HAVERSCHMIDT, F. 1962. Notes on the feeding habits and food of some hawks of Surinam. Condor, 64: 154-158.

HAVERSCHMIDT, F. 1968. Birds of Surinam. Edinburgh, Oliver and Boyd.

Murphy, R. C. 1955. Feeding habits of the Everglade Kite (Rostrhamus sociabilis). Auk, 72: 204-205.

STIEGLITZ, W., AND R. L. THOMPSON. 1967. Status and life history of the Everglade Kite in the United States. U. S. Dept. Interior, Fish and Wildl. Serv., Spec. Sci. Rept.-Wildl., No. 109.

F. HAVERSCHMIDT, Wolfskuilstraat 16, Ommen, Holland.

Black-whiskered Vireo in Surinam.—On 17 December 1967 I collected near Phedra on the Surinam River, Surinam, a juvenile female Black-whiskered Vireo (Vireo altiloquus). It weighed 24.8 g and the gizzard contained a number of seeds of Bixa orellana and insects (Coleoptera). The specimen is preserved in the Leiden Museum; G. F. Mees assigned it to the nominate race altiloquus. Neither Meyer de Schauensee (The species of birds of South America and their distribution, Narberth, Pennsylvania, Livingston Publishing Co., 1966) nor Blake (in Check-list of birds of the world, vol. 14 (R. A. Paynter, Jr., Ed.), Cambridge, Massachusetts, Mus. Comp. Zool., 1968) include Surinam within the winter range of this bird. I am indebted to G. F. Mees for his help and to D. C. Geyskes for identifying the gizzard contents.—F. HAVERSCHMIDT, Wolfskuilstraat 16, Ommen, Holland.

The Black-crowned Night Heron as a predator of tern chicks.—In the course of a study of the terns nesting on Great Gull Island, Suffolk County, New York, during the summers of 1967 and 1968, many banded chicks of both the Common Tern, Sterna hirundo, and the Roseate Tern, S. dougallii, disappeared within a few days of hatching when they were still too small to have wandered far. This was particularly noticeable in 1968, when at least 33 chicks less than 3 days old disappeared from study plots encircled by low wire fencing. No mammalian predators inhabit Great Gull Island and no avian predators are resident there. An occasional Sparrow Hawk, Falco sparverius, passed over the island and small numbers of Herring Gulls, Larus argentatus, and Great Black-backed Gulls, L. marinus, were often present on off-shore rocks and pilings. Redwinged Blackbirds, Agelaius phoeniceus, which nest on the island occasionally destroyed some tern eggs (Pessino, 1968). Detailed information about this tern colony and the studies in progress is presented by Cooper et al., 1970.

The consensus of the several investigators studying this colony was that these losses might be the result of predation by Black-crowned Night Herons, Nycticorax nycticorax. Night herons were heard flying over Great Gull Island almost nightly, although they did not nest there and only occasionally roosted on the island. The intense mobbing reaction of both species of terns directed at any night heron flushed from a diurnal roost on the island supported the view that they were chick-predators. On such occasions a closely bunched flock of 60–70 terns immediately swirled about the heron as long as it was in flight or in sight, with some individuals continually diving at it. The reaction was comparable in intensity to that shown to Sparrow Hawks passing over the island. Proof of the predatory habits of these herons was obtained on 13 July 1968 when an adult male was collected on Great Gull Island at approximately 07:00. Its stomach contained the nearly digested remains of three small fish (Cottidae?) and one Roseate Tern chick estimated to have been 2-4

days old. The chick remains included numerous down feathers and parts of the legs, head, and wings. It of course remains to be shown just how widespread this habit is among the local night herons, and also whether they were responsible for the observed losses of Common Tern chicks. The latter seems quite likely since the nests of the Common Terns were far more exposed and seemingly more vulnerable to predation.

The food habits of Black-crowned Night Herons as reported from many parts of the species' range are notably variable. Although fish generally make up the bulk of the items in their diet they are also reported to eat frogs, toads, salamanders, snakes, rats, mice, leeches, worms, several kinds of mollusks, crustaceans, and aquatic insects and small amounts of vegetable matter (Baynard, 1912; Wetmore, 1920; Gross, 1923; Allen, 1937; Allen and Mangels, 1940; Palmer, 1962; Nickell, 1966). In addition these herons have been reported to feed on the young of colonial nesting birds, particularly herons and ibises (Beckett, 1964; Kale, 1965; Stronach, 1968), and have been seen feeding on the eggs of Common Terns when nests were left unattended at night (Marshall, 1942). The food habits of these herons also have been shown to vary considerably from locality to locality (Gross, 1923), from colony to colony within a rather limited area (Allen, 1937), as well as from year to year at the same colony (Allen and Mangels, 1940).

