

Michigan-Specific Tree Farm Guidance on FORI, Special Sites, and T&E Species

Forests of Recognized Importance

Forests of Recognized Importance (FORI) are defined as “globally, regionally and nationally significant large landscape areas of exceptional ecological, social, cultural or biological values.” FORI occur at the landscape level, not the individual stand or ownership level. All Tree Farm forest management plans must note if the property is located within a FORI or is not located within a FORI.

Excerpts from Standard 5:

Standard 5: Fish, Wildlife, Biodiversity and Forest Health
Forest management activities contribute to the conservation of biodiversity.
Performance Measure 5.4 Where present, forest management activities should maintain or enhance forests of recognized importance.
Indicator 5.4.1 Appropriate to the scale and intensity of the situation, forest management activities should incorporate measures to contribute to the conservation of identified forests of recognized importance.

In Michigan, FORI on private forest land are primarily important wildlife habitat, corridors of legally designated rivers and Great Lakes coastlines. Landowners and plan writers should report in the forest management plan if the property is or is not located within a known FORI.

Important Wildlife Habitat

- Statewide: forest types that provide habitat required by state and federally listed species
 - Example: pine barrens or oak savannah for Karner blue butterfly
- Upper Peninsula: [deer wintering complexes](#)
 - More information at www.Michigan.gov/deer
- Southern Lower Peninsula (south of Clare County): contiguous forests greater than 500 acres
 - Provides habitat for species that require core interior habitat

Riparian Zones Along Legally Designated Unique Rivers

- State “[Natural Rivers](#)”
 - Jordan, Betsie, Rogue, Two Hearted, White, Boardman, Huron, Pere Marquette, Flat, Rifle, Lower Kalamazoo, Pigeon, Au Sable, Fox, Pine, and Upper Manistee
- Federal “[Wild and Scenic Rivers](#)”
 - Au Sable, Bear Creek, Black, Carp, Indian, Manistee, Ontonagon, Paint, Pere Marquette, Pine, Presque Isle, Sturgeon (Hiawatha), Sturgeon (Ottawa), Tahquamenon, Whitefish, Yellow Dog
- Consult local zoning ordinances for special riparian management zone restrictions along Natural or Wild and Scenic Rivers

Great Lakes Coastlines

- Statewide: any forest within ~0.5 mile of Great Lakes shorelines
 - More information at <http://mnfi.anr.msu.edu/communities/community.cfm?id=10679>

Special Sites

Special sites are defined as having “unique historical, archeological, cultural, geological, biological or ecological characteristics.” Special sites can be contained within a single property or stand. Landowners can self-designate their own special sites. Special sites should be noted on the map in the Tree Farm forest management plan. The absence of special sites should also be reported in a Tree Farm plan.

Excerpts from Standard 7:

Standard 7: Protect Special Sites
Special sites are managed in ways that recognize their unique historical, archeological, cultural, geological, biological or ecological characteristics.
Performance Measure 7.1 Forest management activities <u>shall</u> consider and maintain any special sites relevant on the property.
<i>Indicator 7.1.1</i> Landowner <u>shall</u> make a reasonable effort to locate and protect special sites appropriate for the size of the forest and the scale and intensity of forest management activities.

In Michigan, special sites on private forest land are most often archeological or cultural sites identified by the State Historic Preservation Office (SHPO - www.Michigan.gov/SHPO) and unique natural communities identified by the Michigan Natural Features Inventory (MNFI).

Archeological and Cultural Sites

Landowners and plan writers should consult SHPO to determine if archeological or cultural sites may be present on the property, and report this result in their forest management plan. DNR Service Foresters provide this database check for foresters for forest management plans and Tree Farm inspections but only have access to the SHPO database at the section level (640 acres) for a positive or negative for that entire section. Landowners, plan writers or Inspectors may contact SHPO to request this database check. Contact the State Archeologist Stacy Tchorzynski at TchorzynskiS@Michigan.gov for information, especially if the SHPO database shows a positive in the section containing a Tree Farm parcel.

