

NOTES ON THE LIFE HISTORY OF THE BLOOD-COLORED  
WOODPECKER IN SURINAM

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THE Blood-colored Woodpecker, *Veniliornis sanguineus*, is, according to Peters (1948:175), probably confined to the Guianas. In Surinam it is quite a common bird in the coastal area and particularly numerous in the coffee plantations. It also occurs in dry sandy country in the interior, where a relative, *Veniliornis cassini*, is also found.

The Blood-colored Woodpecker is a rather small bird. The weights of specimens collected in Surinam are as follows: four males, 24, 24, 30, and 30 grams; two females, 23 and 26 grams. In the male the head, entire back, and wings are bright red, and the entire under surface is blackish-brown barred with white. The tail is dark brown. The female differs from the male in having the crown and nape brown instead of red, and the under surface is paler brown (Chubb, 1916: 487). The birds are usually seen singly or in pairs and forage in all kinds of trees and even in shrubbery. Both sexes drum. In the large egg collection assembled in Surinam for the Penard brothers and now preserved in the Leiden Museum, eggs of this species are dated: February, and May through September (Hellebrekers, 1942:249-250). In this collection is one clutch of three eggs, six clutches of two eggs, and seven single eggs.

*Excavating the hole.*—On March 24, 1950, I found a circular hole about nine meters up in the dead stump of a tree in my garden, which is situated in an old, neglected coffee plantation on the left bank of the Surinam River just outside Paramaribo. A Blood-colored Woodpecker was foraging in the neighborhood but was not seen working on the hole at that time. On April 3, I observed a bird hammering at the hole. Hammering was seen daily from then on, but was carried on in a rather leisurely way and never for long at a time. On May 2 the hole had progressed so far that part of the bird was hidden in it. On May 12 only the bird's tail protruded from the hole, and on this day both sexes were observed taking part in the work. This lasted until May 20 when the bird at work entirely disappeared in the hole. On May 30 a bird spent a short time in the hole looking out. Although I did not observe the start of the building, it is clear from these notes that the excavation of this hole lasted for at least two months. To my regret this hole was not used for breeding but only as a roosting place.

*Roosting.*—Roosting was noted for the first time on June 10. About 6:00 p. m. two woodpeckers were observed busily foraging; suddenly

the birds copulated, the female sitting sideways on a branch like a passerine bird. Shortly afterward the birds entered the hole in quick succession and spent the night inside.

On June 24, I saw that three birds entered the hole about 6:15 p. m. Two birds arrived together and entered in quick succession. They were hardly inside when a third bird alighted at the hole and entered shortly afterward. Roosting by three birds was seen again on June 25, but owing to bad light I was still not able to discern the sexes. On July 8, I determined that one male and two females entered the hole to spend the night. From that date on, however, the hole was used for roosting by only two birds, presumably a male and female, although I never was certain about this.

Usually, but not always, both birds arrived in the neighborhood about 6:00 p. m., foraged busily, defecated, and then one bird alighted just under the hole and inspected the hole several times before entering. Then it looked out of the hole for some time, until the second bird alighted and took the same precautions before entering.

Roosting was from then a daily feature and was seen the last time on February 4, 1951. After that date the birds were not seen again, and it is possible that they bred somewhere in the neighborhood. In April the branch containing the hole was partly eaten away by termites and fell down.

This hole was used for about eight months as a roosting place. Briefly, at the beginning of this period, it was used by three birds; later it was occupied by two.

In his fine study of the Golden-naped Woodpecker, *Tripusurus chrysauchen*, Skutch (1948:257-258) gives a preliminary and partial classification of woodpeckers based on their life histories. I do not know of a life history study of any member of the genus *Veniliornis*. From my observation on the roosting of *Veniliornis sanguineus*, it appears that this species belongs to the group called by Skutch the "*Tripusurus* type," in which the adults occupy their sleeping cavities in pairs or family groups. Unfortunately I have no records on the return of young birds after fledging.

*The nesting hole.*—A hole, which contained young about a week old, measured as follows: diameter of entrance, 3 cm.; depth of hole from bottom to roof, 17 cm.; depth of nest chamber to entrance, 13 cm.; largest diameter of nest chamber, 6.5 cm.; diameter at bottom of nest chamber, 5 cm. The diameter of the tree at the entrance was 15 cm., and the height of the hole above ground was 1.37 meters.

