

NOTES AND LETTERS

FOOD CACHING BY BURROWING OWLS ON THE REGINA PLAIN, SASKATCHEWAN

Nest boxes have been used as a means of protecting Burrowing Owl nests from predators in southern Saskatchewan for two decades. In 2005, we were maintaining about 115 nest boxes between Moose Jaw, Weyburn and Regina. The nest boxes are constructed from a combination of plywood and weeping tile, and are buried underground to emulate a natural Burrowing Owl nest burrow. One of the side benefits of using nest boxes has been our ability to identify and count prey items stored by the owls. Burrowing Owls arrive in Saskatchewan in mid- to late April and

immediately begin to store prey items in their nest burrow. Presumably these caches help insure that the owls have access to food during lean times, during inclement weather, while the female is incubating, and especially when the chicks begin to hatch. The cache tends to reach peak size immediately prior to egg laying at the beginning of May, and then declines to near zero as the female begins to lay eggs. The caches tend to increase in size again just before the eggs hatch, and decline to near zero again after hatch.

Since 1992, we have kept records of all the prey items we have encountered in Burrowing Owl nest boxes.^{1,2} Our list of cached species includes Deer



Figure 1. The 87 Deer Mice, 4 Meadow Voles and a Prairie Shrew found in a Burrowing Owl nest box near Moose Jaw on 26 April 2005 Claire Sanders

Mice, Meadow Voles, Sagebrush Voles, Prairie Shrews, Olive-backed Pocket Mice, House Mice, Northern Grasshopper Mice, Richardson's Ground Squirrels, Thirteen-lined Ground Squirrels, young hares, ducklings, a young American Coot, a Yellow-headed Blackbird, Lapland Longspurs, Chestnut-collared Longspurs, Snow Buntings, Vesper Sparrows, Sprague's Pipits, garter snakes (*Thamnophis* spp.), Tiger Salamanders (*Ambystoma tigrinum*), Boreal Chorus Frogs (*Pseudacris triseriata*), dragonflies, carrion beetles, moths, and even the occasional golf ball.

By far, Deer Mice are the most common prey we have found. Between 1998 and 2002, Deer Mice comprised 86% (n = 114 nests) of the individuals found in the prey caches across the Regina Plain. Meadow Voles were the second most common at 12%. The average cache is usually only a few mice, but each year we tend to find a cache or two that consists of a couple dozen animals. Once every few years, we encounter a nest box with several dozen Deer Mice stored inside. On 26 April 2005, we, along with C. Sanders, examined a nest in Moose Jaw that contained 87 Deer Mice, 4 Meadow Voles and a Prairie Shrew (Figure 1). On 18 April 1998, we found a nest near Lang, SK that had 82 Deer Mice, 8 Meadow Voles and 2 House Mice. The largest prey cache we've ever encountered occurred during an irruption of Meadow Voles in 1997: in one nest in Moose Jaw, observed on 15 May 2005 we counted 2 Deer Mice and 210 Meadow Voles.

We have used the data from these prey caches to identify fluctuations in the quantity of Burrowing Owl prey items and have shown that the

reproductive success of Burrowing Owls tends to be correlated to the size of their prey caches.¹

1. POULIN, R.G. 2003. Relationships between Burrowing Owls (*Athene cunicularia*), small mammals and agriculture. Ph.D thesis, University of Regina.

2. POULIN, R.G., T.I. WELLICOME and L.D. TODD. 2001. Synchronous and delayed numerical responses of a predatory bird community to a vole outbreak on the Canadian prairies. *Journal of Raptor Research* 35: 288-295.

