UMA

Sea Around Us Project - Relative pelagic fish abundance inferred from commercial catch data, Western Australia (1997-2006)

Metadata | Metadata (XML)
| Visualization service URL (WMS) (MAP - Relative Pelagic Fish Abundance) |

Title	Sea Around Us Project - Relative pelagic fish abundance inferred from commercial catch data, Western Australia (1997-2006)
Date	2016-06-15
Date type	Creation
Abstract	This dataset describes the relative abundance of an assemblage of commercially exploited pelagic fishes around Western Australia, mapped over a 30 arc-minute (0.5 degree) spatial grid. The data cover the period 1997-2006 and are derived from an analysis of commercial landings available through the Sea Around Us Project (http://www.seaaroundus.org/). Further details can be found in the following peer-reviewed publication: Bouchet PJ, Meeuwig JJ, Huang Z, Letessier TBL, Nichol SL, Caley MJ, Watson RA. 2017. Continental-scale hotspots of pelagic fish abundance inferred from commercial catch records. Global Ecology and Biogeography. DOI: 10.1111/geb.12619 Below is a full list of species considered, with their respective contributions to the total catch (%): ---------- Greenback horse mackerel / Trachurus declivis -- 10.92 % Greater amberjack / Seriola dumerili -- 0.05 % Samson fish / Seriola hippos -- 0.01 % Silver gemfish / Rexea solandri -- 2.80 % Snoek / Thyrsites atun -- 1.22 % Indo-Pacific blue marlin / Makaira mazara -- 2.87 % Striped marlin / Tetrapturus audax -- 0.26 % Black marlin / Makaira indica -- 0.17 % Indo-Pacific sailfish / Istiophorus platypterus -- 0.06 % Shortbill spearfish / Tetrapturus angustirostris -- 0.00 % Bluefish / Pomatomus saltatrix -- 0.13 % Southern bluefin tuna / Thunnus maccoyii -- 19.17 % Narrow-barred Spanish mackerel / Scomberomorus commerson -- 16.93 % Skipjack tuna / Katsuwonus pelamis -- 9.82 % Yellowfin tuna / Thunnus albacares -- 9.40 % Bigeye tuna / Thunnus obesus -- 7.67 % Albacore tuna / Thunnus alalunga -- 4.16 % Longtail tuna / Thunnus tonggol -- 0.78 % Kawakawa (mackerel tuna) / Euthynnus affinis -- 0.56 % Wahoo / Acanthocybium solandri -- 0.01 % Great barracuda / Sphyraena barracuda -- 0.25 % Tope shark / Galeorhinus galeus -- 6.66 % Swordfish / Xiphias gladius -- 6.09 %
Metadata language	eng
Character set	UTF8
Hierarchy level	Dataset

OnLine resource

Linkage	https://geoserver.imas.utas.edu.au/geoserver/NESP/wfs?version=1.0.0&request=GetFeature&typeName=NESP_D1_SAUP_PelagicFish&outputFormat=SZIP
Protocol	OGC:WFS-1.0.0-http-get-feature--shapefile
Linkage	https://geoserver.imas.utas.edu.au/geoserver/NESP/wms
Protocol	OGC:WMS-1.3.0-http-get-map

Linkage	http://purl.org/au-research/grants/nesp/mb/d1
Protocol	WWW:LINK-1.0-http--link
Linkage	https://metadata.imas.utas.edu.au:443/geonetwork/srv/en/metadata.show?uuid=16501b1f-4b29-4b52-82d1-2e5c4d536acc
Protocol	WWW:LINK-1.0-http--metadata-URL

Point of contact

Individual name	Bouchet, Phil
Organisation name	Centre for Marine Futures, The University of Western Australia (UWA)
Role	Principal investigator
Individual name	Meeuwig, Jessica
Organisation name	Centre for Marine Futures, The University of Western Australia (UWA)
Role	Principal investigator

