

ABSTRACTS FOR *CONDOR* 103(2) MAY 2001

SHORT COMMUNICATIONS

EFFECT OF GROUP SIZE ON FIELD METABOLIC RATE OF ARABIAN BABBLERS PROVISIONING NESTLINGS¹

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Abstract. Arabian Babblers (*Turdoides squamiceps*; adult body mass 65–75 g) are territorial, cooperatively breeding passerines that inhabit hot, dry deserts. Groups include breeding adults and helpers and generally consist of 3 to 5 individuals (range 2 to 22). All group members provision nestlings at similar rates, and individual visitation rates decline with increasing group size. Consequently, we predicted that the field metabolic rate (FMR) of individuals provisioning nestlings would decrease with increasing group size. To test this prediction, we determined FMR of primary female, primary male, female helper and male helper babblers in different sized groups provisioning nestlings. Field metabolic rate of primary females, but not other classes, decreased linearly with group size. This energy savings could allow primary females in larger groups to start a new nest more quickly. FMR for all babblers was 61% to 66% of the value predicted for a passerine of its body mass provisioning nestlings and was 3.11 ± BMR, similar to the mean value of 3.13 ± BMR reported for a number of terrestrial species.

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