BONAPARTE'S GULL NESTING IN NORTHERN ALBERTA.

BY A. D. HENDERSON.

Plate XII.

FOREWORD—When I undertook to compile the life history of Bonaparte's Gull (Larus philadelphia), I was surprised to find that so little had been published regarding its nesting habits. Apparently no one had found its nest since the days of MacFarlane and Kennicott; or, if any one had, the fact had not been published. Authentic eggs are very scarce in collections; a few of MacFarlane's thirty-seven sets have been distributed by the National Museum in exchanges and a few other sets may have found their way into collections unheralded. It seems remarkable that the breeding grounds of such a common and widely distributed bird, should remain undiscovered for fifty or sixty years. I have seen adult birds in the breeding season in the Magdalen Islands, Quebec, near Lake Winnepegosis in Manitoba and near Quill Lake in Saskatchewan, but have never found a nest. North of Prince Albert, beyond the north branch of the Saskatchewan River, I have seen this Gull in just such country as that described below, and it probably breeds all through the muskeg wilderness of northern Canada.

I have been trying for several years to interest Mr. A. D. Henderson of Belvedere, Alberta, in locating the breeding grounds of this species. I was more than pleased to learn that he had discovered them this year, 1925, and was delighted to receive from him a handsome nest and a set of three eggs. He has written up his experience with them and sent me the accompanying paper for publication.—A. C. BENT, *Taunton*, *Mass.*]

IN 1922, I sent some notes on Alberta birds to Mr. A. C. Bent in hope that he might find some of them of sufficient interest to be included in his 'Life Histories of North American Birds.' One of them referred to my having seen Bonaparte's Gull (*Larus philadelphia*) in the vicinity of Belvedere, Alberta, in the breeding season. Mr. Bent suggested to me the desirability of securing definite breeding records of this Gull, as little was known of its breeding range. Accordingly I made it a point to question every trapper, halfbreed and Indian I came in contact with, as to any knowledge they might have of a breeding place of this bird, but results were rather scanty. One halfbreed, however, told me he had once seen three nests of this Gull in spruce trees at a small lake near Athabasca Landing.

The first clue of any real value I obtained from an old Indian, Paul Potteskin, near Fort Assiniboine in June, 1924. On questioning him through an interpreter he at first said he did not know, evidently not recognizing the bird from my description, but on being shown a colored illustration of the bird, he immediately recognized it and said he had seen many nesting in spruce trees at a small lake near the foot of the Swan Hills. There the matter had to rest until the season of 1925.

However, it was not in the wilderness lying between the Athabasca River and the Swan Hills, that I was to see my first nest of Bonaparte's Gull, but, strangely enough, on one of my own farms at Belvedere. On May 22, 1925, I received a note from the wife of the man who rents the farm saying she had found a nest with two eggs of the little Gull I wanted. I lost no time getting to the place and was soon gazing at two eggs of Bonaparte's Gull in a beautiful nest of dead tamarack twigs and beard moss, about nine feet up in a spruce tree at the edge of a small pond in a muskeg of about twenty acres in extent, with a scattering growth of tamarack and spruce trees in it.

The bird left the nest at my approach and swooped at my head with cries of "*Kea-rr*." She then circled around overhead uttering the same cry and alighted on near-by trees and also on the pond. When I left she returned to the nest. There were three eggs in the nest when I returned on the 24th to secure some photographs; but, as I am the merest amateur, as a photographer, taking nothing but snapshots and, as the sun refused to shine, I had to give up the attempt until next day when the views accompanying this article were secured.

On May 29, I started by automobile for the Fort Assiniboine country north of the Athabasca River, late in the afternoon, my wife accompanying me. I had started a team and wagon ahead in the morning with Jean Chalifoux, a halfbreed hunter, who 290

knew the lakes and trails of the country we intended to explore. We overtook Jean at Camp Creek, six miles south of the Athabasca and camped for the night. Next morning we travelled on, crossed the Athabasca, passed Fort Assiniboine, and continued seventeen miles northeast, arriving at a place known as the Klondyke City which was formerly the headquarters of the Indians who lived in the district. There are a few sections of hay meadows and good land here, like an oasis in the surrounding muskegs.

On the north side of the Athabasca valley the character of the country undergoes a complete change from a country of poplar woods dotted with farms, to a wilderness of muskegs and sandhills, the predominating timber being spruce and tamarack in the muskegs and jack-pine on the sandhills. The old Klondyke trail winds through it, following the ridges and good land along the creek bottoms. Occasionally a pack trail or an old survey road branches off into the country on either side. The Klondyke City was as far as we could penetrate with the car and we waited for Jean who arrived in the afternoon.

