

out of 246 attempts. All prey were captured on the ground. In 41 cases, the prey item was positively identified through binoculars or by the examination of fragments dropped in feeding. Of the identified items, 9 were short-horned grasshoppers (Acrididae), 19 were long-horned grasshoppers (Tettigoniidae), and 11 were lizards of the genus *Anolis* (probably *Anolis limifrons*). One item was a large cockroach (Blattidae) and the last was a small colubrid snake. This list is probably biased since grasshoppers and other large insects were difficult to identify at a distance but were abundant in the area. In about 30 cases where identity could not be certainly established, it appeared that the bird was tearing off wings as it characteristically did with large insects. The lizards and snake on the other hand, were easily distinguished by their long tails which hung down from the hawk's talons.

I recorded about thirty additional prey captures by other individuals wintering in the Turrialba area, but, because of the greater distance from the observer, only four of these could be identified. Two were *Anolis* lizards and one was a tettigoniid grasshopper. A good-sized *Ameiva* lizard (probably *Ameiva festiva*) was taken by a wintering female. *Ameiva* lizards were present on the territory of the male hawk at the Institute, but no captures were recorded. It may be that the significantly larger size of females permits them to take larger prey, but these few data are not sufficient to justify such a statement. No warm-blooded prey or attempts on warm-blooded prey were recorded. Suitable mammals are uncommon and the place that they occupy in the diets of hawks in the temperate zones is largely filled by the abundant reptiles and large insects. Birds are not molested by wintering Sparrow Hawks and show no great fear of them, often perching on the same tree or power line.

These observations were made while the author was engaged in a study of avian ecology supported by a Harvard University Scholarship, NSF grant number GB7346 (Reed C. Rollins, principal investigator), and by a grant-in-aid of research from the Society of Sigma Xi.—ROBERT E. JENKINS, *Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts 02138, 13 February 1969.*

Marsh Hawk chases crows mobbing owl.—On 5 November 1968, at 08:00, near Shabbona, DeKalb County, Illinois, I observed a Great Horned Owl (*Bubo virginianus*) that was perched on the ground near the edge of a partially picked corn field. A drainage ditch paralleled the border of the field and a dense growth of annual weeds, grasses, and willows (*Salix* sp.) extended for about 30 feet on both sides of the waterway. My attention was directed to the owl by the raucous calls of eight Common Crows (*Corvus brachyrhynchos*) that were mobbing it.

After the crows had been swooping at the owl and calling almost continuously for about four minutes, the owl flew toward the ditch and landed on a fence post. The crows' activity seemed to become intensified during the owl's short flight. Four of the crows landed on fence posts, all in the same direction from the owl, and the others continued flying about near the owl and calling. About two minutes later a female-plumaged Marsh Hawk (*Circus cyaneus*) flew in low over the adjacent corn field and briefly chased each of the four flying crows. The crows maneuvered swiftly and left the immediate area. The hawk then dived at each of the perched crows and caused them to fly. All eight crows flew to a row of large trees about $\frac{1}{4}$ mile north and landed. The hawk left the area immediately and disappeared to the west (08:08). Approximately one minute later the owl (possibly in response to my presence) flew for about 200 yards and landed on the ground in a hay field.

At 08:12 the crows arrived at the owl's new location and resumed mobbing activities. Within two minutes a Marsh Hawk appeared from out of the west and chased each crow for a brief period. The crows quickly departed to the north and the hawk flew west (08:15). Neither species returned to the hay field during the next 45 minutes.

The significance of this observation cannot be determined at this time. It seemed that the Marsh Hawk was attracted by the noise generated by the mobbing crows; however, the hawk did not return after its second departure when the same crows mobbed two Short-eared Owls (*Asio flammeus*) that were flying over a hay field $\frac{1}{4}$ mile north of the Great Horned Owl's location.—WILLIAM E. SOUTHERN, *Department of Biological Sciences, Northern Illinois University, DeKalb, Illinois 60115, 23 January 1969.*

Ruddy Turnstones making use of Yellow-crowned Night Herons for food-finding.—On 5 June 1948 I was watching a number of Yellow-crowned Night Herons (*Nyctanassa violacea*) feeding on the innumerable crabs on the coastal mudflats at the mouth of the Coppename River, Surinam. Near one of them stood two Ruddy Turnstones (*Arenaria interpres*) which swallowed the remains of a crab which fell out of the heron's bill on the mud. The turnstones obviously watched the feeding herons as each time a heron captured a crab they hurried toward the feeding bird and swallowed the wasted morsels as soon as they fell on the mud. The turnstones never chased or bothered the herons but simply waited their turn and the herons apparently did not take any notice of them.—F. HAVERSCHMIDT, *Wolfskuilstraat 16, Ommen, Holland, 29 March 1969.*

Common Terns pirating fish on Great Gull Island.—In 1967, while working in the Great Gull Island tern colony, located 7 miles ENE of Orient Point at the eastern end of Long Island, New York, I saw adult Common Terns (*Sterna hirundo*) pirating fish brought in to feed the young. An adult would fly in carrying a fish. The young tern would rush out, grasp the fish in its bill and at that moment a second adult Common Tern would dart in and make off with the fish. The young, still holding the end of the fish, would be lifted 8–10 feet in the air, then would drop to the ground without the fish. The fall did not seem to hurt the young tern. Pirating of Common Terns by Common Terns was seen on several occasions, but I did not see this pattern in Roseate Terns (*Sterna dougallii*) which also nested on the island. In the three years I have worked on Great Gull Island I have seen pirating only in 1967.

Bannerman (*Birds of the British Isles*, p. 152, 1962) reports Roseate Terns in the Farne Islands as pirating fish regularly from Arctic Terns (*Sterna paradisaea*).

Austin (*Bird-Banding*, 5:155–171, 1934) states that the degree of food abundance for a tern colony can be estimated from the number of fish found on the ground in the colony during the season. Using this criterion the bait fish, on which the terns feed were in short supply in our area in 1967. In contrast to 1966 I found very few fish on the ground near these nests and less variety in those I did find: 3 species in 1967, in contrast to 9 species in 1966. In 1968 not many fish were found in the colony, but growth rate studies of the young Common and Roseate Terns on the island (LeCroy and Collins in prep.), suggest the food supply was better in 1968 than in 1967.

As far as I know there are no data on relative abundance of bait fish for this area for the period 1966–1968. Dr. William A. Lund, Jr., working on bluefish (*Pomatomus*