

Step 2 – 2012

In management areas 2, 3 and 4, thin an additional 25 percent of the stand by removing the smallest trees.

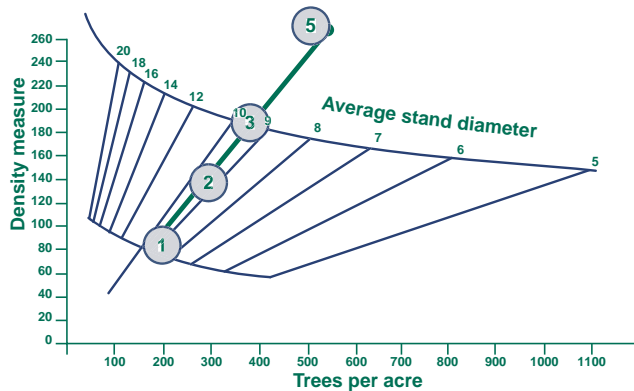
Step 3 – 2024

Remove an additional 30 percent of the trees in management areas 3 and 4, thinning from below first (smallest trees), then from above (larger trees), until desired spacing is achieved. Implement intensive treatments in area 4.

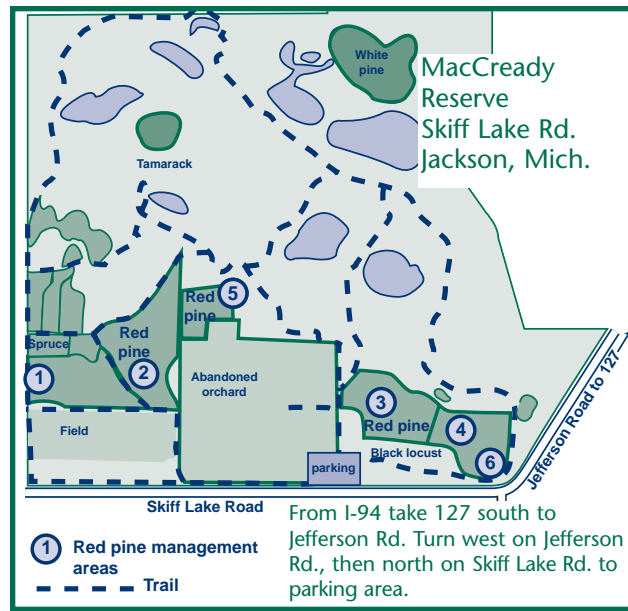


Thinning red pine

By using the stand's average diameter, a red pine stocking chart will show you the recommended density ranges for growing trees (the number of trees per acre that should remain after a thinning). Growing trees within the recommended ranges gives the best chance for healthy trees that utilize the site's potential. Remember, do not harvest more than one-third of the trees at any one thinning. Space your thinning operations seven- to ten years apart. Consult a forester for more information.



Numbers represent red pine management areas in this brochure.



① Red pine management areas
--- Trail

From I-94 take 127 south to Jefferson Rd. Turn west on Jefferson Rd., then north on Skiff Lake Rd. to parking area.

For more information on managing red pine or other evergreen plantations contact your local MSU Extension office

or

Biewer Sawmill-McBain
6251 W. Gerwoude Dr.
McBain, MI 49657
231-825-2855

For on-site visits contact MSU Extension – Jackson County, 517-788-4292.

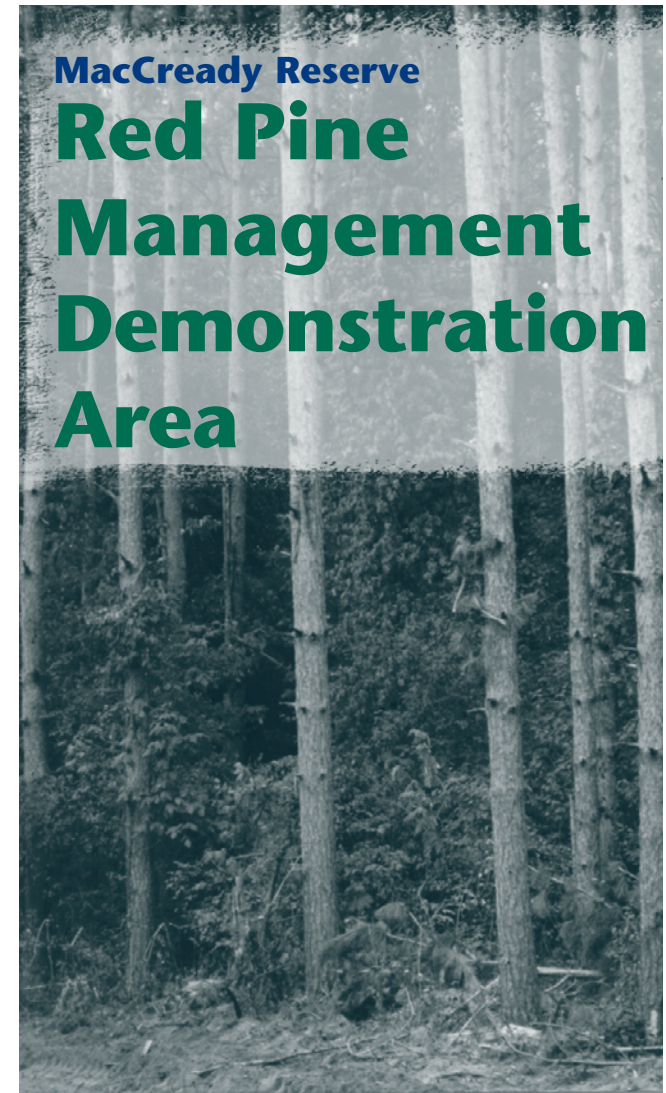
Biewer Sawmill-McBain is a corporate manager partner for this project and has been a major contributor for on-site programs, signs and the production of this brochure.



