

Jack Pine

Project Subject/Title: Jack Pine and White Spruce Seeding

Contact Person: Langlade County Liaison

Abstract: In 2004 a clearcut was conducted in a 51 acre stand in compartment 114 located in north-central Langlade County. Four years after the harvest was completed, a 3.8 acre site within the harvested area was seeded to jack pine and white spruce. Prior to the seeding, the site was scarified in order to expose mineral soil which would help establish the seeding area. Heavy competition from raspberry, aspen and other hardwoods limited the amount of successful jack pine and white spruce. This was especially evident in the eastern half of the site.

Trial Location:

County: Langlade

Township: 33N **Range:** 11E **Section:** 24

GPS Coordinates: Lat: 45°19'58" **Long:** -89°3'35"

Property Name: Langlade County Forest

Baseline Stand Data

- *Cover Type:* Grass Opening
- *Acres:* 3.8 acres
- *Habitat Type:*
- *Soil Type:* Antigo silt loam/Pence sandy loam
- *Year of Origin:* 2008
- *Total Height:*
- *Site Index Species and Site Index:*
- *Mean Stand Diameter:*
- *Total Basal Area per Acre:*
- *Other stand Condition:* Wildlife opening planted to jack pine and white spruce.

Prescription and Methods:

- *Type of Prescription:* Clearcut
- *Year Initiated:* 2004
- *Establishment Methods:*

The stand was part of a clearcut harvest that was done in 2004. A 3.8 acre portion of the harvested stand was seeded to jack pine and white spruce in 2008. Prior to the seeding, the site was scarified with a 450 JD dozer using a blade to expose mineral soil. The entire area was seeded to white spruce and only the western half was seeded to jack pine.

- *Data Collection Methods:*

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The stand was revisited in each of the first 3 years after seeding and again in 2014. Ocular assessments and height measurements were taken on successful jack pine and white spruce seedlings. Amount and types of competition was also recorded.

Results: In 2008 the planting site was completely covered in nettles. In 2009 and early 2010 there were sparse jack pine and white spruce seedlings that were found to be 4-8 inches and .5-1 inch respectively. Aspen was present as well as heavy raspberry cover and sedge. In late 2010, there were some jack pine measured at 18-36 inches in height in the western half of the stand. Much of the east side was dominated by tall raspberry and aspen. In 2014 when the stand was revisited, there were patches of thick, tall jack pine throughout the western side of the stand while there were very few white spruce seedlings present. Aspen was found throughout the stand. Raspberry was not as much of an issue as in the past.

Discussion/Recommendations: By looking at this stand as a whole, it is evident that the western half will regenerate to a mixture of species with jack pine present in about half of the area. The eastern half will remain to consist of spotty regeneration of hardwoods with little white spruce present. If the eastern half of the stand would have been seeded to jack pine it would have been more successful than on the west side due to the lack of abundant aspen regeneration.

