Project Subject/Title: River-Torch Shelterwood

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Abstract: A white pine stand located in a high traffic area north of Eagle River in Vilas County was harvested using the shelterwood system in 2011. After the first stage of the shelterwood, the stand was scarified with a brush rake also in 2011. Scarifying this pine dominated site should help red and white pine to remain the dominant cover type in the future by exposing mineral soil and creating optimal conditions for regeneration. Creating the best possible conditions for pine regeneration will help give the pine a competitive advantage over unwanted regenerating hardwood species such as red maple.

Trial Location:

County: Vilas

Township: 41N Range: 10E Section: 20

GPS Coordinates: Lat: 46°1’27" Long: -89°15’58"

Property Name: Vilas County Forest

Baseline Stand Data

- Cover Type: White Pine
- Acres: 12 acres
- Habitat Type: PArVAA
- Soil Type: Padus-Pence Complex
- Year of Origin: 1904
- Total Height:
- Site Index Species and Site Index: 60
- Mean Stand Diameter:
- Total Basal Area per Acre:
- Other stand Condition:

Prescription and Methods:

- Type of Prescription: Shelterwood
- Year Initiated: 2011
- Establishment Methods:
  The stand was set up in 2010 for the first stage of a regeneration harvest. The harvest in 2011 reduced the basal area and crown cover to introduce an adequate amount of sunlight for pine regeneration. After the harvest, the site was scarified with a brush rake.
- Data Collection Methods:
  The stand was revisited in August of 2014. Fourteen mil-acre plots were established to record the amount of regenerating pine and other species. Competition for tree species other than pine and shrubs was also recorded.
**Results:** The average amount of regeneration from all plots was 4,429 stems/acre. Red pine and white pine combined to represent the highest number of stems per acre with 2,714. Red maple, white birch and red oak were also present in the seed and sapling layer. Most of the regeneration was short and not advanced. Crown cover in the stand was estimated at about 50%.

**Discussion/Recommendations:** A lot of the hardwood regeneration was browsed, which gives the regenerating white and red pine a chance to become the dominant cover type in the future. The overstory removal that is scheduled to take place in the next 5 years should help release the current regeneration and also encourage additional regeneration from the impact of the logging.