

Symposium

ORNITHOLOGY IN NORTHERN CENTRAL AMERICA

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Northern Central America stretches from the northernmost Neotropical rainforest in the lowlands of the Isthmus of Tehuantepec south to the arid Pacific coast of Nicaragua and the pine savannahs of Honduras. Its biogeography is complex; the product of a tumultuous geological history in which climate change, the rise and fall of oceans, and the interaction of tectonic plates have all influenced the diversity of habitats and the evolution of Central American birds. Roughly one-third of the approximately 1070 species of birds that breed in northern Central America are endemic (Howell, S. N. G. and S. Webb. 1995. *The birds of Mexico and northern Central America*. Oxford Univ. Press, Oxford, U.K.). An additional 225 species of North American birds pass through or winter in the region. In recognition of those who have explored the ornithological complexity of northern Central America and in the hope of stimulating new research on the birds of this region, the Wilson Ornithological Society sponsored a symposium "Ornithology of northern Central America" at its 1995 annual meeting.

Fifty million years ago North and South America were separated by three large islands and four substantial water gaps. For the next 47 million-years, two distinct, tropical avifaunas flourished, each with ample opportunity for repeated cycles of geographic isolation and speciation across the islands and water gaps separating the continents. The rise of the Panamanian isthmus 3 million years ago coincided with climatic cooling. Northern tropical habitats retreated into the Central American lowlands and temperate habitats invaded the Central American highlands. The landscape was fragmented into isolated pockets of tropical lowlands, temperate highlands, and subtropical slopes. The land bridge also provided for extensive interchange of tropical species from North and South America. Multiplication and fragmentation of habitats led to explosive radiation of several avian families from tropical North America and from tropical South America.

Exploration of these ornithological riches dates from the independence of the Central American countries from Spain in the 1820s. Collectors sponsored by wealthy Europeans were the first explorers. The first comprehensive work on the region was begun in 1857 by Osbert Salvin and culminated in the publication of

the 63-volume *Biologia Centrali Americana*. In Mexico the extensive field work of Nelson and Goldman from 1892 to 1906 laid the foundation for later studies of distribution and natural history. Also during this period Ridgway published the first comprehensive taxonomic and distributional guide to birds of the region. From 1950 into the 1990s ornithologists focused on systematics and distribution as critical to understanding the evolution of the Central American avifauna. Recently conservation of biodiversity has emerged as an important concern within the region, but the need for communication among those working in northern Central America is crucial to the success of conservation efforts. To stimulate communication the Wilson Ornithological Society organized and hosted the symposium "Ornithology in northern Central America" at its 1995 annual meeting. The speakers, who are the authors of the following papers, are among the foremost ornithologists working or living in the region.

While discussion at the occasional North American symposium is helpful, all speakers expressed the need to open lines of communication among Central Americans. Their agreement led to the idea of a Mesoamerican organization to promote the study of the natural history of northern Central America. In July 1995 Oliver Komar promoted the idea to about 50 conservation and biology professionals from El Salvador, Honduras, and Nicaragua. The organizational meeting was attended by 11 representatives of El Salvador and Honduras. The attendees drafted a proposal for the society, prepared and accepted an offer by Gerardo Borjas to host a founding meeting in Honduras in January 1996. Seventeen biologists from five countries attended the meeting at which the society's constitution was written, provisional officers were elected, and a quarterly bulletin established. About 70 persons attended a second meeting in June 1996 when bylaws and a mission statement were adopted. About 250 people attended the First Mesoamerican Congress for Biology and Conservation in Tegucigalpa, Honduras, and almost 400 attended the Second Congress in Managua, Nicaragua in June 1998. The bulletin, *Mesoamericana*, now appears quarterly. The Board of Directors of the Mesoamerican Society for Biology and Conservation includes representatives from all Central American countries and membership in the Society exceeds 400. The Wilson Ornithological Society can be proud of its role in facilitating the organization of the Mesoamerican Society through its symposium "Ornithology in northern Central America."

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