

FROM FIELD AND STUDY

Fishing Rates in the Black Skimmer.—Davis (Condor, 53, 1951:259) has published interesting data on the "fishing efficiency" of the Black Skimmer (*Rynchops nigra*). This relates to the amount of skimming time necessary to catch a fish. He observed that the rate of catch varies greatly, but he gave only his maximum figure. At the north cayo of Laguna Atascosa in Cameron County, Texas, he found that the Black Skimmers caught one fish per bird per 6.2 minutes of skimming time. While studying the feeding methods of the Black Skimmer in the same area, I obtained further data which demonstrate the variability of rates of catch. "Skimming time," recorded with a stop watch while I observed a bird through binoculars, represents time during which a flying bird had its lower mandible immersed. My field work was made possible through the cooperation of Luther Goldman, manager of the Laguna Atascosa National Wildlife Refuge, and by financial aid from the Mae P. Smith Research Fund of the American Museum of Natural History.

On the south cayo of Laguna Atascosa, where the water was very shallow and muddy, the birds fed either along the edges or tacked back and forth along the body of water. Here, on the morning of July 1, 1956, they caught one small fish per bird per 1.6 minutes of skimming time in the course of 19.2 minutes of skimming. The effective catch (fish swallowed) was close to the same figure because only one of the twelve fish caught during this time was dropped. At mid-afternoon of the same day the rate of catch was one small fish per bird per 4 minutes, based on observations over 28.5 minutes of skimming. None of the fish caught was dropped. Observations were made later along a wider part of the south cayo where the water was a maximum of three inches deep. On the afternoon of July 28, 1956, in 6.9 minutes of skimming, the birds caught fish at a rate of one per bird every 46 seconds (0.8 min.). One of the fish caught was dropped. On the following day the rate of catch averaged one fish per bird per 55 seconds (0.9 min.) in 13.8 minutes of skimming. However, four of the fifteen fish caught were dropped and three were lost to Laughing Gulls, reducing the effective rate of catch to about one-half the original rate.

The third area under observation was a deep rectangular pond, also on the Laguna Atascosa National Wildlife Refuge. Early in the morning, myriads of small fish appeared at the surface around the edges of the pond and formed a dense border two to three feet wide. The fish dispersed soon after sunrise and did not concentrate again in this manner until the following morning. Skimmers fed at this pond throughout the night, but they were especially active and numerous in the early morning, skimming only along the pond borders where the fish had concentrated. Between 6:30 and 7:00 a.m. the rate of catch averaged one fish per bird every 3 seconds (0.05 min.) in the course of 6 minutes of skimming! Of the 115 fish caught about 15 were dropped, producing an effective catch of one fish per bird per 3.6 seconds.

Davis (*ibid.*) stated that the efficiency of the Black Skimmer was comparable to that of diving birds such as the Least Tern (*Sterna albifrons*) and that it was much less than that of the Reddish Egret (*Dichromanassa rufescens*) and of the White Pelican (*Pelecanus erythrorhynchos*). Such comparisons are of doubtful validity, partly because the birds are not necessarily utilizing the same food niche and partly because it is more difficult to define the active feeding period of a heron or pelican than to define that of a skimmer.—RICHARD L. ZUSI, *Department of Zoology, University of Maine, Orono, Maine, February 27, 1959.*

Distributional Records of the Common Goldeneye and the Crissal Thrasher in Southeastern California.—On December 6, 1958, C. Jackson Selsor and the writers observed 11 Common Goldeneyes (*Bucephala clangula*) resting in a group on a small fresh-water reservoir in the heart of Brawley, Imperial County, California. The only previous record for Imperial County that we could find is that of Clary and Clary (Condor, 37, 1935:80) for the Salton Sea. According to Grinnell and Miller (Pac. Coast Avif. No. 27, 1944:85) the habitat of this species is "Typically, salt-water bays and estuaries; prefers open, quiet water of lesser depth."

