



Wetlands: Inland Emergent Wetland

Description

Inland emergent wetlands, also called marshes, are frequently or continually inundated with water and are characterized by emergent herbaceous vegetation adapted to saturated soil conditions. These wetlands tend to have abundant nutrients and are highly organic. Inland emergent wetlands are quite varied and can be found in poorly drained depressions and along lakes, ponds, and rivers.

General Condition of Feature

This habitat is considered 90% in good to excellent condition, 5% in fair condition, and 5% in degraded to very degraded condition.

Associated Natural Communities

Emergent Marsh
Interdunal Wetland

Intermittent Wetland
Northern Wet Meadow

Associated Species of Greatest Conservation Need

CRAYFISH

devil crawfish (*Cambarus diogenes*)
digger crayfish (*Fallicambarus fodiens*)

INSECTS

sedge darner (*Aeshna juncea*)
spatterdock darner (*Aeshna mutata*)
zigzag darner (*Aeshna sitchensis*)
muskeg darner (*Aeshna subarctica*)

AMPHIBIANS

boreal chorus frog (*Pseudacris triseriata maculata*)
pickerel frog (*Rana palustris*)
northern leopard frog (*Rana pipiens*)

REPTILES

Blanding's turtle (*Emydoidea blandingii*)
wood turtle (*Glyptemys insculpta*)
eastern box turtle (*Terrapene carolina carolina*)

Associated Threats

MODIFICATION OF NATURAL PROCESSES

- Altered hydrologic regimes: Hydrologic alterations; Draining (low threat)
- Climate change: Water levels dropping due to climate change (low threat)

HABITAT CONVERSION

- Riparian modifications: Human development activities; Road construction; Riparian development and filling
- Wetland modifications: Filling

BIOLOGICAL INTERACTIONS

- Invasive plants and animals: (low threat)

Conservation Action Needs (Threats addressed)

LAND & WATER PROTECTION

- Create and expand conservation easements (variety of threats)
- Support land conservancy purchase of undeveloped land (variety of threats)
- Support landowner incentive programs to foster conservation on private land (variety of threats)

LAND, WATER & SPECIES MANAGEMENT

- Allow seasonal flooding (altered hydrologic regimes)
- Close roads during breeding seasons or install tunnels along migration pathways to allow amphibians and reptiles access to breeding areas (riparian modifications, species issue)
- Control and prevent invasive aquatic species introductions and establishments (invasive plants and animals)
- Maintain or establish riparian buffers of at least 50 ft., but 500 ft. or wider maximizes conservation benefits (riparian modifications)
- Maintain or rehabilitate natural corridors between emergent wetlands and other significant habitats to amphibians and reptiles (riparian modifications, species issue)
- Maintain or rehabilitate natural hydrology (altered hydrologic regimes)
- Protect existing natural wetlands and rehabilitate degraded wetlands (wetland modification)
- Restore native flora (wetland modification)

LAW & POLICY

- Encourage clustered development and green space planning (variety of threats)
- Include wetland protections in zoning and planning ordinances (wetland modification)
- Protect and rehabilitate groundwater recharges by requiring that all development-related runoff be captured by infiltration basins (altered hydrologic regimes)
- Restrict dredging and draining of emergent wetlands (wetland modification)
- Strengthen wetland regulations, mitigation requirements, and enforcement (wetland modification)

MICHIGAN'S WILDLIFE ACTION PLAN
AQUATIC SYSTEMS: LAKE SUPERIOR BASIN

- Work with local governments to develop and refine planning and zoning regulations and ordinances that consider natural processes (variety of threats)
- Work with local ordinances on setback and buffer ordinances (riparian modifications)

EDUCATION & AWARENESS

- Educate the public about emergent wetlands and natural processes (variety of threats)

Research and Survey Needs

- Conduct inventories of wetlands and their condition
- Determine all species and life stages that require inland emergent wetlands
- Determine management incompatibility issues
- Determine effects of fire on species composition and seed bank
- Develop new socially-acceptable ways of managing lake levels
- Document effects on beach grooming
- Develop natural alternatives to pesticides and herbicides

Monitoring

- Beach grooming
- Dam operations
- Dredging and channelization
- Hydrologic flow regimes
- Indicator species
- Land use changes
- Operation of lake-level control structures
- Riparian modifications
- Wetland modification