## GENERAL NOTES

Atlantic Fulmar in Worcester, Massachusetts.—Early on the morning of December 29, 1938, Mr. Edward A. Browne, of this city, brought to the Museum of Natural History a live male Atlantic Fulmar (Fulmarus g. glacialis), in the light phase. The bird was mounted and is now on display at the Museum. The identification was subsequently checked by Dr. W. Elmer Ekblaw, who is familiar with the species from association with it in the Arctic. So far as can be discovered at the Museum, this is the first record of the species for Worcester County.—HARRY C. Parker, Worcester Museum of Natural History, Worcester, Massachusetts.

Occurrence of certain birds of the Southern Ocean in the Tropical Atlantic.—During a voyage on the direct route from Cape Town to Dakar (Senegal), observations were made as to the northern limit of range of some of the species of birds which commonly follow ships. After leaving the Cape of Good Hope on September 9, 1937, the usual species were seen behind the ship daily in numbers until the evening of the 12th (noon reckoning: Lat. 21° 02′ S., Long. 6° 32′ E.). On the 13th, there were still four individuals of the Wandering Albatross (Diomedea exulans), all in the white-backed, brown-winged plumage, and at least a dozen each of the White-chinned Petrel (Procellaria aequinoctialis) and the Cape Pigeon (Daption capense). All of these were present until darkness (about 6.30 p.m.) made further observation impossible; at that time the ship was at Lat. 15° 0′ S., Long. 1° 20′ E.

On the 14th, the ship was still followed by three individuals of *Procellaria*, one of which turned away to follow a passing south-bound vessel during the afternoon. The remaining two were present until nightfall, when the ship had reached Lat. 10° 19′ S., Long. 1° 47′ W. The temperature of the air at 6.00 p.m. was 67° F.; the temperature of the sea 70° F.

Since, excepting three stragglers of *Procellaria*, all the southern birds disappeared between the evening of the 13th and the morning of the 14th, the meteorological and hydrological observations covering the period in question are of interest:

	Sept. 13, 1937	Sept. 14, 1937
Density at noon	1025	1025
Temperature of air at noon	65° F.	65° F.
Temperature of sea at 4.00 p. m	64° F.	
Temperature of sea at 8.00 p. m	65° F.	
Temperature of sea at 12.00 p. m	64° F.	
Temperature of sea at 4.00 a. m		67° F.
Temperature of sea at 8.00 a. m		69° F.
Temperature of sea at 12.00 m		70° F.

The presence of these birds in low latitudes in this part of the ocean may be explained by the southern winter and the influence of the cold Benguela Current, a stream deflected by the African continental mass from the eastward drift of the Southern Ocean. In the neighborhood where the birds were last seen, the temperature of the water is affected by the warm Guinea Current, which sets southward into the Gulf of Guinea from the north. The abrupt upward change in temperature during the night of September 13–14 is a result of leaving the sphere of influence of one current for that of the other.

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.