National Conservation Congress. He headed the American forestry Association from 1916 to 1922. He built a home on Forest Avenue in Lakewood, New Jersey.

Anticipating America's entry into the First World War, he organized the National War Garden Commission and encouraged every American to plant a "war garden." Patriotic men, women and children tended almost three million gardens in backyards and on vacant lots, harvesting an estimated \$525 million worth of foodstuffs. He was honored for shipping millions of tree seeds to replant the war-devastated forests of Belgium and France, Between 1927 and 1930, he established a forestry trust, fund, a forest education board, the Charles Lathrop Pack Forestry Foundation at Yale and the George Willis Pack forestry Foundation at the University of Michigan. Through these charitable foundations, he donated "demonstration forests" to Syracuse, Yale, Cornell, Washington and Michigan Universities, provided scholarships. in forestry and endowed twelve colleges with funds for annual prizes for essays and articles on forestry. He founded the American

Tree Association, headquartered in Washington, D. C. He encouraged the planting of 28 million memorial trees to honor the 1932 Bicentennial Of George Washington's Birth.

Charles Lathrop Pack died on June 14, 1937, and was buried, at his own request, in the Charles Lathrop Pack Demonstration Forests, near Warrensburg, New York, which stands upon 2,800 acres that he donated to the New York State College of Forestry at Syracuse.

Cheesequake State Park

The Board of Conservation and Development was authorized to locate, select and acquire lands bordering Raritan Bay, in South Amboy and Keyport, for the establishment of Cheesequake State Park in 1932. The Legislature appropriated \$100,000 in 1937 for land acquisition and development. The first acquisition of property, totaling 735 acres, was made in 1938. The Works Progress Administration oversaw the demolition of buildings on the Favier farm and the construction on this site of a superintendent's house, office building, garage, and equipment depot. Other improvements included the construction of 77 fireplaces, 70 picnic tables, 110 trailside seats, four shelters, five latrines, five miles of park roads, eight miles of foot trails, and three parking lots accommodating 350 cars. Governor A. Harry Moore opened Cheesequake State Park to the public on June 21, 1940.

Approximately 200 acres were added to Cheesequake State Park in 1941. Works Progress Administration Project No. 3, initiated in 1941, undertook construction of three lakes: Hooks Creek Lake of 10 acres; Booth Lake of 2 acres; and Thomas Pond of 1 acre. An additional three miles of park drives and six miles of hiking trails were laid out. A trailside nature study museum was constructed in 1941-42.

Wilber's Vision for the Future

Charles P. Wilber, State Forester and Chief of the Division of Forests and Parks, prepared and published *A Program for State Ownership of Park and Forest Land in New Jersey* in April 1937. He established two general underlying principles in considering the matter of State-owned parks and forests:

"(1) The function of the State is to provide 'open space' or recreation areas of a character or in locations which will serve the population of at least a considerable section of the State. Such areas will ordinarily be of large wild land properties or of unusually high cost properties which, because of their primary value to the whole population are desirable but which are outside the scope or beyond the means of the local government unit. Exceptions to this general principle will occur when historic, scenic or similar factors of Statewide interest justify State ownership and maintenance of smaller areas or of areas which from a purely recreational standpoint would not be made State projects. It is not the function of the State to provide small playground areas, the primary value of which and the major use of which will be for local populations immediately adjacent to them, nor to maintain breathing spaces in the centers of dense population, these being functions of the county and municipal governments.

(2) There are two types of ownership involved in the program proposed; (1) State Parks (2) State Forests. Both types can and should serve the needs of the public for open spaces. In use no sharp line can be drawn between them. In cost there is this distinction: much higher prices are justifiable in purchases for park purposes and much greater expenditure may be made for their development. Also parks may or may not be fully selfsupporting and, while many such areas can and should be handled under scientific forest management, such administration is a secondary consideration. Areas taken as State forests, however, are expected to and will, under proper management, become commercially productive timber areas as time goes on. There is, therefore, a price limit for purchase cost and a maximum per acre limit for maintenance. However in the New Jersey situation, with the State's dense population and limited area of available open spaces, there will certainly be park value and park use of any large forest holdings owned by the State. This will often justify a considerably higher price for such woodland areas than would be permissible for strictly forestry use both for purchase and maintenance. The two programs are so closely related that they must run parallel and under close coordination to avoid duplication."

As privately owned wilderness areas were rapidly closing to unrestricted recreational use, Charles Wilber realized that only an organized system of public parks and forests would offer an opportunity for out-of-doors recreation on a scale sufficient to address the demands of New Jersey's increasing and spreading population. A general wild land ownership program would play a larger part in fish and game conservation, providing public hunting grounds, public fishing streams and ponds, and wildlife sanctuaries for purposes of conservation and stocking. Wilber estimated that there was almost two million acres of wild land in New Jersey in 1937, comprising nearly one half the total area of the State. Due to the decline of agriculture, the concentration of population in towns and cities, and the degradation of timberlands, the acreage of wild lands was increasing, not declining.

