A NEST OF THE MEXICAN PTILOGONYS

By ROBERT J. NEWMAN

Although the Mexican Ptilogonys (*Ptilogonys cinereus*), a rather common bird in the highlands of Mexico, has been known for over 125 years, the available information regarding its habits is meager. The only published reference bearing on its nesting concerns an unspecified number of its eggs taken in May in the state of Oaxaca by Boucard (Sclater, Proc. Zool. Soc. London, 27, 1859:376). These were said to resemble somewhat the eggs of the Meadow Pipit (*Anthus pratensis*). They measured .875 by .61 of an inch and were "minutely freckled and striated with brownish ash-colour on a white ground, the markings being denser and forming a ring around the large end." I have not been able to determine whether these eggs are still in existence. There is a set of two eggs labelled *Ptilogonys cinereus* in the United States National Museum, taken "150 miles W of Durango" on May 20, 1904, by F. W. Andros. Since this locality is very nearly, if not quite, in the Pacific Ocean, some doubt attaches to the validity of the data as a whole. The Andros eggs are much more elongated than those described by Sclater but agree in coloration, even to the concentrated spotting forming a wreath about the blunt end. It is probable that both sets were correctly identified.

F. W. Loetscher, Jr., (MS) records the discovery of a nest of *Ptilogonys* at Jalapa, Veracruz, on May 1, 1939. It was situated about forty feet from the ground on a horizontal branch, in a tree that could not be climbed. Loetscher thought the nest resembled that of the Orchard Oriole (*Icterus spurius*) in size, shape, and general appearance, though it seemed to be covered on the outside with mosses. The actions of the owners suggested that the structure was still being completed.

On May 24, 1949, a field party from the Louisiana State University Museum of Zoology made a brief stop at Kilometer 280 on Mexican Highway no. 2A, which runs from Mexico City to the city of Veracruz, via Orizaba. This point is in the state of Veracruz, just across the Puebla line, about 4 miles airline west of the village of Acultzingo, Veracruz. The surrounding terrain is high, mountainous, and rather dry but supports an open growth of moderately large deciduous trees, mostly oaks, broken by clearings and cultivation. Mrs. Evelyn Kramer and I ascended the slope flanking the road on the south side to a little clump of trees at an altitude of 7700 feet, almost entirely surrounded by fields. Here Mrs. Kramer's attention was attracted to two adult Ptilogonys, one of which flew into the dense upper foliage of a 35-foot oak, with grubs in its bill. As the wind blew, it moved the branches and disclosed the dark outline of what appeared to be a nest in a crotch thirty feet from the ground. Watching the spot through binoculars, we saw the parent bird return with more insects and settle down as though brooding, with its long tail cocked up over the rim of the nest.

The main supporting branch of the nest was steeply slanted and slender, no more than 1½ inches in diameter at the nest, and securing the nest proved difficult. Our efforts to reach it were not successful. Finally, we had to have the supporting bough cut near the trunk. The nest, undamaged in the fall, contained two newly-hatched young, one of which was partly crushed. Both young birds were preserved in alcohol.

The nest of *Ptilogonys* proved to be a work of exquisite artistry. Its exterior is completely shingled with large pieces of foliose lichen, whose crinkled surfaces create a variegated pattern of blackish browns and frosty greenish gray. Invisible strands of spider silk bind this outer covering to a molded inner structure, almost perfectly circular in outline and somewhat doughnut-shaped in the sense that its rounded upper edges curve over thick walls to a rather small interior depression. The approximate dimensions are as follows: outside diameter, 4½ inches; inside diameter, 2½ inches;

outside depth, 2½ inches; inside depth, 1½ inches. The whole nest is based on a very loose foundation of the staminate catkins of oak, with much of this same material filling spaces between the short bits of plant stems, the coarse black hairs, and the vegetable matter resembling hair that comprise the internal framework. A thick padding of fruticose lichens of the genus *Usnea* provides a relatively stiff lining, but no grasses nor long plant stems are woven into the construction anywhere. The soft materials employed seem to have been merely pressed together, rather than tightly interlaced, and as a result the entire structure lacks firmness.

The identity of the nest tree could not be determined, but it had tiny acorns and small, elliptical leaves, approximately half the size of those of the live oak. It will be noted that there is little in this description to remind one of the pensile, woven nest of the Orchard Oriole. Not only was the nest entirely different in its manner of placement, but it does not even have sufficient tensile strength to permit suspension. The nest seen by Loetscher may have been so deeply in shadow and at such an early stage of construction that its characteristics could not be determined from the ground.

Recently recommended taxonomic changes relating to the familial affinities of *Ptilogonys* (Delacour and Amadon, Ibis, 91, 1949:427-429; Arvey, MS) raise the question as to whether the nest throws any light on the rather uncertain position of the genus. Because it is so completely covered with lichens, the nest superficially resembles nothing so much as a nest of the Swainson Pewee (*Contopus pertinax*) from Las Vigas, Veracruz (U.S.N.M. 26222). Structurally, however, it may be considered much closer to that of the Phainopepla (*Phainopepla nitens*). Nests of the Phainopepla from Linda Vista, California, are smaller, are not decked with lichens, and lack a discrete lining; but they are comparable to the nest of *Ptilogonys* in their general shape and loosely molded construction. They are composed largely of a stringy, and somewhat woolly, plant material with the grayish appearance of papier mache. A similar material occurs in nests of the Cedar Waxwing (*Bombycilla cedrorum*) from Fort Sherman, Idaho. Otherwise, the waxwing nests are quite unlike those of either *Ptilogonys* or *Phainopepla*. They are bulkier, larger-cupped, and relatively deeper; and a more firmly knit internal composition of rootlets and a lining of grasses gives the whole structure a much greater solidity. It would be interesting to include the nest of *Hypocolius,* an Asiatic genus, in the comparison, but the only information at present available to me regarding it is the statement that it is a substantial cup, 3¼ inches in diameter by 2¼ inches in depth, lined with fine fibres, the fluff of willow, or hair (Sharpe and Cummings, Ibis, 1886:479). Nest structure in the Central American genus *Phainoptila* is undescribed.

The appearance of the nest of *Ptilogonys,* for all its distinctive characteristics, cannot be said to prejudice the issue of enlarging the scope of the Bombycillidae any more than it has already been prejudiced by the long-known fact that the Palm Chats (*Dulus*) of the West Indies build large, intricate, communal nests of twigs. And, contradictorily, *Dulus, Hypocolius,* and *Ptilogonys* all lay spotted, whitish eggs with a ring of denser markings around the larger end, more like each other than they are like the eggs of waxwings, which are spotted but not white and which lack the pronounced ring. It is likely that the inherited nesting patterns are not of any great significance as regards the family relationships of these long-established and widely scattered genera.

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