

Challenges, Progress and Future Priorities for Modernizing, Enhancing Access and Facilitating Management of the Mollusk Collections of the National Museum of Natural History



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INTRODUCTION

With an estimated 1 million catalogued lots and 15 million specimens, the NMNH collection of mollusks is the largest and oldest collection in the NMNH Department of Invertebrate Zoology and one of the three largest collections of its kind in the world. The synoptic collections are global in scope and date back to the US Exploring Expedition of 1838-1842. The collections have supported the research careers of WH Dall, P Bartsch, HA Rehder, RJ Rosewater, JPE Morrison, and others, and hold the research collections of these and many other notable malacologists. Given the size of the collection and the idiosyncratic curation practices that have been applied piecemeal throughout its history, management of this national resource presents unique challenges.

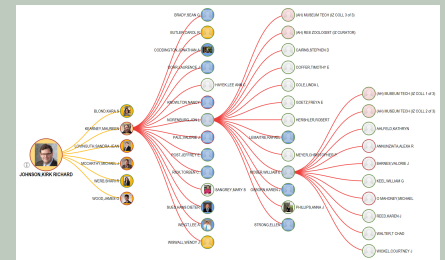
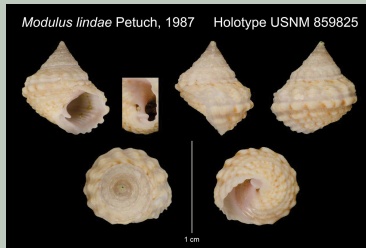


COLLECTION STRENGTHS

- Official repository for all U.S. Government expeditions and research: US Exploring Expedition, Albatross, Blake, etc; Bureau of Ocean Energy Management (MMS/BOEM); US Antarctic Program (USARP)
- Other major collections: A Binney; WG Binney; PP Carpenter; JB Henderson; PM Heude; JG Jeffreys; CJ Maynard, I Lea; REC Stearns; AE Verrill
- 125,000 fluid preserved lots
- ~12,200 primary types; ~10,000 secondary types
- North Atlantic, North Pacific, Continental US and Antarctic are particular strengths
- Flagship collections: Cerionidae (3,500 lots), Cerithiidae (12,700), Cypraeidae (13,400), hydrobioids (11,000), pulmonate land snails (110,700), Pectinidae (11,900), Pleuroceridae (9,000), Pleurotomariidae (350), unionoids (21,200)

CHALLENGES

- Large size, decreasing staffing levels (currently 2.5 curatorial FTEs; centralized CM staff w/ 5 federal FTEs), split locations (NHB, MSC)
- Idiosyncratic systematic arrangement, updated piecemeal
- Curation status varies widely
- Outdated labeling: handwritten taxonomy blocks; individual lots not labeled with current ID
- Some expert knowledge in molluscan taxonomy required to locate and file specimens



FUTURE PRIORITIES

- **Short term:**
 - Complete inventory; data clean-up (e.g., 60,000 duplicate records)
 - Move to renovated space with compactor shelving; update taxonomic arrangement, further decompression and expansion
- **10+ years:**
 - Update cabinet labels; finding aids, collection maps
 - Update storage locations
 - Fine scale taxonomic rearrangements of species
 - Modernize and standardize labeling of taxa/lots
 - Assess type status; identify/recurate types currently housed in general collection (e.g., land snails)
- **Continuing needs:**
 - Strategy for maintaining inventory/storage location information
 - Continue Byne's and glass disease abatement
 - Curation upgrades
 - Backlog processing
 - Imaging (micro-mollusk types)
 - KE EMu record enhancement (georeferencing, skeleton records and metadata enhancement)

PROGRESS

- Collection moved from east to west wing of the NMNH [Updated taxonomic arrangement, decompression, new cabinets]
- Primary type inventory [geo-referencing, inventory/shelf check]
- Primary type imaging (~5,000 plates) (contractors/volunteers)
- Mollusk dry collection inventories [exemplar/skeleton/full inventory (ongoing), including storage location information]
- Secondary types [inventory/cataloguing, replace in general collection]
- Byne's and glass disease abatement (ongoing)
- Fullness survey [move planning]
- Digital inventory (ongoing; 3 years/6 contractors): ~700,000 records (~325,000 of these are skeleton records)
- 120,000 records georeferenced

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