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BALD EAGLE CONSUMES COMMON LOON EGG; COMMON LOON KILLS COMMON GOLDENEYE YOUNG

Since 1975, we have been watching Common Loons and their nests from our cottage on the Winnipeg River near Locke Bay, Ontario. We have ideal observation opportunities from our cottage deck to the small island less than 100 m away where the loons nest each year. In 2005, a pair of Common Loons was observed nesting on the island when we arrived at our cottage on May 19. Vegetation growth was not yet sufficient to conceal the adults while on the nest, and on several occasions over the next two days we noted an immature Bald Eagle harassing the adult loons in the vicinity of the nest. At 1655h on May 21, one of the authors (DGM) observed an adult Bald Eagle land 5 m from the loon nest, just as a downpour began. A single adult loon was located 5 m offshore from the nest and was giving the "tremolo" call that we have noted in our area signals the presence of an eagle. The eagle hopped directly to the loon nest and

began eating the nest contents. The eagle periodically lifted its bill skyward as if to use gravity to aid its consumption of the food.

At 1702h, the eagle finished eating, walked straight into the water and began washing its bill. The single loon had been calling continuously during the previous 7 minutes, but only now did another loon reply, unseen, from somewhere northwest of the nest. At 1703h, the eagle walked back on shore just as a second adult loon arrived and rushed at the eagle, splashing water at it from 2 m away. The eagle retreated several metres farther from shore in response to the loon's aggressive behaviour. The second loon called, and rushed splashing at the eagle until 1705h when the eagle flew off to the southeast. The first loon had remained approximately 10 m from the nest after the arrival of the second loon. After the departure of the eagle, the pair began tremolo calling in unison and continued until 1706h before moving away from the island at 1707h.

At 1711h one of the loons returned to the shoreline by the depredated nest, while the other adult remained approximately 60 m offshore. The loon by the nest picked up some light-coloured material in its bill, shook it, and discarded the material into the water several metres away from the nest. At 1713h the loon left the shoreline, before both adults returned to the nest at 1714h. One of the loons dove and surfaced with what might have been the previously discarded light-coloured material in its bill, and then dropped it. At 1715h both adults left the shoreline and completed "back preen" and "wing flap" postures in unison.²

Although Bald Eagles are well-known to forage opportunistically on a wide variety prey, including both adult and young Common Loons, current species accounts make no mention of eagles depredating eggs of loons or any other bird species.^{1,2} Examination of the depredated nest later in the evening of May 21 demonstrated that the eagle had broken a hole in the



Figure 1. Clark McMaster, age 8, holds the destroyed loon egg. Glen McMaster

upper surface of the single egg in the nest to gain access to the contents (Figure 1). Several pieces of egg membrane were found in the water near the nest, leading us to conclude this was the light-coloured material the loons had discarded. One of us (AM) has previously observed adults remove egg membranes from hatched eggs at successful nests.

In previous years we have observed loons reneating as often as three times in a single summer after nest failure due to flooding. The pair of loons occupying the territory in 2005 may have reneated during our subsequent absence from the cottage, but upon our return in July they were not actively nesting. On a morning in mid-July, 2005 one of the authors (AM) watched from our deck as one of the loons attacked a foraging female Common Goldeneye and her 3 downy chicks. The loon pulled the first two ducklings under the water in turn despite the alarm calls, splashing and short flights of the female goldeneye. The third duckling fluttered across the water almost to the shoreline before being pulled under by the loon. The ducklings did not resurface after being pulled under, but the loon reappeared within a couple of seconds. As loons generally consume prey while on the surface of the water, we assume the ducklings were killed but not eaten. As far as we know, none of the ducklings floated ashore.

Even when not actively nesting, loons often display territorial behaviour toward both other loons and other species.² We have previously observed a loon chase a Mallard hen and her brood out of the water and onto shore. We have also observed loons attack foraging flocks of American White Pelicans, Common Mergansers, and Double-crested Cormorants from

underwater and drive them from their foraging area.

1. BUEHLER, D.A. 2000. Bald Eagle (*Haliaeetus leucocephalus*). In *The Birds of North America*, No. 506 (A. Poole and F. Gill, eds.). The Birds of North America, Inc. Philadelphia, PA.

