



Seeing the Forest AND the Trees:  
How to Make the Most of Minnesota's Woods



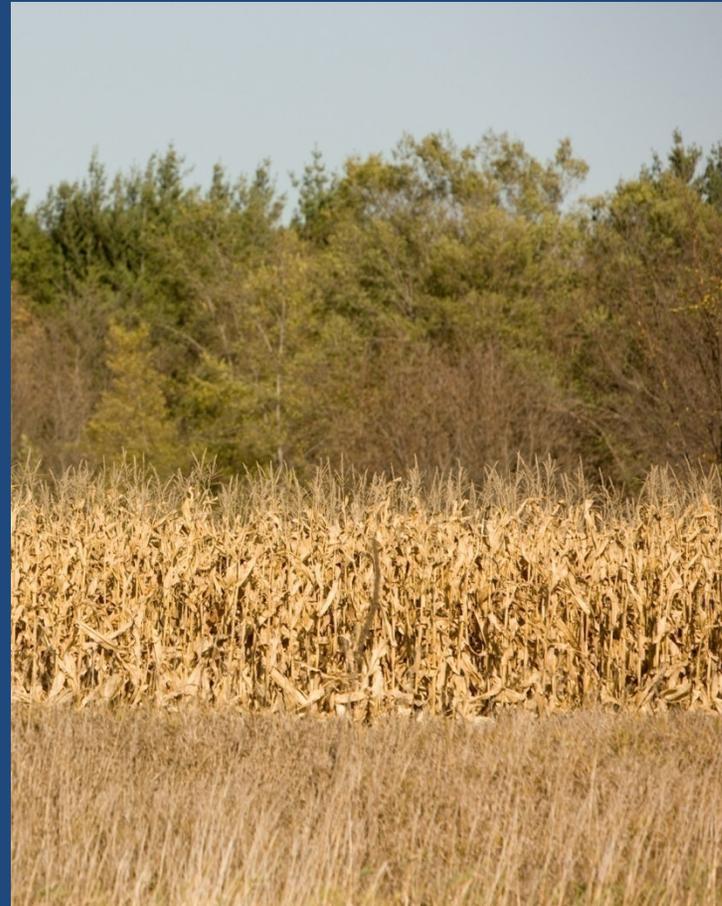
**Summary of experiences, preliminary findings**



**Why study forest productivity?**

## Study focus: Are we making the most of Minnesota's forests?

- Communities, industries and ecosystems depend on them
- Our forest productivity lags others'
- Public engagement nationally has declined
- Mixed ownership here poses complications
- We have a new generation of forests and new tools at our disposal
- Minnesota is in a good position to capitalize on biomass, other emerging markets
- The need to improve the productivity of Minnesota's forests is a recognized priority.



## Seeding long-term impact

Blandin Foundation convened a diverse cohort of 40 leaders from throughout Minnesota:

- Conservationists
- Foresters
- Researchers
- Landowners
- Public Officials
- Manufacturers and Loggers





## A study approach

Three distinct experiences of relevance to Minnesota:

- Aitkin County, Minnesota
- Thunder Bay, Ontario
- Finland and Sweden



**Leg One: Aitkin County and UPM lands in Minnesota**  
At the southern edge of the pines' range and in the heart of  
northern hardwood country

## We heard locally that:

- Forests are critically important as both economic and ecological assets to forest-based communities
- Investments in innovation, including ecological classification and third-party certification, are making a positive difference

