

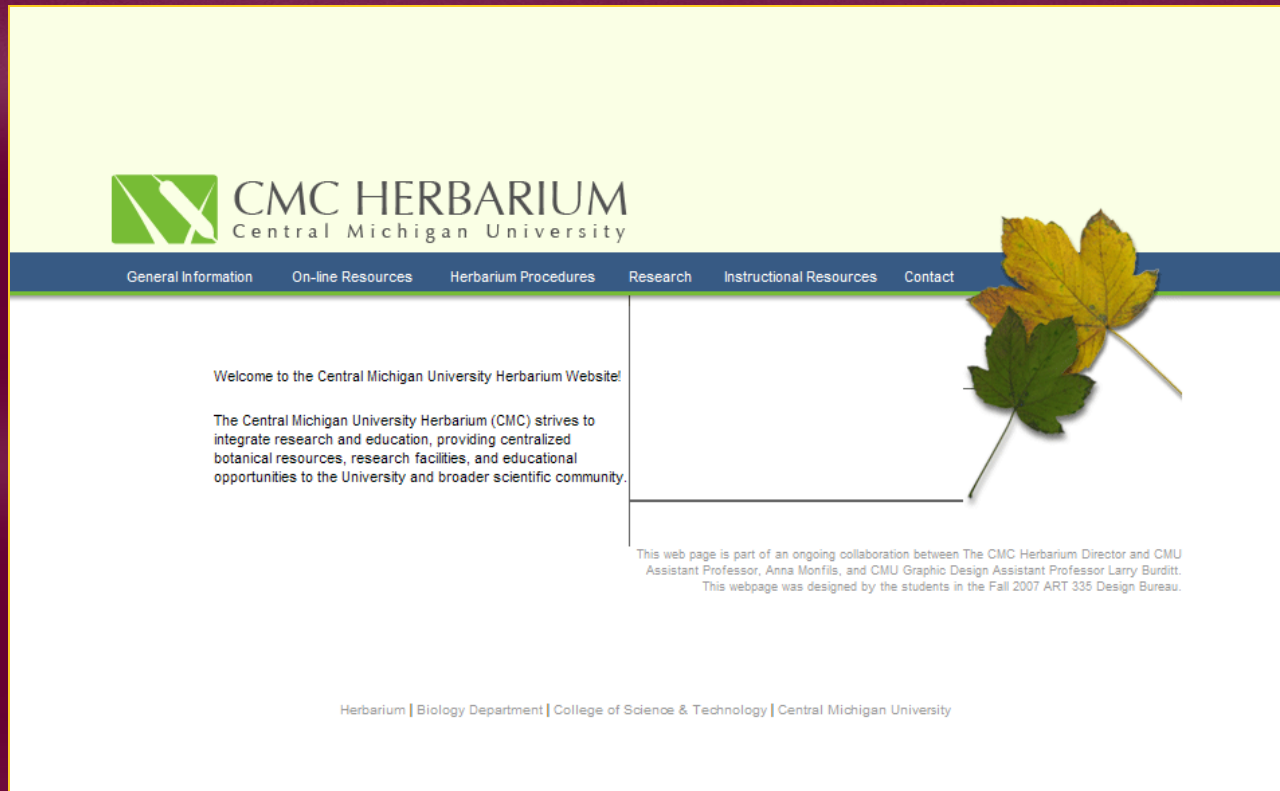


Digitization at the Central Michigan University Herbarium

Anna Monfils
CMC Herbarium
Central Michigan University

CMC Herbarium

<http://cmcherbarium.bio.cmich.edu/>



COLLECTIONSWEB

Building a Community of Natural History Collections

[About Us](#)

| [Activities & Schedules](#)

| [Get Involved](#)

| [Resources](#)

| [Contacts](#)



Project News

Welcome to CollectionsWeb, the website of the Research Coordination Network (RCN) for **Building a National Community of Natural History Collections**. At CollectionsWeb you can find out general information about the RCN and find out how you can **get involved** in the activities of the RCN. Please refer back to CollectionsWeb.org for up-to-date information and resources.

