

**APPENDIX E.**

**DELAWARE STATE FOREST SYSTEM  
HISTORICAL CONTEXT**

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## DELAWARE STATE FOREST SYSTEM HISTORICAL CONTEXT

### HISTORY AND DEVELOPMENT OF STATE FORESTS

W.N. Sparhawk, in his article “The History of Forestry in America,” divided forestry in the United States into five historical periods. The first, the colonial period, was marked by the gradual elimination of substantial amounts of forest land east of the Allegheny-Appalachian Ridge to make room for settlement. The second, encompassing about a century beginning in 1776, was a period of forest exploitation, starting gradually at first but rapidly increasing with the growth of cities and the construction of railroad lines that accompanied the development of heavy industry.

The third period, lasting through most of the remainder of the nineteenth century, was marked by a campaign of public education and advocacy that led to the establishment of a forestry policy for Federal Government timberlands in 1897. The period between the late nineteenth century and 1920 was characterized by the establishment of a national forest system and forestry profession. The period between 1920 and 1950 saw an increasing emphasis on private forestry (Sparhawk 1949:702).

The first state efforts to manage forest land began when Colorado included a provision in its 1876 state constitution to manage its state forest land. Little was done for a number of years to implement this provision. Pennsylvania created a Division of Forestry in its Department of Agriculture in 1895. In 1897, the Commonwealth enacted a provision for the purchase of tax-delinquent forest lands, to “establish a forestry reservation system having in view the preservation of the water supply at the sources of the rivers of the State, and for the protection of the people of the Commonwealth and their properties from destructive floods” (Sparhawk 1949:706).

By 1908, a total of 3,281,721 acres of land were designated as state forests; the largest single tract was the 1.5 million acre Adirondack Preserve of New York (listed as a National Historic Landmark in 1963 and in the National Register of Historic Places on October 15, 1966). In addition to New York, New Jersey and Pennsylvania had designated state forests. Delaware had not yet done so (U.S. Department of Agriculture 1908:544).

According to Michigan forester Stanley G. Fontanna, in an article published as part of an encyclopedia issued by the U.S. Department of Agriculture, state forests have multiple uses. They demonstrate good forestry practices in growing and harvesting forest products. They produce valuable forest products. They protect watersheds and wildlife. Sometimes they are grazed. Another purpose or justification was the need to place under management forest lands that would otherwise be neglected. Most state forests have been founded using tax-reverted land or purchased low-value land (Fontanna 1949:390).

Among the earliest acquisitions of forest land was in 1885 for the Adirondack and Catskill Preserves of New York State. In 1891, Mount Alton Forest was established in Pennsylvania. Eight years later, the Pillsbury Forest was created in Minnesota. Indiana established the Clark County Forest in 1903, while Michigan created the Higgins Lake and Houghton Lake forests in Michigan in 1903 (Fontanna 1949:390).

States created publicly owned woodlands for varying reasons and at various times. For example, in New York State, the creation of state-owned forest land was an attempt to manage inevitably changing land use. During the late nineteenth and early twentieth centuries, farmland abandonment increased as farmers found themselves unable to compete with the larger scale of Midwestern farming. In the 1920s, the state created the Reforestation Commission to retire farmland from agricultural use and reforest the regions for uses ranging from timbering to public recreation. This process was aided in the 1930s by thousands of Civilian Conservation Corps (CCC) workers who planted millions of trees (New York State Department of Environmental Conservation n.d.).

In Maryland, unregulated forestry had left the state's forest resources devastated in the early twentieth century. To challenge the state government into addressing this situation, B&O heirs John and Robert Garrett donated 2,000 acres of cutover land in Garrett County with the condition that the state begin scientific management of forest preserves. In 1906, a board of forestry was established to oversee the acquisition of the Garrett and other forest preserves (Maryland Department of Natural Resources 2005).

By the mid-1930s, 42 of the 48 states had administrative agencies, laws, funds, and personnel to carry on forestry activities. Among these activities were purchase of state forests, establishment and maintenance of state tree nurseries, and promotion and assistance to the private forest owner to practice better forestry (Brown 1935:215-216). By the mid-1930s, there were 4,395,000 acres in state forests and another 2.25 million acres in the process of acquisition (Brown 1935:216).

A major influence on the development of state forests nationwide was the CCC. Almost half of the 2,600 camps operating at its peak were engaged in forestry projects. In its nine years of existence, the CCC contributed some 730,000 man-years of work in forest protection, in construction and maintenance of improvements in public forests, in tree planting, and in timber-stand improvement. It greatly stimulated the establishment and expansion of public forests, particularly by eastern United States communities (Sparhawk 1949:713).

Thirty-six states had state forests by 1948. At that time, 14 million of the 16.6 million acres of forest land were in eight states: Michigan, New York, Minnesota, Washington, Pennsylvania, Idaho, Oregon, and Montana. Approximately 5 million acres in the Mid-Atlantic states were included in forest preserves (Fontanna 1949:390-391).

### **Delaware State Forests**

The history of Delaware's forests is similar to that of woodlands elsewhere in the United States. The first European exploitation of the area's woodlands began in the 1630s when early Swedish settlers in current New Castle County hand-split some of the abundant native timber to build their forts and log cabins. Later in the century sawmills were established and rough boards were cut and shipped back to Europe. As the shipbuilding industry grew in the state so did the demand for lumber. The growth of towns led to further demand for lumber. Wood production in the state rose to a high of 55 million board feet in 1909 and then rapidly dropped to 5.2 million board feet in 1918, with much of that harvested used for wooden boxes, crates, and baskets. Basket wood and spoon wood mills flourished in Delaware until the early 1950s and usually used sweetgum, yellow-poplar, and maple. By early 1988, wood production in the state stabilized at approximately 23.4 million board feet of sawn timber, as well as pulpwood, veneer stock, and piling products (Delaware Forest Service 1998:11-13).

Efforts were begun to encourage the establishment of state forests in Delaware in the early twentieth century. W.D. Sterrett, forest assistant of the Forest Service, in a report titled, "Report on Forest Conditions in Delaware and Forest Policy for the State" recommended that:

It should be the policy of the State of Delaware to acquire all the land for State forest purposes, which can be procured at a sufficiently low figure, and in lots sufficiently large for convenience of administration and management. The price paid should not exceed \$10 per acre, and contiguous holdings of not less than 100 acres and preferably 500 acres in extent should be purchased. (Sterrett 1907:56)

Sterrett indicated that over 35 percent of the land of Sussex County was wooded and that there were many continuous bodies of wooded areas of over 100 acres, the largest of which were in Nanticoke, Georgetown, Dagsborough, and Gumborough Hundreds. The forests of the county were described as follows:

The forests of Sussex are composed, for the most part, of irregular and uneven-aged stands of both pine and hardwoods. Although the large areas of abandoned farm land have grown up mostly to regular, even-aged stands of loblolly, yet these have since been extensively culled, and for the most part, existing stands which are uniform in age and stock, are young and immature. Originally the forests of Sussex County were almost exclusively of hardwood, but by culling and clearing them pine has gradually been established in every part of the county, owing to a superior reproductive power, and is now a source of greater money returns than the hardwoods. (Sterrett 1907:56)

Sterrett's suggestions failed to result in the immediate establishment of a state forestry office or the establishment of the first state forests. In 1909, legislation passed creating a State Board of Forestry. No funds were appropriated for the Board, and therefore, no appointments were made. In 1921, the powers and duties assigned under the 1909 act were delegated to the State Board of Agriculture. Again, no funds were allotted. In the 1920s, the Delaware General Assembly provided for the appointment by the Governor of a bi-partisan Commission for the Conservation of Forests in Delaware. Funds for the Commission to employ a forester were provided by T. Coleman DuPont and his son, F.V. (Springer 1936:3-4). The Commission issued a report in 1927. The portion of the report on the Coastal Plain singled out Ellendale Swamp as an exceptional forest area, indicating that it was the largest contiguous densely forested land in the State, consisting of an area four miles square. The forest was described as follows:

The greater part of it has at one time or another been cut over, but at no one time was the whole area cut off. Some few stands of original timber are to be found; these consist chiefly of hardwoods, and being more tolerant were able to crowd out the native pines. The forest as a whole consists of pine, oak, maple, sweet gum, black gum, tulip, poplar and holly, in abundance. Parts of the forest are so covered with abundant shrubby growth as to make the forest almost impenetrable. (Commission for the Conservation of Forests in Delaware 1927:11)

The Commission recommended the creation of a State Forestry Department, and after legislative skirmishing, the department was created with an initial appropriation of \$5,000. W.S. Taber was appointed the first State Forester (Springer 1936:4-5).