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MacCready Reserve Red Pine Management Demonstration Area



Michigan State University
Department of Forestry
Department of Fisheries and
Wildlife

MSU Extension

Biewer Sawmill-McBain

About the project

This 50-acre red pine management area is a work in progress and will eventually demonstrate a variety of red pine stand management options. You are invited to follow the project's progress that will take 15 to 20 years to complete. For on-site visits contact MSU Extension – Jackson County 517-788-4292.

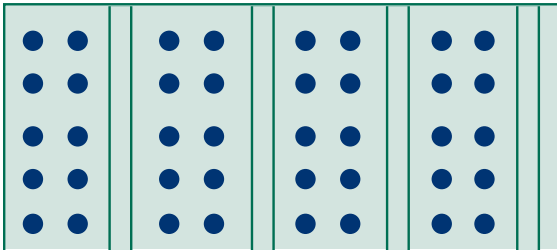
Management goal

This project will demonstrate a range of densities recommended for red pine that will grow healthy trees and use the site's tree-growing potential.

Management options

1. Maximum density

Site No. 1 has the maximum number of trees recommended per acre that will grow healthy trees and use the site's potential. Growing more trees on the site than the recommended maximum density will result in stressed, unhealthy trees susceptible to disease and insect attack. See chart on back ①



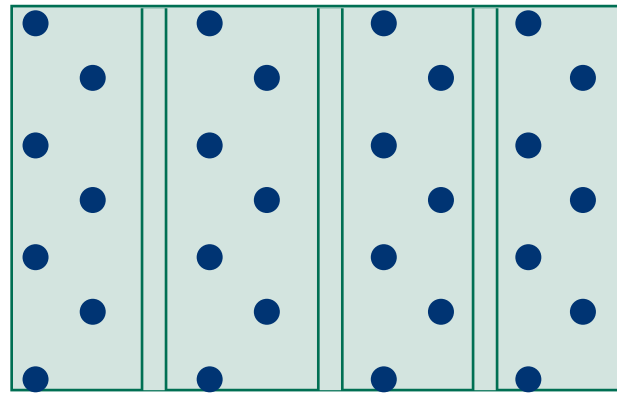
Characteristics: large number of healthy, managed trees. Smallest diameter in size.

2. Mid-range density

Site No. 2 shows a mid-range number of recommended trees per acre that will grow healthy trees and use the site's potential.

3. Minimum density

Site No. 3 shows the least number of trees recommended per acre that will grow healthy trees and use the site's potential. Reducing a number of trees below the recommended minimum disregards the site's growing potential and wastes available space.



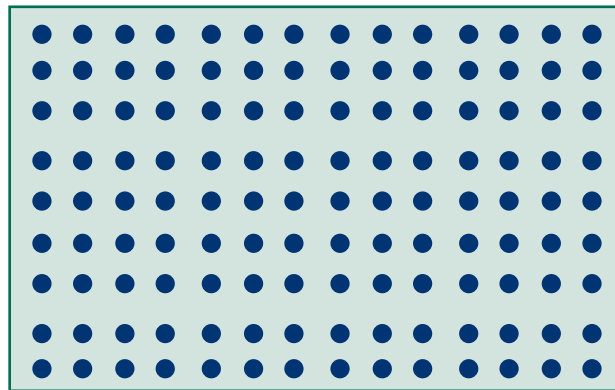
Characteristics: Fewest number of trees that are the largest in diameter. Large, healthy, managed individual trees.

4. Intensive management

In Site No. 4, the forest understory will be intensively managed. Management includes planting desirable tree species and controlling undesirable vegetation and trees by using herbicides. In time, desirable trees are released giving them space to grow in the understory. The red pine trees (the overstory), will grow at the minimum recommended density like Site No. 3.

5. Control

A non-management area with no thinning, this area will be allowed to develop naturally. More trees than recommended are growing on this site.



Characteristics: Most number of trees per acre. No space to grow equals stressed, unmanaged and unhealthy trees.

6. Clear cut

This area was not part of the original management plan. High winds downed trees that were subsequently cleaned up and resulted in a cleared area.

Characteristics: No overstory, allowing full sun to the site and growth of dense vegetative cover. No longer a red pine management area.

A step-by-step process

Establish a management goal

Look at other managed areas and read information about red pine management. Think about what you would like to achieve for your forest property. Consult a forester and/or wildlife manager for professional help.

Inventory

After reviewing aerial photos, foresters run line transects throughout the forest stopping periodically to establish sample plots and collect data. Data is averaged to develop stand characteristics.

Background

This 50-acre red pine stand was planted in 1934. It was 67-years old in 2001 and the average tree diameter measured 9.5 inches. The green portion of the trees, the crown, made up 20 percent of the trees' total height. The recommended crown size for healthy trees is 33 percent of the trees' total height. The trees have only grown 1.5 inches in diameter in the last 28 years.

Thinning steps

More than one-third of the total stand should not be harvested at any one time. A larger harvest would result in trees susceptible to wind and snow damage. In addition, trees need time to adjust to the new environment created from thinning. A seven- to ten-year recovery period is needed before the next thinning.

Step 1 – 2002

Harvest one-third of the trees by removing rows for future access. This was completed in management sites No. 1, 2, 3 and 4, resulting in 889 cords harvested.