



Great Lakes/Coastal: Great Lakes island

Description

Islands located in the Great Lakes.

General Condition of Feature

Much of the Great Lakes island area in the Eastern Upper Peninsula is considered to be in fair or good condition (~60%). Most of the remaining areas are considered degraded or very degraded.

Associated Natural Communities

N/A – No defined natural communities

Associated Species of Greatest Conservation Need

REPTILES

northern ringneck snake (*Diadophis punctatus edwardsii*)

BIRDS

American White Pelican (*Pelecanus erythrorhynchos*)

Bald Eagle (*Haliaeetus leucocephalus*)

BIRDS cont.

Peregrine Falcon (*Falco peregrinus*)

Caspian Tern (*Sterna caspia*)

Common Tern (*Sterna hirundo*)

Forster's Tern (*Sterna forsteri*)

Black Tern (*Chlidonias niger*)

Associated Threats

MODIFICATION OF NATURAL PROCESSES

- Altered hydrologic regimes: Changes in lake levels and currents can affect islands.

HABITAT CONVERSION

- Industrial, residential, and recreational development: Use of islands as dumps and landfills can alter their value for wildlife.

POLLUTION

- Urban, municipal, and industrial: There may be an impact from lead contamination.

CONSUMPTIVE BIOLOGICAL RESOURCE USE

- Forestry practices

NON-CONSUMPTIVE BIOLOGICAL RESOURCE USE

- Non-consumptive recreation: Uncontrolled ATV and ORV use can impact islands, especially in shoreline areas.

BIOLOGICAL INTERACTIONS

- Invasive plants and animals
- Other biological interactions: *Double-crested Cormorant (Phalacrocorax auritus)* may affect community composition and soil or water chemistry. *White-tailed deer (Odocoileus virginianus)* browse may hinder vegetation establishment and regeneration on islands.

EDUCATION

- Social attitudes: There is a lack of appreciation and understanding of island systems.

Conservation Actions Needed [Threats addressed]

LAND & WATER PROTECTION

- Expand conservation easement programs [variety of threats]
- Support and expand conservation purchase of high quality occurrences [variety of threats]

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 white-tailed deer densities to allow for regeneration of vegetation on islands. [Other biological interactions]
- Develop and implement forestry best management practices which address the value of Great Lakes islands for wildlife. [Forestry practices]
- 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 Great Lakes islands. [Industrial, residential and recreational development]
- Develop new and enforce existing regulations restricting disposal of contaminants on Great Lakes islands. [Urban, municipal, and industrial pollution]

MICHIGAN'S WILDLIFE ACTION PLAN
TERRESTRIAL SYSTEMS: EASTERN UPPER PENINSULA

- Develop and enforce regulations to curtail recreational activities that cause significant damage. [Non-consumptive recreation; Social attitudes]

EDUCATION & AWARENESS

- Create awareness in the general public of the value of Great Lakes islands to wildlife. [Social attitudes]

RECREATION

- Promote responsible ATV and ORV use. [Non-consumptive recreation]

LAND AND WATER PROTECTION

- Promote protection of significant Great Lakes islands or island parcels through purchase, easement or other economic incentives. [Industrial, residential and recreational development]

Research and Survey Needs

- Evaluate the use of Great Lakes islands as migratory stopover habitat. Are there characteristics of islands that increase their value to migrating wildlife?
- Evaluate the use of Great Lakes islands as nesting habitat. Are there characteristics of islands that increase their value to nesting wildlife?
- 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). [Industrial, residential, and recreational development, Wetland modifications, Non-consumptive recreation]
- Develop research projects which use islands as control treatments to determine the efficacy of management practices. The natural isolation of islands tends to protect an undisturbed state and they may act as a controllable microcosm of the larger ecoregion.
- Assess the use of Great Lakes islands by cormorants (*Phalacrocorax auritus*) and the impacts of cormorant use on the value of islands for other wildlife species.

Monitoring

- Identify and track floristic composition and diversity.
- Track the density and distribution of development along Island shorelines.
- Track the presence and abundance of invasive species.