FIGURE 1. The entire flock of Lesser Scaup and Ring-necked Ducks in a pseudo-sleeping attitude, showing a somewhat loose organization just after the flock ceased its feeding activity.

Birds on the surface began to move closer to one another and within a few seconds assumed what appeared to be the pseudo-sleeping attitude, with bills tucked under their scapulars and eyes open (fig. 1). They began to swim slowly out from shore. As birds bobbed up, they looked around, joined the group, and assumed the same posture. The entire flock maintained the pseudo-sleeping attitude and after about a minute, moved to a position about 40 ft offshore. Most birds more or less faced me. They remained this way for about 5 min, with an occasional bird holding its head erect, but then again assuming the pseudo-sleeping attitude. When I stood up, a few birds raised their heads and began to move, rapidly swimming away from me to about 30 ft from a strip of ice between them and open water. Then, after facing into the wind, the entire flock flushed into the wind and flew off.

These observations support Cornwell and Bartonek (op. cit.) who suggest that pseudo-sleeping in anatids is a form of displacement activity prompted by mild threat or danger. According to these authors, it occurs on both an inter- and intraspecific basis. The presence of an ice sheet, which prevented the flock from swimming to a greater distance offshore, may have been a key factor in inducing the pseudo-sleeping or "sleep-feigning" attitude under the conditions of mild threat. A possible alternate explanation suggested by Johnsgard (pers. comm.) concerns the effect of the cold weather: when the birds noticed potential danger, they ceased feeding and put their bills under their scapulars to warm them. Observations similar to those I described above in a situation not affected by cold (Cornwell and Bartonek, op. cit.) and my failure to observe pseudo-sleeping in other nonfeeding birds of the same species in the same and other areas of the bay during the same day, favor the first explanation. Whether this form of behavior in anatids can at present be strictly defined as displacement activity seems open to question.

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ADDITIONAL RECORDS OF BIRDS FROM BRITISH HONDURAS (BELIZE)

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In a recent paper on our collecting activities in British Honduras (Belize) in 1966 the status of 17 species of birds, including some data on the White-winged Dove, *Zenaida asiatica,* was reported (Barlow et al., Ibis 3:399, 1969). The present note clarifies the status of *Zenaida asiatica* and gives distributional or breeding information for the Red-billed Pigeon, *Columba flavirostris,* the Black-billed Cuckoo, *Coccyzus erythropthalmus,* and the Collared Araçari, *Pteroglossus torquatus.* Between 20 April and 20 May 1969, James A. Dick collected birds in British Honduras (Belize) on behalf of the Royal Ontario Museum. Dick used the Museum's permanent archaeological camp at Rockstone Pond, Belize District, as his main base of operations. The camp is situated in an area of second growth forest, scrub, and slash and burn agricultural practice. The following records are noteworthy.

Red-billed Pigeon. *Columba flavirostris.* Esther Pendergast obtained a subadult male (ROM 104086) at Rockstone Pond on 8 February 1969. Between that date and 25 June, she regularly saw two or three of these birds in the vicinity of her camp. She then obtained an adult male (ROM 104341) on 13 May 1969 at Rockstone Pond. It had a left testis measuring 14 × 6 mm. Dick obtained an adult male (ROM 104087) on 12 May 1969, also at Rockstone Pond. This individual weighed 300 g, had heavy fat and a left testis measuring 15 × 6 mm. Russell (Ornithol. Monogr. no. 1:70, 1964) reports only one specimen and a sight record for the country, from Corozal, Corozal District, which is about 45 mi. N of Rockstone Pond.

White-winged Dove. *Zenaida asiatica.* This species was first observed in British Honduras by Esther Pendergast in March 1967, and the first two specimens of this dove were taken by her at Rockstone Pond in March 1968 (Barlow et al., op. cit. p. 401). Since only one of these was preserved as a study skin, determination of subspecies was not possible. Dick obtained the following white-wings in 1969 at Rockstone Pond: a male (ROM 104053), testis 14 × 8 mm, 25 April, wing (chord) = 151.7 mm, tail = 104.5 mm, exposed culmen = 19.3 mm, weight = 162 g; a male (ROM 104054), testis = 15 × 5 mm, 24 April, wing (chord) = 154.8 mm, tail = 106.3 mm, exposed culmen = 19.7 mm, weight = 155 g; a female (ROM 104055), ovary = 11 × 6 mm—largest ovum = 15 × 15 mm, 11 × 11 mm, 25 April, wing (chord) = 152.2 mm, tail = 106.4 mm, exposed culmen = 18.8 mm, weight = 156 g; and a female (ROM 104056), 26 April, 5 mi. W Rockstone Pond, ovary = 17 × 6 mm—largest ovum = 3 × 3 mm, wing (chord) = 150.2 mm, tail = 105.7 mm, exposed culmen = 18.9 mm, weight = 14.6 g. These measurements correspond to those of *Z a. peninsulae,* a race recently described by Saunders

(N. Amer. Fauna no. 65, 1968), which is known to breed in Quintana Roo, México. We assign our specimens to that race. The gonadal condition of our specimens indicates breeding.

