

## Ross' Gulls (*Rhodostethia rosea*) nesting at Churchill, Manitoba, Canada

*"The first known nesting of this species  
in mainland North America . . ."*

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Photographs by Robert R. Taylor*

THIS ACCOUNT DOCUMENTS the nesting of three pairs of Ross' Gulls in the summer of 1980 at Churchill, Manitoba. Because of the extreme rarity of this event, some details of the location are omitted. Additionally, in order to minimize disturbance to the birds, we did not make as many observations as we would have liked. As a consequence, this account of the first known nesting of this species in mainland North America is somewhat less complete than it should be. If these birds return to the same location in future years, we hope more detailed information will be obtained. The report which follows is drawn from the sightings of several individuals.

Birds were first sighted near an Arctic Tern (*Sterna paradisaea*) colony on June 10th when a bird in adult breeding plumage was identified by Yves Aubrey of Montreal. From discussions with residents of the area it became clear that a bird fitting the description had been seen the previous day by Peter Scott of the Churchill Northern Studies Centre. The bird was in adult breeding plumage and exhibited the narrow black ring around the neck and the pinkish blush of the plumage that indicate an age of at least two years. On June 11th, a second bird was seen flying with the first and as the days proceeded it became clear that there were at least six birds present, all in adult plumage.

The area frequented by the birds was a low-lying wet tundra with several small tundra pools and three or four large, shallow lakes up to 300 m in diameter. The tundra area was mainly hummocky bog with lichen and dwarf willows (*Salix* sp.) predominating on the hummocks

and grasses and sedges in the lower areas. The area was extensively used for nesting by Arctic Terns, and is also the nesting ground for Arctic Loon (*Gavia arctica*), Horned Grebe (*Podiceps auritus*), Oldsquaw (*Clangula hyemalis*), Greater Scaup (*Aythya marila*), Hudsonian Godwit (*Limosa haemastica*), Lesser Yellowlegs (*Tringa flavipes*), Stilt Sandpiper (*Micropalama himantopus*), Common Redpoll (*Acanthis flammea*), Smith's Longspur (*Calcarius pictus*) and in the adjacent scattered spruce trees, Bonaparte's Gull (*Larus philadelphia*) and Merlin (*Falco columbarius*).

During the middle of June, up to four birds frequented the edges of one of the large shallow ponds and were often seen feeding or loafing there. At no time were the birds seen swimming. Their feeding consisted of walking on the shallow

edges or muddy areas of the ponds and picking up small items from below the surface. During this period two of the birds were seen regularly indulging in courtship activity: facing one another, raising their tails in the air and calling gently. They also stood side by side within a few centimeters of one another and occasionally circled one another. These displays occurred within 400 m of the nest site. No copulation was seen.

THE FIRST NEST [Nest A] was found on June 29th, but as was realized later, this nest belonged to the pair that nested last. The other nests were in more remote locations and were not found until later. The nest found on June 29th was located 200 m from a road in an area frequented by naturalists and others, and was almost certainly found on the first day of incubation. The incubating



*Ross' Gull nest with eggs, Churchill, Manitoba, Canada, June-July, 1980.*

bird was seen sitting on a depression 1-2 cm in depth and 15 cm across on a small hummocky island, less than a metre in diameter and approximately 5 cm deep. It was lined with dry sedges. The pond subsequently dried up. On the following day we visited this site briefly. There were three eggs, olive green in background color, with faint, larger, darker blotches. The eggs were not measured, but were approximately 4 cm in length, less pointed than an Arctic Tern's.

On July 2nd, a second nest [B] was discovered at a second location. Birds had been sighted at this location as early as June 11th, and intermittently thereafter. The area was not examined closely until July 2nd. This nest was at the edge of a large lake, where an area of *Carex aquatilis* marsh of approximately 3000 sq m served as the site of an Arctic Tern colony. The nest was less than one metre from the lake shore in a tussock of the sedge *Carex aquatilis*, and contained 2 eggs.

On July 4th, a third nest [C] was found, at a location about midway between the two other nests near the shore of a lake and also located in a *Carex aquatilis* marsh. The nest on a tussock of *Carex aquatilis* and a young *Salix planifolia* contained 2 eggs. It was situated more deeply in the marsh, and 2 m from an open pool 1 m deep. Nests and eggs of both pairs were similar in appearance to the first nest.

