

LITTLE GULL (*HYDROCOLOEUS MINUTUS*) BREEDING EVIDENCE FOLLOWING A STORM EVENT IN CHURCHILL, MANITOBA

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The Little Gull (*Hydrocoloeus minutus*) is the world's smallest gull species, breeding mainly in the Palearctic in Northeast Europe and Siberia, with sporadic nesting records in Western/Central Europe.¹ Their North American breeding range is poorly understood with less than 100 confirmed, probable, or possible nests from 1990-2012.¹ The majority of these breeding records were from the Great Lakes region, with confirmed breeding evidence from various locations on Lake Ontario, Lake Erie, Lake Michigan, and Lake St Clair. Other nesting records include the St. Lawrence River in Quebec and the Hudson Bay Lowlands in Northern Ontario and Manitoba.¹ Of these nest records, even fewer are confirmed with nests found or flightless young.

Arrival on the breeding grounds in the Hudson Bay lowlands (including Churchill, Manitoba) typically begins in late May and early June. This is the time when the largest concentrations of Little Gulls are usually seen in Churchill, with a historical high count of 14 individuals submitted to eBird on 17 June 2006.² However, high counts in any given year are typically less than 10 birds. Nests are likely completed in mid-June and thus probably hatch roughly 24 days later in mid-July.³ Therefore, juvenile Little Gulls in Churchill likely fledge by late July or

early August depending on the nest initiation dates, which for other local breeders can be quite variable depending on spring weather conditions. This timing is supported by the peak of juvenile Little Gulls moving through James Bay in the last weeks of July through August, with the peak numbers arriving in the first week of August.⁴

In the Churchill region, Little Gulls have been recorded in low densities since at least 1970, with the first confirmed nest record at Akudlik Marsh in 1981 (Figure 1) though were likely breeding long before due to the presence of adults in potentially suitable habitat.^{5,6} From 1981-2012, approximately 30 confirmed breeding records occurred in the Churchill region.¹ In the 1990s to early 2000s, Little Gulls were either confirmed or likely to have nested locally (young seen in town), at Landing Lake, and for several years on islands in the river (Figure 1).⁵ To our knowledge, the

most recent confirmed breeding records occurred during the Manitoba Breeding Bird Atlas (MBBA) at the west Twin Lake in 2010, approximately 30 km southeast of the town of Churchill (Figure 1).⁷ Many probable breeding records exist, for example at Landing (Farnworth) Lake in 1992 (Figure 1), and possible and probable breeding evidence until 2013 elsewhere in the Churchill region according to the Manitoba Breeding Bird Atlas.^{5,7} The yearly persistence of adult Little Gulls in this region during the summer months suggests they are still breeding regularly.

On 18 July 2023, we observed 10 adult Little Gulls with two young on a very small rocky mudflat along the Churchill River (Figures 2, 3).⁸ This site is approximately 3 km south of the Churchill River Weir and 16 km south of the river mouth flowing into Hudson Bay (Figure 1), officially on Churchill River Road; however, the northern section is locally known as Goose Creek Road and

