

fullest extent and the fish were caught with little difficulty without diving. At this stage I tried feeding cut up pieces of larger fish as my supply of small fish was not inexhaustible. This, however, proved unsuccessful. The cut fish was apparently not recognized as food.

The Grebe continued in apparent good health with the exception of its lame leg up until May 4, when I noticed that its plumage had suddenly lost its ability to shed water. The bird again looked like a drowned rat as it had when first put into the tank. This time however, it did not avail itself of the raft. Although it continued to eat well that day, on the next morning it was found floating on the water dead.—JOHN W. ALDRICH, *Buffalo Museum of Science*.

Red-throated Loon in Northern Illinois.—The Red-throated Loon (*Gavia stellata*) appears to be a casual visitor within the state of Illinois. Nelson recorded the bird as a common winter visitor on Lake Michigan in 1876, yet, at present, there are few skins of this bird obtained within the state. I have been able to discover only three occasions on which specimens have been taken, namely: February 15, 1870, three birds; February 13, 1885 and April 18, 1908.

During a snowstorm on April 14, 1928, I was collecting along the lake at Beach, Lake County and was surprised to discover a Loon of this species in the canal which empties into Lake Michigan. The bird, a male in winter plumage, was collected.—JAMES STEVENSON, *Los Angeles, California*.

Auk Flights at Sea.—While I was crossing from England to America last winter on the *Leviathan*, flights of Auks were observed on two successive days and it may be of interest to put them on record. On February 25, I came on deck at 8:40 in the morning and walking forward to starboard saw two small flocks of Razor-billed Auks (*Alca torda*) cross the bow and, flying in more or less the direction of the ship's course, they slowly moved away on the starboard beam. Crossing to port, I saw at once that a general movement of some sort was in progress and this continued for more than half an hour. There is no way to tell how long it had been under way when first noticed.

Birds—all of them Razor-bills—were passing continuously, flying steadily close to the sea, and all in the same direction. They were mostly in flocks of from ten to sixty individuals which had a definitely typical arrangement with about one-third of the birds closely grouped in front and the rest following more and more widely separated until a straggler or two brought up the rear, but there were also twos and threes and at times large areas over which irregularly scattered individuals were moving. Occasionally larger flocks were formed but these soon divided to make two or more of the usual smaller ones for which an average of thirty birds might be fairly accurate. The flocks, however, had little permanence as such and seemed only temporary points of concentration in the moving mass.

Any estimate of total numbers is impossible as the beginning of the flight was not observed, but after counting the birds in a few of the smaller flocks it was possible at a glance to estimate the size of others with fair accuracy and thus gain an idea of the number of birds in sight at one time. By this method the highest count, without using field glasses, was 380 and the lowest 100. With glasses other flocks further away were visible but there was a definite width of front to the movement, for beyond a fixed distance at which the moving groups could still be clearly seen there were no more birds. In all, between 8:40 and 9:15 in the morning, 3,000 individuals at the very least must have passed the ship.

The change to summer plumage was taking place at the time. Many birds showed light, though hardly white, on the sides of the head. Others had the full black hood of the breeding plumage and large numbers fell between these two extremes.

Calculating as well as I can from the ship's announced positions at noon each day, the observation began at 42° 58' N., 49° 56' W. and ended at 42° 57' N., 50° 14' W., or just at the southern end of the Great Bank of Newfoundland where it narrows to a point known as the Tail of the Bank, about 245 miles southeast-by-south of Cape Race.

The birds overtook the ship from the port quarter and crossed the bow to starboard. It is difficult to form any accurate idea as to the direction of the movement. The ship's course was 267°,¹ that is 3° south of West, at the time and the direction of flight made an angle of between 20° and 30° with the course. The birds would be flying then between 287° and 297°, that is between 17° and 27° north of west, or in the general direction of Cape Breton Island. This angle between the direction of the birds' flight and the ship's course was estimated only from memory and several weeks after the event so that too much reliance can not be placed in its accuracy. In the notes written at the time the direction of flight is put down as "something like WNW." Expressed in degrees this is 292° 30' which agrees with the estimate above. This notation was made hurriedly in the field, however, without thought of angles, or other effort to secure accuracy. In fact the ship's course was noted as "perhaps SW by W," an error of over 30°, so this guess at the direction taken by the birds must also be accepted with caution. Still I believe one is justified in stating that the birds were flying in the general direction of Cabot Strait and the adjacent coasts forming the southern entrance to the Gulf of Saint Lawrence, 500 miles away northwest-by-west.

The speed at which the birds were flying seemed perhaps one and a quarter to one and a half times that of the ship. They came from astern and passed on ahead regularly and without signs of particular effort. The weather had undergone no marked change since the preceding day

¹ A ship's course is designated by the angle which it makes with true North. This angle can be anything from 0° to 360° and is measured from North through East, South and West back to North. East is thus 90°, South 180°, Southwest 225°, West 270°, and so on.

so the average speed of the ship from noon to noon, 22.84 knots, may be taken as accurate enough for this calculation. On these assumptions the birds were flying between 28.5 and 34 miles an hour, these figures referring of course to nautical miles of 6,080 feet. There was a fresh southwest wind blowing at the time so the birds' speed through the air was greater than the figures given, probably more like 40 miles an hour.

