

## Molluscan collections at Florida Museum of Natural History

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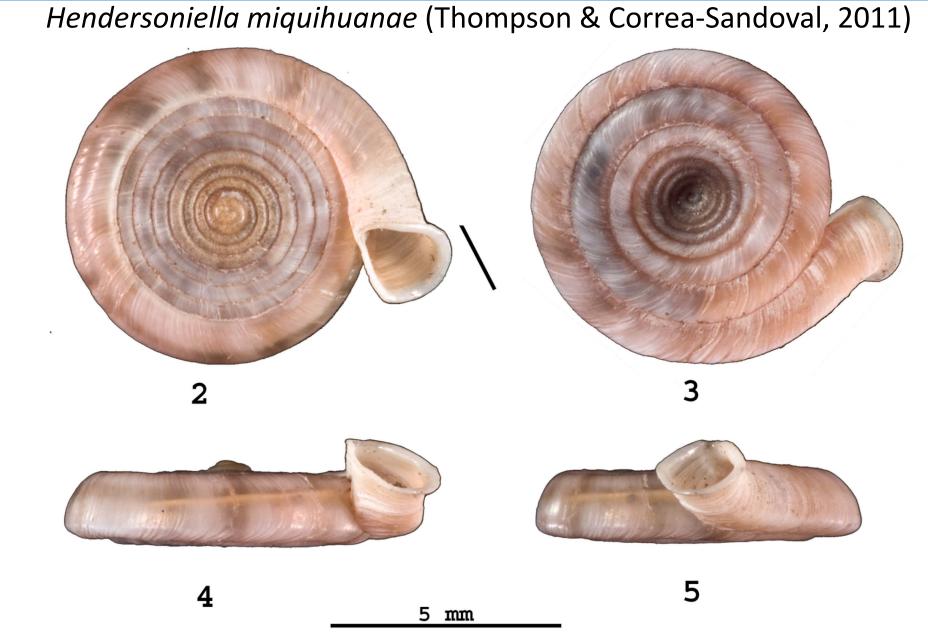


### Background and History



Florida Museum celebrates its 100<sup>th</sup> anniversary this year. In 1966 when the museum's first malacologist, Fred Thompson was hired, the mollusk collection was small and composed of mostly local species. In 50 years, the collection has grown into a global collection of 500,000 lots of 2.5 million specimens.

## Type Collection





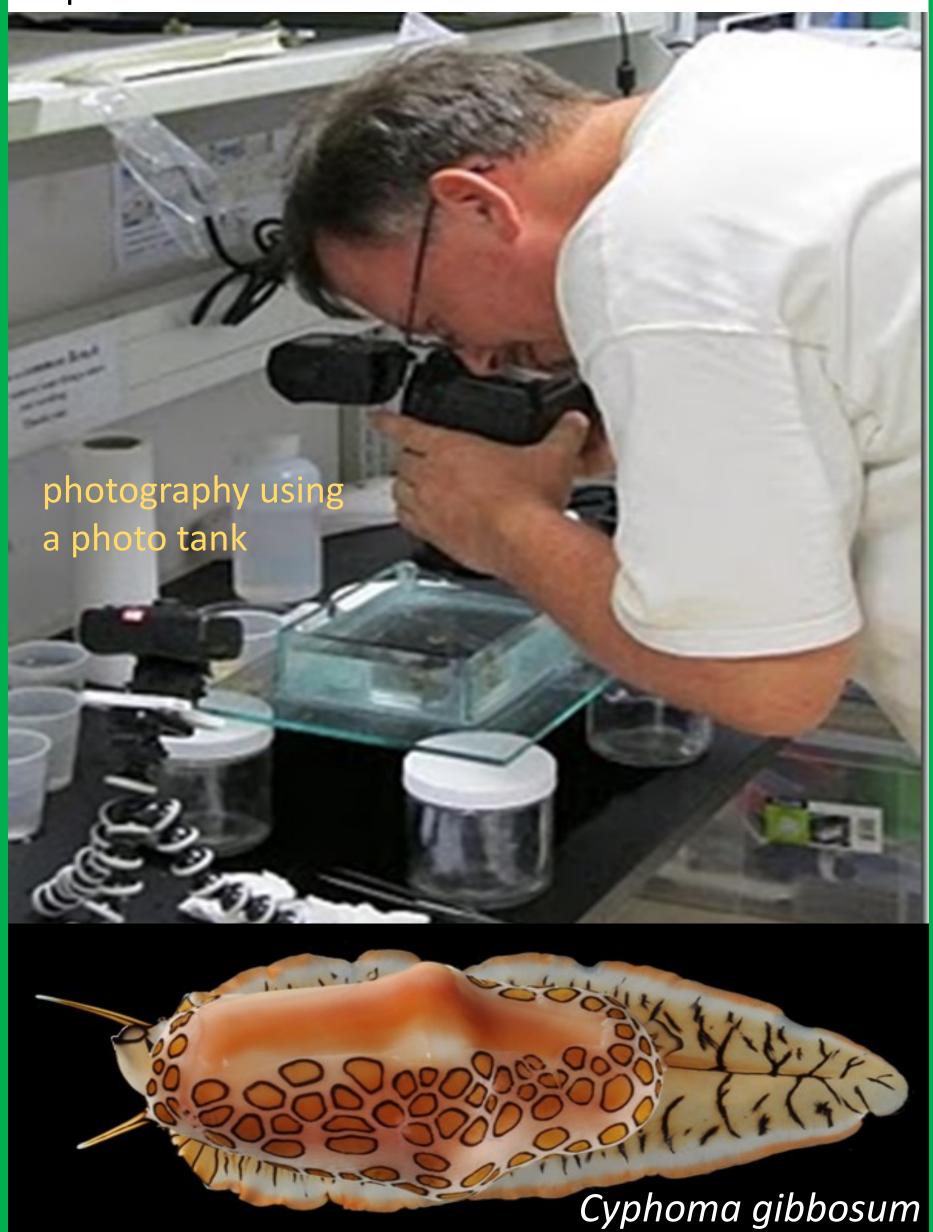
The collection contains 1,200 primary types and 7,200 secondary types, mostly from biodiversity surveys and historic collections.

