



Inland wetlands/water: Inland island

Description

Islands located in inland lakes, ponds, or rivers, including artificial islands (e.g., nesting islands).

General Condition of Feature

Inland islands in the Northern Lower Peninsula tend to be in fair or good condition. However, a significant portion of inland islands are considered degraded or very degraded (~40%).

Associated Natural Communities

N/A – no native natural communities

Associated Species of Greatest Conservation Need

REPTILES

eastern massasauga (*Sistrurus catenatus catenatus*)

BIRDS

Trumpeter Swan (*Cygnus buccinator*)
American Black Duck (*Anas rubripes*)

BIRDS cont.

Common Loon (*Gavia immer*)
Black-crowned Night-heron (*Nycticorax nycticorax*)
Bald Eagle (*Haliaeetus leucocephalus*)
Forster's Tern (*Sterna forsteri*)
Black Tern (*Chlidonias niger*)

Associated Threats

MODIFICATION OF NATURAL PROCESSES

- Altered fire regime: There is an inability to suppress or contain fire on islands due to issues of transport of equipment.
- Altered hydrologic regimes: Water level manipulation may affect islands.

HABITAT CONVERSION

- Industrial, residential, and recreational development: Recreational development is a threat to islands.
- Incompatible natural resource management: Manipulations performed for waterfowl management may impact islands.

NON-CONSUMPTIVE BIOLOGICAL RESOURCE USE

- Non-consumptive recreation: Uncontrolled boat and personal watercraft use may impact islands.

BIOLOGICAL INTERACTIONS

- Invasive plants and animals
- Other biological interactions: Damming by beavers (*Castor canadensis*) may impact islands through alteration of the surrounding water level.

Conservation Actions Needed [Threats addressed]

LAND, WATER & SPECIES MANAGEMENT

- Manage to approximate natural disturbance regimes by restoring water flow patterns. [Altered hydrologic regimes]
- Institute invasive species monitoring, prevention and control programs. [Invasive plants and animals]
- Manage local beaver densities to maintain water levels. [Altered hydrologic regimes; Other biological interactions]
- Work with land managers to develop priorities for island management. [Incompatible natural resource management]
- Use best management practices for development, management, and recreational activities around lakes, streams, and wetlands to maintain natural shoreline stability (thereby reducing the need for restoration or artificial structures). [Industrial, residential, and recreational development, Non-consumptive recreation]

LAW & POLICY

- Work with municipalities to promote planning and zoning insuring adequate protection for natural island communities. [Industrial, residential, and recreational development]
- Develop and enforce regulations to curtail recreational activities that cause significant damage. [Non-consumptive recreation]

RECREATION

- Promote responsible watercraft use. [Non-consumptive recreation]

Research and Survey Needs

- Evaluate the impacts of modifications of natural hydrologic regimes and local water chemistry.
- A common classification system to define wetlands is needed.
- Document the historic and current range of variation between inland islands. This includes variables such as species composition and size.
- Identify invasive species that may degrade the value of inland islands for wildlife. Develop techniques to control invasive species. Common invasive species include reed canary grass (*Phalaris arundinacea*), phragmites (*Phragmites australis*), glossy buckthorn (*Rhamnus frangula*), and purple loosestrife (*Lythrum salicaria*).

MICHIGAN'S WILDLIFE ACTION PLAN
TERRESTRIAL SYSTEMS: NORTHERN LOWER PENINSULA

- Develop best management practices for development, management, and recreational activities around lakes, streams, and wetlands to maintain natural shoreline stability (thereby reducing the need for restoration or artificial structures).
- Examine the impacts of recreational use and aquatic weed control treatments on the wildlife value of inland islands.
- Determine indicators of island condition.

Monitoring

- Track inland island acreage and distribution across the landscape.
- Identify and track floristic composition and diversity.
- Track water level and flow fluctuations and its impacts on vegetation and wildlife.
- Track water chemistry and quality trends.
- Track the abundance and diversity of indicator species.
- Track the density and distribution of development along island shorelines.
- Track the intensity and temporal distribution of recreational use of islands and shorelines.
- Track the rate of erosion along island shorelines.