

InvertEBase

Reaching Back to See the Future:

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

Petra Sierwald, PI

Rudiger Bieler, Co-PI

Field Museum of Natural History, Chicago

The **Field**
Museum

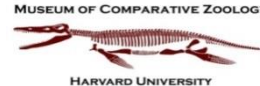


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Four –Year Project: Six institutions, 10 collections



EF 14-02667, Petra Sierwald,
Rudiger Bieler



FilteredPush
EF 14-01450, James Hanken

The Frost
Entomological
Museum

EF 14-00993, Andy Deans



EF 14-02697, Elizabeth Shea

PEN 2016: Chicago Academy of Sciences



EF 14-01176, Jason Bond



EF 16-01700, Dawn Roberts



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



EF 14-02785, Gavin Svenson

InvertEBase Portal:
Additional collections posting their data



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Symbiota Web Portal



North American Invertebrates

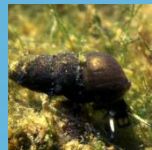
- Terrestrial and aquatic mollusks: 2014 first inclusion of mollusks in ADBC
- Terrestrial and aquatic insects, arachnids, myriapods
- Digitize, mobilize, georeference up to 3Mill specimen data
- Three museums will serve data first time online (DMNH, AUMNH, CMNH)
- **Year 2:**
- **Arthropod data served on**



- **Mollusk Data served on InvertEBase Portal**
- **Posting data from eight additional Collections**



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Digitization Progress Year 1 and Year 2:

- Total digitized in 5 of the 6 collaborating Institutions: 520,000 specimen records
- Frost Entomological Museum: completed 40,000 specimen/label images
- 4 year-period expected: 2,3mill
- Mobilization: DMNH completed transfer of all digitized DMNH specimens records to *Specify*, ingestion to InvertEBase Portal and iDigBio in progress, about 300,000 records

Development of taxonomic authority files:

- MolluscaBase/WoRMs file uploads (5,000+ name combinations) PI Bieler
- Collaboration with SCAN: North American Arthropod names in progress



- MilliBase/WoRMs: global millipedes species database currently transferred to publicly accessible platform, PI Sierwald



Data Management:

- Collections maintaining their own databases
- Optimizing batch uploading: less efficient than anticipated for some databases
- Database conversions in progress at participating collections, DMNH completed

Open Access of Data:

- Data posted on existing institutional web interfaces
- Data posting on joint Symbiota portal: in progress at all TCN collections
- MolluscaBase+ MilliBase/WoRMs file uploads (5,000+ name combinations to date)

Publishing via iDigBio: progress required in year 3

- Connecting TaxonWorks to Symbiota (e.g., lacking IPT instance)
- New PEN: data migration from Arctos to Symbiota and iDigBio

Research use of data: efforts initiated

- FMNH: 2-year postdoctoral fellow Dr. Joan Damerow investigates existing tools to extract and employ online specimen and associated traits data,
In collaboration with Sierwald and Bieler

Management of the network including oversight and processes

- Virtual group meeting via AdobeConnect
- Annual PI meetings at the summit
- Individual site visits (limited, financial constraints)

Looking at Year 3:

Two PEN proposals submitted from collections in

- Virginia
- Arizona

More Collections on InvertEBase Portal

- California Academy of Sciences
- Colorado Plateau Biodiversity Center
- Denver Museum of Nature & Science
- Florida Museum of Natural History
- North Carolina Museum of Natural Sciences
- Sam Noble Oklahoma Museum
- University of Alaska Museum
- Yale University Peabody Museum

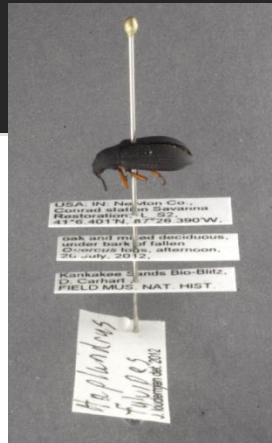
Data enhancement:

- Georeferencing

Sustainability

Additional Digitization projects

- FMNH: inhouse funded
- UMZ Michigan: Insects



Outreach:

- Exhibit development