In the evening at a halfbreed camp I learned among other interesting bird information that Bonaparte's Gull had been seen this spring at some lakes about seventeen miles northeast. There are seventeen lakes lying close together in this section and, as it was considerably nearer than the lake told of by Potteskin, I decided to try that locality first. In the night, however, our horses took the back trail and it was well on in the afternoon before we got started, with one horse packed with our outfit, my wife riding the other and Jean and I on foot. Jean did not know the summer trail, having travelled straight across country through the muskegs on previous trips in the winter and we got tangled up on the flats of Deep Creek, losing much time before we found the trail again on a Jack-pine ridge which we followed several miles to its end at the first lake. It was then 11 P.M. and not a spear of grass in the pines for the horses which we had to tie to trees for the night after which we had supper and turned in.

At daylight we found a slough with good grass for the horses and after breakfast walked around the lake. The trip did not lack interest in species of birds observed, but we found no Gulls. In

the afternoon we took the horses and all went about five miles north to another lake, but here also there was not a Gull to be seen and I was getting rather discouraged. We then left the horses and took to the muskeg, sinking ankle deep at every step and occasionally breaking through the spongy moss into the muck below. It was hard going but we were soon cheered by hearing the call of a Gull beyond the next ridge. Crossing the ridge and entering the next muskeg we soon saw the Gull perched on a tamarac. On our approach it flew at my head calling "Kearr," a few yards more and my wife was the lucky one who spied the nest, probably the first white woman who ever found a nest of Bonaparte's Gull. This nest was about eighteen feet up in a tamarac and contained two eggs which when blown proved to be a complete set, incubated a few days. Walking through the open growth of tamaracks toward another lake about three hundred yards away we found two more nests. One was about twelve feet up in a tamarack and contained one egg shell and another shell lay on the ground beneath. The other nest also in a tamarack about eight feet up contained two egg shells. Though Crows were not at all plentiful, we saw a few in the neighborhood and it is likely they were the culprits. We saw six Gulls here and it is likely the three nests found are all there were. I also noticed some old nests which showed they had bred in the same place in previous years.

The next day, June 2, Jean and I took our lunch and walked several miles to another lake, we saw odd Gulls on the trip, but concluded they were birds from the colony found the previous day. June 3, it rained nearly all day and until noon on the 4th. In the afternoon it cleared and we packed up and returned to the Klondyke City in considerably less time than on our outward trip, having no trouble with the trail.

On June 5, we travelled with the team and wagon to Goose Lake about eighteen miles northwest, but found no Gulls there. Next morning we went on about six miles to Foley's old cabins on Deep Creek. In the afternoon we went about five miles south on an old survey road, through heavy poplar timber, coming out at a lake in the muskeg country again. We immediately saw a Gull alighting on a small pine at the other end of the lake and started to walk along the shore toward it. I then saw another about half a mile away sitting on a dead snag in the muskeg and placing my glasses on it, saw a white object in a spruce about thirty-five yards to one side which I took to be a Gull on her nest and so it proved to be when we reached the spot. This nest contained three eggs. When some distance away I saw another Gull fly away and while I was packing the eggs the others went to look for the nest and finally found it about fifty yards away. It also was in a small spruce and contained three eggs. In order to show how well some of the nests are hidden I might say that Jean looked at this tree twice and passed on. My wife came to it and called him back to look again when they finally decided there was a nest. On June 7 it rained until noon and all the previous night. In the afternoon I went with Jean to another lake in the muskeg. It looked to be an ideal spot for Gulls, but we saw none.

On June 8, there was a heavy frost in the morning. We all went to a lake about a mile south of the one visited on the 7th. We saw no Gulls on reaching the lake and started to walk around it. Stopping to look back I saw a Gull on a nest in a small spruce on the edge of the timber about three hundred yards away and only about fifty yards from where we had come out to the lake. This nest was eight and a half feet up and contained two eggs and another egg lay uninjured on the moss at the foot of the tree. Walking back in the muskeg, I found another nest about forty yards away about seven and a half feet up on a horizontal branch of a small spruce. It was just completed. There were three pairs of Gulls here, but we could not find another nest. We then crossed the next ridge to another lake, but found no Gulls. On June 9 we returned to the Klondyke City and next day drove home to Belvedere in the car.

