

WINTER OBSERVATIONS OF HERRING GULL AND OTHER BIRDS FROM LITTLE GALLOO ISLAND, EASTERN LAKE ONTARIO

PETER J. EWINS AND D. V. WESELOH

Few people, let alone birders and naturalists, have visited islands in Lake Ontario during the winter months. Access is difficult due to shifting ice conditions, and one might reasonably expect to find little of ornithological interest. In early February 1991 we made some observations of birds on and around Little Galloo Island (45°53' N 76°24' W), a 17 ha island lying in the eastern part of Lake Ontario approximately 23 km west of Sackets Harbor, Jefferson County. To our knowledge, these are the first bird observations in winter from the island. Contrary to earlier predictions, we found considerable bird activity!

Our ultimate aim was to document winter roosting and colony attendance by Herring Gull (*Larus argentatus*), in relation to studies of their diet and accumulation of toxic contaminants in the Great Lakes aquatic ecosystem (Mineau *et al.* 1984; Ewins *et al.* 1993). Little Galloo Island is one of the most important nesting sites for colonial water birds on the Great Lakes, including over 300 pairs of Herring Gull (Blokpoel & Weseloh 1982).

METHODS

On 6 and 8 February 1991, the island and surrounding water/ice was surveyed from a fixed-wing aircraft. On 11 and 12 February we made observations on the island itself, camping overnight (at -20°C), and being transported by helicopter. Weather conditions during this period were generally bright and cold, with moderate northwesterly winds pushing in ice from Lake Ontario, and up to 5 cm of snow lying on the frozen ground. The island was almost completely engulfed in ice, but some leads and small patches of open water occurred amongst the shifting ice sheets.

OBSERVATIONS

On 6 February, a flight over the island at 1635 h (EST) recorded only a flock of 50 Snow Bunting (*Plectrophenax nivalis*), 100 unidentified

ducks near the ice-free southern shoreline, and approximately 200 Oldsquaw (*Clangula hyemalis*) 4 km northeast of the island. No gulls were seen, indicating that they were not using the island as an overnight roost site. On 8 February, at 1140 h, up to 20 Herring Gull were standing on the ice and snow over some of the known breeding territories, approximately 200 were standing on iced-over small pools at the southern end of the island, and about an additional 300 birds (mostly adults) were loafing on ice at the island's western shoreline.

On 11 February, small numbers of Herring Gull were seen flying northwest over the island at dusk, presumably to overnight roosting areas on open water or the main ice edge further out into Lake Ontario. From 40 minutes before sunrise, on 12 February, Herring Gull were calling and circling high over the island. A few individuals landed and rested briefly on ice along the south shoreline. By two hours after sunrise, 105 Herring Gull had passed over the island heading in a general south-southeasterly direction, most circling and calling over the island for 5 minutes or so as they went. About 85% of these birds appeared to be in adult plumage, and may have been individuals which would subsequently breed on the island. We recovered large numbers of fresh gull feces from the ice ridge along the southwestern shoreline of the island, and could see more feces on ice offshore. Clearly Herring Gull had been using this area as a daytime roost/loafing area between feeding bouts.

Nine other bird species were seen on 11-12 February: one Common Loon (*Gavia immer*) flying north; 14 Black Duck (*Anas rubripes*); 33 Gadwall (*A. strepera*); 180 scaup, probably Greater Scaup (*Aythya marila*); 36 Oldsquaw; 43 Common Goldeneye (*Bucephala clangula*); more than 130 Bufflehead (*B. albeola*); three Horned Lark (*Eremophila alpestris*); a Song Sparrow (*Melospiza melodia*); and more than 80 Snow Bunting. In addition, just after dawn on 12 February, over 400 unidentified diving ducks flew northwest past the island, presumably heading for more extensive areas of open water than were available near Little Galloo Island. All the ducks identified were feeding within 400 m of the island, particularly along the ice free southern shoreline. The passerines fed on small seeds (possibly of *Atriplex* sp.) in the few small patches of exposed ground. At intervals the Snow Buntings took flight and perched in a compact group on the upper branches of dead hardwood trees. However, we saw no signs of any birds of prey. The only other signs of life were fresh tracks of a Muskrat (*Ondatra zibethica*) on 12 February.

DISCUSSION

There are few published accounts of Herring Gull roosting behavior or colony occupation during late winter or early spring in Lake Ontario. Observations further west in the lower Great Lakes indicate that eggs are laid from mid April onwards, and that some breeding territories are occupied as early as February (Morris & Haymes 1977; Ewins *et al.* 1993). Most Herring Gull which breed on the Great Lakes also winter there once adult, but there is considerable winter immigration from further north (Moore 1976; Weseloh 1984). In northeastern Lake Ontario Herring Gull have usually moved out of the Kingston area by mid January, once ice free water becomes difficult to find close to the city (Cooke & Ross 1972). Our aerial surveys in eastern Lake Ontario in February 1991 located small groups (usually less than 10 birds) of Herring Gull and a few Great Black-backed Gull (*L. marinus*) resting on ice floes during the afternoon, particularly at the ice edge. At dusk we also located a roost of up to about 100 Herring Gulls just northwest of False Duck Island, off Prince Edward Point, Ontario, 35 km west of Little Galloo Island. We suspect that this was an overnight roost, probably one of a number of such roosts in open water in the eastern basin of Lake Ontario at that time. In some winters, enormous concentrations of Herring Gull, up to 20,000 birds, have been noted in open water areas near Oswego and Rochester harbors (Bull 1985).

Most of the other species we noted at Little Galloo Island in mid February can often be encountered in suitable habitat inland in the State during the winter months, but there appear to be few data from Lake Ontario islands (Bull 1985). However, Bull notes that Gadwall are generally uncommon inland in winter, and makes no mention of Common Loon wintering away from the Atlantic coast. Clearly, small islands in eastern Lake Ontario offer suitable wintering conditions for good numbers of a variety of bird species, particularly where open water persists.

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Canadian Wildlife Service (Ontario Region), Canada Centre for Inland Waters, P.O. Box 5050, Burlington, Ontario. L7R 4A6. Canada.

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