THE FRIENDLY
BICOLORED ANTBIRD

By ALEXANDER F. SKUTCH
San Isidro del General, Costa Rica
Illustrated by DON RICHARD ECKELBERRY

You may wander far through tropical forest, meeting only here and there a solitary bird. Just as you begin to suspect that the accounts you have read of the splendor and variety of tropical bird life were greatly exaggerated, your attention may be drawn by a chorus of small voices somewhere in the distance. Following the sounds, you come in view of winged figures flitting through the shrubs, low palms and ferns of the dimly lighted undergrowth. It seems that a large share of the feathered inhabitants of the surrounding forest have congregated in this one spot. Most wear subdued colors—browns, olives and grays—which blend with the bark of trees and the dead leaves on the ground. Some perch on low twigs, others grasp slender upright stems, yet others cling woodpecker-like to thick trunks. From time to time they dart rapidly back and forth, or drop momentarily to the ground.

The excited feathered crowd sends forth a medley of churr, cheeps, rattles, whistles and trills, and in intervals of relative silence the listener may detect a low, rustling sound, made by countless tiny feet patterting upon fallen leaves. Looking down, one sees that the ground beneath the birds is covered with swarming ants—dull brown, sightless army ants. As the hunting ants push beneath fallen leaves and file up the trunks of trees, all the small creatures that hide in such places make a dash for safety. Crickets, roaches, moths, centipedes, spiders, an occasional small frog, lizard or snake, rush forth from concealment, and many which escape the ants are snatched up by the attendant birds. It is the usual feeding food above the foraging army that has brought together this motley crowd of feathered creatures.

Conspicuous among the followers of the army ants in the lowland forests of southern Central America is a bird about the size of a sparrow, clad in rich chestnut-brown upper plumage, with a broad, somewhat irregular band of white along the central under parts from the chin to the abdomen. Each large, dark eye is set in an area of bright blue bare skin, below and behind which the cheeks and ear-coverts are black. It stays within a yard of the ground, clinging to slender vertical stems in preference to horizontal twigs. By stretching out the upper and flexing the lower of its bluish-gray legs, it manages to hold its body almost upright despite its peculiar manner of perching. Whenever its keen eyes espie some small invertebrate desperately trying to escape the ants, it darts down and seizes the fugitive, returning in a trice to an erect stem with the victim in its blackish bill. It is a volatile bird, constantly repeating its half-whimsical, half-mocking call, which consists of a series of little clear notes rising in pitch toward the end: we we we we we we we. Or sometimes two or three notes falling in pitch terminate the series—this call has many variations. Often three or four, and sometimes as many as six or seven, of these attractive birds gather about a swarm of ants, with many associates of other species.

As I walked through the forest one morning in February about fourteen years ago, I noticed a lone Bicolored Antbird in the undergrowth close beside...
the trail, and it stayed so persistently in one spot
that I was led to look for its nest. I searched the
more eagerly because I had never seen the nest
of this species, although I had hunted much for
it in forests where the bird is fairly abundant.
While I peered into the hollow center of a palm
stump and scrutinized the crevices between its
crowded prop-roots, the anhinga appeared to be
examining me from the bushes only a few feet
away. But I found no nest. As I began to walk
away, the anhinga followed me. Moving slowly
and watching it out of the corner of an eye, I saw
that it was snatching up the insects driven from
the fallen leaves by my passage. Taking care to
shaker the ground litter and to avoid abrupt move-
ments, I led it through the undergrowth for
nearly a hundred yards, a leisurely journey on
which it was rewarded by many small creatures
that it ate. Clearly it was using me in lieu of
army ants to stir up the insects so difficult to find
as they lurk motionless beneath fallen leaves with
whose color they blend.

This was the first of many similar excursions
that the anhinga and I took together. As we be-
came intimate, I bestowed a name for my little
woodland friend, and "Jimmy." short for Gym-
ogomphus hoactzo, seemed as good as another. As
we walked together through the forest, I would
repeat this name in order to accustom him to my
voice. But I was doubtful as to the appropriateness
of this masquerade appellation, for the sexes
of the Bicolored Anhinga look very much alike,
and "Jimmy" might well have been a female.

Sometimes as I walked through the woodland
near the house I found Jimmy, but far more often
he found me. While I stood watching some other
bird he might apprise me of his presence by a
low, questioning note, and looking down I would
see him clinging to an upright stem, a foot from
the ground and hardly a yard away. Often he
would wait patiently close by me, perhaps preen-
ing his feathers, until I finished my observation
of the other bird. Then, if I could spare the time,
we would begin the leisurely journey which he
liked, for he would not try to keep up if I walked
fast. Frequently I used a stick instead of my shoes
to stir up the ground litter. Whenever a suitable
mouse was exposed, Jimmy would dart up and
seize it with a chuck of his bill. He had definite
preferences and paid no attention to certain in-
sects which to me looked just as appetizing as
those which he eagerly devoured. Among the
creatures he disdained were certain moths, al-
though he ate other kinds of moths. In the wet
season he varied his diet with small frogs, an inch
or less in length, which he beat against his perch
before he swallowed them. If he saw an escaping
insect dive beneath fallen leaves, he would alight
on a low twig or the ground and flick them aside
with rapid sideways movements of his bill, just
as ant-thrashes, augias and many other ground-
feeding birds do. Sometimes while seeking a
fugitive he would fall some yards behind me, but
soon a rapid flight, low above the ground, would
bring him to my side again. Or if I delayed too
long in one spot, he would remind me of his
presence by repeating his low, throaty note while
dangling to a sapling close beside me.

