A young male Montezuma Oropéndola on the day that he left the nest, aged about one month.

ou who in May have surprised some shy bird with a straw in her bill, and waited quietly until she darted into the thicket where she was building and so revealed to you the nest, and then, returning often, have stood a self-effacing witness to all the pleasant duties of the pair, until at length the clamorous young were awing-you better than all others will understand the absorbing interest of watching the busy life of a colony of oropéndolas, centering around eighty pendent nests in the same lofty tree-top.

It was late in April when I returned to Honduras. The Montezuma Oropéndolas, Gymnostinops mon-

tezuma, were already well advanced in their nesting operations in the same tree where I had found them breeding the preceding year; for they flock each spring to the favored tree, as sea birds congregate from afar to lay their eggs and rear their young on the same barren islet where they themselves were hatched. The tall, smooth-barked nest-tree towered above an almost impenetrable thicket of low bushes and tangled vines that had overgrown an abandoned banana grove. On one side of the narrow strip of thicket ran a well-worn path that led to the thatched huts at the head of the Lancetilla Valley; on the other, beyond a little grass-choked rivulet, a hillside pasture rose steeply to the west. Its slope commanded an excellent view of the nest-tree, whose upper boughs were already laden with three score hanging nests, clustered near the ends of the twigs like great, gourd-shaped fruits. One unfamiliar with the ways of tropical birds would have been surprised to see a big, chestnut-colored bird with a bright yellow tail emerge



The Montezuma oropéndolas of a quiet Honduran valley build—

## A Village in the Tree-top

By ALEXANDER F. SKUTCH

The nearest relatives of the birds in North America are orioles, grackles, bobolinks and cowbirds.

suddenly from near the stalk of a seeming fruit, and fly with measured wing-beats toward the abrupt, forest-clad mountains that enclosed the narrow valley. In these nests the incubation of the two white eggs was still going on, or the young had already burst their shells and were crying loudly for food.

But a group of twenty-one oropéndolas, more sociable than prudent, had clustered their twenty-one great nests among the twigs of one slender bough. Everything had apparently gone well with them until many had laid and begun to incubate their eggs, when the branch, overladen with its heavy bur-

den, had snapped off and come crashing down to the brink of the little stream. All this had happened a week or more before I arrived on the scene, to find the foliage already withered on the fallen branch, and the nests discolored by the water. Since, so far as I could learn, neither hens nor young birds had lost their lives in the crash, I was not altogether sorry about it; for it gave me an opportunity to study and measure the otherwise inaccessible structures, and to watch the dauntless birds as, with unabated zeal, they set about to prepare new cradles for their nestlings.

The female oropéndolas built their nests with no help from the far bigger males. Through most of the day they worked with tireless industry. Among the materials they used were long, pliant fibers, which their sharp, orange-tipped bills ripped from the undersides of the stout midribs of the great leaves of the banana plants growing in a neighboring field. I tried more than once to surprise them at this activity; but a vigilant male nearly always accompanied a



The great swinging pouches of the oropéndolas range from two to five feet in length. The entrance is at the top and it always faces outward from the tree.

party of hens on their excursions to gather material, and his loud *cack* of alarm invariably put them to flight as soon as he saw me.

With long strands of fibrous material for her nest streaming behind, the female oropéndola returned to the nest-tree with labored flight. Upon reaching the tree she might take a short rest, but soon she went to the forked twig that would support her long pouch and twisted and knotted the fibers around it, to form a firm and stable attachment. When this anchorage for the future nest was sufficiently strong, the bird forced apart the tangled strands, using her whole body for this purpose, until they formed a loop in which she could sit as she continued to weave. Now on each return with new strands she would perch in the loop, always facing the center of the tree, until a lengthening sleeve was formed, in which she would hang, head downward, while she wove at its lower margin. Presently the nest became so long that only her yellow tail was visible projecting through the doorway at the top, and her head could be seen as at intervals it pushed forth from the open lower end. Finally her handiwork was long enough to contain the whole oropéndola; and after the rounded bottom was woven in, I could catch, through the field-glasses, only an occasional glimpse of the sharp orange tip of her bill protruding through the side of the nest, as it pushed and pulled additional fibers through the closemeshed network of the fabric-a deft weaving job. In addition to the fibers from the banana plants, the oropéndolas gathered for their nests many slender green vines with leaves attached, and long, narrow strips torn from the fronds of palms. Such was the patient application of the birds that these great swinging pouches, from two to five feet in length, were completed in an average time of ten days. One bird, in a particular hurry to be finished, completed a somewhat shorter nest in eight days; while another, who blundered much as she began her work, required twice that period.