The earliest state forests in Delaware were established in Sussex County between Milford and Georgetown. In 1928, the state began to acquire land that eventually became part of the forest system along the DuPont Highway south of Milford. As was typical of many state forestry programs, the first tracts, a purchased three-acre site and an additional leased five acres located north of Hudson Pond on the west side of the DuPont Highway, were used as a nursery, sown

chiefly with loblolly pine, red pine, and white pine (State Forestry Commission 1930:9-10) (Figure E-1). A nursery house was provided by the donation of a used barn moved to the site at a cost of about one hundred dollars. An overhead irrigation system and pump were installed, and 46 seedling beds were established. In the first year, 64,600 planting stock were distributed (Springer 1936:6). In 1930, a new nursery building was built at the tree nursery using CCC labor (Project #111a). This building was relocated to the Headquarters Tract when the tree seedling nursery was closed in the mid-1980s. A 1958 *Wilmington Journal Every Evening* article called the nursery, “the smallest state nursery in the U.S.” During the previous year, the nursery had distributed 492,000 seedlings (*Journal Every Evening* 1958).

There are currently three state forests in Delaware: Redden in Sussex County, the 1,240 acre Taber in southwestern Kent County, and the 4,800 acre Blackbird on the border of New Castle and Kent counties. Portions of the Redden State Forest (which incorporates the Ellendale State Forest) fall within the Ellendale Study Area, and are discussed in greater detail below.

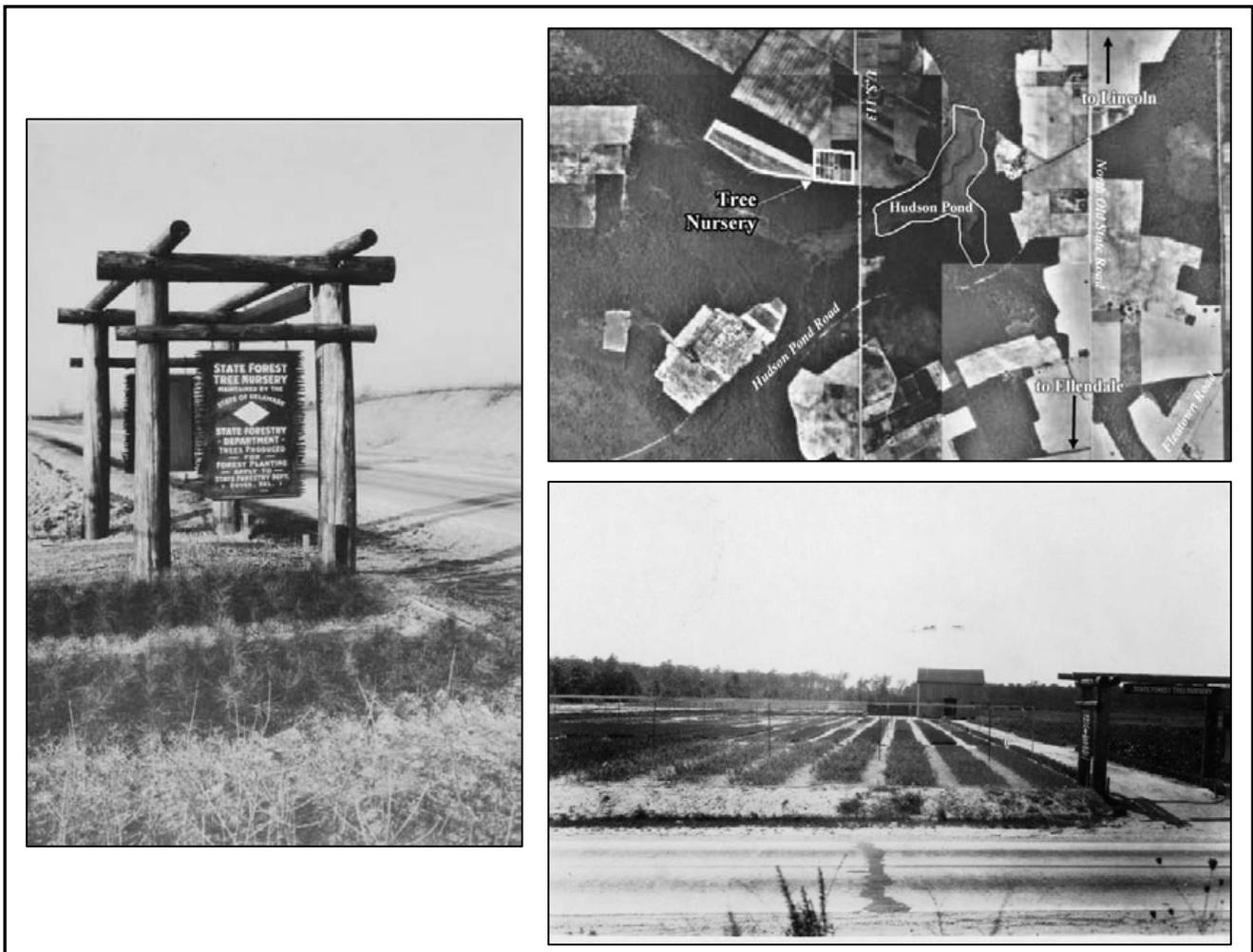


Figure E-1. Delaware's State Forest Tree Nursery along the DuPont Highway south of Lincoln. *Left*: entrance sign in 1930 (DSFD 1930:Collection S, Negative 33). *Upper Right*: location on 1937 aerial photograph. *Lower Right*: seedling beds and overhead irrigation system in 1929 (DSFD 1929:Collection N, Negative 4).

## ELLENDALE AND REDDEN STATE FORESTS

The modern Redden State Forest is the consolidation of several Sussex County forest tracts, including the Ellendale State Forest (Figure E-2). The first land was acquired by the state in 1928 (the tree nursery at Hudson Pond shown in Figure E-1), and since then the forest has continued to grow, with acquisitions as late as 2008. Figure E-3 shows Sussex County forest lands in 1939 and 1957. A substantial amount of land has been added to the forest since the late 1950s, including the entirety of at least 10 tracts: Barr, Chesapeake, Collins Pond, Day, Deep Creek, Eskridge, Rayne, Sill, Townsend, and Tunnell (compare Figures E-2 and E-3). The following discussion focuses on the earlier tracts that are located in the vicinity of the U.S. 113 North/South study.

### Ellendale Tract

The second state forest tract, originally known as the Ellendale State Forest (Figure E-4), had at its core a 40-acre tract in the heart of the Ellendale Swamp, transferred from the State Highway Department to the State Forestry Department in 1931 (Delaware State Forester 1932:15) (Figure E-5).

The Forestry Department's initial plans for the land included planting of vacant areas of abandoned farmland, brushing out existing roads and trails, and erection of campsite facilities on the portion adjoining the DuPont Highway. The campsite included two latrines, two roofed picnic tables, drinking water facilities, and a stone and concrete fireplace (Figure E-6). The 1933 annual report indicated that if the site met with public approval, it should be improved (Delaware State Forester 1933:19). During 1935-1936, CCC workmen improved the roadside picnic area in Ellendale State Forest with the addition of a path to the latrines, reconstruction of well drainage, and installation of benches (Delaware State Forester 1936:15). The site was described in a 1950 *Sunday Star* article:

Under a spacious grove of trees it provides outdoor fire-places, tables and benches, a water well, and a pavilion. It has become a haven for tired motorists who take a short break in traveling to eat a packed lunch or take a short nap. (*Sunday Star* 1950)

The forest gradually grew as parcels were added. Figure E-5 depicts the general sequence of property acquisition. In 1938, the Department had added to the forest three tracts (of 302, 94-3/4, and 6-3/4 acres) on the west side of DuPont Highway (Delaware Forestry Department 1938:10), and in the following year again grew with the acquisition of the 79.83-acre Burton Tract. By 1939 a substantial portion of the modern forest had already been established, and much of it was located on the west side of U.S. 113

During the 1940s and 1950s, the core of the forest was expanded eastward, to the other side of U.S. 113. In 1945, the forest was enlarged with the 4.4-acre Anderson tract and the 111.01-acre Jones and Hughes tracts. The following year, the 40-acre Ford-Warrington tract was added. By 1947, the Ellendale Forest had grown to 752 acres, 620 acres owned by the Forestry Department and the remainder owned by the State Highway Department. In 1952, the 142-acre Harmon tract and the 98.04-acre Beebe tract were added to the forest.