*Incubation.*—On October 3, 1949, I found the nest from which I later took the measurements given in the previous section. It was in

a dead coffee tree in the plantation near my home. The female left the nest at my approach. It was apparent that incubation was in progress. On October 5, the female was in the hole from 6:35 a.m. until 7:00 a.m.; and during one hour of watching, from 1:45 to 2:45 p.m., the male was inside until 2:35 when the female arrived. She alighted on the tree a little below the entrance and hopped towards it. The male then left the nest and the female entered. The female repeatedly peeped out of the hole, her bill open.

TABLE 1

Date	Time	Times fed by		Total
		male	female	
October 11	3:55 to 4:55 p. m.	2	1	3
October 12	6:10 to 7:10 a. m.	3	2	5
October 13	1:24 to 2:24 p. m.	1	—	1
October 14	6:30 to 7:30 a. m.	1	1	2
October 16	6:10 to 7:10 a. m.	3	1	4
	7:10 to 8:10 a. m.	1	3	4
	8:10 to 9:10 a. m.	2	1	3

On October 6, the male was inside from 3:30 until 4:30 p.m., and on October 7, the female from 4:40 until 5:00 p.m. There was no nest relief during these periods. On October 8, I watched the nest from 3:15 until 4:15 p.m. The female was inside at 3:15. The male arrived at 3:45 and nest relief took place in the same way as before, the female leaving when the male climbed to the entrance of the hole.

*The rearing of the young.*—On October 11, it became clear that the young had hatched, because a rattling noise was heard in the hole. Both sexes fed the young in the hole, and the food was always visible in the parents' bills. It struck me that the amount of food taken to the young at each feeding was small. The adults' bills were never packed with clumps of insects as had been the case with two species of the genus *Dendrocopos* which I watched in Europe. My observations of the feeding of the nestlings during one-hour periods are shown in Table 1.

On October 13 at 1:35 p.m., I could distinguish only a single small caterpillar in the bill of the male when it entered the hole; and on October 16 while watching for three hours, I observed that three times only a single arthropod was taken to the young. Twice it was a caterpillar, and once a small spider. On this last day, I also observed once that the female left the hole with a clump of excrement in her bill after feeding the young. I presume the excrement was eaten by the adults when the young were smaller. It was amazing what a noise the small nestlings made in the hole. This went on nearly continuously, and the rattling sound increased when I passed the nest tree

and still more when I covered the entrance with my hand. This noise was presumably the cause of the disaster which occurred while I took a short walk after three hours of continuous watching on October 16. Upon my return, the hole was partly cut open, and in it were seen two naked young of a pinkish color. The floor of the nest chamber was quite clean and covered with a thin layer of wood pulp.

During the nestling period, as far as I was able to observe it, the female usually stayed with the young birds after a feeding, often peeping out of the hole until the male arrived with food. The male most often left before the female came, although he remained inside for a short period. The female left the hole when the male alighted a little distance beneath it, and I never observed both birds together in the hole. For instance, on October 12, the male fed at 6:12 and left at 6:15 a.m. The female arrived at 6:20 and remained in the hole until the male came with food at 6:39. The male then stayed until 6:44, looking out of the hole all the time. At 6:49 the female came once more and stayed with the young until the male arrived at 6:57. The male remained inside until 7:07. On the afternoon of the same day the female arrived at 4:19 and remained inside until 4:40. She returned with food at 4:45. On October 16, the female alighted on the tree at 7:55 a. m. and hopped to the entrance. Before she reached it, the male too arrived with a small caterpillar in his bill. The male waited until the female had entered the hole and had come out again. After the female had disappeared, the male entered to feed the young and left immediately afterwards.

#### SUMMARY

Notes on the roosting and nesting habits of the Blood-colored Woodpecker, *Veniliornis sanguineus*, in Surinam are presented. Both sexes drum. A hole was excavated by both sexes. It was used as a roosting place for at least eight months, in the beginning by three birds—one male and two females—and later by two birds of undetermined sex. A nesting hole in which incubation had been in progress for some time was found on October 3, 1949. Both sexes took part in incubation. After the eggs had hatched, both sexes fed the young in the nest. The food, consisting of insects, was taken to the young in the bill. Feces were removed, carried in the bill of an adult, on October 16. The nest hole was quite clean and contained two young. Measurements of the hole are given. According to these observations *Veniliornis sanguineus* belongs to the "*Tripsurus* type" in the classification of woodpeckers given by Skutch (*loc. cit.*).

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*Box 644, Paramaribo, Surinam, Dutch Guiana, December 3, 1951.*