



“He that plants trees loves others beside himself.” –English proverb

■ Filling in the Gaps

As you become more familiar with your woodland you may sense that something is missing. There may be gaps in the structure of the woodland—the canopy, understory, shrub, and herbaceous layers may not all be present. Or desirable native species may be lacking from the community.

One way to fill in the gaps is to control invasive plant species so they don't take over native plant communities. Removing invasives can clear the way for the emergence of more desirable species.

If desirable native species are lacking, you can help speed recovery by planting native trees, shrubs, vines, and herbaceous plants. The type of community your woodland represents will guide your decisions on what species are appropriate to plant. A look at a similar, neighboring woodland can provide ideas on species to include, as well. Consult a forester to be sure.

Bare-root trees are the most economical to plant and the most likely to survive and thrive. Shrubs, vines, and herbaceous plants may be added as bare-root seedlings, potted plants, or seeds. Because you are planting in an existing woodland, you likely will be limited to using a hand-held auger or a shovel. Most plantings to fill in the gaps probably will be done on a small scale or in phases.

The Special Case of Oaks

One increasing gap in woodlands across the state is the decline in the natural regeneration of oaks. Oaks regenerate from stump sprouts and from acorns, but neither avenue consistently provides numerous, viable sprouts or seedlings. In addition, most woodlands provide too much shade for sprouts or seedlings to thrive. Some of the stewardship options to counter this regeneration problem, in addition to planting oak seedlings in open areas, include:

- Controlling less desirable trees and shrubs that provide too much shade;
- Selectively harvesting groups of trees or heavily thinning to provide more sunlight to seedlings; and
- Harvesting trees after a very good acorn crop. (This method can create significant disturbance, though it can effectively promote oak regeneration if done properly.)

The decline in oak regeneration was brought on in part by the suppression of fire during European settlement. Prior to settlement, North American Indians used fire for a variety of reasons—to promote fruit and berry production, to ready sites for crop planting, to enhance hunting success by concentrating game, and more. These generally were periodic, low-intensity surface fires ignited in the spring or fall. The thick bark of mature oaks and the stump-sprouting ability of oak seedlings and saplings enabled them to withstand these fires. Less fire resistant species did not survive, allowing oaks to become dominant. The continued suppression of fire has led to dense stands of fire-sensitive, shade-tolerant trees at the expense of oak regeneration.

Some natural resource professionals and woodland landowners are beginning to reintroduce fire to encourage oak regeneration, to control invasive plants, and to enhance the growth of desirable grasses and herbaceous plants. In some instances, you may want to consider prescribed burns as a stewardship option. Check with your district forester for information and assistance.