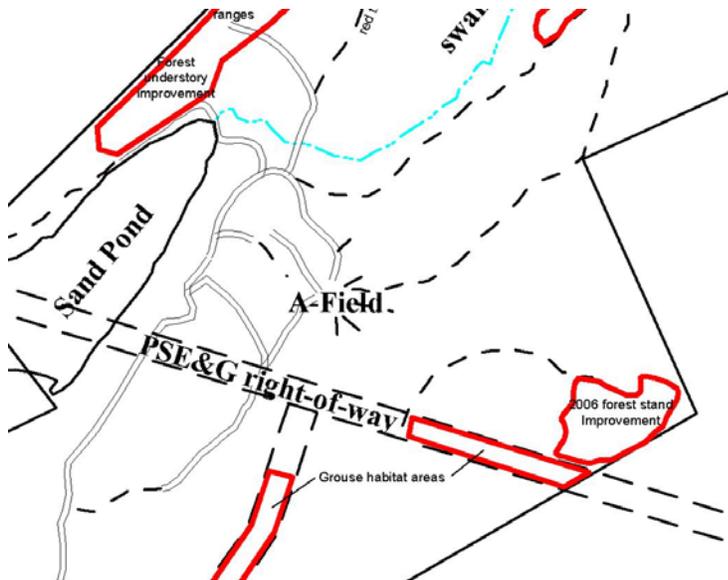


From the Forester: Wildlife Management Practices

Camp No-Be-Bo-Sco

for Fish & Wildlife Management Merit Badge Requirement 4



Forest Understory Improvement

In this wooded area, certain shrubs and plants have been killed, and certain shrubs have been planted. Those shrubs that were killed include multiflora rose, Japanese barberry, phragmites, autumn olive, and garlic mustard. All of these shrubs are considered to be exotic invasive plants. These plants were introduced to the United States at various times. However, these plants spread rapidly across the landscape, and in many areas have displaced native plant species. This has caused a decline in certain wildlife species that are

dependent on native plants for their survival. Therefore, in this area, exotic invasive plants were killed, and native shrubs, such as spicebush have been planted for the improvement of wildlife habitat.

Forest Stand Improvement

The cutting you see here is known as “forest stand improvement.” This forest stand was composed of various oaks (42%), red maple (27%), and black birch (21%). Oaks produce acorns, a high-value food for many wildlife species, such as turkey and deer. Since many desirable oak trees were competing with less-desirable black birch and red maple trees, a decision was made to cut many (but not all) black birch and red maple trees. The trees to be cut were marked by the forester. The forester first looked at the oak and other desirable trees that the Council wished to favor. Then, the forester identified the trees that were competing with those desirable trees for sunlight, and marked some of them for cutting. Later, in 2006, those marked trees were cut.

By cutting some of the undesirable trees that were directly competing with desirable trees, additional sunlight was gained for the desirable trees. As a tree captures more sunlight with its leaves, it can produce more energy from photosynthesis, grow faster, become healthier, and produce more seeds (acorns for wildlife).

Reduction in the Deer Herd

White-tailed deer are a natural part of the forest ecosystem in New Jersey and throughout the eastern United States. However, when one part of the ecosystem becomes too abundant (or not abundant enough), it can affect other parts of the ecosystem. Deer have been overpopulated in northern and central New Jersey for many years. Deer can damage forests and other vegetation by excessive browsing of young seedlings, and by rubbing their antlers (also known

as buck rub) on saplings. Excessive browsing kills seedlings, as can buck rub. Scientific evidence has shown that deer densities of more than 18 deer per square mile can impact the regeneration of oak forests. In many areas of New Jersey, the current population is double or triple that number. In recent years, the deer population has become so large, that other components of the forest, such as native shrubs and other plants have begun to disappear. In order to protect the wildlife dependent on oak forests and native understory vegetation, this camp is actively hunted for deer when Scouts are not in camp. The goal is not to eliminate all deer, but rather to reduce the herd to more normal levels.

Creating Habitat for Ruffed Grouse

Ruffed grouse is an upland game bird that has very specific habitat needs. During a single year, four different habitat needs must be met in order for grouse to reproduce successfully. Due to a lack of management on public and privately-owned lands, there has been a dramatic decline in the number of ruffed grouse in New Jersey in the last twenty or so years. This is because several of those habitats require very young forests that are only created after dramatic events, such as clearcuts or other forest regeneration harvests, catastrophic fire, or a large wind event. Here at camp, young forests under the PSE&G right-of-way present the best opportunity to improve habitat for ruffed grouse.

In the spring of 2009, about 3,000 seedlings were planted in or near the PSE&G right-of-way. Within the right-of-way, silky dogwoods were planted in a very dense pattern. These bushes will provide cover for ruffed grouse and other wildlife. Also, silky dogwoods will not grow tall enough to interfere with the powerlines, and they will resprout if they are cut or damaged as part of powerline maintenance. Immediately outside of the right-of-way, eastern white pine and other evergreen trees were planted to provide cover for wildlife. These seedlings will eventually grow into tall trees.



Grouse drumming on log

Conservation of Core Forest Areas

Just as ruffed grouse require young forests, other species require large, contiguous forests. Area-sensitive songbirds are one example of this habitat need. Such animals rarely nest within 300 feet of a forest edge. Roads, homesites, powerline rights-of-way, and forest regeneration harvests all create and/or maintain forest edges. This behavior is partially explained by increased predation of birds and nests by cats, raccoons, and parasites near forest edges. Thus, in planning activities at camp, care is taken to avoid eliminating all core forest areas. This is particularly true for forest regeneration harvests. While a forest will grow back in such an area, it may take up to thirty years for the edge effect created from the initial harvest to disappear.