Ecology, 100(6), 2019, e02647
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ATLANTIC BIRD TRAITS: a data set of bird morphological traits from the Atlantic forests of South America

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Citation: Rodrigues, R. C., É. Hasui, J. C. Assis, J. C. C. Pena, R. L. Muylaert, V. R. Tonetti, F. Martello, A. L. Regolin, T. V. V. da Costa, M. Pichorim, et al. 2019. ATLANTIC BIRD TRAITS: a data set of bird morphological traits from the Atlantic forests of South America. Ecology 100(6):e02647. 10.1002/ecy.2647

Abstract. Scientists have long been trying to understand why the Neotropical region holds the highest diversity of birds on Earth. Recently, there has been increased interest in morphological variation between and within species, and in how climate, topography, and anthropogenic pressures may explain and affect phenotypic variation. Because morphological data are not always available for many species at the local or regional scale, we are limited in our understanding of intra- and interspecies spatial morphological variation. Here, we present the ATLANTIC BIRD TRAITS, a data set that includes measurements of up to 44 morphological traits in 67,197 bird records from 2,790 populations distributed throughout the Atlantic forests of South America. This data set comprises information, compiled over two centuries (1820–2018), for 711 bird species, which represent 80% of all known bird diversity in the Atlantic Forest. Among the most commonly reported traits are sex (n = 65,717), age (n = 63,852), body mass (n = 58,768), flight molt presence (n = 44,941), molt presence (n = 44,847), body molt presence (n = 44,606), tail length (n = 43,005), reproductive stage (n = 42,588), bill length (n = 37,409), body length (n = 28,394), right wing length (n = 21,950), tarsus length (n = 20,342), and wing length (n = 18,071). The most frequently recorded species are *Chiroxiphia caudata* (n = 1,837), *Turdus albicollis* (n = 1,658), *Trichothraupis melanops* (n = 1,468), *Turdus leucomelas* (n = 1,436), and *Basileuterus culicivorus* (n = 1,384). The species recorded in the greatest number of sampling localities are *Basileuterus culicivorus* (n = 243), *Trichothraupis melanops* (n = 242), *Chiroxiphia caudata* (n = 210), *Platyrinchus mystaceus* (n = 208), and *Turdus rufiventris* (n = 191). ATLANTIC BIRD TRAITS (ABT) is the most comprehensive data set on measurements of bird morphological traits found in a biodiversity hotspot; it provides data for basic and applied research at multiple scales, from individual to community, and from the local to the macroecological perspectives. No copyright or proprietary restrictions are associated with the use of this data set. Please cite this data paper when the data are used in publications or teaching and educational activities.

Key words: body size; functional diversity; individual variation; interspecific variation; phenotypic plasticity; phylogenetic diversity; rapid evolution; tropical forest.

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.2647/suppinfo.