



Museum of Comparative Zoology (Harvard University) Marine Invertebrate Collection Overview

Adam J. Baldinger
Curatorial Associate





MCZ Invertebrate Departments/Collections:

Invertebrate Paleontology: fossils, excluding insects and arachnids (1 million specimens)

Entomology: recent and fossil insects (7.5 million specimens)

Malacology: recent mollusks; to date 376,000 lots (2.7 million specimens)

>500,000 lots; 30% of identified specimen lots not cataloged

Invertebrate Zoology: includes most invertebrate phyla, except mollusks

all arthropod groups, except Hexapoda

to date 167,779 lots (>620,000 specimens) includes the

Araneae (spiders) = 65,000 lots (147,000 specimens)

<https://mcz.harvard.edu>



Department of Invertebrate Zoology: People

Curators



Gonzalo Giribet



Mansi Srivastava



**Robert Woollacott
(Emeritus)**

- 8 graduate students
- 7 post-docs/fellows
- 2 Administrative Assistants
- 1 Research Technician

- 9 Research Associates

IZ/Mala Curatorial Staff (Temp)

- Jennifer Goldstein
- Erin Polka
- Caroline Fleming

Curatorial Staff (Malacology)

- Murat Recevik (FTE)
- Alana Rivera (PTE)

Curatorial Staff



Adam J. Baldinger
Curatorial Associate/Collections Manager
Invertebrate Zoology and Malacology



Penny Benson
Curatorial Assistant (PTE)
Invertebrate Zoology and Malacology



Laura Leibensperger
Curatorial Assistant (FTE)
Invertebrate Zoology (Araneae)

