Southeast Asian birds in peril.—Given their richness of endemic species and unprecedented rates of habitat destruction, the tropics remain an obvious focus for conservation biologists (Myers et al. 2000). Among the world’s tropical regions, Southeast Asia (i.e. Brunei, Cambodia, East Timor, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam) is of particular conservation concern, because it has the highest rate of habitat loss (Sodhi et al. 2004, Sodhi and Brook 2006). Here, we highlight the dire future faced by Southeast Asian birds and urge ornithologists to focus more research and conservation attention on the avifauna of this region.

Southeast Asia contains not only the highest mean proportion of endemic (national level) bird species but also the highest mean proportion of threatened bird species of all tropical regions (Fig. 1A). However, the avifauna of Southeast Asia remains one of the least studied in the tropics (Fig. 1B). Deforestation is likely to be the major cause of avian losses in Southeast Asia (Brooks et al. 1997, Brook et al. 2003), a region that has suffered the second-highest magnitude of habitat loss in the tropics (Fig. 2A). On the basis of the current rate of deforestation reported by the World Resources Institute (see Acknowledgments), we predict that only 10% of natural forests (i.e. composed primarily of native trees; sensu FAO 2001) in Southeast Asia will remain by 2100. Furthermore, most of these remaining forests will be found only in protected areas (Fig. 2B). Actually, our prediction is likely an optimistic one, because deforestation and forest degradation in Southeast Asia is accelerating at the highest rate among tropical regions (Matthews 2001). It is likely that other native habitats, such as freshwater lakes, have also suffered higher losses in Southeast Asia than in other tropical regions (Adeel and Pomeroy 2002).

On the basis of a species-area model calibrated for the avifauna of Southeast Asia (Brook et al. 2003) and information on current known species richness and original and projected forest areas for each country in Southeast Asia, we predict that by 2100 Southeast Asia could lose up to 2,761 of its national bird populations (Fig. 3). Indonesia, the country with the highest number of resident and endemic bird species in

Fig. 1. (A) Comparison of proportion of total number of breeding bird species that are endemic and threatened among tropical regions. Data on number of breeding, endemic and threatened bird species were obtained from World Resources Institute (see Acknowledgments); threatened status was obtained using IUCN Red Listing criteria. Error bars represent standard errors of mean proportion of total number of breeding bird species that are endemic or threatened. (B) Comparison of number of scientific publications derived from biodiversity- or conservation-related research on birds among tropical regions. Number of scientific publications from each region was collated from a web-based search of the Web of Science from the year 1945 to 2005. Expected number of publications for each region was calculated by multiplying the total number of publications in all tropical regions by the proportional geographic area of that region. Abbreviations: SEA = Southeast Asia, SSA = Sub-Saharan Africa, CA & C = Central America and Caribbean, and SA = South America.