Most of the expansion since 1958 has been on the periphery of the forest. In 1963, the 20-acre Coverdale tract and the 134.75-acre Linder tract were added, while in 1965, the 73.73-acre Sapp tract was added. The last acreage to be added to the Ellendale State Forest (before it became part of the Redden State Forest) was the 6.92-acre Fitzgerald tract in 1991.

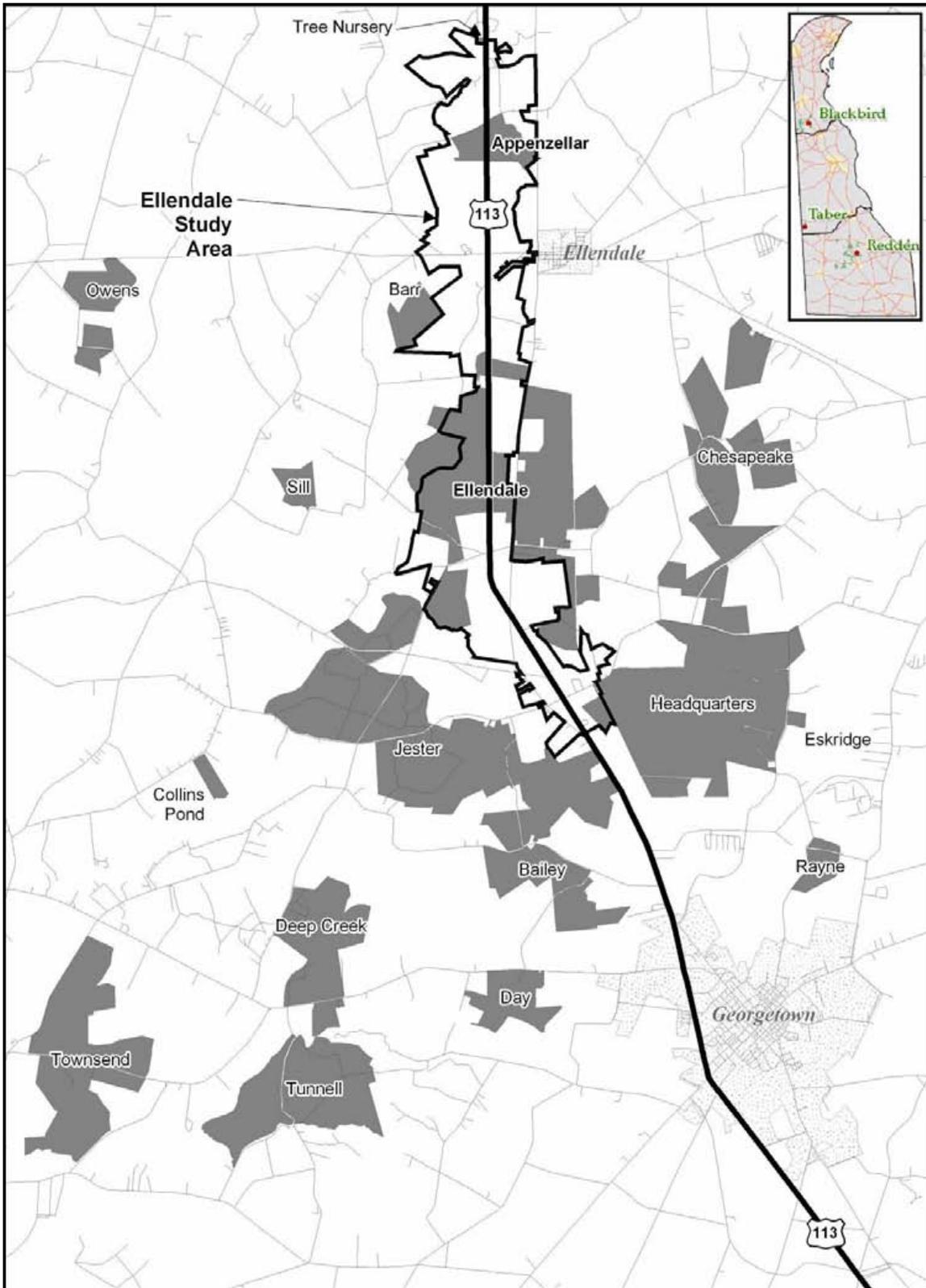


Figure E-2. Redden State Forest Tracts near Ellendale and Georgetown.

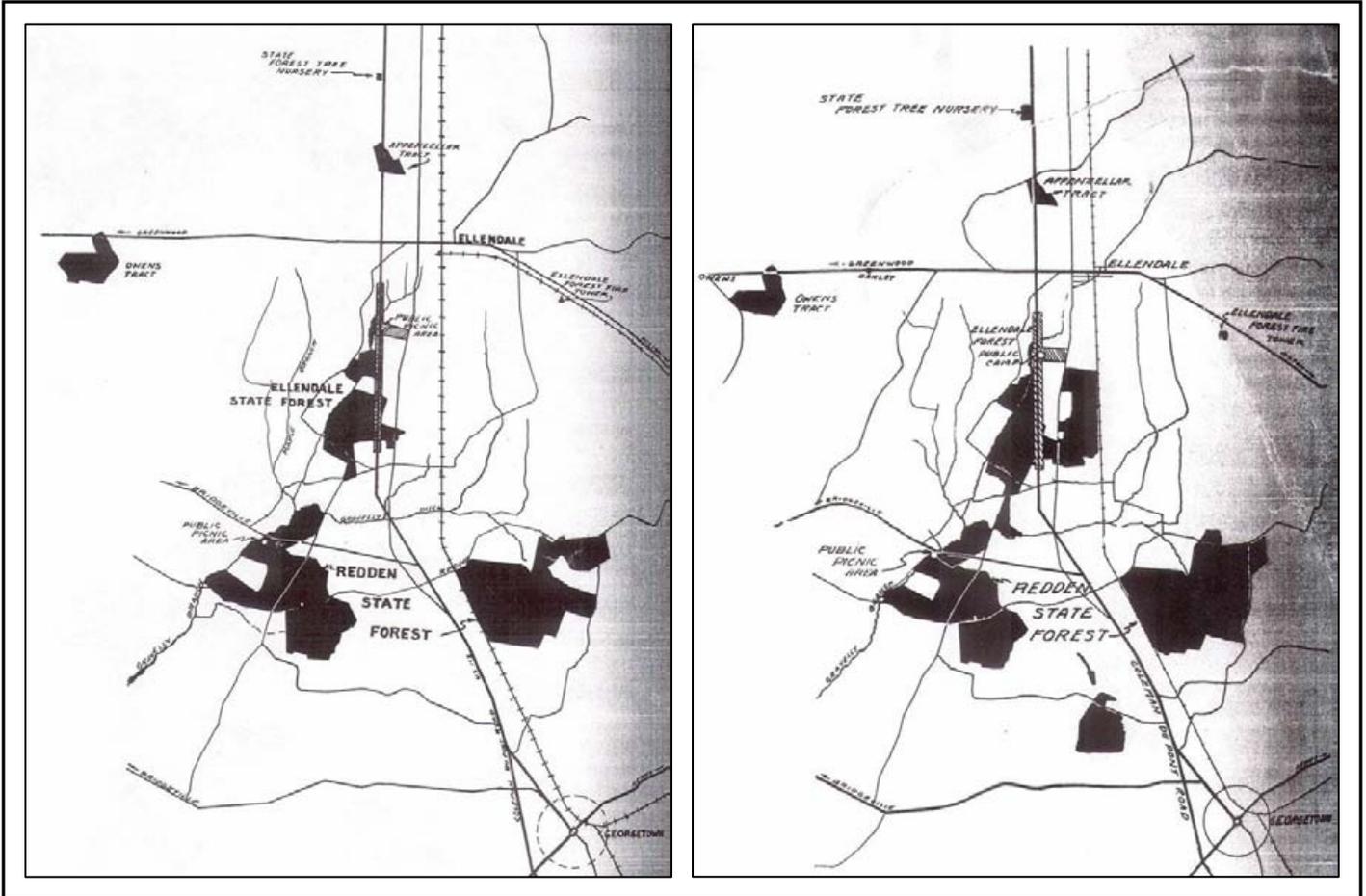


Figure E-3. State Forest lands in Sussex County in 1939 (left) and 1957 (right). (Source: Delaware State Forester 1939, 1957)



Figure E-4. Ellendale State Forest sign on U.S. 113 (ca. 1940 photograph on file, Delaware Forest Service, Department of Agriculture, Dover).