Unique Natural Communities

Landowners and plan writers should consult MNFI to identify any possible unique natural communities and report their presence or absence in the forest management plan. MNFI lists and ranks unique natural communities that occur throughout Michigan. Most of these communities would be rather small (just a few acres or so) and may be contained within a single landowner’s property. Communities with a state ranking of S1 or S2 should be considered special sites, even communities without trees that occur within the certified forestland. See Table 1 on next page for the list of S1 and S2 natural communities in Michigan. The full list of all natural communities ranked S1 through S5 is available on the MNFI website. MNFI also provides a definition, expected location in Michigan, and examples of each natural community on its website at <http://mnfi.anr.msu.edu/communities/index.cfm>.

Table 1. Michigan Natural Community State Ranks

Name	State Rank
<u>Alvar</u>	S1
<u>Cave</u>	S1
<u>Dry-mesic Prairie</u>	S1
<u>Granite Lakeshore Cliff</u>	S1
<u>Hillside Prairie</u>	S1
<u>Inland Salt Marsh</u>	S1
<u>Lakeplain Oak Openings</u>	S1
<u>Lakeplain Wet Prairie</u>	S1
<u>Lakeplain Wet-mesic Prairie</u>	S1
<u>Limestone Lakeshore Cliff</u>	S1
<u>Mesic Prairie</u>	S1
<u>Mesic Sand Prairie</u>	S1
<u>Northern Bald</u>	S1
<u>Oak Barrens</u>	S1
<u>Oak Openings</u>	S1
<u>Volcanic Lakeshore Cliff</u>	S1
<u>Wet Prairie</u>	S1
<u>Wet-mesic Prairie</u>	S1
<u>Clay Bluff</u>	S2
<u>Coastal Fen</u>	S2
<u>Coastal Plain Marsh</u>	S2
<u>Dry Sand Prairie</u>	S2
<u>Granite Bedrock Glade</u>	S2
<u>Granite Bedrock Lakeshore</u>	S2
<u>Granite Cliff</u>	S2
<u>Great Lakes Barrens</u>	S2
<u>Interdunal Wetland</u>	S2
<u>Limestone Bedrock Glade</u>	S2
<u>Limestone Bedrock Lakeshore</u>	S2
<u>Limestone Cliff</u>	S2
<u>Oak-Pine Barrens</u>	S2
<u>Patterned Fen</u>	S2
<u>Pine Barrens</u>	S2
<u>Sandstone Bedrock Lakeshore</u>	S2
<u>Sandstone Cliff</u>	S2
<u>Sandstone Cobble Shore</u>	S2
<u>Sandstone Lakeshore Cliff</u>	S2
<u>Sinkhole</u>	S2
<u>Volcanic Bedrock Glade</u>	S2
<u>Volcanic Bedrock Lakeshore</u>	S2
<u>Volcanic Cliff</u>	S2
<u>Wet-mesic Flatwoods</u>	S2
<u>Wet-mesic Sand Prairie</u>	S2

Threatened or Endangered Species

Under the Endangered Species Act (ESA), landowners are required to protect occupied habitat for threatened or endangered animal species. If landowners or designated representatives become aware of the presence of a threatened or endangered animal species on their property, it is their duty to review the requirements for protecting the habitat for that species and to take appropriate actions in the management of their property. Under ATFS certification, landowners may choose to go above and beyond ESA requirements and protect unoccupied animal habitat. Although private landowners are not required to protect threatened or endangered plant species under the ESA, the State of Michigan law does require landowners to protect threatened or endangered plant species.

Excerpts from Standard 5:

Standard 5: Fish, Wildlife, Biodiversity and Forest Health Forest management activities contribute to the conservation of biodiversity.
Performance Measure 5.1_Forest management activities <u>shall</u> protect habitats and communities occupied by threatened or endangered species as required by law.
Indicator 5.1.1 Landowner <u>shall</u> periodically confer with natural resource agencies, state natural resource heritage programs, qualified natural resource professionals or other current sources of information to determine occurrences of threatened or endangered species on the property and their habitat requirements.
Indicator 5.1.2 Forest management activities <u>shall</u> incorporate measures to protect identified threatened or endangered species on the property.

Landowners and plan writers should check the MNFI database to identify any possible T&E species that may occupy the property and report their presence or absence in the forest management plan. DNR Service Foresters provide a database check for all Forest Stewardship Plans for T&E species known to occupy the nearest quarter/quarter section (40 acres). For plans not developed through the Forest Stewardship Program, landowners, plan writers, or Inspectors may contact DNR Service Foresters for this database check, or they can access public but much longer lists of potential T&E species that are known to occupy a specific watershed or an entire county (<http://mnfi.anr.msu.edu/data/watshd.cfm>).

