Troupials and Thornbirds

FEW SMALL BIRDS are so well known to Venezuelans as the turpial and the güaití. The turpial, or Troupial (Icterus icterus), colorful and songful, widely familiar as a cage bird, is Venezuela's national bird. The smaller, severely plain güaití, in some books called Plain-fronted Thornbird and in others Rufous-fronted Thornbird (Phaeolodomus rufifrons), would be ignored by all but dedicated bird-watchers if it did not hang huge nests so conspicuously in roadside trees that even the most unobservant traveler, speeding along Venezuela's excellent highways, can hardly fail to notice them. The Troupial is an oriole, a member of the large, exclusively New World family, the Icteridae, that includes grackles, blackbirds, meadowlarks, parasitic cowbirds, and oropendolas whose long, woven pouches hang in clusters from lofty trees. The Thornbird belongs to the ovenbird or hornerno family, the Furnariidae, widespread in South and Central America but absent from the United States and Canada. Its many species, mostly dull in plumage, include gifted architects who build an amazing variety of nests, ranging from the clay ovens of the horneros to elaborate castles of sticks. Yet these two so different birds are so closely associated that I cannot tell the story of the turpial without first telling about the güaití.

The nests of many tropical birds are so well hidden that after years of searching they remain unknown. Accordingly, when my wife and I went to Venezuela in 1966, primarily to study thornbirds, we were delighted to see their nests almost everywhere in open country—on the most exposed parts of isolated trees, on dangling vines, and even on service poles beside busy highways. Sometimes the nest tree was as much as fifty yards from the low, dense vegetation beneath which the little brown birds hunted over the ground, rummaging through and pushing beneath brown fallen leaves in search of insects and spiders. The nests could be as low as seven feet or as high as

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A troupial watches a pair of thornbirds building an elaborate nest
seventy-five feet. Sometimes they hung among the swinging pouches of a colony of oropendolas or caciques.

I watched several pairs of thornbirds build their nests. The male and female worked equally hard, and sometimes they were helped by one or two other individuals who looked just like them and seemed to be their older offspring. Although occasionally the builders tried with small bills to break twigs from trees, mostly they were unsuccessful, and nearly all of their material was gathered from the ground. It was not easy for the thornbirds to attach the first stiff twigs to slender, leafy branches; but, after they made a start, they flew up with more and more, which by pushing and tugging they laboriously inserted into the growing mass. As the nest became heavier, it weighed down its thin support, so that most nests hung vertically on branchlets or vines, although a few were on stouter horizontal branches, or even built around slender upright trunks. Before they laid an egg, most pairs had built bulky structures of interlaced twigs that contained at least two rounded chambers, one above the other. These rooms were not connected by passages leading directly from one to another, but each had its own narrow doorway in the side.

Like many other members of the ovenbird family, thornbirds are tireless builders who seem never to be satisfied with what they have accomplished. If the site permits, they continue to build up and up, placing room above room. An exceptionally big nest that we saw on the llanos, hanging inaccessibly on a dangling woody vine, appeared to be about seven feet tall and to contain eight or nine chambers—an amazing achievement for a bird only seven inches long. One might suppose that birds who give so much time and energy to building would take great care to furnish their structures with the finest materials. Surprisingly, they are easily satisfied, and line the bottoms of their chambers with almost anything soft and flexible that they can find: strips of fibrous bark, decaying grass stems, fragments of snakeskin, or, near human habitations, scraps of cellophane, large pieces of plastic bags, tinfoil, paper, brightly colored candy wrappers, chicken feathers, as well as chips of wood and flakes of bark.

Thornbirds are not unique in building nests with several or many chambers. Other birds that do so are the Palm-Chat of Hispaniola, the Sociable Weaverbird of southern Africa, and the Monk Parakeet of Argentina, which recently became established in eastern United States. These three species construct true avian apartment houses, occupied
by many pairs, each with its own room in the often huge structure. When I started to study thornbirds, I supposed that they were similarly sociable, but I was wrong. I watched over twenty nests without ever finding more than one breeding pair, no matter how many compartments the nest contained. A thornbird’s nest is not an apartment house but a family residence, occupied by a single breeding pair and their offspring. However, they find it difficult to exclude unwelcome guests from a home with empty bedrooms. Despite opposition, intruders force their way in—not only thornbirds of other families but birds of different species. Intruding thornbirds appear never to become integrated with the resident family but live a life apart.

In March, when I began to watch thornbirds, I found up to six sleeping in a nest, in the same or different rooms. Standing below a nest into which a family had just retired at nightfall, I often heard a prolonged flow of low notes that seemed to express the well-being and contentment of birds snuggling close together. At dawn, this twittering might continue for many minutes before the family flew out, to hunt breakfast together in a neighboring thicket. The members of a pair often duetted. Standing side by side on their hanging nest, they stretched up their heads and simultaneously poured forth bright, ringing notes that suggested a cheerful nature. Although lacking the complex structure of the songs of many finches and thrushes, at its best this simple performance was beautiful.

