

the species to be sure of myself. However, the bird taken on June 1, 1928, and the one seen the next spring would seem to indicate that my winter bird was *bairdi* also.—ALEXANDER SPRUNT, JR., 92 South Battery, Charleston, S. C.

Additional Notes on Winter Shore-birds on the South Carolina Coast.—The writer has for some years been much interested in pursuing a study of the winter shore-birds of the South Carolina coastal area. This study has resulted in several surprising conclusions, some of which have been mentioned in 'The Auk,' notably the establishing of the Knot (*Calidris canutus rufus*) and the Piping Plover (*Charadrius melodus*) as regular winter visitors. These species had been regarded in the past as transients only.

The winter of 1930-31 has corroborated these findings and opened up others. The Piping Plover was found in some numbers about the Savannah River entrance in January of this year (1931). Specimens were taken on the 24th, and Mr. Ivan Tomkins of the U. S. Dredge "Morgan," in whose company the writer was, says that he sees them regularly each winter. He presented the writer with a specimen taken on January 10, 1930. A new discovery was the finding of two Hudsonian Curlews (*Numenius hudsonicus*) on the mud flats about the mouth of the Savannah River. The birds were in excellent condition, feeding freely on the flats and trading back and forth across the Georgia-South Carolina line. This is the first time that they have been recorded in winter in the writer's experience, which covers many years. Mr. Tomkins has not seen them before this winter though he has worked in the Savannah River entrance for about nine years. Mr. A. T. Wayne took a specimen on December 11, 1917.

Another interesting incident was the observance of a Marbled Godwit (*Limosa fedoa*) at the same locality on January 23, 1931. Mr. Tomkins has taken several of these birds in fall and winter but it constituted another winter month for the writer for South Carolina, observations on this species now having occurred in November, January and February.—ALEXANDER SPRUNT, JR., 92 South Battery, Charleston, S. C.

Nesting of the Greater Yellow-legs (*Totanus melanoleucus*) in Alberta.—The Greater Yellow-legs (*Totanus melanoleucus*) has generally been considered a rare migrant in central Alberta, but ornithologists have for years believed it would ultimately be found breeding in the near north, most probably in the partially wooded lake region lying between the Saskatchewan and the Athabaska rivers, north of Edmonton. Much of this area is in the Canadian Life Zone and consists of extensive muskegs, lakes of varying sizes, surrounded by marshes, and great stretches of jack-pine sand-ridges which have been more or less denuded of timber by recent fires. There are, however, scattered sections of good arable land, mostly along the river bottoms, where cultivation is carried on to a considerable extent, and in such places many species of birds, peculiar to the Transition

Zone, spend the summer. Because of the mystery which has long surrounded the nesting of the Greater Yellow-legs, particularly in western Canada, much interest has been displayed by local ornithologists in the attempt to unfold the secret.

In 1919 I spent the latter part of June in the country north of Lac la Biche, a region of muskeg, lakes and jackpine ridges. While skirting one of the lakes a pair of Greater Yellow-legs challenged my right to pass through a piece of marshy ground, and, from their actions, it was evident they had eggs or young in the vicinity. While still a considerable distance from the marsh, the birds evinced great concern at my presence, flying directly overhead and scolding harshly as I approached the guarded ground. During a half hour's search for the nest, the birds rested impatiently on a dead tree close by, all the time calling "kelp"- "kelp"- "kelp." A close inspection of the marsh, however, revealed neither eggs nor young.

In the fall of 1922, while hunting moose and deer in the triangular tract of country formed by the junction of the Pembina and Athabaska rivers, I was struck with the similarity of the region, to that of the Lac la Biche country referred to above. Here were numerous small lakes, many miles of muskegs, and long stretches of jackpine sand-ridges, apparently ideal nesting sites for the Greater Yellow-legs. Working on this assumption it was decided to visit that section, and should the birds be there, endeavor to learn something of their nesting habits.

