

Data Papers

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MADA: Malagasy Animal trait Data Archive

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Abstract. Species are characterized by their behavioral, physiological, and ecological attributes, which determine their role in ecosystems. In turn, ecosystems and their functions are defined by the species that inhabit them. Thus, evaluating the functional diversity and distributions of species is of utmost importance to studies of biogeography, community ecology, macroevolution, and conservation. The functional diversity of species are determined by traits such as diet, foraging strata, trophic level, activity cycle, litter size, generation length, habitat breadth, and body mass. While there has been a recent growth of information regarding the vertebrate taxa of Madagascar, this information is not always easy to access (non-digitized), and is often fragmented by taxon, location, trait, or combinations thereof. Here, we present the Malagasy Animal trait Data Archive (MADA), a compilation of these and other functional traits, representing the ecological and geographical diversity of all 214 extant mammal and 242 bird species of Madagascar. Data were collected from extensive literature reviews. This Archive is currently limited by select cases of missing data, errors, and uncertainty in the literature; however, it represents the most comprehensive collection of functional trait data of Malagasy mammals and birds to date. The structure of the database allows for different levels of information (and specificity) in each entry and organization by taxon, range, bioclimate, and trait. MADA will be continuously updated as new data become available. Potential uses of MADA include ecological research on the trait or trophic structure of communities, inquiries regarding the mechanisms of community assembly, comparative studies of functionally (dis)similar species, and conservation efforts concerned with the loss of ecosystem function. Madagascar is simultaneously home to one of the most exclusive, diverse, and endangered faunas of the world, making MADA a uniquely valuable resource for biodiversity science and conservation. No copyright restrictions are associated with this dataset. We would appreciate that researchers cite this paper if using all or part of the datasets.

Key words: bird; body size; diet; foraging; function; Madagascar; mammal; mass; niche; stratum; vertebrate.

The complete data sets corresponding to abstracts published in the Data Papers section in the journal are published electronically as Supporting Information in the online version of this article at <http://onlinelibrary.wiley.com/doi/10.1002/ecy.2167/supinfo>.

DATA AVAILABILITY

Data associated with this study are available from the Dryad Digital Repository: <https://doi.org/10.5061/dryad.44tt0>.

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