

How digitization will help your field station's outreach program

Molly Phillips & Gil Nelson
iDigBio



Photo courtesy of FLMNH



iDigBio is funded by a grant from the National Science Foundation's Advancing Digitization of Biodiversity Collections Program (Cooperative Agreement EF-1115210). Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

Outreach at Biological Field Stations

- Common outreach activities:
 - Field courses
 - Volunteer & internship programs
 - Publications & white papers
 - Presentations, speaking engagements, classroom visits
 - Open houses, tours



<http://www.ess.washington.edu>



<http://bunnellhigh.stratfordk12.org/>



<http://biosurvey.ku.edu/friends-ku-field-station>



<http://blog.education.nationalgeographic.com>

Why Digitize?

- How will digitizing your research collections help your outreach programs?



The Three D's

Digitization will increase:

- Discoverability
- Data
- Diversity

Discoverability

- Find out what you have



P. Kent/Clemson University



<p>Cornus alba</p> <p>United States, Michigan, Macomb MFC, Westland Park, 28500, County Dr. D.</p> <p><i>Phlox. Magnoliifolia. Magnolioides. Cornus</i></p> <p>1885.6.4</p>	<p>Cornus alba L.</p> <p>Netherlands, Noordwest-Vlaanderen, 14/11/1914, Fosses-Ollebrun, nr.893, 893.87</p> <p>1918.10.27/88, Terebinth, G.</p> <p><i>Phlox. Magnoliifolia. Magnolioides. Cornus</i></p>	<p>Cornus alba L.</p> <p>Belgium MUSE, 1854, 1857, Bouchepont, H.</p> <p><i>Phlox. Magnoliifolia. Magnolioides. Cornus</i></p>
<p>Cornus alba L. s.s.</p> <p>U.S.A., Alaska, Copper, Comstock Collection Q-2193-01 MUSE, 1848/1850, Sitka, Alaska, Sitka</p> <p><i>Phlox. Magnoliifolia. Magnolioides. Cornus</i></p> <p>1855.05.05</p>	<p>Cornus alba alba L.</p> <p>Belgium, Arrondissement, Heule MUSE, 1854, 1854, Bouchepont, H.</p> <p><i>Phlox. Magnoliifolia. Magnolioides. Cornus</i></p> <p>1855.05.05</p>	<p>Cornus alba L. s.s.</p> <p>U.S.A., Alaska, Copper, E. side, Comstock Collection, Q-2193-0177, Collected privately, 1914 from Alaska Copper District, near Sitka LAT: 57°43' N, Lon: 137° 31' W MUSE, 1848/1850, Sitka, Alaska, Sitka, Alaska, Sitka Cornus</p> <p><i>Phlox. Magnoliifolia. Magnolioides. Cornus</i></p> <p>2001.08.03</p>
<p>Cornus alba L. s.s.</p> <p>U.S.A., Alaska, Copper, China, north section, 22-2754-03 MUSE, 1848/1850, Sitka, Alaska</p> <p><i>Phlox. Magnoliifolia. Magnolioides. Cornus</i></p> <p>2003.07.01</p>	<p>Cornus alba L. s.s.</p> <p>U.S.A., Alaska, Copper, China, north section, 22-2754-03 MUSE, 1848/1850, Sitka, Alaska</p> <p><i>Phlox. Magnoliifolia. Magnolioides. Cornus</i></p> <p>2003.07.01</p>	<p>Cornus alba L. s.s.</p> <p>U.S.A., Alaska, Copper, China, north section, 22-2754-03 MUSE, 1848/1850, Sitka, Alaska</p> <p><i>Phlox. Magnoliifolia. Magnolioides. Cornus</i></p> <p>2003.07.01</p>
<p>Cornus alba</p> <p>Austria, Lower Austria, Bludenz FLAS, 1824(L), 2 Richard Aschle</p> <p><i>Phlox. Magnoliifolia. Magnolioides. Cornus</i></p>	<p>Cornus alba alba</p> <p>Germany, England BM, PALA. ASP, 12318, Fowler</p> <p><i>Phlox. Magnoliifolia. Magnolioides. Cornus</i></p>	<p>Cornus alba alba</p> <p>USA, Iowa, Council, Fort Delaware State Park LAT: 41°22' 30" N, Lon: 89°17' 30" W KSTC, Plant, 2017, Gates, Jack</p> <p><i>Phlox. Magnoliifolia. Magnolioides. Cornus</i></p> <p>1927.06.25</p>
<p>Cornus alternifolia</p> <p>USA, Michigan, Antrim, South Lake KSTC, Plant, 2017, Wilson, James</p> <p><i>Phlox. Magnoliifolia. Magnolioides. Cornus</i></p> <p>1984.05.28</p>	<p>Cornus alternifolia</p> <p>USA, Michigan, Antrim, South Lake KSTC, Plant, 2017, Wilson, James</p> <p><i>Phlox. Magnoliifolia. Magnolioides. Cornus</i></p> <p>1984.05.28</p>	<p>Cornus alternifolia</p> <p>USA, Michigan, Antrim, South Lake KSTC, Plant, 2017, Wilson, James</p> <p><i>Phlox. Magnoliifolia. Magnolioides. Cornus</i></p> <p>1984.05.28</p>



Discoverability

- Once published, others can discover what you have too!

