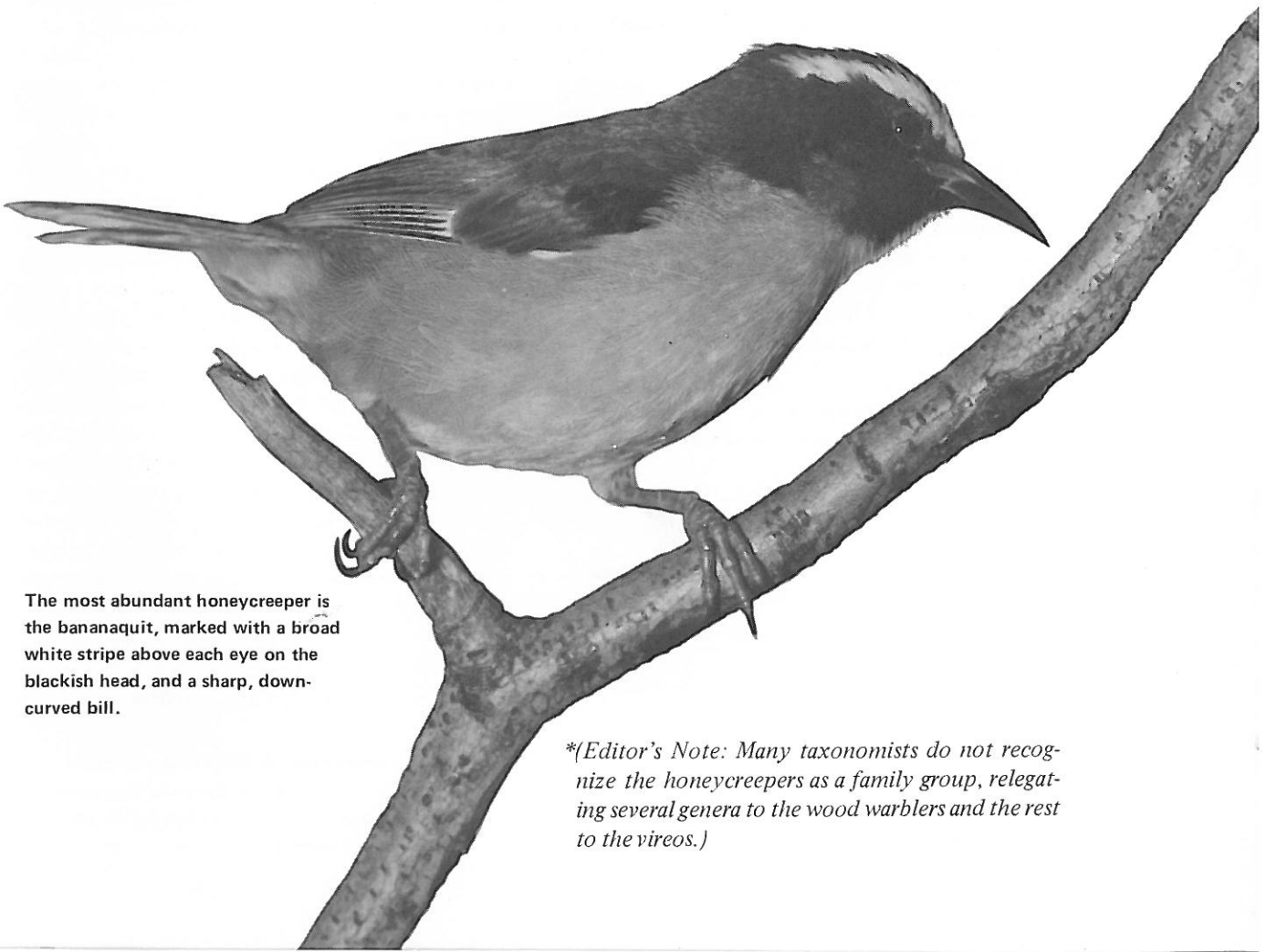
The Honeycreepers of Tropical America

by Alexander F. Skutch

Among the daintiest and most colorful of the birds that flit through tropical American woodlands are the honeycreepers. The 36 species of this exclusively New World family fall naturally into three divisions.* The largest consists of the typical honeycreepers or dacnids – delicate, gem-like birds with slender bills and glossy plumage. The males are blue of various lovely shades, or less often, bright green, with black. Trimmings of yellow, red, or white add to their brilliant color. The second division contains the flower-piercers, distinguished by a bill highly-modified for extracting nectar from flowers. The males are usually deep blue, slaty, or blackish. The third division consists of a single species, the bananaquit *(Coereba flaveola),* which has given its scientific name to the family as a whole. This is unfortunate,



