

Woodland Stewardship Online

6: Managing Important Forest Types – Activity

How this helps you:

This chapter describes many of the forest types that occur throughout the Lake States and how to manage them. A forest type is an aggregation of tree species that naturally occur together. Descriptions for each forest type include common tree species in that type, geographic range where it occurs, products and uses, site conditions where it grows best or worst, regeneration strategies, intermediate stand treatments, pests and diseases.

Step 1: Read introductory information

Read the introductory page ( PDF; pages 55-56) for Chapter 6 that describes different classification systems for woodlands.

Step 2: Determine Principle Tree Species

For each stand in your woodland, determine the principal tree species that comprise the overstory. Refer to a stand inventory performed by you (see Chapter 2 Activities) or your forester to determine its principal tree species.

Step 3: Determine Forest Type

For each stand, match the principal tree species from your inventory to the forest type descriptions in the manual to determine which forest type most closely matches each stand.



The first paragraph in each forest type description lists the species that comprise that forest type and the range map shows the geographic area where the most common species typically grows. Because species composition varies so much across the Lake States, you may not find an exact match, but one of these forest type descriptions should be close to the composition of your stand.














- Aspen
- Balsam Fir
- Birch
- Black Ash-American Elm-Red Maple
- Black Spruce
- Black Walnut
- Bur Oak
- Eastern White Pine
- Hemlock-Yellow Birch
- Jack Pine
- Maple-Beech-Yellow Birch
- Northern Pin Oak
- Northern White-Cedar
- Red (Norway) Pine
- Silver Maple-American Elm
- Tamarack

- White Oak-Black Oak-Northern Red Oak

Step 4: Evaluate the Site

For each forest type, refer to the description of Site Conditions, then do your best to evaluate the site on which each stand is growing.

- **Step 4A:** If necessary, review Chapter 3 How Trees and Woodlands Grow, particularly the section on How Trees Grow ( PDF; pages 26-30), for a description of site conditions and terminology.
- **Step 4B:** You also may want to review Chapter 2 Inventory, particularly the section on Site Quality, including Site Index ( PDF; pages 20-22).
- **Step 4C:** If there are site index curves listed below that apply to your forest type, it would be helpful to measure tree age and total tree height to determine site index as a measure of site quality for the species now on the site. (See Appendix B.)

- Quaking Aspen ( PDF, page 200)
- Balsam Fir in the Lake States ( PDF, page 200)
- Black Spruce ( PDF, page 201)
- Black Walnut ( PDF, page 201)
- Green Ash ( PDF, page 202)
- Eastern Cottonwood ( PDF, page 202)
- Eastern White Pine ( PDF, page 203)
- Hardwood Comparisons ( PDF, page 203)
- Jack Pine ( PDF, page 204)
- Northern White-Cedar ( PDF, page 204)
- Red (Norway) Pine ( PDF, page 205)
- Tamarack ( PDF, page 205)
- Northern Red Oak ( PDF, page 206)

If you are interested in a different tree species, your forester may be able to provide appropriate site index curves or you may find such a chart on the Web. Site index curves do not exist for all species and forest types.

Step 5: Determine Site Quality (Poor, Fair, Good, or Excellent) for each of your Stands

Based on your site evaluation, determine whether the site for each of your stands is poor, fair, good, or excellent for the main overstory species that comprise that stand. You also may find that some stands extend across more than one site so that part of the stand is on a good site and part of it is on a poor site for the dominant species.

Step 6: Talk to your Forester

Talk to a forester about your site evaluation and ask for advice about what to do with forest types on poor sites. It may be appropriate to convert such stands or portions of stands to some other forest type better suited to the site conditions.

Step 7: Review the Description for Each Relevant Forest Type

Read the complete description of each relevant forest type, including its Products and Uses, Regeneration, Intermediate Treatments, and Pests and Diseases.

- **Products and Uses**

The Products and Uses section will help you assess the potential of each stand and its species to produce products or uses appropriate for your objectives. Your objectives for each stand may vary depending on each stand's potential.

- **Regeneration**

The Regeneration section is appropriate if:

- your stand is mature and ready to regenerate or
- it is stocked with mostly undesirable quality trees or undesirable species or
- the site quality is poor for the existing forest type, but converting to a different forest type might improve productivity.

- **Intermediate Treatments**

The Intermediate Treatments section is appropriate if your stand is well-established, but:

- a seedling/sapling stand faces strong competition from weeds, or
- a pole-sized stand would benefit from culling, weeding, or thinning, or
- a sawtimber stand would benefit from crop tree release, such as commercial thinning, weeding, or culling.

- **The Pests and Diseases**

The Pests and Diseases section is always appropriate when you notice a pattern of damage on more than a few trees. Inspect your woodland at the beginning and end of each growing season and whenever a fire, windstorm, ice storm, flooding, prolonged drought, or other such event may have caused damage. See Chapter 7 for help in sizing up the potential damage from different types of pests and diseases.

Step 8: Develop Stand Management Recommendations with Your Forester

Information in Chapter 6 will help you understand the options, but you really should work with a forester or other natural resource advisors to develop management recommendations for each stand, especially since the choices you make may affect the species composition and growth of your woodland for decades and possibly a century.