

six inches, was rippling and dashing over the rocks, a natural feeding ground for the fishes. The birds, after first bathing and dressing their feathers, giving particular attention to their primaries, without any unity of action, as hunger moved them, floated down over the rapids, picking up the fishes here and there, until the still water below was reached, when they would rise and fly back, to float down again, leisurely repeating this mode of fishing until it was quite dark.

NOTES ON *GYMNOSTINOPS MONTEZUMÆ*.

BY N. S. GOSS.

THE birds are known by the natives as the 'Oropendula,' also as the 'Inca Bird,' but are generally called 'Yellow-tailed Cassiques,' or rather 'Yellow-tails.' They are quite common in the low forest lands of Central America, upon the Atlantic side, but I did not find them on the Pacific slope, nor upon the high mountain lands. They are social in their habits, going in couples, and generally in flocks of from ten to fifty or more. They are noisy; their voice is harsh, coarse, and discordant, an indescribable jargon; even their whistling notes are not musical. In their food habits they are omnivorous, but seem to prefer fruits and berries, often doing great damage on the plantations when the bananas, plantains and mangos are ripening. For breeding purposes they select large *thorny* trees in an open space where the limbs of other trees do not touch, so as to be beyond the reach of reptiles, monkeys, raccoons, and other climbing nest robbers.

Their pendulous, gourd-shaped nests, which are suspended to the ends of the boughs of the tallest branches, are strongly and ingeniously woven of fibrous strippings from plants and frond-like leaves, with here and there a rootlet; the bottoms are lined with leaves. Some writers state that the birds build their nests of grasses, but I have been unable to find any in those that I have examined, and I am inclined to think *this large species* rarely,

if ever, uses it; and if they do, the blades, so brittle when dry, must be of a very strong hemp-like nature, to long sustain the weight of the nest and its occupants against the wear and tear of the storms and winds.

The entrance is a purse-like slit at the top, the average length of the nest is about three feet, and the diameter at the rounded base, nine to ten inches. I have never found less than five, nor more than twenty-one nests in a tree; they are said, however, to build as many as fifty and even more, but the late growing demand in the United States for bananas has caused the producers, heretofore so indifferent and indolent, to be more watchful, and the large colonies of the birds are fast thinning out. The only eggs that have come under my observation I collected March 13, 1887, at Cayo, a small village on the Belize river, in British Honduras, near its western boundary line. There were thirteen nests in the tree, which was a species of locust; these were all hanging from one bough, from two to three feet apart, and at least seventy-five feet from the ground, but the dense undergrowth, a tangled mass of young palms, bushes and vines, supported the tree, when felled, like a cushion, so that, to my surprise, I was able to save unbroken three sets of fresh eggs, two in each nest. As the number of the broken eggs found in the other nests was the same, and as furthermore the nests were not large enough to rear more than a pair of the birds in each, I think it safe to enter two eggs as a full set, and I am also led to believe, from the great difference in the dimensions of the eggs, and in the size of the male and female birds (see measurements given below), that they are hatched in pairs which, as they go in couples, remain together during life.

First set: 1.49×1.10 , $1.42 \times .96$ inch; ground color bluish white, thinly marked with specks and spots of brownish black, and with dark purple stains.

Second set: 1.49×1.08 , 1.40×1.00 inch; ground color bluish white, clouded and marbled with pale rusty brown, with a few zigzag, hair-like streaks of a darker tint, the clouding thickest upon the largest egg.

Third set: 1.50×1.03 , $1.40 \times .98$ inch; one bluish white, without a mark or stain (an aberrant egg), the other specked and spotted thinly with pale rusty brown, and having a few faint purple stains.

The broken eggs examined were all specked and spotted with either brownish black or pale rusty brown, in marked contrast to each other, the coloring matter by sets, however, largely alike.

A pair of the birds, which I shot and mounted in the winter of 1886 at Santa Tomas, Guatemala, measure as follows, in inches :

Sex.	Length.	Stretch of wing.	Wing.	Tail.	Tarsus.	Bill.
♂	22.00	32.00	9.75	8.25	2.00	3.60
♀	16.50	24.00	7.50	5.75	1.70	2.30

ON THE AVI-FAUNA OF PINAL COUNTY, WITH REMARKS ON SOME BIRDS OF PIMA AND GILA COUNTIES, ARIZONA.

BY W. E. D. SCOTT.

With annotations by F. A. Allen.

(Continued from Vol. IV, p. 205.)

178. *Piranga ludoviciana*. LOUISIANA TANAGER.—Migrant and summer resident in the pine forests of the Catalina and Pinal Mountains, where they breed. They first appear in the spring about April 15, in the live oak belt of the Catalinas, and remain in numbers for about two weeks; they are to be seen as late as May 20. After this they are absent for about four or five weeks, when they return in much greater numbers than in the spring, and remain till late in September, being most abundant in the latter part of August and the first two weeks of September. This is in the Catalinas at an altitude of about 4000 feet.

They undoubtedly breed in the pine forests of the Catalinas, for the birds observed returning in late July are first adult males in full though very worn plumage, followed in a few days by the females and immature plumaged birds of the year. They soon congregate in large flocks, as many as fifty often being together, and at this time of year their food seems to be almost exclusively wild berries and small fruits of various kinds, particularly a kind of grape. They were noticed in the pine forests of the Catalinas as early as April 24 (see Auk, Vol. II, No. 4, p. 354, October, 1885), and my latest record of them in the cañon near my house was September 29, 1884, when they were observed in small numbers, all apparently young birds of the year.