Wilber also recognized that recreation was big business, as indicated by New Jersey's own seashore resort industry. "People go where there is something to be seen and done," he said. "We have the raw materials, we have the highways to make them accessible, we would be wise to make this combination over into attractive and available objectives. Adequate public reservations, reasonably developed, can multiply many fold the pull on and the profit from visitors to New Jersey, with profit to the locality and consequential benefit to the State." The Board of Conservation and Development was therefore committed to a comprehensive program of State Forest ownership involving a minimum ownership of 200,000 acres of wild land for maintenance as woodland. Additionally, it recommended the acquisition of more costly parkland to also serve wild life conservation, watershed protection, recreation, and other public needs.

Stephens State Park

Marcy P. Stephens and August W. Stephens, of Summit, New Jersey, donated 230 acres in Warren County to the Board of Conservation and Development for a forest park in July 1937. This tract is situated about two and a half miles north of Hackettstown on Waterloo Road. It consisted of rolling hill country about one-third open land and the balance woodland. The property occupies both banks of the Musconetcong River for

nearly a mile, and includes the banks of a picturesque tributary brook. The old Stephen's homestead was included in the gift.

The Civilian Conservation Corps camp at the State Fish Hatchery in Hackettstown devoted part of its time to making improvements at Stephens State Park, completing a mile of foot trail, twenty-two picnic fireplaces and tables, a contact station, and comfort stations. They also planted 30,000 seedlings on open land, made improvements on 50 acres of woodland, and reconstructed a mile of abandoned road to provide park access. A dry retaining wall was built along the river road and the roadbed filled with rock and gravel. In 1940, a few tables and benches were placed on the island in the Musconetcong River. Work also began on a public campground. Electricity and water systems were installed. Two new floodgates for the Stephens dam were installed in 1941. CCC workers landscaped the equipment depot and built a footbridge and guardrail.

Ringwood Manor State Park

In 1937, Erskine Hewitt donated ironmaker Abram S. Hewitt's Manor House and 95 adjoining acres, inaugurating Ringwood Manor State Park. Norvin Hewitt Green, nephew of the late Erskine Hewitt, deeded many of the original Hewitt furnishings and relics to the State. Following renovations and proper arrangement of the furnishings, the 78-room residence was opened for public inspection on September 24, 1938, "as a museum and outstanding example of 19th century living conditions." a formal dedication of Ringwood Manor State Park was held on June 17, 1939. Mr. Green used the occasion to announce an additional gift of 135 acres. The Department of Conservation decided that Ringwood Manor State Park was "primarily an historic shrine and differs from other parks in this respect." State employees constructed a twelve-foot overshot water wheel on the approximate site of the original furnace. It pumped 14,000 gallons of water daily to water the extensive lawns and gardens on the property. Electricity was installed in the Manor House in 1939 to allow for better viewing of the exhibits. In 1940, 23,372 adults paid the 10-cent admission to view the Manor.

Park personnel erected directional and regulation signs, four rustic log barrier gates, and a main entrance gate at Ringwood in 1940. Civilian Conservation Corps workers installed 50 picnic tables, guardrails to control parking in two areas, guard rails along the Mill Pond road, three drinking fountains, and the concrete footing for an ornamental slab wall in front of the Manor House. They also demolished old concrete building foundations and floors, laid out 2,325 feet of foot trail through the picnic areas, and established a small nursery to provide ornamental planting stock.

The CCC camp working on the Newark watershed devoted part of its program to the development of Ringwood Manor State Park, building three comfort stations, a picnic area with nine fireplaces, picnic tables, and 40 log seats. Other projects consisted of construction of a parking lot for 350 cars and diversion of the stream to provide a more rapid flow of water through the lake and deepening of the lake. The historic associations of the surrounding countryside justified further public ownership and the park grew to 579 acres by 1964.

Growing Popularity and Visitation

Thanks largely to the Civilian Conservation Corps and the Works Progress Administration, new recreational and administrative facilities were developed in 1937-38 and forest fire protection improved. Over 700,000 people visited New Jersey's State parks, forests and historic sites in that year, representing a 25% increase in attendance over the previous year.

The shortage of Department personnel was becoming acute, due to the increased use of State parks and forests in both summer and winter: only nine full-time foresters and nine full-time ranger, were charged with the protection, development and public use of 54,603 acres of State Forest land in eight widely separated areas of the entire State. Yet, in the decade spanning 1929 to 1939, the estimated attendance grew from 10,000 to over 80,000 persons. In 1940, visitation at State Forests reached 115,196, an increase attributed to "the general nation-wide migration to the out-of-doors" as well as to "increased facilities and a better knowledge by the public of what is being provided for its use." In 1939, Stokes State Forest had the largest attendance, estimated at 25,081 visitors; this grew to an estimated 52,066 visitors in 1940. Five permanent and five seasonal employees were available to care for 10,000 visitors on a thousand-acre park in a single summer day in 1938. There were 11 miles of hard surface roads, 197 miles of gravel roads, 77 miles of sand or dirt roads, and 35 miles of hiking trails. The attendance figures for State Forests were given for the calendar year 1938:

