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Abstracts

SHORT COMMUNICATIONS

PHYSIOLOGICAL RESPONSES TO TEMPERATURE BY WHIP-POOR-WILLS: MORE EVIDENCE FOR THE EVOLUTION OF LOW METABOLIC RATE IN CAPRIMULGIFORMES

JEFFREY E. LANE[1,4], DAVID L. SWANSON[2], R. MARK BRIGHAM[1] AND ANDREW E. MCKECHNIE[3]
[1]*Department of Biology, University of Regina, Regina, SK S4S 0A2, Canada*
[2]*Department of Biology, University of South Dakota, Vermillion, SD 57069-2390*
[3]*School of Animal, Plant and Environmental Sciences, University of the Witwatersrand, Private Bag 3, Wits 2050, South Africa*
Manuscript received 24 November 2003; accepted 2 July 2004.
[4]Present address: Department of Biological Sciences, University of Alberta, Edmonton, AB T6G 2E9, Canada. E-mail: jelane@ualberta.ca

Abstract. We measured the metabolic responses of nine Whip-poor-wills (*Caprimulgus vociferus*), captured in southeast South Dakota, to incremental changes in ambient temperature within the range of 0–40°C. Similar to other members of the Caprimulgiformes, Whip-poor-wills exhibited a basal metabolic rate that was lower than predicted by allometry. We compared basal metabolic rates of six caprimulgiform species (our data plus published values for five other species) with those of 82 other avian species using both conventional and phylogenetically independent ANCOVAs. The low basal metabolic rate of Caprimulgiformes was not explained by phylogenetic position. A low basal metabolic rate, together with the widespread ability of birds in this order to use daily torpor, seemingly has enabled members of this group to occupy their unique ecological niche (crepuscular insectivory).

Key words: *basal metabolic rate, Caprimulgiformes*, Caprimulgus vociferus, *phylogenetically independent ANCOVA, Whip-poor-will*.