

tarsal feathering contrasts rather markedly with the white of the lower belly and under tail-coverts.

This is, apparently, the first adult Saw-whet Owl ever taken in West Virginia. The species obviously breeds in the state, for a young bird only recently out of the nest was captured at Cranesville, Preston County, on June 22, 1932 (Auk, 50: 361, 1933); an immature female was taken in the Cranberry Glades, Pocahontas County, on June 12, 1936 (Proc. U. S. Nat. Mus., 84 (3021): 409); and three young birds were seen near Alpena, Randolph County, in June, 1934 (Brooks, 'A check-list of West Virginia birds,' Bull. 316, 1944, Agr. Exp. Sta., West Va. Univ., Morgantown, West Va.).

Kennison Mountain is just southwest of the Cranberry Glades which is the most southern point in the Appalachian highlands at which the Saw-whet Owl has actually been found breeding, but the species certainly is to be looked for farther south.—RALPH M. EDEBURN, *Dept. of Zoology, Marshall College, Huntington, West Virginia.*

Northern Record for *Klais guimeti* in Central America.—Some years ago I obtained a female of *Klais guimeti* (Bourcier) from C. F. Underwood. It was collected by him at Catacamas, Olanchó, Honduras, on October 17, 1937. I cannot find a record of this species being found so far north, and apparently this occurrence extends the range at least 250 miles farther from the locality of the previous most northern record in Nicaragua. For some time I have believed that this single female represents an undescribed race, but I have hesitated to segregate it,—awaiting additional material. Twelve years have passed and apparently no other specimen has been obtained from Honduras.

The upper parts are conspicuously richer in coloration, being iridescent orange, instead of the green to golden green of females taken at various localities from Caracas, Venezuela (type locality of *Trochilus guimeti* Bourcier) to Costa Rica. Thanks to the courtesy of Mr. Todd of the Carnegie Museum and Dr. Zimmer of the American Museum of Natural History, supplemented by own my large series from Ecuador, there lies before me a series of 22 adult females of the species—including five from Venezuela, five from Ecuador, and 12 from Costa Rica. Not one of them has the orange upperparts of the Honduras bird, although some from Costa Rica are "brassy" gold. In addition, the pileum of my specimen, like two females from Costa Rica, is much greener than any of the others. This character is darker as one proceeds south, the pilea of the Venezuelan birds being dark green. The name, *Mellisuga merrettii*, proposed by Lawrence, based upon an adult female from Panamá, must also be considered. Obviously a series from Honduras is required to warrant the proposal of a new subspecies.—ROBERT T. MOORE, *California Institute of Technology, Pasadena, California.*

Observations on the Racquet-tips of the Motmot's Tail.—Even though it is now generally known that the shape assumed by the two central tail feathers of the Motmots is dependent on the pattern of structural weakness in the feather itself and not on the bird's instinctive choice of pattern (Beebe, *Zoologica*, 1 (5): 1910), one repeatedly finds in the literature on the Momotidae the statement, apparently based chiefly on Beebe's reports ('Two Bird-Lovers in Mexico,' 1905, and *op. cit.*, 1910), that the bird "plucks" the radii from the shaft as soon as feather growth is complete (Armstrong, 'Bird Display,' 1942: 28, and Stresemann, 'Aves: Handb. der Zool.,' 1934: 831).

This statement seems, from my own observations, a misrepresentation of the case. In 1937, I transported from Europe to Australia two Motmots from Brazil (probably

Momotus momota, though I could not identify them with certainty). They were in a cage about one and a half feet wide, two feet long, and one foot high. When I first obtained the Motmots, the two central tail feathers were missing, but during the voyage which lasted some 50 days these grew out. As with most caged birds, the Motmots had their preferred perch for resting in the cage, as well as a preferred route in their hopping from perch to perch. The result was that one side of the tail hit the cage-wall more often than the other, and the subterminal radii on that side of the tail disappeared sooner than those on the other. One bird, in fact, still had the radii on one side of the feathers nearly perfect when the other side had been worn bare. Obviously, during ordinary preening, loosely attached radii would break off, but I observed no motions of plucking feathers; these plucking activities are, of course, quite different from simple preening movements. My observations of Motmots in the wild point to the same conclusion. In the rain forest of Chiapas, for example, in August, 1940, I observed a Lesson's Motmot, *Momotus lessoni*, almost daily at molting time. The tail feathers of this bird assumed the racquet shape within eight or 10 days after growth was complete, the radii breaking off gradually in irregular narrow sections, but I never observed the bird make any plucking movements. It seemed clear that the breakage was the result of simple preening and contact with branches and leaves.

How loosely the radii along the subterminal section of the shaft are attached was once clearly demonstrated to me when I shot a Lesson's Motmot that had its central tail feathers nearly complete. Though I packed the specimen very carefully, almost all the radii along this section of the shaft broke away during a ride of a few hours.

