

Laurentian Mixed Forest Province



Quick facts

Acres: 23,166,417 (43% of state)

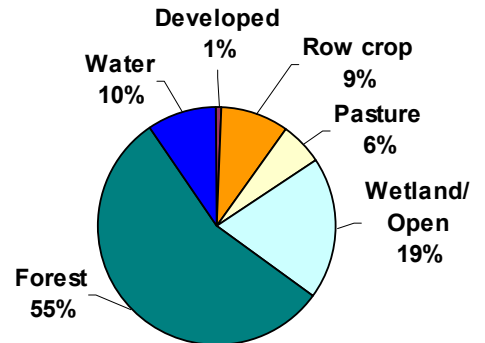
Ownership

Public	Private	Tribal
47.4%	49.3%	3.3%

Population density (people/sq. mi.)

Current	Change (2000-2010)
22.7	+2.5

Current Land Use/Land Cover



Overview

When people imagine the northwoods of Minnesota, more than likely they are thinking about the Laurentian Mixed Forest Province. It is the largest of Minnesota's four provinces, covering two-fifths of the state. The Laurentian Mixed Forest Province traverses northern Minnesota, Wisconsin, and Michigan, southern Ontario, and the less mountainous parts of New England. In Minnesota, the Province is characterized by broad areas of conifer forest, mixed hardwood and conifer forests, and conifer bogs and



L. Gerdes MN DNR

A landscape view of the Laurentian Mixed Forest Province – Subsection

swamps. The landscape ranges from rugged lake-dotted terrain with thin glacial deposits over bedrock, to hummocky or undulating plains with deep glacial drift, to large, flat, poorly drained peatlands. Both the highest and lowest elevation points in the state occur in this province.

A distinctive suite of boreal forest species inhabits this province, contributing to the diversity of Minnesota's wildlife. The state has become nationally known for the wildlife-watching opportunities in this region because of the presence of such species as great gray owls, Connecticut warblers, boreal owls, northern hawk-owls, and boreal chickadees. Other wildlife in this province includes moose, forest salamanders, and northern brook lamprey.

Today this area supports many industries, including recreation, tourism, mining, and forestry. Every summer, the area swells in population as people flock to the bountiful recreational opportunities provided by the lakes and forests. While the majority of this province remains forested, the age and composition of the forest has changed. These changes have affected key habitats available to Minnesota's wildlife.

Province Subsections

[Agassiz Lowlands](#)

[Border Lakes](#)

[Chippewa Plains](#)

[Glacial Lake Superior Plain](#)

[Laurentian Uplands](#)

[Littlefork Vermilion Uplands](#)

[Mille Lacs Uplands](#)

[Nashwauk Uplands](#)

[North Shore Highlands](#)

[Pine Moraines and Outwash Plains](#)

[St. Louis Moraines](#)

[Tamarack Lowlands](#)

[Toimi Uplands](#)

Summaries of Species in Greatest Conservation Need

A list of the species in the province, including identification of those unique to the province, is found in [Appendix F](#). Table 5.10 presents the number of species in greatest conservation need in each subsection and the number unique to each subsection. Subsections are ranked from most to fewest SGCN. This ranking can help conservation stakeholders prioritize their efforts in a province. For example, the 128 SGCN found in the Mille Lacs Uplands Subsection is substantially higher than the other subsections and is a large proportion of the total of 171 SGCN that potentially occur in the Laurentian Mixed Forest Province. Thus, conservation stakeholders may want to focus more attention on the Mille Lacs Uplands than on other subsections. Further investigations into the reasons for these differences should be carried out during implementation of the CWCS.

Table 5.10. Number of SGCN in and Number Unique to the Laurentian Mixed Forest Province by Subsection

Subsection	Number of SGCN	Number of SGCN Unique to Subsection
Mille Lacs Uplands	128	6
Pine Moraines and Outwash Plains	89	1
Agassiz Lowlands	88	1
North Shore Highlands	84	6
Chippewa Plains	83	1
St. Louis Moraines	74	0
Tamarack Lowlands	69	0
Border Lakes	69	2
Littlefork Vermilion Uplands	67	0
Nashwauk Uplands	60	0
Laurentian Uplands	58	0
Glacial Lake Superior Plain	55	0
Toimi Uplands	52	0
Laurentian Mixed Forest Province	171	47

SGCN Problem Assessment

The SGCN problem assessment provides information on the factors influencing the vulnerability or decline of SGCN that are known or predicted to occur in the province. The following table lists the percentage of SGCN in the province influenced by nine possible factors or problems. The results of the species problem assessment indicate that habitat loss and degradation in the province are the predominant challenges facing SGCN populations.

