

Intermediate Treatments Tour

31 July 2009

At the end of July, land managers from Minnesota and members of the 'Seeing the Forest AND the Trees' study group, toured forests in north-central Minnesota managed by the Aitkin County Land Department. The tour included a review of intermediate treatments in different forest types, including pine, aspen and hardwood stands.

Intermediate treatments include management activities, such as thinning, that occur during the life of a forest stand and can help meet diverse management objectives, including increased productivity.

The first stop of the tour was a Norway pine thinning. The forester and the operators explained the importance of using the right equipment to protect the residual stand and the crop trees that are being given more room to grow by the thinning operation.

The tour participants could view the thinning operation first hand.

The thinning harvest includes removing about 10 cords of wood per acre and it is a 50-acre treatment area. The income to the land department is \$220.00 per acre.

The next stop on the tour was an aspen thinning treatment. About 5 cords per acre were removed from the 13-acre stand with an income of \$58 per acre. At the site, the group discussed the benefits of intermediate treatments in aspen and how the county is monitoring the results. A review of the literature shows that focusing intermediate efforts on more productive aspen sites is most effective and that it is likely to be uneconomically to thin aspen that is very young.

The third stop of the morning was another Norway pine stand, but unlike the first one, this stand has been thinned three times. The stand is now 50 years old and the trees average 11.5 inches in diameter. The goal of the management is to produce high quality pine sawlogs by using a crop tree release approach. The group discussed some of the concerns about needing to find markets for materials and engaging the industry in developing the opportunities.

At lunch time, the tour reviewed the results of a survey Minnesota's land managers with a presentation by Kathleen Preece of the Minnesota Forest Resources Partnership.

The survey found that about half of the land managers conduct intermediate treatments on a consistent basis. The barriers to expanded use of intermediate treatments include a lack of funding and personnel resources. Despite these barriers, the survey also identified interest in expanding these treatments through education and research support as well as policy changes.

After lunch, the group had a few more stops to make before the day was over.

The mixed pine stand included on the tour offered the group the opportunity to view a second thinning in pine that included the objective of creating openings for white pine regeneration. About 9 cords were cut per acre in the 2008 harvest for an income of \$172 per acre.

After spending time on pine and aspen, the group moved on to hardwood management with a visit to a red oak thinning. The stand is 81 years old and is marked for its third thinning in 2009.

The first thinning in 1987 was for firewood and resulted in about \$18 per acre for income; the second thinning in 1995 included oak bolts and provided \$65/acre.

The third thinning marked for this year includes high quality materials and veneer resulting in \$359 per acre.

The final stop of the day was an oak shelterwood treatment. The harvest was designed to encourage red oak, basswood and paper birch regeneration and corresponded with an excellent acorn and birch seed crop in 2008. The income was \$137 per acre. There are 1,900 red oak seedlings per acre, more than 5,000 birch seedlings per acre and basswood and white pine seedlings as well.

Take Away Messages from the tour

- Minnesota's land managers are using intermediate treatments to meet management objectives, and their experiences illustrate the opportunities to increase productivity.
- Intermediate treatments can be applied in pine, aspen, hardwood and mixed species cover types but need to be aligned with market demands.
- Intermediate treatments can meet objectives for timber products, wildlife, recreation and other ecosystem benefits and services.
- Education, funding and policy support are needed to support the expanded use of intermediate treatments.

For more information, please see the intermediate treatments report available from Dovetail Partners (www.dovetailinc.org).

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