

Over 75 years of zooplankton data from Australia

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Abstract. Zooplankton are the key trophic link between primary producers and fish in pelagic ecosystems. Historically, there are few zooplankton time series in Australia, with no data sets longer than two years prior to 2008. Here we compile 98 676 abundance records of more than 1000 zooplankton taxa from unpublished research cruises, student projects, published literature, and the recent Integrated Marine Observing System (IMOS). This data set covers the entire coastal and shelf region of Australia and dates back to 1938. Most records are for copepods, but there are also data for other taxa such as decapods, chaetognaths, thaliaceans, appendicularians, and cladocerans. Metadata are provided for each record, including dates, coordinates, and information on mesh size and sampling methods. To facilitate analysis across the multiple data sets, we have updated the species names according to the World Register of Marine Species (WoRMS) and converted units to abundance per cubic meter. These data will be valuable for studies of biodiversity, biogeography, impacts of climate change, and ecosystem health. We encourage researchers holding additional Australian zooplankton data to contact us and contribute their data to the data set so we can periodically publish updates.

Key words: *biogeography; continuous plankton recorder; copepod; diversity; Integrated Marine Observing System (IMOS); plankton; species richness; zooplankton abundance.*

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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