# THE NESTING OF THE BELTED FLYCATCHER

### By MIGUEL ALVAREZ DEL TORO

The Belted Flycatcher (*Xenotriccus callizonus*) is one of the least known and rarest of Mexican birds. This flycatcher is a small, olive gray bird about five inches in length, with the tail accounting for about half its total length. The underparts are pale yellow and the wing coverts have two buffy bars; there is a cinnamon pectoral band, a whitish eye-ring, and a dark loreal spot. The distinctive field recognition marks are a long pointed crest, the jerky motion of the tail, and the prominent cinnamon pectoral band. The feathers of the crest are sometimes held flat, but more often they are elevated. Both sexes are alike in plumage, but if the pair is seen together, it is not difficult to differentiate male from female by the smaller size of the latter and her somewhat duller colors.

The range of the Belted Flycatcher, as presently known, appears to be restricted to the extreme northern part of Guatemala extending into central Chiapas, México. I have observed it only in Chiapas: to the north of San Fernando, near Ocuilapa, southeast of Ocozocoautla at El Canelar and mainly on the mountain El Sumidero near Tuxtla Gutiérrez.

This flycatcher inhabits the deciduous second-growth woodlands and thickets in subhumid localities at altitudes of 800 to 1700 meters above sea level (fig. 1). It is resident throughout the year. The first known examples of this flycatcher were secured at Panajachel, Lake Atitlán, Guatemala. On the basis of two specimens collected there, Dwight and Griscom (Amer. Mus. Novit. No. 254, 1927) described them as a new genus and species.

From this date until publication of Part II of the Mexican Check-list in 1957 (Pac. Coast Avif. No. 33) it appears that not more than six additional specimens of the Belted Flycatcher were taken, and nothing has been published about its habits. To date I have secured five additional specimens at El Sumidero near Tuxtla Gutiérrez and have seen many more. My specimens were taken as follows: February 27, 1957, two adult males at 1300 meters altitude; June 2, 1964, one adult male and one nestling at 1200 meters; June 13, 1964, one adult female at 1100 meters.

# VOICE

When the calls of the Belted Flycatcher are learned, it is easy to locate the bird. A soft *peeurr-r*, *peeurr-r* is uttered when the bird is startled or when an intruder comes near the nest. Both sexes give a short *peer—peer* when the female is incubating and the male approaches or when the female leaves the nest and is met by the male. During the incubating period, the male sings frequently from a well hidden perch in the thickets. His song is a rolling *peet-chorr-r-r*, usually repeated three times. The male jerks his tail rhythmically with each call as he darts about catching insects in the low understory.

#### THE NEST

I have not been fortunate enough to observe these birds during the actual nestbuilding period, so I can only report details from the time completed nests were found. On June 2, 1964, two nests (fig. 3) were found on the slopes of El Sumidero Mountain about 21 kilometers north of Tuxtla Gutiérrez. One held three eggs ready to hatch (fig. 2) while the other contained one fully fledged young which left

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Fig. 1. Habitat of the Belted Flycatcher (Xenotriccus callizonus).

the nest after about 20 minutes and joined two other juveniles in the nearby thicket. On the following day, a third nest was found in this area. It contained three fully fledged young which flew into the thicket as the nest was approached. The three nests were found about 100 meters from one another in a triangle with the one containing the eggs forming the vertex of the triangle. The slope where the nests were found was covered with second-growth deciduous shrubs which were still without leaves due to the lateness of the rains.

The nest is an open-cupped affair, made of fine grasses and plant fibers exteriorly and lined with fine black rootlets resembling horsehair mixed with other fine fibers. It is attached on a fork of three branches by the use of spider webs woven around the grasses. Typical construction includes the use of several long grass streamers hanging down from the side for about 30 centimeters. The cup of one nest measured 50 mm. in diameter, 45 mm. in depth, and the walls were 10 mm. thick. The three nests were placed from one to one and a half meters from the ground.

The three eggs have a whitish base with brownish spots and blotches which form a ring around the larger end. They measure  $13.5 \times 16$ ;  $13 \times 16$ , and  $14 \times 17$  mm.