2. McINTYRE, J.W., and J.F. BARR. 1997. Common Loon (*Gavia immer*). In *The Birds of North America*, No. 313 (A. Poole and F. Gill, eds.). The Birds of North America, Inc. Philadelphia, PA.

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UN-FEATHERING THE NEST

At our cottage on the east shore of Last Mountain Lake, Tree Swallows and House Wrens often compete for the nest boxes. Last year, on June 26, we noticed that a House Wren was investigating a box in which a Tree Swallow had already reared an early brood.

As we watched, the wren went into the box a couple of times, then emerged with a white feather in its beak, which dropped to the ground. It went back in again and returned with another feather. After this happened a few more times, we decided to count seriously.

Sometimes it was a three-inch long feather, sometimes it was a fluffy half-inch bit of down, sometimes the wren came out with two feathers in his beak. Over half an hour elapsed before the wren finally ceased clearing the box, by which time we had counted 111 (yes, one hundred and eleven!) feathers removed.

We don't know who to admire most, the Tree Swallow for collecting so many

feathers or the House Wren for determinedly removing them!

When we checked the box a few days later, there was no sign of occupation. We did have a couple of wren nests in other boxes, but whether one of them was our energetic friend, we don't know.

- Stan and Margaret Fielden, 3923 24th Avenue, Regina, SK S4S 1J9, E-mail: <fieldens@accesscomm.ca>

A SPRING WELCOME, 2005

Spring arrived with a swoop of wings out here on the farm, 12 miles southwest of Ceylon. As I settled down to watch the 6 p.m. news on March 20, I saw a large, dark bird sail past the window. On going outside, I discovered it was one of four mature Bald Eagles that had stopped to rest in the big poplar tree across the road. After about half an hour, they left, one at a time, flying north, approximately following our gravel road. I lost sight of them as they flew behind the trees north of our place. What a beautiful way to welcome spring.

- Wendy Caldwell, P.O. Box 21, Ceylon, SK S0C 0T0

PAINTED LADY BUTTERFLY IRRUPTION IN REGINA

On a calm and sunny Saturday (June 18, 2005), an unusual wildlife event occurred in my family's backyard in south Regina and apparently across the city. An estimated 500-600 Painted Lady butterflies (*Vanessa cardui*) temporarily occupied our Little-Leaf Linden tree (*Tilia cordata*) in the northwest corner of our backyard, with dozens more visiting the flowering plants in the backyard.

-Robert Warnock, 3603 White Bay, Regina, SK S4S 7C9, E-mail: <warnockr@accesscomm.ca>