The most abundant honeycreeper is the bananaquit, marked with a broad white stripe above each eye on the blackish head, and a sharp, down-curved bill.

**(Editor's Note: Many taxonomists do not recognize the honeycreepers as a family group, relegating several genera to the wood warblers and the rest to the vireos.)*

for it is in many ways the least typical of its members and appears to be derived from the wood warblers, whereas most other species of the Coerebidae seem to be more closely related to the tanagers. The sexes of the bananaquit are alike in plumage; but in most other honeycreepers, the male is more richly colored, often contrasting strikingly with the female.

The most widespread of the honeycreepers, the bananaquit ranges from northern Argentina to southern Mexico. It has also colonized the Bahamas, most of the West Indies, and many other islands in the Caribbean Sea as well as off the Pacific coast of the Americas. Most of the rest of the family is largely confined to the tropical mainland; but the blue honeycreeper *(Cyanerpes cyaneus)* has reached Cuba, where it may have been introduced by man. It is the only member of the family on that island, from which the bananaquit, so widespread in the Antilles, is absent. Another honeycreeper, the orangequit *(Euneornis campestris)* is found only on the island of Jamaica. The typical honeycreepers and the bananaquit are heat-loving birds rarely found more than 5,000 feet above sea level. The flower-piercers prefer the cool highlands.

The most familiar of the typical honeycreepers is the blue, or red-legged, honeycreeper (also known as the yellow-winged sugarbird). The male's plumage is deep blue, with clear turquoise on the crown, and black on his lores, back, tail, and wings. When spread, the wings reveal the otherwise hidden yellow of their undersides. The female is greenish-olive, with faint streaks on her breast. A curious fact about these birds is that, as the breeding season ends, the male molts into an eclipse plumage not greatly different from that of the female. I have watched male blue honeycreepers gradually go into eclipse while still feeding nestlings. In southern Costa Rica, they wear their dull plumage for only a few months, from June or early July until September or October.

Annual changes in coloration, so familiar in northern birds, are rare in those constantly resident in the humid tropics. As far as I know, the only other songbird in tropical America that goes into eclipse is the male blue-black grassquit *(Volantinia jacarina)*, which after the nesting season exchanges its shining nuptial attire for the brownish garb like that of the female.

Captivity is the price that blue honeycreepers too frequently pay for their loveliness. They die in large numbers in captivity; but when properly attended they have lived for 24 years, a surprising age for so small a bird.

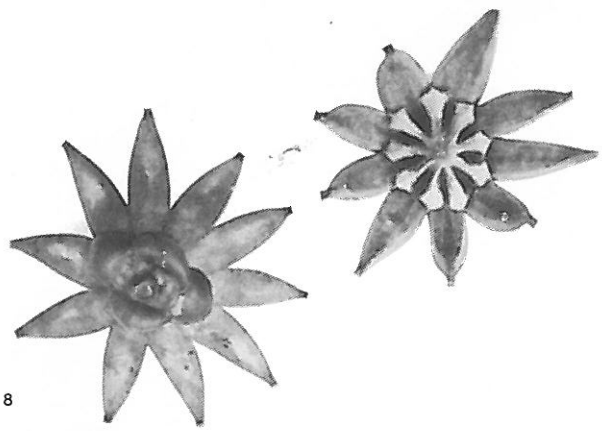
Blue honeycreepers roam through the treetops in loose flocks of both sexes. Sometimes they swarm in the shade trees of Central American coffee plantations, especially when the Inga trees display masses of white, powder-puff flowers on their open crowns. With long, slightly curved, black bills, the honeycreepers probe these and other blossoms, usually while clinging to them. Nectar, however, is a minor item in their varied diet. They also glean small insects from foliage and the finer branches.

