

# Great Lakes Aquatic Invasives TCN:

DOCUMENTING THE OCCURRENCE THROUGH SPACE & TIME OF AQUATIC NON-INDIGENOUS FISH, MOLLUSKS, ALGAE, & PLANTS THREATENING NORTH AMERICA'S GREAT LAKES

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# BASIS OF THE PROJECT:



***GLANSIS maintains a Database of invasive and potentially invasive genera and species of plants, fish, and mollusks***

***- plants: 49 genera (2147 sp. in North America)***

***- fish: 38 genera (290 sp.)***

***- mollusks: 14 genera (113 sp.)***

**= 2,550 Species in 101 Genera**

## Digitization TCN: Great Lakes Invasives- Collaborator Map



- 1. Univ of WI-Madison (WIS)**
- 2. Univ of WI-Steven's Point**
- 3. Univ of WI-Milwaukee**
- 4. Univ of WI-LaCrosse**
- 5. University of Minnesota**
- 6. Michigan State University**
- 7. Field Museum (F / FMNH)**
- 8. University of Illinois / ILNHS**
- 9. Morton Arboretum \*\*\***
- 10. University of Notre Dame**
- 11. Butler University**
- 12. Univ of Michigan (MICH)**
- 13. Central Michigan University**
- 14. MI Small Herbaria Network ++**
- 15. Miami University**
- 16. Ohio State University**
- 17. Ohio University**
- 18. NY Botanical Garden (NY)**
- 19. New York State Museum**
- 20. Université de Montréal /Canadensys**
- (21. Arizona State Univ / Symbiota)**

**NETWORK OVERSIGHT & PROCESS**

<http://GreatLakesInvasives.org>



# GREAT LAKES INVASIVES NETWORK

## Aquatic Invasives Homepage

[Fish Collections](#)

[Mollusk Collections](#)

[Plant Collections](#)

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One of the greatest threats to the health of North America's Great Lakes is invasion by exotic species, several of which already have had catastrophic impacts on property values, the fisheries, shipping, and tourism industries, and continue to threaten the survival of native species and wetland ecosystems. This bi-national thematic collections network of >20 institutions from eight states and Canada will digitize 1.73 million historical specimens representing 2,550 species of exotic fish, clams, snails, mussels, algae, plants, and their look-alikes documented to occur in the Great Lakes Basin. Others have been placed on watchlists because of their potential to become aquatic invasives.

Several initiatives are already in place to alert citizens to the dangers of spreading aquatic invasives among our nation's waterways, but this project will develop complementary scientific and educational tools for scientists, wildlife officers, teachers, and the public who have had little access to images or data derived directly from preserved specimens collected over the past three centuries. This award is made as part of the National Resource for Digitization of Biological Collections through the Advancing Digitization of Biological Collections program and all data resulting from this award will be available through the national resource (iDigBio.org).

Join the network as a regular visitor and please send your feedback to Ken Cameron



