

thirty Willetts, six White-rumped Sandpipers, and one Baird's Sandpiper.

Returning to the point where I had first seen the Buff-breasted Sandpipers, I saw six birds flying in. The four had returned with two others. They immediately "froze" in a half squatting position. One slowly turned his head, looking up as if expecting an attack from above. Soon they relaxed and while four started to feed in a rather indifferent sort of manner, the other two bathed. This was not a vigorous process as is the habit of most waders. One dipped the rear half of his body by teetering exactly like a Spotted Sandpiper. The other one just wet the under surface of his body by a series of squats. The wings were fluttered without touching the water. Both bathers seemed to fear disarranging their immaculate brown feathers. The birds moved about on the ground in a very deliberate manner, their folded wings extending just beyond their tails. Suddenly one uttered a short throaty "err," "err." Immediately alert, they all took flight, settling on the Brigantine Golf Course, about fifty yards away. Here two of them indulged in the curious performance of stretching one wing straight up over the back. Possibly the bathers were pluming themselves. Scattering they began to feed in the short grass—their backs just showing. Now and then their heads were raised for danger signs. I moved toward them but had taken only a few steps when they flew, darting swiftly inland. As they went, I heard weak twitters again.

From the viewpoint of the field student, this Sandpiper when on the ground could aptly be described as a diminutive Upland Plover brown and buff-colored from the base of his bill to the tips of his toes. In flight, the underwing pattern is quite distinctive. These characteristics are possessed by no other shore bird, I believe.—JULIAN K. POTTER, *Collingswood, N. J.*

Black-necked Stilt (*Himantopus mexicanus*) again in South Carolina.—On August 16, 1928, I secured a specimen of the Black-necked Stilt (*Himantopus mexicanus*) in an old rice field bordering the Cooper River, South Carolina. The bird was a young male.

The Stilt was with a flock of Least Sandpipers (*Pisobia minutilla*) and Semipalmated Sandpipers (*Ereunetes pusillus*) and a few Yellow-legs (*Totanus flavipes*).

So far as I can ascertain, this is the first record for the Stilt in South Carolina in nearly fifty years. Mr. Arthur T. Wayne in his "Birds of South Carolina," p. 43, tells of seeing several pairs of Stilts on Sullivan's Island in May, 1881; judging from their actions, he was sure the birds were breeding.—E. VON S. DINGLE, *Huger, S. C.*

The Possibility of Tularemia in the Ruffed Grouse.—An article on "Tularemia in Birds" occurs in the 'Journal of the American Medical Association' for May 26, 1928. It seems to be a condensation of an

article by R. G. Green and E. M. Wade, of the Minnesota State Board of Health, in 'Proceedings of the Society for Experimental Biology and Medicine,' April, 1928, which I have not seen. In speaking of the occurrence of tularemia in rabbits, they say that the decrease in the number of wild rabbits and of the Ruffed Grouse has occurred simultaneously in Minnesota during the past four years and that cases of tularemia in humans have appeared at the same time. Because of these facts and the discovery of tularemia in the blood of many rabbits, they think that the decrease in the Ruffed Grouse may be due to the same cause. They have demonstrated that the rabbit tick is an important carrier of tularemia and that the parasite is found also in game birds. They have shown that the Ruffed Grouse can be experimentally infected with the Bacterium Tularensis as regularly as the rabbit, and think that the parasite may carry the disease from rabbits to the birds. Although no cases of human tularemia have been reported as the result of cleaning grouse, they think it probable that the grouse may be a source of infection and feel that the indications justify a careful search for tularemia in grouse dying from disease.—J. J. MURRAY, *Lexington, Virginia.*

On *Dendragapus obscurus obscurus.*—The separation of the grouse of the genus *Dendragapus* into two groups has been considered for some time past. The principal feature that separates these two groups is the gular hooting sac, together with the volume of sound that is emitted from it.

In the males of the coastal group the skin of the hooting sacs is specialized and of a deep yellow color, the hooting is powerful and with great carrying power.

In the interior birds of the *richardsoni* type this skin is only slightly specialized and flesh-colored, deepening to purple when in display; the hooting is feeble and barely audible.

The crux of the question lies in the determining features of the type form *obscurus*.

A recent paper on this bird by Mr. M. P. Skinner in the 'Wilson Bulletin' for December, 1927, sheds no light on the subject except that the gular sacs are said to be "orange." If this was the case *obscurus* would become the type of the coastal group; that it is an error is proved by two fresh specimens of *obscurus* with color notes which I have recently received through the kind offices of Mr. J. Stokeley Ligon, of the State Game and Fish Department of New Mexico.

These birds were collected by Mr. Ligon on the mountains near Santa Fe (Sangre del Christo range). Taken on May 7, 1928, the male exhibits the maximum development of the hooting sacs. These are of the *richardsoni* type, purplish flesh color and only slightly carunculated, exactly as in a *richardsoni* male taken a few weeks later at Okanagau, British Columbia.

This negatives the different accounts in which *obscurus* is said to have