Bass River	6,088
Belle Plain (acquired 1928)	14,28
Green Bank (acquired 1930)	3,957
Jenny Jump (acquired 1931)	5,166
Lebanon	19,616
Penn	5,483
Stokes	25,081
Total:	79,672

The nine State Parks (not including High Point, which operated under its own park commission), embraced 4,350 acres in 1939. The 36 employees included: 3 superintendents, 1 engineer, 10 guards, 19 helpers, 1 gardener, 1 caretaker, and 1 boat tender. The attendance figures for 1939 were:

Washington Crossing	223,481
Parvin	142,044
Ringwood	85,914
Hacklebarney	35,410
Swartswood	54,205
Voorhees	14,948
Ferry House	9,845
Stephens	8,433
Hopatcong	47,180

Total:	621,460
--------	---------

The Civilian Conservation Corps continued to operate seven camps on five State Forests in 1939, spending 226,897 man-days on forest work and park improvements. The average annual operating cost per camp, including materials purchased for work projects, amounted to \$180,000. The Civilian Conservation Corps terminated its activities on June 30, 1942.

Forest Fire Service

The responsibilities of the Forest Fire Service had also grown without a commensurate increase in appropriations. Besides enforcing the forest fire laws and extinguishing marsh, brush and woodland fires, the Forest Fire Service furnished the only fire protection for hamlets, villages, cranberry bogs, blueberry plantations, isolated homes and other improved property, whose value was conservatively estimated at \$300,000,000. In 1939, for the first time in New Jersey, three pieces of heavy mobile fire apparatus were used, one assigned to each of the three divisions of the Forest Fire Service. These trucks consisted of a one-and-a-half-ton chassis, carrying a 500-gallon water tank and a centrifugal pump attached to the motive power that was capable of pumping 400 gallons of water per minute. Each vehicle carried 5,000 feet of hose, 300 feet of rubber-lined hose, and such auxiliary equipment as nozzles, shovels, knapsack sprayers, first aid kits, buckets, and search lights.

Four new forest fire trucks were assembled at the Forest Fire Service repair shop in 1940. These new units were equipped with a centrifugal pump driven from the truck crank shaft, a 200-gallon water tank, 1,000 feet of forestry fire hose, and 600 feet of rubberlined hose mounted on a live reel. These fire trucks were also outfitted with a two-way radio system, enabling the operator to transmit as well as receive emergency fire messages. These mobile units were capable of pumping water over distances up to 10,000 feet from their own tanks or from local water supplies.

The two-way UHF radio system for forest fire fighting was revamped in 1939, according to specifications of the Federal Communications Commission, resulting in great improvement in the quality and stability of all transmissions. By 1940, the radio network consisted of twenty-three fixed stations and twenty mobile stations. Airplanes were also used to observe all fires burning in excess of 50 acres.

Due to the diversion of manpower to the National defense, and the worst drought on record, the State suffered through an increased number of forest fires in 1941. Severe improved property loss occurred at Taunton Lakes in Burlington County and the City of Lakewood.

State Forests

State Forests were acquired as rapidly as appropriations permitted, mainly for the rehabilitation of woodland abused by over cutting and devastating forest fires, particularly in the Coastal Plain forest of South Jersey. Management policies were directed at timber production for commercial purposes, the maintenance of forest cover to

protect watersheds and to control erosion, the provision of suitable food and cover to increase wildlife populations, and for the development of public recreational facilities. No funds, however, were appropriated for the purchase of additional State Forest lands between 1931 and 1941. The Legislature passed a law in 1940, allowing municipalities to transfer tax-delinquent lands to the State of New Jersey (with the consent of the Board of Conservation and Development) for use as forest park reservations. As of August 21, 1940, the Board acquired 31,261 acres by this means, including 26,823 (?) acres at Bass River. In 1939, seventeen acres of game food patches were sown, wildlife censuses were taken at Lebabon and Stokes, and technical wildlife work was carried on at Lebabon, Stokes, Penn and Belleplain State Forests.

For purposes of reforestation, not only within State Forests but over an estimated one million acres of abandoned farmland, the Department of Conservation and Development established seedling nurseries at Washington Crossing and at Green Bank in 1926, each capable of producing six million evergreen seedlings annually. At these facilities, two nursery superintendents, three permanent nursery helpers, and 30 to 40 laborers, cultivated a total of 32 acres, raising white Pine (30%), Red Pine (20%), Shortleaf Pine (20%), Norway Spruce (10%), Scotch Pine (7%), Pitch Pine (5%), Loblolly Pine (3%), Southern white Cedar (2%), hardwoods (2%), and other species (1%).