Blue honeycreepers are among the five kinds of honeycreepers that visit the feeding table at our Costa Rican home for bananas and the juice of halved oranges. The others are the shining honeycreepers *(Cyanerpes lucidus)*, the green honeycreeper *(Chlorophanes spiza)*, the turquoise dacnis *(Dacnis cayana)*, and the bananaquit.

The favorite food of all these honeycreepers, except the bananaquit, is the soft coat, known as the aril, that encloses each hard little seed of *Clusia*. This is a large genus of trees and shrubs that grow chiefly as epiphytes upon bigger trees in tropical America. Their white or pinkish and often very fragrant flowers are followed by roundish fruits. When ripe the fruits open by spreading pointed valves, until they resemble stars with four to a dozen rays, according to the species. Each ray bears a mass of tightly packed, bright red seeds. Although tasteless or bitter to me, they are evidently delicious to the honeycreepers.

For a number of years, a tree of *Clusia rosea* grew on a calabash tree close by our feeding shelf. Neglecting the bananas, the blue, shining, and green

When opened, the ripe fruit of the *Clusia* resembles a star or pinwheel. It is the favorite food of most honeycreepers.



A bird of many names is the blue, or red-legged honeycreeper, which also is known as the yellow-winged sugarbird. It is the most familiar of the typical honeycreeper group.

The female green honeycreeper builds a shallow nest of dead leaves and fine petioles, held together with cobweb and vegetable horsehair.

honeycreepers flitted around the apple-sized green fruits waiting for the valves to separate. In this same tree, a pair of golden-naped woodpeckers *(Tripsurus chrysauchen)* were feeding their well-grown young with the seeds, which their stronger bills could extract from barely-open pods, still inaccessible to the honeycreepers. Repeatedly I saw a blue honeycreeper try to intercept some of this coveted food that the male woodpecker was passing to his offspring, but apparently the would-be thief never was successful.

Blue honeycreepers are pacific birds. To be sure, like most creatures they sometimes disagree among themselves; but their disputes always are settled by displaying to each other rather than coming to grips. The contestants are invariably two individuals of the same sex, either male or female. Facing each other, the rivals repeat incessantly their nasal *chaa,* while they bow, pivot from side to side, and flit their wings. Male opponents flash the bright yellow of the wing-underside in each other's face. These long-drawn-out disputes are contests of endurance. If one has the patience to watch to the end, he may notice that, after a while, the calls and movements of one of the contestants come less frequently than those of its opponent. Finally, the bird that seems to tire flies away, sometimes pursued by the other.

The male green honeycreeper has the habit of suddenly, without any obvious reason, seizing some other small bird by its tail, or less often by a wing or a leg, and holding on tightly until the protesting victim manages to pull away. Usually the bird seized is a female green honeycreeper; but I have seen a male green honeycreeper treat a blue honeycreeper and a small tanager in this same fashion. If not simply a manifestation of bad temper, these seizures may be sexually motivated, but I have seen this behavior in no other bird.

A black, hanging basket formerly was thought to be the nest of the blue honeycreeper. Now, however, there is abundant evidence from Mexico, Central America, and Brazil that this species builds a small open cup amid concealing foliage, as is true of all the dacnids, as far as we know.

After searching for many years, I recently found a nest of the shining honeycreeper. It was built in a drooping spray of a tall timber bamboo in front of my study window. Constructed of fine, dark fibers, the fabric was so open that I could count the eggs through the bottom, which was fortunate, as the nest was inaccessible. A nest of the scarlet-thighed dacnis *(Dacnis venusta)* which I found was even slighter: a shallow hammock composed of rather coarse, wiry materials 50 feet above the ground. The bottom was well covered with living fragments of a fern, which blended so well with the dense foliage around the nest that I was long in finding it, even after I had climbed into the tree where I had seen the parent birds carrying food.

The nest of the turquoise dacnis is deep and soft, composed of fine bast fibers and similar materials bound together and attached to the supporting twig with cobweb. The shallow nest of the green honeycreeper is made largely of dead leaves and fine petioles, held together by cobweb and the dark fungal strands known as vegetable horsehair.

