

Between displays a male often jumped suddenly to another perch or reversed its direction suddenly on the same perch. I did not detect any sound during jumping or reversing. The flight of both males and females is normally silent.

The clapping of the thickened secondaries probably produces the insect-like sounds during displays, although I could not definitely rule out the possibility that these are vocalizations. The related species *Machaeropterus regulus* and *M. pyrocephalus* also produce grasshopper-like buzzes, but in several respects their displays are rather different (Sick, *op. cit.*). The males of both of these species stand head down on slender vertical twigs, hold their beaks open when they buzz, and do not spread their wings. Sick was thus uncertain whether their buzzes are vocal or are produced by vibrating the thickened shafts of the secondaries. I never noted bill opening or vertical perching by displaying *A. deliciosus*. The displays of *M. regulus* and *M. pyrocephalus* emphasize dorsal colors, while the wing-flashing display of *A. deliciosus* is much more conspicuous from the rear.

In the same locality a Club-winged Manakin nest, a mossy and deep pensile cup like a vireo nest, was discovered on 22 March about two feet above the ground in a small fork of a three-foot shrub (*Piper* sp.). The bush was in the dense undergrowth a few yards from a favorite dancing site of one male. The two brownish-white eggs were speckled with brown. The inside of the nest was lined with fine fibers, perhaps fungal rhizomorphs or "vegetable horsehair." When approached, the female flushed from the nest and flew off quietly, then looked back from a perch low in the undergrowth.

Foraging birds of this species wander silently from 3 to 30 feet above the ground, keeping to the undergrowth below the level of display perches much of the time. They snap tiny prey off leaves and twigs and eat small berries and other fruits in the style of such manakins as *Pipra mentalis*. Occasionally one joins a wandering mixed-species flock, but they more often wander alone. A melastome, *Conostegia* sp., affinities with *icosandra* (kindly determined by John Wurdack of the U. S. National Herbarium), which grew above many of the dancing sites at Queremal, may have permitted nesting at the season I visited the area. Males frequently visited these fruiting trees and ate the abundant berries.

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Parasitism of the Dwarf Vireo (*Vireo nanus*) by cowbirds.—H. Friedmann ("Host relations of the parasitic cowbirds." *U. S. Natl. Mus., Bull.* 233; 1963; p. 83) mentions one known case of parasitism by the Brown-headed Cowbird (*Molothrus ater*) on the Dwarf Vireo. This record is listed as a set of four eggs of the vireo and two of the cowbird, taken on 17 June 1943, five miles northeast of Irapuato (= "Irapucto"), Guanajuato, Mexico; the eggs are in the Moore Collection, Occidental College, Los Angeles, California. After Friedmann's work had been published the collection of nests and eggs in the Moore Laboratory of Zoology was catalogued and three additional records of this parasitic relationship were found in that collection. All specimens were collected at the locality mentioned above. Following is a brief description of each specimen (nest or eggs or both), giving Moore Laboratory catalogue numbers.

EN-416 (record cited by Friedmann): nest composed of grasses, leaves, plant fiber, strips of bark, fine plant fiber as an inside lining, and spider web or other silky material incorporated; nest completely suspended; four immaculate white vireo eggs

(average measurements, 130×164 mm); two cowbird eggs (150×190 mm and 148×188 mm), which are different in coloration.

EN-417: 22 June 1943; nest similar to the above; three vireo eggs (average, 129×190 mm); two cowbird eggs (151×204 mm and 150×207 mm) with no marked color or size differences.

E-418: 26 June 1943; no nest; four vireo eggs (average, 134×189 mm); one cowbird egg (156×198 mm).

E-419: 26 June 1943; no nest; one vireo egg (130×192 mm); three cowbird eggs (150×187 , 158×196 , and 160×200 mm). The first cowbird egg listed is different in size and color from the last two.

The field notes of the collector, Chester Lamb, do not indicate that any of the nests were deserted and, in fact, a male vireo (Moore Collection, 37714) was taken at the same time as specimen EN-416.

The Dwarf Vireo seems to be scarce throughout its range in Michoacán, Oaxaca, and Guanajuato (A. H. Miller *et al.*, *Pacific Coast Avif.*, no. 33, pt. II, 1957; p. 224) and there are few specimens in museum collections. Considering the apparently low numbers of the Dwarf Vireo, and the fact that all four specimens of nests and eggs show evidence of brood parasitism, the effects of cowbird parasitism on the population structure of the Dwarf Vireo certainly warrant investigation.—DENNIS M. POWER, *Museum of Natural History, University of Kansas, Lawrence, Kansas.*

Nesting of Hooded Mergansers on the Patuxent Wildlife Research Center, Laurel, Maryland.—The first known record of Hooded Mergansers (*Lophodytes cucullatus*) nesting on the coastal plain of Maryland was in 1961, when Mr. Francis Uhler (pers. comm.) found two clutches in Wood Duck nest boxes in impoundments at the Patuxent Wildlife Research Center, about five miles southeast of Laurel, Maryland. R. E. Stewart and C. S. Robbins ("Birds of Maryland and the District of Columbia," *N. Amer. Fauna* no. 62, 1958; see p. 102) reported two records of broods for Maryland, one for the Piedmont and one for the mountains.

From 1961 through 1964, two pairs have nested annually in nest boxes on the Research Center; there has been no indication of nesting in natural cavities. The data from the nestings were recorded because of the paucity of information in the literature on nesting of Hooded Mergansers.

The earliest clutch was begun on 14 March 1961 and the latest on 25 March 1963. Mumford (*Indiana Aud. Quart.*, 39: 5, 1952) gave the starting dates of three clutches in Indiana as 23 March to 1 April.

Assuming one egg was laid each day, incubation time in the three clutches was 28, 36, and 37 days. The assumption of one egg laid per day was made because the literature gives no information concerning the frequency of egg laying. Delacour (*The waterfowl of the world*, p. 199, 1959) reported that an incubator-hatched clutch required 30.5 days. According to Hochbaum (*The Canvasback on a prairie marsh*, American Wildlife Institute, 1944; see p. 90), incubation time is 21 to 28 days for incubator-hatched puddle ducks (Mallard, Gadwall, Pintail, Shoveler) and 23 to 29 days for diving ducks (Redhead, Canvasback, Lesser Scaup). The early nesting during cold weather together with the nervousness of most females, often resulted in their being off the nest for long periods, which may have prolonged incubation. A hen was found on the nest only once during inspections.

Once incubation began, adult male Hooded Mergansers were not seen at Patuxent until the fall migration. Mumford (*op. cit.*: 6) also reported absence of males during nesting in Indiana. It would appear that effective renesting would be severely handi-