

Vital Forests/Vital Communities

Minnesota's resources policy leaders get a first-hand look at Finnish and

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economic interests. I came away learning that the industry here has to become more of a player and to make additional connections to the Nordic communities. The study included field tours that focused on ecological and social issues of Fennoscandian forestry; visits to district heating facilities and local biomass harvesting sites; presentations on international forestry, forest technology, forest management planning, ecology and biodiversity of boreal forests, wood technology and forest economics; bioenergy income for forest owners; and converting paper mills to biorefineries.



Reception at the U.S. Embassy in Helsinki, Finland. Left Loren Solberg, Commissioner Sandy Layman, U.S. Ambassador Lailich, NRRI, James Marshall, UPM Blandin Paper Mill.



Equipment using new technology for clearing brush around four-year-old planted spruce.

aged forests of Finland could in the future be considered in Minnesota as the result of a study tour involving about 40 of Minnesota's top natural resources policy leaders. The September 27 to October 5 tour studied forestry practices in Finland and Sweden as part of the Blandin Foundation's Vital Forests/Vital Communities Initiative.

The year-long, "Seeing the Forest AND the Trees: How to Make the Most of Minnesota Woods," initiative is aimed at turning the challenges facing Minnesota ecosystem managers into opportunities to improve forest quality and quantity. Forest productivity was listed as a statewide priority in a 2007 assessment by the Governor's Task Force on the Competitiveness of Minnesota's Primary Forest Products Industry.

Increasing forest productivity; concerns about becoming a wood importer rather than an exporter; the parcelization of forest lands; and world competition are major forest concerns in Minnesota. Iron Range Resources Commissioner Sandy Layman, who participated in the tour, said the nine-day study revealed that:

- Forests in Finland are thinned more often than Minnesota forests, leading to higher productivity.
- Finland and Sweden make substantial public investments in forestry research and development.

ger forest industry relationships with Nordic countries. "In northeastern Minnesota, our economy is resource based, and Finland and Sweden have economies that are based on forest products and mining, much like ours," said Layman. "We have very similar

"It is our hope that, through these first-hand experiences and close collaboration, we can turn the challenges facing forest managers in Minnesota into new opportunities to improve quality as well as quantity," said Bernadine Joselyn, Blandin Foundation director of public policy and engagement. "It has been very valuable to have Commissioner Layman in the field with us, and Iron Range Resources will be a critical partner as innovations grow out of our learning."

"While Nordic countries are continually trying different harvesting techniques, the forest industry is highly-productive due to frequent forest thinning, sophisticated harvesting techniques, market development, research and development investment and worker training," said Layman. "What we saw in Finland was the loggers were able to use the whole tree," said Layman. "The people

who are in the woods are well trained, and the trees were efficiently harvested and marketed domestically. We can learn from that."

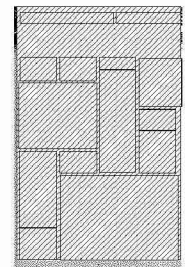
"Iron Range Resources is committed to providing financial assistance to bioenergy development initiatives across northeastern Minnesota," said Layman.

State Senator Tom Saxhaug and Representative Loren Solberg, both of Grand Rapids, said they and other tour participants found Finland's forests to be productive, but in many ways different than Minnesota's.

"They look like plantations," said Saxhaug. "There's no wildlife in them. I think we learned from each other and I think we learned about more effective ways to manage forests. But I think after looking at their forests and the way we manage our wildlife, ours is the way to go."



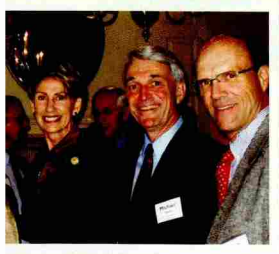
The Minnesota delegation of Seeing Forests AND the Trees study tour in Sweden gathers at the end of the trip.





Initiative

Swedish forestry methods



Right: State Senator Tom Saxhaug, State Representative Barbara McConnell Barrett, Michael Lalic

management practices; and better utilizing school trust lands. "But I don't think you want to adopt everything that they do over here," said Solberg. "There can be drawbacks in that too, because they don't manage their forests for birds or wildlife. I think what they are trying to do is to change to become more diverse as well."

