

Post 13

Out of New York's 18.95 million forested acres, 76% or 14.4 million acres are privately owned. There is a great need for this valuable renewable resource to be managed by those private land owners. Individuals wishing to prepare a management plan for their own woodland can be directed by Dyken Pond staff to professional foresters who can provide valuable assistance.



Written by: Amanda McCreary, 2017

Image Sources:

Britton, N.L., and A. Brown. 1913. An illustrated flora of the northern United States, Canada and the British Possessions. 3 vols. Charles Scribner's Sons, New York. Vol. 1: 45. (pages 2, 4)

Goff, G.R., Lassoie, J.P., Layer, K.M. 1994. Timber management for small woodlands, Media Services at Cornell University. Information Bulletin 180 (revised edition). (pages 2, 3, cover)

Sloan, E. 1955. Our vanishing landscape. Ballantine Books, Random House Inc., New York. (page 6)

Taize, L., Zeiger, E., Meller, I.M., Murphy, A. 2015. Plant physiology and development (6th edition). Sinauer Associates, Inc., Sunderland, MA. (page 5)



475 Dyken Pond Road
Cropseyville, New York 12052
(518) 658-2055
www.dykenpond.org
dykenpond@gmail.com

Dyken Pond Environmental Education Center



Cherry Trace Woodland Management

Welcome

Welcome to the Cherry Trace. The word “trace” is an older use of a word which in this context means trail. The Cherry Trace is a loop of 0.4 miles which will take you through a northern hardwood forest and a mature hemlock stand.

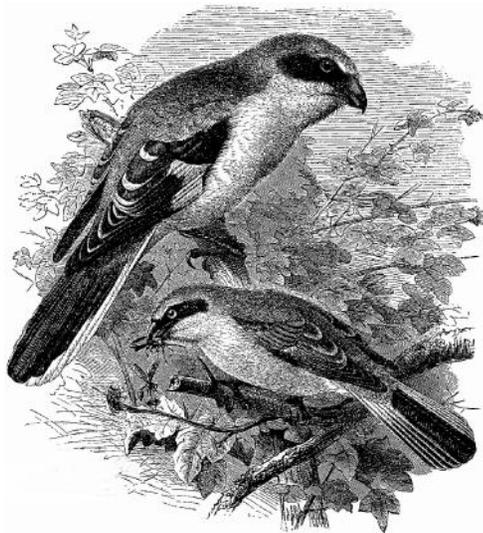
This booklet will describe some practices used in **silviculture** or woodland management. Like any other management, you need to establish specific objectives and then design a plan to achieve them. Some objectives for interested woodland owners are: timber or firewood production, wildlife habitat, water quality, recreation, aesthetics, and even food production. **Multiple-use management** is a combination of two or more of these objectives.

Follow the orange trail markers

Many of the plants along this trail are protected by New York State. Under penalty of law, they may not be gathered from public lands.

Post 1

Notice the open clearing to your right. You’ll see high and low bush blueberry shrubs, ferns, and sun-loving plants scattered throughout the clearing. These open spaces allow more sunlight to penetrate to the ground, promoting herbaceous plant growth and populations of ground level insects. These clearings are an important habitat for many bird species, even those living deeper in the forest, because they provide food in the form of seeds, berries, grasses, and insects for adults and their hungry hatchlings. If managing your forest for wildlife habitat, you may consider removing a few trees to provide several clearings.