State Listed Species

The Michigan Department of Natural Resources maintains a list of the [State listed threatened or endangered species](#) at www.Michigan.gov/Wildlife. There are many more species on the State of Michigan list (hundreds) than are on the federal list of threatened or endangered species. The state list of T&E animals is also available at <http://mnfi.anr.msu.edu/data/specialanimals.cfm>. The state list of T&E plants is also available at <http://mnfi.anr.msu.edu/data/specialplants.cfm>.

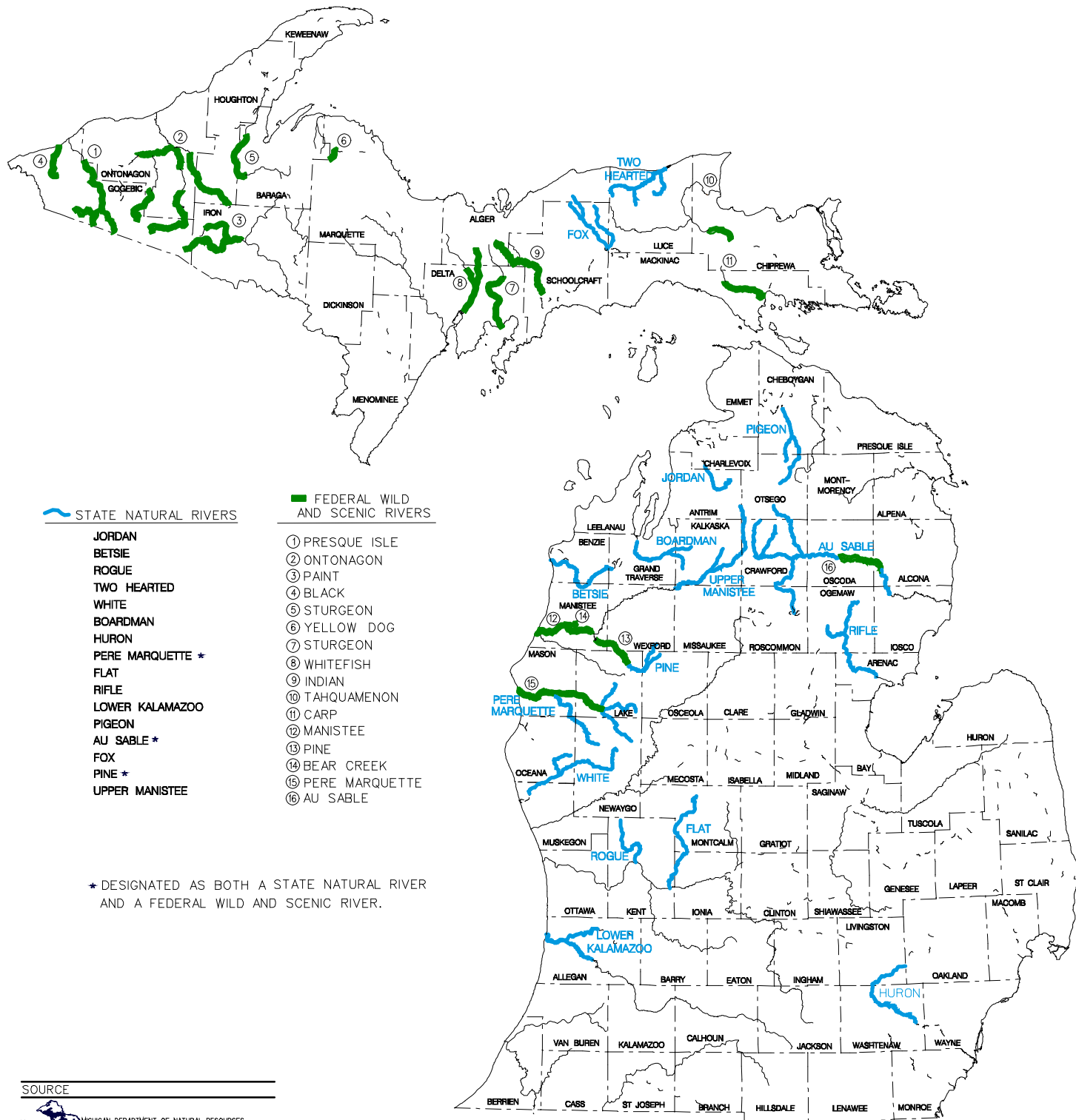
Federally Listed Species

The U.S. Fish and Wildlife Service maintain the list of the federally listed threatened or endangered species for Michigan at www.fws.gov/midwest/endangered/lists/michigan-spp.html. The entire federal list of 24 species for Michigan is presented in the following table, sorted by their habitat preference.

