MICHIGAN SMALL HERBARIUM INITIATIVE:

THE TRAIL FROM AN IDEA TO SPECIMEN DIGITIZATION

Richard K. Rabeler, University of Michigan

Anna K. Monfils, Central Michigan University

Timothy M. Evans, Grand Valley State University







MICHIGAN SMALL HERBARIUM INITIATIVE: HISTORY

- Sept. 2004 NSF workshop at Michigan State University; idea for forming regional networks arises.
- Late 2004 regional meeting at MSU 20 colleagues from Illinois, Indiana, Michigan, and Ohio show interest in a Great Lakes network.
- August 2006 Anna joins the effort.
- October 2006 meeting of 4 to rekindle the idea, focusing on Michigan.
- January 2007 survey sent to Michigan botanists to gauge interest; results reported in posters at Ohio Botanical Symposium and Botany 2007 meetings.
- July 2008 Anna & Rich apply to the Hanes Fund, seeking funds for a meeting and website creation for a Michigan Herbarium Network.

MICHIGAN SMALL HERBARIUM INITIATIVE: MICOB IS BORN

• Late 2009: Hanes Fund grant received

MICHIGAN CONSORTIUM of BOTANISTS

Mission Statement:

The Michigan Consortium of Botanists is a state-wide community of botanical professionals dedicated to advancing the study of Michigan's flora by providing a centralized platform for facilitating communication, and sharing resources, research, and expertise in plant biology.

MICHIGAN SMALL HERBARIUM INITIATIVE: BORN FROM MICOB

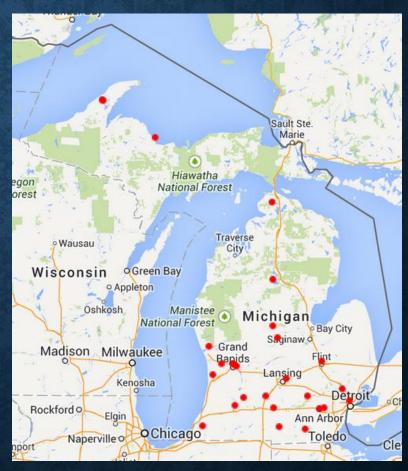
- Rich reported on digitization initiatives/proposals in the Great Lakes region at the annual MiCOB meetings in 2010, 2011, and 2012.
- Anna received internal support to digitize the CMC collection.
- Tim and Anna spearheaded a discussion at the 2012 MiCOB meeting could the group develop a digitization project involving some of the small collections?

MICHIGAN SMALL HERBARIUM INITIATIVE: BORN FROM MICOB

- October 2012: MiCOB, iDigBio, and the Hanes Fund cosponsored a Workshop on Digitization of Small Herbarium Collections at CMC: Good community response:
 - 19 directors and/or curators, 2 graduate students, 7 undergraduate students, 3 herbarium volunteers, and 1 Dean(!)
- Tim and Anna write a proposal to the Hanes Fund for a portable imaging station to be shared among several of the collections, with the images and data processed by SilverBiology and stored at CMC.
- Funding received (!) in 2013. The imaging begins....

MICHIGAN SMALL HERBARIUM INITIATIVE: HERBARIA IN MICHIGAN

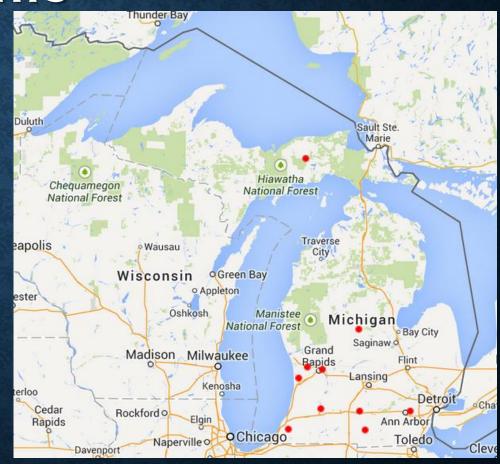
- 31 Herbaria listed in IH for Michigan
- 27 of these are active; 4 incorporated
- 500 1.75 million specimens
- Only 4 (BLH, MICH, MSC, WMU) have over 30,000 specimens
- 24 of 27 affiliated with a college or university



http://www.hamstermap.com/quickmap.php

MICHIGAN SMALL HERBARIUM INITIATIVE: PARTICIPANTS

- 9 of the 31 (27) Michigan herbaria listed in Index Herbariorum + 1;
- 400 33,000 specimens about 90K specimens total.
- ALBC, AUB, CALVIN, CMC, EMC, GVSU, HCHM, HLSD, Seney, WMU
- 9 Universities + 1 National Wildlife Refuge



http://www.hamstermap.com/index.php

MICHIGAN SMALL HERBARIUM INITIATIVE: PROGRESS

- As of May, 2014:
 - Imaging station is currently at ALBC
 - Imaging has been completed at HOPE and CALVIN
 - Seney completed their initial commitment (400); would like a second "round" with the imaging equipment.
 - ½ of the collection at GVSU has been imaged
 - Cost per specimen for imaging (excl. student labor): 25 cents/image

MICHIGAN SMALL HERBARIUM INITIATIVE: WHY HAS IT WORKED?

- We formed a core group that both respect each other and enjoy working together
- We started in a rather unstructured manner focusing on doing things rather than formalities
- Ideals:
 - Work with friends, interested colleagues. Don't force collaboration!
- Positives:
 - Links to get small collections involved in national initiatives (ADBC TCNs, etc.); MSHI was included in two TCN proposals in 2013.
 - Exposes collections to outside researchers who otherwise would very likely not consult them.
- Challenges:
 - Remembering that Curators of small collections have primary responsibilities elsewhere.
 - IT abilities are often quite limited.

MICHIGAN SMALL HERBARIUM INITIATIVE: INVASIVE AQUATICS TCN (?)

- "Documenting the Occurrence through Space & Time of Aquatic Non-indigenous Fish, Mollusks, Algae, & Plants Threatening North America's Great Lakes".
- One of the NSF-sponsored Thematic Collection Networks that is still under consideration for funding in 2014.
- Aim: digitize specimens of 43 genera from North America that include species known to be invasive in the Great Lakes region.
- Network of Plant and Animal collections in the Great Lakes area
- One participant: Anna Monfils (CMC) will coordinate inclusion of specimen data from MSHI collections.

MICHIGAN SMALL HERBARIUM INITIATIVE: FUTURE PLANS

- Promote further collection collaboration; MiCOB survey has revealed at least seven additional active small herbaria in Michigan
- Expand the network to include other interested collections
- Make the data from the network available on GBIF

MICHIGAN SMALL HERBARIUM INITIATIVE: ACKNOWLEDGMENTS

- Hanes Fund
- SilverBiology Michael Giddens
- Barbara Thiers (NY) Index Herbariorum data
- National Science Foundation the original 2004 workshop, ADBC program
- iDigBio Small Collections Workshop



