



Databasing efforts within the Department of Malacology at the Museum of Comparative Zoology (Harvard University)



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Abstract: In 1859, Louis Agassiz founded the Museum of Comparative Zoology (MCZ) at Harvard University. The enthusiastic oversight of past curators namely John G. Anthony, William J. Clench, Ruth D. Turner and Kenneth J. Boss enabled the Department of Malacology at the MCZ to develop one of the largest and most diverse collections in the world. The collection is rich in types, and currently includes over 372,056 cataloged lots and at least another 100,000 uncataloged lots. Overall strengths of the collections include western Atlantic species, North American Unionidae and Pleuroceridae, deep-sea mollusks, Teredinidae, Achatinellidae and other pulmonate groups. Associated specimen data for all cataloged lots has been captured in our Museum wide database (MCZbase). Our data is fully searchable and is compatible with ongoing efforts of other external shared databases (i.e. EOL, GBIF). Additionally, MCZbase provides a means to illustrate species distribution maps, specimen images, literature and direct links to historical data written in our specimen ledgers.

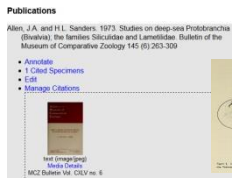


- University Museum founded in 1859. John G. Anthony is the department's first curator. Other Curators: William J. Clench (1926-1966), Ruth D. Turner (1946-2000), Kenneth J. Boss (1966-2004).
- Current Staff: James J. McCarthy (Acting Curator); Adam J. Baldinger (Curatorial Associate); Curatorial Assistants: Penny Benson, Jennifer W. Lenihan, Murat Rekevik and Alana Rivera.
- Strengths include western Atlantic species, North American Unionidae and Pleuroceridae, deep-sea mollusks, Teredinidae, Achatinellidae and other pulmonate groups.
- Includes 14,074 Types (ca. 6,500 primary).
- 97% of the collection is identified to at least genus.
- Gastropoda (67%), Bivalvia (27%), Polyplacophora (2%), Cephalopoda (1%), Scaphopoda (1%).
- Marine species (63%), terrestrial (22%), freshwater (14%).
- 372,056 cataloged/databased lots (=2,677,173 specimens) and another 100,000 uncataloged lots.
- 275,000 records entered from ledgers over 6 year period (2006-2012).
- 10% of the holdings are georeferenced. Databased records represent 142,236 distinct localities.
- Mostly dry preserved shells. 10% of holdings in ethanol. Tissue collection growing.

In November 2009, specimen data was moved to a centralized database (MCZbase) that is shared by all MCZ departments. Collections data are available on-line and can be searched at <http://mczbase.mcz.harvard.edu/SpecimenSearch.cfm>



MCZ specimen data is distributed to databases such as the World Registry of Marine Species (WoRMS), Global Biodiversity Information Facility (GBIF), Encyclopedia of Life (EOL), Integrated Digitized Biocollections (iDigBio), Biodiversity Heritage Library (BHL) and Assembling the Tree of Life (ATOL).



Original Literature is linked to specific records.

Malacology 271977 *Silicula filatovae* - Mozilla Firefox

MCZbase.mcz.harvard.edu/guid/MCZ.Mala.271977

Malacology 271977 *Gay Head Bermuda* whole animal (70% ethanol) **14/Dec/1965**

Silicula filatovae Atlantic Ocean, Atlantic, Northwest

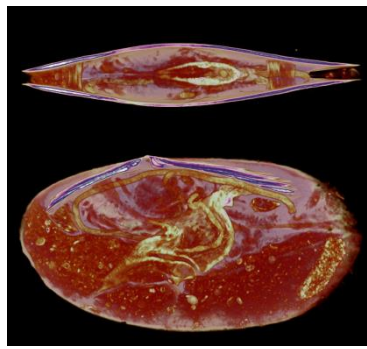
Identifiers: malacology accession number: 1801, station number: 93

Part Name	Condition	Disposition	#	Label	Remarks
whole animal (70% ethanol)	good	in collection	1		