The construction of the nests did not proceed without a good deal of discord between the laboring female oropéndolas. In many instances two nests were begun so close together that the builders were mutually in each other's way as they worked, and they paused to express their annoyance in loud, highpitched, irritated voices. Else, losing temper completely, they menaced each other with open bills, and, meeting face to face in the air, came fluttering earthward until their proximity to the foliage below warned them it was time to cease this aimless dispute. Then they separated and flew up to continue their weaving side by side, as though nothing had happened between them. But what surprised me more in these usually so orderly, industrious birds was the frequency with which they stole each other's nestmaterial. A building oropéndola could rarely resist

This prosperous colony of oropendolas in Honduras contained eighty-eight nests, hanging like gigantic fruits from the tips of the branches of the nest-tree.



In the heart of the oropéndola colony. Two nests are sometimes built in such close contact that they are sewed together by the birds as they weave. An oropéndola rests in the center of the group of nests.

the temptation to snatch a fiber that hung loosely from the unfinished nest of a neighbor, to incorporate it into her own. Sometimes, when the upper end of such a fiber was attached more securely than she reckoned, the would-be thief, grasping it tightly in her bill, hung with half-closed wings beneath the nest until the coveted strand gave way, or the legitimate owner returned to drive her off. In the end, I think, this habit of pilfering must have been somewhat beneficial to the colony, for it discouraged careless, slipshod work; those individuals who wove most carefully and left few loose strands were not often molested by thieving neighbors, and finished the stronger nests.

But the effrontery of these robberies did not end here. Often, returning with long banana fibers trailing behind her, an oropéndola paused to catch her breath on a neighboring bough before going to the nest to continue her weaving. On seeing these strands depending from the bird's bill, a second female, perhaps just preparing to go afield to gather more material for her own nest, would change her plans and grab one dangling extremity, then, hanging from it with nearly closed wings, do her best to pull it away. The utterance of one single note of protest to her shameless rival would have been disastrous to the rightful owner; for to open her mouth, as the raven in the fable when he succumbed to the flatteries of the fox and began to sing, would have resulted in the loss of the whole cheese! The situation was so ludicrous that at times I could not help laughing aloud, at the risk of alarming the birds. But the oropéndolas were too industrious to waste much of their time in pilfering or quarreling, and weaving

The male oropéndolas, as big as crows, were a third larger than the females, which otherwise they rather closely resembled. There were several females to every male, so that polygamy of necessity prevailed in the colony. While the hen birds labored assiduously at their nests, the big males strutted about the nest-tree with heads held high in pompous idleness. Or else they made gallant advances to the females, who were at the moment far too completely absorbed in their important tasks to be aware of such unessential presences. At intervals they voiced their far-reaching calls. Bowing profoundly, until his raised tail stood directly above his inverted head, spreading his wings until they met above his back and ruffling all the feathers of his body, the male oropéndola would utter, or rather seem to force out with heartrending effort, an indescribable liquid gurgle. Heard from

proceeded apace.



afar, there is no sound, save possibly the distant call of the short-billed pigeon or the melodious wail of the tinamou, which is to me more expressive of the mystery and the wonder of the lowland forests of Central America. Close at hand the effect of the oropéndola's call is somewhat marred by screeching overtones, as though the machinery that produces this inimitable music were badly in need of lubrication.

The male oropéndolas were also the watchmen of the flock. At the approach of danger, real or fancied, they uttered a sharp, harsh *cack*, which often sent the whole colony headlong into the shelter of the thicket beneath the nest-tree. It was extremely difficult to elude the keen eyes of these sentries.

After the outer fabric of the nest was completed, the female oropéndolas neglected their structures for a day or two. This was probably the period of their honeymoon with some attentive male, afar in the forest. At least, there was never any actual mating in the crowded nest-tree; although the male birds displayed often while in the vicinity of the nests, their deep obeisances were as a rule directed toward the world at large rather than any particular female of their kind. After this interlude, the females would

return and work assiduously for several days more, bringing pieces of dead leaves into their nests. These formed a yielding litter in the bottom, and apparently served to prevent the two eggs' rolling together and breaking when a wind rocked the swinging pouch.

A bustle of activity prevailed in the nest-tree at the height of the breeding season in May: the female oropéndolas hurrying back and forth with fibers or food for the young in their bills, or clucking as they paused to rest among the branches; their not infre-

quent quarrels and high-pitched remonstrances; the male birds strutting along the limbs or flying with resonant wing-beats from one to another, often repeating their liquid calls; the whining cries of the nestlings rocked in their lofty cradles: the voices and movements of birds of many other kinds that came to the nest-tree to seek food or to rest.

