

FROM FIELD AND STUDY

Invasion of the Southern California Coast by Elegant Terns.—During July and August of the present year, Miss Agnes Craig of Pasadena was staying at her house at Playa del Rey, which affords a full and unobstructed view of the near-by canals and lagoons, and a portion of the beach and ocean. Early in the afternoon of Friday, July 30, she looked over the area with 8-power binoculars, and saw nothing unusual. Some two hours later, observing a great increase in the size of the flock of gulls and Forster Terns congregated on the exposed tide flat in the main lagoon, she went out to the dunes overlooking the assemblage, and found there a very large flock of Elegant Terns (*Sterna elegans*). She then called Mrs. Josephine Bates, of Pasadena, and myself by telephone, and on the following day we joined her at Playa del Rey, finding the Elegant Terns still there in hundreds. I then telephoned Mr. L. E. Wyman, in hopes that he would go down and confirm our observations. A week passed, however, before he was able to do so.

At the time of their arrival, the color of the bills of most of these Terns was a bright coral red, paling to yellow toward the tips. During the time of their stay the red gradually faded out, leaving the entire bill yellow, bright in tone. The breasts of a great many of the adults were flushed with delicate rose pink, not observable in all lights.

An estimate of the total number of the birds present must be only approximate, as they were often divided into several groups, some of which frequented the adjacent marsh and rested on the flats there, while many came and went between these points and the ocean, where their gleaming white forms beautified the scene day after day. Partial counts were many times made, bearing out the conviction that there was a total of upwards of three hundred birds in the area. A great many were about the Hyperion pier. Bolsa Chica also was visited by small flocks, nine and fifteen being observed there on different dates. The large flock was accompanied by a few young, still being fed. On Friday, August 27, exactly four weeks from the date of their arrival, the majority of the great flock departed as suddenly as they had come; and on the 28th the remainder disappeared, with the exception of two individuals which were seen from time to time about the lagoon and marsh. My last personal record of them was September 17.—FRANCES B. SCHNEIDER, *Los Angeles, California, October 10, 1926.*

Notes on the Courtship of the Rufous Hummingbird.—The towering flight of the Rufous Hummingbird (*Selasphorus rufus*) and its accompanying whining note, is perhaps well known to most ornithologists, but I am not aware of having heard of or seen in print any account of the whole performance. The following notes may therefore be of interest.

In the displays I have witnessed, which have been many, a careful survey of the ground beneath the performer invariably revealed the female sitting motionless on some twig of the low-growing underbrush, and as the aerial acrobat reached the limit of his upward flight she was seen to turn her head slightly and glance admiringly aloft. The male ascended usually with his back towards his mate, then turning, faced her, and with gorget fully expanded descended swiftly until within an inch or two of her, when spreading both wings and tail he checked himself and soared aloft again to repeat the performance, or else settled on some near-by bush. As he so checked his flight the whining note was produced, undoubtedly by the rush of air through the outspread feathers.

On two occasions, in May, 1925, and May, 1926, I witnessed in connection with the above performance what I believe to be the actual mating of the birds. After one or two towering flights by the male, the female rose from her perch and the male immediately closed with her. Then over a distance of some ten or twelve feet, and horizontally, they swung together backwards and forwards through the air, just as one often sees insects so doing. The regular swinging hum of the wings is hard to describe but is just what one might expect. So fast is this swinging flight, and so close was I, not over four to five feet away in one instance, that I was totally unable to see the birds