Entered By: Adam J. Baldinger on 2000-04-04
Last Edited By: Penny Benson on 2013-07-08

Accession: 86357

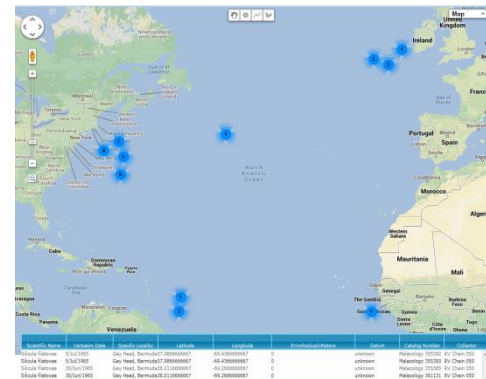
Media: image (image/jpeg), image (image/jpeg), image (image/jpeg)



Digital imaging initiatives including automontage (top) and micro-CT scans (bottom two images = *Silicula filatovae*, MCZ 361127) to enhance specimen data.

Original specimen ledgers have been scanned and linked to specific records.

Accession	Cat Num	Identification	Order	Family	Accession/Collection/Container/Country	Specific Locality	Verbatim Date	Disposition
Malacology 271977	1801	<i>Silicula</i>	Nuculidae	Siliculidae	RV Chain Atlantic North American Basin, NW of Bermuda	North of Bermuda	14/Dec/1965	whole animal (70% ethanol)
Malacology 361126	1802	<i>Silicula</i>	Nuculidae	Siliculidae	RV Chain Atlantic Day Head, Bermuda	Day Head, Bermuda	14/Dec/1965	body (70% ethanol)
Malacology 361113	1803	<i>Silicula</i>	Nuculidae	Siliculidae	RV Chain Atlantic Day Head, Bermuda	Day Head, Bermuda	30/Aug/1965	body (70% ethanol)
Malacology 355348	1804	<i>Silicula</i>	Nuculidae	Siliculidae	RV Chain Atlantic off island	off island	22/Aug/1972	body (70% ethanol)
Malacology 355305	1805	<i>Silicula</i>	Nuculidae	Siliculidae	RV Chain Atlantic Day Head, Bermuda	Day Head, Bermuda	15/May/1965	body (70% ethanol)
Malacology 355349	1806	<i>Silicula</i>	Nuculidae	Siliculidae	RV Chain Atlantic Day Head, Bermuda	Day Head, Bermuda	25/Apr/1972	body (70% ethanol)
Malacology 355349	1807	<i>Silicula</i>	Nuculidae	Siliculidae	RV Chain Atlantic Day Head, Bermuda	Day Head, Bermuda	5/Apr/1965	body (70% ethanol)
Malacology 355349	1808	<i>Silicula</i>	Nuculidae	Siliculidae	RV Chain Atlantic Day Head, Bermuda	Day Head, Bermuda	5/Apr/1965	body (70% ethanol)
Malacology 355349	1809	<i>Silicula</i>	Nuculidae	Siliculidae	RV Chain Atlantic Day Head, Bermuda	Day Head, Bermuda	5/Apr/1965	body (70% ethanol)
Malacology 355349	1810	<i>Silicula</i>	Nuculidae	Siliculidae	RV Chain Atlantic Day Head, Bermuda	Day Head, Bermuda	5/Apr/1965	body (70% ethanol)
Malacology 355349	1811	<i>Silicula</i>	Nuculidae	Siliculidae	RV Chain Atlantic Day Head, Bermuda	Day Head, Bermuda	5/Apr/1965	body (70% ethanol)
Malacology 355349	1812	<i>Silicula</i>	Nuculidae	Siliculidae	RV Chain Atlantic Day Head, Bermuda	Day Head, Bermuda	5/Apr/1965	body (70% ethanol)
Malacology 355349	1813	<i>Silicula</i>	Nuculidae	Siliculidae	RV Chain Atlantic Day Head, Bermuda	Day Head, Bermuda	5/Apr/1965	body (70% ethanol)
Malacology 355349	1814	<i>Silicula</i>	Nuculidae	Siliculidae	RV Chain Atlantic Day Head, Bermuda	Day Head, Bermuda	5/Apr/1965	body (70% ethanol)
