Data Papers

Ecology, 98(12), 2017, pp. 3227 © 2017 by the Ecological Society of America

ATLANTIC BATS: a data set of bat communities from the Atlantic Forests of South America

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Abstract. Bats are the second most diverse mammal order and they provide vital ecosystem functions (e.g., pollination, seed dispersal, and nutrient flux in caves) and services (e.g., crop pest suppression). Bats are also important vectors of infectious diseases, harboring more than 100 different virus types. In the present study, we compiled information on bat communities from the Atlantic Forests of South America, a species-rich biome that is highly threatened by habitat loss and fragmentation. The ATLANTIC BATS data set comprises 135 quantitative studies carried out in 205 sites, which cover most vegetation types of the tropical and subtropical Atlantic Forest: dense ombrophilous forest, mixed ombrophilous forest, semideciduous forest, deciduous forest, savanna, steppe, and open ombrophilous forest. The data set includes information on more than 90,000 captures of 98 bat species of eight families. Species richness averaged 12.1 per site, with a median value of 10 species (ranging from 1 to 53 species). Six species occurred in more than 50% of the communities: Artibeus lituratus, Carollia perspicillata, Sturnira lilium, Artibeus fimbriatus, Glossophaga soricina, and Platyrrhinus lineatus. The number of captures divided by sampling effort, a proxy for abundance, varied from 0.000001 to 0.77 individuals h^{-1} m⁻² (0.04 \pm 0.007 individuals h^{-1} m⁻²). Our data set reveals a hyper-dominance of eight species that together that comprise 80% of all captures: Platyrrhinus lineatus (2.3%), Molossus molossus (2.8%), Artibeus obscurus (3.4%), Artibeus planirostris (5.2%), Artibeus fimbriatus (7%), Sturnira lilium (14.5%), Carollia perspicillata (15.6%), and Artibeus lituratus

Key words: biodiversity hotspot; Chiroptera; crop pest suppression; emerging diseases; forest fragmentation; hyper-dominance; mammal communities; mist nets; nutrient flux; Phyllostomidae; pollination; seed dispersal.

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.2007/suppinfo

Manuscript received 26 May 2017; revised 4 August 2017; accepted 18 August 2017. Corresponding Editor: W. K. Michener.

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