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## CHAPTER 3

### AVIFAUNA OF THE GAOLIGONG SHAN MOUNTAINS OF WESTERN CHINA: A HOTSPOT OF AVIAN SPECIES DIVERSITY

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**ABSTRACT.**—The Gaoligong Shan Mountains (GLGS) of southwestern Yunnan, China, which form the southeastern extent of the Himalaya Mountains, are a narrow range running north-south, rising over 4,000 m in the north and receding into the lowlands in the south. The range is defined by the Irrawaddy lowlands to the west and by the Nujiang (also known as the Salween River) to the east. We summarize results of five recent ornithological expeditions that surveyed altitudinal transects in the southern and northern GLGS. The GLGS are a designated UNESCO World Heritage Site and are considered a “hotspot” by multiple conservation organizations. We used bird distributions to examine the hotspot status of the GLGS, and we discuss the value of the local species diversity for conservation. We found that the GLGS have tremendous avian diversity for a temperate region, with at least 486 documented avian taxa in the region. However, there is relatively little endemism in the GLGS per se, and ~50% of GLGS breeding bird species are near the edge of their range. Our data do not suggest that the GLGS are a major evolutionary center for birds; however, the larger eastern Himalaya region (of which the GLGS are a part), does appear to be a center of endemism and evolution. The GLGS may have been—and are likely to remain—an important and precious refuge for the preservation of Asian montane forest birds.

Key words: Asia, Hengduan Shan, Himalaya, survey, Yunnan.

### Avifauna de las Montañas Gaoligong Shan del Oeste de China: Un Punto Caliente de Diversidad de Especies de Aves

**RESUMEN.**—Las montañas Gaoligong Shan (GLGS) del sudoeste de Yunnan, China, que forman la parte sudeste de las montañas Himalaya, son una cordillera estrecha que corre en sentido norte-sur y que alcanza más de 4,000 m en el norte y desciende hacia tierras bajas en el sur. La cordillera está definida por las tierras bajas de Irrawaddy al oeste y por Nujiang (también conocido como el río Salween) al este. Resumimos los resultados de cinco expediciones ornitológicas recientes que estudiaron transectas altitudinales en el sur y norte de las GLGS. Las GLGS están designadas por la UNESCO como Sitio de Patrimonio Mundial y son consideradas un “punto caliente” por varias organizaciones conservacionistas. Usamos la distribución de las aves para examinar el estatus de punto caliente de las GLGS y discutimos el valor de la diversidad local de especies para la conservación. Encontramos que las GLGS tienen una diversidad de aves enorme para una región templada, con al menos 486 taxones de aves documentados en

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