We saw several other interesting birds on the trip but, as it was an expedition mainly for nests of Bonaparte's Gull, I have confined myself altogether to notes on this bird. However, it might be of interest to mention some other characteristic birds of the muskegs. A few of them are:—Yellow-legs, Greater Yellowlegs, Solitary Sandpiper, Lincoln's Sparrow, Rusty Blackbird and Dowitcher, the last probably the eastern form, or possibly a new variety. PLATE XII.



NESTING THEE AND NEST OF BONAPARTE'S GULL (Larus philadelphia)

Photos by A. D. Henderson

Jean reached Belvedere on June 11, and next day brought me another nest and three eggs of Bonaparte's Gull taken that morning by his wife near the place the first nest was found. This nest was seven feet up in a spruce, three yards from the pond in the muskeg. There was one egg in it on June 5, and it was almost certainly a second set from the same pair. Another nest was found later on near the same place with two eggs both of which hatched and the young were successfully raised.

It would seem from the foregoing that Bonaparte's Gull breeds in small numbers in scattered colonies throughout the muskeg country beyond the Athabasca. Also that a few pairs breed further south in suitable places, like the pair found nesting at Belvedere. I did not find more than three pairs breeding at any one spot, but it is likely that considerably larger colonies exist whch future expeditions may discover.

Although some of the nests are almost impossible to see when the bird is not sitting, others are quite easily noticed. When the bird is sitting it can be seen at a distance of several hundred yards and it seems strange that travellers and residents in the north should have discovered so few nests. However, most people prefer to give the muskeg country a wide berth in the summer, and travellers confine themselves for the most part to the rivers and larger lakes and do not penetrate the back country. Thus the Bonaparte's Gull, a very numerous species, has escaped notice in the breeding season except in a few instances. I would say that the nest is one of the easiest to find, as the white plumage of the birds is very conspicuous in their summer home amid the pale green of the tamaracks and the somber hues of the spruces, and when the birds are once located a short search will usually reveal the nests. A description of the nests taken follows all measurements being in inches:---

(a.) Taken May 25, 1925, nine feet up on horizontal branches of a spruce tree, close to the trunk, made of tamarack twigs and a few spruce twigs, lined with beard moss. Inside diameter 5, outside 6 to 8. Depth inside .75, saucer shaped. Three eggs, fresh, measured 1.91×1.38 , 1.83×1.36 , 1.84×1.38 .

(b.) Taken June 1, about eighteen feet up in a tamarack on two horizontal limbs close to the trunk, two hundred yards from nearest lake, of similar construction to "a" with a few alder twigs replacing the spruce. Two eggs, slightly incubated, measured 1.79×1.35 , 1.90×1.39 .

(c.) Taken June 6, seven feet up on a horizontal branch of a small spruce made of tamarack and alder twigs lined principally with green moss from the muskeg and a little beard moss, also dry grass and plant stems. About three hundred yards from a lake. This nest was not nearly so well built as the two foregoing. Three eggs, incubated about one-third.

(d.) Taken June 6, eight feet up in the thick bent-over top of a small spruce about fifty yards from "c". A poorly made nest of a very few small twigs, but principally composed of beard moss and green moss from the muskeg matted together with a few plant stems and a little dry grass. Three eggs incubated about one-quarter, measured 2.00×1.32 , 1.95×1.33 , 2.02×1.32 .

(e.) Taken June 8, eight and a half feet up in the thick top of a small spruce on the shore of a lake, about a mile from "c" and "d". A rather poorly made nest of tamarack and alder twigs and principally of green moss and a little beard moss, dry grass and stalks and plant stems matted together. Two eggs in the nest were incubated about one-half and another egg at foot of the tree was incubated about one-quarter. Eggs measured 1.93×1.35 , 1.89×1.38 , 1.87×1.38 .

(f.) Taken June 12, seven feet up in a spruce, three yards from a pond in a muskeg, made of tamarack twigs and a few of alder and spruce interwoven and lined with beard moss, a few pieces of weed stalks and dry grass in outer parts. Inside diameter 5. Outside diameter 7 to 8. Depth inside 2. Thickness of nest at bottom 1.25. Most substantial nest of the six. Three eggs, incubated, trace, measured 1.83×1.41 , 1.84×1.41 , 1.83×1.35 .

The nests found resolved themselves into two types, one a slovenly, flattish structure of irregular shape bearing some resemblance to that of the Mourning Dove, but more substantial. The other type was round and saucer like in shape and up to 2 inches deep, very artistic in appearance and resembling that of the Olive-sided Flycatcher on a larger scale.

Belvedere, Alberta.