

Texas A&M University Biodiversity Teaching and Research  
Collection: Marine Invertebrates  
Mary K. Wicksten, Department of Biology, curator



Texas A&M University, College Station: including former collections of Texas A&M University, Galveston and TAMU-Corpus Christi, formerly Texas Cooperative Wildlife Collection (TCWC)

# What we have:

- 9,579 lots of specimens, ALL catalogued and are or soon will be available on digital catalog and IDigBio (but no other links)
- 40,000 or so specimens, most identified at least to family. (Some small crustaceans and polychaetes need work).
- Emphasis on Gulf of Mexico, western Atlantic and Caribbean.
- Major holdings: DEEP SEA SPECIMENS, hope to provide link to “Deep Benthic Species Identification Guides” through NOAA
- Major holdings of crustaceans including TX crayfishes; corals, bryozoans, polychaetes

# Expeditions and vouchers:

- *Alaminos* and *Gyre* cruises, with full data
- Some specimens from U.S. Fisheries *Oregon*, *Oregon II*, *Silver Bay* and *Pelican*; have data sets
- Specimens and data for Northern Gulf of Mexico Benthos and Gulf of Mexico Benthos (NGoMB and DGoMB) cruises, 1970-2004
- Extensive vouchers from Flower Gardens Banks and other hard banks of Gulf of Mexico with data, 1970-1980, recent deep fish habitat studies by ROV
- Vouchers from Padre Island National Seashore with data

# Specimen care

- Wet specimens in 70% ethanol but almost all taken before 2000 originally were preserved in 10% formalin. Beware of labels!
- Some coral and echinoderm specimens dried--so noted in catalog.
- Wet specimens in jars on shelving, dried in cabinets--some old and of wood. Efforts underway to put dry specimens into interior boxes, jars, etc. Nothing sitting out and accumulating dust.
- ALL wet specimens checked for fluid at least yearly, so noted on shelves. Almost all in jars with scientific grade screw-top lids (a few very large specimens in sealed buckets, small specimens in vials inside larger jars)--NO metal lids.
- Jars arranged in phylogenetic and alphabetical order. Revised classifications being incorporated into arrangement and records.
- Holotypes at USNM, paratypes in special fire-proof cabinet. I have TX collecting permit.

# The Good

- Collections have been used previously to describe new deep-sea crustaceans and echinoderms, revisions of corals. New effort to use specimens to verify *in situ* identifications from ROV footage.
- New descriptions of coastal amphipods, chirostyliid lobsters.
- Specimens used in undergraduate seminar on Deep Sea Biology, graduate Biology of the Invertebrates.
- Specimens borrowed by Brazos Museum of Natural History for display.
- Public display to Assisted Living facilities, student groups.

# The Bad

- Collections originally belonged to Department of Oceanography, moved to main Collections (vertebrates) under Dept. of Wildlife and Fisheries--BUT, no curator 1980-2000 when M. Wicksten (Dept. of Biology) became volunteer curator. No other invertebrate people except in Entomology and 2 parasitologists.
- Collection moved to new spacious building but it has big loading docks that admit insects and dust. 3 miles from main campus.
- Computer in Invert. Area has NO internet connections.
- Entire collections managed through Wildlife & Fisheries, one paid manager, vertebrate professors maintain their specialties.

# Funding?????

- NO paid assistants except through vertebrate programs. (Past assistance in curating MMS benthic collections).
- Jars, lids, ethanol available through general collections stores but no funding for new cabinets. Some old shelving has irregular shelf heights that cannot be adjusted.
- General lack of interest and support. NSF has turned down applications because there is no evidence of a long-term investment. Previous attempts to join forces with local community museum and entomology collection did not succeed.
- I am alone and strongly suspect that nobody who works on invertebrates will be hired to replace me. Future fate of the collection?