Zooplankton collected from 1977 to 2002 in the Pacific Ocean (ORI_Historical project)

Website: https://www.bco-dmo.org/dataset/3345
Version: 20100427
Version Date: 2010-04-27

Project
» ORI-Historical (ORI_Historical)

Program
» Census of Marine Life (CoML)

Contributors	Affiliation	Role
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Dataset Description

Species counts, sex, life stage for the following zooplankton groups:
- Appendicularia (larvacea) from the NW Pacific, 1977 to 1995 (by Dr. N. Shiga)
- Oncaeidae (Copepoda) from 1996 to 1997 (by Dr. Nishibe)
- Calanoid copepods from 2002 (by Dr. Yamaguchi)

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Data Files

File
cmarz_asia_zoop.csv (Comma Separated Values (.csv), 278.39 KB) MD5:de9fce7f15992c06a0144fcb5340f168
Primary data file for dataset ID 3345

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Parameters

Parameter	Description	Units
yrday_local	local year day	
month_local	local month	
day_local	local day	
depth_min	minimum depth	meters
depth_max	maximum depth	meters
station	station number	
lat	latitude; negative = South	decimal degrees
lon	longitude; negative = West	decimal degrees
time_local	local time	
timezone	timezone	
species	species name of organism	
sex	sex as Female (F), Male (M) or Female_Male	
life_stage	life stage	
count	number of individuals	individuals
id_by	Person who identified the animal.	
catalog_no	local designation	
year	year	

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Deployments

ORI_historical

Website	https://www.bco-dmo.org/deployment/58057
Platform	ORI
Start Date	1977-03-17
End Date	2002-08-22

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Project Information

ORI-Historical (ORI_Historical)

Coverage: North and South Pacific

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Program Information

Census of Marine Life (CoML)

Website: http://www.coml.org/

Coverage: global

The Census of Marine Life is a global network of researchers in more than 80 nations engaged in a 10-year scientific initiative to assess and explain the diversity, distribution, and abundance of life in the oceans. The world's first comprehensive Census of Marine Life - past, present, and future - will be released in 2010.

The stated purpose of the Census of Marine Life is to assess and explain the diversity, distribution, and abundance of marine life. Each plays an important role in what is known, unknown, and may never be known about what lives in the global ocean.

First, diversity. The Census aims to make for the first time a comprehensive global list of all forms of life in the sea. No such unified list yet exists. Census scientists estimate that about 230,000 species of marine animals have been described and reside in jars in collections in museums of natural history and other repositories. Since the Census began in 2000, researchers have added more than 5600 species to the lists. They aim to add many thousands more by 2010. The database of the Census already includes records for more than 16 million records, old and new. By 2010, the goal is to have all the old and the new species in an on-line encyclopedia with a webpage for every species. In addition, we will estimate how many species remain unknown, that is, remain to be discovered. The number could be astonishingly large, perhaps a million or more, if all small animals and protists are included. For comparison, biologists have described about 1.5 million terrestrial plants and animals.

Second, distribution. The Census aims to produce maps where the animals have been observed or where they could live, that is, the territory or range of the species. Knowing the range matters a lot for people concerned about, for example, possible consequences of global climate change.

Third, abundance. No Census is complete without measures of abundance. We want to know not only that there is such a thing as a Madagascar crab but how many there are. For marine life, populations are being estimated either in numbers or in total kilos, called biomass.

To complete the context, it is important to understand the top motivations for the Census of Marine Life. Most importantly, much of the ocean is unexplored. Most of the records in its database are for observations near

the surface, and down to 1000 meters. No observations have been made in most of the deep ocean, while most of the ocean is deep.

Another important issue is that diversity varies in space. Marine hot spots, like the rain forests of the land, exist off for large fish off the coasts of Brazil and Australia. The goal is to know much more about marine hot spots, to help conserve these large fish. Their abundance and thus their diversity is changing, especially for commercially important species. Between 1952 and 1976, for example, fishermen and their customers emptied many areas of the ocean of tuna.

The Census has evolved a strategy of 14 field projects to touch the major habitats and groups of species in the global ocean. Eleven field projects address habitats, such as seamounts or the Arctic Ocean. Three field projects look globally at animals that either traverse the seas or appear globally distributed: the top predators such as tuna and the plankton and the microbes. The projects employ a mix of technologies. These include acoustics or sound, optics or cameras, tags placed on individual animals that store or report data, and genetics, as well as some actual capture of animals. The technologies complement one another. Sound can survey large areas in the ocean, while light cannot. Light can capture detail and characters that sound cannot. And genetics can make identifications from fragments of specimens or larvae where pictures tell little.

This mix of curiosity, need to know, technology, and scientists willing to investigate the unexplored and undiscovered will result in a Census of Marine Life in 2010 that provides a much clearer picture of what lives below the surface around the globe. Several reasons make such a report timely, indeed urgent. Crises in the sea are reported regularly. One recent study predicted the end of commercial fishery globally by 2050, if current trends persist. Better information is needed to fashion the management that will sustain fisheries, conserve diversity, reverse losses of habitat, reduce impacts of pollution, and respond to global climate change. Hence, there are biological, economic, philosophical and political reasons to push for greater exploration and understanding of the ocean and its inhabitants. Indeed, the United Nations Convention on Biological Diversity requires signatories to collect information on living resources, but, as yet, no nation has a complete baseline of such information. The Census of Marine Life's global network of researchers will help to fill this knowledge gap, providing critical information to help guide decisions on how to manage global marine resources for the future.

[Text copied from the CoML web site, November 5, 2008]

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Funding

Funding Source	Award
Alfred P. Sloan Foundation (Sloan)	unknown CMarZ_2004-2010 Sloan

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