

ZUSI, R. L. 1987. A feeding adaptation of the jaw articulation in New World jays (Corvidae). *Auk* 104: 665-680.—Based in part on observations of Scrub Jays at Archbold Biol. Sta., Highlands Co.

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REVIEWS

Voices of the wrens.—J. W. Hardy and Ben B. Coffee, Jr. 1988. ARA Records, Gainesville, Florida. Cassette, \$10.00.—This 75-minute tape is a collection of field-recorded vocalizations of 71 of the 74 species of wrens recognized by the authors. It replaces Hardy's 1977 phonodisc album entitled "The wrens: a guided tour of the voices of over 40 species in perhaps the ultimate songbird family." Indeed, the songs of certain members of the family Troglodytidae are complex, but the vocal duetting of mated pairs is perhaps the most impressive vocal behavior of this group. The tape provides good examples of vocal duetting by Black-capped Donacobius (*Donacobius atricapillus*), Rufous Wren (*Cinnycerthia unirufa*), and Inca Wren (*Thryothorus eisenmanni*) among other species. The tape also demonstrates that certain wren species have peculiar and simple songs. My favorite on the tape are the Nightingale Wren (*Microcerculus philomela*), whose song sounds like someone learning to play a sound synthesizer, and the Flutist Wren (*M. ustulatus*), whose song sounds like a flute.

Most of the recordings are high quality. They were made not only by the authors, but recordings by numerous talented naturalists and researchers were utilized. The recordings were made in 13 countries, including 25 vocal samples from Mexico, 11 from Columbia, 10 from Peru, 7 from Costa Rica, 6 from the U.S.A., 6 from Panama, and the remainder from Venezuela, Brazil, Ecuador, Bolivia, Argentina, Cuba, and France.

For most species the tape includes an example of what is believed to be the primary, or advertising song, delivered by the male and one or more types of calls; however, only what appear to be calls are provided for the Spotted Wren (*Campylorhynchus gularis*) and Mountain Wren (*Troglodytes solstitialis*). In the case of Gray-barred Wren (*Campylorhynchus megalopterus*), the authors are not sure if they have captured the song or just calls from this species. The three species whose vocalizations were not included in this tape are the Niceforo's Wren (*Thryothorus nicefori*) from Columbia, Grey Wren (*T. griseus*) from Brazil, and Tepui Wren (*Troglodytes rufulus*) from Guyana, Venezuela, and Brazil. The authors request that they be contacted by anyone who becomes aware of sound recordings of these species.

For several wren species common in the United States, the authors have included samples of song from distant portions of their range. For example, the samples of House Wren (*T. aedon*) song were recorded in Colorado, Mexico, Columbia, and Argentina; recordings of the Winter Wren (*T. troglodytes*) song are from North Carolina and France. In some cases the differences in song pattern are noticeable, and one may be left wondering how much of the differences are a result of individual versus geographical variation.

The vocalizations of few avian families have been documented quite as extensively as the wrens presented on this tape. The tape represents an excellent reference tool for museum work and is useful for learning to identify certain species in the field. The tape, however, is not intended to be listened to purely for entertainment! I suspect that this tape will stimulate future research into the evolutionary patterns of vocal communication in the wren family.—Peter G. Merritt, 8558 S.E. Sharon St., Hobe Sound, Florida 33455.

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