Tour participants learned about the potential to produce energy such as methanol from paper mill waste products, municipal biomass use, strict environmental regulations, and huge public and private capital investments for forestry research and development, said Michael Lalic, director of the Natural Resources Research Institute in Duluth.

However, the two Nordic countries fundamentally view forests as an agricultural resource and utilize productivity practices that "are pretty severe," he said.

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Study tours in Aitkin County and Thunder Bay, Ontario were also part of the year-long Blandin Foundation initiative, giving participants an understanding of forestry practices in three distinctive regions.

The Blandin Foundation, based in Grand Rapids, is Minnesota's largest rural-based private foundation.

The "Seeing the Forest AND the Trees: How to make the Most of Minnesota's Woods," study identified five areas in which the study participants intend to focus its work:

1. Develop a forest bioenergy strategy for Minnesota.
2. Develop incentives that appeal to non-industrial private forestland owners and draw them into

"We're doing it right." Saxhaug on October 29 discussed the tour at a Natural Resources committee hearing in St. Paul attended by 18 state senators.

The state, said Saxhaug, should examine more efficient methods of managing school trust lands to produce additional forest harvest revenue for education.

Revenues from timber sales, land sales, mining royalties and surface and gravel leases and hunting cabin leases on school trust lands are deposited into the state's Permanent School Fund. Interest from the fund provides payments to K-12 schools. In 2007, the fund generated about \$25 million in spendable income.

"We have some school trust lands that are old growth forests or swamps that we could exchange for other forest lands," said Saxhaug. Solberg said the nine-day tour included seven airplane rides and eleven bus trips.

"It was very intense," said Solberg. "It was really interesting to see how forests are managed. In Finland, they harvest three or four times during the growth of a forest. They don't waste much."

Solberg said Minnesota could consider using more wood for bioenergy; developing community forest networks such as in Finland; implementing more intensive



Shoreline view from the ferry on the way to Lieksa, Finland.

"They remove everything, including the stumps, and I didn't see any wildlife in the forests," said Lalic. "But it was an absolutely excellent trip. I think the whole group came away saying there's plenty of potential to look at the use of more biomass from our forests for energy

organizing, management and conservation, using Itasca County as a pilot study area.

3. Use intermediate harvest to advance forest productivity, whether for timber, wildlife, recreation, biodiversity or biomass.
4. Rationalize ownership and intensify management of School Trust Lands.
5. Build a statewide and regional constituency for investment in productive Minnesota forests.

Forest facts comparison	Minnesota	Finland	Sweden
Population	5,155,000	5,244,749	9,045,389
Population density (pop./acre)	10	06	08
Land area (acres)	50,985,000	83,557,449	111,188,525
Total forest area (acres)	16,349,000	46,834,238	69,189,223
Productive forestland (acres)	15,038,000	33,538,200	53,000,000
Productive forestland as %	92%	59%	77%
Forest as % of land area	32%	68%	62%
Reserved forests (acres)	935,000 (6%)	6,820,108 (12%)	9,800,000 (11%)
Total public timberland	54%	63%	39%
Total private timberland	46%	61%	52%
State & Federal research (US\$ million)	\$5 million	\$87 million	\$58 million
Annual harvest (billion cubic ft)	0.34	2.4	1.7
Forestry workers	42,000	86,000	91,000

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- Forests in Finland are thinned more often than Minnesota forests, leading to higher productivity.
- Finland and Sweden make substantial public investments in forestry research and development.
- All of the wood grown in Finland's forests is utilized, including the stumps.
- Finland has a highly-developed biomass industry with community-based heating plants fueled by wood.
- Opportunities exist for a 2009 state trade mission to forge stronger forest industry relationships with Nordic countries.

"In northeastern Minnesota, our economy is resource based, and Finland and Sweden have economies that are based on forest products and mining, much like ours," said Layman. "We have very similar economic interests. I came away learning that the industry here has to become more of a player and to make additional connections to the Nordic communities."

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