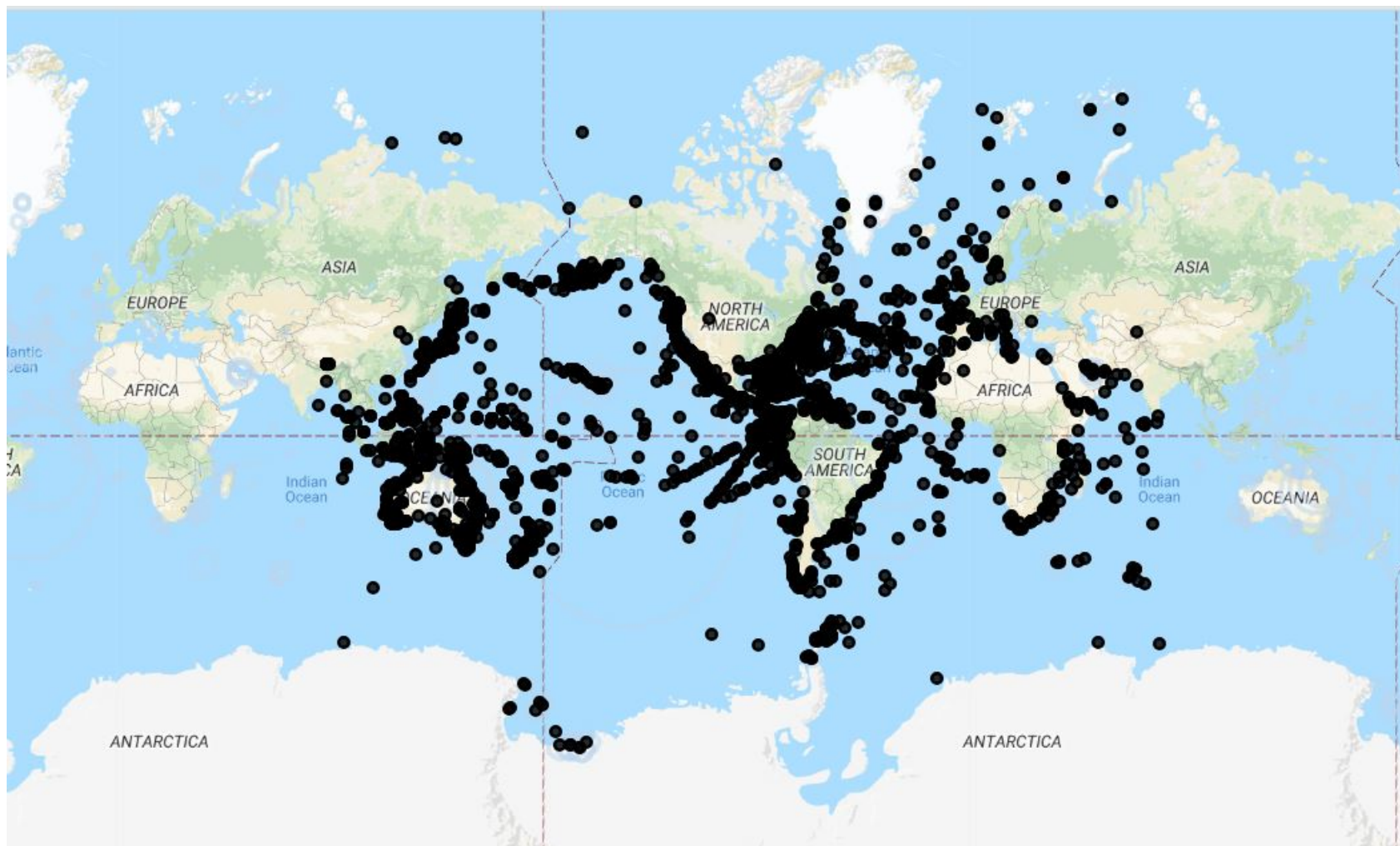


Jennifer Lenihan-Trimble
Curatorial Assistant (FTE)
Invertebrate Zoology and Malacology



Invertebrate Zoology Collection: Marine Specimens

Specimens from diverse geographical regions of the world





Invertebrate Zoology Collection: Marine Specimens

Many specimens were collected during the 19th and early 20th century expeditions:

- US Exploring (1838-1842), N. Pacific (1853-1856): Atlantic and Pacific
- “Thayer” (1865-1866): Brazil
- “Hassler” (1871-1872): coast of South America
- “Bache” (1872-1874); “Blake” (1877-1880) and “Atlantis” (1938-1939): Atlantic and Caribbean
- “Challenger” and “Albatross” (1891-1921): Pacific regions, and the U.S. Geological Surveys of the Territories.
- National Marine Fisheries Service cruises: North Atlantic
- WHOI: Howard Sanders deep-sea collections
- deep water specimens from the Ocean Exploration Trust via the E/V *Nautilus*.
- Massachusetts Water Resource Association Boston Harbor clean-up voucher specimens



Invertebrate Zoology Collection: Storage



Alphabetical arrangement
Types segregated





Invertebrate Zoology: Digitization

Filemaker Pro (1990's – 2008)

MCZbase (Arctos platform) - shared by all MCZ collections

<https://mczbase.mcz.harvard.edu/>

Data is also searchable through iDigBio, GBIF

Databasing by staff, priority based or focused

No past TCN or other digitization grants





Invertebrate Zoology: Digitization

<https://mczbase.mcz.harvard.edu/SpecimenSearch.cfm>

MCZBASE: The Database of the Zoological Collections
Museum of Comparative Zoology - Harvard University

Search Enter Data Manage Data Manage Arcdos Reports My Stuff Help Log out as abasinger (Last login: 31-Jan-2018)

Invertebrate Zoology OPH-400 Holotype of *Ophiochaeta mixta* Cuba, south of Havana
Atlantic Ocean: Atlantic, Western Central
December 1877 - March 1878 (1877-12-01 - 1878-03-31)
BerkeleyMapper  

whole animal (dry) [Report Bad Data](#) [Return to results](#)

[Taxa](#) [Accession](#) [Pick New Coll Event](#) [Locality](#) [Agents](#) [Relations](#) [Parts](#) [Part Locn](#) [Attributes](#) [Other IDs](#) [Media](#) [Encumbrances](#) [Catalog](#)


Identifications Edit


Ophiochaeta mixta (Lyman, 1878)
Animalia Echinodermata Ophiuroidea Ophiurida Ophiidermatidae Ophiurochaeta mixta
Identified by World Register of Marine Species on 2015-02-10
Nature of ID: taxonomic revision

Ophiochaeta mixta Lyman, 1878
Animalia Echinodermata Ophiuroidea Ophiurida Ophiidermatidae Ophiurochaeta mixta
Identified by Theodore Lyman III
Nature of ID: type ID
Remarks: Identification Made Date: 1878

Citations

Agassiz et al. 1878, Page 222. Holotype of *Ophiochaeta mixta*
Plate II, figs 40-42



