

BODY SIZES OF CONSUMERS AND THEIR RESOURCES

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Abstract. Trophic information—who eats whom—and species' body sizes are two of the most basic descriptions necessary to understand community structure as well as ecological and evolutionary dynamics. Consumer–resource body size ratios between predators and their prey, and parasitoids and their hosts, have recently gained increasing attention due to their important implications for species' interaction strengths and dynamical population stability. This data set documents body sizes of consumers and their resources. We gathered body size data for the food webs of Skipwith Pond, a parasitoid community of grass-feeding chalcid wasps in British grasslands; the pelagic community of the Benguela system, a source web based on broom in the United Kingdom; Broadstone Stream, UK; the Grand Cariçaie marsh at Lake Neuchâtel, Switzerland; Tuesday Lake, USA; alpine lakes in the Sierra Nevada of California; Mill Stream, UK; and the eastern Weddell Sea Shelf, Antarctica. Further consumer–resource body size data are included for planktonic predators, predatory nematodes, parasitoids, marine fish predators, freshwater invertebrates, Australian terrestrial consumers, and aphid parasitoids. Containing 16 807 records, this is the largest data set ever compiled for body sizes of consumers and their resources. In addition to body sizes, the data set includes information on consumer and resource taxonomy, the geographic location of the study, the habitat studied, the type of the feeding interaction (e.g., predacious, parasitic) and the metabolic categories of the species (e.g., invertebrate, ectotherm vertebrate). The present data set was gathered with the intent to stimulate research on effects of consumer–resource body size patterns on food-web structure, interaction-strength distributions, population dynamics, and community stability. The use of a common data set may facilitate cross-study comparisons and understanding of the relationships between different scientific approaches and models.

Key words: *allometry; body length; body mass; body size ratio; food webs; parasitoid–host; predation; predator–prey.*

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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