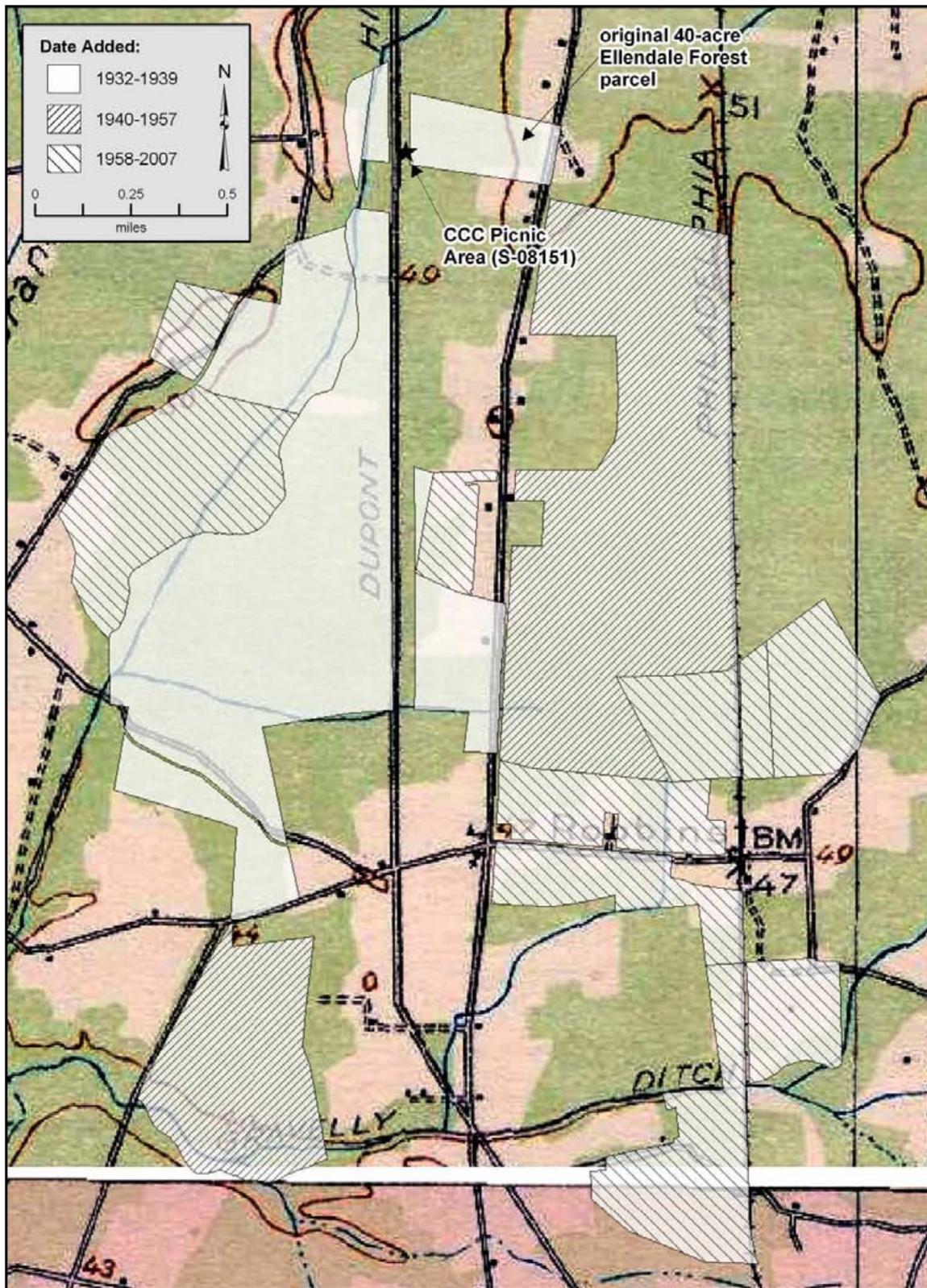


Figure E-5. Ellendale Tract periods that parcels were added to the forest system (base maps: USGS 1918a, 1918b).



Figure E-6. Ellendale State Forest campsite on the east side of the DuPont Highway (ca. 1939 photograph on file, Delaware Forest Service, Department of Agriculture, Dover).

In 1995, the Ellendale State Forest became the Ellendale Tract of the Redden State Forest. In 2000, the Delaware Forest Service acquired 210.1 acres of land on the east side of U.S. 113 adjoining Saw Mill Road from the J.G. Townsend Company. In 2005, a 126.8-acre tract, also on the east side of U.S. 113, was acquired. The most recent acquisition for the Ellendale tract occurred in December 2007 when a 137-acre parcel adjoining the previous western boundary the tract was acquired from the Glatfelter Pulpwood Company (Burkentine 2008).

### **Appenzellar Tract**

The Appenzellar tract was named for Paul Peyton Appenzellar (1875-1953), a New York investment banker. A native of Chambersburg, Pennsylvania, he attended college at Dickinson in nearby Carlisle. By 1905 he had become a member of a firm specializing in investment banking and later became Director of the New York Railways Company. He created the New York Stock Exchange firm of Swartout and Appenzellar and served on the board of various New York-based companies, including the Dictaphone Corporation which he helped found. He subsequently sold his firm to the predecessor of Merrill Lynch (Dickinson College n.d.).

Appenzellar's ties to Sussex County are unknown, and it is unclear why the tract, which was in his possession for just two short years, was named for him. In 1916, he purchased two tracts, one of 20 acres and the second of 30 acres from Jona and Georgiana Ellingsworth for \$1,500. The first tract adjoined land of William Jester and James Murphy, while the second tract began in the center of the public road leading from Fleatown to Bridgeville. In 1918, he sold the parcels to Thomas Coleman DuPont. The latter transaction occurred following the settlement of Appenzellar's suit against Henry C. Conrad, Thomas Coleman DuPont, Lewis L. Dunham, Frank M. Williams, Sidney H. Henry, and Paul E. Wilson, challenging the right of Coleman du Pont

Road, Inc., to use eminent domain for the construction of a boulevard. In dismissing the case, the Delaware Supreme Court wrote:

We submit that the uses for which it is proposed to construct the boulevard in question are clearly and unquestionably public; this being so, it is without province of the court, in this case, to enquire further. The writ of prohibition which is prayed for should be denied, the rule discharged and the plaintiff's petition dismissed, with costs (Boyce 1918:243).

The Appenzellar Tract grew more slowly than the Ellendale State Forest, with no new acreage added after the initial purchase until the 1960s (Figure E-7). The original portion of the tract, which consisted of 45 acres lying on both sides of the DuPont Highway about midway between the State Forest Tree Nursery and Ellendale Crossroads, was transferred from the State Highway Department to the newly formed State Forestry Department in 1928. It was initially used as a forest demonstration and experimental area. To call attention to the treatment given portions of the tract, small signs describing the treatments were erected along the highway in front of the respective plots (Figure E-8). The area was used as a “show window” of forest practice (Delaware State Forester 1932:19).

Among the plantings on the property noted in the 1932-1933 annual report of the State Forest were loblolly pines established on vacant areas in 1930-1931 and the Asiatic chestnut experimental planting made in 1930 (Delaware State Forester 1933:18). In 1965, 83 acres of cutover woodland and farmland was added to the north and east side of the existing tract, land that had been purchased from Carey D. Sapp. Plans were made for the land to be converted from low-value hardwoods to pines. In 1968, additional tracts were added including the 58-acre Harry Frankel property on the west side of U.S. 113, and a new tree nursery was established on the west side of U.S. 113 (Delaware Forestry Department 1968:7).