Washington Crossing

The Works Progress Administration carried on extensive landscape work along Steele's Run at Washington Crossing. Permanent structures replaced all footbridges in the park. A dam and pond on Steele's Run were also completed. The Nelson House was remodeled and reconstructed for a contact and comfort station. A new office building and equipment depot was erected in Sullivan Grove. A playfield, including a baseball diamond, were completely rebuilt. A shelter was built in Green Grove in 1940. Improvements made under the Works Progress Administration project included: a new pump house at Headquarters; construction of three parking areas and two latrines; construction and placement of 22 new picnic tables of the permanent type and 22 fireplaces; placement of 2,000 feet of rubble gutters; and construction of seven sets of gates. In 1941, the Legislature appropriated \$17,000 to acquire the Neiderer farm, consisting of approximately 75 acres adjoining Washington Crossing.

During the Second World War, the Military Police used Washington Crossing State Park during the winter months for maneuvers.

The Deserted Village of Allaire

Phoebe C. Brisbane, widow of newspaper columnist Arthur Brisbane, offered the "Deserted Village of Allaire" and 700 acres to the State of New Jersey in January 1940. Preserved as a monument to early American industry, nine surviving buildings from James P. Allaire's self-contained company town were restored and opened to the public. The village is noted for its picturesque brick architecture, built between 1827 and 1835, and quaint country church. The one surviving row of married workers' cottages is now a visitor center.

Penny Pines Project

The State Chapter of the Daughters of the American Revolution dedicated the "Penny Pines Project" at Lebanon State Forest on October 15, 1940. This was a nation-wide planting project to celebrate the fiftieth anniversary of the Daughters of the American Revolution and was intended as a memorial to their deceased members. Through a cooperative agreement, they planted an acre of pine seedlings at Lebanon State Forest each year, for three years.

The Second World War

Attendance at State Parks and Forests reached a record of 816,00 visitors in 1941. The works Progress Administration and the Civilian Conservation Corps assisted greatly in creating new facilities to meet the ever-increasing public demand, but their help was suddenly curtailed, leaving many projects unfinished. More than 60,000 soldiers used State forests for field maneuvers.

The United States Army stationed troops at various abandoned Civilian Conservation Corps Camps in New Jersey's State Parks and Forests during the Second World War. A unit of the 731st Military Police Battalion occupied the CCC Camp at Bass River until February 1, 1944. A unit of the 113th Infantry used the Belle Plain camp until January 25, 1994, and also used the forest for maneuvers, rifle practice, tank maneuvers and trench digging. A unit of the 113th Infantry originally occupied the CCC Camp in Penn State Forest, followed by the 990th Signal Post Supply Company. The camp at Lebanon was occupied 995th Signal Post Supply company, which used the forest for maneuvers and special tactical training, before abandoning the camp on January 1, 1944. The CCC Office Building at Hoppaugh Grove was converted to a residence for the park guard. Prisoners of war working on Seabrook Farms for the Deerfield Packing Company were housed in the abandoned CCC Camp at Parvin. Camp S71 at Stokes State Forest was transferred to the State and all but a few of its buildings were sold and dismantled.

As observed in 1942, more and more people each year were "seeking the solitude of the forest for the relaxation which is so increasingly necessary to health and happiness in this era of high-speed living." The rapid advance of the urban population, the ascendancy of the automobile, and the spread of suburban life saw "a corresponding decrease of forest areas suited and available for out-of-door recreation." Private owners steadily restricted the use of their properties to themselves and their friends. Furthermore, extensive tracts of New Jersey's forests were exhausted by cutting-over and neglect, becoming wastelands. For so long as the Second World War commanded the nation's attention and resources, little could be done.

Farny State Park, acquired in 1943, occupies 3,900 acres of the forested high ground lying northwest of Splitrock Reservoir in Morris County.

At War's End: Onset of the Baby Boomers

The Department of Conservation and Development comprised the Division of Forests and Parks, of which the State Forester was chief, and the Division of Geology and

Topography, in charge of the State Geologists. The Department also administered the State Museum, the abandoned Morris Canal, and the Delaware and Raritan Canal. The governing Board consisted of eight members, who served four-year terms. The Board appointed a Director, who also served for a term of four years.

Most parts of the Department and Board of Conservation and Development, excepting the State Museum, were transferred to the Division of Forestry, Geology, Parks and Historic Sites, Department of Conservation, in 1945, including the Historic Sites Commission's functions and properties. Twenty historic sites, either partly or wholly supported by the State, were placed under the Division's administrative jurisdiction and a Bureau of Historic Sites was created for their management and care. In the reorganization of State government following the adoption of the new State Constitution in 1947, "Historic Sites" was dropped from the Division's title. The Division was absorbed into a Division of Planning and Development, Department of Conservation and Economic Development. In 1961, the name was changed to the Division of Resource Development.

Norvin Green State Forest

Norvin Green State Forest, established in 1946, perpetuates the name of Norvin Green, a grandson of A. S. Hewitt, who donated many acres of his family estate to Ringwood Manor State Park. This State Forest encompasses the wooded Wyanokie Highlands, lying west of the Wanaque Reservoir in Passaic County, including the elevations known as Assinwikim Mountain (literally, "stone house" mountain), Torne Mountain, Carris Hill and Birch Mountain. Blue Mine Brook and Posts Brook drained the property.