In these species, I have seen only the female build the nest, with materials plucked from trees and the epiphytes rather than gathered from the ground. The female alone incubates the two, or rarely three, white, spotted eggs. At intervals the male turquoise dacnis brings food to his sitting partner, but I have not seen other honeycreepers do so.

The eggs hatch after an incubation period of 12 or 13 days. The male then helps to feed the nestlings. I watched a nestling turquoise dacnis fed by two males in full nuptial plumage. Most of the time they seemed to get along, although occasionally one chased the other. The second male was evidently an unmated helper rather than a member of a polyandrous trio. Typical honeycreepers do not regurgitate food for their young but carry it in the bill, mouth,

or throat. Food consists of small insects, berries, and great quantities of the red arillate seeds of *Clusia,* which sometimes are lined up along the whole length of the slender bill, adding another touch of color to the birds. The young remain in the nest for 13 or 14 days.

The male blue honeycreeper brings food to the nestlings less often than the female, but after the young leave the nest, the male may be their chief attendant. Occasionally, he responds to the begging of some fledgling of another species. One male honeycreeper I observed fed a juvenile yellow-green vireo *(Vireo flavoviridis).* Another time, I watched a blue honeycreeper attend a young scarlet-rumped black tanager *(Ramphocelus passerinii)* twice his own size. The noisy youngster frequently came to the feeding table with its silent attendant, and with fluttering wings took banana from the honeycreeper's sharp bill. The tanager also followed its foster parent through the trees, receiving insects and berries. Although it could feed itself and its own father still attended it, the young tanager seemed to prefer the gifts of the obliging honeycreeper.

The flower-piercers of the genus *Diglossa* differ greatly in appearance and behavior from the typical honeycreepers. Most abundant in the tropical Andes, they range from the bleak *paramos* above timberline down to the upper levels of the Tropical Zone at about 3,000 feet. One species inhabits the mountains of Costa Rica and western Panama, another the highlands of northern Central America and tropical Mexico.

The flower-piercer's short, uptilted bill has an abruptly downturned hook at the end of the upper mandible, while the shorter lower mandible is awl-like. This peculiar bill is an efficient instrument for extracting nectar from flowers with tubular corollas. The upper mandible hooks over the tube and holds it steady while the sharp lower mandible pierces the tissue. Apparently the fringed tongue enters through the perforation to extract the sweet fluid. The flower-piercer can perform this operation rapidly, and can remove the nectar from several flowers in the course of a minute.

From the point of view of the flowers, these little birds are inveterate thieves, never transferring a grain of pollen to pay for their meals. If the glittering highland hummingbirds, the bees, and the butterflies did not carry the fertilizing grains from flower to flower, the diglossas might go hungry, because the plants on which they depend for nourishment would fail to be pollinated and would not perpetuate their kind.

Like hummingbirds, flower-piercers supplement their sugary diet with proteins derived from the many small insects that they catch in the air. Although their bills seem no better adapted for this mode of foraging than those of hummingbirds, they are at least equipped with bristles at the corners of their mouths, in the manner of flycatchers. These bristles evidently help to deflect insects into the gape. Sometimes flower-piercers press the juice from small berries, then drop them to the ground.

Flower-piercers demonstrate convincingly how the nesting seasons of birds are controlled by their food supply. In the western highlands of Guatemala, where the dry season is long and severe, practically all of the small birds begin to nest as the dry season approaches its end in April or early May. Breeding continues into June or July, when cold rains are frequent. The hummingbirds, however, chiefly nest early in the dry season, from November to January, when bright sunshine covers the high mountains with colorful blossoms, although nights are frosty and penetratingly cold.

Parting company with all the passerines to which it is most closely related, however, the cinnamon-bellied flower-piercer *(Diglossa baritula)* joins the unrelated hummingbirds to breed in the frosty, flowery months at the year's end. Amid low shrubbery, the female builds an open cup much thicker and more substantial than the nest of a typical honeycreeper, as is necessary on these chill heights.

The male green honeycreeper often seizes the female, or a small member of another species, by its tail, a form of behavior the author has seen in no other bird.