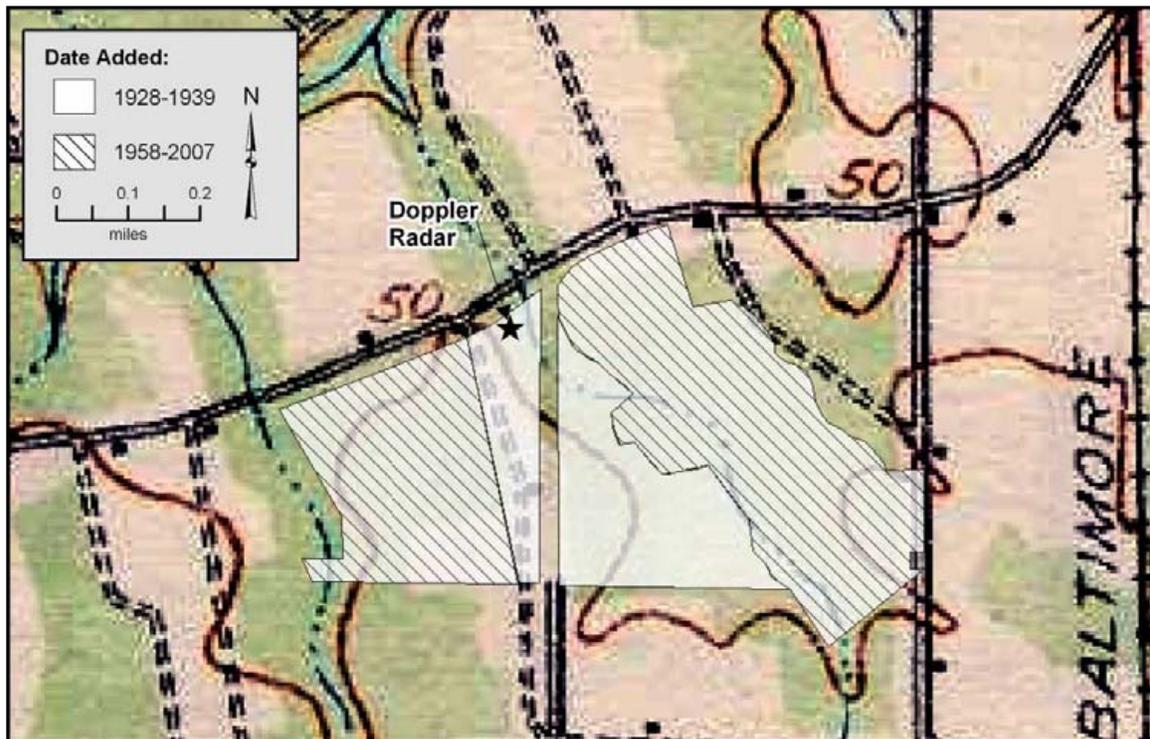


Figure E-7. Appenzellar Tract showing periods that parcels were added to the forest system (base map: USGS 1918a).



Figure E-8. Demonstration area sign in the Appenzellar Tract on the west side of U.S. 113 in 1940: sign reads “PLANTED/Loblolly Pine Seedlings 1930” (DSFD 1940:Collection P, Negative 361).

During the dualization of U.S. 113, a portion of the original Appenzellar parcel at the southwest corner of U.S. 113 and Staytonville Road was used to store road construction equipment and materials. Once all construction equipment was removed, the management scheme for the site returned to natural succession. In 1994, the spot became the site of a Doppler Radio antenna for Dover Air Force Base. In 1995, the Appenzellar tract was merged into the Redden State Forest (Burkentine 2008).

### **Jester Tract and the CCC**

The initial portion of Redden State Forest was 1,133 acres purchased from Harry W. Jester near Georgetown, acquired by the State Forestry Commission on August 30, 1934 (Figure E-9) (Delaware State Forester 1935:18-19). The plot of land became the Jester Tract of the newly formed Redden State Forest, named in honor of local Civil War hero William O. Redden, and/or for the Redden crossroads community that had adopted its name from John Redden, a local farmer (Federal Writers Project 1938:379; Page 2005:124). Similar to the Appenzellar Tract, subsequent growth of the tract did not occur until after 1957, as which time parcels were added to the periphery of the forest.

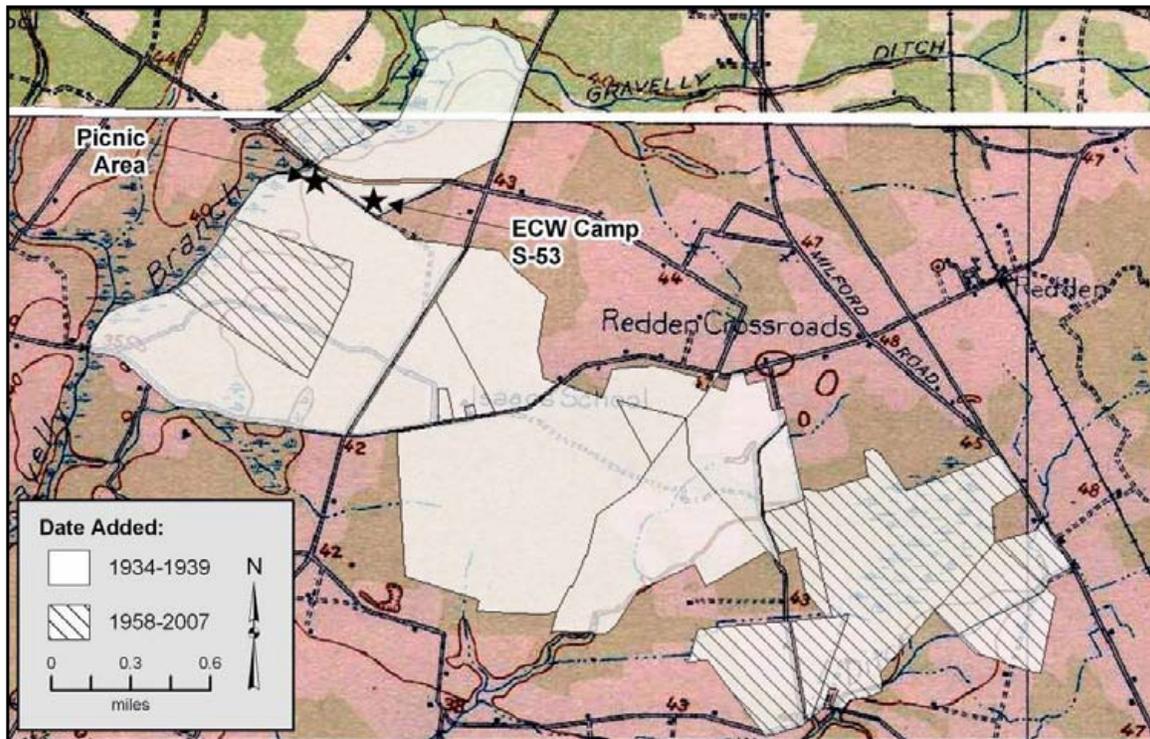


Figure E-9. Jester Tract showing periods that parcels were added to the forest system (base maps: USGS 1918a, 1918b).

Prior to the acquisition of the Jester Tract, Delaware was the only state in the country without an Emergency Conservation Work (ECW) forestry camp. State Forester William Taber recognized the advantages of using the CCC to build up the new forest, so when the deed for the land was delivered on August 30, 1934, a CCC camp was requested (Page 2005:100). Construction of the camp buildings, which probably included barracks, a mess hall, storage buildings, etc., was started by the United States Army on September 4, 1934. On October 6, Company 2210 V (i.e., veterans) occupied the camp. In late 1935 or early 1936, the camp was officially designated as ECW Camp S-53 (Page 2000) (Figure E-10).

The selection of the CCC camp site was the responsibility of the State of Delaware. The Army constructed the camp buildings including housing, supplied food and clothing to the enrollees and was charged with the responsibilities of education, recreation, medical needs, and discipline of enrollees.

The planned CCC camp activities were described in a *Wilmington Morning News* article:

Plans for the construction of the camp are well under way, and work will be begun shortly by the Army Engineers of the Second Corps Area. The camp will house 200 enrolled CCC men plus the Army and Forestry supervising and facilitating personnel. Sixty per cent of the work planned for the camp will be done on the new State forest and other State lands in road and fire trail construction, forest stand improvement, tree planting, installation of public camping facilities, and other improvements of public use nature. One of the projects not on this forest, but contemplated as a part of the work program, is the reconstruction and restoration of the dams and spillways of the upper Millsboro Pond on State property under the control of the Delaware Colony at Stockley. Howard Ennis, superintendent of the Colony, has been asked by State Forester Taber to submit plans and specifications of the structure he proposes for the dam. (*Wilmington Morning News* 1934)



Figure E-10. ECW Camp S-53 in the Jester Tract at Redden State Forest. *Top*: location on 1937 aerial photograph. *Lower Left*: storage garage (DSFD 1934:Collection CCC, Negative 259). *Lower Right*: office, tool room, and repair garage (DSFD 1934:Collection CCC, Negative 258).

Work began in the forest on October 9, 1934, with Company 2210, war veterans transferred from an Army flood control project near Montpelier, Vermont. In January 1936, they were replaced by CCC junior Company 2193 from Camp Dix, New Jersey, the first troop dedicated exclusively to the Department of Forestry (Delaware State Forester 1936:12; Page 2000). Due to the lack of experience of the latter group, it became necessary to hire more outside skilled labor to perform certain jobs.

