Collection Overview

~187,000 specimens (clams, snails & related)
  - Bivalvia: ~34,000 bivalves
  - Gastropoda: 151,000+ specimens

Geographic Breadth: Worldwide/ 50% North American

Taxonomic Breadth: 200 families

Foreign Distribution (~30 species)
- Brazil
- Canada
- China
- Cuba
- England
- Germany
- Guatemala
- India
- Japan
- Malaysia
- Nicaragua
- Norway
- Panama
- South Africa
- Sumatra
- Syria

Domestic Distribution
- 30 U.S. States
  - Top 5: Wisconsin, Tennessee, North Carolina, Alabama, Michigan

Unionidae
- 3,017 lots/7,388 specimens
- 149 species (~12 extinct)

Goals
- Develop a workflow to digitize dry shells.
- Experiment with single-stage data gathering workflows.
- Experiment with alternative data gathering methods.
- Experiment with new imaging techniques for mussel lots.
- Digitize the Harold Mathiak collection of WI mussels (collected ca. 1970-1980), and the more recent material from the same field sites, collected by a MPM Research Fellow.

State of Curation
- 100% curated/no bulk backlog
- >98% recorded in catalog ledgers, Access, or Excel
- 90% dry shell
- <1% in a publicly accessible database
- 0% georeferenced

Data Entry
Volunteers enter label and catalog data into the Google form.

Equipment
- Light box
- Nikon D810
- Desktop computer
- Sandbox platform & gridded tray

Software
- Lightroom
- DigiCamControl
- Google Forms
- Axiell EMu Collections Management Database

Research
Using historical MPM collections and recently collected specimens, current projects seek to quantify how the number, species composition, chemistry, and morphology of mussels change with ecological conditions, environmental stressors, watershed land use, and time. In development: a Zooniverse citizen science project that invites the public to participate in measuring key features of valve shape.

Data Processing and Ingestion
Specimens return to storage. Data is cleaned and imported into MPM database (EMu). All images are processed for archives & database. Select images are processed for Zooniverse.

Staff & Support
- 1 Vertebrate & Invertebrate Collection Manager
- 1 Digitization Manager
- 6 Digitization Volunteers
- 1 Research Fellow
- 1 Research Assistant

Freshwater Mussels Digitization

Photography
Volunteers & research assistant photograph exterior and interior images of the specimens.

Interiors captured on a sandbox platform
Exteriors captured on a gridded tray

Collection Storage

Data Processing
Volunteers & research assistant capture exterior and interior images of the specimens.