Although the Crissal Thrasher (*Toxostoma dorsale*) occurs regularly in the low desert regions of southeastern California, it has not been recorded previously from eastern San Diego County. On December 12, 1958, C. Jackson Selsor and the authors observed four of these thrashers on the out-

skirts of Borrego township, well within San Diego County limits. All four were seen at midday, and two of them were viewed from a distance of approximately twenty-five feet. The species has been previously reported from Borrego Valley, as well as at nearby Yaqui Well, by reliable observers, but these sightings have gone unrecorded.—KEN STOTT, JR., and JAMES R. SAMS, *Natural History Museum, Balboa Park, San Diego, California, January 19, 1959.*

Procellaria aequinoctialis on Amazon River in Brazil.—According to Murphy (*Oceanic Birds of South America*, 2, 1936:641-642), the breeding ground of the Shoemaker (*Procellaria aequinoctialis*) is the sub-Antarctic and low Antarctic islands, the Falklands, South Georgia, Crozet, Kerguelen and a number of the sub-Antarctic outliers of New Zealand. Northward it occurs to about 30° south latitude in the open oceans and to ten or fifteen degrees farther on the eastern side of South America; casually it ranges to the neighborhood of Cape Frio, Brazil. Pinto (*Cat. Aves Brasil*, vol. 1, 1938:19) mentions the coast of São Paulo (Iguape) and Bahia.

The ornithological collection of the Museu Goeldi possesses two skins of the Shoemaker. One female was collected by E. Snethlage in the Marajó Islands on August 25, 1921, and one male was collected at Cameté, Rio Tocantins, State of Pará, on September 5, 1937 (no collector's name on the label). These two unexpected records extend the range of this species farther north in the Atlantic Ocean than formerly known.

Those who have travelled the Amazon River by boat to the mouth of the Rio Tocantins know how wide it is and that seldom can one see both banks of the river at the same time. During the rainy season water spouts are common, and in the dry season the northwest winds blow frequently. Small and medium-sized boats cross the mouth of the Rio Tocantins carefully. The natives call the place baia (bay). To me this region looks like a sea. This explains why this oceanic bird could be collected at a locality like Cameté, 250 kilometers from the coast. Another possible explanation is that it was carried to this locality by a hurricane.—FERNANDO C. NOVAES, *Museu Goeldi, Belem, Pará, Brazil, January 15, 1959.*

The Starling in Eastern México.—While Blake (*Birds of Mexico*, 1953) does not list the Starling (*Sturnus vulgaris*) for México, other authorities (*Mexican Check-list*, 1957:219) report it variously for northern Tamaulipas or for northeastern México "since 1939." A review in *Bird-Banding*, 18, 1947:184, of Helmuth Otto Wagner's "*Sturnus vulgaris* L. als Wintergast in Mexico," *Ornithologische Monatsberichte*, 49, 1941:143-144, gives these records. "April, 1935 (circumstances not clear); December 1938, 2 at Anaxhuac, 50 kilometers east of Nuevo Laredo; 24 December 1939, ten at Santa Lucia, between Laredo and Monterrey." A more recently published record is found in the *Newsletter of the Texas Ornithological Society*, December 9, 1953:7. L. Irby Davis and party made an intensive bird count on January 1 and 2, 1953, at Tampico. The compiler, Edgar Kincaid, states, "Starling, 27 (some of these were in the state of Veracruz—apparently a new state record . . .)."

On the return from a vacation trip, on December 1, 1946, Mrs. Coffey and I, with the B. F. McCameys, saw a flock of 500 Starlings south of and within sight of Nuevo Laredo. On December 12, 1948, we saw five in Linares, Nuevo León. In 1956 we looked for the species especially around Tampico and Veracruz, without success. On December 3, 1956, while looking over blackbirds on a pasture in the outskirts of Coatzacoalcos, Veracruz, Mrs. Coffey spotted 15 Starlings. This was much farther south than we had expected to find the species.—BEN B. COFFEY, JR., *Memphis, Tennessee, January 15, 1959.*

Red-necked Grebe in San Diego County, California.—On December 21, 1958, Red-necked Grebes (*Podiceps grisegena*) were observed twice on Glorietta Bay, an inlet on the Coronado shore of San Diego Bay, by James R. Sams of the San Diego Natural History Museum, C. Jackson Selsor, Jordan S. Roux, William McTear, and the writer. At 8 a.m. two specimens were seen swimming together among a mixed concentration of Horned Grebes (*Podiceps auritus*), Eared Grebes (*Podiceps caspicus*), Pied-billed Grebes (*Podilymbus podiceps*), and various species of wintering ducks. At 4 p.m. on the same day, four Red-necked Grebes in a compact group were observed in the same locality.

Grinnell and Miller (*Pac. Coast Avif.* No. 27, 1944:37) give the southernmost known station of the species as Elsinore Lake, Riverside County. However, our observation in addition to previous