

CATALOGUE FOR THE 123 PORTAL (AUSTRALIAN OCEAN DATA NETWORK)

Database of Marine Larval Fish Assemblages in Australian temperate and subtropical waters (1983 - 2016)



[Metadata](#) | [Metadata \(XML\)](#)

Title	Database of Marine Larval Fish Assemblages in Australian temperate and subtropical waters (1983 - 2016)
Date	2018-03-21
Date type	Creation
Abstract	<p>Larval fishes are a useful metric of marine ecosystem state and change, as well as species-specific patterns in phenology. The high level of taxonomic expertise required to identify larval fishes to species level, and the considerable effort required to collect them, make these data extremely valuable. Here we collate 3178 samples of larval fishes, from 12 research projects from 1983 to November 2016, from temperate and subtropical Australian waters. This forms a benchmark for the larval fish assemblage for the region, and includes recent monitoring of larval fishes at coastal oceanographic reference stations. Comparing larval fishes among projects can be problematic due to differences in taxonomic resolution, and identifying all taxa to species can be extremely challenging, so this study reports a standard taxonomic resolution (of 221 taxa) for this region to help guide future research. All data reported here has been expertly resolved to this taxonomic resolution.</p> <p>The ongoing version of this larval fish database will be freely available through the Australian Ocean Data Network Portal (AODN; http://portal.aodn.org.au/) in the near future, and will serve as a data repository for surveys of larval fish assemblages in the region.</p>

Unique resource identifier	DOI: 10.4225/69/5ab33c62f9c52
Metadata language	eng
Character set	UTF8
Hierarchy level	Dataset

OnLine resource

Linkage	https://catalogue-imos.aodn.org.au:443/geonetwork/srv/en/metadata.show?uuid=2d2b2f92-12fa-4330-a480-94f0892c2b72
Protocol	WWW:LINK-1.0-http--metadata-URL
Linkage	http://data.aodn.org.au/CSIRO/Atlas/Larval_Fish/Marine_larvalfish_database_snapshot_20180323.csv
Protocol	WWW:LINK-1.0-http--link
Linkage	http://data.aodn.org.au/CSIRO/Atlas/Larval_Fish/Master_species_list_larvalfish_database.xlsx
Protocol	WWW:LINK-1.0-http--link
Linkage	https://www.nature.com/articles/sdata2018207
Protocol	WWW:LINK-1.0-http--link

Point of contact

Individual name	Suthers, Ian M.
Organisation name	School of Biological, Earth and Environmental Sciences (BEES), The University of New South Wales (UNSW)

Role	colInvestigator
Individual name	Smith, James A.
Organisation name	School of Biological, Earth and Environmental Sciences (BEES), The University of New South Wales (UNSW)
Role	colInvestigator
Topic category	Biota
Topic category	Oceans

Keyword

Keyword	http://www.marlin.csiro.au:80/geonetwork/srv/eng/xml.keyword.get?thesaurus=register.dataSource.urn:marlin.csiro.au:sourceregister&id=urn:marlin.csiro.au:sourceregister
Keyword	Ship: Southern Surveyor
Keyword	http://www.marlin.csiro.au:80/geonetwork/srv/eng/xml.keyword.get?thesaurus=register.dataSource.urn:marlin.csiro.au:sourceregister&id=urn:marlin.csiro.au:sourceregister
Keyword	Ship: Franklin
Keyword	http://www.marlin.csiro.au:80/geonetwork/srv/eng/xml.keyword.get?thesaurus=register.dataSource.urn:marlin.csiro.au:sourceregister&id=urn:marlin.csiro.au:sourceregister
Keyword	Ship: Sprightly
Keyword	http://www.marlin.csiro.au:80/geonetwork/srv/eng/xml.keyword.get?thesaurus=register.dataSource.urn:marlin.csiro.au:sourceregister&id=urn:marlin.csiro.au:sourceregister
Keyword	Ship: Investigator (RV)
Keyword	http://www.marlin.csiro.au:80/geonetwork/srv/eng/xml.keyword.get?thesaurus=register.dataSource.urn:marlin.csiro.au:sourceregister&id=urn:marlin.csiro.au:sourceregister
Keyword	Ship: Kapala
Keyword	http://www.marlin.csiro.au:80/geonetwork/srv/eng/xml.keyword.get?thesaurus=register.dataSource.urn:marlin.csiro.au:sourceregister&id=urn:marlin.csiro.au:sourceregister
Keyword	Ship: Challenger
Type	dataSource
Keyword	http://www.marlin.csiro.au:80/geonetwork/srv/eng/xml.keyword.get?thesaurus=external.theme.gcmd_keywords&id=http://gcmdservices.gsfc.nasa.gov/kms/concept/ca8d77f2-9257-4298-9244-e81cd890f000
Keyword	Earth Science Biosphere Aquatic Ecosystems Plankton
Keyword	http://www.marlin.csiro.au:80/geonetwork/srv/eng/xml.keyword.get?thesaurus=external.theme.gcmd_keywords&id=http://gcmdservices.gsfc.nasa.gov/kms/concept/ea855d4c-f132-44f9-b31c-447e1101684d
Keyword	Earth Science Biological Classification Animals/Vertebrates Fish
Type	Theme
Keyword	http://www.marlin.csiro.au:80/geonetwork/srv/eng/xml.keyword.get?thesaurus=register.survey.urn:marlin.csiro.au:surveyregister&id=urn:marlin.csiro.au:surveyregister
Keyword	Research Voyage: FR 02/97
Keyword	http://www.marlin.csiro.au:80/geonetwork/srv/eng/xml.keyword.get?thesaurus=register.survey.urn:marlin.csiro.au:surveyregister&id=urn:marlin.csiro.au:surveyregister
Keyword	Research Voyage: FR 14/98
Keyword	http://www.marlin.csiro.au:80/geonetwork/srv/eng/xml.keyword.get?thesaurus=register.survey.urn:marlin.csiro.au:surveyregister&id=urn:marlin.csiro.au:surveyregister
Keyword	Research Voyage: IN2015_V03
Keyword	http://www.marlin.csiro.au:80/geonetwork/srv/eng/xml.keyword.get?thesaurus=register.survey.urn:marlin.csiro.au:surveyregister&id=urn:marlin.csiro.au:surveyregister