CollectionsWeb Announces Availability of Two Collections-Based Research Internships for 2011. Interns can be housed at any U.S. institution and supervised by any appropriate mentor. **More internship details and application information.**

Partner Organizations

- [American Institute of Biological Sciences \(AIBS\)](#)
- [Natural Sciences Collections Alliance \(NSCA\)](#)
- [Society for the Preservation of Natural History Collections \(SPNHC\)](#)



iDigBio

Integrated Digitized Biocollections

Digitization at CMC

- Significant Institutional Support
 - Administrative
 - Financial
 - Information technology
 - Electronic/Construction technician

Silver
BIOLOGY

Biodiversity Informatics Consulting & Solutions

- *Michigan Flora* and Voss database



Digitization Challenges

- Pre-digitization curation
 - Consolidating, evaluating and repairing
 - Annotating
 - Organizing
 - Folder labeling
- Optimizing workflow
- Communication
- Space limitations

Where are we now?

CMC HERBARIUM
Central Michigan University

Custom Links: Herbarium Website | Support: About, English, Help, Report Bug | SilverBiology Network: All Collections, Share, Facebook, Twitter

Welcome | **Browse Collection** | Search Collection | Checklist | 253 | 516

Browse Collection

- Castilleja (1)
- Caulophyllum (4)
- Ceanothus (3)
- Celastrus (4)
- Centaurea (13)
- Cephalanthus (4)
- Cerastium (4)
- Ceratophyllum (5)
- Chamaedaphne (10)
- Chelone (3)
- Chenopodium (8)
- Chimaphila (5)
- Chondrilla (1)
- Chrysanthemum (6)
- Chrysosplenium (1)
- Cichorium (6)
- Cicuta (9)
- Cinna (1)
- Circaea (6)
- Cirsium (11)**
- Cladium (2)**
- Claytonia (4)
- Clematis (1)
- Clinopodium (4)
- Clintonia (1)
- Collinsia (1)
- Comandra (1)
- Comptonia (5)
- Convallaria (1)
- Convolvulus (2)
- Conyza (1)
- Coptis (6)
- Corallorhiza (51)

Genus: Calamagrostis (3 Specimens)

Catalog #	Genus	Species	State	County	Locality	Collector	Date Collected
253	Calamagr...	canadensis	Michigan	Charlevoix A	Beaver Island, Peain...	LaBeau	25 Jul 1966
254	Calamagr...	canadensis	Michigan	Charlevoix A	Peaine Township, T...	S.C. Swan	26 Jul 1964
255	Calamagr...	inexpansa	Michigan	Charlevoix A	St. James Twp., T-3...	S.C. Swan	14 Aug 1964

Genus: Cirsium (11 Specimens)

Catalog #	Genus	Species	State	County	Locality	Collector	Date Collected
512	Cirsium	arvense	Michigan	Charlevoix A	Beaver Island St. Ja...	G. Lee, M. Wilkinson...	30 Jul 1970
513	Cirsium	arvense	Michigan	Kent	Grand Rapids Town...	G. Stegmier	01 Jul 1976
514	Cirsium	arvense	Michigan	Isabella	Gillmore Township T...	L. Urban	08 Sep 1981
515	Cirsium	arvense	Michigan	Montcalm	T. 11N R. 9W Sec. 22	Bunce	07 Jul 1973
516	Cirsium	muticum	Michigan	Clare	Surrey Township T. ...	Gretchen M. Peters	02 Aug 1997
517	Cirsium	pitcheri	Michigan	Charlevoix A	Beaver Island Peain...	K. Peschel	
518	Cirsium	vulgare	Michigan	Washtenaw	Superior Township ...	M. Sutherland	11 Sep 1977
519	Cirsium	vulgare	Michigan	Macomb	Harrison Township	Dave Hartman	07 Aug 1978
520	Cirsium	vulgare	Michigan	Clare	Surry Township T. 1...	Charles Martin	23 Sep 1981
521	Cirsium	vulgare	Michigan	Isabella	Fremont Township ...	David Huber	27 Sep 1981
522	Cirsium	vulgare	Michigan	Isabella	Deerfield Township ...	J.M. Flynn	05 Oct 1979

