

The Male Flicker's Part in Incubation

By Alexander F. Skutch

RECENTLY I watched two nests of the Northern Flicker. Both were high up in dead trees, so far decayed that they seemed unsafe to climb, and I did not attempt to learn the number of eggs nor how many days were required to hatch them. What I wanted particularly to determine was the part taken by each sex in the incubation of the eggs, and whether the male or the female kept them warm during the night. At both nests it was the regular duty of the male to sit on the eggs during the hours of darkness.

The female occupied the nest during the late afternoon, and her mate came to relieve her as night approached. In clear weather, the males of both pairs delayed their arrival until a little after seven o'clock in the evening, when the last nearly horizontal rays of the setting sun filtered between the trunks of the flat woodland where the nests were located. The latest time of the arrival of the male which I recorded was 7.23. One evening I found one of the males looking out from his high doorway as early as 6.40, but he took three brief recesses, during which he called much, before he finally settled down in the nest for the night at 7.13. On a dark and rainy afternoon the male came to replace his partner at 6.22.

During the early morning hours, when their feathered neighbors, less

burdened with domestic cares, sang their cheerful morning songs and hurried about for their breakfasts, the male Flickers continued to sit quietly in their holes and warm their eggs, without breaking their fast. As the sun rose higher and the day became warmer, they climbed up to look out of their doorways with increasing frequency. At one of the nests, before which I began to watch at daybreak, the female did not appear to take her turn on the eggs until 8.35, four and a half hours after the Robins had announced the return of day with their dawn chorus. During all this time, the male Flicker stuck patiently to his task of keeping the eggs warm, with only a single brief recess of two minutes' duration. At the second nest, at least on the morning of my watch, the female was even less considerate of her mate. As the hours dragged by and still she failed to appear, the bird in the nest became increasingly impatient of the long delay. First he climbed out and clung to the trunk beside the entrance, where he carefully preened himself, spreading his wings and revealing the beautiful yellow shafts of the feathers as he carefully put them in order. His toilet complete, he crawled back into the hole, but as the day wore on the preenings became increasingly frequent. Time and again he leaned out of the

*Young Flickers*

Photo by Allan D. Cruickshank

entrance for a look around, and at a few minutes past 8 o'clock he called to his mate for the first time that morning. But she did not respond to his ringing *wic wic wic wic*. So, soon after this he left the nest and flew to a neighboring tree, to which he clung while he called *fee-ab fee-ab*, then came promptly back to his eggs. As he became hungrier and hungrier, he called more and more for his undutiful partner, and left the nest for brief periods. But he never remained away more than

ten minutes at a stretch, and at half past nine, when I decided to delay my own breakfast no longer, he still faithfully warmed the eggs and awaited his laggard mate. I had begun to fear that some calamity had befallen her during the night, and the poor male might wait all day in vain for her return; but my fears proved to be ungrounded, for that afternoon I found the female in the nest.

I thought it would be interesting to see how long each member of a

pair of Flickers occupied the nest during a twenty-four-hour period. Beginning my vigil at 1.30 in the afternoon, I watched before the nest until dark, then returned at the break of the following day and continued the watch until 1.30 P.M. The record which I made may prove of interest.

MAY 23:

- 1.30 P.M. I begin the watch, the female in the nest.
- 1.56. The male replaced the female, and remained, with a single recess from 3.36 to 3.40, until at
- 3.57. The female returned. Toward the end of her turn on the eggs she became impatient and took recesses from 6.09 to 6.14, 6.34 to 6.37 and 6.43 to 6.49.
- 7.03. The male replaced the female and remained for the night.

MAY 24:

- 4.15 A.M. I resumed the watch. After it became lighter the male looked out of the hole. From 8.10 to 8.12 he took a recess. Otherwise he sat until at
- 8.35. The female replaced him on the nest. She took a recess from 10.27 until 10.30.
- 10.47. The male returned and relieved his mate. During this period he was very impatient and took recesses from 11.40 to 11.44, 11.58 to 12.02, 12.13 to 12.23, 12.45 to 12.52. At 1.06 he went off again, and the nest was still unattended at 1.30, when I ended my watch.

During the entire period of twenty-four hours the male incubated for a total of 17 hours and 21 minutes, the female 5 hours and 27 minutes. The eggs remained unattended for 1 hour and 12 minutes. Even if we do not include in the reckoning the hours of darkness or very dim light, but consider only the period during which diurnal birds were active, roughly from 4.30 A.M. to 7.30 P.M., the male still occupied the nest the

greater part of the time, 501 minutes against the 327 of his mate. After the eggs hatched, the male continued to brood the young Flickers during the night.

The male Flicker is not alone among Woodpeckers in taking charge of the nest during the night. I found, last spring, a nest of the Red-bellied Woodpecker, too far from my residence for frequent observations, into which the male retired in the late evening to brood the young nestlings for the night. In Central America, where I first discovered that male Woodpeckers make such excellent husbands and fathers, I have satisfied myself that the males of at least four species are responsible for keeping the eggs or the nestlings warm during the hours of darkness. These are the White-billed Pileated Woodpecker (*Ceoph-læus lineatus similis*), the Truxillo Woodpecker (*Centurus santacruzi pauper*), the Guatemalan Flicker (*Colap-tes mexicanoides mexicanoides*) and the Guatemalan Hairy Woodpecker (*Dryobates villosus sanctorum*). All female Woodpeckers are not so inconsiderate of their mates as were the Flickers that I watched. The female Pileated Woodpeckers, which I studied in the lowlands of Guatemala, came to relieve their mates from half an hour to an hour after daybreak, instead of keeping them waiting for their breakfast four or five hours, as the Flickers did. It is stated that the female Black Woodpecker of Europe incubates during the night, a situation very different from that which seems to prevail among the American representatives of the family.