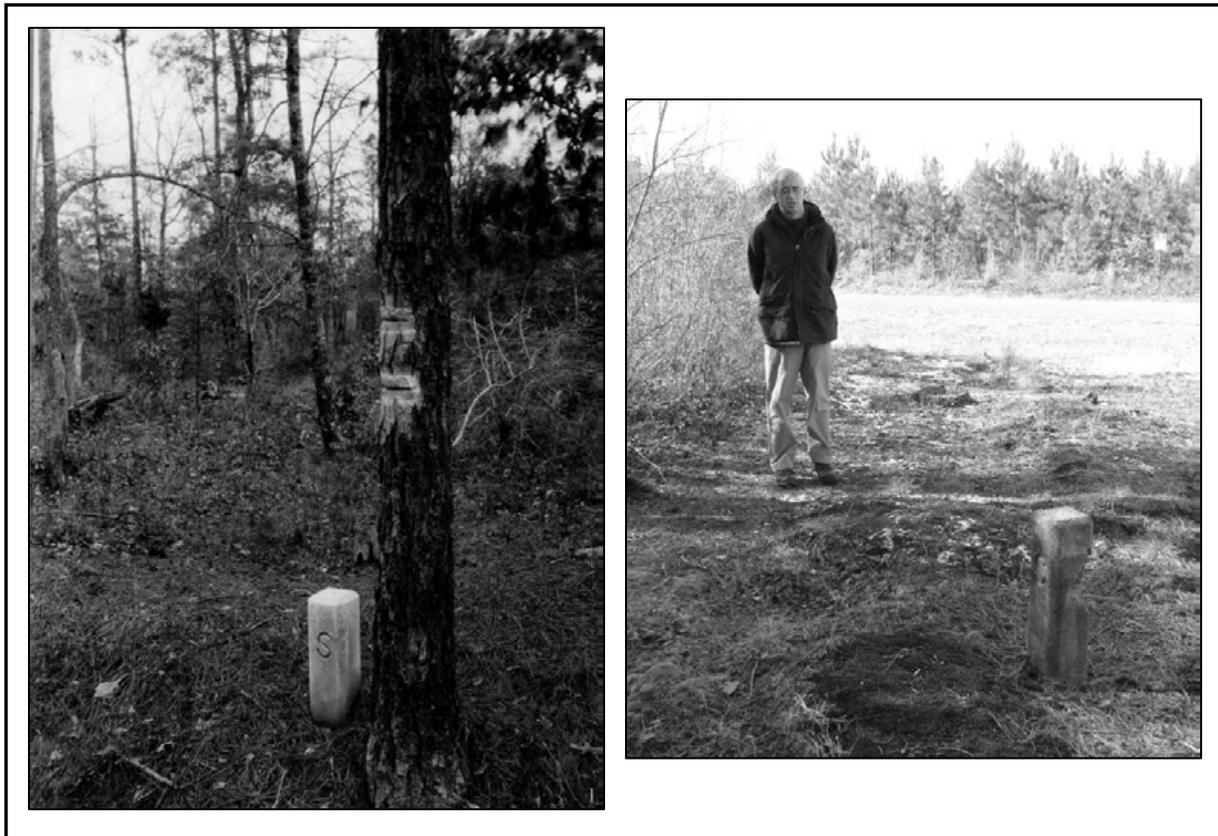


Figure E-11. Standard Delaware State Forest boundary line markers. *Left*: concrete marker beside notched tree at unspecified location in 1936 (DSFD 1936:Collection S, Negative 336). *Right*: extant concrete marker on VFW Road south of Ellendale Forest Road in 2009.

One of the first CCC projects was the permanent establishment of boundaries of the 1,133-acre Redden State Forest. After all property lines were brushed out, resurveyed, and blazed, permanent concrete monuments were placed to replace the older and decaying wood corner posts. The concrete posts were impressed with “S” on the side facing state property and “P” facing private property. Some of these monuments remain in place, although not within the boundary of the current project area (Figure E-11).

Another activity of the CCC camp was the construction of roads and trails (Figure E-12). From 1934 to June 30, 1936, 7.6 miles of truck trail and 4.1 miles of horse trail were constructed in the state forests of Sussex County. The truck trails constituted the trunk line of the road system and were constructed for medium service. The horse trails were the feeder roads constructed to facilitate forest improvement work in various sections of the properties. The latter consisted largely of old logging trails that were brushed out, widened, and improved. Bridges and culverts were also built to serve this system. Camp superintendent Joseph A. Crist described some of the work that occurred there:

Since the camp was established in October of 1934 the property has been improved through intensive management....

Truck trails have been built according to the Forest Service specifications, with the view that their maintenance will greatly facilitate the effective administration of the forest. These roads have been made as nearly “all-weather” as possible, by grading, filling low

spots, installation of bridges and corrugated pipe under-drains, and by a system of runoff ditches.

Horse trails, opened to facilitate the improvement of various sections of the forest, will act as fire breaks, or “cool spots,” from which to attack fire in case of an emergency. Wherever possible, old logging trails were utilized, widening them just enough to permit trucks to pass. With the exception of placing of corrugated under-drains, where these trails crossed ditches, no other construction was considered necessary....

To show timberland owners what may be attained through proper attention to production principles, considerable attention has been given to the various operations in the woods, termed generally “Forest Stand Improvement”; this includes the removal of the excess amount of undesirable species from the forest where they are cramping the desirable ones, the cutting of diseased trees, and the opening of the stand in places where it is desirable to encourage natural reseedling, supplemented by planting. Over 200 acres have been so treated to date.... (*Index 1936*)

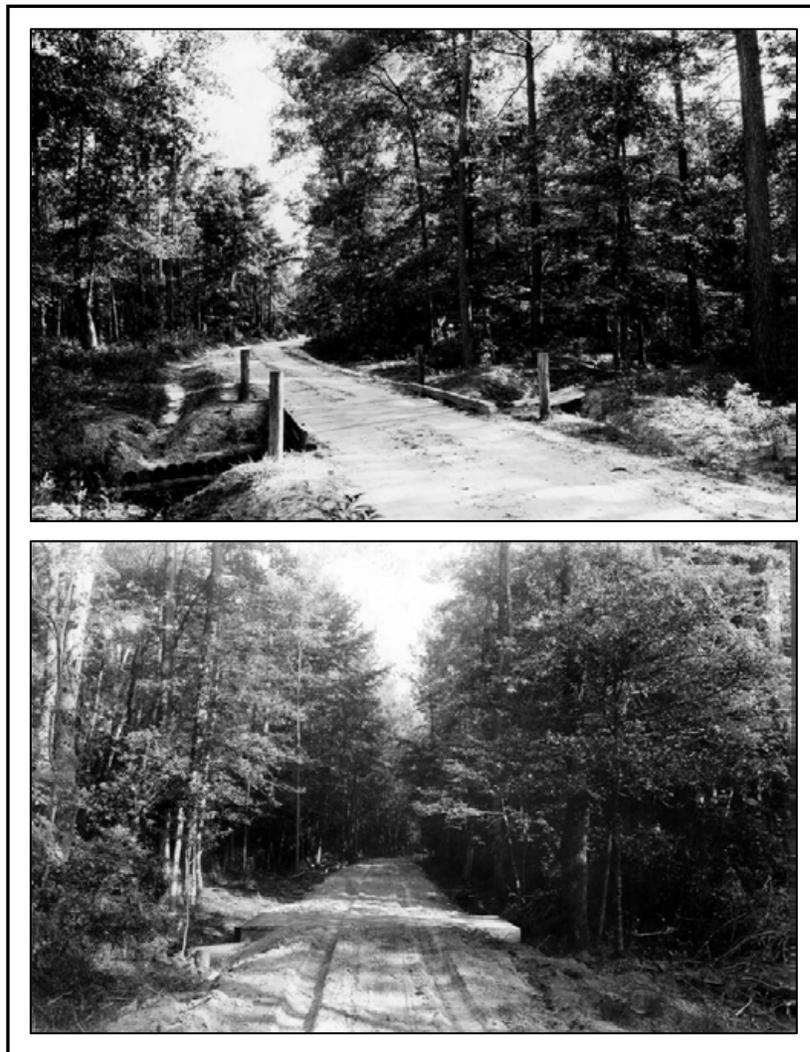


Figure E-12. CCC roads and trails. *Top*: road and bridge in Redden State Forest (DSFD 1936:Collection R&T, Negative 335). *Bottom*: trail in Ellendale State Forest (DSFD 1953:Collection R&T, Negative 464).