Topic category	Biota

Keyword

Type	Theme
Keyword	HOTSPOTS
Keyword	ABUNDANCE
Keyword	WILDLIFE DISTRIBUTION
Keyword	BIOGEOGRAPHY
Type	taxon
Keyword	TUNA
Keyword	MACKEREL
Keyword	MARLIN
Type	Theme
Keyword	http://metadata.imas.utas.edu.au:/geonetwork/srv/eng/xml.keyword.get?thesaurus=external.theme.sciencekeywords&id=http://gcmdservices.gsfc.nasa.gov/kms/concept/ea855d4c-f132-44f9-b31c-447e1101684d
Keyword	EARTH SCIENCE | BIOLOGICAL CLASSIFICATION | ANIMALS/VERTEBRATES | FISH
Keyword	http://metadata.imas.utas.edu.au:/geonetwork/srv/eng/xml.keyword.get?thesaurus=external.theme.sciencekeywords&id=http://gcmdservices.gsfc.nasa.gov/kms/concept/ed019e00-9b0a-4bdc-89aa-606cc929bd9f
Keyword	EARTH SCIENCE | BIOLOGICAL CLASSIFICATION | ANIMALS/VERTEBRATES | FISH | SHARKS/RAYS/CHIMAERAS
Keyword	http://metadata.imas.utas.edu.au:/geonetwork/srv/eng/xml.keyword.get?thesaurus=external.theme.sciencekeywords&id=http://gcmdservices.gsfc.nasa.gov/kms/concept/fa57b0a0-9723-4195-bdd1-4f26aefa0e07
Keyword	EARTH SCIENCE | OCEANS | AQUATIC SCIENCES | FISHERIES
Keyword	http://metadata.imas.utas.edu.au:/geonetwork/srv/eng/xml.keyword.get?thesaurus=external.theme.ANZSRC_FOR_Codes&id=http://purl.org/au-research/vocabulary/anzsrc-for/2008/070403
Keyword	Fisheries Management
Keyword	http://metadata.imas.utas.edu.au:/geonetwork/srv/eng/xml.keyword.get?thesaurus=external.theme.ANZSRC_FOR_Codes&id=http://purl.org/au-research/vocabulary/anzsrc-for/2008/060205
Keyword	Marine and Estuarine Ecology (incl. Marine Ichthyology)

Keyword	http://metadata.imas.utas.edu.au:/geonetwork/srv/eng/xml.keyword.get?thesaurus=external.theme.ANZSRC_FOR_Codes&id=http://purl.org/au-research/vocabulary/anzsrc-for/2008/070402
Keyword	Aquatic Ecosystem Studies and Stock Assessment
Type	Discipline

Extent

Geographic bounding box

West bound	109.2
East bound	128.8
South bound	-40.7282971451
North bound	-9.25

Lineage

Statement	Raw data were filtered and spatially partitioned into 4 contiguous bioregions (North, Gascoyne, West, South), as per the management boundaries recognised by the Western Australian Department of Fisheries. Catch values were paired with estimates of fishing effort acquired independently and gap-filled (where appropriate) using a multivariate smoothing spline algorithm. Generalised linear models (GLMs) were used to standardise catch rates and account for the confounding effects of year, fishing gear type, body mass and effort. Model coefficients were extracted as relative abundance indices, and hotspots identified based on the position of the 45 degree tangents to their cumulative frequency distribution. For further details, see Bouchet PJ, Meeuwig JJ, Huang Z, Letessier TBL, Nichol SL, Caley MJ, Watson RA. 2017. Continental-scale hotspots of pelagic fish abundance inferred from commercial catch records. Global Ecology and Biogeography. DOI: 10.1111/geb.12619

Resource constraints

Use limitation	The data described in this record are the intellectual property of the University of Western Australia and the University of Tasmania.
Classification	Unclassified

File identifier	16501b1f-4b29-4b52-82d1-2e5c4d536acc
Metadata language	eng
Character set	UTF8

Metadata author

Individual name	Emma Flukes
Organisation name	Institute for Marine and Antarctic Studies (IMAS), University of Tasmania (UTAS)
Role	metadataContact

Date stamp	2020-09-10T08:47:30