



OCEAN COUNTY BOARD OF CHOSEN FREEHOLDERS

BARNEGAT BRANCH TRAIL

DEPARTMENTS OF PLANNING, ENGINEERING AND PARKS & RECREATION



POST-INDUSTRIAL FOREST



The New Jersey Pine Barrens is a post-industrial forest. Scholars distinguish between pre-industrial (places for hunting and gathering of food stuff), industrial (where the harvesting of the forest into useful products such as lumber dominates) and post-industrial forests (usually a situation where the forest has reestablished itself to a more dense degree than before industrial exploitation) and is often preserved for ecological and recreational purposes. Most of the undeveloped land in this part of Ocean County has been cut or harvested three to five times since European contact. With a touch of hyperbole, experts have claimed that by the mid-nineteenth century, there were no trees standing between the Delaware River and the Atlantic Ocean due to the widespread destruction of the Pine Barrens forests.

Lenape Native Americans are said to have started fires in the region on a regular basis to concentrate game and create wide open areas to facilitate travel, hunting and gathering of natural food stuff.

The harvesting and milling of trees into lumber was a major industry in the Pine Barrens region from the 17th through the middle of the 20th century. Oak, white pine and other hardwoods were used for furniture, cabinets and framing. The most prized was Atlantic White Cedar (*Chamaecyparis thyoides*) with its soft wood that is pest and rot resistant. It swells when wet and is an excellent material for ship and house planking and roof shingles. Before the commercial harvesting of cranberries and blueberries in the later 19th and early 20th centuries, European agriculture was only feasible in the narrow strip of land between the Pinelands and the Wetlands (roughly the area between what is now the Garden State Parkway and Route 9).

Pitch pines were used to make charcoal. Trees would be cut and piled into teepee shaped structures and then covered by a combination of soil, sod and plant material that acted as an oven. A fire would be set under the covering and the intake of air would be regulated to prevent the fire from consuming the wood completely. Colliers would manage the fire for days until the result was charcoal, a product that was about 1/10th the volume of firewood and capable of reaching temperatures of nearly 3500 degrees Fahrenheit. Before the widespread availability of cheap anthracite coal from Pennsylvania and elsewhere, charcoal was the major source of industrial energy, especially for the smelting of bog iron for a variety of uses including the making of cannons and cannon balls. Pine Barrens charcoal was also used during the American Revolution to heat homes in Loyalist occupied New York. Well into the 19th century, Pine Barrens charcoal was shipped to the Caribbean to be used to produce salt from ocean water.

The Pine Barrens forest is based on fire ecology and involves a natural succession of growth. The number, spacing and types of trees tell a story of this natural succession of plant life after fires, the industrial harvest of desirable lumber or especially the use of native pine trees to create charcoal. Typically, a Pine Barrens Forest will naturally transition from Pine to Pine-Oak to Oak-Pine to Oak without the natural or human intervention of fire. Fire brings the process back to the beginning by removing the undergrowth, the competing deciduous trees and causing the opening of pine cones to release its seeds.

Black Cherry and Catalpa trees are plentiful in this area of the Pine Barrens. They are early successional species, meaning they are the first trees to grow in a disturbed area, and are therefore indicators of past disturbance(s).

Some trees and plants are invasive species that are not natural to the local ecology and force themselves into the pattern and can actually replace the indigenous plant life. An example of an invasive plant that you can see from this spot is oriental bittersweet.



The Barneget Branch Trail logo was explicitly designed with history in mind: Lady Liberty's silhouette is reminiscent of the Central Railroad of NJ (CNJ) logo, adopted by the railroad in 1944 to reflect the close proximity of the CNJ Terminal in Jersey City to the Statue of Liberty. The BBT logo also includes a ghost locomotive, as well as Ocean County's most recognizable environmental features.