Collection and locality information of Hemichordata and Echinodermata from global sites, Table S1, Cannon et al (2014) Curr. Bio. (Antarctic Inverts project)

Website: https://www.bco-dmo.org/dataset/671493
Data Type: Cruise Results
Version: 1
Version Date: 2016-12-22

Project
» Genetic connectivity and biogeographic patterns of Antarctic benthic invertebrates (Antarctic Inverts)

Contributors	Affiliation	Role
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Abstract
This dataset was published as Table S1 from Cannon et al (2014). It contains collection and locality information by taxon of hemichordate specimens collected globally from 2001 to 2013.

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Coverage

Temporal Extent: 2004-12 - 2013-02

Data Processing Description

BCO-DMO Processing notes:
- added conventional header with dataset name, PI name, version date
- modified parameter names to conform with BCO-DMO naming conventions
- converted lat and lon to decimal degrees
- removed special characters (degree symbols) and trailing blank spaces
- changed date format from 'Month, yyyy' to 'Mon-yyyy'
- removed commas

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Data Files

File
Cannon_2014_TS1.csv (Comma Separated Values (.csv), 2.32 KB) MD5:bdf2442d54454a3395ce61afe799493e Primary data file for dataset ID 671493

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Related Publications

Cannon, J. T., Kocot, K. M., Waits, D. S., Weese, D. A., Swalla, B. J., Santos, S. R., & Halanych, K. M. (2014). Phylogenomic Resolution of the Hemichordate and Echinoderm Clade. Current Biology, 24(23), 2827–2832. doi:10.1016/j.cub.2014.10.016
Results

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Related Datasets

IsSupplementTo

Halanych, K. M., Mahon, A. (2016) **Hemichordata and Echinodermata GenBank accessions, Table S2, Cannon et al (2014) Curr. Bio. (Antarctic Inverts project).** Biological and Chemical Oceanography Data Management Office (BCO-DMO). (Version 1) Version Date 2016-12-22 http://lod.bco-dmo.org/id/dataset/671521 [view at BCO-DMO]

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Parameters

Parameter	Description	Units
species	taxonomic genus and species name	unitless
locality	location of specimen collection	unitless
latitude	latitude; north is positive	decimal degrees
longitude	longitude; east is positive	decimal degrees
depth	collection depth	meters
collection_date	type of gear used for collection	unitless
preservation	type of preservative used	unitless
tissue_extracted	type of tissue extracted for transcriptomic study	unitless
comments	comments pertaining to samples	unitless

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Instruments

Dataset-specific Instrument Name	Blake or Agassiz trawl
Generic Instrument Name	Beam Trawl
Dataset-specific Description	A modified Beam Trawl. USAP Standard 5-ft. net, robust net and frame system good for exploratory fishing. Qualitative sampling device used to sample large numbers of the megabenthos and benthopelagic fauna It is a double sided trawl adapted from the fishing gear of coastal fishermen. Named after the American naturalist Alexander Agassiz. Also called the Blake trawl or Sigsbee trawl (the name of the ship used by Alexander Agassiz and the captain of that ship respectively). from https://www.isa.org.jm/agassiz-trawl
Generic Instrument Description	A beam trawl consists of a cone-shaped body ending in a bag or codend, which retains the catch. In these trawls the horizontal opening of the net is provided by a beam, made of wood or metal, which is up to 12 m long. The vertical opening is provided by two hoop-like trawl shoes mostly made from steel. No hydrodynamic forces are needed to keep a beam trawl open. The beam trawl is normally towed on outriggers, one trawl on each side. While fishing for flatfish the beam trawl is often equipped with tickler chains to disturb the fish from the seabed. For operations on very rough fishing grounds they can be equipped with chain matrices. Chain matrices are rigged between the beam and the groundrope and prevent boulders/stones from being caught by the trawl. Shrimp beam trawls are not so heavy and have smaller mesh sizes. A bobbin of groundrope with rubber bobbins keeps the shrimp beam trawl in contact with the bottom and gives flatfish the opportunity to escape. Close bottom contact is necessary for successful operation. To avoid bycatch of most juvenile fishes selectivity devices are assembled (sieve nets, sorting grids, escape holes). While targeting flatfish the beam trawls are towed up to seven knots, therefore the gear is very heavy; the largest gears weighs up to 10 ton. The towing speed for shrimp is between 2.5 and 3 knots. (from: http://www.fao.org/fishery/geartype/305/en)

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Deployments

NBP1210

Website	https://www.bco-dmo.org/deployment/568987
Platform	RVIB Nathaniel B. Palmer
Report	http://dmoserv3.bco-dmo.org/jg/serv/BCO-DMO/OA_Antarctic_organisms/727518.html0%7Bdir=dmoserv3.whoi.edu/jg/dir/BCO-DMO/OA_Antarctic_organisms/,info=dmoserv3.bco-dmo.org/jg/info/BCO-DMO/OA_Antarctic_organisms/mg_ca_ratios%7D
Start Date	2013-01-06
End Date	2013-02-09
Description	Seaglider AUV-SG-503-2012 was recovered on this cruise.

Halanych_lab_2011-16

Website	https://www.bco-dmo.org/deployment/671488
Platform	Auburn University lab
Start Date	2011-08-01
End Date	2016-07-31
Description	Invertebrate genomics

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Project Information

Genetic connectivity and biogeographic patterns of Antarctic benthic invertebrates (Antarctic Inverts)

Coverage: Antarctica

Extracted from the NSF award abstract:

The research will explore the genetics, diversity, and biogeography of Antarctic marine benthic invertebrates, seeking to overturn the widely accepted suggestion that benthic fauna do not constitute a large, panmictic population. The investigators will sample adults and larvae from undersampled regions of West Antarctica that, combined with existing samples, will provide significant coverage of the western hemisphere of the Southern Ocean. The objectives are: 1) To assess the degree of genetic connectivity (or isolation) of benthic invertebrate species in the Western Antarctic using high-resolution genetic markers. 2) To begin exploring planktonic larvae spatial and bathymetric distributions for benthic shelf invertebrates in the Bellinghausen, Amundsen and Ross Seas. 3) To continue to develop a Marine Antarctic Genetic Inventory (MAGI) that relates larval and adult forms via DNA barcoding.

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Funding

Funding Source	Award
NSF Office of Polar Programs (formerly NSF PLR) (NSF OPP)	PLR-1043745
NSF Office of Polar Programs (formerly NSF PLR) (NSF OPP)	PLR-1043670

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