In the breeding season Jimmy sometimes fol-
lowed me while I searched for birds' nests to
study, but these trips were more profitable to him
than to me, for they provided many insects for
him and rarely a nest for me. At times our jour-
nies together lasted an hour or more, and once
we went an estimated half-mile, which seems a
long distance in the forest. This must have taken
Jimmy far beyond his home area. Although he
refused to follow when I returned along a little-
used wood road, he apparently had no difficulty
in finding his way home, and a few weeks later I
met him in the part of the forest where he lived.

He could not be enticed beyond the border of
the heavy woodland into the brighter light of
neighboring second-growth thickets or pastures,
although here I might have chased up fat grass-
loppers for him. Although he picked up insects
at my feet, he always fished away when my ad-
vancing hand was a few inches from him and
never permitted me to touch him. Yet he did not
object when I ruffled his feathers with the end of
a short stick. After he had become thoroughly
acquainted to me, I tested his reactions to noises
and found him unmoved by my loudest clapping
or shouting. Nor was he alarmed when I shook
the sapling to which he clung. He was not
exaggerated by a long separation, and after an in-
terval of several months in which we did not
meet he would come to me as though our last
meeting had been yesterday. No other free bird
has ever been so intimate with me.
Since I had neither known nor heard of any other Black-crowned Anubird or bird of any kind which followed men through the woodland, I concluded that Jimmy was an original genius who had discovered that featherless bipeds may be utilized as purveyors of food, just as Cattle Egrets and ants use cows, horses and other grazing animals to stir up insects and in the East certain hornbills are said to employ arboreal monkeys. My walks with Jimmy extended over a period of sixteen months, after which for nearly three years I could induce no anubird to follow me. I missed his quiet companionship on my solitary woodland walks.

Then one day a Black-crowned Anubird followed me much as Jimmy had done. Considering the long period when no anubird had accompanied me, I concluded that this was a different individual, perhaps a descendant who had inherited Jimmy's peculiar trait. Hence I called him "Jame-
son." In subsequent years, I have from time to time been followed through the forest near our house by Black-crowned Anubirds and sometimes by two together, apparently a mated pair. It is possible that Jimmy started a custom which has been spreading through the local population; but we should need to know far more about the habits of the species in other parts of its range before passing final judgment on this surmise. Sometimes young Black-crowned Anubirds, easily recognized by their darker under plumage and the yellow corners of their mouths, have come almost within arm's length and even followed me for short distances, but they could never be induced to take a longer trip and catch the insects I stirred up, perhaps because they still received food from their parents, who were near by. They were either curious or simply friendly. At times, especially in June, the anubirds who followed me, instead of eating at once the food they caught, would carry it off through the underwood, suggesting that they were feeding young. To my great disappointment, I never succeeded in following them to their nest, if nest they had. But as I passed along an indistinct trail in the forest near our house in mid-August, a Black-crowned Anubird clung to a stem close beside me with a fat insect in its bill, repeating ever and over a low, solding chirp. This led me to begin a search through the undergrowth, and as I moved about the bird darted so close to me that its wing brushed my leg. Then it dropped to the ground, groveling and beating its half-spread wings, in an excellent distraction display. It "feigned injury" repeatedly in various spots only a yard or two from my feet.

Finally I discovered two nestlings lying close together on the ground, as though they had been tumbling there. They seemed to be about five or six days old, for they were long, lead-colored pin-feathers and their eyes were already open. They had great, white flanges at the corners of their mouths. They were cold and sluggish in their movements, and one had fresh blood on its flank. A little more searching disclosed whence they had come. Near by was the stump of what had been a tall feather-palm. It was only about six inches high, and all the central part had decayed away, leaving a deep hollow surrounded by a papery shell. The frail stump had somehow collapsed, spilling nest and nestlings onto a palm frond that lay close beside it. The nest had consisted of large pieces of partly decayed palm leaf, forming a thin mat, above which was a lining of coarse fibrous roots and similar materials.

While I examined the remains of the ill-fated nest, the parent beheld in most extraordinary fashion. It gulped down with effect the fat insect it had been holding and with empty bill incessantly repeated a somewhat churred peeeewt at once plaintive and protesting. Several times more it groveled on the ground in front of me, beating its wings in an effort to lure me away from the nestlings. When I held them in front of the parent in the palm of my hand, it advanced and bit a finger three or four times, but not hard enough to hurt. With the exception of a female Slaty Antshrike, who swooped the finger I placed on her nest while her mate "feigned injury" on the ground to lure me away, no other forest bird has ever dared to attack me. Spreading a handlerchief on the fallen leaves, I placed the inquisitive nestlings on it while I arranged a new home for them. The parent lay or sat on the ground facing the handlerchief with its youngsters and remained motionless, watching or guarding them, for the ten minutes or so that I left them on the leaves.

