

Murphy ('Oceanic Birds of South America,' 1: 60, 1936), commenting at length on hydrology in relation to birds, observes: "Water temperature, rather than air temperature, may be said to govern the distribution of sea birds. The control is rarely a direct one between the warmth or coolness of the water and the sensory system of the bird. . . . In most instances . . . the control is bound up rather with a long ecological sequence—with a ladder of phenomena beginning with sunlight and photosynthesis and ending in the nature and quantity of organisms upon which birds may feed."

Observations by several ornithologists on the occurrence of *Diomedea exulans* in these same waters (but without pertinent meteorological and hydrological data) have appeared in 'The Ibis.' Saunders (*l.c.*, 1866, p. 124) notes that "albatrosses range further north in the Eastern than in the Western Atlantic." Osmaston (*ibid.*, 1931, p. 98), from a north-bound boat at the end of the first week of October, observed that the albatrosses disappeared somewhere between Lat. 17° 12' S. and Lat. 12° S. (*cf.* Lat. 15° 0' S., *supra*, from a north-bound boat). Whistler (*ibid.*, p. 342), from a south-bound vessel, first met with it on the 18th of May, somewhere between Lat. 20° S. and Lat. 22° S. Ticehurst (*ibid.*, p. 344), on a south-bound ship, first saw it on the 19th of August, in Lat. 20° S. Finally, Moreau (*ibid.*, p. 781), also travelling southward, first recorded it early in October, in Lat. 20° S.

Lat. 20° S. would thus appear to be the normal limit for the species in the Benguela Current, and voyagers on *south-bound* boats need not expect to meet with it until an individual by chance sights the ship which has entered its domain. But a *north-bound* boat will induce following birds to travel north at least as far as whatever position is reached by the ship at the nightfall next after passing that limit (*cf.* Sperling, *Ibis*, 1872, p. 76).—H. G. DEIGNAN, *U. S. National Museum, Washington, D. C.* (Published by permission of the Secretary of the Smithsonian Institution.)

White Pelican in Kentucky.—While studying shorebirds on the Falls of the Ohio River at Louisville, on September 5, 1938, I saw two White Pelicans (*Pelecanus erythrorhynchos*) flying downstream and almost directly overhead. As far as I have been able to ascertain this is the first record of this species in the Louisville area since the time of Audubon. While Miss Mabel Slack and I watched the majestic birds alternately flap their wings and soar in unison, they circled, apparently looking for a place in which to alight, and then descended behind a dike. We ran to the barrier, crept cautiously up the wall and from over the top saw them not a hundred feet from us. They were standing at the water's edge in company with a single American Egret (*Casmerodius albus egretta*) which had joined them soon after they had alighted. Seven-power and eight-power binoculars were used to observe the birds. Approximately twenty minutes elapsed from the time the pelicans were first seen until they became frightened and took wing. Instead of continuing their course downstream they headed up the river, then turned south and flew directly over the city of Louisville.—DOROTHY MADDEN HOBSON, *Louisville, Kentucky.*

Man-o'-war-birds prey on Eastern Sooty Terns.—J. B. Watson (Papers from Tortugas Lab. Carnegie Inst. Washington, 2: no. 103, p. 212, 1908) could find no evidence that Man-o'-war-birds (*Fregata magnificens rothschildi*) preyed upon immature Eastern Sooty Terns (*Sterna fuscata fuscata*) at the Dry Tortugas, Florida, in 1907. Paul Bartsch (Ann. Rept. Smithsonian Inst. for 1917, p. 469-500, 1919) mentioned active predation and others have seen it occur since. The writer visited Fort Jefferson National Monument at the Dry Tortugas several times during the spring and summer of 1938 and has seen Man-o'-war-birds capture Sooty Tern chicks upon numerous occasions.

At the time Watson made his studies, the Eastern Sooty Terns and Noddies (*Anous stolidus stolidus*) used Bird Key exclusively. It was then a small island well covered with bay cedars. When Bartsch was at the Tortugas, the terns still nested on Bird Key, but a hurricane had changed the vegetation and there were fewer bay cedars and more open areas. At the present time, the birds nest in colonies on the eastern portion of Garden Key and the northern and western parts of Bush Key. Bird Key has washed away.

Experiments by the writer with captured Man-o'-war-birds showed that the species is unable to fly among bushes. Individuals placed on the ground or released just a little above the ground between bay-cedar bushes were unable to take to the air unless there was at least an eight-foot clearance (their wing spread is seven feet) and often not even then unless the wind was blowing strongly in their faces. So, although Watson observed the big birds soaring low over the tern colonies, the immature Sooty Terns were probably protected by the bay cedars which grew on Bird Key at the time.

During the 1938 nesting season, there were estimated to be about 27,500 adult Eastern Sooty Terns on Garden Key and 36,570 on Bush Key (Beard, Fla. Naturalist, Oct. 1938). From twenty to sixty Man-o'-war-birds regularly soared over a corner of old Fort Jefferson on Garden Key where the updraft of air from prevailing southeasterly winds was deflected from the walls of the fort. Soon after sunrise in the mornings when the Man-o'-war-birds moved from their roost on Bush Key to position over the corner of the fort and in the evenings from six to seven o'clock before returning to the roost, the birds preyed upon Sooty Tern chicks.