Genus: Cladium (2 Specimens)

Catalog #	Genus	Species	State	County	Locality	Collector	Date Collected
523	Cladium	mariscoides	Michigan	Charlevoix A	Beaver Island. Peain...	LaBeau	25 Jul 1966
524	Cladium	mariscoides	Michigan	Charlevoix A	Peaine Township, B...	S.C. Swan	29 Jul 1964

Page 1 of 1 | Export... | Distribution Maps | Reports | Displaying Specimens 1 - 16 of 16

Digitization Progress

<http://cmc-herbarium.blogspot.com>

CMC Herbarium - Central Michigan University

TUESDAY, JULY 3, 2012

Week 1: Arrival and Exploration

Hey guys,

My name is Taylor. I am the newest graduate student to start in the Monfils Lab. I have been given the pleasure of helping Emilee and Dr. Monfils digitize and re-organize the Central Michigan Herbarium.

The first task I was given was to address workflow issues by re-organizing the herbarium for digitization. The following pictures will serve as our "before" shots.



BLOG ARCHIVE

▼ 2012 (7)

▼ July (1)

Week 1: Arrival and Exploration

► June (2)

► May (4)

CONTRIBUTORS

CMC
Herbarium
Team

Taylor Lowrey

Lessons Learned

- Iterative process
 - By the time we figures out the best way to do it we were done!
- Instill ownership but keep an eye on the process
- Imaging is easy (2 months); organization is the challenge (1 year)



Value Added



Michigan Small Herbarium Initiative

<http://www.micob.org/mshi/index.html>



MICHIGAN SMALL
HERBARIA INITIATIVE



Workshop

Michigan Small Herbaria
Digitization Effort

Digitization Resources

MICOB.org

A strategic plan for establishing a Network of Biocollections Alliance (NIBA) has been developed to facilitate digitization and mobilize information associated with natural history collections. The goal is to record and archive biodiversity across the United States.

This website is intended to assist with consolidating resources and facilitating digitization efforts for small collections in Michigan and across the Great Lakes

Digitization of Michigan's Regional Herbaria: A Collective Effort.

T. Evans & A. Monfils

Funded through Hanes Trust

- A. Monfils (CMC)
- T. Evans (GVSC)
- D. Skean (ALBC)
- M. Hanes (EMC)
- J. Li (HCHM)
- R. Cooper (HLSD)
- T. Barkman (WMU)
- G. Corace (Seney National Wildlife Refuge)
- D. Woodland (AUB)
- D. Warners & G. Crow (CALVIN)

2013 Thematic Collection Network Proposals (NSF)

- COLLABORATIVE RESEARCH: DIGITIZATION
TCN: Great Lakes TCN: Leading edge dynamics of vascular plant species within a biogeographic tension zone (CMU co-PI)
- COLLABORATIVE RESEARCH: DIGITIZATION
TCN: Documenting the occurrence through space & time of aquatic non-indigenous fish, mollusks, algae, & plants threatening North America's Great Lakes (CMU contributor)

Undergraduate Learning Outcomes in Natural History Collections

A. Monfils & S. Ellis




ecard created by E. Jordao for CMC Herbarium blog entry

NANSH -

North American Network of Small Herbaria

Nansh.org/protal/



North American Network of Small Herbaria

Homepage

- [Search Collections](#)
- [Dynamic Checklist](#)
- [Dynamic Key](#)
- [Image Library](#)
- [About Network](#)
- [Resource Links](#)
- [Symbiota Help Page](#)

