

| Date | Number seen | Date | Number seen | Date | Number seen |
|------------|-------------|------------|-------------|------------|-------------|
| August 2. | 7 | August 11. | 71 | August 21. | 45 |
| August 3. | 4 | August 12. | 21 | August 22. | 83 |
| August 4. | 68 | August 14. | 86 | August 23. | 173 |
| August 5. | 43 | August 15. | 53 | August 24. | 163 |
| August 6. | 15 | August 16. | 55 | August 25. | 78 |
| August 7. | 106 | August 17. | 146 | August 26. | 15 |
| August 8. | 90 | August 19. | 40 | August 28. | 36 |
| August 10. | 65 | August 20. | 15 | | |

The Turnstone was seen every trip as were also the Sanderling, Semipalmated Sandpiper, Short-billed Dowitcher, Ring-necked Plover, and Least Sandpiper, but ranked behind all of these and the Knot in total numbers seen and behind all of these six and the Western Sandpiper in greatest number seen on one trip. However, the total of 1485 and average of 64.6 per trip and rank of 7 compares with Urner's 1935-1937 records of:

| | Rank | Number of Trips seen | Number Trips | Total Number | Average per Trip when seen |
|------|------|----------------------|--------------|--------------|----------------------------|
| 1935 | 14 | 41 | 178 | 602 | 14.2 |
| 1936 | 15 | 53 | 171 | 693 | 13.13 |
| 1937 | 14 | 37 | 144 | 730 | 19.73 |

However, in considering relative rank, it must be remembered certain species like the Yellow-legs, Killdeer, Hudsonian Curlew, and Pectoral Sandpiper are rare or absent from Long Beach Island although common across Beach Haven Inlet in the Sheepshead Meadows, while Red-backed and Western sandpipers are commonest after the end of August. Furthermore, the Ruddy Turnstone migrates south on the Jersey Coast mainly in August.

Clearly the Ruddy Turnstone can hardly be said to have decreased in numbers along the New Jersey Coast between 1928 and 1950, at least on Long Beach Island. Its relative standing among the shorebirds would seem to be as given by Urner, common along with the Knot, but not abundant as is the Sanderling.—FREDERICK V. HEBARD, 1500 Walnut Street Building, Philadelphia 2, Pennsylvania.

Breeding Notes on Two Panamanian Antbirds.—During a study in 1948 of birds attending army ants on Barro Colorado Island, Panama Canal Zone (Proc. Linn. Soc. N. Y., No. 63, in press), nests of two common antbirds were found. Though both nests were prematurely destroyed, I was able to obtain certain information on the incubation period of *Thamnophilus punctatus atrinucha*, and on the appearance of the nest, eggs, and newly-hatched young of *Microrhophias quixensis virgata*.

Thamnophilus punctatus atrinucha, the Slaty Antshrike, is the most common member of the Formicariidae in the forest of Barro Colorado Island. Nests with eggs have been recorded from December through July (Eisenmann, Smith. Misc. Coll., 117 [5]: 34, 1952). Yet the incubation period has not been reported, though Skutch has given a good account of a nesting (Auk, 51: 8-16, 1934). *Building of nest and incubation:* On February 3, I saw a male carrying material to an unfinished nest, a thin cup of black fibers and moss, suspended from a horizontal fork in a low tree. On February 4, 5, and 6, the nest was still empty and no bird was seen nearby. When next visited, on February 10, at 12:40 p.m., there was one egg, white with many amber spots around the large end. On February 11 at 2:00 p.m. I found two

eggs; the male was incubating. During visits on the following days both male and female were observed to incubate. Both permitted close approach before leaving the nest, sometimes remaining until I tapped the tree. On February 24 at 11:45 a.m. the male was incubating; there was no sign of hatching. On February 25, when I arrived at 12:30 p.m. there were two young in the nest—making an incubation period of about 14 days. This assumes, as Skutch believes, that the eggs are laid and normally hatch in the morning, and agrees with the incubation period of a related

TABLE
Microrhopias quixensis virgata
CARE OF YOUNG

| Date | Hours of observation | Total period observed | No. of feedings | | Feeding intervals | | Times brooded | | Total time brooding |
|---------|-------------------------|-----------------------|-----------------|--------|-------------------|---------|---------------|--------|---------------------|
| | | | Male | Female | greatest | average | Male | Female | |
| 2-6-48 | 10:20 a.m. to 2:30 p.m. | 240 min. | 1 | 4 | 77 min. | 48 min. | 0 | 3 | 80 min. |
| 2-7-48 | 3:15 p.m. to 5:18 p.m. | 122 min. | 5 | 3 | 25 min. | 15 min. | 1 | 3 | 18 min. |
| 2-8-48 | 1:30 p.m. to 3:30 p.m. | 120 min. | 1 | 2 | 40 min. | 30 min. | 0 | 0 | 0 |
| 2-10-48 | 9:42 a.m. to 10:55 a.m. | 73 min. | 2 | 3 | 56 min. | 14 min. | 0 | 0 | 0 |
| 2-11-48 | 1:00 p.m. to 1:30 p.m. | 30 min. | 0 | 1 | 25 min. | | 0 | 0 | 0 |
| 2-12-48 | 2:30 | Nest found destroyed | | | | | | | |