Continued study revealed how these family groups originated. After rains returned in May, or rarely earlier, the female laid three pure white eggs on the odd assortment of trash that lined a chamber, usually the lowest and oldest, which would be least accessible to a snake or other predator. Approaching along the supporting branch. Then she and her mate incubated them, sitting alternately, for sixteen or seventeen days. Even during the incubation period, they devoted much time to tucking in loose sticks and keeping their elaborate household in order. They also brought more lining, both for the brood chamber and unoccupied rooms above it. A thornbird’s nest is never finished!

Both parents passed the night with the eggs, and, if young from the preceding year were present, they might sleep either with their parents or in an upper room. After the nestlings hatched, both parents brought them small caterpillars and mature insects, always carried singly in the ends of their bills. Three twelve-day-old nestlings were fed two hundred and fifty-five times in a day of nearly thirteen hours. Although fairly well feathered at the age of twelve days, the young remained in the nest until twenty-one or twenty-two days old, when they flew strongly. At the end of their first day in the open they were led back to sleep in the nest with their parents, and sometimes also older brothers and sisters. Including parents, older young, and fledglings, eight individuals lodged in one nest. In July, when these parents started their second brood, two of the older young departed, probably to find mates and establish homes of their own. The family was thereby reduced to six, the number that I had found in March.

Troupials prefer arid, open country with cacti and thorny scrub, and were rare on the farm south of Valencia where we studied thornbirds. In early April, while I watched a large nest of the latter, a pair, the first free troupials I ever saw, flew up to investigate it. Silent, they clung to it here and there and peered into some of its five chambers, in which six thornbirds slept. These troupials were handsome birds, about ten inches long, mostly bright orange, with black heads, backs, wings, tails, and throats, and a broad, white, longitudinal band on each wing. Their sharp bills were black, with blue at the base of the lower mandible. Although they resembled other orioles, I noticed certain differences. Behind each clear yellow eye was a triangle of bright blue skin, which more typical orioles lack; and the throat feathers were sharply pointed, so that the black encroached with a jagged outline on the orange breast. I could not distinguish the male from the female. As I was soon to learn, their habits differed greatly from those of typical orioles.

After this preliminary investigation, I saw little of the troupials for the next month. As I approached this nest on an evening in early May, a troupial flew from it. Soon thereafter, the six thornbirds entered. Since the troupial was far more wary than the confiding thornbirds, I withdrew to a greater distance and stood partly hidden. After hesitating awhile, the troupial entered a chamber below that into which the thornbirds had retired. As the larger bird went in, some of the thornbirds flew out, but soon they returned to their dormitory. I noticed no antagonism between the two kinds of birds.

In the side of the chamber where it slept, the troupial had made an opening much larger than the original doorway. It had also pulled sticks from the middle of the thornbirds’ nest, dropping them to the ground. Soon the nest had the form of an hourglass, much thinner in the middle than at the top and bottom. I do not know why troupials alter in this way the thornbirds’ nests. They occupy. Perhaps the constriction makes the lowest chamber more difficult for a flightless predator to reach.

After some days, the mate of the first troupial started to sleep in the thornbirds’ nest. Sometimes in the evening he tried to enter the lowest room with the female. Although he resisted expulsion, he was always forced out. Refused admission to the female’s chamber, he retired into a higher one, where the nest had been made thinner. Unlike giiatit, turpieles always slept alone.

As I approached the nest in the dim, misty dawn of a day in early June, a stag was eating ripe fallen fruits beneath the neighboring mango trees. He lifted his antlered head to look at me, then trotted off toward the nearest thicket, with white tail raised. The male troupial was already looking out of his bedroom door, singing in his velvety voice here come, here come, and come right here, come right here. After continuing for
about five minutes, he emerged and repeated his mellow notes while he clung to the outside of the nest or flitted among the surrounding branches, waiting for his mate. When at last she darted out of the lower chamber, the two flew away together.

For a few weeks, the thornbirds and troupials continued peaceably to share the same nest, always, of course, sleeping in separate chambers. But, after the troupials intruded, the thornbirds started a new nest, only eight feet away in the same small tree. By the end of May, all had moved to the new structure, leaving the old one to their uninvited guests. Unfortunately, the male troupial, not content with his room in the thin part of the old nest, took possession of a chamber in the new one, in the side of which he opened a large gap, below the thornbirds' narrower doorway. From the ground below this nest, I picked up fragments of white eggshell. A thornbird had laid in the new nest, and the troupial had either eaten or thrown out the eggs. The poor thornbirds now moved back to the chamber in the old nest that the troupial had just vacated. Unwittingly on their part, the two kinds of birds had exchanged bedrooms.

