Rare Species and Biodiversity Conservation in Michigan Brenda Haskill

**MDNR Forest Resources Divison** 



#### **Presentation Overview**

- Basis for T/E Protections
  - Federal and State Laws
  - Forest Certification
- Seasonal Restrictions



#### Laws and Regulations

- Federal Endangered Species Act
- State T&E legislation, Part 365
- Regulations on the Take of Reptiles and Amphibians
- Bald and Golden Eagle Protection Act
- Ginseng Act
- Christmas Tree Act



### **Endangered Species Act of 1973**

- Fish and Wildlife Service has authority
- Section 9 of the ESA prohibits activities that might "take" a listed species
- Federally listed plants are protected only when there is a federal nexus
  - Federal nexus: land, funding, agency
  - Federal ESA vs. State law



### What is "Take"?

- "Take" of fish and wildlife: to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in any such conduct
- "Harm" includes habitat destruction that kills or injures listed species
- "Take" of plants: to collect, pick, cut, dig up, or destroy in any manner



### When is "Take" Allowed?

#### Section 10: incidental take permits

- Enhancement of Survival
  - Research and Recovery
  - Safe Harbor Agreement
  - Candidate Conservation Agreements
- Incidental take permits
  - Habitat Conservation Plans

#### **Section 7: Consultation**

 a process for federal agencies to receive "take" exemption

### When is "Take" Allowed?

- Section 6: Cooperative Agreement
  - DNR has program to benefit T&E species
  - FWS will provide financial assistance
  - Funding contingent on continued T&E program
  - Law enforcement activities are cooperative
  - Work together to develop programs and projects to benefit T&E species
  - Share data on T&E species locations

#### When is "Take" Allowed? Section 6 (cont.)

- DNR staff who are qualified may "take" federally listed fish and wildlife for conservation purposes that are consistent with the agreement such that is does not result in:
  - The death or permanent disabling
  - Removal from the State
  - Introduction beyond historic range
  - Holding in captivity beyond 45 days



#### Eastern Massasauga Rattlesnake CCAA

- Enhancement of Survival Permit
- Managed and unmanaged lands
- Conservation measures
  - Prescribed fire
  - Mowing and hydro-axing
  - Cultivation
  - Water level manipulation
  - Forest management
  - Chemical control





#### **Bat Habitat Conservation Plan**

- Indiana Bat, Northern Long-eared Bat, Little Brown Bat, and Tricolored Bat
- Incidental take permit
  - Provide for covered activities including forestry and prescribed burns
  - Non-Federal Landowner Enrollment
- MI, MN, WI DNRs

#### **State Endangered Species Law**

- Part 365 of NREPA, Act 451 of 1994
  - Definitions
  - Duties
  - Investigations
  - Programs, cooperative agreements
  - Prohibitions and exemptions
  - Enforcement
  - Violations



#### Michigan Endangered Species Law Part 365 of PA 451 of 1994

- Prohibits harm to species listed as threatened or endangered on public or private land
- Includes animals and plants
- Permits may be issued to alleviate damage to property or to protect human health or for scientific purposes



### **Examples of "Take"**

- State listed species
  - Cutting down a tree with an active nest of a listed bird species
  - Heavy equipment crushing a listed turtle
  - Collecting seeds of listed plant species
  - Applying herbicide to listed plant



#### **Species of Special Concern**

- Goal: track and manage to avoid future endangerment
- When and where possible treat with similar management consideration as listed species
- However, no protection under Part 365



#### Christmas Greens and Wildflower Protection Law Public Act 182 (1962)

- Protects attractive plants from collectors and commercial exploitation, to prevent these plants from becoming rare
- Prohibits collection of plants on list on someone's land without their permission
- If these plants occur on your land, you may do as you wish with them, except if they are also threatened or endangered
- Species include trilliums, holly, bittersweet, etc.

## Michigan Ginseng Act

- Passed in 1994 to regulate the harvest, sale, and distribution of American Ginseng in Michigan
- This act covers both cultivated and wild ginseng
- Unlawful to take ginseng from the wild without a permit from the DNR



#### Director's Order on Take of Reptiles and Amphibians

- Unlawful to kill, take, trap, possess, buy, sell, offer to buy or sell, barter, or attempt to take, trap, possess or barter any reptile or amphibian from the wild, or the eggs of any reptile or amphibian from the wild, except as provided within this order
- Includes T&E and SC species
- Fishing License required for take of allowed species
- Reptiles and amphibians may not be bought, sold or offered for sale.

#### Bald & Golden Eagle Protection Act

- Federal law enacted in 1940
- Prohibits anyone to "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part, nest, or egg thereof."
- Also covers impacts from human-induced alterations around nest sites when eagles are not present that interferes with or interrupts normal breeding, feeding, or sheltering habits, and causes injury, death or nest abandonment



#### **Michigan's Rare Species**

	Endangered	Threatened	Extirpated
Insects (??,000)	15	15	4
Plants (1,800)	88	186	60
Birds (414)	7	18	1
Mollusks (257)	23	12	2
Fishes (152)	12	10	9
Mammals (66)	4	5	4
Reptiles (29)	2	6	
Amphibians (23)	2	1	
Totals	138	258	62

MDNR Website, Revised 2023



# Why do species become endangered?

- The main reason plants or animals become endangered or threatened is because of the loss or destruction of the habitat (food, cover, water, or space) that these species depend upon for survival
- Every species requires a certain habitat to live; Michigan has many different types of habitats from the Great Lakes to prairies to forests to wetlands.
- In Michigan, the dramatic loss of wetlands (to drainage and fill) over the last 50 years or so, has raised real concerns about associated loss of plant and animal life.
- However, many T & E species are listed because of the rare or unique habitats that they inhabit (require for survival)