Table 5.11. SGCN Problem Analysis for the Laurentian Mixed Forest Province

Problem	Percentage of SGCN for which this is a known problem.
Habitat Loss in MN	75
Habitat Degradation in MN	83
Habitat Loss/Degradation Outside of MN	28
Invasive Species and Competition	31
Pollution	33
Social Tolerance/Persecution/Exploitation	21
Disease	3
Food Source Limitations	4
Other	11

NOTE: The inverse of the percentages for each problem does not necessarily represent the percentage of SGCN for which the factor is not a problem, but instead may indicate that there is not sufficient information available to determine the level of influence the factor has on SGCN in the subsection.

Summaries of Key Habitats

Table 5.12 ranks the habitats by the frequency with which they are identified in the subsections as key habitats. Table 5.13 ranks the subsections by their number of key habitats.

Table 5.12. Frequency of Key Habitats in the Laurentian Mixed Forest Province by Subsection

Key Habitat Ranked by Frequency	Number of Subsections	Percentage of Subsections
River-Headwater to Large	13	100
Forest-Upland Conifer	12	92
Forest-Lowland Conifer	10	77
Shrub/Woodland-Upland	6	46
Wetland-Nonforest	5	38
Lake-Deep	4	31
Forest-Upland Deciduous (Hardwood)	3	23
Shoreline-dunes-cliff/talus	3	23
Forest-Upland Deciduous (Aspen)	1	8
River-Very Large	1	8

Table 5.13. Number of Key Habitats in the Laurentian Mixed Forest Province by Subsection

Subsection	Number of Key Habitats
Mille Lacs Uplands	9
Border Lakes	5
North Shore Highlands	5
Nashwauk Uplands	5
Agassiz Lowlands	4
Chippewa Plains	4
Glacial Lake Superior Plain	4
Laurentian Uplands	4
Pine Moraines and Outwash Plains	4
Tamarack Lowlands	4
Toimi Uplands	4
St. Louis Moraines	3
Littlefork Vermilion Uplands	3

Assessment of SGCN and Key Habitats

Table 5.14 provides the number of species that use at least one key habitat at the subsection, province, and statewide scales. Subsections are ranked within each province by the percentage of SGCN that use at least one key habitat in the subsection. The number of SGCN that benefit from the key habitats varies greatly among the subsections in the Laurentian Mixed Forest Province. Nearly 50 percent of the species in the St. Louis Moraines and the Glacial Lake Superior Plains subsections do not use the key habitats identified in these subsections. Further investigations into the reasons for these differences and appropriate actions necessary to address them should be carried out during implementation of the CWCS.

Table 5.14. SGCN That Use Key Habitats in the Laurentian Mixed Forest Province by Subsection

Subsection	Total Number of SGCN	Number of SGCN Using at Least 1 Key Habitat	Percentage of SGCN Using at Least 1 Key Habitat
Mille Lacs Uplands	128	125	97.7
Chippewa Plains	83	74	89.2
Laurentian Uplands	58	51	87.9
Pine Moraines and Outwash Plains	89	77	86.5
Tamarack Lowlands	69	59	85.5
Toimi Uplands	52	44	84.6
North Shore Highlands	84	69	82.1
Border Lakes	69	56	81.2
Nashwauk Uplands	60	48	80.0
Agassiz Lowlands	88	67	76.1
Littlefork Vermilion Uplands	67	46	68.7
Glacial Lake Superior Plain	55	31	56.4
St. Louis Moraines	74	38	51.4
Province total	171	164	95.9
State total	292	269	92.1

Note: Subsections are ranked by the percentage of SGCN that use at least one key habitat in the subsection.



D. Luce

Peatlands of the Agassiz Lowlands Subsection – Red Lake Peatland SNA