

Jack Pine

Project Subject/Title: Wisconsin River Jack Pine

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Abstract: A 14 acre clearcut harvest was established in a jack pine stand located in Vilas County, north of Eagle River. Jack pine, as well as white and red pine, are a common cover type in this area. The 14 acre stand is made up of 4 separate sections all close in proximity. A recreational trail runs between a couple of the sections but because of the small size of the harvest, aesthetics is not a major concern. After the harvest, the stand was scarified by using anchor chains. This method was used to create an optimal seed bed for jack pine to regenerate.

Trial Location:

County: Vilas

Township: 41N **Range:** 10E **Section:** 19

GPS Coordinates: Lat: 46°1'14" **Long:** -89°17'33"

Property Name: Vilas County Forest

Baseline Stand Data

- *Cover Type:* Jack Pine
- *Acres:* 14 acres
- *Habitat Type:* PQE
- *Soil Type:* Karlin loamy fine sand
- *Year of Origin:* 2013
- *Total Height:*
- *Site Index Species and Site Index:* 60
- *Mean Stand Diameter:*
- *Total Basal Area per Acre:*
- *Other stand Condition:* Near a few recreational trails.

Prescription and Methods:

- *Type of Prescription:* Clearcut
- *Year Initiated:* 2013
- *Establishment Methods:*

The 14 acre jack pine harvest was comprised of 4 different small sections. The harvest prescription was to harvest all jack pine trees 8 inches in diameter and larger. The stand was harvested in February of 2013 and anchor chained in June 2013.

- *Data Collection Methods:*

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The stand was revisited in September 2014. Fourteen mil-acre regeneration plots were established in order to determine the amount and species of the regeneration present. Competition from herbaceous plants was also noted.

Results: The total number of regeneration in the stand was 3,429 stems/acre. Red maple was the most numerous species with 1,714 stems/acre and jack pine was the second most numerous with 1,143 stems/acre. Aspen was also present in some areas and accounted for 571 stems/acre. Competition from sweet fern, bracken fern and sedges was present but wasn't severely limiting. Slash was heavy in places and was very limiting in areas that were most heavily covered. All of the jack pine within the plots were less than 6 inches in height.

Discussion/Recommendations: The overall distribution of jack pine regeneration throughout the stand was inconsistent, with only 6 of the 14 plots containing jack pine. There were 2 plots that didn't have regeneration of any tree species and had minimal to no herbaceous cover at all because of the amount of slash. Although there was some form of competition found in most parts of the stand, slash was by far the most limiting factor in jack pine regeneration. Removal of the slash by either prescribed fire or by mechanical means could possibly enable more jack pine regeneration throughout the stand.