The next day, February 26, soon after noon and not far from 41° 13' N., 65° 20' W. (137 miles south of Cape Sable), there took place a flight of Dovekies (*Alle alle*), but on a much smaller scale than that of the Razorbills on the previous day. First came a flock of fifteen flying almost parallel to the ship's course and 200 yards to port; then eight or ten more flocks and many scattered individuals, perhaps 200 birds in all, flying steadily in one direction. At least one flock managed to cross the ship's bow but others turned away to port. The speed of the birds was little if any faster than that of the ship; a fresh northwest wind must have hindered them somewhat. There were never more than four or five flocks in sight at one time and the last had disappeared within ten minutes after the first was noticed.

During the passage of these Dovekies a certain number of others were flushed from the water by the approaching steamer and they thereupon joined those in flight. This would seem to indicate that large flocks, such as that of the Razorbills described above, may be built up from birds widely scattered in small parties who have successively joined the flight as it passed. In neither of the two cases observed was any withdrawal noticed; in fact the most striking characteristic of both flights, but specially with the Razorbills, was the regular succession of flocks moving steadily in one direction which seemed to express a fixed purpose in every bird to reach with all speed some particular spot off beyond the northwestern horizon.

The question naturally presents itself whether such flights are migratory movements toward shore for the breeding season. In the case of the Razor-billed Auks there might be some ground for this inference, as the direction of their flight was toward a part of the coast where the species nests regularly. In the books of reference at hand nothing is said as to when birds which have wintered at sea arrive off the coast or in the vicinity of their breeding places. Coward,¹ writing of British birds, states, "Early in March or even in February the birds return to the neighborhood of the nesting colony, . . ." If this occurs at the same time on the American coast, the birds observed could well have been definitely on their way toward their nesting places. On the other hand Lowe² refers to "the tendency of the whole Auk tribe to hang together in huge flocks—nomadic flocks, which wander all the winter upon the face of the limitless expanse of the ocean, . . ." Further information is needed to judge whether these Razorbills were migrating or merely wandering.

¹ Coward, T. A. *The Birds of the British Isles and Their Eggs*, Series II, p. 264.

² Lowe, P. R. *Our Common Sea Birds*, p. 249.

The line of flight followed by the Dovekies was not clearly evident as the ship caused many of them to turn aside. In any case they were moving to the west toward the coast of the United States, not in the direction of their breeding grounds in the far North.—THOMAS H. MCKITTRICK, JR., 28 Chelsea Park Gardens, London S. W. 3, England.

Little Gull at Point Pleasant, N. J.¹—On the afternoon of August 11, 1929, in company with Messrs. Richard Herbert, C. A. Urner and L. L. Walsh, I found a large flock of Common Terns on the sand along the Manasquan River at Point Pleasant, N. J.

We noticed that one bird lacked the black on the head and when the flock suddenly arose and circled a few times before settling again, this bird was seen to have black under wing surfaces. We immediately surmized that it was a Little Gull (*Larus minutus*) having learned this character when the Little Gull appeared at Newark Bay in May of this year (see 'Auk,' July 1929, p. 376). We approached as near as we could and observed the bird closely as it stood on the sand. It was smaller than the Terns with a different build, resembling a Bonaparte's Gull. The under parts of the body were white. The head was white with gray spots, presenting a mottled appearance. The bill which was very small, appeared black and the eyes also were apparently black. The feet were very dark and to some of us appeared to have a reddish tinge. As the bird flew the wings were seen to be pale gray above with no white except for a distinct white margin on the posterior edge, which showed both above and below. The rest of the under surface appeared black and, contrasted with the white parts of the body, made a striking field mark.

As we approached nearer the Terns grew nervous and finally took wing leaving the Gull alone. We continued to approach and were within seventy-five feet of it when it arose and flew to another point.—JAMES L. EDWARDS, 27 Stanford Place, Montclair, N. J.

Golden-eye Nesting on the Ground.—In 'The Auk' for October, 1928, p. 498, I recorded finding the nest of a Golden-eye Duck on the ground under an old tree top. Correspondence on this matter with Mr. J. Hooper Bowles led to some doubt as to whether the nest really was that of a Golden-eye. When I visited the spot in June last I succeeded in finding some of the fragments of the egg shells which I sent to Mr. Bowles. The high water of the spring freshet had evidently covered the nesting place and how much change it had wrought on the egg shells I do not know.

Mr. Bowles writes me as follows: "I took the eggshells down to our museum where my collection is kept and compared them carefully with the eggs of every species to which they might possibly belong. They compare perfectly with eggs of the Red-breasted Merganser, being only slightly less buffy, which might easily be caused by exposure to the elements. They do not have the gloss of the Harlequin, which I doubt if exposure

¹Published by the Dwight Memorial Fund.