## GREAT LAKES INVASIVES TCN – Bi-Monthly Report Through Dec. 31, 2015

Our four regional processing centers (NY Botanical Garden, Field Museum, Univ. of Michigan, and Univ of Wisconsin-Madison) report the following from their constituents:

### 1) Progress in Digitization Efforts TO DATE

#### **PLANTS:**

- Specimens <u>Barcoded Only</u> (not photographed yet): **0**
- Imaged only AND image uploaded to the portal (i.e., no data record yet): 6604
  (OSU) + 9804 (ALBC) + 1833 (MSC) = 18,241
- <u>Imaged</u> only but image not yet uploaded to the portal: 436 (BUT)+ 102,646 (NY)
  + 38,198 (F) + 26,744 (OSU) = 168,024
- <u>Databased</u> only (skeletal or complete record) AND data uploaded to a portal (i.e., but not imaged yet): 3840 (MOR) = 3,840
- <u>Databased</u> only but not yet uploaded to a portal: 98,519 (NY) + 46,079 (F) + 3250 (MOR) = 147,848
- Imaged and Databased but not yet uploaded to a portal: 20,775 (MICH)
- Both Image AND a Data Record Uploaded to iDigBio, to the GLI portal directly, or to another Symbiota portal: 458,473

<u>PLANT IMAGING SUMMARY:</u> At least 644,738 images taken. Target stated in grant proposal is 637,000. Imaging goal is 101% complete.

### FISH:

- Specimens Barcoded Only (not photographed yet): 519 (MIN) =519
- <u>Imaged</u> only AND image uploaded to a portal (i.e., no data record yet): 1617 (F)
  + 6694 (OSU) = 8,311
- Imaged only but image not yet uploaded to a portal: 187 (OSU) = 187
- <u>Databased</u> only (skeletal or complete record) AND data uploaded to a portal (i.e., but not imaged yet): 29291 (ILLS) + 4422 (WIS) = 33,713
- <u>Databased</u> only but not yet uploaded to a portal: 200,000 (MICH: UMMZ) complete, but waiting for corresponding images to be completed before uploading + 4709 (F) = 204,709
- Both Image AND a Data Record Uploaded to iDigBio, to the GLI Portal directly or to another Symbiota Portal for editing before transfer to GLI Portal: 128 (MICH: UMMZ) + 6674 (OSU) + 2696 (MIN) = 9,498

<u>FISH IMAGING SUMMARY:</u> Five institutions making progress so far. At least 17,809 images have been taken. Target stated in grant proposal is 102,000 lots. Imaging goal is 17% complete.

#### **MOLLUSKS:**

- Specimens <u>Barcoded</u> Only (not photographed yet): 200 (WIS) = 200
- Imaged only AND image uploaded to a portal (i.e., no data record yet): 0
- <u>Imaged</u> only but image not yet uploaded to a portal: 9341 (MICH: UMMZ) + 640 (ILLS) = 9,981
- <u>Databased</u> only (skeletal or complete record) AND data uploaded to a portal (i.e., but not imaged yet): 5716 (ILLS) + 349 (WIS) = 6,065
- <u>Databased</u> only but not yet uploaded to a portal: 15,668 (MICH: UMMZ) = 15,668
- Both Image AND a Data Record Uploaded to iDigBio, to the GLI Portal directly or to another Symbiota Portal for editing before transfer to GLI Portal: 855 (MICH: UMMZ) + 94 (WIS) = 949

MOLLUSK IMAGING SUMMARY: Two institutions making progress so far. At least 10,889 images have been taken. Target stated in grant proposal is 44,000 lots. Imaging goal is 25% complete.

# 2) Share and Identify Best Practices and Standards (including Lessons Learned)

MOR - We recently switched to entering skeletal records for plants collected outside of the Chicago Region and we are continuing to enter full records for plants collected within the Chicago Region.

Learned about how GUIDs are assigned and how to best ensure that collections added to Symbiota are given correct GUIDs to enable ingestion into iDigBio (WIS)

# 3) Identify Gaps in Digitization Areas and Technology

F - the new EMu version (our database system) generates a report with a project name and with live image links that will enable us to upload our data and images to the portal. We will test this in January.