For a week or more, the thornbirds slept above the female troupial, who had begun to incubate in the lowest chamber of the old nest, where she had long been sleeping. Relations between the large, brilliant birds and the small, plainly attired ones now deteriorated, and the latter were often chased. One morning I watched a troupial drive a thornbird through the crown of the neighboring mango tree, thence to a smaller tree, then across twenty-five yards of open pasture to a thicket. Even here the aggressive troupial did not relent, but continued to pursue the poor fugitive through the tangled branches until I lost sight of his glowing plumage. Rarely have I seen one bird chase another with such fierce persistence. Since the smaller bird could more easily slip through the tangle, it probably escaped. Soon after this, the family of thornbirds moved to their newly built third nest, on the opposite side of the mango tree's dense, spreading crown, and had fewer encounters with their persecutors.

By this time the troupials, probably chiefly or only the female, had arranged a thick pad of finely shredded vegetable fibers over the thornbirds' coarser lining, and covered with grass a place in the rear wall of the chamber where much light penetrated between the sticks. These slight additions, and pulling sticks from certain parts of the thornbirds' structure, were the only preparations for nesting made by members of an avian family second to none in the art of nest weaving. Early in June, nearly a month after I found a troupial sleeping in the thornbirds' nest, the female laid in this lowest chamber three dull white eggs, irregularly speckled, blotched, and scrawled all over with brown and pale lilac. She alone incubated these eggs, sitting from a quarter of an hour to, rarely, as much as an hour at a stretch. Her mate sang superbly, especially at dawn, and often accompanied her

Treeless pastures and lightly wooded hillside near Valencia, Carabobo State, northern Venezuela, where the author spent several months studying troupials, thornbirds, and their numerous bird neighbors.
when she returned from a recess. Sometimes, when about to enter the nest, she also sang, almost as well as he. After two weeks of incubation, two of her eggs hatched.

The pink-skinned nestlings were warmed only by their mother; but both parents fed them, bringing many caterpillars and winged insects, including, especially after they grew older, numerous grasshoppers and crickets. The nestlings also received much fruit but, as far as I could learn, none from the nearby mango tree, although their parents sometimes stuck their sharp bills deep into the juicy fruits. These parents, who had at first been so excessively shy that I could watch them only when well hidden, became bolder after their eggs hatched. Before long, at least one of them would take food to the nest while I stood, fully exposed, only ten yards away. When I climbed a ladder to look into their nest, they flitted around close above me and, surprisingly, sang beautifully instead of scolding or complaining with the sharp or harsh notes that many birds utter in similar circumstances.

At two weeks of age, the young troupials were well covered with feathers, but they remained in the nest until they were twenty-one and twenty-three days old. They were then colored in the same pattern as the adults, but while the latter were bright orange they were pale yellow, and the bands on their wings were impure white. The bare skin behind their eyes was less intense blue. Their mother had continued to brood them during all except their last four or five nights in the nest; but, after their departure they were not, as far as I could learn, led in the evening to a thornbird's nest or some other snug shelter to protect them from July's frequent rains. Such neglect of the fledglings' comfort is widespread among birds, like the troupials, who refuse to share a dormitory with a mate. Parents who sleep in contact, like the thornbirds, usually take better care of their progeny.

About the time the young troupials flew, I noticed a wide gap in the wall of a high nest that belonged to a different thornbird family, consisting of only a pair who we, e feeding nestlings. The owners of this nest tried to repair the breach in their wall; but a few days later it gaped as widely as before, and their nestlings vanished. Watching this nest in the evening, I saw a troupial, one of the pair that I had been studying, pull a stick from beside the wide opening and drop it to the ground. Then it entered to sleep in the lower chamber of this nest, while the two thornbirds retired into the upper one.

This pair of troupials had intruded into three thornbirds' nests, in all of which they slept, and in one of which they raised nestlings. Their two young were reared at the price of two broods of thornbirds, representing, probably, six young guairds. Although I watched only one pair of troupials, Paul Schwartz, a leading student of Venezuelan birds until his untimely recent death, told me that wherever the two species occur together, the troupials regularly occupy thornbirds' nests. Where thornbirds are absent, troupials may breed in other kinds of nests, such as the covered structures built by the cristofier or Great Kiskadee (Pitangus sulphuratus). Although several books state that troupials occasionally nest in a deep, pensile pouch, such as many orioles make, they do not claim that anyone has watched a troupial weaving such a pouch. Probably it was stolen.

A Venezuelan friend who was aware of the Trroupon's piratic habits deemed it a poor choice for the national bird. However, it had not previously been carefully studied, and its life history was not well known. Doubtless, those who chose the toupial for this distinction thought only of its beautiful plumage and outstandingly melodious voice.

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