Sustainable Forest Management Indicators

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Great Lakes Forest Alliance

The Great Lakes Forest Alliance

- Governor's Charter in 1987
  - Michigan, Minnesota, Ontario, Wisconsin
- Forum
- Emerging Issues
- Regional Significance
- Using Science and Experience
- Affect Policy and Practice
- Public and Private Forest Lands
- Open and transparent process
- Among people of integrity
- Diverse forest perspectives

Great Lakes Board of Trustees

- Governor/Premier's Appointee
- Chief/State Forester
- Four Additional Delegates per Jurisdiction
  - Academia/Research
  - Forest Products/Tourism Industry
  - Woodland Owners
  - Conservation groups
  - Citizens

Indicator Development

- Regional Forest Resources Assessment
  - Universities, Research Centers
- Interdependence of Ecological, Economic, Social
- Add insight to other processes
- Broad development and prioritization at Wingspread

Ecological Pillar

- Amount of forest area - cover types, age classes
- RTE forest based species, habitat
- Trends in the area of forest land
- Impact of forest activities on soil
- Compliance & effectiveness of water quality BMP's

Ecological Indicator

Sample #1 - Abundance of, and trends in, rare, threatened and endangered forest-based species

- Description: This indicator requires an analyst to provide more depth to an accounting of rare, threatened and endangered species than a mere listing of numbers provides. A distinction must be made between species that have always been rare in the region and those that are decreasing due to human activity.
- Metrics: State/Provincial agencies of natural resources, Partners in Flight, Breeding Bird Survey, US Fish and Wildlife Service, USDA Forest Service, The Nature Conservancy, Nature Conservancy Canada, Federation of Ontario Naturalists, Herpetological Society
- Scale: State/Provincial

Ecological Indicator

Sample #2 - Compliance with, and effectiveness of water quality Best management practices

- Description: Monitoring compliance with established BMPs may be the most practical indirect measure of effects of forest practices on water quality.
- Metrics: Site specific Best Management Practices Reports: DNR, DEQ, MNR
- Scale: State/Provincial; County/Forest Management Unit; Woodlot

Economic Pillar

- Trends in forest land area
- Forest recreation impacts/opportunities
- Annual harvest vs. net forest growth
- Direct/indirect economic activity
- Economic diversity
- Production vs. consumption

Social Pillar

- Cultural, spiritual, personal values
- Community vitality, health, well-being, capacity
- Public participation in decision-making
- Formal legal framework including the capacity to measure and monitor

Lessons Learned from Deliberative Process

- Forest Loss
- Disturbance
- Selected Species
- Non-natives
- Cover types
- Statistical Validity of BMP's

Applications to Policy & Practice

Wisconsin Forests at the Millennium

- Booklet
  - Developing Options-

The Statewide forest plan is an effort by DNR forestry and our citizen partners to articulate a commonly held vision for our forest resources and lay out a strategy to achieving that vision. Given that our forests touch every one of Wisconsin's citizens, and countless visitors to our state, we have a large task ahead of us. We are taking a comprehensive view of the forests, accounting for their ecological, economic and social significance. All forests, including county, state, federal, urban and private (industrial and non-industrial) are considered in the planning process.

Assessing the state of Wisconsin's forests was the first stage of the planning process. In this assessment, completed in November of 2000, we identified 45 trends and issues currently facing our forests. With the help of our public and partner organizations we will focus on the most critical trends and issues in the final Statewide Forest Plan.

Wisconsin's forests have a rich history and a bright future. We hope you will join us in celebrating the many benefits we receive from forests and in working together to set a course for their future management and protection.

Applications to Policy & Practice

- Great Lakes Forests at a Glance
- Community SFM Handbook
- World Summit on Sustainable Development

