Notes

Large Ring-billed Gull Clutches on an Island in Southern James Bay

by Doug McRae

On 1 July 1992 I had the chance to visit a Ring-billed Gull (Larus delawarensis) colony on a small island in James Bay, just off Big Stone Point, Ontario, about 45 km east of Moosonee. The island is variously called Seagull Island or Big Stone Island, and is loosely joined to the mainland during very low tides. It appears as an unnamed island at UTM coordinates 810700 on 1:250,000 Topographic Map 32L (Lower Harricanaw River). I was joined on this visit by Barry Hunter from the Moosonee office of the Ministry of Natural Resources and by John and Frank Turner of Moose Factory.

We spent about thirty minutes on the island and located nests of Ringbilled Gull and several of Herring Gull (L. argentatus). In addition, Common Terns (Sterna hirundo) appeared to be breeding in a separate area of the island but we did not go to that section, therefore no actual nests were located. I estimated that at least 250 pairs of Ring-billed Gulls were present on the island. John Turner noted that there appeared to be only about half as many birds as when he last visited the island in 1980, and that the actual colony area had decreased as well. In addition to the Ring-billed Gulls, I estimated that about 25 pairs of Herring Gulls and

15 pairs of Common Terns were also present.

The colony was typical in appearance to any other gull colony, but was unusual in that there was a high incidence of abnormally large clutches. Of the 35 nests examined, over 17% had unusually large clutches. The breakdown of nest contents was as follows: 4 (11.43%) had one egg and/or chick, 15 (42.86%) had two eggs and/or chicks, 10 (28.57%) had three eggs and/or chicks, 1 (2.86%) had four eggs and 5 (14.29%) had five eggs.

H. Harrison (1975) and C. Harrison (1978) state that Ring-billed Gulls usually lay three, "sometimes" or "often" two, and "rarely four" eggs. Peck and James (1983) list Ontario clutches ranging from one to six eggs and state that "some 5- and 6- egg clutches may have involved laying by more than 1 female". They also note that of 38,919 nests documented through the Ontario Nest Records Scheme, only 359 (0.9%) involved clutches of more than three eggs, and mention that the number of large clutches may be somewhat inflated since "an additional bias has been created because on some colony visits exact counts were recorded only of sets of 4 or more eggs". While the large clutches we found are not unprecedented, the frequency within



Figure 1: Ring-billed Gull nest with five eggs, on Seagull Island, James Bay, 1 July 1992. Photo by *Doug McRae*.

this colony is substantially higher than the provincial average (i.e. 17.1% compared with 0.9%).

It seems improbable that, for some strange reason, the females from this island lay abnormally large clutches. The more likely explanation for the large clutches would be that more than one female was laying in each nest. However, there is no strong evidence to support this either way, since in the five egg nests, eggs in some clutches appeared the same colour while differences within a clutch were noted in others (see Figure 1).

If the large clutches are a result of "dumping" by additional females, one has to wonder why the frequency of dumping is so high on this island.

John Turner's observation that the colony had decreased both in numbers and physical area may provide a clue. If, for some reason, parts of the former colony are unsuitable for nesting now, females may be under greater pressure to use existing nests to lay their eggs. While I could see nothing that would preclude gulls from expanding the colony in area, there may well be subtle factors to which the gulls are sensitive. Also, island nest sites are at a premium in southern James Bay, which may add to the pressure to use this nest site even if its suitability is declining.

This Ring-billed Gull colony would be an exellent location to further study this interesting situation. In order to determine if dumping by multiple females is the reason for the large percentage of abnormally large clutches, it would be advisable to arrive during egg laying. Our visit on 1 July appeared to coincide with the onset of hatching, so presumably early June would be a good time for a follow-up visit.

My thanks go to John Turner who, while on his way to Netitishi Point, kindly went out of his way to take us to the island. These observations were made while employed as the Moosonee

Community Naturalist, a program cosponsored by the Ministry of Natural Resources, Moosonee Area Development Board and Ontario Northland.

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Unusual Escape Strategy by Tree Swallow from Merlin

by Marcie Jacklin and Jim Harris

On 2 September 1992, we were birding at the Munster Sewage Lagoons near Ottawa, Ontario. We had just finished scanning the first cell where a group of approximately 50 Tree (Tachycineta bicolor) and 12 Barn (Hirundo rustica) Swallows were hawking insects when Jim noticed an adult female Merlin (Falco columbarius) which had swung in over the second cell. The bird was about ten metres away at the closest point of observation, and we could clearly see a swallow struggling in the talons of the Merlin. As the birds passed us, we noted that the Merlin was having a lot of difficulty holding onto its prey. Within the next few

seconds the prey, which we were now able to identify as a Tree Swallow, had worked itself free of the Merlin. The swallow hovered in the air for a few seconds, and then when it noticed the Merlin had swung around for a second try, the swallow dove directly down approximately seven metres into the sewage lagoon. Unfortunately in all the excitement we lost sight of the swallow so we don't know if it resurfaced. The Merlin left the area and returned approximately 20 minutes later and chased a group of shorebirds and then the swallows again.

