

White Birch

Project Subject/Title: Pence Lake Tower Road Birch Scarification

Contact Person: Langlade County Liaison

Abstract: A two-step strip cut in a white birch stand located in north-central Langlade County was conducted in 2001. The width of the cut strips and uncut strips was variable. The average width of the cut strips was 70 feet and the average width of the uncut strips was 95 feet. Two years after the harvest, scarification with a blade on a J.D. 450 within the cut strips was done to mix the mineral soil with the organics. The scarification was thought to be a viable option for promoting adequate white birch regeneration. The removal harvest was completed in late 2013. The site was revisited for the first 3 years after the scarification and again in 2014.

Trial Location:

County: Langlade

Township: 33N **Range:** 11E **Section:** 24

GPS Coordinates: Lat: 45°19'23" **Long:** -89°3'52"

Property Name: Langlade County Forest

Baseline Stand Data

- *Cover Type:* White Birch
- *Acres:* 13 acres
- *Habitat Type:*
- *Soil Type:* Keweenaw sandy loam
- *Year of Origin:* 2001
- *Total Height:*
- *Site Index Species and Site Index:* 65
- *Mean Stand Diameter:*
- *Total Basal Area per Acre:*
- *Other stand Condition:* Residual strips were harvested in 2013.

Prescription and Methods:

- *Type of Prescription:* Strip clearcut
- *Year Initiated:* 2001
- *Establishment Methods:*

The stand was harvested using a strip cut method in 2001 along with other adjacent stands. In August of 2003 the harvested strips were scarified with a blade on a J.D. 450 to mix the organics with the mineral soil. The residual strips were harvested in December of 2013.

- *Data Collection Methods:*

The stand was revisited in 2004, 2005, 2006, and in 2014. Amount of regeneration was counted and the height of white birch seedlings was measured. Competition and other stand conditions were also recorded.

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Results: From 2004 to 2006 stocking levels of white birch were recorded to be fair to good. The average height went from 1 to 4 inches in 2004, to 6 to 18 inches in 2006. Raspberry provided the highest number of competition in the stand. When the stand was revisited again in 2014, stocking of white birch was very good with many stems over 6 feet in height. As in prior years, there were a few dying residual white birch on the edges of the strips that were left behind from the recent harvest.

Discussion/Recommendations: Despite the early competition from raspberry, the white birch regeneration outcompeted it in nearly all areas. There were only a few small pockets that were absent of white birch. The margins of the strips had more of a mixture of species including sugar maple, balsam fir and white spruce but white birch was still the dominant species. The condition of the residual strips immediately prior to the removal harvest was not recorded.