After I had improvised a sort of nest in the hollow sheath of a palm frond, I placed the nestlings
In it while the anhinga intently watched me. Then I went away, confident that so devoted a parent would not neglect its little ones. But when I returned next morning they were both dead, one in the palm sheath, the other lying on the ground close by it.

After this, I looked into every hollow palm stump that I found, and also into the long, almost cylindrical sheathing bases of great fallen palm fronds, for Dr. Josephine Van Tyne had a short while before published an account of the discovery of a Bicolored Anhinga's nest in a similar situation in Panama. The following May, not far from the point where I had found the fallen nestlings, I peered into a low palm stump to behold a Bicolored Anhinga sitting in it and returning my gaze. It stared at me for nearly a minute, then jumped out and "feigned injury" on the ground close in front of me. Its departure revealed two creamy eggs, thickly marked with elongate blotches of rufous-chocolate, which lay on a nest composed of a double handful of leaf fragments, with a thin lining of国足ets and other fibrous materials. The stump, about ten inches high, had been reduced by decay to a thin shell, so fragile that I did not dare insert a hand into the deep, narrow cavity in order to pick up and measure the eggs. All the while that I examined the nest and made notes, the anhinga circled close around me, voicing a churred pe-pee-pee, punctuated with a higher, sharper note. Once it tried to lure me away by approaching within arm's length and then walking in front of me with little, mincing steps. When finally, having completed my note-making, I walked off, the parent followed for a yard or two. Then at once it went to look into the stump to see whether its eggs were still there. It made a second examination, then while I stood watching a short distance away it returned to incubate. Rarely have I seen a bird evince more obvious concern for the fate of its nest.

Setting up a blind, I spent two whole mornings and all of an afternoon studying the anhingas' mode of incubation. The sessions on the eggs were amazingly long even for anhingas, which as a family sit for longer periods than songbirds. One morning a parent incubated continuously from 6:25 to 12:04—nearly six hours. On another morning I timed a session which lasted four hours and four minutes. These were long fests for a small bird. Afternoon sessions were shorter, but one was continued for about three hours. Yet I never saw one parent replace the other. Sometimes after sitting for hours the bird would go off, leaving the eggs unattended. At other times the muse would come and call the sitting bird from the nest, then both would fly away together. In either case, the eggs might be neglected for periods ranging from five minutes to an hour and a half. Often the bird returning to the nest brought a snoot or fiber to lay beneath the eggs.

Since I was unable to distinguish the members of the pair, I could not tell whether incubation was performed by the male, the female, or by both sitting alternately. Remembering that Jimmy would permit me to touch him with a stick, I wrapped a little cotton about the end of a long wand, dipped it in paint, and touching the parents as they fished close around me protesting my intrusion, I placed white stains on one and some vermilion spots on the other. Continued watching of the marked birds left no doubt that both male and female took turns warming the eggs, so seems to be the inviolate procedure in the anhinga family. In those species in which the sexes differ in coloration, it is not difficult to convince oneself that the female regularly takes charge of the nest by night. The bird on whom I had placed the white marks sat through the night, hence I inferred that this was the female. Fourteen days after I found the eggs, I visited the nest by moonlight, and looking into the stump with the aid of an electric torch, I saw a mass of feathers so loosely spread and disheveled that they appeared not to be attached to a living bird. Such complete relaxation of the contour plumage is typical of anhingas sleeping on their nests. The parent with the white marks continued to crouch while the light increased and the woodland birds gradually became active. Even after awakening she would not leave when I bent over and tugged gently on the side of the stump. Soon weak peepings filtering through the material coverlet told me the cause of this increased attachment to the nest. When finally she jumped out, it was to grovel at my feet in realistic "injury-feigning" acts repeated again and again, until I put an end to them by with-
drawing a few paces. Then the parent promptly returned to her newly hatched nestlings. The empty shells had not yet been removed.

The young ambids had dark flesh-colored skin wholly devoid of down, and the interior of their mouths was orange-yellow. On the second day after they hatched they were fed eleven times between daybreak and noon, seven times by their father and four by their mother. On each visit the parent brought a single insect, which it held in its bill and delivered while it clung inside the stumps in an inverted position, its tail in the air. Both parents took turns brooding the nestlings, each of them sometimes sitting well over an hour at a stretch.

When the nestlings were five days old, they bristled with long pinfeathers and their eyes could be opened, although most of the time they drooped with closed eyelids. Their parents had by now simulated injury before me dozens of times—far more than any other birds I have studied. Yet when a predator arrived their wives failed to save their nestlings, possibly because it came in the night. I returned on the sixth day after the young hatched to find that their nest had been raided, as happens to the great majority of the nests that one discovers in the tropical forest. But from the tremendous loss of eggs and nestlings one may deduce the pleasant thought that the adults must be long-lived, for otherwise they could not rear enough progeny to replace themselves and their kind would vanish from the earth. It is now nearly nine years since these nestlings were lost, and since then I have not succeeded in finding another nest of the friendly but secretive Bicolored Ambid.