

## **Beltrami County Natural Resource Management**

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Reed, M. 1997. Beltrami County Natural Resource Management. In: Landis, T.D.; Thompson, JR., tech. coords. National Proceedings, Forest and Conservation Nursery Associations. Gen. Tech. Rep. PNW-G TR-419. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 5-7. Available at: <http://www.fcnet.org/proceedings/1997/reed.pdf>

### **TAX-FORFEITED LANDS**

Prior to the 1980's, Minnesota's fifteen counties with natural resource management programs struggled to build professional management programs with very small budgets, lack of professional staff and years of catch-up work on tax forfeited lands which had been largely neglected. Many of these lands are highly productive and contain an abundance of natural resources. These factors, coupled with a surging upswing in demand by a growing wood products industry, an escalating recreational demand, and a growing environmental awareness, have created a keen interest in county-administered tax forfeited land which is a large segment of Minnesota's forest resource and have become a major factor in Minnesota's economy, forest industry, and future well-being.

The county tax forfeited lands in the State of Minnesota are truly assets to be treasured, retained and their diverse resources wisely managed over the long term. Pressure to return tax forfeited lands to the private sector has sometimes been a point of concern which had, in the past, threatened a valuable resource.

To alleviate this concern, in 1979 the Minnesota State legislature enacted an "in lieu of tax" statute (MN Statute 477A) to encourage retention of tax forfeited lands and provide compensation to local taxing districts for the loss in tax base as a result of the retention. Payments to counties began in 1980 and are based upon the acreage of public ownership within each county.

Although tax relief is a primary objective, a portion of the payment is dedicated to intensified natural resource management and subsequent improvement of all resources on tax forfeited lands. Several legislative studies were conducted which justify these payments to counties.

To further intensify natural resource management on county lands, in 1985, the Minnesota Legislature provided for the first forest-intensification grants to counties with a grant to St. Louis County for a pilot project. County Forestry Assistance State Grants were distributed to all counties with Land Departments based upon acres of commercial forest land in each county. Said grants were eliminated by legislative action in 1991.

These payments and grants have been very beneficial in the rapid development of professional natural resource management on county-administered tax forfeited lands. This bodes well for the future of these lands and resources and for the people of the State of Minnesota.

## **LANDS MANAGED**

Minnesota counties manage 32% of the commercial forest lands managed by public agencies which is 17% of all commercial forested lands in the state. From these lands, the counties supply 35% of all wood commercially harvested from public agency lands in Minnesota which equates to 13.49% when all ownerships are considered.

In addition to retaining 2.8 million acres of land, most of which is in dedicated Memorial Forest and nearly all of which is open for public entry, counties also make substantial provisions for recreation and other public services for the people of Minnesota.

## **REFORESTATION**

Prior to 1980, due to inflation and rising energy costs along with a weak timber market, the overall planting efforts of the counties had been declining. In the late 1970s, the counties collectively planted approximately 1,000 acres per year.

In the 1980s, there was a substantial increase in the amount of acres planted on county-administered tax forfeited lands. From 1980 to 1990, counties planted approximately 60,000 acres. This was due in part to funding through the BWCA Grant and the County Forestry Assistance Grant. By 1990, both these grants were complete and planting programs leveled off to average approximately 3,000 acres per year.

Additionally, counties have shown their innovative nature as they strive to improve timber quality and resource production for the future. Many counties are members of the Minnesota Tree Improvement Cooperative and have taken the initiative to establish and maintain seed orchards which will soon produce genetically improved seed and trees for the future.

Experimental plantings of various native and nonnative trees are also pursued on a regular basis to provide diversity and expand alternatives for future wood products.

## **HARDWOOD MANAGEMENT**

Quality hardwood management on county lands has shown a steady increase in the 1980s. In the period from 1980 to 1990, acres of managed hardwoods have more than tripled. The emphasis has shifted from a volume production philosophy to a quality improvement philosophy, because growing quality hardwood products is the key to a successful hardwood management program.

Since 1980, various county land departments have:

- \* Expanded hardwood planting with a variety of species obtained from high quality seed sources
- \* Participated in interagency workshops to increase awareness of techniques to increase quality hardwood growth, ensure adequate hardwood regeneration, enhance wildlife habitat, and improve aesthetic values
- \* Applied timber stand improvement practices to improve hardwood quality

- \* Been involved in logger and sawmill operator workshops to maximize quality products retrieved from county lands.

Hardwood acres properly managed now not only produce immediate income, but increase the potential for much greater income and diversity of forest benefits in future years.

## **WILDLIFE MANAGEMENT**

County land departments strive to promote a diverse, healthy forest which provides a wide range of habitats for both game and nongame species.

## **BELTRAMI COUNTY**

Beltrami County is located in the northwestern part of Minnesota with its county seat located in Bemidji. The department is responsible for the management of approximately 150,000 acres of tax forfeited lands. Of this, approximately 125,000 is commercial timber land. Four field foresters oversee the management on these lands.

## **PLANTING PROGRAM**

Beltrami County has a relatively aggressive planting program. We plant approximately 500,000 trees per year. Species planted include: red pine, Jack pine, white pine, white spruce, and balsam fir. Red pine and jack pine are our predominant species. The following are our observations regarding our regeneration program:

Successful planting often depends on measures such as reduction of competing vegetation and removal of physical obstacles. Mechanical site preparation in conjunction with a chemical application has been a successful practice to ready a site for young seedlings. The county uses either a Bracke Scarifier or a TTS disc trencher when preparing a site to be planted. Chemical application is applied either before mechanical treatment or simultaneously with mechanical treatment. The department has observed that sites treated with chemical a few weeks prior to mechanical treatment tend to provide a better planting site than those sites where chemical is applied at the same time as the mechanical treatment. We have also found that coarse textured soils are harder areas to establish a plantation. This may be a function of the site itself making it difficult for the seedling to establish itself, or difficulty in properly planting the seedling.

Handling of the trees is also an important aspect of successful plantations. The number one issue for success is the handling of the seedlings from the time they leave the nursery to when they are put into the ground. There are many variables that can affect the final success or failure of these seedlings. These include:

- \* Storage temperature
- \* Storage duration
- \* Storage in the field
- \* Planting technique.

The sooner the trees are planted the better the success. The later in the season (after a lengthy

storage period) the better chance for failure. Also the later in the season (as temperatures increase) the better chance of failure. The later in the season, the better success with containerized seedlings.

Beltrami County is committed to a sustainable resource and, through proper regeneration of its lands, this goal can be accomplished.

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