Both sexes incubated and changeovers at the nest were observed. The sitting bird flew off the nest only upon the mate's arrival. The relieving bird flew close to the nest and usually landed briefly before flying the final few metres to the nest. The incubating bird occasionally left the nest for short periods, often in response to an avian predator such as a Herring Gull (*Larus argentatus*) or a Parasitic Jaeger (*Stercorarius parasiticus*). The gulls also responded aggressively to Bonaparte's Gulls. When predators were present, the pair of nesting Ross' Gulls circled over the general area of their nest among the Arctic Terns. Interestingly, the nesting pair was often joined by other Ross' Gulls, presumably the off-duty members of the other pairs. Additionally, birds from different pairs occasionally associated in a non-aggressive manner, and visited the vicinity of each other's nests. It appeared as though there was some group cohesion.

Hatching dates were recorded for all three nests. Nest B hatched on July 9th and Nest C on July 11th, indicating that the birds had been incubating for some time before being discovered. Two newly hatched chicks were in Nest B, and a pipping egg and an unhatched egg in Nest C. These nests were not visited again, since we wished to minimize disturbance. However, the birds at Nest B appeared to still be feeding young on July 20th. The adults were flying over the lake, taking small food items from the surface of the water and returning to the nesting marsh. Both parents were landing on different spots, suggesting that the young were not close together.

No further observations were made of Nest C. On the two occasions when the nest area was visited, July 18th and 20th, no adults were seen.

**N**EST A HATCHED ON July 19th. Rob McLaughlin, hired through funds provided by The World Wildlife Fund (Canada) to provide surveillance of this nest, reported young being fed at the nest early on the morning of July 20th. Two young were seen, despite the fact that 3 eggs were originally in the nest. The fate of the third egg is unknown. Both parents attended the nest during the day with frequent exchanges at the nest. Brooding and feeding activity were both noted. The feeding consisted of regurgitation of some blackish material by the adults which was taken by the chicks. By the evening the young were already leaving the nest. Jo Blanch of Minnesota reported that a chick came from the vegetation back into the nest upon return of the adult to the nest. On the 21st, the parents were attending the nest and brooding, but no young were reported seen. Avian predators increased near the nest, perhaps in response to all the young birds of various species in the area. By the 22nd the parents were no longer present. The nest was examined but proved to be empty. A dead chick, presently deposited in the National Museum of Canada, was found, and there was no sign of the second chick despite a thorough search. Tracks of a fox were near the nest and there was also one set of unaccounted-for human tracks. This nesting attempt was almost certainly unsuccessful. Nevertheless the conspicuousness of this nest allows us to be reasonably certain that the nest incubation period was 21-22 days. To our knowledge this is the first determina-

tion, albeit with a sample size of one, of the incubation period of the Ross' Gull. Through early August, sightings of adult Ross' Gulls in the nesting area were infrequent, and the last bird was seen there August 9th. Most Arctic Terns had also left by this time. The gulls did not, however, leave the Churchill area completely. An adult and immature were seen on the Hudson Bay coast line, within a kilometre of the nesting area on August 24th. The immature bird was the same size as the adult. It had a grey-brown mantle with brown greater coverts extending in the primaries. The outer primaries were black and the tail was tipped with a slaty-black. The head was mainly white but with some grey-brown feathers. Although it is possible that this bird came from another location, it seems likely that this immature bird was hatched in the Churchill area, probably from one of the 3 nests described above.

#### DISCUSSION

This outstanding ornithological event of 1980 is important in a number of ways. If the immature bird was of local origin, it is the first documented successful nesting of Ross' Gulls outside the Soviet Union and the first nesting on the mainland of North America. At latitude 58°40'N it is the most southerly nesting of this species in the world. Dementiev and Gladkov (1951) report the nesting range between 62°27'-70°30' North and 142°00'-160°00' East. The nesting range of the species is thus limited, and Borodin *et al.* (1978) estimate the total population at fewer than 10,000. These observations thus represent a considerable range extension for this rare and elusive species and thus confirm the speculations of MacDonald (in prep.), that nesting may be occurring in the Canadian low Arctic.

