

White Pine

Project Subject/Title: East Buckatabon Release

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Abstract: A 12 acre stand located north of Eagle River in Vilas County was harvested using the shelterwood technique in 2013. The stand is located in a residential area and has a snowmobile trail going through it. Prior to the harvest, the stand was treated with herbicide in 2010 and then scarified later that year using a brush rake and bracke method. In April 2011 the stand was planted with white pine to ensure successful regeneration once the stand was harvested in 2013. A year after the stand was harvested it was monitored for survival of the white pine as well as natural regeneration.

Trial Location:

County: Vilas

Township: 41N **Range:** 10E **Section:** 07

GPS Coordinates: Lat: 46°2'38" **Long:** -89°18'17"

Property Name: Vilas County Forest

Baseline Stand Data

- *Cover Type:* White Pine
- *Acres:* 12 acres
- *Habitat Type:* PArV
- *Soil Type:* Au gres sand
- *Year of Origin:* 2011
- *Total Height:*
- *Site Index Species and Site Index:* 60
- *Mean Stand Diameter:*
- *Total Basal Area per Acre:*
- *Other stand Condition:* Near high-traffic residential area.

Prescription and Methods:

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

The stand was treated with the herbicides Chopper 2 and Accord XRT in 2010 to reduce the competition from unwanted species. In fall of 2010 the stand was scarified using a combination of a brush rake and bracke scarification methods. White pine seedlings were planted throughout the stand in April of 2011. The stand was then harvested in July of 2013 using the shelterwood silviculture method.

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- **Data Collection Methods:**

The stand was revisited in September 2014 and monitored for regeneration. Fifteen mil-acre plots were established to record the amount and types of regeneration occurring. Competition and crown cover was also assessed.

Results: White pine and white birch were the most numerous regenerating species found in the stand with each species having 1,667 stems/acre. Red pine was the third most numerous regenerating species with 667 stems/acre. Aspen, red maple and white spruce were also present in the stand but in low numbers. White birch and raspberry were the main competitors with the white pine. Crown cover from residual trees was variable throughout the stand with the northern area having less than 40% and the southern area having more than 60%.

Discussion/Recommendations: The relatively skinny nature of the stand caused there to be a wide variety of tree species present because of the different cover types adjacent to the harvested area. Nearly all of the hardwood observed in the stand was negatively impacted from deer browse. Pine regeneration was most numerous in areas with the most scarification. Both red and white pine seedlings were relatively short and there were only a few stems taller than 3 feet present. Because of the amount of deer browse on the hardwood species, the pine should have the competitive advantage over the white birch in areas where both species are present.