Conioselin United States: Michigan, Muskegon MICH. Herbar. Herb. 38522. Colby, G. D.	Conioselin Michigan, Ann Arbor, University of Michigan MICH. Herbar. 37	Conioselin Belgium MICH. Herbar. 38571. Boudaert, H.	Conioselin
Conioselin s.s. U.S.A. State: Michigan, Conioselin Collection 022825.01 MICH. Herbar. 38572. Colby, G. D.	Conioselin s.s. Michigan, Ann Arbor, University of Michigan MICH. Herbar. 37	Conioselin s.s. U.S.A. State: Michigan, Conioselin Collection MICH. Herbar. 38573. Colby, G. D.	Conioselin s.s.
Conioselin s.s. U.S.A. State: Michigan, Conioselin Collection 022825.02 MICH. Herbar. 38574. Colby, G. D.	Conioselin s.s. Michigan, Ann Arbor, University of Michigan MICH. Herbar. 37	Conioselin s.s. U.S.A. State: Michigan, Conioselin Collection MICH. Herbar. 38575. Colby, G. D.	Conioselin s.s.
Conioselin United States: Michigan, Muskegon MICH. Herbar. Herb. 38522. Colby, G. D.	Conioselin Michigan, Ann Arbor, University of Michigan MICH. Herbar. 37	Conioselin Belgium MICH. Herbar. 38571. Boudaert, H.	Conioselin



Biodiversity Information Serving Our Nation (BISON) - Explore & download U.S. species occurrence data & maps

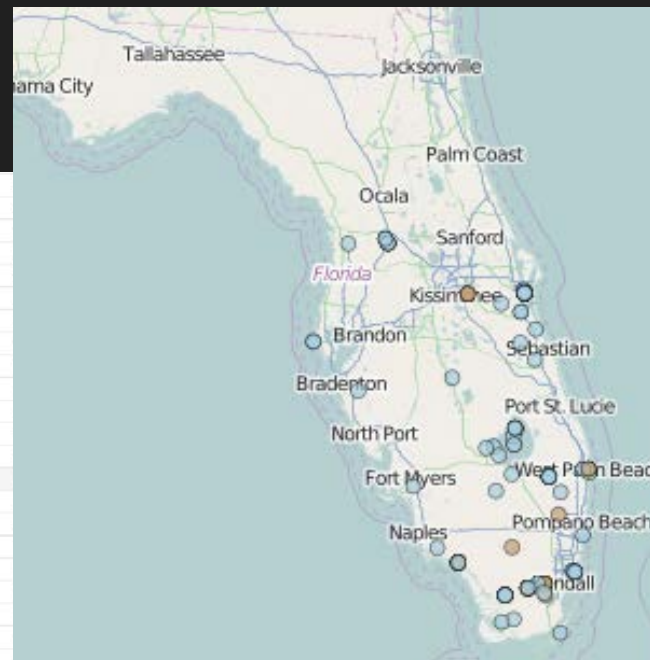
Home About Data Providers Statistics API Examples Blog Help



Data

- Let your collection inform the creation of outreach documents

Genus ^	Specific Epithet	State/Province			
Rosthamus	sociabilis	no data			
Rosthamus	sociabilis	Rio Grande do Sul			
Rosthamus	sociabilis	Rio Grande do Sul			
Rosthamus	sociabilis	Rio Grande do Sul			
Rosthamus	sociabilis	San Pedro			
Rosthamus	sociabilis	Concepción			
Rosthamus	sociabilis	Presidente Hayes			
Rosthamus	sociabilis	Concepción			
Rosthamus	sociabilis	no data			
Rosthamus	sociabilis	Alto Paraguay			
Rosthamus	sociabilis	Pará			
Rosthamus	sociabilis	no data			
Rosthamus	sociabilis	no data			
Rosthamus	sociabilis	Para			
Rosthamus	sociabilis	Nickerie			
Rosthamus	sociabilis	Guanacaste			
Rosthamus	sociabilis	Chiapas			
Rosthamus	sociabilis	Oaxaca			
Rosthamus	sociabilis	Tabasco			
Rosthamus	sociabilis	Tabasco			
Rosthamus	sociabilis	Tabasco	no data	18.0224022	-92.9268459
Rosthamus	sociabilis	Tabasco	no data	18.0224022	-92.9268459
Rosthamus	sociabilis	Tabasco	no data	18.0224022	-92.9268459
Rosthamus	sociabilis	Tabasco	no data	18.0224022	-92.9268459
Rosthamus	sociabilis	Veracruz	no data	18.1507243	-94.4168777
Rosthamus	sociabilis	Veracruz	no data	18.5840314	-95.3668984



Data

- Imaging your collection provides real and localized visuals for outreach materials



Diversity

- Having a digitized collection diversifies your outreach options...



Photo provided by Central Michigan University / Steve Jessmore

Diversity

- With digitization you can broaden your collection's reach to beyond the people who can physically visit the station



Diversity

- Digitized images/data can go anywhere you go & serve as aids for outreach presentations.
- Keep you specimens safe by creating displays and presentations with your media instead!



Digitization can be outreach

- Volunteers and interns



Chris Grinter



Ken Cameron

Digitization can be outreach

- Citizen Science and bioblitzes



Projects to partner with

Digitization-centric:

- WeDigBio



- <https://www.wedigbio.org/>

- Notes from Nature

- www.notesfromnature.org



- Herbaria @ Home

herbaria@home

- <http://herbariaunited.org/atHome/>

More Projects to check out

More biodiversity projects:

- Yourwildlife.org

- School of Ants

- <http://ants.yourwildlife.org/school-of-ants/>

- iNaturalist

- <https://www.inaturalist.org/>



Summary

Digitized collections can:

- supplement current outreach projects
- Expand your outreach activities
- Become a tool to engage the public!



Thank you!



www.idigbio.org



facebook.com/iDigBio



twitter.com/iDigBio



vimeo.com/idigbio



idigbio.org/rss-feed.xml



<webcal://www.idigbio.org/events-calendar/export.ics>