**T**HE ROSS' GULL was first described by McGillivray (1824) from the specimen collected by James Clark Ross in the Melville Peninsula, Canada in 1823. Since then, Canadian reports have been infrequent. Godfrey (1966) reports records from Boothia Peninsula, Cornwallis Island, McConnell River and Broughton Island, all in the Northwest Territories, and there was a record from Victoria, B.C., on November 9, 1966 (Syesis, 1971). A bird was shot in Newfoundland in 1976 [*Am. Birds*,

1977]. There was a sight record with photographs from Churchill, Manitoba in June 1978 and MacDonald (in prep.) records nesting on small Arctic islands in the Arctic archipelago from 1976-79. The Canadian Arctic, with its vast unpopulated areas, must contain other suitable nesting habitat for Ross' Gulls and it is important to discover if other nesting locations exist. It seems unlikely, however, that there are considerable numbers of nestings in the Hudson Bay lowlands, since although other species of gulls are attracted to the mouths of rivers flowing into the bay in early June, there have only been two confirmed sight records of Ross' Gulls (McConnell River, June 1965; Churchill, June 1978).

Previous publications in this journal (Miliotis and Buckley, 1975; Balch, Bohlen and Rosenband, 1979) have discussed the important field marks of the winter-plumaged birds seen in Massachusetts and Illinois respectively. The summer-plumaged birds in Churchill presented few problems of identification with the conspicuous necklace and pinkish coloration. There appeared to be considerable variation in the amount of pink observed, but this seemed to be correlated more with viewing conditions than with the time of season or individual variation. On dull, overcast days, the pink cast was most noticeable, but on bright days it was barely discernible. On the ground, the short, black bill, horizontal stance and elongated appearance caused by the relatively long wings and tail were conspicuous. In flight, the bird appeared tern-like, and the uniform grey mantle and dark grey underwings were evident. Occasionally, while flying, the birds gave a small flutter flight, with wings briefly flapping rapidly—similar to but shorter than that of a Bonaparte's Gull. While hovering over the nest in company with other Ross' Gulls, they occasionally gave a *tikka-tikka-tikka-tic* call, somewhat reminiscent of a Common Flicker (*Colaptes auratus*).

It is interesting to speculate on the future. How phylopatric will these gulls prove to be? It seems highly unlikely that they nested in the same location

earlier than 1980. With so many ornithologists and birdwatchers visiting the Churchill area it is difficult to imagine that the birds were breeding there earlier, undetected. It seems possible that the birds will return to breed in future years, but only time will tell. Fortunately the birds chose to nest in an area where collecting is forbidden. Funds for surveillance were provided for 1980. A similar program of surveillance is planned should they return to nest in 1981.

**D**ETAILS OF THE BREEDING biology of the Ross' Gull have been infrequent since the original description by Buturlin in 1906. Vorobiev (1963) provides a more recent account of the nesting in Yakutz, and MacDonald (in prep.) reports on the recent nesting in the Canadian Arctic. The habitat of the Churchill nesting seems to be similar in general to that in the major Russian nesting locations, both in terms of vegetation and in the tendency to locate the nests in tern colonies. Nesting in such colonies, may well provide increased protection from predators, although Arctic Terns were reported to kill Ross' Gull chicks (MacDonald, pers. comm.). With such a small sample it is difficult to compare the Churchill findings with the others. Suffice to say that of 7 eggs laid in 3 nests, 5 were known to have hatched, and at least one chick appears to have reached the free-flying stage. The incubation period is 21-22 days.

There was considerable speculation about whether the winter records of Ross' Gulls in North America were of Canadian Arctic or European origin. This increases the probability that the birds were of North American origin. Churchill, Manitoba, is well known for its sightings of 'so called' European gulls. In the summer of 1980, there was an unsuccessful nesting attempt by a pair of Mew Gulls (*Larus canus*), a considerable nesting range expansion, and there were sightings of Little Gull (*Larus minutus*) and Black-headed Gull (*Larus ridibundus*). These birds appeared among the large populations of Bona-

parte's Gulls which regularly occur in the Churchill area.

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