GENERAL NOTES

Mockingbird Attacking Blacksnake.—On February 21, 1953, I was walking through pine flatwoods near Paradise, Alachua County, Florida, at 10:05 A.M. when I noticed a Mockingbird (*Mimus polyglottos*) diving several times to the ground with loud harsh cries. Upon investigation, I saw that the bird was attacking a blacksnake (*Coluber constrictor*) about two and one-half feet long in a sandy clearing. Although instances of Mockingbirds attacking snakes have been reported, there seems to be little information regarding the details of these encounters.

Audubon, in one of his paintings, depicted four Mockingbirds defending a nest from a large rattlesnake. Mrs. Jesse L. Alley (Florida Naturalist 13: 26, 1939) saw a Mockingbird attack a coachwhip (*Coluber flagellum*) for "at least a whole day." The bird "was lighting on its [the snake's] head and picking it, and then up in the air as quick as a flash." She reports that the snake did not strike once, a phenomonen which I also noticed. Other passerines have been known to attack snakes. C. J. P. Ionides (Ibis 96: 310-311, 1954) reported having seen a pair of Black-headed Tchagras (*Tchagra senegala*) attacking a bird snake (*Thelotornis kirtlandii capensis*) and a female White-headed Black Chat (*Thamnolea arnotti*) holding a juvenal spotted wood snake (*Philothamnus semivariegatus semivariegatus*) near Liwale Boma, Tanganyika, in 1945. In each case the snake died.

The following is an account taken from field notes. The fight was observed at approximately five yards. The weather was clear and warm, the temperature being 72° F. at 8:30 A.M. as reported by the weather station at the University of Florida. It is impossible to say how many times the bird had dived before, but after observation began it flew down at the snake 18 times without alighting on the ground. The bird's path was an arc between a wax myrtle bush (*Myrica cerifera*) and a limb of a long-leaf pine (*Pinus palustris*) about 25 feet from the ground, a distance of approximately 20 yards. Each time the bird dived, it continued its flight and alternately alighted on the pine tree or the wax myrtle. It stopped to perch after each trip, remaining at rest from 20 seconds to 2 minutes 10 seconds, the whole 18 trips lasting 13 minutes. On the nineteenth flight, the bird did not attack but flew from the myrtle to the pine tree.

The snake remained motionless during an attack, and bodily contact was not apparent. As long as the snake remained still, the bird did not attack, but as soon as there was movement, the aggressive response was initiated. During the longest interval noted above, the snake remained almost completely motionless.

Now began a most interesting performance. The Mockingbird flew to the ground, alighting about three feet in front of the snake. It flashed its wings two or three times and moved to the right about two feet, always facing the snake; then to the left about four feet, flashing its wings from time to time and emitting loud chirps much in the manner that males do during the breeding season when facing each other in a "combat." The bird made these sidewise runs to the right and left seven or eight times with wings flashing constantly. The snake moved towards the bird several times as if to pass rather than attack. Each time that this occurred, the bird retreated always keeping the three-foot distance.

Now the bird began to circle in a counter-clockwise motion, with wings flashing and the distance between it and the snake remaining about the same. One complete circle was made without an attack, but as the bird began the second circle, it lunged from the left of the snake, pecking it about six inches from the head. It retreated and stood still, cocking its head from side to side.

At this moment, the snake crawled swiftly away indicating that it was far from

moribund as at first suspected. With this maneuver, the bird flew and lighted on the snake pecking it ferociously several times, and then it flew to the myrtle. Almost immediately, it approached again and alighted on the snake near the neck region which it pecked repeatedly. The snake made writhing motions but did not attempt to move away. The bird then began making its back and forth path before the snake, but now running in and pecking the snake's head, then jumping back about a foot. At no time did the snake strike at its opponent. It always moved towards the bird, but it seemed as though it were trying to pass rather than to attack. The bird repeated its vicious head attacks for about 12 minutes and then flew into

The snake, apparently none the worse for its experience, moved swiftly away. I attempted to collect it, but was hindered by the most unusual aggressiveness of the Mockingbird. This individual flew at my head several times, while the snake disappeared into a clump of saw palmetto (*Serenoa repens*).

The fight from the time observations began, lasted 33 minutes, and it is quite possible that it would have continued for a considerable length of time. Courtship posturing occurs in early February, but breeding somewhat later. No nest was found, and the bird was not collected.—THOMAS W. HICKS, University of Florida, Gainesville, Florida.

Apparent Copulation of Baldpate in Central Massachusetts.—On March 13, 1954, we observed a pair of Baldpate, Mareca americana, in apparent copulation on North Hadley Pond, North Hadley, Massachusetts. As we approached the pond four Baldpate flew off. We remained quiet as the birds circled overhead several times. One pair landed in open water about 300 yards from us, giving us an excellent view with 7×50 binoculars and a $20 \times$ spotting 'scope. While we watched, the male bird swam up behind the female, pumping his head and neck up and down in a manner similar to the Gadwall's action described by Wetmore (Auk, 1920, 37: 241). He quickly mounted her, forcing her entire body and head under water. Her head appeared above the surface two or three times during the brief period in which we assume copulation took place. This observation differs from the unusual action described by Hambleton (Auk, 1949, 66: 198) in that the male did not grab the female's tail in his bill and the female was completely submerged for two or three short intervals during the activity. Further, the date of our observation is a full two months before the May date on which Hambleton's observation was made in Toronto.

In view of the statements in Kortright (The Ducks, Geese and Swans of North America, 1942, p. 187), Bent (U. S. Natl. Mus. Bull. 126: 90), and several of the better-known "state" works to the effect that Baldpates arrive unmated on their breeding grounds, this observation of apparent copulation in Massachusetts is of interest. Our observation might be interpreted in one or more of five ways: (1) that it was merely a behavioral pattern associated with the courtship performance but not culminating in actual copulation; (2) that at least some Baldpate are paired on arriving at the nesting site; (3) that the Baldpate copulates over a long period of time and may be more promiscuous than other anatids; (4) that this pair may be preparing to nest nearby; (5) that it was an abnormal reflex set off by our disturbing influence. It is of course apparent that all five of these possibilities are in the nature of very tentative hypotheses.—L. M. BARTLETT (*Dept. of Zoology*) and GERRY ATWELL (*Dept. of Wildlife Management*), University of Massachusetts, Amherst, Massachusetts.

the pine tree.