Other Networks

- [Great Plains](#)
- [Intermountain](#)
- [MABA Flora](#)
- [SEINet](#)
- [SERNEC](#)

[Log In](#)

[New Account](#)

[Sitemap](#)

North American Network of Small Herbaria

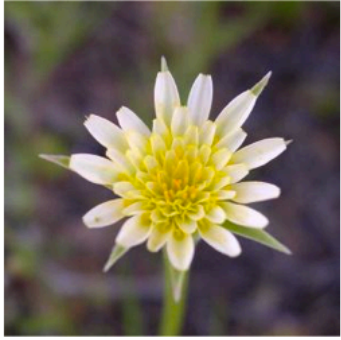
Portal will be offline for maintenance during a 4-5 hour period in the afternoon of Saturday, Dec. 14th. We are sorry for any inconvenience this may cause.

The North American Network of Small Herbaria is an open access data portal provided by Symbiota and intended to foster digitization of small collections and facilitate collaboration among institutions. The establishment of this portal is the result of collaboration between Symbiota and iDigBio's Small Herbarium Working Group (https://www.idigbio.org/wiki/index.php/Small_Herbarium_Interest_Group). To learn how to join the working group or network, contact Anna Monfils (monfi1ak@cmich.edu) or Gil Nelson (gnelson@bio.fsu.edu).

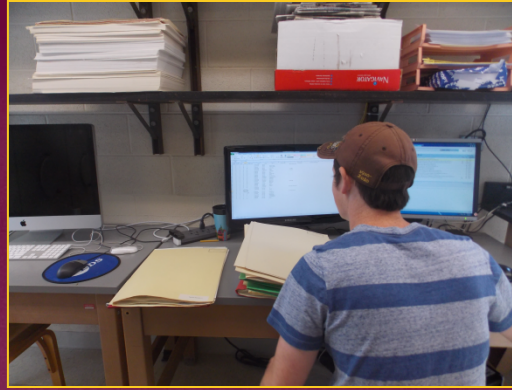
Small herbaria constitute a major source of information for understanding North America's plant diversity. These collections are typically regional in scope with strong ecological, taxonomic, and geographic biases. They frequently hold specimens that are unduplicated in larger herbaria and usually represent intense samplings of community composition that significantly expand our knowledge of landscape-level biogeography. As a result, they are singularly important to the study of regionally and nationally significant natural communities.

Until recently, access to the wealth of biodiversity data stored in small herbaria has been hampered by travel requirements, insufficient staff, and long-term loans that render specimens unavailable for extended periods. With the advent of biodiversity collections digitization, small herbaria are now poised to overcome these obstacles by making label data and specimen images readily available online through searchable electronic databases. As more institutions take advantage of open-source, community-supported digitization software, the online presence of small collections will rapidly increase and with it the volume of available biodiversity data.

Plant of the Day



What is this plant?
[Click here to test your knowledge](#)



“If you give people tools and they use their natural ability and their curiosity, they will develop things in ways that will surprise you very much beyond what you might have expected.”

Bill Gates

CMC Herbarium - Central Michigan University

Saturday, December 7, 2013

Happy Holidays from the CMC Herbarium

Seasons Greetings!

With the holiday season in full effect, the CMC Herbarium is really getting into the spirit. From decorations to festive threads, the holiday cheer is infectious and we hope that you too, catch the jolliness bug.



Figure 1. Graduate students Heather Dame, Rachel Hackett (represented as the chair), and Clint Pogue show off their holiday spirit.

Blog Archive

▼ 2013 (19)

▼ December (1)

Happy Holidays from the CMC Herbarium

► November (2)

► October (3)

► July (2)

► June (3)

► May (3)


► March (1)


► February (3)


► January (1)

► 2012 (29)

Contributors

 Abigail L. Hollingsworth


 Hillary Karbowski

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