## Advantages of Youth

Collection growth coincided with revolutions in computing, molecular biology and digital photography. As a result, all cataloged lots are available electronically at http://specifyportal.flmnh.ufl.edu/iz/ and many have associated tissues and digital photographs.



Biotic surveys generated 83,000 alcohol preserved lots of mollusks and DNA barcoding efforts have resulted in nearly 10,000 molluscan tissue samples that are stored in liquid nitrogen and 2,000 DNA extractions and COI sequences.



Most specimens collected during field work are photographed resulting in approximately 50,000 associated photographs.

### **Biodiversity Surveys**

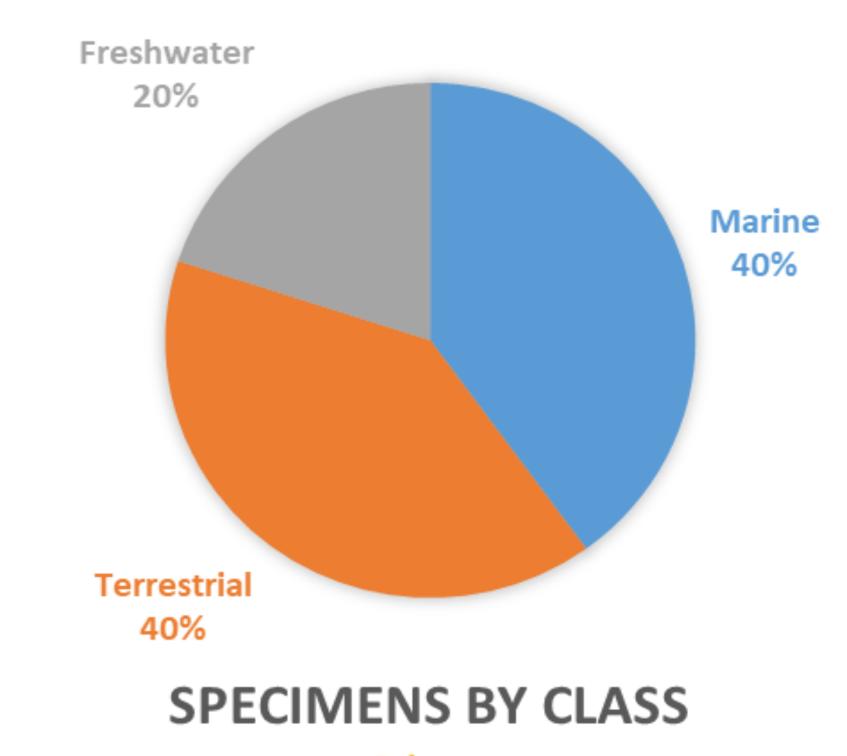




Museum staff and associates conduct biodiversity surveys globally using many specialized collecting techniques. The collection encompasses the largest non-marine mollusk collections from several regions including Hispaniola, Mexico-Central America, Madagascar, and Pakistan, and large holdings from the southeastern US, West Indies, Andean South America, Southeast Asia, and Oceania. Marine holdings are especially strong for Florida and the Caribbean and rapidly growing for the Indo-Pacific.

# Habitat and Class

#### **SPECIMENS BY HABITAT**



# Other **Bivalvia** 19% Gastropoda 80%

## Collection Acquisitions



Acquisitions include collections from Alabama State Museum, Miami University, Rollins College, and Tulane University, containing collections by J. Beal,, T. McGinty, C. T. Simpson, H. H. Smith, E. and H. Vokes, and J. Weber. Recent donations include collections by H.G. Lee and H. McCullagh.

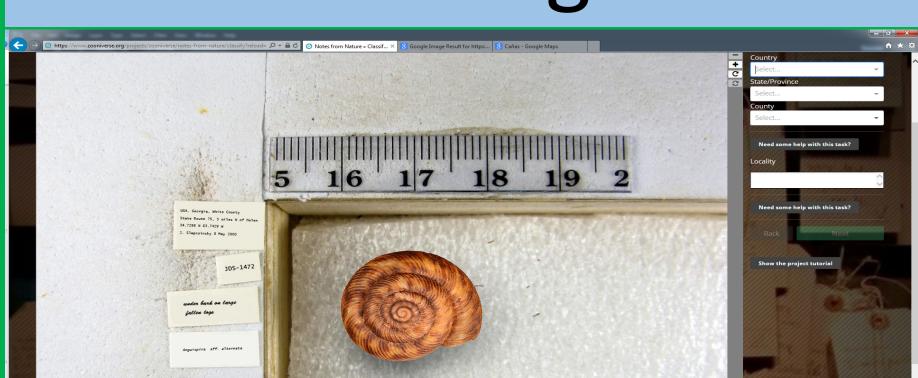
# Ecological Associations



Our collection also houses other invertebrate taxa and we capture data about relationships between species including parasitism and mutualism. Database records for each specimen are linked to one other.

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## Challenges



We are investigating methods to rapidly catalog our backlog of 55,000 lots, including crowd sourcing using sites like Notes from Nature. We also need to retroactively add or improve coordinates for nearly 90,000 localities and to find ways of coping with rapidly changing molluscan nomenclature.