



RARE SPECIES PROTECTION APPROACH AND ASSESSMENT GUIDELINES FOR DNR STAFF ON STATE FOREST LANDS

This information is provided by the Michigan Department of Natural Resources to assist in protection of rare species.

This is a summary of the Michigan Department of Natural Resources (DNR) approach to protecting rare species. Key issues include: 1) An overview of the Michigan DNR approach to protection of rare species, 2) Guidance to Michigan DNR staff on how to assess whether rare species will be impacted by land management operations, and 3) An outline of the procedure for requesting a rare species survey. The following is an outline of this summary.

Michigan DNR's Approach to the Protection of Rare Species, including:

- A list of relevant management documents and a summary of management objectives.
- An overview of the Michigan DNR's rare species assessment protocol.

Rare Species Assessment Guideline that includes:

- A documentation checklist that provides an overview of steps to take and resources available to evaluate impacts to rare species.
- A decision making guide for Michigan DNR staff that outlines a step by step process for evaluating potential impacts to rare species.

Process for Requesting a Rare Species Survey:

- Where to send a request.
 - What information to include.
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MICHIGAN DNR'S APPROACH TO THE PROTECTION OF RARE SPECIES

Two Work Instructions and a set of guidelines (see references below) provide guidance to the Michigan DNR for the protection and management of endangered, threatened and special concern species (rare species) on Michigan DNR State Forest lands. (See Conservation Area Management Guidelines, pages 6-9, for definitions.)

- Work Instruction 1.4 Biodiversity Conservation on State Forest Land:
http://www.michigan.gov/documents/RevisedbiodiversityWI8_134556_7.19.05.pdf
- Conservation Area Management Guidelines (pages 6 – 9):
http://www.michigan.gov/documents/ConservationAreaMgtGuidelines_162564_7.pdf
- Work Instruction 3.1 Forest Operations:
http://www.michigan.gov/documents/3_133210_7.1.pdf

To protect and manage rare species on Michigan DNR State Forest Lands, Michigan DNR:

- Avoids the taking of threatened and endangered species (T/E) species;
- Treats special concern (SC) and Candidate Conservation species, when and where possible, with similar management consideration as T/E species;
- Protects, maintains, and/or enhances rare species (T/E/SC) health and habitat;
- Refers all conflicts or potential conflicts regarding management of rare species to the Michigan DNR's Endangered Species Coordinator;
- Does not share data on specific locations of T/E species in public documents;
- Initiates and completes field surveys for rare species when there is a high probability for a rare species to be in or near a proposed treatment.

Rare Species Assessment Protocol

The following are primary elements to Michigan DNR's rare species assessment protocol:

1. Obtain training, access resources and technical assistance
 - a. Supervisors and staff identify training needs and enroll in classes annually. Training is provided to access information on Michigan's rare species and to identify rare species and associated natural communities via introductory (classroom) and field based workshops.
 - Michigan State University Extension (MSUE) - Michigan Natural Features Inventory (MNFI) staff holds workshops annually in both the northern lower and upper peninsulas with topics rotating approximately every two to three years depending on staff training needs.
 - In 2006, field staff in each Forest Management Unit (FMU) received additional training on the application of the Biodiversity Work Instruction 1.4 and the Conservation Management Guidelines (see above link). Staff may contact Kim Herman (hermank@michigan.gov) for those training materials.
 - b. Staff are encouraged to use a myriad of web based resources, largely from the MSUE - MNFI website (refer to Rare Species Assessment Guideline for Michigan DNR Staff below).
 - c. To seek technical expertise from wildlife and fisheries biologists, staff specialists, Wildlife Division Endangered Species staff, and MNFI biologists (Refer to Rare Species Assessment Guideline for Michigan DNR Staff below).