Abram S. Hewitt State Forest

Abram S. Hewitt State Forest encompasses much of Bearfort Mountain, lying on the New York border, between Upper Greenwood and Greenwood Lakes. The first purchase of lands was made in 1951.

Barnegat Lighthouse

The State of New Jersey assumed the care and maintenance of the historic Barnegat Lighthouse, built in 1856-1858 under the direction of Lieutenant George Gordon Meade, in 1926. The Legislature created Barnegat Lighthouse State Park on 17 acres in 1951 to preserve this "symbol of the seafaring tradition of New Jersey."

Island Beach State Park

Twenty-two hundred acres of sand dunes, beach and native vegetation were purchased in 1953 to form Island Beach State Park in Ocean County. In 1983, the Legislature specified that Island Beach State Park be preserved, maintained, and improved, so as to perpetuate in its present state a unique recreational resource, highly valued for its topography, flora and fauna. Island Beach is nationally known as a unique biotic resource with over 300 plants identified, including the largest expanses of beach heather in New Jersey.

Wharton State Forest

Eyeing the greatest undeveloped source of ground water in the region, New Jersey purchased the Joseph Wharton Tract, comprising 95,000 acres, for \$3,000,000 in 1954. Wharton had originally acquired lands in the Pine Barrens with a plan to sell water from its aquifer to Philadelphia and Camden. He also experimented with cranberry cultivation, cattle raising and lumbering.

Worthington State Forest

Charles C. Worthington, a millionaire steam pump manufacturer, began to acquire 8,000 acres, covering six miles of Blockade Mountain (including Mount Tammany, the promontory that frames the New Jersey side of the Delaware Water Gap) in 1890. He established a deer park, named Buckwood Park, in February 1892, surrounding 2,000 acres of woodland, including Sunfish Pond, with eleven miles of wire fencing, eight feet high. Interested in the principles of forest management, Worthington was responsible for planting over one hundred thousand trees, mostly evergreens. Worthington leased Buckwood Park to the State Fish and Game Commission in October 1916 for a game preserve. This scenic tract became Worthington State Forest in 1954.

Charles Wilber, State Forester

Charles P. Wilber, a founder of New Jersey's system of state parks and forests, retired as State Forester after 43 years in service, on November 18, 1953. He died at his Trenton home on April 5, 1954, aged 70 years.

A native of New Brunswick, Charles P. Wilber received an M. A. from Rutgers University in 1908 and later an M. F. from the Yale School of Forestry. He worked for the United States Forest Service at Ogden, Utah, before entering state service as Assistant Forester in 1910. Wilber served successively as State Fire Warden, Chief of the Division of Forests and Parks, and Director of Forests, Geology, Parks and Historic Sites. During his tenure, he initiated the Forest Fire Service, authored many articles and pamphlets on forestry, forest fires, parks and land use, and was widely cited for his work in providing recreational facilities in New Jersey's parks and forests. He was active in both state and national park associations. He won the 1937 Silver Medal of the American Scenic and Historic Preservation Society. He was a deacon of the Second Reformed church of New Brunswick from 1914 to 1918 and an elder of the First Presbyterian Church of Trenton from 1919 to 1939. He was a trustee of the New Brunswick Presbytery 1929-49, president of the Fort Dix Y. M. C. A. 1940-47, class representative on the Rutgers Alumni council 1910-30, and president of the Yale Forest School Alumni Association 1937-38. His widow, Mrs. Ida Exton Wilber, and a sister, Mrs. Sidney Moe, of New Brunswick, survived him.

Forest Comeback

Reaching the high tide of deforestation between 1850 and 1860, New Jersey's forest began their recovery after the Civil War when coal supplanted wood as a domestic and industrial fuel. Scientific forest management practices and improved timber operations, combined with better utilization of cut timber and greater vigilance against forest fires,

resulted in a slow but steady increase in timber production after 1930. According to a pamphlet called "Forests of New Jersey," jointly published by the Northeast Experiment Station at Upper Darby, Pennsylvania, and the New Jersey Department of Conservation and Economic Development, the State's lumber production increased fivefold between 1932 and 1955. Forests covered nearly half of New Jersey's land area. About thirty thousand private owners held nearly 90% of the State's woodland in small parcels. The Forest Management Section of the Department of Conservation and Economic Development provided full-time foresters to advise owners in desirable forestry practices. 45

A Water Supply Bond issue in 1958 led to the development of the Spruce Run and Round Valley reservoirs. State Recreation Areas were established at Round Valley in 1968, at Spruce Run in 1974, and at Warren Grove in 1972.

Green Acres Program

Rapid suburban growth after the Second World War placed such a demand upon open space and recreational parks as to exceed the State's ability to acquire sufficient land for public use and conservation purposes. In January 1961, Governor Robert Meyner proposed funding for a 10-year land acquisition program to double New Jersey's outdoor recreational and conservation lands. The New Jersey Legislature unanimously endorsed the first Green Acres Bond Act, which voters enthusiastically ratified in the November general election.