Although we have observed this kind of behaviour in ducks and shorebirds when being pursued by falcons, we have never witnessed or heard of passerines using this technique. A review of the literature (Bent 1938, Palmer 1988, Terres 1982) did not provide any further insight into this unusual behaviour.

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Concealment Behaviour in the Loggerhead Shrike

by Ron Pittaway

During a recent study of the Loggerhead Shrike (*Lanius ludovicianus*) on the Carden Plain, Victoria County, in central Ontario, it was discovered that both juvenile and adult shrikes exhibit a well-developed concealment behaviour (Pittaway 1991). This activity has apparently not been adequately described previously, based on the extensive literature search undertaken during my study.

I first observed concealment behaviour in juvenile shrikes on 15 June 1991. When looking for old shrike nests I accidently discovered two fully grown juvenile birds hiding inside a thick hawthorn (*Crataegus* sp.). The young shrikes attempted to hide while being observed at very close range. They soon flew, each

diving out of sight into the interior of separate, nearby hawthorns. They remained hidden and did not give alarm calls.

At another nest site, the fledged young I had been monitoring could not be located. An adult called "meeg" in alarm several times from nearby trees. The young were suspected to be hiding and two were eventually discovered concealed in a thick buckthorn (*Rhamnus* sp.). As the branches were parted, each of the young darted in different directions, taking cover in a dense clump of hawthorns.

The young of the three other pairs in the study also exhibited this well-developed concealment behaviour. This behaviour was used frequently by juveniles for up to three weeks after leaving the nest (fledging). Even when young shrikes were known to be in the nest site area, they could not be located on several occasions.

Amy Chabot (pers. comm.) of McGill University also reported this hiding behaviour in recently fledged shrikes near Napanee, Ontario. In Saskatchewan, Wayne Harris (pers. comm.) also has observed this behaviour and has seen young shrikes "freeze" when alarm calls were given by adults. All these observations suggest that concealment behaviour may be an adaptation to prevent predation of recently fledged shrikes.

A similar behaviour is used by adults to avoid larger birds of prey. In May 1990, I observed a male Loggerhead Shrike perched on top of a hawthorn near the nest tree where the female was incubating eggs. The male called a raspy "meeg" twice in alarm, then flew down inside the hawthorn out of sight. At that moment, a Cooper's Hawk (Accipiter cooperii) flew over the shrikes' territory. The shrike returned to its conspicuous perch after the hawk had flown out of sight.

On another occasion in August 1991, an adult Loggerhead Shrike took cover when an American Kestrel (Falco sparverius) flew low over its perch site. The shrike called "meeg"

once before ducking out of sight, and returned to its perch once the falcon had gone. Kestrels are common on the Carden Plain, and except for the above incident, no other interactions with shrikes were noted. These observations suggest that adult Loggerhead Shrikes also have a well-developed concealment tactic used to avoid contact with larger avian predators.

In summary, both juvenile and adult Loggerhead Shrikes exhibit well-developed concealment behaviours. This adaptation probably helps to lower the predation level of newly fledged juveniles. In adults, it may be a tactic used to avoid conflict with avian predators.

Acknowledgements

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Barred Owl and Northern Goshawk Co-occurrence

by Doug Sadler

The author received a phone call on 12 June 1992 from Jim Dunsire, a quite experienced birder, telling of an adult Barred Owl (*Strix varia*) which dived at him along a trail in the Emily Tract, Victoria County Forest, in mid-morning. It softly screamed once, then landed in a nearby tree, where diagnostic field marks were well observed. Three fledglings were hopping about in another tree not far away. This is known behaviour for that date (Weir 1987).

I went to the site two days later and was dive-bombed by a screaming Northern Goshawk (Accipiter gentilis), which landed well up in a tree not far away, and was in full visual, as well as audio, contact. There was a large nest with fresh pine branches about 10 m off the trail in the divided trunk of a tall Red Pine (Pinus resinosa), about 15 m up (see Godfrey 1986).

Dunsire went in to the site again on 16 June, and was attacked by the Goshawk, but found no sign of the owl. The owl was not seen again, but the adult Goshawk flew at Doug and Tony Bigg from the nest, and a downy juvenile was seen in the nest on 23 June. Two weeks later, the nestling was found sitting on a twig just above the nest.

The presence of these two predators in exactly the same locality

and in the same time period seems hard to explain. One can perhaps assume that the owl family was moving through, although the behaviour indicates that this was a newly fledged family. But why did the hawk ignore it? The Northern Goshawk is notorious for its boldness in defence of its nesting territory. The Barred Owl is also known to be active by day (Bent 1937, 1938). Bent (1938) quotes the discovery in winter of the bodies of a Goshawk and a Barred Owl lying on the snow within 10 feet (3 m) of each other amidst masses of feathers and a good deal of blood. The Goshawk was dead, and frozen stiff, but the owl was still warm, though it apparently died of wounds (Bent 1937).

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