

InvertEBase

Reaching Back to See the Future:

Species-rich Invertebrate Faunas Document Causes and Consequences of Biodiversity Shifts in North America

Petra Sierwald, PI

Rüdiger Bieler, Co-PI

Field Museum of Natural History, Chicago

Eight institutions, 13 collections



EF 14-02667, Petra Sierwald,
Rüdiger Bieler

The Frost
Entomological
Museum

EF 14-00993, Andy Deans



EF 14-02697, Elizabeth Shea



EF 14-01176, Jason Bond



EF 14-04964, Diarmaid
O'Foighil, Taehwan Lee



EF 14-02785, Gavin Svenson



FilteredPush

EF 14-01450, James Hanken

PEN 2016: Chicago Academy of Sciences



EF 16-01700, Dawn Roberts

PEN 2018: Museum of Northern Arizona



EF 17-01842, Lawrence Stevens,
Gary Alpert



North American terrestrial & aquatic invertebrates

- Selected insects (e.g., dragonflies, water beetles); arachnids, myriapods, mollusks
- Digitize, georeference, mobilize up to 3 million specimen data
- Several museums serve data online for the first time (DMNH, AUMNH, CMNH)
- Arthropod data now served on



More Collections on InvertEBase Portal

California Academy of Sciences

Carnegie Museum of Natural History

Colorado Plateau Biodiversity Center

Denver Museum of Nature & Science

Eastern Kentucky University

Florida Museum of Natural History

Natural History Museum of Utah

North Carolina Museum of Natural Sciences

University of Alaska Museum

Yale University Peabody Museum

Naturalis Biodiversity Center (NL) - Mollusca

Digitization Progress Highlights:

- Cleveland (arthropods): **95,811 records entered and uploaded to SCAN**; georeferencing ongoing
- Frost (arthropods): now 70,000 records on SCAN, **entire Odonata collection imaged**; 30% georeferenced
- Auburn (arthropods & mollusks): **213,000 records completely digitized**; IPT forthcoming
- Michigan (arthropods & mollusks): 60,000 mollusks entered with **11,000 images**; georeferencing ongoing; IPT established
- Delaware (mollusks): **43,000 mobilized from old database** via Specify; georeferencing in progress
- Field (arthropods & mollusks): 177,000 insect and 46,000 mollusk records entered; **pinned insect georeferencing completed for 35 of 50 states**
- PEN: Chicago Academy (arthropods & mollusks): **26,000 and 15,000 mollusk records** already done; georeferencing in progress

- >> in total, more than 1.5 million specimen digitized to date



Lessons learned

Pre-curation, pre-curation, pre-curation

Voice recognition is popular with students, not with data entry staff (works well for field notes)

Georeferenced data from early efforts are of limited accuracy

If you can, find a nearby geography program as an intern source





Outlook:

More georeferencing (various time trials)

Completing exhibition development



High-throughput pin and vial imaging



Contribute more authority files



Agree on new logo...