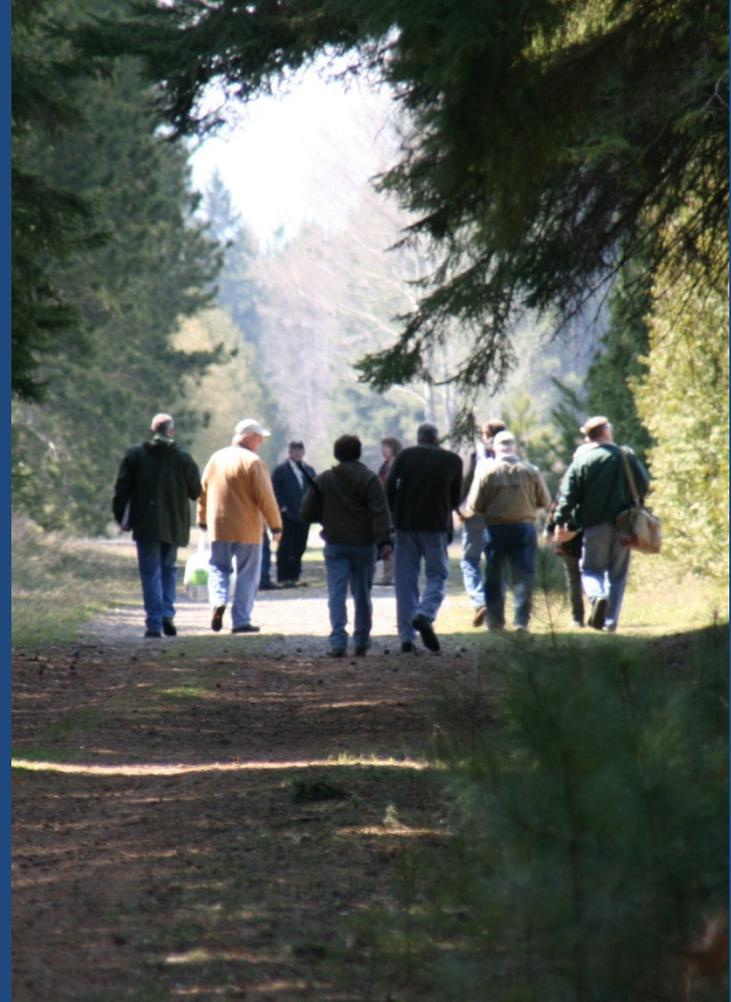




**Leg Two: Thunder Bay, Ontario**  
The heart of Canada's boreal forest

## What Canada taught us:

- They model historic, large-scale fire disturbance using clear-cuts as their primary management tool
- Dependence on commodity building product and paper-making economies is particularly painful now with huge swings in those markets
- The province's massive "green" energy commitments offer both challenge and opportunity
- Ontario's forest-based economies are being forced to reinvent themselves
- New focus on diversification, strategic partnerships to leverage demand for green energy, heavy investment in research and technology





## **Leg Three: Finland and Sweden**

Into the heart of the Boreal wood basket

## Participants identified 9 “key learnings” in Scandinavia

### 1. Cultural context matters; we can adapt, but should not necessarily adopt, others’ best practices.

*“We can learn from and apply some of the Finnish forestry practices, but they are not perfect and we need to commingle our best and their best practices.”*

*“Cultural uniformity has made it possible for these countries to perform marvelous forestry and get solid results. MN will be challenged in agreeing on a course of action, partly because of our diverse interests and constituencies.”*



Conversation with Finnish social scientist

## 2. Doing a better job of engaging family forest land owners (NIPFs) is key to increasing forest productivity in Minnesota.

*“To enhance forest productivity in MN, we will have to invest a lot more in NIPF management.”*

*“Forestry associations and cooperatives can serve as a huge assist for private forest owners.”*



Landowners in Sweden receive tax incentives for active forest management, such as for this family's new forest road

### 3. Intermediate harvests can be an effective tool for increasing forest productivity....

*“MN could make much more use of intermediate harvests, but will require investments in research and development of markets for small wood.”*

*“The key to everything we need to do in MN is to create a shift in stand characteristics and management policy such that landowners can receive frequent income from stand treatments. This means, in general, a greater proportion of both older and later successional stands.”*



Demonstration and discussion of intermediate harvests,  
Finland

#### 4. ...as long as we don't go overboard.

*“To increase forest productivity in MN, we need to apply... pre-commercial and commercial thinning more extensively ... though not to the extent that these practices are used in Finland because of potential adverse environmental impacts.”*

*“Some Finnish and Swedish ... practices have significant adverse environmental impacts, and should not be adopted in MN (e.g., peat mining, stump removal).”*

*“Some of the Finnish practices deeply disturbed me.”*



Experimental stump removal following final harvest, Finland

## 5. Minnesota should do more to use wood for energy....

*“Building on the experiences of Finland and Sweden, MN should develop a coherent strategy for expanding use of wood for energy in a way that benefits the existing forest products industry.”*

*“Development and implementation of an alternative energy strategy for Minnesota is an imperative.”*



Biomass collected from the residue of a recent harvest in Finland.

## 6. ... district heating projects in particular

*“Small, community-based biomass energy centers are important to both address clean energy goals and provide markets for fiber derived from intermediate harvests.”*

*“There is great opportunity for MN in district heating.”*



District energy facility, Enon, Finland

## 7. Increasing forest productivity will require increasing investment in forests.

*“Even with poorer soils, Finland has demonstrated that investments in forest productivity can pay off in a big way.”*

*“Forestry research investments in Finland (about \$600 million in 2008) dwarf comparable U.S. research investments that are relevant to MN. MN forestry interests need to devise an integrated forestry research strategy that will enhance MN forest industry's global competitiveness while sustaining the environment.”*



**8. Science is the best tool to help public and policy makers understand and embrace the important role forests can play in mitigating global climate change.**

*“Forest management best practices and public policy recommendations should be based on this emerging science and take advantage of the ecological urgency and economic opportunities that accompany global climate change challenges.”*