She lays two bright blue eggs, heavily spotted with brown on the thicker end, which she alone incubates. Both parents feed the nestlings, with nourishment regurgitated from inside, in the manner of hummingbirds, rather than carried in the bill and throat, as in the typical honeycreepers. The flower-piercers sing more freely than the dacnids, but no member of the family known to me is a fine songster.

The tiny bananaquit, with its blackish head adorned by a broad white stripe above each eye, dark upper plumage, and bright yellow underparts, shows no family resemblance to the other honeycreepers. Bananaquits on the Lesser Antillean islands of St. Vincent and Grenada are melanistic, with almost uniformly black plumage. In all races, the short, sharp bill is downcurved. A nectar-feeder like the flower-piercers, it tirelessly probes flowers of many kinds. If the corolla is too deep for its bill, the bananaquit perforates the base, accomplishing this with a bill less highly modified than that of the flower-piercer. The bananaquit also gleans small insects and spiders from foliage and twigs.

Despite its name, the bananaquit is not nearly so fond of bananas as are the typical honeycreepers. On its infrequent visits to our table, it seems to sip moisture from the surface of the fruit rather than to eat solid bits, as all the other bird guests do. The bananaquit punctures juicy berries, such as those of the pokeweed that springs up in recently-burned clearings, and sucks out the juice. On some of the West Indian islands, bananaquits enter houses to search for spiders, or take sugar or syrup from the dining table. On the mainland, they are less familiar with man.

Through much of the year, bananaquits sing tirelessly, in thin, high-pitched voices of no great charm. Of all the birds I know, they are the most assiduous nest-makers, seeming to spend almost half their lives building cozy globular structures with a little round doorway at one side of the bottom. These roofed nests, so different from the open cups of other honeycreepers, are placed in a tree or shrub, and composed of almost anything suitable that the locality affords: coarse vegetable fibers, grass blades, strips from banana leaves, weed stems, rootlets of epiphytic plants, tendrils, green moss, and the like. The nests are built at all seasons. Most of them never contain eggs but are used only as dormitories.

Often in the night, the flashlight's beam that I have thrown upon a bananaquit's nest has revealed a soft yellow breast blocking the doorway, or else the boldly white-striped, black head of the awakened bird, gazing down at me with shiny black eyes. The dormitory nests are always occupied by a single bird, which will not even permit its mate to join it.

In the season when many kinds of birds breed, bananaquit dormitories, unguarded by day, are often torn apart by other birds gathering materials for their own nests. Finding itself roofless at nightfall, the bananaquit may use the uncovered nest of some other small bird. Once I watched one try to enter the mossy globe in which a paltry tyranniscus *(Tyranniscus vilissimus)* was raising a family, but the intruder was spiritedly repelled by the pair of tiny flycatchers. Turning the tables, sometimes a wren lodges in a bananaquit's nest, as do small mammals such as the marmosa or pygmy opossum.

Unlike typical honeycreepers, bananaquits never flock. Also unlike the dacnids of the same region, they breed almost throughout the year. In the Valley of El General in Costa Rica, where I have studied them, their eggs have been found in every month except April. Yet in April and May, at the beginning of the long rainy season, when fruits and insects are plentiful but flowers relatively scarce, the nesting season of the great majority of the birds is at its height. From December to February, at the beginning of the dry season when flowers are abundant but hardly any songbirds have nests, Bananaquits—and some hummingbirds—breed freely.

The male helps his mate to build the nest in which she sleeps before she lays her eggs, but I have never known the female to help build the male's dormitory. The two or three eggs, whitish with brown spots, are incubated for 12 or 13 days by the female alone. The male joins in feeding the nestlings, by regurgitation, as is usual in nectar-drinkers.

If undisturbed, the young remain in their well-enclosed nursery for 17 to 19 days, which is considerably longer than other honeycreeper young stay in their open nests.

Although the female may continue to sleep in the nest from which the young have flown, she does not lead them back to its shelter. They must find such lodgings as they can, until, while still in the dull juvenal plumage, they undertake to build their own dormitories. Even then, the adult in whose territory a youngster has built may evict it from the newly-made nest, causing it to start another. Thus, at an early age, it begins its life-long occupation of nest-building.