Keyword	Research Voyage: FR 01/99
Keyword	http://www.marlin.csiro.au:80/geonetwork/srv/eng/xml.keyword.get?thesaurus=register.survey.urn:marlin.csiro.au:surveyregister&id=urn:marlin.csiro.au:surveyregister
Keyword	Research Voyage: FR 04/94
Keyword	http://www.marlin.csiro.au:80/geonetwork/srv/eng/xml.keyword.get?thesaurus=register.survey.urn:marlin.csiro.au:surveyregister&id=urn:marlin.csiro.au:surveyregister
Keyword	Research Voyage: FR 11/97
Keyword	http://www.marlin.csiro.au:80/geonetwork/srv/eng/xml.keyword.get?thesaurus=register.survey.urn:marlin.csiro.au:surveyregister&id=urn:marlin.csiro.au:surveyregister
Keyword	Research Voyage: FR 02/94
Keyword	http://www.marlin.csiro.au:80/geonetwork/srv/eng/xml.keyword.get?thesaurus=register.survey.urn:marlin.csiro.au:surveyregister&id=urn:marlin.csiro.au:surveyregister
Keyword	Research Voyage: SS 08/2004
Type	

Lineage

Statement	<p>All larval fishes were sampled by plankton nets towed from a variety of vessels. Nets were either towed obliquely (across a range of depths), or at constant near-surface depths. Upon net retrieval of this single ‘tow’, all plankton were fixed immediately in ~4% formalin in seawater (and often buffered with sodium borate or sodium carbonate to avoid sample degradation). The volume sampled by the net for each tow was determined, typically using a flowmeter attached to the mouth of the net, which was used to standardise larval fish counts to volume of water sampled.</p> <p>See data paper for information on the larval fish identification.</p>
Statement	<p>Project_ID: Unique database code to identify the project (Table 1)</p> <p>Tow_ID: A unique identifier for each tow, which is the Project_ID plus the numerical data record for that project; e.g. P1_1 is the first record in project P1</p> <p>Sample: A project-specific identifier for each record</p> <p>Date: Date a tow was taken, yyyy-mm-dd</p> <p>Time_local: The local time a tow was taken, hh24:mm</p> <p>Day_Night: Whether the tow occurred in the day or night – only used when Time_local was unavailable</p> <p>Latitude; Longitude: Geographic coordinates for each tow (usually start of tow)</p> <p>Location: A project-specific identifier of feature of interest (e.g. oceanographic feature)</p> <p>Volume_m3: The volume of a tow (m3)</p> <p>Replicate: Identifies when tows were done consecutively to act specifically as replicates</p> <p>Cruise_ID: A project-specific identifier of different cruises</p> <p>Station: A project-specific identifier of a specific location sampled multiple times</p> <p>Gear_depth_m: The maximum depth tows were deployed to, or a range of depths sampled; surface tows have a depth=0</p> <p>Gear_mesh_um: The type of net, and the mesh dimensions (µm); summarised in Table 1</p> <p>Bathym_m: The bottom depth at location of the tow (m)</p> <p>Temperature_C: Surface (< 10 m) water temperature (°C) at approx. the same time as the tow; measured with a CTD</p> <p>Salinity: Surface (< 10 m) salinity (PSU) at approx. the same time as the tow; measured with a CTD</p>

Resource constraints

Use limitation	<p>Acknowledgements</p> <p>We acknowledge the contributions of all collaborators and their institutions. We acknowledge the Australian Fisheries Management Authority who funded part of this study (grant: 2015/0819), as well as the Marine National Facility and the Australian Research Council who provided funding in support of many of these projects.</p> <p>We acknowledge the support of the Integrated Marine Observing System (IMOS), which currently undertakes the larval fish monitoring at the National Reference Stations (NRS; project P12). We are grateful to the personnel who collect these NRS samples each month. If using data from project P12 please add the following acknowledgement: "Data were sourced</p>
----------------	---

	from the Integrated Marine Observing System (IMOS) – IMOS is a national collaborative research infrastructure, supported by the Australian Government."
File identifier	2d2b2f92-12fa-4330-a480-94f0892c2b72
Metadata language	eng
Character set	UTF8

Metadata author

Organisation name	Integrated Marine Observing System (IMOS)
Role	Distributor
Date stamp	2020-01-14T11:11:10