On May 20, 1929, Dr. Wm. Rowan, Mr. Arthur Twomey and the writer arrived at the little hamlet of Fawcett, on the Northern Alberta Railway, less than a hundred miles north of Edmonton. The following day camp was made close to an old logging trail, seven miles west of Fawcett, and about midway between the Pembina and Athabasca rivers. In the vicinity of the camp were several lakes varying in size from ten to three hundred acres, all more or less surrounded by marsh, muskeg or sand-ridges. At least ten pairs of Greater Yellow-legs, and a few of the Lesser Yellow-legs were noted within two miles of camp, and it was evident they were on their nesting grounds. However, a week's careful search failed to show where, or how they nested, although many arduous hours were spent working over all kinds of country. The birds showed greatest concern while the edges of the marshes were being hunted and at such times strongly resented our presence. Towards the end of the visit the reason for this excitement was explained when downy young were found. It was then and there decided the nesting season was over.

May 9, 1930, found Mr. Arthur Twomey and the writer in camp at a location about three miles further west than that chosen for headquarters the previous year. Observations made during the trip in satisfied us that at least a dozen pairs of the birds were located within two or three miles of the camp, but, strange to say, they showed little or no interest in our presence. Occasionally one or two of the birds were seen high in the air, sometimes performing in wide circles over certain sand-ridge openings,

while others were noted flying from one lake to another, probably changing their feeding places. While the birds carried on their aerial performances, their songs, which might be represented by the syllables "wig-ily"- "wig-ily"- "wig-ily," with the accent always on the first syllable, could be heard at great distances.

On May 10, it rained most of the day and although quite a number of the birds were seen, some in the air performing, and others quietly feeding in the marshes, no clue was elicited as to where they nested. On the 12th a nest of the Lesser Yellow-legs (*Totanus flavipes*) was found on a low swampy piece of ground, an unusual situation for this species which likes the dry ridges for nesting. While walking along the old trail on the 14th a mile east of camp, a Greater Yellow-legs came from the south and circled overhead, apparently excited at our presence. It soon lit on a tall isolated stub, and commenced to scold by rapidly repeating "kelp-kelp-kelp." Shortly afterwards it circled and lit on a shorter stub 150 yards southwest of my position, and nearer to Mr. Twomey, who had taken cover under a small live jackpine. In a few minutes it made off for the lake a half mile south of the opening. I then joined Mr. Twomey and we decided to remain in the vicinity under cover, believing the bird was nesting somewhere on the ridge. It soon returned and lit on a still shorter stub, and apparently in great excitement, rapidly repeated its notes "kelp-kelp-kelp" for several minutes at a time. It then quieted down and after watching in all directions dropped to the ground about fifty feet from the base of the stub. Mr. Twomey and I walked towards each other, to the spot where the bird disappeared, and it quietly flushed at about twenty feet, and went directly to the lake. Only one bird was seen. No difficulty was experienced in finding the nest which was a slight depression in the sandy soil, lightly lined with grass. It contained one egg only. The nest was placed in the center of a large opening on a sand-ridge, which was thickly littered with fallen timber. The elevation was about fifty feet above the surrounding lakes, two of which were within a half mile of the nest. Two small jack-pines 150 feet from the nest were the only live trees in the vicinity. A visit was made to the nest on May 16 when it was found to contain three eggs. On the 17th there were no additional eggs, and as several Crows were that day seen in the vicinity, the set was collected. The ground color of the eggs is deep buff, spotted with light, medium and dark brown spots and blotches, spots are heavier at the larger end. The eggs measure as follows, No. 1, $1\frac{1}{8} \times 1\frac{5}{8}$ inches; No. 2, $1\frac{5}{8} \times 1\frac{1}{2}$ inches; No. 3, $1\frac{3}{8} \times 1\frac{1}{4}$ inches. The bird was first observed coming from the south at 10.15 A. M. and the nest was found at 11.30. During this period the following list of birds were noted, either seen or heard within a mile of the nest, Sandhill Cranes, Loons, Bonaparte's Gulls, Dowitchers, Canada Jays, Ruby-crowned Kinglets, Lincoln's and White-crowned Sparrows.—FRANK L. FARLEY, *Camrose, Alberta.*