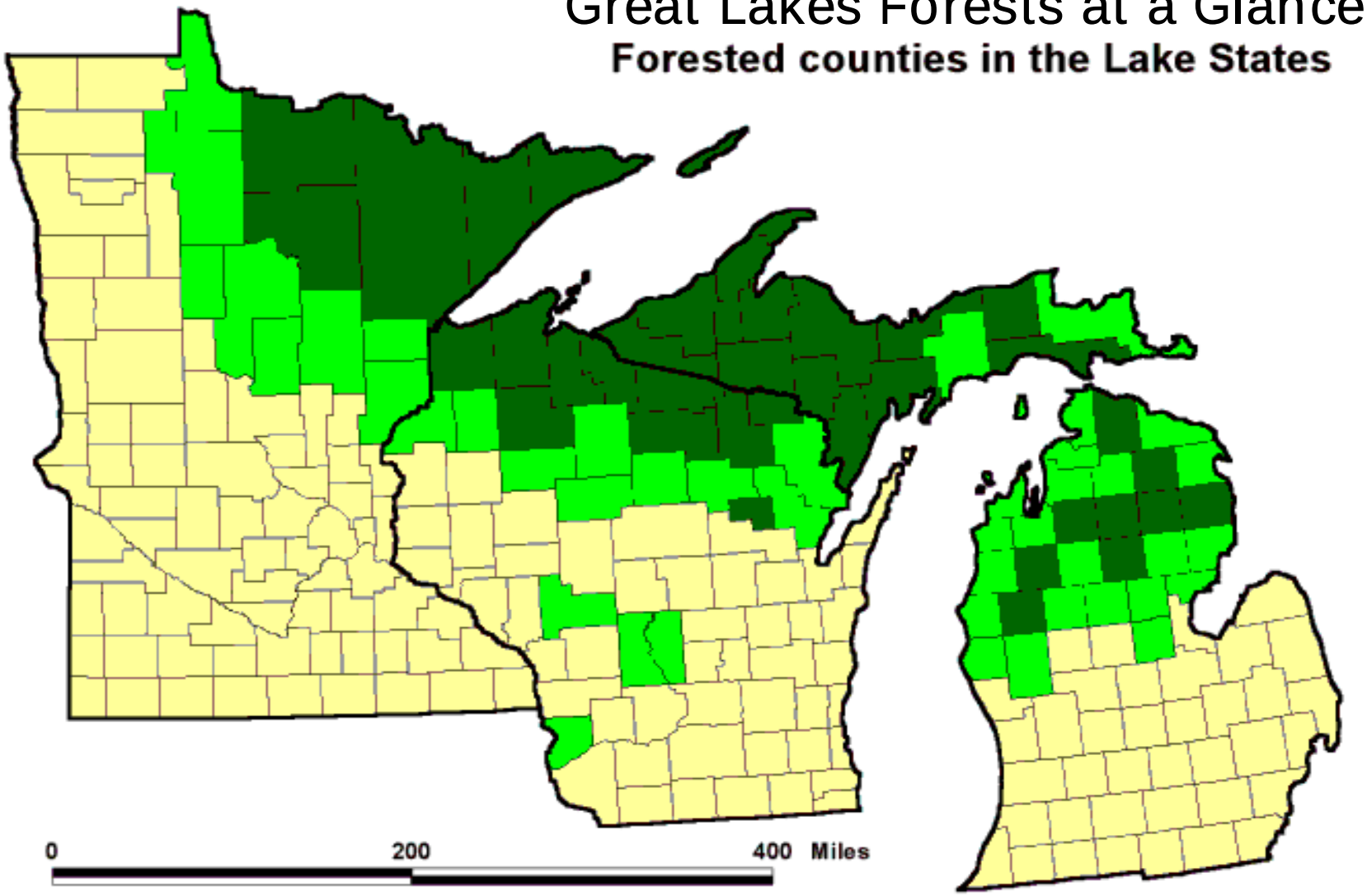
Great Lakes Forests at a Glance

Better data = Better decisions

- Data Work Group
- Jurisdictional /Regional
- Matched to Indicators
- Data limitations

