



Great Lakes Islands 101

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MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

32,000



32,000*



(* depends on dataset, resolution/scale, definition of “island”, water levels)



Islands of the Great Lakes:
By the Numbers

Source: Henson et al., 2010

Lake Superior: 2,591

Lake Huron: 23,883

Lake Michigan: 726

Lake Ontario: 2,699

Lake Erie: 2,176

Islands of the Great Lakes:

● Top Biodiversity Scores

(Source: Henson et al., 2010)



Islands of the Great Lakes:

- Top Biodiversity Scores
 - △ Most Threatened
- (Source: Henson et al., 2010)





Islands: The Values



Ecological

- Rare and endemic species & high quality natural communities

State of Michigan Islands (1,709 total):

- ❖ 1% of land area but 10% of all element occurrences in the state
- ❖ 92% of colonial waterbirds were observed on islands (4th decadal survey)

- Migratory stop-over habitat
- Disjunct populations – e.g., Arctic-alpine flora
- Refugia from habitat loss (mainland) and changing climate?



Islands: The Values

Economic

- Tourism
- Harbors
- Recreation
- Game species
- Resource extraction
(timber, minerals, etc.)



Social/Cultural

- Year-round inhabited communities
- Seasonal cottagers & transient visitors



15 Largest Year-round Island Communities
❖ Cumulative population ~20,000

Islands: The Values

Tribes, First Nations, and Métis

- Past & present spiritual, cultural & economic importance
- Madeline Island, Manitoulin Island, Beaver Island Archipelago, others

Dual language (English-Ojibwe)
sign on Madeline Island,
Wisconsin



Islands: The Threats

Ecological

- Habitat loss and fragmentation (residential development, roads, resource extraction, shoreline modifications)
- Invasive species



- Overabundance of certain native species (deer, cormorants)
- Incompatible recreation and other uses
- Climate change (lake levels, species distributions, etc.)

Islands: The Threats

Operational/Technical

- Data gaps
- Fewer organizations/partners
- Sparser “benefiting population” (less bang for the buck)
- Logistics (distance/isolation) – complicated and costly

State of Michigan: 68% of island EOs have not been surveyed in the last 20 years.



Credit: Eric Ellis, Great Lakes Commission

Islands: The Threats

Social

- Poor awareness among decision-makers and the general public
 - Little appreciation of the sheer number, distribution, diversity, unique needs
 - “Leave well enough alone”
 - “Out of sight, out of mind” mentality
- Lack of a regional coordination and support network
 - *Until recently!*



Opportunities

- Significant island acreage in public or conservancy ownership
- Broad geography: bi-national, every Great Lake
- Limited choke points (ferries, boats, planes) – enhanced ability to have meaningful impact
- Academic footprint on islands

Ex: CMU's Beaver Island Biological Station, OSU's Stone Lab, SUNY ESF's Thousand Islands Biological Station; others



The Challenge

How can we best protect islands & support island communities?

- Common goals
- Connected programs
- Leveraged resources
- Shared solutions
- Informed strategic decision-making
- Backbone organization support
- Prioritized projects
- Elevated awareness

“Management policy based on an island-by-island, case-by-case approach can potentially result in degradation of the entire array of islands... The islands must be considered as a single, irreplaceable resource and protected as a whole...” (J. Soule, 1996)

New Regional-scale Partnerships/Networks

Great Lakes Islands Conservation Workgroup

- Formed 2022
- All 32,000 islands
- Federal, state, provincial, tribal governments; NGOs; universities
- Conservation focus

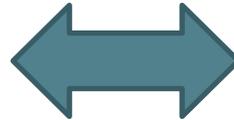
Great Lakes Islands Alliance (GLIA)

- Formed 2017
- Year-round populated islands only (20)
- Islanders
- Dual environmental stewardship & socio-economic focus

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Great Lakes Islands Conservation Workgroup

Mission: to advance the conservation of Great Lakes islands.

Goals

- Foster collaboration and relationships between scientists, managers, indigenous communities, property owners and other island advocates.
- Support regional and local island decision-making with respect to islands, including prioritization of conservation actions.
- Improve awareness about islands, particularly among mainland audiences.

