

on Long Island). As these general observations may have a bearing on flock organization I would like to place them on record for what they may contribute to the present considerable interest in that subject.

As the birds approach or fly by, one imitates their whistled calls to attract their attention and induce them to join one's flock of artificial birds. There comes a point when they are about to do so, have circled back or set their wings to 'come in.' As they come closer they are still alert and one had best remain motionless and even refrain from further whistling which may not be too perfect a rendering of the proper call. A false move or a false note can send them off again. When they are actually among the decoys, however (well inside the zone of alarm which they hesitate to pass through), and, as it were consider themselves a part of your flock, it is often remarkable how loath they are to leave.<sup>1</sup> Even when fired into they will sometimes circle back and run the gauntlet a second or even a third time.

However independent a unit a shore-bird may be when alone, when in a flock its condition changes and it becomes for the time being an integral dependent part of that flock.—J. T. NICHOLS, *American Museum of Natural History, New York.*

**Shore-birds Hopping on One Leg.**—I have read with interest the notes by Robert P. Allen (*Auk*, July, 1934) and J. T. Nichols (*Auk*, October, 1934) on the Sandpipers' habit of hopping on one leg. As doubtless most observers of the shore-birds know, some, and perhaps all, of the Plovers have the habit, too. I have supposed it to be a species of play. *Standing* on one leg might be restful—human beings often rest by shifting the weight from both feet to one—but it is hard to see how *hopping* on one leg could rest a bird. It seems to be a sort of follow-my-leader game, one bird of a flock starting it and another and another joining in till half a dozen or more may be hopping about at once. The foot is usually drawn up out of sight, but on one occasion, in company with Mr. A. C. Bent, I saw three or four Semipalmated Sandpipers (*Ereunetes pusillus*) trailing the unused foot. This performance was started by a bird that may have been an actual cripple, but the others were certainly able-bodied for they varied their gait at will, shifting from one leg to two legs and back again with perfect ease.

My notes on this hopping habit include observations of the Knot (*Calidris canutus rufus*), Semipalmated Plover (*Charadrius semipalmatus*), and Black-bellied Plover (*Squatarola squatarola*). In the cases of the Knot and the Black-bellied Plover the birds were hopping in shallow water. Of the Knots six or eight were playing the game together. The Black-bellied Plover, a flock of thirteen at the edge of a shallow fresh-water pool, besides the hopping game played another, which remains unique in my experience, while bathing, one after another flew up about a foot into the air and came splashing down into the water with much fluttering of wings. About half the flock indulged in this pretty performance.—FRANCIS H. ALLEN, *West Roxbury, Mass.*

**Maximum Numbers of Shore-birds in Iowa During the Spring of 1934.**—Due to the scarcity of suitable feeding areas, resulting from the drought, unusual opportunities were presented for the intensive study of concentrated, migrant shore-birds in Iowa during the spring of 1934. This drought condition was general throughout the state but especially affected the water levels on lakes in western and southern Iowa. Besides the primary effect of reducing or eliminating bodies of water, there was the resulting factor of over-pasturing. Large numbers of cattle were

<sup>1</sup> See Bent, 1927, *Bull. U. S. Nat. Mus.*, 142, p. 328; Nichols and Harper, 1916, *Auk*, XXXIII, p. 239.

shipped into Iowa from the Dakotas, where even more severe conditions prevailed. This resulted in the disrupting of many suitable mud-flats as feeding areas for shore-birds.

Enumerated below are observations of the maximum numbers of several species of shore-birds as noted at one time by the writer. The Killdeer, Upland Plover, Spotted and Solitary Sandpipers were noted in moderate numbers, and usually but a few at a time.

*Charadrius semipalmatus*. SEMIPALMATED PLOVER.—25 were seen at Lost Island Lake, Clay County, May 24.

*Pluvialis dominica dominica*. AMERICAN GOLDEN PLOVER.—A flock of 16 was seen on the mud flats of South Twin Lake, Calhoun County, May 7. They were accompanied by one Black-bellied Plover.

*Squatarola squatarola*. BLACK-BELLIED PLOVER.—A flock of six was seen on Goose Lake, one mile east of Jewell in Hamilton County, May 19.

*Arenaria interpes morinella*. RUDDY TURNSTONE.—Small scattered flocks which totaled 14 were seen along the sandy shores of Spirit Lake, Dickinson County, on May 23.

*Capella delicata*. WILSON'S SNIPE.—A group of 27 birds was noted around a very small pond near Lake Mills, Winnebago County, April 20.

*Totanus melanoleucus*. GREATER YELLOW-LEGS.—A total of 15 birds was seen at the Cones Marsh in Louisa County, April 27.

*Totanus flavipes*. LESSER YELLOW-LEGS.—About 300 were seen at the Cones Marsh in Louisa County, April 27.

*Pisobia melanotos*. PECTORAL SANDPIPER.—At least 125 were seen at Little Wall Lake, Hamilton County, May 19.