Great Lakes Forests at a Glance

Forested counties in the Lake States



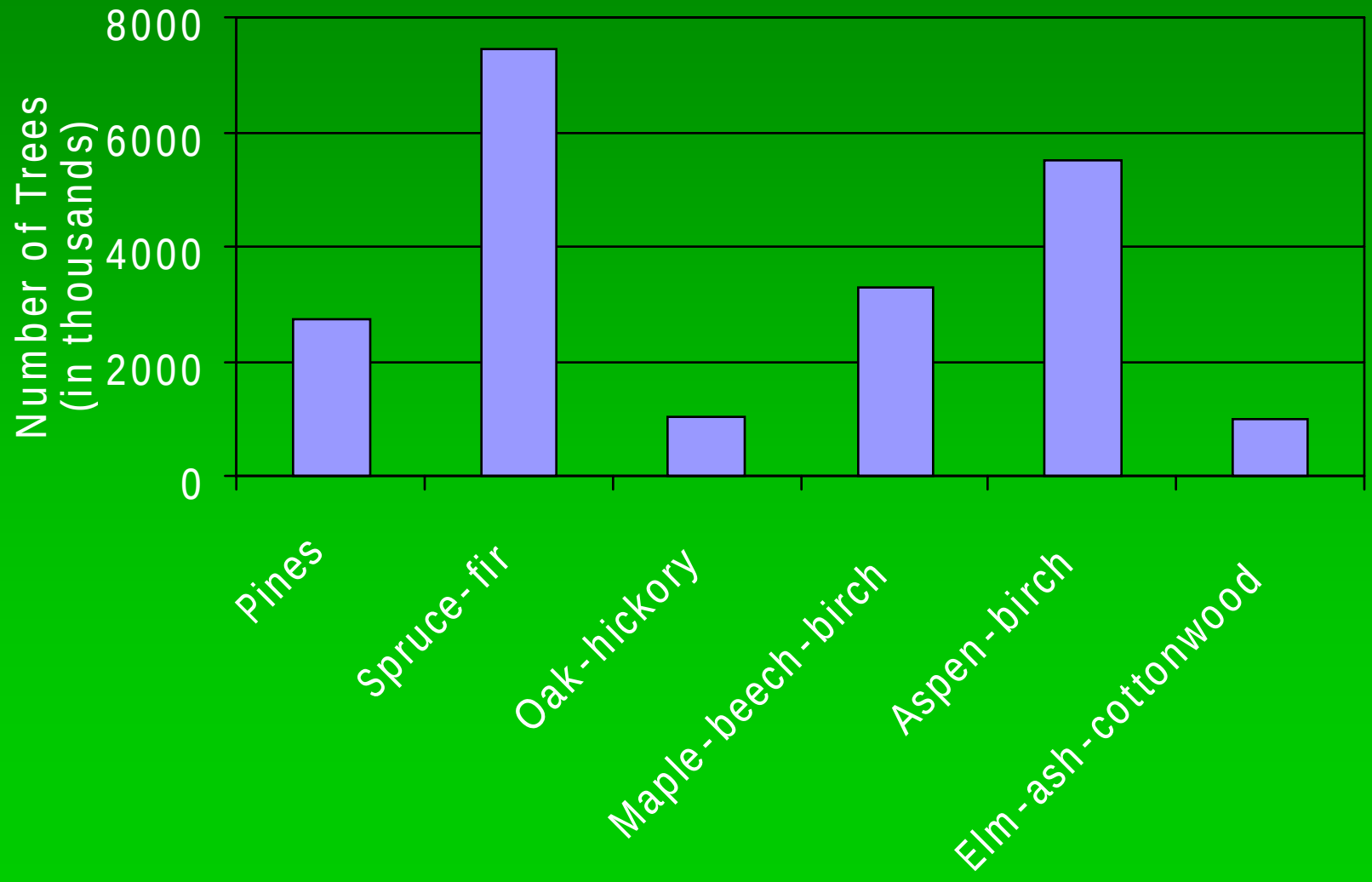
Map prepared by: USDA Forest Service
Natural Resource Information System
Human Dimensions Module