A Man-o'-war-bird would swing away from the soaring group and gradually glide lower over the tern colonies on either Garden or Bush Keys, turning its head from one side to the other when near the ground. This reconnaissance flight took from five to fifteen minutes. About once out of ten times, the bird would return to position over the fort without taking any young terns. Usually, however, the Man-o'-war-bird would begin flapping its wings, break into a short glide, pick up an immature Sooty Tern in its beak without breaking the forward motion, and flap rapidly away. One or more Man-o'-war-birds would pursue the one carrying the tern chick. It often happened that, after some beautiful aerial acrobatics, the little tern would be released and another Man-o'-war-bird would scoop it out of the air before it hit the water. At one time, an unfortunate chick changed from one bird to another four times before being swallowed. After eating an immature Sooty Tern, the Man-o'-war-bird always swung down over the water and drank while in flight.

It is not possible to state exactly how long the immature Sooty Terns are vulnerable to attack because they do not hatch out at the same time in the colonies. However, it is believed that they are safe for the first few days after hatching when they lie flat in nesting depressions and after they are about a month old. Predation was noted only in open areas and not among bay cedars. The writer saw eighteen Sooty chicks taken in one evening, but workers at Fort Jefferson reported that the number was sometimes as high as thirty-three and forty. There is no evidence that Man-o'-war-birds will take Eastern Sooty Tern eggs or young Noddies. The Noddies nest in bushes, high grass, deep sea purslane, or other less exposed places and cannot be reached by the Man-o'-war-birds. It is also to be noted that the Noddy will not desert its young as quickly as does the Sooty Tern.

Observations were made of the colonial behavior of Sooty Terns when Man-o'-war-birds were preying upon the young. It was found that the immature Sooty Terns seemed totally oblivious to the large birds swinging over their heads. The Sooty

chicks were capable of moving from nesting territory and most of them spent the greater part of the day under the shade of bushes as much as fifty feet from their nests. They came out in the evenings when the heat of the sun was diminishing and stayed until it became hot again in the mornings. So, they were exposed in the open when the Man-o'-war-birds hunted them. Adult Eastern Sooty Terns became excited upon the approach of a Man-o'-war-bird and sometimes flew after it when a chick had been picked up; but at no time were they seen actually to attack the intruder. One Noddy was seen striking a Man-o'-war-bird on the back as it flew low near the Noddy's nest. The mate, however, remained on the nest protecting its young. Adult Sooty Terns resumed normal behavior less than a minute after a chick was taken. Even the parents of a captured bird alighted in their nesting territory after a few minutes and acted in a normal manner.

The writer has never seen a Man-o'-war-bird attack an adult Sooty or Noddy and force it to disgorge while on the wing.—DANIEL B. BEARD, *National Park Service, Washington, D. C.*

Reddish Egret nesting near Tavernier, Florida.—On April 17, 1938, I discovered the nest of a Reddish Egret (*Dichromanassa rufescens*) near Tavernier, Florida, in the Florida Keys district. The nest was located about six feet above the water, in a clump of red mangroves on a small key or island approximately eight miles west of Tavernier. No nests of other birds were observed on the little key which was only about two hundred feet across. The flat nest, about fourteen inches in diameter, composed principally of sticks, contained two young and one egg. One adult remained nearby during the period of observation, sufficiently close for positive identification as a Reddish Egret. The nest was photographed several days later independently by Mr. Alexander Sprunt, Jr., of Charleston, Director of the Southern Sanctuaries Section of the National Association of Audubon Societies. Apparently definite nesting records of Reddish Egrets in Florida have been rare in recent years.—THOMAS C. DESMOND, *94 Broadway, Newburgh, New York.*

Snow Goose at Reading, Pennsylvania.—On November 13, 1938, Conrad Roland and I saw a Snow Goose (probably *Chen hyperborea atlantica*) on Lake Ontelaunee, near Reading, Berks Co., Pennsylvania. The only other anserine birds present were Black Ducks, Mallards, and Green-winged Teal. It mingled with these, taking flight with them when we alarmed the flock. The birds finally retreated to a small estuary, where the goose followed several Black Ducks to a mud flat. When we last saw it, the bird was walking along the shore line, apparently feeding. Recent Pennsylvania records of the Snow Goose are rare. One was seen on November 8, 1934, on the Susquehanna River in Lancaster County (Auk, 52: 436), while four were seen on the Susquehanna at Harrisburg on November 18, 1935 (Auk, 53: 94 and 208). These are the only records I have been able to find for the present decade.—C. BROOKE WORTH, *Dept. of Zoölogy, Swarthmore College, Swarthmore, Pennsylvania.*

Barrow's Golden-eye in New Jersey.—On February 5, 1939, while observing waterfowl on Sandy Hook Bay from the beach-front of Leonardo, Messrs. C. D. Brown, J. L. Edwards and F. P. Wolfarth identified a fine drake Barrow's Golden-eye (*Glaucionetta islandica*). The duck was under observation for nearly twenty minutes and with the aid of a 35-power telescope, all field marks were carefully noted. The differently shaped head, glossed with purplish iridescence, the crescent-shaped face patch, the black sides marked with two plain oblong white patches and a row of white spots on the scapulars and the black curved line down the center of the side