

with a captive owl for decoy, such traps might harmlessly lead to the banding of quite a few of these interesting and endangered birds.—S. A. ELIOT, Jr., Smith College, Northampton, Massachusetts.

Some Notes on the Hairy Woodpecker.—The question has come up as to whether the male or female Downy Woodpecker (*Dryobates pubescens medianus*) selects the nesting-territory. This raises the same question as to the habit of the Hairy Woodpecker (*Dryobates v. villosus*) in this respect. Turning to my notes accumulated since banding was begun at this station, I find two interesting cases, where the female Hairy took the initiative in this act.

The first case has to do with a female which was first noticed at our yard on February 14, 1931, and later trapped and banded as A379710. She thereafter made it a daily habit of coming to feed, either on doughnut or suet, several times a day. The period of her visits extended throughout the following spring and summer, but with longer intervals between visits during the summer and sometimes with an absence of a few days. By August her visits were again daily and continued to be so until November 1st, after which she was not seen and may have migrated with others of the species, passing over at about this time.

On April 15, 1931, a male Hairy was seen about the station with A379710, and they were together more or less thereafter. There was no active mating display, and at no time was a second male seen to contest the male's suit. The female soon selected a spot on the north side of an apple tree trunk three and one half feet from the ground, and began digging a nest-cavity, working at it silently and methodically, mostly during the forenoon but sometimes of an afternoon. This site is forty yards from our yard; and while the male never came to the yard to feed, the female often left work and came directly to my feeding station. The male rarely came near her when she was at work, and when he did so, he alighted on the trees no closer than forty feet away. She usually met him there, and they flew away together. He spent practically all of his time in the woods and his winter territory to the south, and here the two went when together. Close to this apple tree the Hairy selected, stands a tall and large elm stub in which three pairs of Starlings (*Sturnus vulgaris*) were nesting.

Before the Hairy nest-cavity was completed, the bird was inadvertently frightened away. She then went to a partly decayed elm one hundred and fifteen yards to the southeast, where a second cavity was begun situated some twenty-five feet from the ground, which but for a limb too tough to work through might have served for a nest. On May 14th she returned to her apple tree. The following day the birds were seen in the act of copulation; and in due time a set of four eggs was deposited. A pair of the ubiquitous Starlings, desiring to nest again, entered the Hairy's nest May 28th and destroyed the eggs and drove the female away. She then went to an apple tree twenty-five yards to the northwest, and enlarged an old Downy Woodpecker nest-cavity to accommodate her needs. Again the Starlings disturbed her and they finally drove her out and used the site for their own purposes. The result was that the birds were again driven away and they apparently nested in near-by woods, though the nest was not found. The female continued to feed at the yard, and later both adults were seen when carrying food to the woods. The male disappeared soon after nesting was over and was not positively seen again.

During 1932 a pair of Hairy Woodpeckers nested near my station and were frequently seen, but neither bird wore a band and neither came to our yard for food.

The second case has to do with my 1933 experiences. Three adult Hairies were banded, as follows: A393055 (♂), March 26th; A393058 (♀), April 21st; and A393060 (♂), May 11th. A second female was not captured. Of these birds, A393055 and A393058 afterwards mated. On June 15th their three young were banded. The nest was in a poplar tree at the edge of a woodland one hundred and seventy yards from the station. The entrance was fourteen feet from the ground, and the cavity fifteen inches deep. During the time occupied by me in sawing out a section of the tree to gain access to the young, they kept up a continuous calling. The female lingered in the surrounding trees, uttering her distress call and scolding. The male came with a billful of food, but remained in the back-ground. At no time did the adults carry food from the yard to their young, nor did the young follow their parents to the yard.

Regarding the selection of nesting-territory with this pair, the female (A393058), even though banded twenty-six days later than her mate (A393055), was apparently the first to visit the station; she came on March 13th. Prior to that date, during January, February, and early March, she was probably the unbanded female that had been seen about the village. The male was not seen until March 15th, when he came with the female to the suet. Usually the male and female birds feed separately, and the instance just cited was the only time this pair were known to feed together. Later, whenever one came and the other was eating, the arriving bird fed, the other bird leaving. This male Hairy always came from the east woods when visiting the yard and returned in that direction. On the other hand, the female frequented a near-by territory in a southeast to a westerly direction. Rarely the two were seen in a maple sugar wood to the southwest.¹

On the morning of April 10th the birds were seen in the act of copulation. On the 18th a second male appeared. Throughout that day and until the 21st, when a second female Hairy arrived upon the scene, the two males were almost constantly courting female A393058. However, soon after the second female arrived, A393060 (♂) divided his time about equally between the two females, but was constantly repulsed by the mated male. On May 10th, he had finally mated with the second female. While the second male (A393060) was actively displaying to obtain A393058 as a mate, A393055, while already mated to her, went through a protective display that did not materially differ from the usual mating maneuvers.

The second 1933 pair of Hairies discontinued coming to the yard about May 15th and were not seen again to my knowledge. Only the banded pair were observed from this date on. The selection of nesting-territory by this second pair is unknown.

Thus, of the first 1933 pair the female arrived first on the territory later utilized for nesting and occupied that part of it during the winter. And, like the 1931 male, this male kept to his territory during the period the female was digging a nest-cavity. This pair ceased to feed at our yard, like the 1931 birds, when they had young. Both A393055 and A393058 disappeared when the first migrating Hairies appeared about the first of August, 1933.—LEWIS O. SHELLEY, East Westmoreland, New Hampshire.

¹ I should explain that with this species each sex has a separate territory, that of the male being close to, but separate from, the female's territory. The male occupies his territory exclusively during the winter or prior to the nesting-season. During the breeding-season the two territories are combined but to just what extent I am not certain; the merging of the two is most marked during the period the young need the most food.