Percent forested land

- Less than 50 %
- 50 - 75 %
- 75 - 100 %

Great Lakes Forests at a Glance

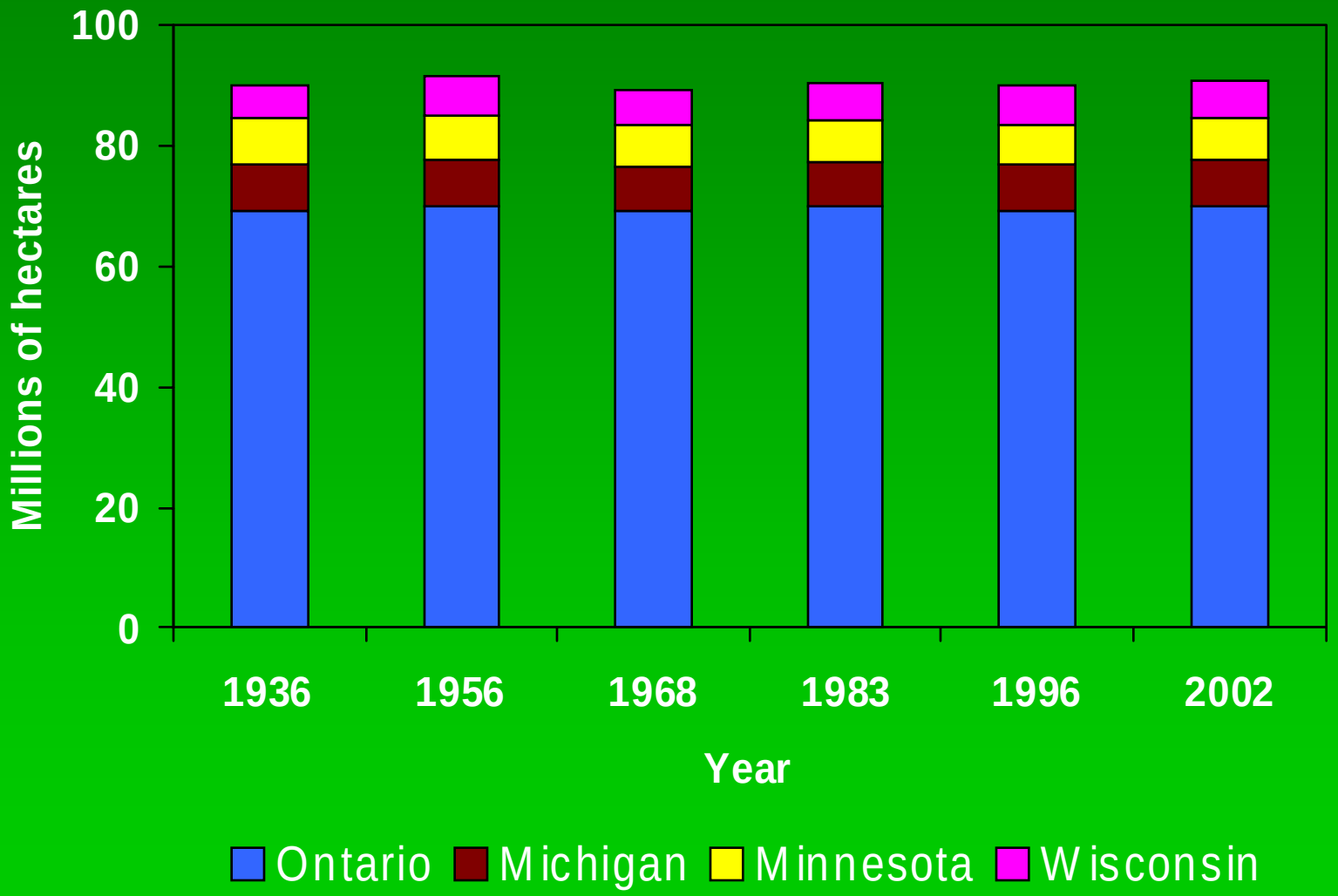
Regional Tree Diversity (1990 -1999)



