



Great Lakes/Coastal: Great Lakes island

Description

Islands located in the Great Lakes.

General Condition of Feature

Most of the Great Lakes island area in the Southern Lower Peninsula is considered to be in fair to good condition (~70%) and about 10% is considered in excellent condition. The remaining areas are degraded or very degraded.

Associated Natural Communities

N/A – No defined natural communities

Associated Species of Greatest Conservation Need

REPTILES

eastern fox snake (*Elaphe gloydi*)

BIRDS

Bald Eagle (*Haliaeetus leucocephalus*)

Piping Plover (*Charadrius melodus*)

BIRDS cont.

Caspian Tern (*Sterna caspia*)

Common Tern (*Sterna hirundo*)

Forster's Tern (*Sterna forsteri*)

Black Tern (*Chlidonias niger*)

Associated Threats

HABITAT CONVERSION

- Industrial, residential, and recreational development: Development may impact these systems. Shipping through the Great Lakes may contribute to erosion on islands.

POLLUTION

- Urban, municipal, and industrial: Contaminants may impact these islands due to the close proximity to metropolitan areas in Michigan and Ontario. Islands may be used as contaminant disposal sites.

NON-CONSUMPTIVE BIOLOGICAL RESOURCE USE

- Non-consumptive recreation: Easy accessibility of islands in the Detroit River and Lake St. Clair foster greater use.

BIOLOGICAL INTERACTIONS

- Invasive plants and animals
- Other biological interactions: Cormorant (*Phalacrocorax auritus*) nesting colonies on islands may affect existing community composition.

OTHER

- Historic status/current abundance: There are no Great Lakes islands in Lake Michigan in the Southern Lower Peninsula.

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

- Assess management goals to ensure that they provide for a diversity of communities across the landscape. [Other biological interactions]
- Institute invasive species monitoring, prevention and control programs. [Invasive plants and animals]
- Coordinate trash and litter collection efforts to remove illegally dumped waste materials. [Urban, municipal, and industrial pollution]
- 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

- Enforce ordinances regarding dumping of waste materials in the Great Lakes. [Urban, municipal, and industrial pollution]
- Enforce existing and develop new mitigation regulations, where needed, for islands that are used as contaminant disposal sites. [Urban, municipal, and industrial pollution]
- Enforce existing and develop new legislation to restrict emissions that contribute to acid rain and mercury deposition. Also address industrial discharge issues for both waste chemicals and return of water used in cooling systems. [Urban, municipal, and industrial pollution]
- Develop and enforce regulations to curtail recreational activities that cause significant damage. [Non-consumptive recreation]

RECREATION

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

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 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.
- 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).
- Determine the impacts of navigation of cargo carrying ships through the Great Lakes on wildlife and their associated habitats. [Industrial, residential, and recreational development]

Monitoring

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