

Red Oak

Project Subject/Title: Turkey Roost Oak

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Abstract: A red oak stand located north of Eagle River in Vilas County was harvested using the shelterwood method in 2012. The stand was scarified with an anchor chain after the harvest was completed. Scarifying the stand during a bumper crop year for acorns was believed to provide the best conditions for regenerating the red oak. Because the red oak stand was harvested around the same time as a large aspen stand to the north, it was believed the deer population in the area would not have a severe impact on the red oak regeneration. The stand is located in near a highly used trail system which makes aesthetic concerns a thing to keep in mind.

Trial Location:

County: Vilas

Township: 41N **Range:** 10E **Section:** 16

GPS Coordinates: Lat: 46°2'18" **Long:** -89°14'38"

Property Name: Vilas County Forest

Baseline Stand Data

- *Cover Type:* Red Oak
- *Acres:* 16 acres
- *Habitat Type:* AVVb
- *Soil Type:* Champion silt loam
- *Year of Origin:* 1920
- *Total Height:*
- *Site Index Species and Site Index:* 56
- *Mean Stand Diameter:*
- *Total Basal Area per Acre:*
- *Other stand Condition:* There was a salvage harvest done in 2003 from blow down.

Prescription and Methods:

- *Type of Prescription:* Shelterwood
- *Year Initiated:* 2012
- *Establishment Methods:*

The stand was set up and sold in 2011 as the first step of an oak shelterwood harvest. In 2012 the stand was harvested in conjunction with an aspen clearcut to the north and west of the stand. After the stand was harvested it was scarified with an anchor chain in September of 2012.

- *Data Collection Methods:*

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The scarified stand was revisited in August of 2014. Sixteen mil-acre regeneration plots were established. Along with recording the amount and type of regeneration present, competition, browse and crown cover were also assessed and recorded.

Results: There was an abundant amount of red oak regeneration present throughout the stand. The total amount of oak regeneration was 5,813 stems/acre. Despite the large amount of oak regeneration, only 25% of the plots were considered to be stocked. In addition to the red oak regeneration there were 3,938 stems/acre consisting of sugar maple, red maple, aspen and white pine. Apart from the competition from tree species other than red oak, bracken fern was the most common competitor in the shrub layer.

Discussion/Recommendations: Although the stand only contained 25% stocking of red oak, it is likely that there is adequate red oak regeneration potential. The short height of the red oak regeneration can be attributed to the young age of the regeneration present. It should be noted that there was minimal deer browse found throughout the stand. This was most likely a result of there being an abundant food source present in the form of several wildlife openings and a large aspen clearcut nearby. The remaining overstory appeared to be healthy and should successfully release the oak regeneration when it is removed.