Because the forest was composed of growth representing many different age groups and large parcels that had previously been lumbered at different times by different methods, a major effort was made to classify the existing stands, map their location, and determine treatment plans, with timber production and forest practice demonstration the main purpose. The inventory was developed by foresters employed at the camp, while management decisions were the responsibility of the superintendent and camp foresters (Delaware State Forester 1936:12-17).

The last CCC residents of the camp departed in July 1939 for a camp near Cortland, New York. The camp, once valued at \$17,500, was abandoned in part because Delaware had not appropriated funds for its operation (*Journal Every Evening* 1939).

At the end of 1943, the lease that the Department of Forestry had with the Army for the former CCC camp expired. Included on the land were five new structures built by the Army in addition to the older CCC buildings. There is no known contemporary site plan of the camp, and the total number of buildings extant in 1943 is unknown. Two of the newer structures—warehouses measuring 20 by 40 feet—were moved to the State Forest ranger station in the Headquarters Tract on the east side of U.S. 113 and were joined to form one structure. The camp latrine was moved to the Headquarters Tract where it still stands (Figure E-13). Lease agreements were reached with private individuals to move seven buildings and structures to Staytonsville, a small crossroads in Cedar Creek Hundred, approximately 6 miles northwest of Ellendale (near the intersection of Route 36 and Staytonsville Road). The names of the individuals are not identified in the State Forester's report, and whether or not the buildings are still in Staytonsville is not known. The remainder were rehabilitated on the site for use by agricultural laborers (Delaware State Forester 1944:8). An old barracks or mess hall is currently used by McColley's Chapel (at the corner of McColley's Chapel Road and Redden Road) as a fellowship hall, but the locations of the remaining buildings, if still extant, are unknown. Inquiries to the owners of two suspected CCC buildings in the vicinity (a VFW hall on VFW Road and a dwelling further west on Redden Road) revealed that neither was constructed by CCC personnel. A former barracks from an unspecified CCC camp near Georgetown now serves as the church hall at St. John's Methodist Church at Springfield crossroads in Indian River Hundred, approximately 4 miles east of Georgetown.

The Jester Tract was also the site of a picnic facility, which was located on the south side of Redden Road, east of Gravelly Branch (see Figures E-9 and E-10). The facility, built in 1937 by the CCC (Federal Writers Project 1938:379), included a picnic shelter, a pump shelter, and a latrine. Much of the facility remains intact today (Figure E-14).

In addition to their work in Sussex County forests, the CCC was also active elsewhere in Delaware. Perhaps their most lasting contribution was the initial construction of what became Trap Pond State Park in Laurel. Another major activity was the construction of ditches and other structures to assist in mosquito control. These efforts were centered in coastal Sussex County and in Kent County (Page 2005).



Figure E-13. Latrine building moved to the Headquarters Tract from ECW Camp S-53 in the Jester Tract.

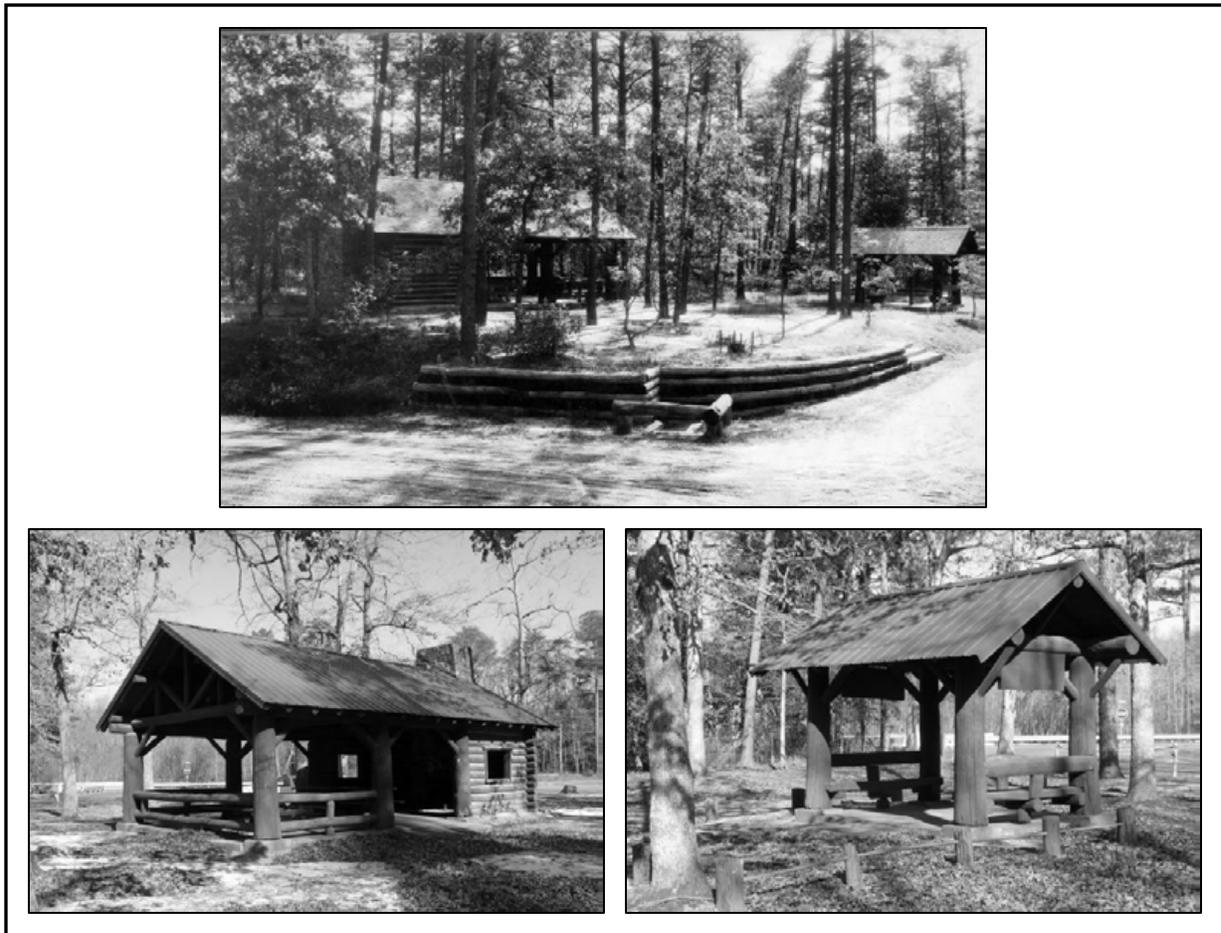


Figure E-14. Public picnic area in the Jester Tract, on the east side of Gravelley Branch. *Top*: overview from the parking area in 1930 (DSFD 1930:Collection B, Negative 342). *Lower Left*: picnic shelter, 2009. *Lower Right*: pump shelter (the pump itself is no longer extant), 2009.

## Headquarters Tract

The original portion of the Headquarters Tract—then called the Gun Club Tract—was developed around the turn of the twentieth century as a retreat for officials of the Delaware, Maryland and Virginia Railroad (Burkentine 2008). In 1937, 706 acres of upland and swamp forest was acquired, along with another small tract, for inclusion in Redden State Forest (Figure E-15). The seller of the tract was Richard C. Houghton of Philadelphia. The cost for the tract, including attorney and recording costs and resurvey, was \$9.50 per acre (Delaware State Forester 1937:13). The tract became known as the Headquarters Unit because it was developed as the headquarters for both the Redden and Ellendale Forests.

Three buildings of the railroad company retreat were still standing when the state acquired the property: a large house, a large stable, and a lodge. The house is now used as Forest Service offices, the stable was converted to a storage shed and now serves as a forestry education center, while the 11-bedroom lodge is used by local groups (*Sunday Star* 1950). These three buildings form the core of Delaware CRS property S-00824, which was listed on the National Register of Historic Places on November 25, 1980, for its architecture and as representative of the pre-state forest use of the tract.

During the late 1930s, road construction that had previously started as a private land protection measure on the tract was continued. The boundary lines of the tract were marked and brushed out, and concrete posts were set. During the spring planting season, CCC labor from the Redden ECW Camp S-53 planted 65,400 trees on old fields lying on the west side of the tract. A large portion of the tree planting was experimental, involving species, spacing, and conditions about which more knowledge was desired.

Another 136-acre tract was sold to the state at Georgetown in June 1937. The majority of that tract was formerly in cultivation. Where not well-stocked with tree seedlings, it was to be planted with suitable forest trees. The tract adjoined the Gun Club Unit on the east and was to be administered and improved as part of that unit (Delaware State Forester 1937:13).

