Sexual size dimorphism and geographic variation in body size in a group-living, insectivorous passerine: Hall's Babbler *Pomatostomus halli*

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Sexual size dimorphism in birds is widely used by ornithologists to identify the sex of individuals using linear discriminant analysis of morphological measurements. The feasibility of using this approach for the sexually monochromatic Hall's Babbler *Pomatostomus halli* using 154 genetically-sexed individuals from a single population was investigated. In addition, geographic variation in size was examined using morphological measurements of museum specimens because this can reduce the accuracy of discriminant equations when applied to additional populations. Hall's Babbler exhibited clear sexual size dimorphism with males being 2–7 per cent larger than females in culmen, head-bill, wing, tail and tarsus lengths and body mass. The best performing discriminant equation, which used wing and head-bill lengths, correctly identified the sex of 88 per cent of individuals. Geographic variation in body size of Hall's Babbler was not evident for any morphological trait; therefore, the accuracy of discriminant equations may be similar across populations. Like two of its congeners, sexual size dimorphism was proportionally greatest in culmen length. Such disproportionate dimorphism may be adaptive in reducing intersexual overlap in resource use, since babblers rely heavily on their bill to probe substrates. However, data on intersexual foraging differences in babblers are currently lacking to test this hypothesis.

Welcome Swallow *Hirundo neoxena* breeding ecology in the Yarra Valley, southern Victoria: nest use and the incubation stage

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Welcome Swallows *Hirundo neoxena* breeding in eleven sites less than or equal to 12 kilometres apart in southern Victoria were studied over three successive seasons. Many aspects of nest use and egg production and survival agreed with information derived from a compendium of records for other temperate Australian localities. However, significant seasonal differences occurred in: (a) the percentage of active nests in a season that were not newly-constructed (100%, 86% and 77.5%), (b) the timing of laying of first and second clutches in a particular nest or site and (c) the causes of egg failure; parental desertion due to low ambient temperatures and for other reasons was significant only in 2009, egg 'disappearance' was particularly common in 2010 and 2011 and egg loss through flooding was particularly prominent in 2010. Variation among the largest colonies was limited to: (a) the relative use of newly-constructed nests and (b) the causes of egg failure; desertion at low ambient temperatures was particularly prominent in one colony, causing 29 percent of egg

failures. Egg failure due to flash flooding and the parents' death, respectively, were significant only in one colony each. Variations in rainfall and its impact and in ambient temperature probably accounted for some seasonal and spatial variability in pre-hatching breeding ecology.

The breeding diet of Wedge-tailed Eagles *Aquila audax* in the absence of rabbits: Kangaroo Island, South Australia

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Rabbits form a significant component of the diet of the Wedge-tailed Eagle *Aquila audax*, particularly in temperate mainland Australia. The breeding-season diet of this eagle species was studied on Kangaroo Island, South Australia – a large island lacking rabbits. Wedge-tailed Eagles at three nest sites consumed mostly mammals (67% of prey individuals; 95% biomass; five species), but also birds (33% of prey individuals; 5% biomass; five species). Although roadkill is abundant on Kangaroo Island, further study is required to determine its relative influence in the diet of Wedge-tailed Eagles in this region.

Sex bias in captured Little Ravens *Corvus mellori* varies with entry aperture size in a modified Australian Crow Trap

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