Data server object: JeDI

BCO-DMO dataset: JeDI

Contacts

Name	Role
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Dataset description

The Jellyfish Database Initiative (JeDI) is a scientifically-coordinated global database dedicated to gelatinous zooplankton (members of the Cnidaria, Ctenophora and Thaliacea) and associated environmental data. The database holds 476,000 quantitative, categorical, presence-absence and presence only records of gelatinous zooplankton spanning the past four centuries (1790-2011) assembled from a variety of published and unpublished sources. Gelatinous zooplankton data are reported to species level, where identified, but taxonomic information on phylum, family and order are reported for all records. Other auxiliary metadata, such as physical, environmental and biometric information relating to the gelatinous zooplankton metadata, are included with each respective entry. JeDI has been developed and designed as an open access research tool for the scientific community to quantitatively define the global baseline of gelatinous zooplankton populations and to describe long-term and large-scale trends in gelatinous zooplankton populations and blooms. It has also been constructed as a future repository of datasets, thus allowing retrospective analyses of the baseline and trends in global gelatinous zooplankton populations to be conducted in the future.

References:

Lucas, C.J., et al. 2014. Gelatinous zooplankton biomass in the global oceans: geographic variation and environmental drivers. Global Ecol. Biogeogr. (DOI: 10.1111/geb.12169)

Condon, R. H., et al. 2013. Recurrent jellyfish blooms are a consequence of global oscillations. PNAS vol. 110(3) 1000-1005. (www.pnas.org/cgi/doi/10.1073/pnas.1210920110)

Condon, R. H., et al. 2012. Questioning the Rise of Gelatinous Zooplankton in the World's Oceans. BioScience vol. 62(2) 160-169. (doi:10.1525/bio.2012.62.2.9)

Acquisition description

This information has been synthesized by members of the Global Jellyfish Group from online databases, unpublished and published datasets. More specific details may be found in *Lucas, C.J., et al. 2014. Gelatinous zooplankton biomass in the global oceans: geographic variation and environmental drivers. Global Ecol. Biogeogr. (DOI: 10.1111/geb.12169)* in the methods section.

Processing description

BCO-DMO Processing Notes:

-Added BCO-DMO header information
NOTE:
record 476254-476255 (klr.49, physalia sp.) both have "None" as values for almost all fields.
precision varies greatly within parameters and over the time series.

Ran a script to edit the following in in all text fields:
- Output was tab-delimited file
- spaces were edited to underscores
- commas edited to semicolons
- "?" was edited to unknown
- missing data fields were edited to 'nd'.

Also edited the following:
- resolved/edited all special characters associated with foreign language/names
- Separated day from variably-formatted date and served month day and year separately.
- edited precision of density (calculated field)
- Separated compound Project names into Project and Sub-pProject names (i.e., created column 'sub-project')

-Many text fields were too large to serve online, and were therefore edited to abbreviate information, create a consistent format, and correct found errors. Original values were retained in the file: jedi_term_legend.txt

Formatting of names was highly variable/inconsistent. Therefore, the parameters 'owner_dataset' and 'contact' were edited as follows:
-Last name was put first with underscore, then first initial. If first/last names were indistinquishable, and no comma or semicolon was present, then first name in cell was considered the first name of individual and moved to just initial after the second name, assumed to be last name.
-More than three names in a cell was abbreviated to lastname_firstinitial_et_al
-Removed all puncuation (e.g., commas, semicolons, appostrophies and ampersands)
-Removed titles (e.g., Dr.)

When editing location names:
- Abbreviations were made where possible, in addition to camel case for two-word water body names.
- Commas were edited to semicolons for distinguishing between multiple location names

- As per PI, the following parameters were removed from the original file (empty fields):

Sea surface temperature, Temperature at collection depth, Temperature at maximum depth, Sea surface salinity, Salinity at collection depth, Salinity at maximum depth, Dissolved oxygen at surface, Dissolved oxygen at collection depth, Dissolved oxygen at maximum depth, Chlorophyll at surface, Chlorophyll at maximum depth, Chlorophyll at collection depth, Fluorescence at surface, Fluorescence at collection depth, Fluorescence at maximum depth, Transmissivity at surface, Transmissivity at collection depth, Transmissivity at maximum depth, pH at surface, pH at collection depth, pH at maximum depth, JEDI internal reference number, Depth integrated carbon, Depth integrated nitrogen, Depth integrated protein, Morpho metadata file ID.

- Removed all duplicate records (lines).

Field Names List

Parameter	Description	Units
project_title	Main portion of original project name or regional description.	dimensionless
owner_dataset	Original owner of data.	dimensionless
contact	Contact details for data access or further information about dataset.	dimensionless
location_name	Description of sample region.	dimensionless
date	Date sample was collected.	variable
year	year	YYYY
month	Month of the year	MM
day	Day of the month	DD
time_local	Local time of sampling.	HH:MM:SS
lat	Sample latitude.	Decimal degrees
lon	Sample longitude.	Decimal degrees
taxon	Taxonomic grouping.	dimensionless
rank_phylum	Taxonomic phylum name.	dimensionless
rank_class	Taxonomic class name.	dimensionless
rank_order	Taxonomic order name.	dimensionless
rank_family	Taxonomic class name.	dimensionless
rank_genus	Taxonomic genus name.	dimensionless
rank_species	Taxonomic species name.	dimensionless
data_type	Quantitative categorical presence/absence or presence only.	dimensionless
collection_method	Brief description of methodology or data synthesis.	dimensionless
net_opening	Size of collection net opening.	meter
net_mesh	Net mesh size.	millimeter
depth	Sampling depth.	meter
depth_upper	Used for determining integrated sample units.	meter
depth_lower	Used for determining integrated sample units	meter
count_actual	Raw counts from respective survey.	dimensionless
density	density	unknown
density_integrated	Depth integrated density.	unknown
biovolume	Displacement volume of sample.	milliliters/meter^3
biovolume_integrated	Depth integrated biovolume.	milliliters/meter^2
weight_wet	Sample wet weight.	grams/meter^3
weight_dry	sample dry weight.	grams/meter^3
categorical_abundance	Generic categories or descriptors of jellyfish abundance.	unknown
presence_absence	Indication of presence or absence of a targeted species, via 'present' or 'absent'.	dimensionless
study_type	Text describing type of study in which samples were obtained.	dimensionless
accompanying_ancillary_data	Indication of accompanying ancillary data via 'yes' or 'no'.	dimensionless
catch_per_effort	Fisheries unit: an indirect measure of the abundance of a target species; also known as catch rate.	kilograms per hectare
	Sub-project portion of original project name. If no sub-project	

sub_project_title	exists, original project name was duplicated in this field.	dimensionless

Deployment List

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sub_project_title	exists, original project name was duplicated in this field.	dimensionless