Table 2. Federally listed threatened or endangered species in Michigan.

Species	Status	Distribution	Habitat
Canada lynx	Threatened	Upper Peninsula	Northern forests
Gray wolf	Delisted 2020	Upper Peninsula	Northern forests
Indiana bat	Endangered	Southern Lower Peninsula	Riparian woods, upland forests, caves, and mines
Northern long-eared bat	Threatened	Statewide	Upland forests, caves, and mines
Kirtland's warbler	Delisted 2019	Northern Lower Peninsula and eastern Upper Peninsula	Jack pine forests
Karner blue butterfly	Endangered	Southern Lower Peninsula	Pine barrens and oak savannas with wild lupines
Small whorled pogonia (orchid)	Threatened	Berrien	Dry woodlands
American hart's tongue fern	Threatened	Chippewa, Mackinac	Limestone sinkholes in mature hardwood forest
Copperbelly water snake	Threatened	Branch, Calhoun, Cass, Eaton, Hillsdale, St. Joseph	Wooded and permanently wet areas
Eastern massasauga	Threatened	Lower Peninsula	Shallow wetlands and adjacent upland
Hine's emerald dragonfly	Endangered	Alcona, Alpena, Mackinac, Menominee, Presque Isle	Wetlands
Mitchell's satyr (butterfly)	Endangered	Southern Lower Peninsula	Wetlands and fens
Poweshiek skipperling (butterfly)	Endangered	Southern Lower Peninsula	Wet prairie and fens
Eastern prairie fringed orchid	Threatened	Southern Lower Peninsula	Wet prairies and meadows
Lakeside Daisy	Threatened	Mackinac	Dry, rocky prairies
Pitcher's thistle	Threatened	Northern Lower Peninsula and eastern Upper Peninsula	Dunes along Great Lakes shorelines
Piping plover (shorebird)	Endangered	Northern Lower Peninsula and eastern Upper Peninsula	Sandy, gravel or cobble Great Lakes shorelines
Dwarf lake iris	Threatened	Northern Lower Peninsula and eastern Upper Peninsula	Beach ridges along Great Lakes shorelines
Rufa red knot (bird)	Threatened	Statewide	Coastal areas and wetlands along Great Lakes shorelines
Houghton's goldenrod	Threatened	Northern Lower Peninsula and eastern Upper Peninsula	Interdunal wetlands along Great Lakes shorelines
Michigan Monkey-flower	Endangered	Benzie, Charlevoix, Cheboygan, Emmet, Leelanau, Mackinac	Mucky, wet areas along Great Lakes shorelines
Hungerford's crawling water beetle	Endangered	Emmet, Montmorency, Oscoda, Presque Isle	Five streams in northern Michigan and Ontario
Clubshell (mussel)	Endangered	Hillsdale	Streams and rivers
Northern riffleshell (mussel)	Endangered	Monroe, Sanilac, Wayne	Streams, rivers & Lake Erie
Rayed bean (mussel)	Endangered	Oakland, St. Clair	Belle, Black, Clinton and Pine Rivers
Snuffbox (mussel)	Endangered	Southern Lower Peninsula	Creeks and rivers

MICHIGAN'S NATURAL AND WILD & SCENIC RIVERS



SOURCE

MICHIGAN DEPARTMENT OF NATURAL RESOURCES
FOREST, MINERAL AND FIRE MANAGEMENT DIVISION

Michigan Resource Information System
Part 609, Resource Inventory, of the Natural Resource and
Environmental Protection Act, 1994 PA 451, as amended
OCTOBER 2003

NOTE: ALL RIVERS INCLUDE SOME
OR ALL TRIBUTARIES