Body size of Chilean foxes: a new pattern in light of new data

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Abstract

By using body measurements and weight data of culpeo fox Dusicyon culpaeus Molina, 1782 and chilla fox D. griseus Gray, 1837 from the Chinchilla National Reserve (north-central Chile) and Torres del Paine National Park (southern Chile), the body size distribution of Chilean foxes was analyzed and compared to data previously published by Fuentes and Jaksic (1979). Contrary to those authors, our data show that not only the larger but both species increase in size in southern Chile. Thus, latitudinal size distribution of D. culpaeus and D. griseus may not be the result of character displacement through exploitation competition, as previously interpreted, but of bioenergetic adaptations. Department of Wildlife Ecology and Conservation, University of Florida, Gainesville, FL 32611, USA (JEJ); Sección Zoología, Museo Nacional de Historia Natural, Casilla 787, Santiago, Chile (JLY); Proyecto Chinchilla, Corporación Nacional Forestal, Vicuña Mackenna 93, Illapel, Chile (ELT); Departamento de Ecología, Pontificia Universidad Católica de Chile, Casilla 114-D, Santiago, Chile (FMJ).

Key words: Dusicyon culpaeus, Dusicyon griseus, Canidae, body size, sympatric foxes, Chile