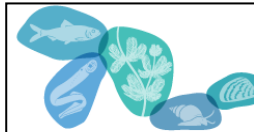
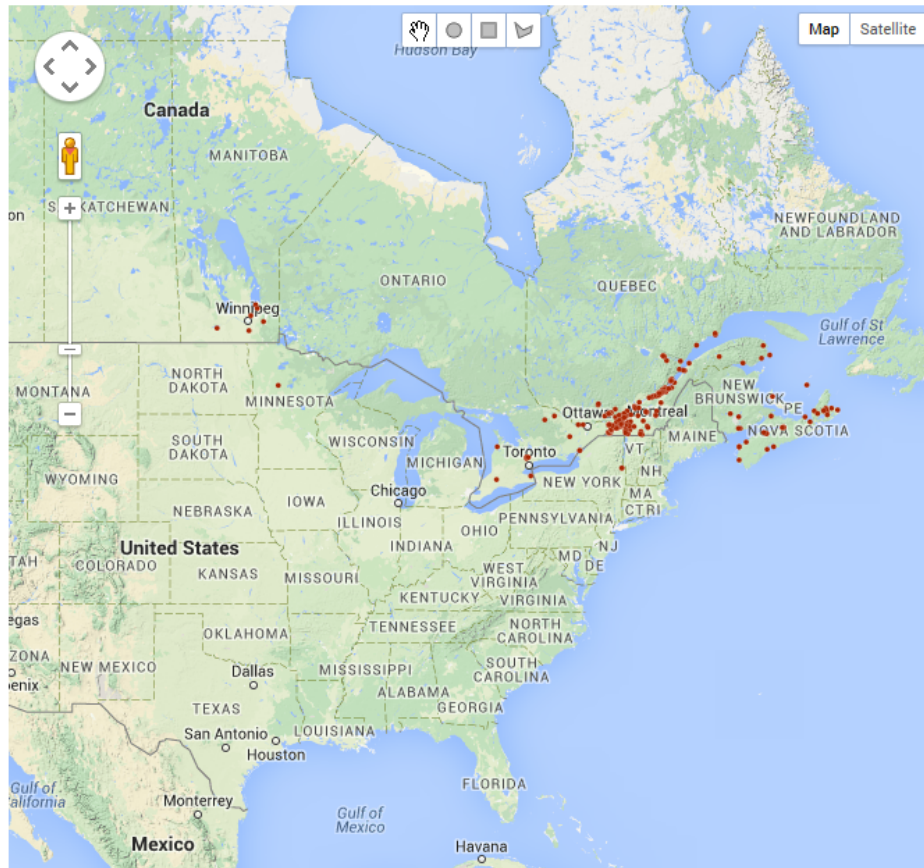
## 726 Results

(showing only georeferenced records: 354)

Map view

Table view

Stats view



## GREAT LAKES INVASIVES NETWORK

Home >> Collections



**Albion College (ALBC)** [more info](#)



**Central Michigan University (CMC)** [more info](#)



**Field Museum of Natural History (F)** [more info](#)



**Green Plant Herbarium (TRT)** [more info](#)



**Herbarium, Biodiversity Centre of Ontario (OAS)** [more info](#)



**Herbier du Québec (QUE) – Collection de plantes vasculaires (QUE)** [more info](#)



**Herbier Louis-Marie (QFA) - Collection de plantes vasculaires (QFA)** [more info](#)



**Illinois Natural History Survey (ILLS)** [more info](#)



**J. F. Bell Museum of Natural History Herbarium (MIN)** [more info](#)



**Jardin Botanique de Montréal (JBM)** [more info](#)



**Marie-Victorin Herbarium (MT)** [more info](#)

# PROGRESS TO DATE: SPECIMENS IN INVASIVES PORTAL

	Specimens	Georeferenced	Imaged	Original goals
27 US Herbaria	737546	246123	685540	
10 Canadensys Herbaria	122195	57296	13946	
total plants:	859741	303419	699486	637000
	<b>Lots</b>			
6 Fish Collections	107728	61787	45565	102000
6 Mollusk Collections	45002	22240	15099	44000
<b>Grand Totals</b>	<b>1012471</b>	<b>387446</b>	<b>760150</b>	<b>783000</b>

% Georeferenced	% Imaged	% over goals
38.26	75.08	29.31%

# INNOVATION: REDUNDANCY OF RECORDS

Our project structure has some built-in redundancy.

Plant records from US institutions are available:

- via the source institution
- via the Consortium of Midwest Herbaria portal
- iDigBio
- Our project portal: [http:// GreatLakesInvasives.org](http://GreatLakesInvasives.org).

An advantage for sustainability – not all is lost if a site eventually goes away.

# LESSONS LEARNED

1. Media interest: may be greater than one might think. We discovered that if one approaches them with a story they are likely to be excited and will help promote the project. One of our PI's was especially helpful in getting our TCN some radio, newspaper, and even online video coverage.
2. Maintaining interest among collaborators over the course of the project takes more work than we originally assumed.



# GREAT LAKES INVASIVES NETWORK

[http:// GreatLakesInvasives.org](http://GreatLakesInvasives.org)

[http:// MidwestHerbaria.org](http://MidwestHerbaria.org)

