

Red Oak

Project Subject/Title: Sawyer County Compartment 72 Stand 2

Contact Person:

Abstract: A 33 acre red oak stand in northwestern Sawyer County was harvested in 2013 using the shelterwood silvicultural system. The stand was scarified in 2010 by a dozer using a salmon blade. The purpose of the scarification was to promote red oak reproduction and give it the competitive advantage over other regenerating species. A serious limiting factor in the stand other than competing vegetation was the amount of deer browse.

Trial Location:

County: Sawyer

Township: 42N **Range:** 08W **Section:** 27

GPS Coordinates: Lat: 46°5'23" **Long:** -91°21'49"

Property Name: Sawyer County Forest

Baseline Stand Data

- *Cover Type:* Red Oak
- *Acres:* 33
- *Habitat Type:* AVb
- *Soil Type:* Padus-Pence-Keweenaw complex
- *Year of Origin:* 1894
- *Total Height:*
- *Site Index Species and Site Index:* 49
- *Mean Stand Diameter:*
- *Total Basal Area per Acre:*
- *Other stand Condition:*

Prescription and Methods:

- *Type of Prescription:* Shelterwood and Scarification
- *Year Initiated:* 2010
- *Establishment Methods:*

The first stage of the shelterwood harvest occurred in 1985. The stand was scarified with a salmon blade in 2010 and then harvested again in 2013.

- *Data Collection Methods:*

The stand was revisited in August of 2014. Twenty regeneration plots were established throughout the stand. Browsing from deer was recorded as well as competition from other trees and herbaceous cover.

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Results: There was significant deer browsing found throughout the stand. The total amount of regeneration from all species throughout the stand was 6,600 stems/acre. Red oak was the fourth most abundant regenerating species with 950 stems/acre. White ash, sugar maple and red maple were more abundant than red oak. Crown cover was estimated to be about 50%.

Discussion/Recommendations: At the time the stand was revisited in 2014, it was apparent that the stand did not have adequate regeneration potential for oak. It should be noted that scarification should coincide with a good seed crop year. The high amount of deer browse severely limited the presence and growth of red oak. Although there were 6,600 stems per acre in the stand, nearly all of the regeneration was very short and impacted by deer browse. There also wasn't much herbaceous cover found within the stand. The operability of the site was difficult due to its rockiness.