2. Review records against known occurrences in the MNFI database. The MNFI database is an ongoing, continuously updated information base, which is the only comprehensive single source of existing data on Michigan's endangered, threatened, or otherwise significant plant and animal species, natural plant communities, and other natural features.
 - a. For annual forest inventories, an MNFI ecologist reviews the records and sends two products to each unit:
 - a preliminary spreadsheet by compartment and rare species records in the spring, and
 - a formal written review prior to each unit's compartment review.
 - b. To supplement forest inventories or for intrusive operations (earth moving activities), Michigan DNR stand examiners including foresters, forest technicians, wildlife biologists, technicians and other land management staff, can independently access MNFI rare species database (See Documentation checklist 1c below).
3. Assess and document potential impacts to rare species.
 - a. For Forest Inventory, an MNFI ecologist provides a written assessment for each forests annual inventory prior to each Compartment Review. Forest Management Unit staff incorporate these comments into the Compartment Review.
 - b. All staff preparing treatments subsequent to the Compartment Review must take rare species decisions made at the Compartment Review into account. When approved activities vary from the Compartment Review or new information becomes available during contracting (a new access road for example), staff must follow up by doing an additional review of the MNFI database.
 - c. For forest operations not reviewed by Michigan DNR Wildlife, Natural Heritage Unit Endangered Species Program during a permit review or MNFI via the compartment review process, the administering/managing division will have the lead responsibility to coordinate with the Michigan DNR endangered species coordinator and document potential impacts as part of the operations approval process.
4. Survey for Rare Species: MNFI biologists or other experts conduct field surveys for rare species where staff has determined there is a high likelihood of finding a rare species within a proposed treatment area (See Decision Making Process below). In addition, MNFI is conducting a new systematic and comprehensive biological survey of Michigan and a survey of known natural community element occurrences on State Forest lands (ERA survey) which will update the MNFI database and inform the field on future decisions.
5. Consult with the Michigan DNR Endangered Species Coordinator: Where impacts to rare species are anticipated, consultation with the Michigan DNR Endangered Species Coordinator is required.

Rare Species Assessment Guideline for Michigan DNR Staff

The following documentation checklist and decision making guide may be used to assist Michigan DNR FMU Stand Examiners and Wildlife biologists or others proposing Intrusive Operations (earth moving activities), including Fisheries biologists, Resource Protection staff, Recreation specialists, Forest Health specialists or others to determine:

1. whether proposed activities on the Michigan DNR State Forest Lands will have impacts to rare species;
2. whether, when and how to request a field survey for rare species.

They may also be used for recordkeeping by writing in spaces provided and be used in conjunction with additional documents for filing in compartment files.

Documentation Checklist

Utilize the checklist below to assist in documenting the steps taken and what resources were used during this process. There is no requirement to have looked at or utilized every resource listed, though a MNFI database records check is required in every case.

1. MNFI Information
 - a. MNFI YOE Compartment Review Spreadsheet (For annual Forest Inventory only).
 - b. MNFI YOE Compartment Review Report (For annual Forest Inventory only).
 - c. MNFI Database Element Occurrence Records.
 - MNFI web database (<http://web4.canr.msu.edu/mnfi/search/login.cfm>) Obtain a password by emailing Jennifer Olson (olsonjen@michigan.gov).
 - IFMAP Biodiversity shape files.
 - Biodiversity CD (Biodiversity.apr) contact Lisa Dygert, FMFM, (dygertl@michigan.gov).
2. Local Knowledge (you and your colleagues) of:
 - a. Rare species locations.
 - b. Rare species habitat
 - c. Forest Inventory data
 - Aerial photos
 - USDA soil surveys
 - Site visit(s).
3. References to Use:
 - a. MNFI Rare Plant Reference Table (<http://web4.msue.msu.edu/mnfi/data/rareplants.cfm>)
 - b. MNFI Community Abstracts (<http://web4.msue.msu.edu/mnfi/pub/abstracts.cfm>)
 - c. MNFI Rare Species Abstracts (<http://web4.msue.msu.edu/mnfi/pub/abstracts.cfm>)
 - d. Michigan DNR websites

- e. Plants and Natural Communities on State lands – MNFI Introductory Biodiversity training handout.
 - f. Others (See Work Instruction 1.4 Reference list).
4. Technical Assistance:
- a. MNFI Staff (MNFI staff are available to answer questions on the biology and ecology of rare species. Note: MNFI staff has no legal authority to make permitting decisions for the Michigan DNR.)
 - Ecology - Josh Cohen (cohenjo@michigan.gov)
 - Botany - Mike Penskar (penskarm@michigan.gov)
 - Zoology - Joelle Gehring (gehringj@michigan.gov)
 - Aquatic Ecology - Amy Derosier (derosiea@michigan.gov)
 - b. Michigan DNR Staff Specialists:
 - Kim Herman, FMFM (HERMANK@michigan.gov)
 - Others
 - c. Michigan DNR Endangered Species Program:
 - Todd Hogrefe, Coordinator (HOGREFET@michigan.gov)
 - Lori Sargent (SARGENL2@michigan.gov)