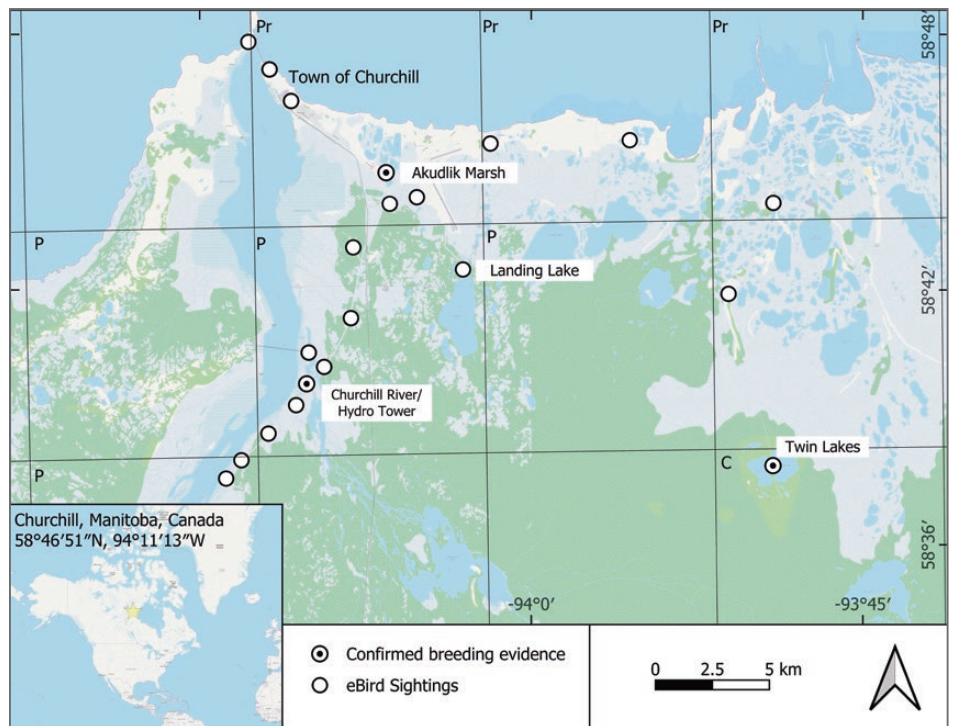


FIGURE 1. Summary of Little Gull (*Hydrocoloeus minutus*) activity in Churchill, Manitoba area: general locations of Little Gull eBird sightings, 2010-2014 Manitoba Breeding Bird Atlas breeding evidence and examples of other available breeding evidence in the region. To reduce spatial inaccuracy, eBird data were filtered to include only properly assigned "Hotspots" so some records may be missing.¹¹ Atlas squares in which breeding evidence was recorded are indicated in the top left corner of each square by P—possible, Pr—probable, C—confirmed.^{15,16} Map generated in QGIS, basemap from ©OpenStreetMap.^{17,18}

the southern section as Hydro Road. The adults were among a group of adult Bonaparte's Gulls (*Chroicocephalus philadelphia*) and both adult Arctic Terns (*Sterna paradisaea*) and their flightless chicks. The Bonaparte's Gulls would periodically fly or land too close to the Little Gull chicks, and their parents would defend their young with aggression towards the intruders.

The chicks were flightless, head and underparts covered in downy feathers, wings not fully developed, and slightly smaller than the adults. Although they did hop short distances (with wings spread, Figure 3) they were incapable of sustained flight. Therefore, this record qualifies for confirmed breeding evidence following the North American Ornithological Atlas Committee Handbook.⁹ We observed the group for more than 20 minutes, during which the entire group of adults would repeatedly take off and land again, leaving the young Little Gulls and Arctic Terns on the mud. Several times over our observation period, the Little Gull chicks would flap their wings and attempt to hop but did not appear to be able to leave the ground. They spent time standing, walking back and forth on the mud, climbing small rocks, begging when the adults came near, and occasionally preening.

Prior to our observations, Little Gulls had been sporadically reported for weeks, since 28 May, as is typical for the region. An average of two \pm 1.1 and no more than four Little Gulls were reported on any checklist prior to the 12 individuals we observed simultaneously on 18 July. On 21 July, we visited this site and observed three adult Little Gulls.¹⁰ We returned to this site twice more (27 July and 7 August) and did not observe any Little Gulls; however, the water levels had since dropped significantly. Several other checklists from the general area were submitted to eBird in July and August but none reported Little Gulls.¹¹ Time constraints and high traffic from construction vehicles involved in repairing the weir made frequent visits to this area difficult.

We believe this record was made possible by extreme flooding in the area. After a very dry spring, there were



FIGURE 2. Little Gull (*Hydrocoloeus minutus*) chicks begging on a mudflat on the Churchill River in July 2023. Photo credit: Andrew Brown.



FIGURE 3. Little Gull (*Hydrocoloeus minutus*) chick with outstretched wings on a mudflat on the Churchill River in July 2023. Photo credit: Andrew Brown.

multiple extreme rainfall events in late June and early July. In the month of July there was a total of 144.8 mm of rainfall with 65.2 mm falling between 13 and 15 July alone, exceeding the station's historical average total precipitation for the entire month of July of 59.8 mm.^{12,13} The mudflats and rocky shorelines that typically host large numbers of migrating shorebirds and gulls were almost completely submerged in water. Fewer shorebirds were present than normal, mostly consisting of the long-legged Lesser Yellowlegs (*Tringa flavipes*) and Greater Yellowlegs (*Tringa melanoleuca*) that were still able to forage in the deeper water. The Little Gull chicks very likely hatched from a nest in a nearby coastal marsh or small island along the Churchill River. After the water level rose, they would have been forced to swim closer to the shoreline and onto a suitable patch of remaining dry land. This is likely to be what brought the Little Gulls closer to the road that runs parallel to the river.

Last year, on 30 and 31 July 2022, we observed one fledged juvenile Little Gull (Figure 4) near the same location on Hydro Road (Figure 1).¹⁴ This individual appeared to have an injured or deformed left foot but was fully fledged and effectively hawking insects. This sighting is what led us to initially suspect breeding in this area and return in the following year; however, since this bird was fledged and independent, we did not consider this previous year's sighting as confirmed breeding evidence. Although it is impossible to be certain of the origin of this bird as it was already fledged (and thus could have originated elsewhere), it is very likely of local origin given the history of this species breeding in Churchill and the age of the bird.

In *Birdlife of the Churchill Region*, it is noted that in 1996-1997, two-to-three pairs of Little Gulls nested on an island on the Churchill River that became inundated after the construction of the weir. When a new island was constructed, pairs likely returned to breed in 2000.⁵ Recent construction activity at the weir may similarly influence the Little Gulls breeding on islands in the Churchill River.



FIGURE 4. Juvenile Little Gull (*Hydrocoloeus minutus*) flying over a marsh on the Churchill River in July 2022. Photo credit: Andrew Brown.

Acknowledgements

We are grateful to Chip Weseloh for his helpful insights on this paper.

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