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Great Lakes Islands Conservation Workgroup





Great Lakes Islands Alliance



*Photo credit:
Jet Express*

Mission: to encourage relationship building, foster information exchange, and leverage resources to address shared challenges and embrace opportunities to benefit islands.



Great Lakes Islands Alliance

Goals

- Connect remote, distant communities.
- Facilitate information access and sharing, particularly through tools that offer best practices and solutions to island challenges.
- Advance opportunities for multi-island collaboration, where appropriate.
- Amplify island voices to mainland audiences.





Great Lakes Islands Alliance

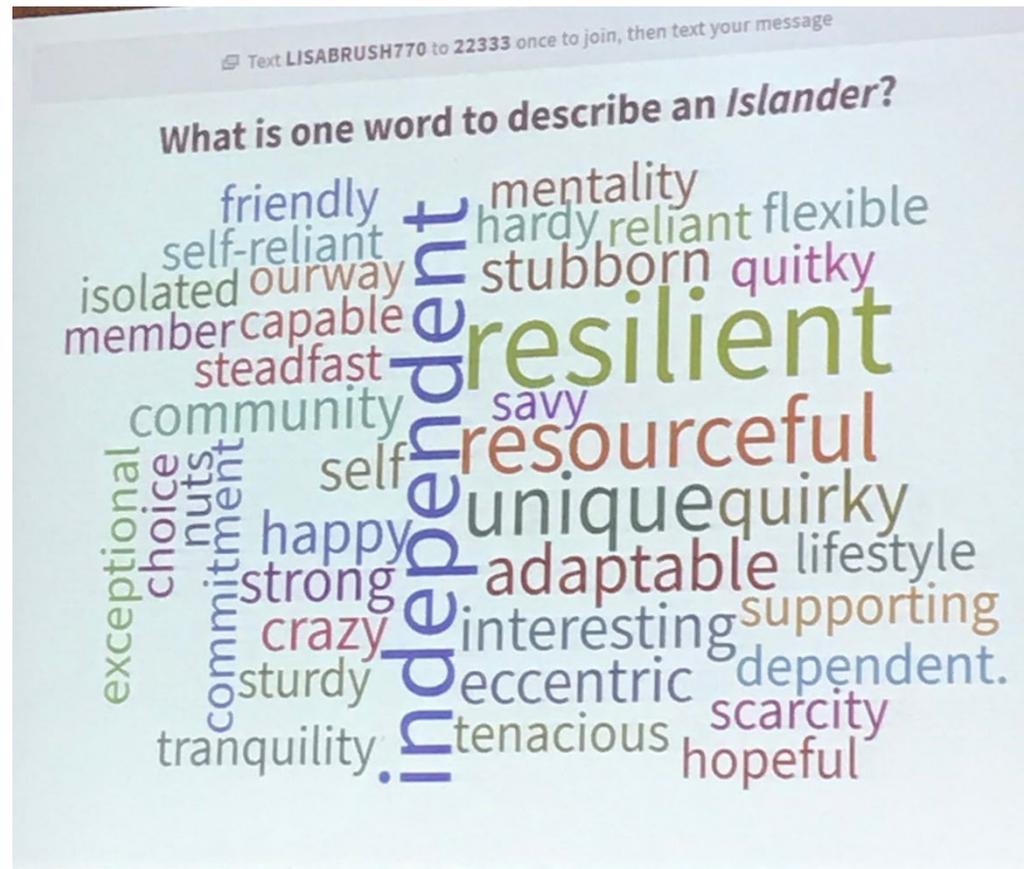
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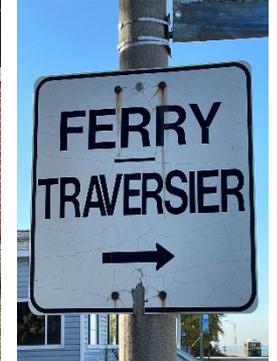
Great Lakes Islands Alliance





GREAT LAKES
ISLANDS ALLIANCE

2022 Islands Summit



For more on GLIA, see <https://glialliance.org/>

Photo credit: Jakob Grubb, Shelby Harris, Peter Huston, Matt Preisser, Shores & Islands Ohio, Joe Shorthouse, Jackie Taylor

Thank You!



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