PREDATOR AND PREY BODY SIZES IN MARINE FOOD WEBS

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1Centre for Environment, Fisheries and Aquaculture Science, Lowestoft, Suffolk, NR33 0HT United Kingdom
2NOAA Fisheries Panama City Laboratory, 3500 Delwood Beach Road, Panama City, Florida 32408 USA
3Estuarine and Ocean Ecology Program, Northwest Fisheries Science Center, 2030 South Marine Science Drive, Newport, Oregon 97365-5296 USA
4Centre de Recherche sur les Mammifères Marins, Université de La Rochelle, F-17071 La Rochelle, France
5Centre de Recherche sur les Ecosystèmes Littoraux Anthropisés, UMR6217, Université de La Rochelle, F-17071 La Rochelle, France
6Annisquam River Marine Fisheries Station, Massachusetts Division of Marine Fisheries, 30 Emerson Avenue, Gloucester, Massachusetts 01930 USA
7School of Aquatic and Fishery Sciences, University of Washington, Box 355020, Seattle, Washington 98195 USA
8Department of Natural Resources Conservation, University of Massachusetts, Amherst, Massachusetts 01003-4210 USA
9International Council for the Exploration of the Sea (ICES), H. C. Andersens Boulevard 44-46, DK-1553 Copenhagen, Denmark
10Department of Biology, School of the Environment and Society, University of Wales Swansea, Singleton Park, Swansea SA2 8PP United Kingdom
11Institut de Recherche pour le Développement (IRD), Centre de Recherche Halieutique Méditerranéenne et Tropicale, BP 171, 34203 Sète Cedex, France
12Department for Marine Ecology and Aquaculture, Danish Institute for Fisheries Research, Charlottenlund Castle, DK-2920 Charlottenlund, Denmark
13Department of Biology and Marine Biology, University of North Carolina, 601 S. College Road, Wilmington, North Carolina 28402 USA
14Marine Ecology and Technology Applications, Inc., 23 Joshua Lane, Waquoit, Massachusetts 02536 USA
15Aristotle University of Thessaloniki, School of Biology, Department of Zoology, UP Box 134, 54124 Thessaloniki, Greece
16Pelagic Fish Biology Section, East China Sea Fisheries Resources Division, Seikai National Fisheries Research Institute, Fisheries Research Agency, 1551-8 Taia-machi Nagasaki 851-2213 Japan
17Institue de Ciencias del Mar, CSIC, Pl. del Mar s/n, 08039 Barcelona, Catalonia, Spain

Abstract. Knowledge of relationships between predator size and prey size are needed to describe interactions of species and size classes in food webs. Most estimates of predator and prey sizes have been based on dietary studies and apply to small numbers of species in a relatively narrow size range. These estimates may or may not be representative of values for other groups of species and body sizes or for other locations. Marine predator and prey size data associated with published literature were identified and collated to produce a single data set. If predator or prey length of mass were not measured in the original study, the length or mass was calculated using length–mass relationships. The data set consists of 34 931 records from 27 locations covering a wide range of environmental conditions from the tropics to the poles and for 93 types of predator with sizes ranging from 0.1 mg to over 415 kg and 174 prey types with sizes from 75 pg to over 4.5 kg. Each record includes: predator and prey scientific names, common names, taxa, life stages and sizes (length and mass with conversion details), plus the type of feeding interaction, geographic location (with habitat description, latitude, longitude) and mean annual environmental data (sea surface temperature and primary productivity).

Key words: body size; consumer resource; energy transfer; food web; marine; transfer efficiency.

The complete data sets corresponding to abstracts published in the Data Papers section of the journal are published electronically in Ecological Archives at (http://esapubs.org/archive). (The accession number for each Data Paper is given directly beneath the title.)

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18 E-mail: Carolyn.Barnes@cefas.co.uk
ERRATA

The Data Paper by Carolyn Barnes et al. in the March 2008 issue, Ecology 89(3): 881 appeared in print with the word “prey” omitted from the title. This was the result of a printer error. The correct title is “Predator and prey body sizes in marine food webs.” The title is correct in the Table of Contents and in the online versions.

The bird appearing in the cover photo of the March 2008 issue of Ecology, 89(3), was misidentified in the cover photo caption. It is actually a Black-billed Magpie (Pica hudsonia). Thanks to the birding enthusiasts among our readers who notified us about the error.

Smithson et al. have reported an error in their paper (“Do rewardless orchids show a positive relationship between phenotypic diversity and reproductive success?”), which appeared in the February 2007 issue, Ecology 88(2):434–442. The photo credit for Plate 1 should be “Photo credit: A. Internicola.”

The article “Landscape constraints on functional diversity of birds and insects in a tropical agroecosystem” by Tscharntke et al. appearing in the April 2008 issue of Ecology, 89(4), has a printer introduced error in the first sentence of the abstract. The line should begin, “In this paper, we analyze databases on birds and insects to assess patterns....” The line is correct in the online version.