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A Phenology of Ring-billed Gull Activities in Thunder Bay District

by
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The Ring-billed Gull (*Larus delawarensis*) is a rather common bird in Thunder Bay District, although it occurs in far fewer numbers here than in southern Ontario. Ring-bills have a limited breeding distribution in north-western Ontario. To date, colonies have been located in Lake-of-the-Woods (two colonies containing 6,000 and 100 pairs; B. Termaat, pers. comm.) and along the north shore of Lake Superior (100 pairs on Gravel Island and 5,000 pairs on Granite Island; pers. obs.) There are few documented nesting areas away from these two water bodies (Blokpoel and Tessier 1986).

This paper presents a chronology of Ring-billed Gull activity in and around the Thunder Bay District. Comparisons are made with the

phenology of Ring-bills inhabiting the southern regions of the province.

In 1986, Ring-billed Gulls were first sighted in Thunder Bay on 30 March. By 20 April, they were scattered along the north shore of Lake Superior between Thunder Bay and Nipigon. The majority of the population, however, was clumped around the City of Thunder Bay. By the middle of April, courtship behaviour and aggressive displays became apparent. The first attempt at copulation was observed on 22 April.

By the last week of April, large numbers of adults had moved to the breeding colonies. At this time they usually pause at the mouths of rivers running into Lake

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Superior to feed on smelt (*Osmerus mordax*). Movement of Ring-billed Gulls to the colonies is largely dependent on time of ice breakup on the lake and timing of the annual smelt run. Smelt forms a large part of the pre-breeding diet of Lake Superior Ring-bills (Meathrel 1986). Granite Island is the most important colony along the north shore of the lake and research on Ring-bills has been conducted there by the Department of Biology at Lakehead University for the past 15 years. The following breeding chronology comes from personal observations made on Granite Island.

The first clutches are initiated in the first week of May, with the peak of egg-laying occurring in the second week. Severe weather during this period may result in considerable re-nesting during the last half of the month (this probably occurred in May 1986). The number of nests initiated per day declines sharply after the peak nesting period. The egg-laying period is usually completed by late June.

Eggs begin to hatch on Granite Island in the first week of June. Initially, parents feed smelt to the offspring. Insects and grains form the bulk of regurgitate samples as the season progresses. By 1 July, most eggs are hatched and the majority of chicks are near fledging. Adults and juveniles arrive in the City of Thunder Bay in the latter part of July. There does not appear to be a large number of non-breeding adults on the colony or in the city during the breeding season.

Ring-billed Gulls in Thunder

Bay begin to moult in the early part of July and are commonly seen in winter plumage by the end of August. Migration from the area is leisurely; although Ring-bill numbers are greatly reduced by October, there was still a small core of birds in the city at the time of writing (3 November 1986). No gulls were located outside of the city at this time. Ring-bills from northern Ontario appear to gather on the shores of Lakes Erie and Ontario before migrating to the eastern seaboard of the United States (J. Ryder, pers. comm.).

There are several interesting comparisons to be made between northern and southern Ontario populations of Ring-billed Gulls. First is the nature of the actual colony sites. Breeding colonies in Lake Superior and Lake-of-the-Woods are relatively pristine, undisturbed habitats (with the exception of slight disturbance caused by two researchers each year at the Granite Island colony). Human activity does not have much influence in these areas. Southern Ontario colonies, on the other hand, are often located near large industrial complexes or other sites of human activity (H. Blokpoel, pers. comm.). It is not clear if these habitat differences produce behavioural differences between gulls from northern and southern colonies.

The breeding timetables of northern and southern Ring-billed Gulls also differ. In general, each phase of the reproductive season (arrival at colony, egg-laying, hatching, fledging) occurs approximately two weeks earlier on Lakes Erie and Ontario than on Lake

Table 1: Date of arrival at breeding colony, clutch initiation, fledging and fall migration for Ring-billed Gulls of Lake Erie/Ontario and Superior

Gull population	Arrival at colony	First date of clutch initiation	Peak of clutch initiation	Peak of fledging	Fall migration	Source
Lakes Erie/Ontario	mid-February to early March	April 9 April 22	last week of April first week of May	last week of June	October to December	Chardine and Morris (1983); Blokpoel and Tessier (1986)
Lake Superior	mid to late April	May 4 (1986) May 8 (1985)	second to third week of May	first to second week of July	September to October	L. Hauta (pers. comm.) and personal observations

Superior (Table 1). Migration from the Thunder Bay area begins at least one month earlier than in southern Ontario (Table 1). In fact, some southern Ontario Ring-bills forego migration completely (Blokpoel and Tessier 1986).

Post-breeding foraging behaviour differs markedly between northern and southern Ring-bill populations. Insects, grains, earthworms and small fish are the mainstay of post-breeding Lake Superior gulls (Ryder, pers. comm.). Although there is a large dump situated just outside the city limits, Ring-bills rarely frequent it (pers. obs.). By contrast, Lake Erie and Lake Ontario gulls are frequently seen feeding at garbage dumps and other urban food sources (Blokpoel and Tessier 1986).

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