

be moving back and forth on an indefinite and irregular axis, which approximated the length of their territories.

A special effort was made in 1937 to learn the number of unmated males. Twenty-four occupied rigidly fixed territories on the study area. Twenty of these birds were definitely mated. Of the remaining four, one held its territory until at least June 13, another until at least June 19, a third until June 20, and a fourth until June 26. If all four, or even half of these were unmated, the percentage of paired birds would be between 83 and 91. This figure is comparable to the 85 per cent found by Mrs. M. M. Nice for Song Sparrows, but like most American studies, it is higher than the remarkable percentages reported by British investigators: 45 per cent for Nightingales, 60 and 70 per cent for Chiffchaffs, and 80 per cent for English Robins and Willow Warblers. In the case of the American Redstart, an indeterminate number of unmated wandering males also exist. Without banding, these are extremely difficult to detect in the adult plumage. By plotting the position of all birds on a map, one such bird was discovered on June 13. On the same day, a male in the immature plumage spent the entire morning softly singing and gradually working its way along 800 yards at the top of the ridge. This bird was furiously driven off by males and females whenever it passed through their territories. Plumage notes on 48 males on territory showed that only four (8.3 per cent) were in immature plumage. All four were paired and possessed territories of the same size as those of the adult males.

The size of territories was usually about one acre or less, but in one instance was compressed to about half an acre. Approximately twenty-two pairs (or males) each year occupied the 39.93 acres under investigation. Their boundaries were observed in two cases to break down on June 17, when young were being fed in the nest. Interspecies competition or jealousy were seldom in evidence. Redstarts and Ovenbirds were the two most dominant species of the slope and both would sing in the same tree without the slightest evidence of hostility. The former was once seen briefly fighting with a Black and White Warbler. Males were silent in the presence of female Cowbirds, but females reacted with sharp hisses, a rapid snapping of the bill and much spreading of the tail.—JOSEPH J. HICKEY, *c/o Consolidated Edison Co. of N. Y.*, 4 Irving Place, New York City.

**Bobolink rises from ocean surface.**—During the spring of 1939, I observed an extremely unusual manifestation of bird migration on the eastern coast of Florida. Early in the morning of April 28, I arrived on an offshore bar protecting the coast of Riviera, Florida. Settling near the surf, I watched a stream of small, isolated flocks of passerines and Icteridae pass over the surf, coming from almost due east. Their origin was presumably Settlement Point, Great Bahama Island, which is about sixty miles due east of Riviera. None of the flocks was lower than one hundred feet.

Several hours after my arrival and while the flocks were still in passage, I discovered an unfamiliar object floating on the surface of the ocean about fifty feet beyond the surf. Using my eight-power binocular I was amazed to see a male Bobolink (*Dolichonyx oryzivorus*) riding the swells with both its head and tail held at right angles to the surface. Occasionally its back would appear above the water. I had not been looking in this direction for some time and did not witness the initial appearance of the bird. For a few seconds it remained very still, then it began to struggle vigorously for several seconds, finally leaving the water directly without pattering along in coot fashion. After flying very weakly across the beach, it

dropped into an extensive clump of beach reeds about two hundred feet back from the shoreline, where I was unable to locate it.

Knowing of no similar observations, I endeavored to determine whether any reliable reports of this nature were available. I have found none involving land-birds, although Mr. Roger Tory Peterson has written me of an observation made by him which might be placed in the same category. He writes, "On one occasion I saw a Spotted Sandpiper rise from the surface of the water. This bird had, oddly enough, a collision with another sandpiper going in the opposite direction, believe it or not! It dropped below the surface of the water, rose up, rested for a moment and then flew."—VINCENT EVERETT SHAININ, *Columbia University, New York City*.

**Bullock's Oriole in Thibodaux, Louisiana.**—On February 1, 1939, I observed a strange female oriole in a garden in the town of Thibodaux, Louisiana. On February 5, it was found dead. The bird was a female Bullock's Oriole (*Icterus bullocki*) the first of its species to be recorded for Louisiana. Identification was made by Professor George G. Williams of Rice Institute, Houston, Texas, and confirmed by Dr. Harry C. Oberholser of the Biological Survey, Washington, D. C. The specimen is now in the Louisiana Department of Conservation Museum in New Orleans, Louisiana.—AVA R. TABOR, *Thibodaux, Louisiana*.

**Hosts of the Cowbirds.**—A few of the records of the parasitic cowbirds in the oölogical collection of the A. M. N. H. represent additions to the scrupulous lists of known hosts published by Dr. Herbert Friedmann in his monograph, 'The Cowbirds' (1929), and in supplementary articles in the periodical literature. The new or unusual hosts are:

*Mimus l. longicaudatus.*—A nest of this mockingbird found near Lima, Peru, on February 6, 1913, contained two eggs of *Molothrus bonariensis occidentalis* and two of the host. This is an addition to the several species of mockingbirds known to be parasitized by the Shiny Cowbird. The specimens were collected by Mr. R. H. Beck, who at that time was leading the Brewster-Sanford Expedition.

COOPER'S TANAGER, *Piranga rubra cooperi.*—A set of this species taken near Tucson, Arizona, on July 3, 1922, contains two eggs of the Bronzed Cowbird (*Tangavius aeneus aeneus*). This is the second such record for Cooper's Tanager, and the first within the United States. These eggs, now in the P. B. Philipp collection at the A. M. N. H., were collected by Mr. H. H. Kimball.

TEXAS SPARROW, *Arremonops r. rufivirgatus.*—Two eggs of the Red-eyed Cowbird, *Tangavius aeneus involucratus* from the George B. Sennett collection are accompanied by data indicating that they were taken in a nest of this sparrow. The eggs of the host, unfortunately, are not with them, although they may have been sent in separately as there is a set of similar data in the collection. J. B. Bourbois collected these eggs in 1879 at his Lomita Ranch near Hidalgo, Texas. This seems to be the only evidence that the Texas Sparrow is sometimes a victim of the Red-eyed Cowbird.—DEAN AMADON, *American Museum of Natural History, New York City*.

**Alabama Towhee in northeastern Florida.**—Early in the spring of 1938, from March 11 to 28, large numbers of migrating towhees were seen near the mouth of the St. Johns River, in the vicinity of Mayport, Duvall County, Florida. A specimen taken by the writer on March 12 proved to be an adult male White-eyed Towhee (*Pipilo erythrophthalmus alleni*), the common breeding variety of eastern Florida. A second specimen, however, collected on March 18, was found to be an adult male Alabama Towhee (*P. e. canaster*), normally found in the western part of the State