GENERAL NOTES

Pileated Woodpecker attacks pilot black snake at tree cavity.—Although the Pileated Woodpecker (*Dryocopus pileatus*) and the pilot black snake (*Elaphe obsoleta*) occur together in the woodland habitat of much of the eastern United States, an incident in which this snake climbed a tree to eat nestling Pileated Woodpeckers was considered "remarkable" by Hoyt in her report on the latter species (1957. *Ecology*, 38:246–256). On the occasion mentioned, the observer rescued the young birds and thus lost the chance of witnessing the response of the adult woodpeckers to the predator. Information about such a response is desirable because the woodpecker may encounter this common arboreal, bird-eating snake more frequently than the reported evidence would indicate, and because, in general, very little is known about predation in the ecology of the Pileated Woodpecker (Hoyt, op. cit., 255; Bent. 1939. U.S. Nat. Mus. Bull., 174:164–194). Kilham (1959. Wilson Bull., 71:191) has recently reported observing a black snake that spent five days in a cavity a few feet from a Pileated nest and left without taking the nestlings. The present note describes an apparently fatal attack by a male Pileated Woodpecker on a large black snake which had entered a hollow used by a pair of the birds near Bloomington, Indiana.

The nest at which the incident occurred was 20 feet up in a dead beech (*Fagus grandi-folia*) stub 26 feet high, 22 inches dbh, and about 17 inches thick at the level of the entrance to the cavity. The hole in the tree faced west and measured some three inches wide by three and one-half inches high.

About a week prior to May 23, 1958, a male Pileated Woodpecker had been discovered entering the tree, and a day or two later a female went in. Each of the pair was seen going in several more times; and this fact, the date, and the behavior herein reported are the basis for the assumption that there probably was a nest there. The birds did not relieve each other at the cavity, which suggests the possibilities that it contained either an incomplete clutch of eggs or held young being brooded only part of the time. If there were young, however, they were not yet old enough to greet returning parents at the entrance to the nest. Since adults feed nestlings by regurgitation, food-bringing would not have been noticed.

From the hole at 2 p.m. on May 23, there protruded part of a pilot black snake; the posterior two feet or so were visible, and the girth of this segment indicated a total length of a little over five feet. In the next 15 minutes a few more inches of the body moved slowly out of sight. Finally the snake disappeared into the hollow, and shortly thereafter the male woodpecker arrived at the tree, hopped up, looked in, and withdrew his head. To me, 30 yards away and (because the nest stub was on a hill) at eye level, no sound was audible, nor was there any display or other response suggesting alarm or excitement. Instead, the woodpecker began deliberately and methodically to deliver hard blows into the cavity, pausing for from 10 to 60 seconds after each one or two jabs; during these pauses the bird remained in position and looked into the hole or, more rarely, surveyed the surrounding woods. Occasionally the snake could be glimpsed dimly as part of its body passed before the aperture. In the course of 20 minutes, in which some 50 or 60 blows were delivered, the orientation of the woodpecker's attack shifted from the bottom of the hole to a point above the entrance and then back down again. It therefore seemed possible that the blows were aimed at a specific part of the snake, perhaps the head. One or two quick movements by the bird may have been reactions to strikes by the snake; otherwise there was nothing to suggest effective resistance.

About 20 minutes after the male's appearance the female flew to a nearby tree and then landed beside her mate. The male thereupon departed, not to return during the remainder of the observation. To the last, his behavior seemed free of excitement, and it was soon indicated that probably he had communicated no alarm to the female: she hopped quickly to the entrance and thrust her head well in, then jerked backward so suddenly and violently that she lost her grip and fell away from the tree. Returning immediately, she began constantly to thrust her head in and out of the hole and continued to do so for at least half an hour, at first as often as 30 times a minute. Evidently there was little life remaining in the snake, for gradually the bird left her head in the cavity for longer stretches, finally for 10 seconds at a time. However, even after 30 minutes, when it was necessary to discontinue observation, she was still alternately scrutinizing the contents of the hole and then looking at the woods around her, as though in considerable nervousness. (Probably neither woodpecker ever was aware of my presence.)

Repeated visits to the tree during the days that followed disclosed no Pileated Woodpeckers near it; the nest, if there was one, apparently failed when the snake gained entrance to it. No informative traces could be found on the surrounding ground, but dense vegetation may have hidden the snake's body, even if the woodpeckers removed it and dropped it nearby.

Throughout incubation and early life of nestlings, one member of the pair of Pileated Woodpeckers is virtually always at the nest (Hoyt, op. cit., 251-253), and this was true of the birds observed by Kilham (op. cit.). If the behavior described herein is typical and the reaction to a snake entering or attempting to enter the nest is to attack and sometimes overcome it, then nest relief must greatly reduce the risks from this group of predators. In the light of the present observations, it is the more interesting that Kilham should have seen a five-foot black snake making its departure after five days spent harmlessly so near a cavity containing small young.—VAL NOLAN, JR., Indiana University, Bloomington, Indiana, August 12, 1959.

A North American sight record of the Redwing.—On February 21, 1959, at ca. 10:00 a.m., Messrs. S. Stepinoff, S. Ozard, T. Peszel, J. Kirk, and I discovered a Redwing, *Turdus musicus (Turdus iliacus* of some authorities), at the West Impoundment of the Jamaica Bay Wildlife Sanctuary, Ruler's Bar Hassock, Queens County, New York. The Redwing is a Palaearctic thrush not previously reported on the North American mainland, though recorded several times in Greenland (1957. A.O.U. Check-list, 5th ed., p. 430). The bird was observed at distances varying from 20 to 100 feet by means of 10×50 binoculars and a $20 \times$ spotting telescope. The individual was extremely wary, repeatedly taking flight when efforts at closer approach were made; such molestations having been ceased however, the Redwing was observed to feed on the berries of several shrubs in the area of the sanctuary parking-field. Upon his arrival, Mr. H. Johnson, manager of the sanctuary, was shown the bird. Johnson recalled having seen it in the locality on the previous day, though he had not identified it. During the next two days a large number of observers gathered at the sanctuary, including several familiar with the species in Britain and Europe. The Redwing was last seen on February 24, 1959.

By way of description, I observed the following features on February 21:

Head, wings, back and tail were of a neutral brown-gray color, somewhat broken with light gray on the secondaries and coverts. The face-pattern, consisting of striking white moustachial and superciliary stripes, was unusually bright. The underparts were white, with black streaking on the breast, the flanks and wing-linings possessing the reddish coloration characteristic of the species. The bill was yellow with a black tip, or perhaps a black tip to the upper mandible alone.

Inquiry has failed to locate any cage-bird dealer or zoological collection in the city