Black-billed Cuckoo. *Coccyzus erythropthalmus.* Dick obtained a Black-billed Cuckoo (ROM 104057) at Rockstone Pond on 4 May 1969. The bird demonstrated heavy fat and weighed 46 g. The left testis measured 6 × 4 mm. Russell (Ornithol. Monogr. no. 1, 1964) placed this species on a hypothetical list for British Honduras (Belize) because the only previous record was of a bird seen by Morton E. Peck at Toledo Settlement on 15 November 1906.

Collared Araçari. *Pteroglossus torquatus.* Russell (op. cit., p. 96) indicated that nesting of this common species had not been verified in British Honduras. Esther Pendergast had several nests under observation near Rockstone Pond in the late spring of 1969. On 4 June 1969 her husband, Dr. David Pendergast, exposed a nest in a cavity 13 ft up in a coconut palm (*Cocos nucifera*); the nest contained three partially feathered nestlings. A female (ROM 97230) collected on 18 April 1966 by D. H. Baldwin at Rockstone Pond had an enlarged ovary 20 mm in diameter with the largest ovum measuring 4 mm. Dick obtained a female (ROM 104125) at Rockstone Pond on 25 April 1969 weighing 168 g and with an ovary measuring 14 × 7 mm and the largest ovum 2 mm. The oviduct was enlarged.

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SOOTY TERN EGG PREDATION BY RUDDY TURNSTONES

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In the late afternoon of 10 January 1969 we were observing a Sooty Tern (*Sterna fuscata*) colony on "Janet" Island (Engebi), Eniwetok Atoll, Marshall Islands. We watched from inside a parked vehicle about 60 ft from the densely packed colony in which nests in many places were spaced only a foot apart. The terns had quieted down and seemingly were no longer disturbed by our presence. At about 18:00 a single Ruddy Turnstone (*Arenaria interpres*) was noted walking along the edge of the colony, sometimes venturing 10 ft or so into the massed terns. Most of them made feeble pecks at the intruder as it moved among them, but none really attacked. The turnstone was very alert and side-stepped and dodged in avoidance. At times enough terns made threatening maneuvers to cause it to fly to the edge of the colony.

Within 15 min four more turnstones alighted at the edge of the colony in front of us. A few minutes later three of them were spaced at roughly equal distances around an incubating tern which had been blue leg-streamered and banded the night before and thus was easy to see during the ensuing action. When it lunged at one turnstone which had ventured too close, one or both of the others spontaneously ran toward the exposed egg. This caused the tern to retreat immediately to the egg and lunge anew at one or the other of the nearer turnstones. The three rapidly circled the tern, alternately pressing forward and being driven back. A fourth turnstone then joined the others and the tempo increased markedly. By this time the tern was very excited and made forceful lunges at the turnstones. At times during these attacks the bird was about a foot from the egg, but it always retreated quickly enough to prevent any encroaching turnstones from reaching it. On one lunge, however, a turnstone reached almost under the tern and pecked the egg. Later examination revealed a gaping hole about ¾ inch in diameter. Perhaps more than one turnstone had pecked the egg. During the early minutes of the battle an unmarked tern, probably the mate, came to the side of the incubating bird only to be immediately repulsed, possibly because of the latter's agitation. Although the unmarked bird quickly returned to the side of the defending bird and was not again repulsed, it attempted no defense against the turnstones. Things quieted after about 12 min of intense action, and the turnstones wandered off in different directions.

Although we observed other turnstones about the colony until dark, we noted no other concerted attacks; single birds, however, were seen moving about, usually near the edges. Once a tern left an egg to press a territorial attack on a neighboring tern. In an instant a nearby turnstone darted in and pecked the exposed egg three times before the returning parent drove it off. For the most part the terns ignored or delivered only low intensity pecks at the turnstones as they meandered through the colony. Most serious lunges appeared to come from incubating birds.

Although turnstones are common on all of the central Pacific islands where we have worked for several years, neither of us has ever noted egg predation by this species on seabirds. Dr. Alexander Wetmore, however, (pers. comm.) recalls that on Laysan Island in 1923, Ruddy Turnstones made heavy inroads on eggs of the Sooty Tern, and also on those of the Gray-backed Tern (*Sterna lunata*). As these migrant shorebirds increased in number during April he was careful not to disturb the incubating terns, because, if he walked into their colonies, turnstones followed close behind to break and eat the eggs. The destruction was so widespread from casual entry, however, that when he collected a small series of eggs for specimens to show variation in pattern of marking, it required search to find perfect examples in which the shell had not been broken. He concluded that the terns had a limited chance of nesting success until the bulk of the turnstones had left in northward migration.

In the Eniwetok Sooty Tern colony, considerable predation on the eggs had taken place, particularly along the edges. In places, as many as a dozen broken, empty eggs were found in small piles. This was probably destruction by curlews, which are notorious egg eaters. Two species, the Bristle-thighed Curlew (*Numenius tahitiensis*) and the Whimbrel (*Numenius phaeopus*), were common about the island,

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