

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*

saltatrix) in areas near Great Gull Island reports (pers. comm.) his impression that 1966 was a good year for bait fish, in 1967 bait fish were very low and in 1968 they were more abundant. Bluefish and terns are often seen feeding in the same areas, the fish chasing the bait to the surface where the terns dive for it.

Since pirating of fish by Common Terns seems to be exceptional in the Great Gull Island colony, its occurrence may have been correlated with a shortage of bait fish. Where pirating is seen regularly, as described for the Farne Islands Roseate Terns the pattern may have had its beginning during a period when bait fish were in short supply.—HELEN HAYS, 14 East 95th Street, New York, New York 10028, 5 March 1969.

Sand-kicking camouflages young Black Skimmers.—Bent (U.S. Natl. Mus. Bull., 113:315, 1921) describes young Black Skimmers (*Rynchops nigra*) digging themselves into depressions on the beach when disturbed. "From their earliest stage the young skimmers have a habit of scratching themselves into a hollow and lying absolutely flat upon the shell-covered beach. While this habit is displayed mostly by the downy young, I have seen it exhibited to a great extent by the feathered young when the young birds are able to run about and danger threatens. Then they will throw themselves flat on the shells of the beach and scratch alternately with their little webbed feet backward. They make 15–20 movements before they snuggle down to rest, and while their legs are in action they make the shells fly most energetically. When the hollow is dug sufficiently to allow them to lie flush with the surrounding beach they remain absolutely motionless. . ." Stone (Bird studies at old Cape May, II:604, 1937) mentions the difficulty of seeing young skimmers as they lay in depressions with sand apparently drifted around them.

On 7 August 1968 we visited a sand bar in Shinnecock Bay at the eastern end of Long Island, New York, where terns and skimmers nest. As we walked into the colony we saw spurts of sand ahead of us. As we approached the sand stopped flying and there would be a young skimmer lying very still, partially covered with sand.

On 27 August 1968 we visited a section of beach about one mile south of Stone Harbor, New Jersey where skimmers were nesting. We found a nest where one egg had hatched and two eggs were still left in the nest. The young skimmer, which looked at most a day old, was still kicking sand into the air as we stood over it. The sand fell on the back of the bird.

The sand-kicking as Bent suggests does function in digging a depression in which the bird lies. It seemed to us equally important, however, that the sand which is kicked into the air falls on the back of the young skimmer partially covering it, and from our point of view, at least, helping to camouflage it. It seems likely that Stone's drifted sand could have been sand kicked by the young skimmers. The camouflage aspect of this kicking may not be realized if the substrate is composed of small stones, or shells, which the young skimmer could not easily kick into the air.

Conway and Bell (Living Bird, 7:57–70, 1968) describe Kittlitz Sandpipers (*Charadrius pecuarius*) kicking sand over their eggs when disturbed. We have not found any reference which suggests the camouflage function for sand-kicking in young skimmers, but feel it is applicable.—HELEN HAYS, 14 East 95th Street, New York, New York 10028, AND GRACE DONALDSON, Department of Education, American Museum of Natural History, Central Park West at 79th Street, New York, New York 10024, 27 February 1969.