species, *T. bridgesi*, which he found to have an incubation period varying from 14 to 16 days (Auk, 62: 11, 17, 1945). *Condition and care of young:* The newly-hatched young had no down, showed dark under the skin on the upper dorsal tract and outer wing joints, and had light flesh-colored legs. Their eyes were closed, but they had strong voices and opened their mouths when handled. The female brooded the newly-hatched young. On February 26, the nest was watched from 8:20 to 9:20 a.m. The female and male took turns brooding the young, the female leaving when the male brought food to the young. When each member of the pair was brooding, the other could be heard from time to time calling from a distance. On February 27, at 11:45 a.m., the nest was found with one side torn away and the young gone.

Microrhopias quixensis virgata, the Dotted-winged Antwren, a small, noisy, arboreal species, is one of the leaders of the mixed bands that wander through the forest. Skutch found an unfinished nest on February 22, 1935, but other than that nothing

is reported of its breeding (Eisenmann, *op. cit.*; 35, 1952). *Nest and eggs:* On February 5, Robert Z. Brown showed me a nest under the canopy of large forest trees in a small bush, 42 inches above the ground. The nest was a deep cup, with thick sides, suspended from the fork of two branches, somewhat in the manner of a vireo nest. It was composed of dead leaves bound together with plant fibers and lined with finer black fibers. Measurements: outside diameter 3 inches, outside depth $3\frac{3}{4}$ inches, inside diameter $1\frac{3}{4}$ inches, inside depth $1\frac{3}{4}$ inches. The nest contained two eggs, white with small brown spots over the entire surface and with heavier blotches around the large end. *Development of young:* On February 6, at 10:30 a.m., two young were in the nest. A shell lay on the ground below. The egg sac was yellow. First day—February 6: No down, skin light flesh color, showing dark on outer wing joints and tail; mouth lining yellow; eyes closed. Third day—February 8: Dark ventral tract well defined; feet black; fear response present. Fifth day—February 10: Eyes open; dorsal tract showing; primary pins $3/16$ inch long. Sixth day—February 11: Ventral tract feathers out of sheath, rufous colored; primaries $\frac{1}{2}$ inch long. (Last record—nest found destroyed on February 12.) *Other notes:* When the nest was found, the male was incubating, but slipped away as soon as I came in sight. On the day of hatching, the female consumed a fecal sac; on the third day the male carried one away. From the first day the young opened their mouths when the nest was jarred. As the parents appeared to move their wings rapidly when they brought food, this may have functioned to vibrate the nest and serve as a mouth opening stimulus. Data on feeding and brooding of the young are summarized in the table.—R. A. JOHNSON, *State U. Teachers College, Oneonta, New York.*

Winter Feeding of the Red-wing (*Agelaius phoeniceus*).—During the winter of 1948–49 a group of about 35 Cowbirds (*Molothrus ater*), Grackles (*Quiscalus quiscula*) and Red-wings were present in Flushing (a suburb of New York City) in the same neighborhood as in previous years.

The birds were frequent visitors to the various feeding stations in the area, but the flock was difficult to locate away from a feeder, for the birds seldom made any sound. Tall sweet gums (*Liquidambar styraciflua*) are common in the region and often the group, especially the Red-wings, were detected working quietly on the seed capsules.

On December 19, 19.5 inches of snow fell on the area. From a window the following morning I watched an immature male Red-wing, probably a member of this flock, feeding in a manner new to me. The bird was on a dead ragweed (*Ambrosia trifida*) in a vacant lot. By forcing his bill along a stalk—he seemed to use the lower mandible most—the stem was split open and something was extracted, which was immediately eaten.

The first stalk I saw the Red-wing work on was split for a distance of about 15 inches. In one instance the bird started on a stalk that apparently held no food, for after splitting it open for only 6 inches he moved to another.

I watched this bird for almost 10 minutes and was impressed at the ease with which the plants were slit open. Only the main, upright stems were attacked, the lateral branches (averaging 0.25 inches in diameter) being ignored. Several English Sparrows (*Passer domesticus*) whose own sustenance was likewise buried under the snow, appeared interested in the Red-wing's manner of feeding, for they followed him about and watched intently from as close as two feet away.

Several days later I examined some of the ragweeds the bird had been feeding on and also some that were untouched. Along the stalks at intervals varying from three to six inches were small, orange-yellow larvae measuring from 0.3 to 0.4 inches