USDA Forest Inventory Analysis & Ontario Ministry of Natural Resources

Great Lakes Forests At A Glance

Forested Land by Jurisdiction



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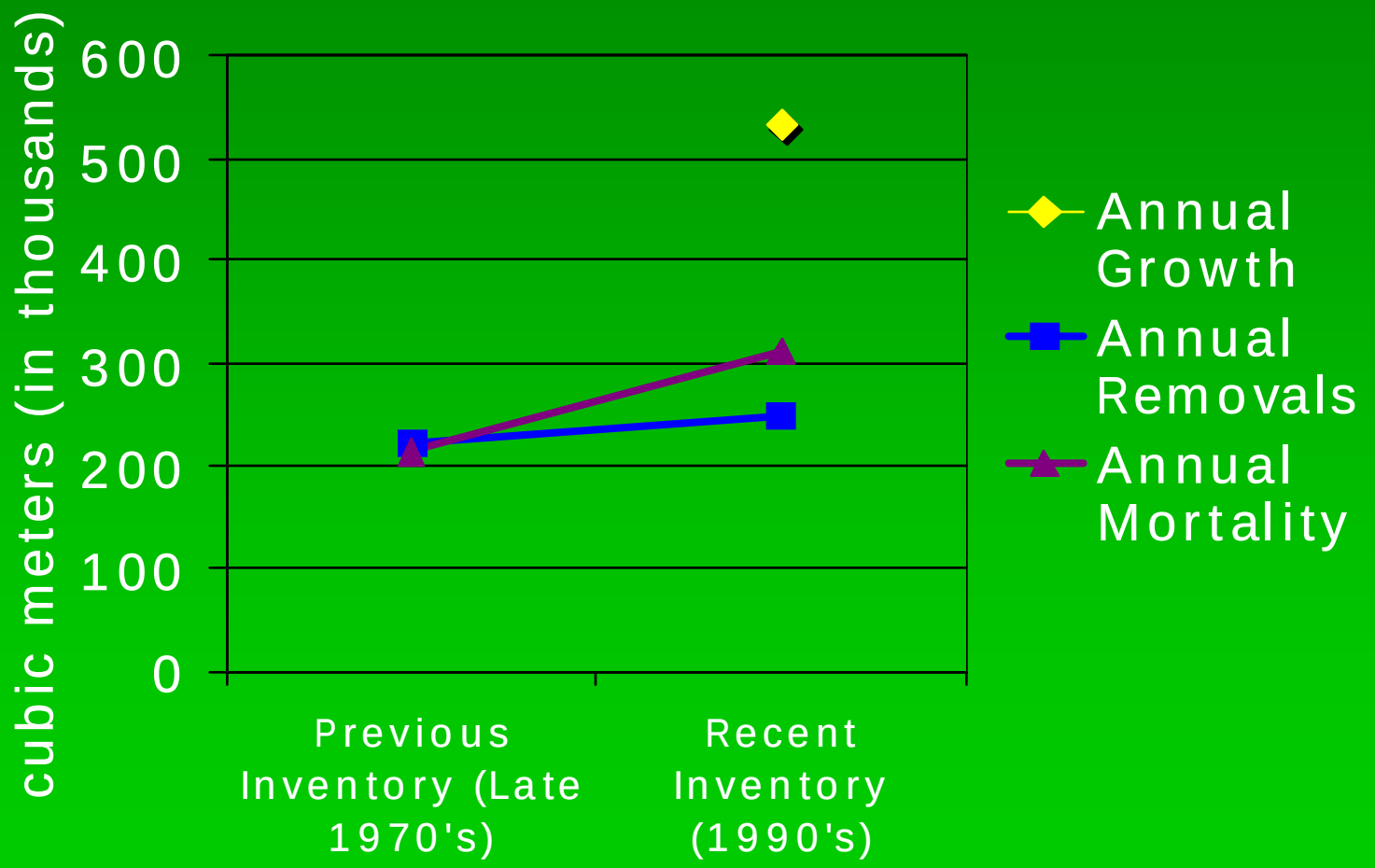
Great Lakes Forests at a Glance