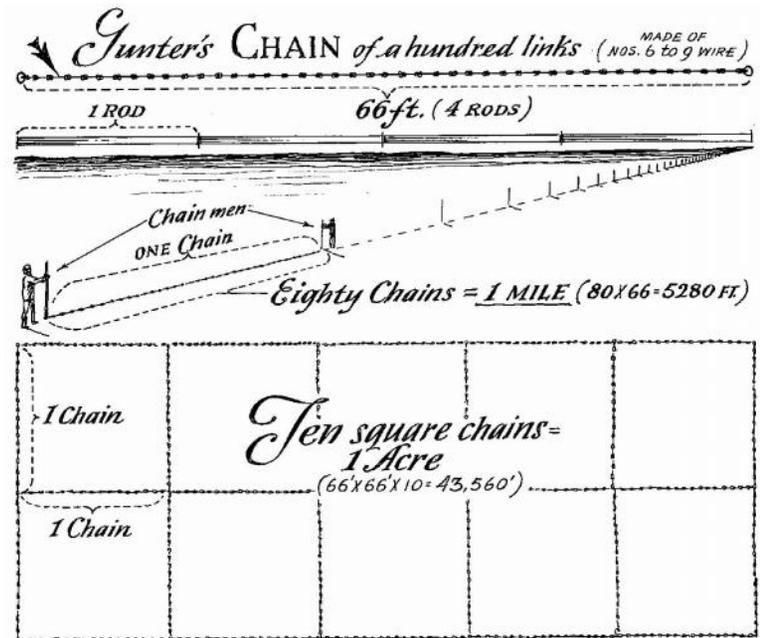


Post 11

Notice the difference between the woods ahead of you and the woods you’ve left behind as you pass along the trail. You are leaving an area where the **dominant** or most abundant plant life is deciduous trees: maple, beech, and cherry. Before you is almost exclusively coniferous trees, mostly hemlock. Compare the amount of sunlight reaching the ground, the types of groundcover, any temperature differences, and any signs of wildlife between the two areas.

Post 12

The distance between this post and post #13 is one **chain** or 66 feet. From this unit of measurement comes many familiar terms:

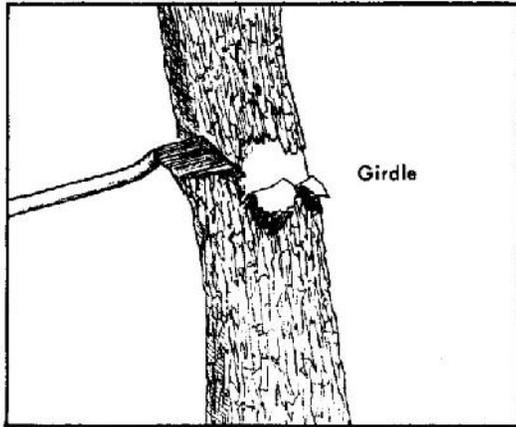


Foresters and surveyors know how many paces they take in order to walk one chain. They can use this as a quick estimate of distance when they’re in the field. Count how many paces it takes you to walk from Post #12 to Post #13 to determine how many paces you have in one chain.

Feel free to keep this guide, or return it after your hike.

Post 9

Look around and you'll see several dead trees still standing at this station. These den trees attract a variety of insects which provide food for woodpeckers and other birds. A common silvicultural practice is to leave 4-6 den trees per acre instead of removing them. If attracting wildlife is a management objective, you may wish to increase the number of den trees by girdling a low quality tree. Girdling a tree is when you make a cut completely encircling the tree, cutting off its supply of water and nutrients.

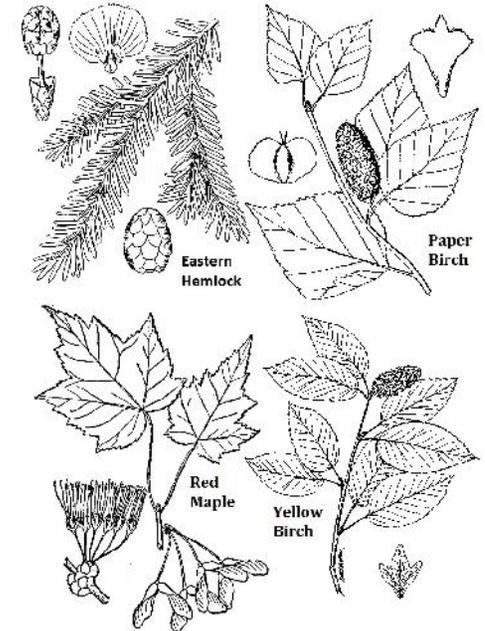


Post 10

When practicing multiple use management, there are some activities that serve multiple purposes. Logging a forest leaves logging trails, which can later be repurposed as hiking and recreation trails. Increasing habitat for certain species of wildlife can help reduce pest populations, and can improve recreational and aesthetic aspects of the forest as well.

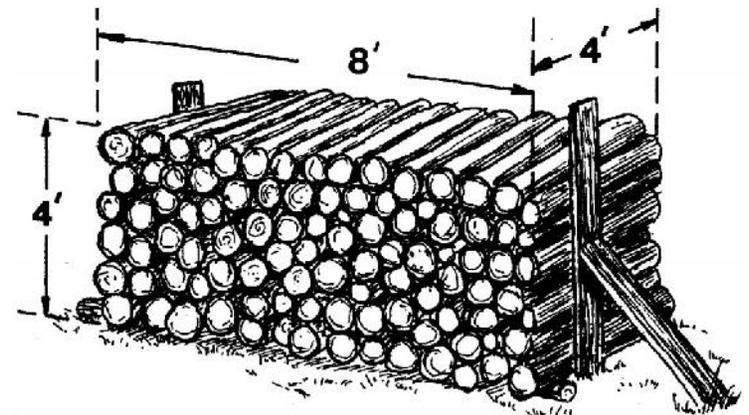
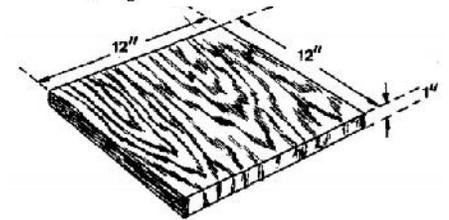
Post 2