The first Green Acres Bond provided \$600 million to buy land for parks, natural areas, forests, water supply, fish and wildlife preserves, and other conservation purposes. New Jersey was one of the first states to inaugurate such an open-space program. Of the total amount, \$40 million was used to purchase State lands, including preservation of access areas to the Atlantic Ocean, protection of the Jersey Palisades in conjunction with the Palisades Interstate Park Commission, and acquisition of the Revolutionary War battlefields at Princeton (1964) and Monmouth (1963). The State of New Jersey also acquired ownership of several historic sites, including Twin Lights (1962), Absecon Lighthouse (1966), and the Proprietary House (1967) in Perth Amboy.

In September 1960, the State of New Jersey purchased a 440-acre tract surrounding Lake Wawayanda for development as a State Park. Wawayanda State Park, site of the Young Men's Christian Association boys' summer camp from 1885 to 1919, includes the old Wawayanda Furnace stack and associated ruins. The first Green Acres Bond Act additionally funded the purchase of 10,556 acres for Wawayanda State Park in 1963.

The first Green Acres Bond Fund also created State parks at Corsons Inlet (1963), Cape May Point (1964), Double Trouble (1964), Liberty in Jersey City (1965), Rancocas (1965), and Allamuchy (1966). Undeveloped parkland was acquired at Great Piece Meadows in Essex and Morris Counties (1965), Hawk Island in Burlington County

⁴⁵ "Forests in Jersey Making a Comeback; Fivefold Rise in Lumber Output Cited," *The New York Times*, August 24, 1958

(1966), and Pigeon Swamp in Middlesex County. State forest lands were acquired at Cape May Wetlands (1965), Troy Meadows in Morris County (1966), Bursch Sugar Maple in Warren County (1967), Johnsonburg in Warren County (1967), Strathmere in Cape May County (1967), Osmun Forest in Warren County (1967), Swimming River in Monmouth County (1967), North Brigantine in Atlantic County (1967), and Swan Point in Ocean County (1967).

Natural Lands Management

In 1961, the Legislature vested the Division of Parks, Forestry and Recreation with the responsibility for acquiring and preserving natural areas as a habitat for rare and vanishing species of plant and animal life. Such places possessing their primeval character were to serve as living illustrations of the State's original heritage and as places for scientific study. The Natural Areas Council, consisting of seven members with a demonstrated interest in the preservation of natural lands, were to advise the Commissioner on an over-all program of natural lands acquisition and management. A Natural Areas section was also established within the Division of Parks, Forestry and Recreation.

The Office of Natural Lands Management identifies critically important natural areas to conserve New Jersey's biological diversity. Its database provides detailed, up-to-date information on rare species and natural communities for use in resource management, environmental impact assessments and for both public and private land protection efforts.

New Jersey's first "natural area," encompassing 800 scenic acres around the Cedar Swamp, north of the High Point Monument, was dedicated in 1965 as the John Dryden Kuser Memorial Natural Area.

Parks, Forestry and Recreation

A Division of Parks, Forestry and Recreation was re-established in the Department of Conservation and Economic Development on May 27, 1966. It was authorized to develop, improve, protect, manage and administer all State forests, parks, recreation areas, historic sites, and natural areas. It is to protect all forests, brush lands and marshes from damage by fire, insects and disease and to promote the use of good forest management principles on all forestlands. The Division also is responsible for the administration of programs for the licensing of certified tree experts, the Bureau of Recreation, historic sites and natural areas management. It is to provide liaison between the Federal and lesser governmental levels in matters pertaining to forestry, conservation, recreation, historic sites and other appropriate fields. The Department commissioner was empowered to create and organize such bureaus as may be appropriate for the Division's efficient and effective administration.

Historical Interpretation

In 1966, the Division of Parks, Forestry and Recreation was vested with the responsibility for interpreting New Jersey's heritage through its historic sites and was required to:

- Formulate comprehensive policies for the preservation, restoration and public presentation of all historic sites within the State;
- Do the necessary research, prepare exhibits and furnish services required for a proper and adequate interpretive program;
- Prepare and disseminate informational materials to inform the public about New Jersey's historic sites;
- Consult and co-ordinate with groups and organizations in order to advance the purposes of the historic sites program.

On June 21, 1967, an 11-member Historic Sites Council was established within the Division of Parks, Forestry and Recreation to consult with and advise the Department Commissioner and the Division Director. It was authorized to recommend programs and policies for: (1) the acquisition, development, use, improvement and extension of historic sites; (2) the development of a broad historic sites preservation program on a statewide and local basis; and (3) the identification, authentication, protection, preservation, conservation, restoration and management of all historic sites within the State.

