Jack Pine

Project Subject/Title: Pre-Sale Scarification in Jack Pine

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Abstract: A 38 acre jack pine stand located within the Brule River State Forest was prescribed to be pre-sale scarified in 2005 by using a straight blade. The initial goal was to expose the mineral soil in order to create a favorable seed bed for the jack pine. It was hoped that there would already be established jack pine regeneration present by the time of the harvest in 2007 and that it would be released and have the advantage over the oak and competing hardwood species present.

Trial Location:

County: Douglas

Township: 47N **Range:** 10W **Section:** 25

GPS Coordinates: Lat: 46°31'50" **Long:** -91°34'18"

Property Name: Brule River State Forest

Baseline Stand Data

- *Cover Type:* Jack Pine
- *Acres:* 38 acres
- *Habitat Type:*
- *Soil Type:* Rubicon Sand
- *Year of Origin:* 2006
- *Total Height:*
- *Site Index Species and Site Index:* 62
- *Mean Stand Diameter:*
- *Total Basal Area per Acre:*
- *Other stand Condition:*

Prescription and Methods:

- *Type of Prescription:* Scarification followed by clearcut
- *Year Initiated:* 2005
- *Establishment Methods:*

The stand was scarified in 2005 using a straight blade. The clearcut harvest was completed two years later in 2007.

- *Data Collection Methods:*

The stand was revisited in July of 2014. A regeneration survey was taken by establishing mil-acre plots throughout the scarified area. An ocular stand assessment was also taken in order to identify competing species as well as the overall success of jack pine throughout the stand.

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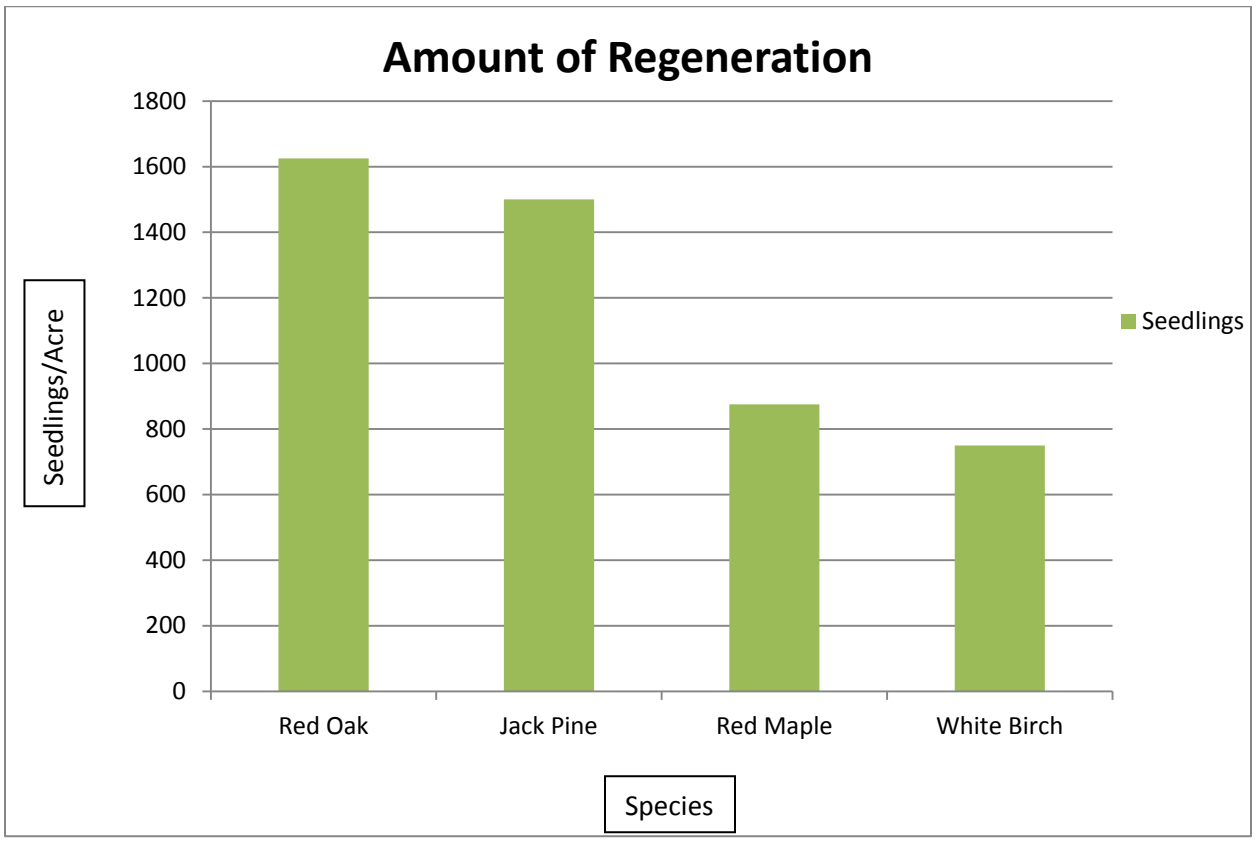
Results: The 2014 regeneration survey showed that oak, red maple and white birch were present along with the regenerating jack pine. Oak showed up in the most plots and had the highest overall regeneration numbers at 1,625 stems/acre. Jack pine came in second with 1,500 stems/acre and was not as well represented throughout the site. Both red maple and white birch were present in less than half of the plots taken.

Discussion/Recommendations: Nearly all of the regeneration measured within the plots was tall and above deer browsing height. Jack pine regeneration was more successful in areas of noticeably greater amounts of scarification. Apart from these areas, oak and other mixed hardwood species were present and generally dominant over the jack pine.



*Data in chart is based on 2014 regeneration survey.