Passerine Morphology: External Measurements of Approximately One-Quarter of Passerine Bird Species

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Abstract. Studies of community organization and clade diversification that include functional traits have become an important component of the analysis of ecological and evolved systems. Such studies frequently are limited by availability of consistently collected data. Here, I present a data set including eight measurements of the external morphology of 1642 species, roughly one-quarter of all passerine birds (Aves: Order Passeriformes), from all parts of the world, characterizing the relative proportions of the wing, tail, legs, and beak. Specimens were measured opportunistically over the past 40 years in museums in the United States and Europe. Numbers of individuals measured per species vary from one to dozens in some cases. Measurements for males and females of sexually size-dimorphic species are presented separately. The measurements include total length, the lengths of the wing, tail, tarsus, and middle toe, and the length, breadth, and depth of the beak. Particular attention was paid to obtaining a broad representation of passerine higher taxa, with special interest in small families and subfamilies of passerines, as well as species produced by evolutionary radiations of birds in archipelagoes, including the Galapagos, Hawaii, and the Lesser Antilles. Taxonomy follows the Taxonomy in Flux (TIF) checklist as well as the World Bird List of the International Ornithological Council. Geographic distributions are summarized from Edwards’s Coded List of Birds of the World. Coverage of taxa and geographic regions varies and reflects the changing interests of the author over the past four decades. North American and South American species are particularly well represented in the sample, as well as species belonging to the families Tyrannidae, Furnariidae, Thamnophilidae, Mimidae, Sturnidae, Fringillidae, Parulidae, Icteridae, Cardinalidae, and Thraupidae.

Key words: adaptive radiation; ecomorphology; functional morphology; functional trait; museum collections; passerine bird.