The New Jersey Historic Trust was also established in 1967 and empowered to accept gifts, legacies, bequests and endowments and to hold real and personal property of historic, aesthetic or cultural significance, by gift, purchase, or devise. It was further ordered to preserve and administer such cultural properties, and to acquire property adjacent thereto, if deemed necessary for the proper use and administration of historic, aesthetic or cultural property. Its board of seventeen members includes the membership of the Historic Sites Council, augmented by a member of the State House Commission, the State Treasurer, the Commissioner of the Department of Conservation and Economic Development (now the DEP), the Chairman of the Parks, Forestry, and Recreation Council, the State Librarian and the Commissioner of the Department of Education (or their designated representatives). The New Jersey Natural Lands Trust was formed in 1968

The Department of Conservation and Economic Development was charged with the seemingly conflicting goals of conserving natural resources and developing their economic potential. The *New Jersey Almanac* of 1964 observed that —

"... The Department operates on the philosophy that 'conservation' means 'wise use' and not merely 'preservation.' A state as small as New Jersey cannot afford to set aside a hundred-square-mile tract as a forest preserve. With a limited amount of area and a growing population, each natural resource must be made to serve as many purposes as possible."

Organizationally, the Bureau of Forestry managed the State forests, growing trees for reforestation projects at the nursery in Washington Crossing State Park and stationing fire

wardens throughout the State. The Bureau of Parks and Recreation maintained and operated the State Forests, Parks, and Historic Sites.

The Department of Environmental Protection

On Earth Day, April 22, 1970, Governor Cahill established the new Department of Environmental Protection Chapter 33, L. 1970), bringing together the many agencies and jurisdictions of State government involved in the conservation, restoration and enhancement of New Jersey's physical environment. The Division of Parks, Forestry and Recreation joined the new Department of Environmental Protection and was designated the Division of Parks and Forestry in 1971.

The New Jersey Register of Historic Places was established in the Division of Parks and Forestry in 1970 to create and maintain a permanent record of areas, sites, structures and objects within New Jersey that are determined to have significant historical, architectural or cultural value. With the advice and recommendations of the Historic Sites Council, the Commissioner of the Department of Environmental Protect establishes criteria for receiving and processing nominations and approvals, both publicly and privately owned, for inclusion on the New Jersey Register.

Voters approved a second Green Acres Bond issue, totaling \$70 million, in November 1971. Of this amount, \$40 million was provided for direct State acquisitions of land for State Parks, Forests and Wildlife Management Areas. Purchases included lands fronting the Hudson River and the Statue of Liberty, acquisitions along the Appalachian Trail, and continued purchases of South Jersey pine lands.

The Commissioner of the Department of Environmental Protection was authorized in 1973 to acquire easements or controlled-use agreements for sections of the Appalachian Trail lying within New Jersey, which were not in public ownership, and to construct suitable shelters and other facilities for hikers' use. He was to act in consultation with the United States Secretary of the Interior and the Appalachian Trail Conference.

Another Green Acres Bond was approved by public referendum in 1974. Besides land banking for conservation and recreational purposes, this bond issue was the first to fund recreational development, most notably at the Spruce Run and Round Valley reservoirs, and at Liberty State Park. The Green Acres Development Program built the Environmental Center at Liberty State Park, the Visitor Centers at Washington Crossing (1976) and Monmouth Battlefield (1978), and at Batsto in Wharton State Forest. It also funded construction of parking lots, roadways, bikeways, trails, water and sewage systems, bathing facilities, boat launches, park offices and maintenance buildings, dam repairs, comfort stations, and historic preservation projects.

The New Jersey Trails System Act of 1974 (L. 1974, c. 159) established a State trails system consisting of scenic, recreational and connecting (or side trails) "in order to provide for the ever-increasing outdoor recreation needs of an expanding population, and in order to promote public access to, travel within, and enjoyment and appreciation of the outdoor, natural and remote areas of this State..." The Legislature authorized the

institution of a Statewide system of trails "both in natural and scenic areas of New Jersey, and in and near the urban areas of this State."

Scenic trails were to be "extended trails so located as to provide maximum potential for the appreciation of natural areas and for the conservation and enjoyment of the significant scenic, historic, natural, ecological, geological, or cultural qualities of the areas through which such trails may pass." These trails are limited exclusively to foot use, except that use by horses or non-motorized bicycles may be permitted on segments of scenic trails where deemed appropriate. State recreation trails provide a variety of outdoor recreation uses in or reasonably accessible to urban areas. Connecting or side trails provide additional points of public access to, or connections between, state scenic or recreation trails.

The State of New Jersey took possession of the historic Delaware and Raritan Canal and its feeder in 1934, placing it in the custody of the Department of Conservation and Development. The Department and the Delaware and Raritan Canal Commission made a joint report to the Legislature, recommending that the canal be made available for an industrial water supply, particularly in Somerville, Bound Brook, and New Brunswick, and for recreational purposes. The Canal was therefore assigned to the Division of Water Resources in the Department of Conservation and Development.

Recognizing the Delaware and Raritan Canal as a vital source of water supply, possessing historic, ecological, and recreational value to the citizens of New Jersey, the Legislature established the Delaware and Raritan State Park and created a nine-member Delaware and Raritan Canal Commission in 1974.

The Green Acres Bond of 1978 authorized \$200 million for the redevelopment of urban waterfront parks, for the construction of environmental education centers, and for providing open space and recreational opportunities in urban areas, including playgrounds, athletic fields, and swimming pools. Funding from this bond issue built the environmental education centers at Liberty State Park and at the Pequest Fish Hatchery.

