

Mueller (pers. comm.) observed aerial captures of many House Sparrows by a nesting pair of Sparrow Hawks in downtown Milwaukee.

Appreciation is extended to Frank L. Fish who assisted in banding operations and observations, and to Dr. John Phillips and Kenneth Niven who read the manuscript and suggested improvements.—VALERIE M. FREER, *Biology Department, Sullivan County Community College, Loch Sheldrake, New York 12759, 6 August 1972.*

First specimen of Laughing Gull for Illinois.—Although there are many sight records of the Laughing Gull (*Larus atricilla*) for Illinois, there has never been a specimen taken previously. The American Ornithologists' Union's Check-list of North American Birds (1957) does not list the species as occurring in Illinois and "A Distributional Check List of the Birds of Illinois" (Smith and Parmalee, 1955) indicates that there is no specimen—only sight records. On 26 May 1971, I observed a Laughing Gull near the north end of Lake Springfield, Sangamon County, Illinois. On the following day (27 May) I collected the bird just north of the dam at Lake Springfield (No. 604789, ISM Coll., Springfield). The gull was a male in breeding plumage, the testes measuring, right, 12 mm \times 7 mm and left, 15 mm \times 7 mm. The gizzard contained one small fish.

There are nineteen sight records from northern Illinois, 14 fall and five spring records. There are three other records from downstate Illinois: Alton Dam, Madison County, 30 May 1955, by Sally Vasse (Anderson and Bauer, *A Guide to Finding Birds in the St. Louis Area*, 1968:35); along the Mississippi River near Nauvoo, Hancock County, 12 June 1971, by James Funk, four adults and one immature (Kleen and Bush, *Amer. Birds*, 25:864, 1971); and Lake Springfield, Sangamon County, 30 April and 1 May 1972, by myself.

In light of these sight records and the specimen from Springfield, the Laughing Gull should be considered a rare migrant in Illinois.—H. DAVID BOHLEN, *Illinois State Museum, Springfield, Illinois 62706, 17 August 1972.*

Common, Arctic, Roseate, and Sandwich Terns carrying multiple fish.—It has been well documented that the Fairy Tern (*Gygis alba*) carries more than one fish at a time in its bill. Howell (*Natl. Geogr. Mag.* 140:417, 1971) reports a Fairy Tern carrying as many as 15 small fish and a Fairy Tern carrying a number of fish is pictured by Walker (*Natl. Geogr. Mag.* 90:807-814, 1946).

In 1969 Dunn observed Common Terns (*Sterna hirundo*), Arctic Terns (*S. paradisaea*), Roseate Terns (*S. dougallii*), and Sandwich Terns (*S. sandvicensis*), bringing in more than one fish at a time to the Coquet Island Colony in Northumberland, England.

In 1971 observers on Great Gull Island, New York, noted both Common and Roseate Terns bringing in multiple fish. Having found nothing in the literature on this behavior for the above species we felt it would be worthwhile to combine our observations in a note.

Dunn's sightings of fish carried by all four species during 10 days in July are given in Table 1. In all but two cases the birds carrying more than one fish brought in two-inch sand-eels (*Anmodytes marinus*). The exceptions were a Common Tern carrying two two-inch sprats (*Clupea sprattus*) and in another case an Arctic Tern carrying two three-inch sprats.

Most of the Great Gull Island observations were made by a team monitoring fish brought to two young Common Terns between 17 June and 30 July, and fish brought to two young Roseate Terns between 30 June and 14 August. Observers each took two-

TABLE 1
NUMBER OF TIMES DIFFERENT TERN SPECIES CARRY 1, 2, 3, 4, AND 5 FISH
COQUET ISLAND

Frequency of sightings for each species	Numbers of fish carried					Total sightings	Percent with multiple fish
	1	2	3	4	5		
Common	1,735	15	6	6	3	1,765	1.70
Arctic	516	5	4	0	0	525	1.71
Roseate	261	2	1	1	0	265	1.51
Sandwich	446	6	3	1	0	456	2.19
Totals and Mean	2,958	28	14	8	3	3,011	1.76

(Note: no bird was ever seen to carry more than 5 fish.)

hour watches so as to cover the period from 05:00 EDST to 21:00 EDST daily. Additional notes on Common Terns carrying multiple fish were made by the senior author 15-30 August.

During the team's 59 days of observation terns were seen carrying more than one fish per trip only during the last 13 days of the Roseate watch, 2-14 August. The Roseate young were in a section where a number of Roseate Terns nested and most of the birds seen in the area carrying multiple fish were Roseates. These sightings are shown in Table 2. Thirteen Roseate Terns carried two fish; nine carried three; five, four; and one, nine fish.

Of a total of 28 cases of Roseate Terns carrying multiple fish during the 13-day period 18 cases were noted 12-13 August between 18:26 and 19:30 EDST. All fish carried by the Roseates during the two-day period were small menhaden (*Brevoortia tyrannus*). The fish varied in size from less than an inch to about an inch in length. The terns usually held the fish in their bills with most of the heads on the same side, as can be seen in Fig. 1.