Because the Gun Club tract differed from other parts of the Redden State Forest in terrain, and, to an extent, in forest characteristics, the methods of treatment applied in developing it differed. Roads built while the tract was in private ownership were improved by CCC personnel without greatly altering the original layout. It was found necessary to fill many sections of the road from the headquarters buildings southward in order to construct an all-weather road. This goal was supported by construction of an improved drainage system (Delaware State Forester 1938:12-13).

In 1937, a 102-acre tract known as the Jones area was purchased by the Department of Forestry. Adjoining the Gun Club Unit at one point, “it seems to resist efforts to weld it thereto in the work plans.” Work performed in the area by CCC workmen included razing the dilapidated buildings surrounding the house, reconstruction of .7 miles of access road; cleaning about 2 miles of drainage channels; brushing and marking the boundary; and the planting of 49,710 trees on 27 acres of vacant fields of which the area primarily consists (Delaware State Forester 1938:13).

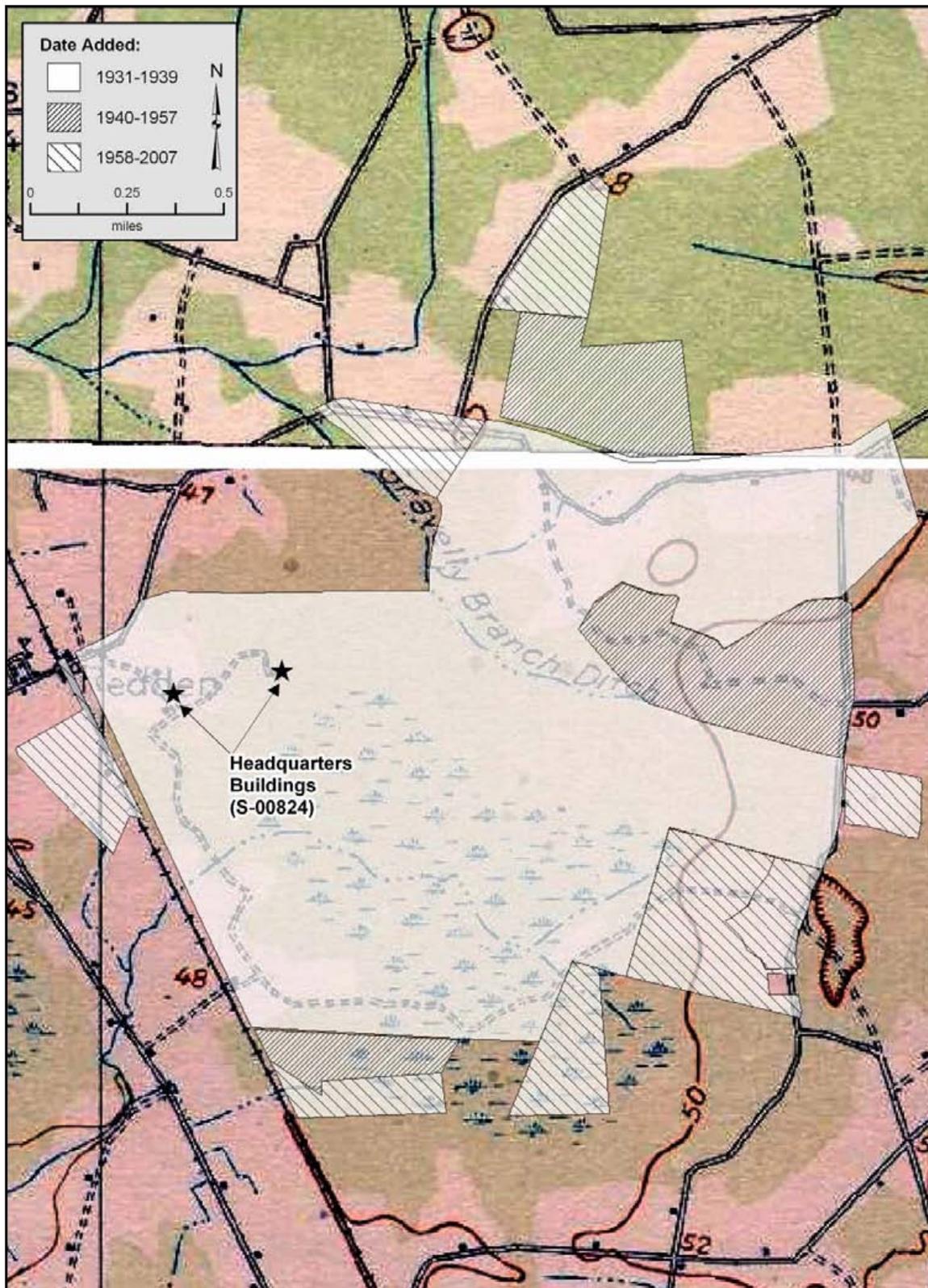


Figure E-15. Headquarters Tract showing periods that parcels were added to the forest system (base maps: USGS 1918a, 1918b).

## Redden State Forest and the Forest Legacy Program

In 1947, the Redden State Forest consisted of 2,566 acres situated 4-5 miles northwest of Georgetown. Of this total, 1,133 acres—mostly the Jester Tract—lay west of DuPont Highway and another main area—the Gun Club Tract—lay east of the Pennsylvania Railroad near Redden (Delaware State Forester 1947:13) (see Figure E-3). In 1949, the forest included a 2.5-acre Christmas tree plantation established on the forest and returned to the state a total of \$42,403.33. Few saleable trees remained at that time (Delaware State Forester 1949:11).

In 1952, Redden State Forest was enlarged by two tracts: one of 62.9 and the other of 104.5 acres (Delaware State Forester 1952:7). Since 1991, with the inception of the Governor's Open Space Program, a total of 7,000 acres has been added to the Redden State Forest. Much of this land was purchased from J.G. Townsend, Jr. and Company, the Chesapeake Forest Products Company, and the Glatfelter Pulpwood Company. The forest grew considerably in size in 1995 when it subsumed the 190-acre Appenzellar Tract and the 1,736-acre Ellendale State Forest.

In a 1998 report, an anonymous author advocated the establishment of a Forest Legacy Program in the state, a partnership program with the U.S. Forest Service to protect threatened forests. Eligibility criteria for this program were cited as following:

- Be threatened (subject to present or future conversion to non-forest uses, development, or fragmentation);
- Contain one or more of the following important public values:
  - Scenic resources
  - Public recreation opportunities
  - Major rivers or streams recognized as important to the State
  - Wetlands
  - Groundwater aquifers of important public water supplies
  - Unique habitats
  - Rare or endangered species
  - Important cultural resources
  - Large areas of contiguous forest land
  - Provide opportunities for continuation of traditional forest uses
  - Reflect important regional values

One of the proposed legacy areas was the Redden/Ellendale Forest. The forest was described in the report as follows:

This resource area consists of one of the largest forested wetland complexes in the state noted for its ground water recharge and yield potential. Freshwater wetland and five thousand acres of forest lands help maintain high water quality and provide vary significant water recharge/yield area. It supports diverse plant and animal communities, with known location of twenty-five rare plant species of State concern including one of Federal concern....

The most common timber types of the area are coastal plain hardwoods and southern yellow pine. Old growth stands of loblolly pine are present. Significant historical and archaeological features are widely scattered. Prehistoric hunting and gathering sites from 8000 B.C. to 1650 A.D. have been identified. (Delaware Forest Service 1998:37)

Delaware disbursed funds for Forest Legacy acquisitions under the Green Horizons program. In 2007, the Delaware Forest Service added 328 acres of loblolly pine forest to Redden State Forest. These new lands—part of the Tunnell Tract—connected the Headquarters Tract with the Chesapeake Tract of the State Forest and significantly contributed to the state’s efforts to protect working forest lands in an area that is highly sought after for residential development. The landowner, Glatfelter Pulp Wood Company, was paid \$5,200,000 by the State of Delaware for the land on February 28, 2007. The Forest Legacy Program provided \$2,956,000, the State of Delaware provided \$744,000, and Sussex County provided \$1,500,000 towards the purchase (U.S. Forest Service 2007). In November 2007, Redden State Forest was once again enlarged with the acquisition of the remainder of the Tunnel Tract—another 420 acres in all. The \$7.15 million purchase price was provided by the state (Conservation Fund 2008; Short 2009). Currently, the Redden State Forest comprises 10,781.4 acres, approximately 10,585 of which are forested, while 125.6 are farmed (Burkentine 2008).