#### **Rare Species Resources**

- Michigan Natural Features Inventory (MNFI) <u>http://mnfi.anr.msu.edu/</u>
- U.S. Fish & Wildlife Service Midwest Endangered Species
  <u>http://www.fws.gov/midwest/endangered/</u>
- State Wildlife Action Plan
  <u>http://www.michigan.gov/dnrwildlifeactionplan/</u>
- International Union for Conservation of Nature Red List <u>http://www.iucnredlist.org/</u>
- Michigan DNR Endangered and Nongame Wildlife <u>http://www.michigan.gov/nongamewildlife</u>





### **QUESTIONS SO FAR?**



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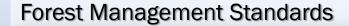




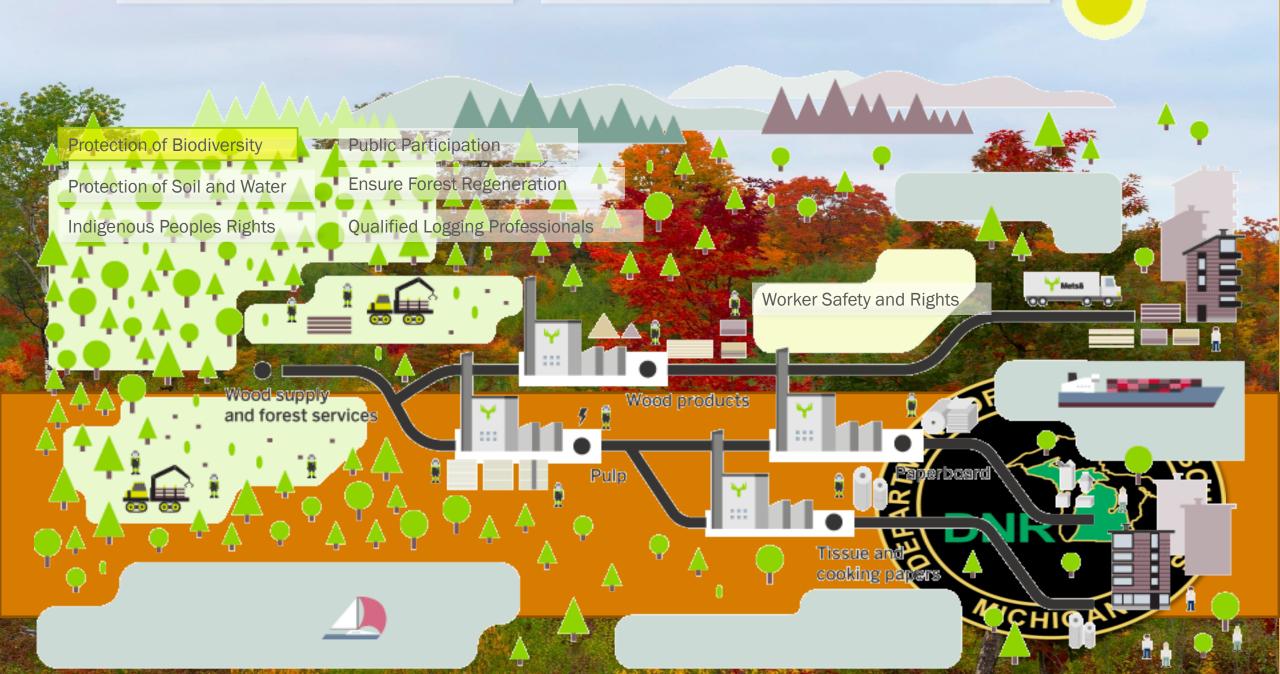
#### FOREST CERTIFICATION: IMPROVING MANAGEMENT & CONSUMER CONFIDENCE

STEWARDSHIP COUNCIL™ (FSC) & SUSTAINABLE FORESTRY INITIATIVE™ (SFI)





#### Chain-of-Custody/Supply Chain Standards



### **Certification Standard Requirements**

Forest Stewardship Council (FSC)	Sustainable Forestry Initiative (SFI)
Requires protection of forest ecosystems and functions,	Requires a "program to promote the conservation of native biological
including genetic, species, and ecosystem diversity.	diversity."
Requires protection of Rare,	Requires "a program to
Threatened or Endangered (RTE)	protect federal- or state-listed
species, based on credible	threatened or endangered species."
scientific analysis, assessments of	
potential impacts to RTE species	Additionally requires a program to
prior to any harvest, and	locate "viable occurrences" of

safeguards to protect and/or enhance RTE species.

globally imperiled species, which would generally trigger legal protection.





### **Additional Topics**

Summary of Seasonal Restrictions



#### Insect/Disease Restrictions

- Oak Wilt: April 15 to July 15.
- Pine bark beetle: March 1 through July 1



### **Wildlife Restrictions**

- Kirtland's Warbler Nesting: May 1st to August 15<sup>th</sup>.
  At least 500 feet.
- Red Shouldered Hawk Nest Tree: March 15 to July 15 (NLP). April 1 to July 30 (UP). February 15 to July 1 (SLP). 5 Chain (330 feet) buffer
- Eagle Nest: Only harvest September 1 through December 31.
- DNR MICHIGAN
- Loon: April 15th August 15<sup>th</sup>. Next to Lake.

#### **Recreation Restrictions**

- Hunting: Bear-September 29 thru October 2nd or Deer-November 13 thru November 16<sup>th</sup>.
- Snowmobile Trail: December 1 to March 31



#### **Other Restrictions**

- National Guard: May 1 to October 31
- Bark Slippage: April 15 to July 15