[text \(text/html\)](#)
[Media Details](#)
U.S. Coast Survey steamer
Blake.  Corals and Crinoids

Locality and Collecting Event Details Edit

Continent/Ocean: Atlantic Ocean
Specific Locality: Cuba, south of Havana
Verbatim Locality: [coordinate data only]
Collecting Source: wild caught
Depth: 242 fms
Coordinates: 22° 9' 30" N 82° 21' 30" W (Datum: unknown)
(No agent catg.; 1878-01-01; Source: Lists of Dredging Stations in North American Water from 1867-1867 by Sanderson Smith
Coordinate Remarks: Also referred to as Sigsbee Station 11

Collecting Date: December 1877 - March 1878 (1877-12-01 - 1878-03-31)

Collectors Edit

Charles D. Sigsbee
USCSS Blake Expeditions

Part Details Edit


Part Name	Condition	Disposition	#	Container Name	Remarks
whole animal (dry)	poor (broken arms)	in collection	1	IZ_cabinet-87_drawer-13	


Entered By: Meaghan H. Sorce on 2014-12-11
Last Edited By: Paul J. Morris on 2018-07-10


Accession Edit


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Media Edit


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Invertebrate Zoology: Collection Profile (FY18)

Collection Profiles for FY 18 (1 July 2017 - 30 June 2018)		
Data	IZ	Mala
Number of databased lots/specimens	165,438 (614,662)	375,981 (2,699,432)
Araneae	64,984	
Crustacea	33,780	
Annelida	9,995	
Echinodermata	9,146	
Cnidaria	6,948	
Porifera	3,731	
Primary Types lots	14,420	5,663
Secondary Types lots	5,970	7,719
Newly cataloged records	5,495	3,385
Number of distinct localities (% with coordinate data)	53,476 (37 %)	142,681 (8%)
Percentage of records with coordinate data	49%	11%
Records with NCBI data	2,027	418
Records with tissues in Cryo colln	2,069	928
Records with media	1,493	721
Number of images	7,870	2,722
Number of cataloged records with citations	21,067	14,798
New accessions: lots/specimens	880 (3,386)	270 (361)
Number of loans*/specimens	56 (678)	20 (879)
Specimens used in HU courses, HMNH exhibits**		
Scholarly visitors*** (visit days)	28 (61)	19 (55)
Departmental tours	9	4
Filming	1	1



Invertebrate Zoology: Marine Holdings

Phyla	Databased	Not databased	Georeferenced	Fluid	Dry
Annelida (total)	9995		5496	9663	97
Annelida: Polychaeta only	8420	250	5034	8204	91
Arthropoda:					
Crustacea	33780	500	16342	30358	1021
Pygnogonida	296	0	170	286	4
Xiphosurida	80	0	29	62	16
Bryozoa	621	500	201	440	124
Chordata (98% urochordates)	78	400	56	62	3
Cnidaria	6948	2500	3874	3791	2334
Echinodermata - total	9146	15000	6930	4583	4416
Echinodermata -non types	5712		3836	3428	1931
Echinodermata - All Types	3704		3094	1155	2485
Porifera	3731	100	1956	1839	1677
Brachiopoda	55	284	41	163	176
Ctenopora	110	0	51	110	0
Total	82676	19534	47110	64144	14375

Groups with >50% of holdings not databased: Bryozoa, Tunicata, non-type octocorals and scleractinia, non-type echinoids, asteroids, and ophiuroids, brachiopods. Microscope slides (N=15,000)

Future: Capture metadata for non-databased lots, georeference, image specimens and labels



Invertebrate Zoology: Terrestrial Holdings

Terrestrial Invertebrates	databased	not databased	georef.		
Araneae (spiders)**	64984	75% of colln.	32143		
Opiliones (Harvestman)	9225		6295		
Chilopoda (centipedes)	6777		2717		
Diplopoda (millipedes)	6084		1665		
Scorpiones	4611		1614		
Pseudoscorpiones	2038		1195		
Acari (mites and ticks)	1068		187		
Solifugae (Windscorpions)	390		56		
Ricinulei	338		291		
Amblypygi (Tail-less whip scorpions)	327		108		
Schizomida (Short-tailed whip scorpions)	225		141		
Uropygi (Whip scorpions)	175		33		
Palpigradi (microwhipscorpions)	71		51		
Symphyla	61		28		
Pauropoda	4		0		
Total:	96378	0	46524		