Forest research station, Thunder Bay, Ontario

**9. We must think regionally;  
our forests know no state or  
national boundaries.**

*“A spirit of cooperative regionalism should be fostered rather than a competitive ‘us vs. them’ mindset.”*

*“Opportunities to create a cross-border, value-added supply chain in the Great Lakes region should be pursued in order to compete with other global supply chains. This should include exploring ways to balance the pulp and paper industry with new markets and new approaches to wood utilization in order to shift the focus to higher value products.”*



Forest products company owned by private forest landowners coop in Sweden

## 10. The biodiversity of Minnesota's forests is an important asset.

*“Despite the preeminence of the Nordic countries in pulp and paper economy, they did paint themselves into a corner by putting too much emphasis on a narrow niche of possible wood-based industries. This worked well for decades, but apparently is not working so well right now. Diversity would have been better in the long run.”*

*“Our forests are more diverse and healthier.”*



Site that had previously burned, near Joensuu, Finland

## 9. Deepened relationships will help.

*“Getting to know each other so well will help us work well together going forward.”*

*“Getting a group of stakeholders together like we had for an extended period of time really helps foster improved working relationship and a better understanding of the multiple perspectives each of us have.”*



## What's Next?

Moving forward, our participants identified opportunities for further collective action....

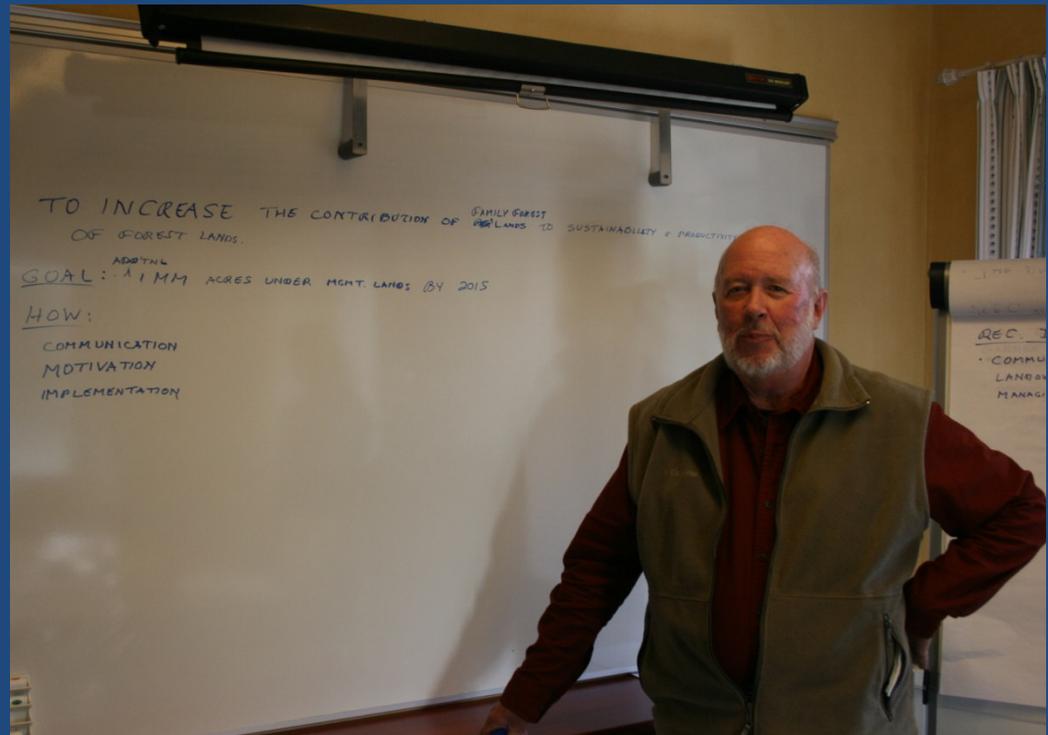
.. And self organized into Action Teams.



Pulling together all that we experienced and learned, outside of Stockholm, Sweden

## Action Team Recommendations

1. Develop a forest bioenergy strategy for Minnesota.
2. Develop incentives that appeal to NIPFs and draw them into organizing, management, conservation, using Itasca County as a pilot area.



## Action recommendations continued:

3. Use intermediate harvest to advance forest productivity, whether it's for timber, wildlife, recreation, biodiversity and biomass.
4. Rationalize ownership and optimize management of School Trust Fund lands.
5. Build a statewide and regional constituency for investment in productive forests.





## **Minnesota leaders are in the driver's seat**

Moving forward, the work of leveraging the learning for this year of study rests with participants. Within days of returning to Minnesota, work began to shape action and to leverage new connections.