Development Program projects from the 1978 Green Acres Bond Fund included construction of the seawall and restoration of the Central Railroad Terminal at Liberty State Park, where \$29, 465,000 was expended on improvements (not including Federal funds). Historic restorations were undertaken at Allaire, Twin Lights, Walt Whitman House, Skylands Manor, and the Trenton Battle Monument. A new office and nature center were built at Cheesequake State Park. A new visitor center was built at Allaire, where the Enameling Furnace and Carriage House were restored, and where the Mansion and General Store were renovated. A new Regional Forest Fire office and maintenance building was erected at Lebanon State Forest. New maintenance facilities were also built or expanded at High Point, Island Beach, Parvin, Spring Meadow Golf Course, and Cheesequake.

The New Jersey Legislature required the designation of 212 acres in West Milford Township, recently acquired for inclusion in Wawayanda State Park and commonly

known as the "Ferber plot," as a wildlife sanctuary for the protection of animals inhabiting the property and for the issuance of permits allowing the release of orphaned, injured or displaced animals onto its grounds.

A Green Trust revolving fund for low-interest loans was the centerpiece of the 1983 Green Acres Bond, which totaled \$135 million. Of this amount, \$52 million was used for State acquisitions or the development of park facilities. Emphasis was placed on linking open-space projects along stream corridors and ridge crests to form environmentally sensitive areas and recreationally usable units. A new park office was designed and built at Swartswood State Park. The Green Acres Bond Act of 1987 provided an additional \$35 million for the Green Trust.

The Division of Parks and Forestry expended a total of \$116,014,998 from the 1974, 1978 and 1983 Green Acres Bond funds. Approximately 44%, or \$50.9 million, of this amount was expended at Liberty State Park. Long Pond Ironworks State Park, comprising 2,590 acres in Ringwood Boro and West Milford Township, Passaic County, was established in 1987.

Voters approved \$230 million in the Green Acres Bond Act of 1989, including \$80 million in funding for State acquisition and development. The 1992 Green Acres Bond provided \$200 million, including \$80 million for State acquisition and development. \$3.1 million in 1992 Green Acres funds purchased the 288-acre Belle Terre Farm, where some of the fiercest hand-to-hand fighting occurred on June 28, 1778, as an addition to the 1,520-acre Monmouth Battlefield State Park.

For the ninth consecutive time since 1961, New Jersey voters approved a statewide Green Acres Bond on November 7, 1995. Completing her third annual bike tour at Island Beach State Park, Governor Christie Whitman signed legislation in August 1996 appropriating more than \$173 million dollars from the Green Acres, Farmland, Historic Preservation and Blue Acres Act (P. L. 1995, c. 204). This legislation provided \$65 million to add 24,000 acres to the State Parks, Forests, and Wildlife Management Areas. Green Acres funds provided additional land acquisitions for Parvin, Allaire, Long Pond Ironworks and Pigeon Swamp State Parks, and helped preserve historically significant sites such as Monmouth Battlefield, Princeton Battlefield, Washington Crossing State Park and Twin Lights State Historic Site. Recreational development in Liberty State Park received \$10 million in Green Acres funding.

Kittatinny Valley State Park was established in 1994 on the lands of the Aeroflex Corporation, fronting the shores of Aeroflex Lake (formerly Slaters Lake) in Andover, Sussex County. Reaching depths of 100 feet, Aeroflex Lake is one of New Jersey's deepest lakes. The setting is transitional between the gneiss, limestone and slate, varying between wooded limestone ridges and associated wetlands, which display a rich diversity of flora and fauna.

These scenic grounds had been home to the Y. M. C. A. Jersey Boys' Camp from 1919 through 1954, when neighbor Fred Hussey acquired the property for his corporate

headquarters. In 1957, a 300-acre alfalfa field bordering Gardner's Pond was paved to create a 2,004-foot runway. Airport facilities included six hangers and an Advisory Tower. Upon its completion, Aeroflex became the first helicopter operator in the State of New Jersey.

The Historic New Bridge Landing Park Commission was established in 1995 (PL. 1995, Chapter 260) to coordinate and implement federal, State, county, municipal and private development policies and other activities incidental to the preservation, maintenance, restoration and interpretation of historic buildings, structures, sites and features of Historic New Bridge Landing, so as to develop and promote their optimal educational and recreational benefit to the public. The Commission provides an intercommunicative forum to inform and coordinate decisions made by diverse public and private entities having ownership of land, buildings, structures or roadways within the Commission's jurisdiction. Its membership includes a representative of the County of Bergen, a representative of the Blauvelt-Demarest Foundation, a representative of the Borough of River Edge, a representative of the Borough of New Milford, two representatives of the Bergen County Historical Society, and two representatives of the Township of Teaneck. The Director of the Division of Parks and Forestry is the ninth member.

A purchase of 488 acres on Stow Creek in Cumberland County in 2000 comprises a recent addition to our State Parks.