*Pisobia fuscicollis*. WHITE-RUMPED SANDPIPER.—Flocks totaling about 300 were noted at Spirit Lake, Dickinson County, May 23.

*Pisobia bairdi*. BAIRD'S SANDPIPER.—Three were seen at a small pond south of Le Mars, Plymouth County, May 24. This is in no way a true index as to the comparative abundance of this species as a spring migrant through Iowa.

*Pisobia minutilla*. LEAST SANDPIPER.—About 100 were seen at Little Wall Lake, Hamilton County, May 19.

*Pelidna alpina sakhalina*. RED-BACKED SANDPIPER.—At least 600 were seen along the sandy shores of Spirit Lake, Dickinson County, May 23.

*Micropalama himantopus*. STILT SANDPIPER.—A flock of 47 was found feeding in the shallow, muddy water of Round Lake, Clay County, May 24.

*Ereunetes pusillus*. SEMIPALMATED SANDPIPER.—1,800 were estimated to be present along the shores of Spirit Lake, Dickinson County, May 22.

*Limosa fedoa*. MARBLED GODWIT.—A single bird was seen at Brenton's Slough, twelve miles northwest of Des Moines, Polk County, May 13, and another was noted at Lost Island Lake, Clay County, May 24.

*Limosa haemastica*. HUDSONIAN GODWIT.—A flock of 21 was seen along the west side of Spirit Lake, Dickinson County, May 23.

*Crocethia alba*. SANDERLING.—Five were seen at Spirit Lake, Dickinson County, May 22.

*Steganopus tricolor*. WILSON'S PHALAROPE.—A group of ten was seen near a pool north of Spencer, Clay County, May 6.

*Lobipes lobatus*. NORTHERN PHALAROPE.—A flock of 20 was seen at Spirit Lake, Dickinson County, May 22.

The Piping Plover, Woodcock, Western Willet, Dowitcher, and Avocet, while not

observed by the writer, were noted by other observers in Iowa during the 1934 spring migration.—PHILIP A. DUMONT, *Des Moines, Iowa*.

**The Lesser Black-backed Gull in New Jersey.**—On September 9, 1934, Mr. C. A. Urner and the writer saw a Gull at Beach Haven, Ocean Co., N. J., which we feel certain was a Lesser Black-backed Gull (*Larus fuscus fuscus*). We found a flock of about 25 Gulls standing on the ocean beach at the inlet just south of Beach Haven. The birds were all Herring Gulls with the exception of two.

One of these was an adult Great Black-backed Gull. The other bird on first glance appeared to be the same but as it stood in the midst of the Herring Gulls we noticed that it did not exceed them in size and was considerably smaller than the Great Black-backed Gull which was standing about twenty feet away. Fortunately we recalled that there was a difference in the color of the feet and legs in the Lesser Black-backed Gull and we concentrated our attention on these parts. The legs were seen to be yellow instead of dull pinkish as were the legs of the Herring Gulls and the Great Black-backed Gull. When we first saw the bird it was standing between us and the rising sun. In order to make sure that the light conditions were not responsible for the apparent differences in leg color we circled to get the sun at our backs. We found that the difference in color was striking under any condition of light.

Careful comparison of the size of the bird with the Herring Gulls showed that it might be slightly larger than some of them but it was slightly smaller than others. The color of the back appeared to be the same as that of the Great Black-backed Gull. This would indicate that the bird belonged to the northern race known as *Larus fuscus fuscus* and not to the western race, more frequently found in the British Isles, which has a lighter mantle. We had the bird under observation, using 7 and 8 power binoculars, for about half an hour under excellent light conditions at a distance of about 75 yards.

The circumstances, which made possible direct size and color comparisons with the Herring and Great Black-backed Gulls, make this sight record, for a bird which has apparently never before been reported from the United States, worthy of consideration.—JAMES L. EDWARDS, *Montclair, N. J.*

**Probable Occurrence of Little Gull in Massachusetts.**—On June 7, 1934, the writers made a short afternoon trip to Nahant, Essex County, in search of late shore-birds. While driving down the causeway, we stopped to look over Lynn Harbor with our glasses, and saw a flock of ten Bonaparte's Gulls, alternately resting on the water and restlessly flying up for a short distance. With them was a slightly smaller bird, which in flight was instantly picked out by the dark under surface of the wings. A brief moment's observation was sufficient to check the fact that it was light gray above and white below, obviously a Gull, not a Tern, and we knew we were looking at a Little Gull (*Larus minutus*) of Europe. At first the flock was some distance off, and when the birds settled they almost disappeared. They gradually came nearer shore, however, and after the third restless move, the Little Gull was picked out on the water by its smaller size. On the wing the smaller size was even more obvious, and the dark under surface of the wing was easily visible and, of course, absolutely diagnostic. The bird was still in winter plumage, with dusky about eyes, ears and back of head, and as there was a broad tail band and some black and dusky near the tip of the wing, it was undoubtedly passing from the first winter to the second year non-nuptial plumage.

Unfortunately the bird could not be collected, as Lynn Harbor is sanctuary. In