Decision Making Guide

1. Check the MNFI database records including one or more of the three information sources listed in the above Decision Making Guide (1a.b.c). Are there rare species known within the treatment or project or area (including possible access routes), concentrations of rare species, and/ or MNFI natural communities nearby and/or rare species habitat present? *Some examples of habitats with concentrations of rare species include Great Lakes shorelines, alvars, wetland complexes, savannas, barrens for a variety of plants and animals and northern hardwoods for woodland raptors and forest interior song birds.*
 - a. No
No other action is required.
Record steps taken and place documentation in compartment file, sign and date.
 - b. Maybe - There are no rare species known within the project or treatment area, yet there are concentrations of rare species, and/ or MNFI natural communities nearby and/or rare species habitat present.
Go To 2
 - c. Yes, there are rare specie(s) known.
Go To 3
2. Use references in the above Decision Making Guide (Reference to Use, 3a-3f) to review nearby listed species biology and habitat needs. (The specific reference to utilize is dependant on species and habitat.) Is the habitat within the proposed treatment or project area quite similar to nearby habitat for rare species?
 - a. No
No other action is required.
Record steps taken and place documentation in compartment file, sign and date.
 - b. Yes
Go To 3
3. Review listed species data against proposed treatment or intrusive operations (See above Decision Making Guide, item 2 - Local Knowledge and item - 3 References above). Will the proposed treatment or project affect rare species habitat or a known rare species? *For example, you may be able to tell from an aerial photo, soil survey data and/or site inspection the habitat does not match, the habitat is highly disturbed or may actually no longer exist.*
 - a. No
No other action is required.
Record steps taken and place documentation in compartment file, sign and date.
 - b. Yes - The proposed treatment or project will affect rare species habitat or a known rare species.
Go To 4
4. Request technical assistance from sources listed in the above Decision Making Guide (4a.b.c.) if necessary. Can you avoid an impact to rare species or potential rare species habitat? *For example, for woodland raptors change the timing of the treatment to avoid breeding season or buffer the nest. For a rare wetland plant, protect hydrology and location, do a winter harvest when ground is frozen.*
 - a. Yes
No other action is required.
Place documentation in compartment file, sign and date.
 - b. No – An impact to rare species cannot be avoided or you are not sure.
Contact Todd Hoegrefe, Endangered Species Coordinator
 - c. No – An impact to rare species habitat cannot be avoided, but there is no documentation of a known population of that rare species within the proposed treatment or project area.
Follow process to request a rare species survey (See Process for Requesting a Rare Species Survey below).

PROCESS FOR REQUESTING A RARE SPECIES SURVEY

If you have arrived at a point where a rare species survey is recommended (4c above), complete the following steps:

1. Forest Management Unit Supervisors email or send Rare Species Survey Requests to **both**:

BOUCHERC@michigan.gov
Cara Boucher, Manager
Forest Resource Mgt. Section
Michigan DNR, FMFM
PO Box 30452
Lansing, MI 48909-7952

AND

HERMANK@michigan.gov
Kim Herman, Monitoring Specialist
Michigan DNR, FMFM
Marquette OSC
US-41 South
Marquette, MI 49855

Sign-offs from the local Wildlife Biologist and Fisheries Biologist are required with copies to FMFM, WLD, FSD Supervisors and Co-Managers.

2. Include the following information in your request.

- a. Species Information (What to survey):

- i. Plant or Animal – Mammal, Bird, Fish, Herptile (snakes, turtles, frogs, toads), Invertebrates – Insects, Mussels, (clams, snails) (Circle One).
- ii. Common Name
- iii. Scientific Name
- iv. Element Occurrence Number (from MNFI database Element Occurrence Record)
- v. Best Survey Period (The season is it easiest to positively identify the plant or animal in the field)
 - * See MNFI website – Rare Plant Reference Table, Plant and Animal Species Abstracts.
 - * Or if you cannot tell, contact MNFI biologists or Kim Herman (see Technical Assistance in Decision Making Guide above).

- b. Location (Where to survey):

- i. Forest Management Unit
- ii. County(ies)
- iii. Town(s), Range(s), Section(s), ¼ Section(s)
- iv. Compartment Map
- v. Stand Map
- vi. GPS coordinates (if available)
- vii. Directions to the site
- viii. Access issues (crossing private land, very wet, steep slopes, etc.)

- c. Need For Survey

- i. Contact person, email, phone number
- ii. Best dates and time to contact
- iii. Proposed treatment
- iv. What potential impacts to species may result from treatments?
- v. Preferred survey window – What is the optimum time for the survey to be completed to meet your management needs? When (how soon) is the treatment proposed?
- vi. Urgency – Is this an emergency? Is a contractor on hold for example?