As one of the parent Roseate Terns landed carrying several fish, the young usually

TABLE 2
NUMBERS OF FISH CARRIED PER TRIP BY ROSEATE TERNS IN AUGUST
GREAT GULL ISLAND

Numbers of fish carried	Date in August					
	2	4	10	12	13	14
9					1	
8						
7						
6						
5						
4			1		3	1
3	1	2		3	2	1
2	1	1	1	6	3	1



FIG. 1. Adult Roseate Tern carrying four fish for its young. Photograph taken by A. Poole.

responded in one of two ways. Either, the bird receiving the fish would walk to the parent and take one fish at a time from its bill, or it would dash toward the parent, appearing to knock the bill of the parent with its bill, as it attempted to take the fish. The parent then dropped the fish and the young picked them up one at a time and ate them.

In August a few observations were made of Common Terns carrying multiple fish landing in the colony. Two Common Terns were seen each carrying two mackerel, (*Scomber scombrus*) on 12 August, a Common Tern was noted holding two unidentified fish 13 August, and a Common Tern holding two fish, both about three inches long, landed in the dusk gatherings of terns on the island 18, 19 and 30 August. It is probable that if observations had been made at the nest of a Common Tern in August, as well as at a Roseate nest, more cases of the former carrying multiple fish could have been collected.

Of the instances of terns carrying more than one fish at a time to the Coquet Island Colony, 40 percent were made on two of the 10 days of observation. On Great Gull Island 64 percent of the cases of Roseate Terns carrying multiple fish occurred during two days of the 13 day period during the watch that the behavior was noted. Observations at both colonies suggest that, bringing in multiple fish is an exceptional, opportunistic behavior which occurs when small fish are present at the surface of the water in large numbers.

The question arises as to how the terns pick up a number of fish. Dunn, in three years of studying fishing success in terns, has only once seen a bird dive with a fish already in its bill. This was a Sandwich Tern in Sierra Leone, January 1970. The regular arrangement of fish in the bills of birds noted on Great Gull Island suggests that the terns may pick them up rapidly from a school of fish at the surface when the fish are all heading in the same direction. Whether this is done by rapid diving or rapid dipping, or some other way remains to be seen.

We would like to thank Grace Donaldson, Lauren LeCroy, and Roger Pasquier, all of whom noted multiple fish, as well as others who participated in the watch, making complete coverage possible at the nests on Great Gull Island. We would also like to thank Lavett Smith for identifying fish collected on Great Gull Island, and the Department of Photography at The American Museum of Natural History, for reproducing the photograph.—HELEN HAYS, *Great Gull Island Project, The American Museum of Natural History, Central Park West at 79th Street, New York, New York 10024*, EUAN DUNN, *Department of Zoology, Durham University, South Road, Durham, England, (Present address: Department of Zoology, Edward Grey Institute of Field Ornithology, South Parks Road, Oxford, England.)* and ALAN POOLE, *Bellwood Farm, Geneva, New York 14456, 31 July 1972.*

Encrusted wings causing flightlessness in young terns.—While banding young Common Terns (*Sterna hirundo*) at West End Beach, Jones Beach State Park, New York, as part of a study of mortality, I have encountered several abnormalities which render the birds flightless. The commonest abnormality in 1969 and 1970 was fracture of the humerus apparently due to collisions with automobiles. The West End Beach colony lies on both sides of a U-shaped road, and auto traffic is heavy. Normal terns become capable of flight at 4–5 weeks of age, and at this age they congregate on open surfaces including the road, and many are killed or crippled by cars (Gochfeld, Newsletter of Linnaean Society of N.Y., 19(9):1–3, 1966). Flightlessness due to premature feather-loss (Gochfeld, Kingbird, 21:206–211, 1971; Hays and Risebrough, Auk, 89:19–35, 1972) first appeared at West End Beach and also at Gull Island in 1969. In 1970 and 1971 about one percent of chicks hatched at West End suffered premature feather-loss.

A third cause of flightlessness, feather encrustation, was observed first in 1969. Of about 1,600 Common Tern chicks banded that season five were found with several primaries of one wing matted and damaged. In late July I captured the first of these, a banded chick known to be at least 39 days old. It flapped vigorously but could not fly. Close examination revealed that the primaries of the right wing were encrusted with a white cement-like substance and were badly frayed. The shafts were denuded of barbs in some places. The substance appeared to be dried avian excrement which I was unable to remove with a knife. Although the material was not water soluble a forceful jet of water removed some of it, but caused further damage to the primaries. I released the bird. I found the bird on several subsequent visits and damage to the feathers progressed, while those on the other wing appeared normal. The other four birds were first found in August, after most normal young and adults had left the colony. Parents of flightless chicks attended them at least until 1 September, but on 15 September the adults were gone and I found remains of two of these chicks. One case of severely encrusted primaries was seen in 1970. In 1971 I found a bird estimated to be more than 5 weeks old which was unable to fly due to mild encrusting of the three outer left primaries. The bird was kept in captivity and after 6 days normal feather growth had progressed sufficiently to allow it to fly.