Whenever a lurking giant cowbird, Psomocolax oryzivorus, appeared among the nests, things moved with an even swifter tempo. So long as there were any nests in which incubation of the eggs had not yet begun, these big, black, red-eyed, parasitic birds continued to haunt the nest-tree, the females paying furtive visits of inspection to the finished pouches, the larger males waiting near by and from time to time voicing an unlovely, spluttering screech. Of all visiting birds, save, of course, dangerous raptors, their presence alone seemed to be resented by the oropéndolas. Continually chased by one and then another of the bigger vellow-tails, the cowbirds circled

and doubled and returned with undaunted persistence, until at last one contrived to elude many watchful eyes and slipped into an unguarded nest, where she left an egg to be incubated by the oropéndola. The cowbird who finally succeeded in foisting her future offspring on a foster mother had not only to dodge the watchful oropéndolas, but also found it necessary to outwit jealous rivals of her own species, each eager to drop her own egg into the newly-finished nest. Had the oropéndolas made a concerted attack upon these unwelcome intruders, they might have driven them far from their nest-tree; but they were mild-mannered birds and seemed content merely to prevent their entry into the nest, rarely continuing their pursuit for more than a few yards from its doorway.

Once incubation had begun, I could only surmise how things were going in those close-woven baskets so high and inaccessible. Often an idle male oropéndola would jump heavily on the side of a nest and hang there, head downward, to deliver his loud call, while from within came the protesting whine of the annoved female. But at length there came a day when I saw one return to the nest with some morsel of fruit she had gathered on the distant forested slopes, and I knew that her nestlings had escaped from their shells. Then, day after day, she continued her tireless journeying between the nest and the fruiting trees in

the far-off mountain forest, until at last her nestlings grew feathers and could fly with her to the sources of

The ever-active female oropéndolas would continue their daily tasks even after the sun had fallen behind the western mountain rim. As dusk descended over the quiet valley, they would weave a last strand into an unfinished nest, or bring a final mouthful to the waiting nestlings. Other members of the flock would perch among the boughs of the nest-tree, enjoying the refreshing cool of evening after a strenuous day, the female birds clucking in contended tones, the males often bowing low as they uttered their liquid gurgles. Then, in little groups of several together, the males, and those females who had neither eggs to incubate nor tender young to brood, would fly off northward to their nightly roosting place on a wooded hillside two miles down the valley. Finally, as the tree-frogs began their shrilling, and the loud yet soft kwah-reo of the crepuscular pauraque heralded the approach of night, the

last lone male oropéndola jumped heavily to the side of a nest to bow and call, then hurried with sonorous strokes of his wings to overtake his companions. When he had gone, the remaining females entered their nests one by one, to cover their eggs or callow young, and rest from the prolonged labors of the day. The older nestlings slept alone in their secure cradles until the mother returned with food for them at dawn. Every oropéndola that remained in the nesttree during the night was inside a nest.

The nestlings lingered in their lofty nests about four weeks, a period unusually long for a passerine bird. During all this time they never received a morsel of food from the males, who at most would come to stand above the nest and peer down at them with head cocked to one side. Early one misty morning, I saw a fledgling climb to the top of one of the long pouches and look out with (Continued on page 162)

## Have You?

By ETHEL ROMIG FULLER

Have you chanced to wonder What the world were like, If the feathered Brotherhoods Went on a strike? If, till hours were shortened, Thrushes, summer-long, Meadow larks, and bobolinks Refused to trill a song? If not one goldfinch fluted From a roadside thistle? If, in the dark, was never A white-crowned sparrow's whistle? If orioles demanded A week-end holiday? And the warblers, for over-time, An increase in pay? If vireos scorned pleas of A harassed Labor Board? If delegates of phoebes "Waited on the Lord?" Have you chanced to wonder, Did birds go on a strike, What an apple orchard, A wooded hill, were like?

taking a height, for it paused here as though uncertain of its next move. The mother bird, who had been flying in circles around the tree, now made a turn close before the nest, clucking as though to encourage her offspring. The young oropéndola launched forth. Without so much as touching the branches of the nest-tree, it followed her across the rivulet to a small tree on the hillside beyond, completing a flight of about two hundred feet on a slightly descending course-not a bad feat for wings that until that minute could never have been fully spread! Several other females, who had followed the fledgling on its first flight, joined the mother in driving away a brown jay, who had alighted in the tree where it perched. After feeding the youngster, the mother coaxed it still farther from the nest-tree. This was invariably the way, for the colony was too conspicuous and well known in the valley for the young to remain there with safety once they had forsaken the sheltering nest. Even the adults did not feel it safe to pass the night in a position so exposed.

After the departure of the last young oropéndola in June, the nest-tree beside the rivulet stood solitary like a deserted village, until the great woven pouches decayed and fell during the long rainy season.

VILLAGE IN THE TREE-TOP

(Continued from page 128) its pale head in the doorway. The youngster was perhaps a trifle daunted by this first view of the world from so breath-