All the available evidence points to Black-crowned Night Herons being extremely opportunistic predators utilizing whatever suitable prey happens to be most plentiful or most easily caught at any particular place and time. This has been particularly well illustrated by Allen and Mangels (1940) who report a colony that fed on Meadow Mice, *Microtus pennsylvanicus*, "to almost the complete exclusion of other items" during a year when large numbers of these mice were available. The next 2 years when mice were not so numerous the herons at the same colony "turned to fish as an exclusive diet and no evidence was obtained of *Microtus* being taken in even a single instance." It is therefore not surprising that these herons have been found to exploit the temporary abundance of food items in the form of eggs and young in the nesting colonies of other birds.

I am grateful to Edward Lanier and Donald M. Cooper for assistance in collecting the heron specimen and to Grace Donaldson and Mary LeCroy for calling my attention to some of the literature cited. Helen Hays, Kenneth C. Parkes, and Stuart L. Warter provided helpful comments on the manuscript. Support for field work on Great Gull Island was received from the American Museum of Natural History and the Linnaean Society of New York.

## LITERATURE CITED

- ALLEN, R. P. 1937. Black-crowned Night Heron colonies on Long Island. Proc. Linnaean Soc. New York, 49: 43-53.
- Allen, R. P., and F. P. Mangels. 1940. Studies of the nesting behavior of the Black-crowned Night Heron. Proc. Linnaean Soc. New York, 50-51: 1-28.
- BAYNARD, O. E. 1912. Food of herons and ibises. Wilson Bull., 24: 167-169.
- BECKETT, T. A., III. 1964. Black-crowned Night Heron feeding behavior. Chat, 29: 93-94.
- COOPER, D. M., H. HAYS, AND C. PESSINO. 1970. Breeding of the Common and Roseate Terns on Great Gull Island in 1966. Proc. Linnaean Soc. New York, in press.
- Gross, A. O. 1923. The Black-crowned Night Heron (Nycticorax nycticorax naevius) of Sandy Neck. Auk, 40: 1-30.

KALE, H. W., III. 1965. Nestling predation by herons in a Georgia heronry. Oriole, 30: 69-70.

MARSHALL, N. 1942. Night desertion by nesting Common Terns. Wilson Bull., 54: 25-31.

Nickell, W. P. 1966. The nesting of the Black-crowned Night Heron and its associates. Jack-Pine Warbler, 44: 130-139.

Palmer, R. S. 1962. Handbook of North American birds, vol. 1. New Haven, Connecticut, Yale Univ. Press.

Pessino, C. 1968. Redwinged Blackbird destroys eggs of Common and Roseate Terns. Auk, 85: 513.

STRONACH, B. W. H. 1968. The Chagana heronry in Western Tanzania. Ibis, 110: 345-348.

Wetmore, A. 1920. Observations on the habits of birds at Lake Burford, New Mexico. Auk, 37: 393-412.

Charles T. Collins, Department of Biology, California State College, Long Beach, California 90801.

Red-tailed Hawk attacks Bald Eagle.—While driving south on Highway 76 in Winona County, Minnesota, at 07:22 on 22 March 1969, a companion and I saw an adult Bald Eagle (Haliaeetus leucocephalus) sitting in an oak overlooking a 40-foot embankment at the edge of a dense oak forest. I stopped the car and after watching for about a minute, we got out and flushed the bird, which flew across the road at a height of about 50 feet. Almost immediately an adult Red-tailed Hawk (Buteo jamaicensis) flew from the same stand of oak, caught up with the eagle about 200 feet from us, and struck it on the back with its talons. We distinctly heard the sound of the impact. The eagle appeared to lose about 3 feet in altitude when struck, but recovered and flew up the valley to the north. After uttering one typical cry, the hawk flew southwesterly to a slope a quarter mile distant. About 12:30 that same day we saw a Red-tailed Hawk circling over the bluffs about a quarter mile north of the site of the attack. As the nesting season was then getting underway for the Red-tailed Hawk in southeastern Minnesota, the hawk's aggressiveness probably can be explained as territorial defense.—PAUL V. LE DUC, St. Mary's College, Winona, Minnesota 55987.

A kingfisher new to Borneo.—Muara is a small island in Brunei Bay, North Borneo, at approximately 5° N and 115° E. Near its ocean shore I collected on 17 July 1945 a male and female White-collared Kingfisher, Halcyon chloris collaris. Smythies (The birds of Borneo, second Ed., Edinburgh, Oliver and Boyd, 1968, pp. 308–310) reports only the resident race from Borneo, H. c. chloroptera. As Thompson (Birds from North Borneo, Univ. Kansas Publ., 17: 401, 1966) did not collect collaris there, my Muara specimens (now in the University of Michigan Museum of Zoology) represent a range extension and is the first known record for Borneo of the race breeding in the Phillipines, the Palawan group, and Cagayan Sulu (Delacour and Mayr, Birds of the Phillippines, New York, MacMillan Co., 1946, pp. 135, 267). I am grateful to Dean Amadon for his advice and aid in comparing the specimens.—Kenneth W. Prescott, New Jersey State Museum, Cultural Center, 205 West State Street, Trenton, New Jersey 08625.