

GENERAL NOTES.

Behavior of the Yellow-billed Tropic-bird.—On June 8, 1935, standing on the northern cliffs of St. Georges Island, Bermuda, where the Yellow-billed Tropic-bird (*Leptophaethon lepturus calesbyi*) breeds, I observed a flight antic of this species which is, so far as I can discover, unrecorded in the literature of any of the Tropic birds. My notes regarding the maneuver, taken on the spot, are as follows:

"I noticed an unusual flight antic of the birds as they flew over the sea. One bird would rapidly overtake another and, getting into position directly over it in full flight, it would bend its tail down so that the long tail feathers seemed to touch the bird below. The latter bird seemed to try to avoid being touched; therefore I saw this antic attempted many more times than I saw it completely carried out."

A. C. Bent in his 'Life Histories of North American Petrels and Pelicans and Their Allies' gives data which establish the date for the second egg-laying of the Yellow-billed Tropic-bird in Bermuda as "late in June." Therefore the date of my observation (June 8) would be such as to allow any of the following explanations of this flight antic:

1. The antic may be an aerial transfer of food from parent to young of the first breeding. That this is unlikely is attested to by the fact that the birds I saw appeared to be in full adult plumage (unmottled, long tails). Bent states that the fully adult plumage is "probably acquired by the end of the first year," but he is not certain of this. Furthermore the young are reputed to be inexperienced flyers for some time after leaving the nest, whereas the antic I am describing embodies the most peerless technique on the part of these consummate flyers. Lastly, my observations, made through binoculars at close range under ideal conditions of light, failed to detect any food transference.

2. The antic may have been a form of courtship display if a new selection of mates is made preparatory to the second breeding. Of this possibility I have been unable to find confirmation.

3. The antic may have been of a directly sexual nature, preparatory to copulation. I am not suggesting that such copulation would take place in mid-air, but rather that sexual excitement might have been aroused by the antic, copulation taking place later in the accustomed medium of Tropic-birds. I can find no reference to the latter question and, unfortunately, did not observe the birds in the act of copulation.

Whatever the correct interpretation of the antic may be, the observation that the long tail feathers are used for personal contact between the birds throws an interesting light on the evolution of these appendages. Whereas one might heretofore have supposed that they were a direct adaptation to the exigencies of graceful and protracted flight, one must now see at least an additional explanation, namely, one based on the process of sexual selection.—C. BROOKE WORTH, 712 Wynnewood Road, Philadelphia, Pa.

The White Pelican (*Pelecanus erythrorhynchos*) on Lake Mattamuskeet Wild Life Refuge (Hyde County) N. C.—On June 16 the writer's attention was attracted to a large bird soaring above the New Holland Inn in the Lake Mattamuskeet Wild Life Refuge. Focussing 8 x glasses on it the form and colors showed it to be a wandering White Pelican. It stayed above the Refuge for quite a while finally coming down toward the lake and disappearing from view. Pearson, Brimley and Brimley in 'Birds of North Carolina' give only three definite records for the state up to the time that admirable book was published. There are probably others