Regional Annual Growth-Removals-Mortality

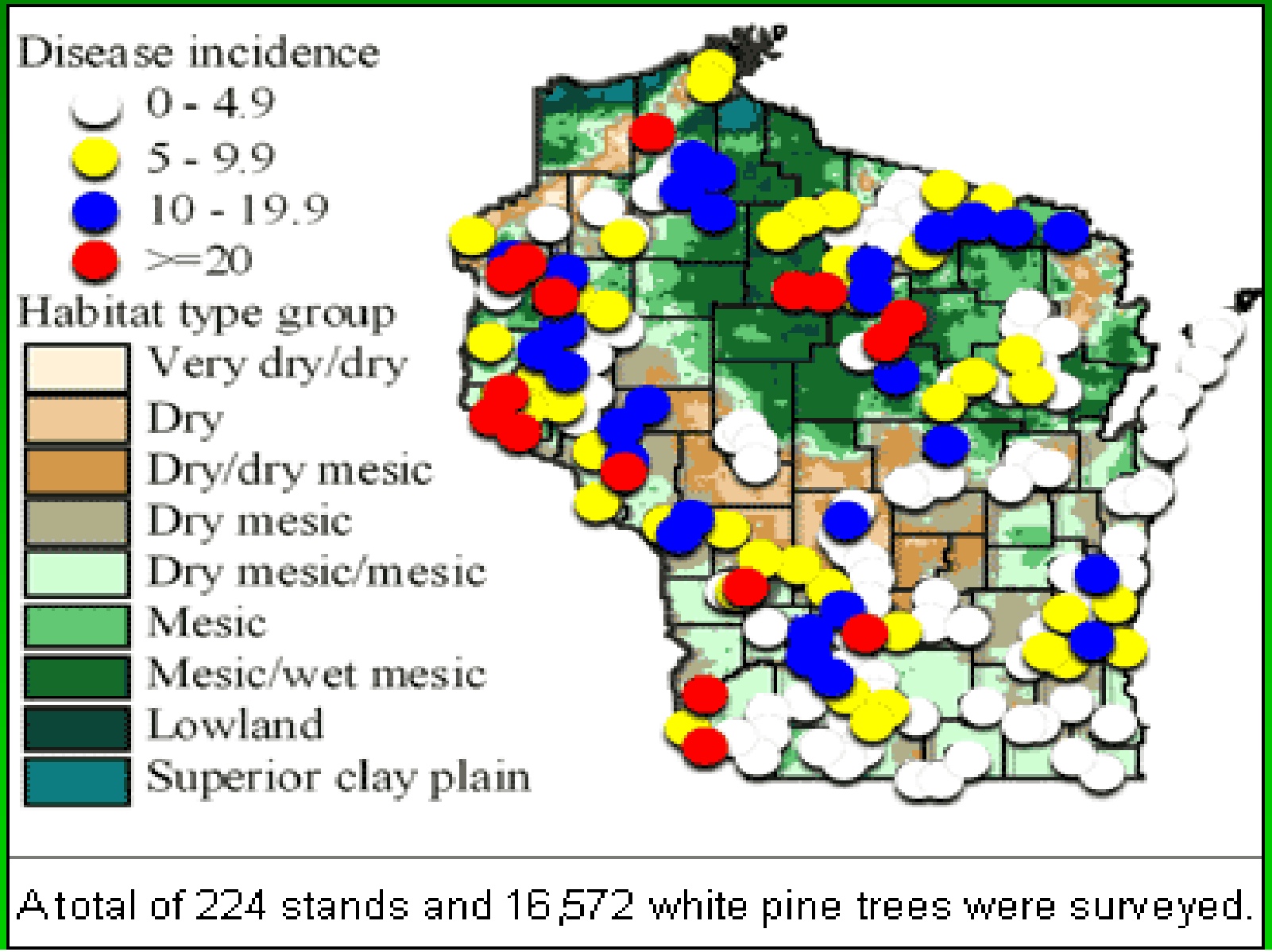


USDA Forest Inventory Analysis & Ontario Ministry of Natural Resources

Community SFM Handbook

- Understanding of forest sustainability
- Historical perspectives
- Community case studies
- Process ideas
- Data sources

Community SFM Handbook – Forest Disturbance



A total of 224 stands and 16,572 white pine trees were surveyed.

World Summit on Sustainable Development

Great Lakes Forest Alliance

Serving Michigan, Minnesota, Ontario and Wisconsin in North America to address emerging forest resource issues of regional significance and make research, policy and practice recommendations

Annual Forest Resource Data

*65% of the land base is forested

*90.1 million hectares forested land as compared to 89.3 in 1987, 124.6 in 1953 and stabilizing as forest conversion to development is counter-balanced by agricultural land conversion to forests

*111.6 million m^3 net growth

*53.8 million m^3 roundwood production

*186 million trees are planted

*1.3 million people employed in timber and tourism sectors

*$18.6 billion ($US) employment compensation in timber and tourism

*7.3 million anglers and hunters

Great Lakes Forest Alliance, Inc.


Imagine an island nation who creates laws to protect the ecological resources of its forests yet its consumption patterns force intensive harvesting in other countries.
Unless it aggregates data globally, it can ignore the impacts of its practice on global forests.
-Sylvia Karlsson

Challenges Ahead

- Robust Deliberation
- Among People of Integrity
- With Diverse Forest Perspectives
- Global Implications
- Biological, Economic & Social Integrity
- From a Global Perspective


Thank You!
Great Lakes Forest Alliance
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