MOR - Our database is almost out of the transition stage but we are still having issues with data export. A meeting with the database programmer is planned to discuss these issues.

# 4) Share and Identify Opportunities to Enhance Training Efforts

We need to make a better effort in helping less experienced (with digitization) collections in setting up and managing their online presence (WIS)

# 5) Share and Identify Collaborations with other TCNs, Institutions, and Organizations

The Experience Box learning tool being developed in collaboration with the Field Museum is well underway. The activity guides outlining suggestions and procedures for lesson planning are in the drafting stage. Future meetings are planned for editing, scientific content review, and efficacy review by area teachers.

The Education and Outreach Coordinator attended the Michigan Consortium of Botanists meeting on October 24. At this meeting she presented our TCN's outreach strategies and networked with botanists interested in sharing the Experience Box's educational materials. Half of the day's presentations were focused on invasive species research, reporting, and control strategies. Of particular interest was learning more about MISIN (Midwest Invasive Species Information Network). MISIN has an online invasive species records database and specializes in optimizing occurrence reporting. We will be contributing our data records to MISIN.

## 6) Share and Identify Opportunities and Strategies for Sustainability

## 7) Other Progress (that doesn't fit into the above categories)

Intensive data-cleaning and quality control was completed. As a result, some data from the project have been repatriated into the MICH in-house database.

Progress slowed a bit this bimester due to technician turnover (MICH)

Rich Rabeler, Diego Barroso, and Taehwan Lee (Mollusk Division) attended iDigBio Summit in Washington, DC, in November 2015 (MICH); additional attendees included Andrew Simons (MINN – who gave 10 minute presentation on behalf of Ken Cameron who could not attend), Melissa Tulig (NY), Ed Gilbert (ASU) among others

Ken Cameron (WIS) attended the iDigBio workshop on using specimen data to address issues of global change 2-3 December, St. Louis, MO.

Interviewing applicants for 300 hour digitization internship. (MOR)

Created several charts of GLI data to begin to tease out collection patterns and differences between native and nonindigenous species (WIS)

The following tables contain data taken from the greatlakesinvasives.org portal on 12/305. The values represent only records & images that can be seen at the present time; others may be uploaded but not yet released.

Table 1. PLANTS

			% with		
Institution	Total Records	with images	images	georeferenced	% georeferenced
UW-Madison	91337	86566	95	6605	7
UW-Milwaukee	7300	7225	99	10	0.14
UW-LaCrosse	1095	603	55	11	1
UW-StevensPoint	0	0	0	0	0
UMinnesota	29830	29783	100	4	0.01
Field	5782	0	0	3050	53
UofIllinois	5558	5519	99	0	0
INHS	45011	17179	38	5075	11
Morton	10297	8135	79	1093	11
NotreDame	0	0	0	0	0
Butler	272	267	98	0	0
UMichigan	75546	67525	89	7623	10
MichiganState	12177	12128	100	0	0
CentralMichigan	3722	3691	99	288	8
Miami	17721	17512	99	0	0
OhioState	394	394	100	0	0
OhioUniversity	0	0	0	0	0
NYBotanical	22282	11208	50	8284	37
NYMuseum	0	0	0	0	0
Canadensys	122816	14278	12	57504	47
Eastern_Michigan	1458	1357	0.93	0	0
Total	452598	283370	0.63	89547	20

Table 2. Fish

			% with		%
Institution	<b>Total Records</b>	with images	images	georeferenced	georeferenced
INHS:Fish	29291	0	0	8325	28
Uminnesota:Fish	2696	2647	89	2404	89
OhioState:Fish	6674	6046	91	0	0
UW-					
Madison:Fish	4422	0	0	427	10
Umichigan:Fish	128	48	38	0	0
Total	43211	8741	20	11156	26

Table 3. Mollusks

Institution	Total Records	with images	% with images	georeferenced	% georeferenced
INHS:Mollusks	5716	0	0	5553	97
U-M:Mollusks	0	0	0	0	0
OhioState:Mollusks	0	0	0	0	0
Umichigan:Mollusks	855	414	48	1	0.12
UW-					
Madison:Mollusks	443	94	21	425	96
Total	7014	508	7	5979	85