Tree identification will help you in establishing management objectives. Each tree species contributes in a different way to the forest's character. This tree finder can help you identify a few common tree species found on the Rensselaer Plateau. Turn the dial and match the dots.



Post 3

Quantities of wood are measured in two ways. Lumber is measured by the **boardfoot** which is a volume of 1 foot x 1 foot x 1 inch. Firewood is measured in **ords** or piles 4 feet x 4 feet x 8 feet. Remember that firewood is frequently sold in units called **face cords** which measure 2 feet x 4 feet x 8 feet or less. The frame by this post is one face cord. The eastern hemlock marked next to it contains 628 boardfeet.

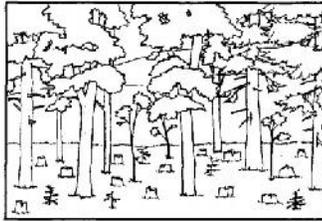


Post 4

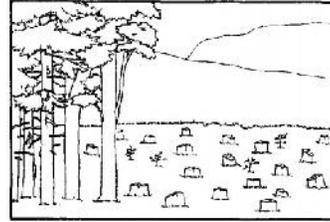
On your left you'll see an old rock wall. This is a remnant of the farm that existed here 100 years ago. By the late 1800s, much of New York's forests had been cleared for farmland, leaving only 20% forested. Many of those farms have since been abandoned and reclaimed by nature. Today a whopping 63% of the state is forested. With that increase comes changes in the animals that live here. For example, increased forest area has led to a large increase in deer population, and moose and fisher are two animals to return to the state on their own.

Post 5

There are several methods of



Selection system



Clear-cut system

harvesting trees. A **selective harvest** is designed to remove selected mature trees and trees of poor quality and/or low vigor. This creates holes in the canopy, increasing the amount of sunlight, aiding the germination of seeds and the development of un-even aged stands. With this method, the aesthetic value of the forest is maintained, habitat for wildlife is diversified, and the opportunity to conduct periodic income-producing harvests is ensured. **Clear-cutting** is when you cut every tree in a stand. This method has negative associations for many people. If done properly, giving respect to slope, stream corridors, and aesthetics, clearcutting can be a useful silvicultural tool. It is considered an option when: the stand is even-aged and all the trees are mature and ready for harvest, when species that regenerate in direct sunlight are favored, when wildlife diversity is encouraged by the creation of open space, or for disease control.

Post 6

The **brush pile** before you is the remains of some downed trees. When cutting for firewood, or during a timber harvest, tops of the trees should be cut so they lie no more than 4 feet above the ground. Insects and fungi living in and on the brush pile will then break down the wood, returning nutrients such as nitrogen, potassium, and phosphorous back to the soil. The nutrients are then available to the existing trees or newly established seedlings. If you are managing for wildlife, brush piles also provide food

Post 7

The tree marked in front of you is a black cherry or *Prunus serotina*. Cherry, aspen and birch are all **pioneer species** and were the first trees to grow here after the farm was abandoned. Black cherry is a fast-growing tree which also gives it a continued advantage of reaching the sunlight at the canopy top, but it is quite susceptible to a number of diseases and insect damage. Look closely, and you'll see many of the cherry trunks have **burls** or deformed, swollen sections.



Black Cherry

These are generally the result of some stress or injury to the tree. Most of the time this is not fatal, and the tree heals itself. The new growth is twisted and distorted, but fully capable of transporting water and nutrients along the trunk.



American Beech

Post 8

The tree that dominates this area of the woods is *Fagus grandifolia* or American beech. Easily recognized by the smooth grey bark and the small beech nuts that ripen in the fall, beech is not an especially valuable lumber species. It is used primarily as a fuel source for humans and as a food source for wildlife. Most of the beech trees in this forest suffer from beech bark disease, caused by scale insects that look like white fuzzy patches. These insects cause cracks and furrows in the usually smooth bark of the beech trees, opening them up to fungal infection.