Another point of interest is Beebe's statement (1905: 201): "In some of the birds which we saw the process [of "plucking" the radii] had just begun, only a few barbs being torn away." To me this is most surprising, for Beebe was in Mexico from December 25 until April. The Motmots of Mexico have their molt after the breeding season, between May and early November, the exact time depending on climatic conditions which are extremely variable from year to year, as well as between different localities. For example, Lesson's Motmot in Tamaulipas molts from very early May to July, in Chiapas, August to September, and in Campeche, as late as November. It would seem impossible, therefore, that Beebe observed Motmots just after molting.

The character of the biotope in which the bird lives has its importance in relation to the problem. The tails of Lesson's Motmots that inhabit the virgin rain forests of Chiapas are sometimes still in perfect condition at the beginning of the breeding season. Here, their "*Lebensraum*" between the ground vegetation and the tree-crowns is clear and open, so that their tails are not worn by constant contact with branches and leaves. In the dense chaparrals of Yucatan, however, I have found Lesson's Motmots with tails completely bare by December. In the course of the year, especially when the pair is excavating a nest burrow, even the racquet-tips and the ends of the shafts tend to wear away.

The racquet-formation of the central tail feathers seems to be related to the Motmot's characteristic pendulum-like movements of the tail. I have noted this movement only when something seemed to be attracting the attention of the bird. I have often observed a Motmot when it was unaware of my presence and otherwise undisturbed; its tail was then invariably still, but the oscillation began as soon as I attracted the bird's attention. The tail movements are most intensive and regular during the breeding season, and infrequent or absent during molting. Near my house at the Laguna de Tequesquitego (Morelos), I daily observed a Mexican Motmot, *Momotus mexicanus*, at the beginning of the molt in July, but I did not once see the oscillating movements.

In Campeche I observed Lesson's Motmot during November and December, after completion of the molt, when pair formation was beginning (Motmots live in pairs the year round except during the molting period); the tail movements at this time were regular but not intensive. In specimens collected at this time the follicles of the ovaries were readily visible and the testes enlarged. Doubtless, intensity of the movement is directly correlated with degree of sexual activity.

During nesting, the male spends most of his time on a perch within seven meters of the burrow and oscillates his tail intensively at any disturbance. This may be considered a form of "distraction display" and may also serve as a danger-signal to the mate and to other birds near by. The racquet-shape of the central tail feathers causes a slower movement of the tip, giving the movement its characteristic "hypnotic" pattern.—HELMUTH O. WAGNER, *Apartado 7901, Succursal 3, Mexico, D. F.*

Northern Red-cockaded Woodpecker, *Dendrocopos b. hylonomus*, in Central Florida.—In the Twentieth Supplement to the A. O. U. Check-List, *D. borealis hylonomus* (Wetmore) was added to the Check-List as a valid subspecies (Auk, 62: 443, 1945). The material of this species available in the Louis Agassiz Fuertes Memorial Collection at Cornell University upholds Wetmore's claim that the Florida population of Red-cockaded Woodpeckers is characterized by shorter wing measurements. In Wetmore's original description (Proc. U. S. Nat. Mus., 90: 499, 1941), he states that he examined only a single specimen from the range of *hylonomus* (central and southern Florida) which fell outside the range of measurements given for that subspecies. This specimen he considered to be a straggler of *D. b. borealis* from the north.

On March 31, 1949, I collected a female Red-cockaded Woodpecker about four miles south of St. Cloud, Osceola Co., Florida. This specimen is apparently an additional record of the nominate race from within the range of the Florida subspecies. Wetmore gives the range of wing lengths of female *hylonomus* as 111.3 to 116.7 millimeters. The wing of the St. Cloud specimen measures 118.5 mm., or 1.8 mm. larger than Wetmore's largest specimen, and close to Wetmore's mean for female *borealis* (118.9 mm.). The Florida specimen which Wetmore identified as *borealis* had a wing 2.2 mm. longer than his maximum for *hylonomus*.

The St. Cloud specimen had an ovary five mm. in diameter, and weighed 41.2 grams. It was one of two seen at this locality; the other was not collected. It might be of interest to note that this specimen was collected no more than 12 or 13 miles from the type locality of *hylonomus*.—KENNETH C. PARKES, *Laboratory of Ornithology, Cornell University, Ithaca, New York.*

Scissor-tailed Flycatcher, *Muscivora forficata*, in South-central Florida.—The status of this species in Florida might adequately be described as irregular winter visitor in the Keys and accidental on the peninsula. Therefore, any occurrence regarding the latter is of interest. The writer has had winter field experience in the Lake Okeechobee-Kissimmee Prairie region for 14 years, during January, February and March. He never observed a specimen there until February 7, 1949, when one was seen on Trip No. 2 of the Audubon Wildlife Tours, near Lakeport, (State Highway 78) on the northwest shore of Lake Okeechobee. There were six observers aside from the writer; a recognizable photograph of the bird was secured, and study was available at a range of about 35 to 50 feet, for as long as the party wished. Specific correspondence with several resident Florida ornithologists since has failed to reveal a previous record for this region.—ALEXANDER SPRUNT, JR., *The Crescent, Charleston 50, S. C.*