## BEHAVIOR AT THE NEST

The Belted Flycatcher appears to be fearless. While the eggs and young were being examined, both male and female fluttered no more than a meter from the nest uttering protesting calls. Upon retreating perhaps two meters, the adults soon returned and perched on the rim of the nest. A blind was constructed about five meters from the nest containing eggs, and both birds approached the nest readily, the female proceeding to brood. Since I lacked a telephoto lens, the camera was placed about 30 centimeters from this same nest, which contained one newly hatched young and two eggs on June 3. On June 4, at 9:00 a.m. the female was brooding and was reluctant to leave; after the female was flushed, it could be seen that the remaining two eggs had hatched. The adults were not very concerned about the camera being placed so close to the nest, and both the male and female fed the young from time to time, being startled only when the shutter clicked, whereupon they would fly off but soon returned.



Fig. 2. Above: Nest and eggs of the Belted Flycatcher. Below: Male feeding the female on the nest.

The brooding female sits very flat on the nest with only the bill and tail showing. When the young were newly hatched, the female remained on the nest for short periods of ten minutes, then flew off for two or three minutes. She followed this pattern during a whole morning of observation. When the female was brooding, the male brought food and passed it to her (fig. 2). Sometimes she ate it and often she fed the young. If the female was off the nest, the male fed the young directly. The first few days after the young hatched the female brooded almost continuously, leaving the nest only for short periods and in each instance the male appeared at once and remained watching the nest while perched on the rim or on a nearby twig. The male disappeared as soon as the female returned. As the adults met during this action, they uttered the characteristic *peer-r*, *peer-r* call, all the while jerking the tail and wings and raising and lowering the crest. On two occasions, I observed the female flying out with excreta from the young in her bill, and after perchange on a twig she devoured it.

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Fig. 3. Two nests of the Belted Flycatcher.

On the days that observations were made, several species of birds approached the nest site. There was no alarm shown by the adults when an Olive Sparrow (Arremonops rufivirgatus), Blue and White Mockingbird (Melanotis hypoleucus), and Plain Wren (Thryothorus modestus) approached to within two or three meters of the nest, but the appearance of a Green Jay (Cyanocorax yncas) brought immediate frantic calls and darting about by the Belted Flycatchers.

When I approached the nest on the fifth day after the hatching of the young, the brooding female at once dropped to the ground and feigned injury until I entered the blind. Apparently there was enough insect life in the immediate vicinity of the nest, as the adults returned with food every minute or two, working steadily for half an hour then resting for ten minutes during which time they preened themselves on a perch near the nest. Visits to the nest by the parents slackened as midday arrived, but after 4 p.m. the visits became as frequent as in the morning hours.

### THE NESTLINGS

The newly hatched young are almost naked, the skin being a slightly orange color. There is pale gray down on the head, the femoral and spinal tracts and on the scapular region when the young are 30 hours old. The inside of the mouth is bright orange. At the age of four days, pinfeathers start to show on the pterylae. At nine days of age the nestlings are well feathered, with down adhering principally to the head feathers. The young leave the nest at the age of 14 days.

When the young reach the age of nest departure they resemble the adults in every respect. The tail and crest are short, the cinnamon band less prominent and the general coloration is paler throughout. The iris is light brown, the mandible and rictus a bright yellow and the tarsi and toes a brownish flesh color.

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## SUMMARY

The Belted Flycatcher (*Xenotriccus callizonus*) is one of the rarest birds of México. It inhabits second growth and thickets in subhumid localities from 800 to 1700 meters elevation in the state of Chiapas, México, where it is found usually a meter or two above the ground. Three nests were found on El Sumidero Mountain, 21 kilometers north of Tuxtla Gutiérrez. These nests represent the first ones to be recorded for the genus.

The nest is an open cup, woven on a fork in a low bush. Three eggs seem to constitute a full set and the young leave the nest on the fourteenth day.

It is most interesting to note how similar the nest and habits of this flycatcher are to those of the Pileated Flycatcher (*Aechmolophus mexicanus*) from Morelos and Oaxaca as described by Rowley (Condor, 65, 1963:318-323). Further field work may give us more information as to relationships of these two flycatchers.

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