Malacology 355349	1815	<i>Silicula</i>	Nuculidae	Siliculidae	RV Chain Atlantic Day Head, Bermuda	Day Head, Bermuda	5/Apr/1965	body (70% ethanol)
Malacology 355349	1816	<i>Silicula</i>	Nuculidae	Siliculidae	RV Chain Atlantic Day Head, Bermuda	Day Head, Bermuda	5/Apr/1965	body (70% ethanol)
Malacology 355349	1817	<i>Silicula</i>	Nuculidae	Siliculidae	RV Chain Atlantic Day Head, Bermuda	Day Head, Bermuda	5/Apr/1965	body (70% ethanol)
Malacology 355349	1818	<i>Silicula</i>	Nuculidae	Siliculidae	RV Chain Atlantic Day Head, Bermuda	Day Head, Bermuda	5/Apr/1965	body (70% ethanol)
Malacology 355349	1819	<i>Silicula</i>	Nuculidae	Siliculidae	RV Chain Atlantic Day Head, Bermuda	Day Head, Bermuda	5/Apr/1965	body (70% ethanol)
Malacology 355349	1820	<i>Silicula</i>	Nuculidae	Siliculidae	RV Chain Atlantic Day Head, Bermuda	Day Head, Bermuda	5/Apr/1965	body (70% ethanol)
Malacology 355349	1821	<i>Silicula</i>	Nuculidae	Siliculidae	RV Chain Atlantic Day Head, Bermuda	Day Head, Bermuda	5/Apr/1965	body (70% ethanol)
Malacology 355349	1822	<i>Silicula</i>	Nuculidae	Siliculidae	RV Chain Atlantic Day Head, Bermuda	Day Head, Bermuda	5/Apr/1965	body (70% ethanol)
Malacology 355349	1823	<i>Silicula</i>	Nuculidae	Siliculidae	RV Chain Atlantic Day Head, Bermuda	Day Head, Bermuda	5/Apr/1965	body (70% ethanol)
Malacology 355349	1824	<i>Silicula</i>	Nuculidae	Siliculidae	RV Chain Atlantic Day Head, Bermuda	Day Head, Bermuda	5/Apr/1965	body (70% ethanol)
Malacology 355349	1825	<i>Silicula</i>	Nuculidae	Siliculidae	RV Chain Atlantic Day Head, Bermuda	Day Head, Bermuda	5/Apr/1965	body (70% ethanol)
Malacology 355349	1826	<i>Silicula</i>	Nuculidae	Siliculidae	RV Chain Atlantic Day Head, Bermuda	Day Head, Bermuda	5/Apr/1965	body (70% ethanol)
Malacology 355349	1827	<i>Silicula</i>	Nuculidae	Siliculidae	RV Chain Atlantic Day Head, Bermuda	Day Head, Bermuda	5/Apr/1965	body (70% ethanol)
Malacology 355349	1828	<i>Silicula</i>	Nuculidae	Siliculidae	RV Chain Atlantic Day Head, Bermuda	Day Head, Bermuda	5/Apr/1965	body (70% ethanol)
Malacology 355349	1829	<i>Silicula</i>	Nuculidae	Siliculidae	RV Chain Atlantic Day Head, Bermuda	Day Head, Bermuda	5/Apr/1965	body (70% ethanol)
Malacology 355349	1830	<i>Silicula</i>	Nuculidae	Siliculidae	RV Chain Atlantic Day Head, Bermuda	Day Head, Bermuda	5/Apr/1965	body (70% ethanol)



Species lists can be generated. These lists can also be customized to include specific specimen collection data (i.e. depth, coordinate, habitat) and then exported (in an excel file) for the researcher.

Species distribution maps can be generated. Data can be uploaded into other programs (i.e. Google Earth) for additional mapping functions.