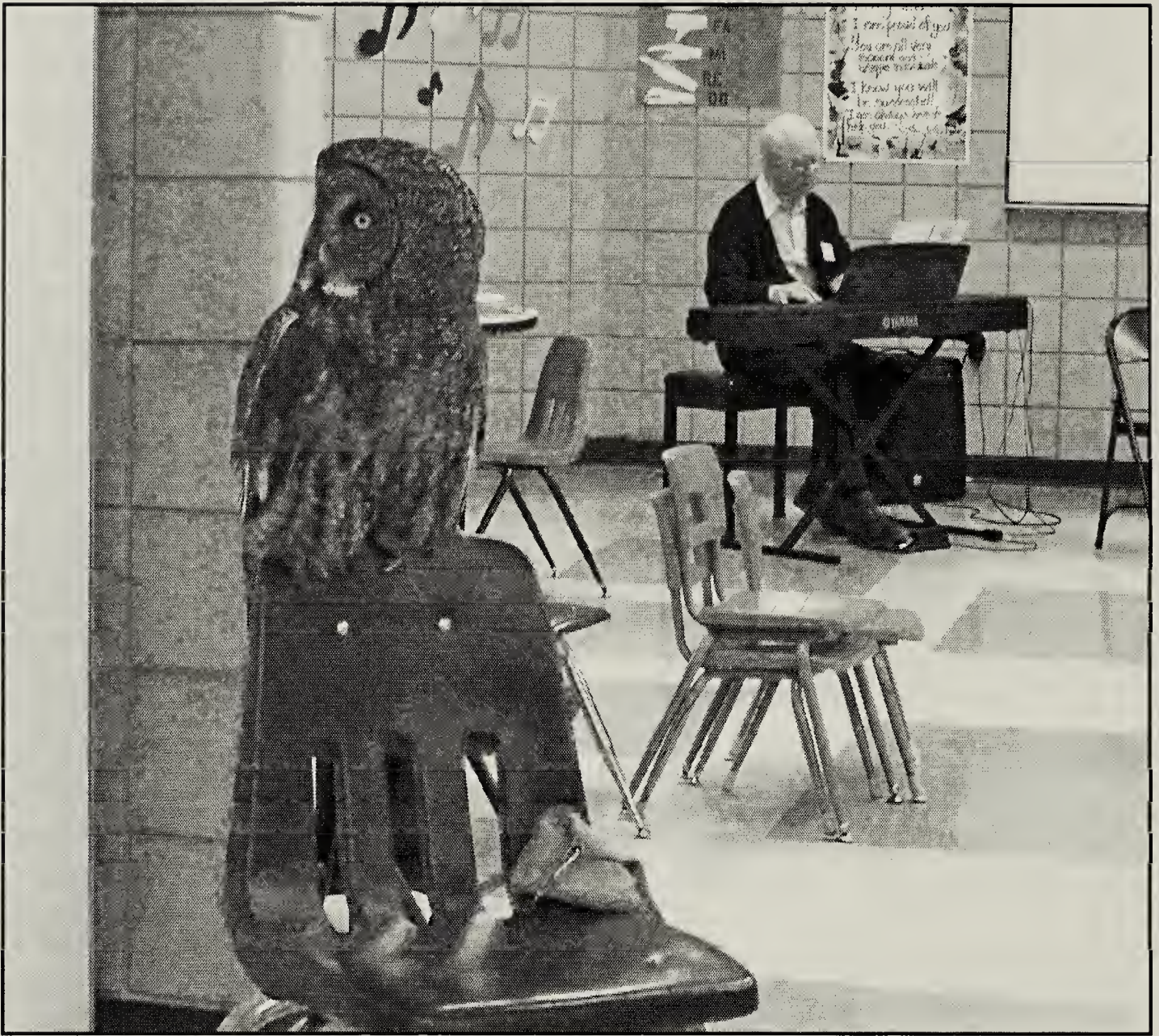
OBITUARY, LADY GRAYL

Lady Grayl (or Gray'l), the tame Great Gray Owl kept for Manitoba Conservation by ornithologist and writer Dr. Robert Nero, died October 13, 2005. Through her appearances with Nero at schools, shopping malls and other venues, Grayl had helped educate thousands of children and adults about the need for conservation, notes Dr. Jim Duncan, a local wildlife biologist.

In his 1994 book, *Lady Grayl: Owl With A Mission*, Nero recounts how he and a helper, Renate Scriven, first found Grayl as a young chick in a manmade nest in the area around Marchand, east of Steinbach, in 1984. "We came back a week later and the chick was in worse condition with a cut on its head made by one of its nest mates," said Nero. Rather than leave her to die, 'a decision was made' to raise the young bird in captivity.

When she wasn't on tour with Nero, Grayl resided in a large pen in the backyard of her keeper's Charleswood home. Among other achievements, Nero and Grayl played a major role in having the Great Gray Owl declared Manitoba's official provincial bird emblem in 1987. 'She was tame, but not like a dog. We worked within her limitations. In many ways, she still behaved like a wild bird,' said Nero. According to Dr. Tom Hutchinson, who performed a necropsy to determine the cause of death, Lady Grayl died of natural causes. She was 21½ years old.

[Adapted from an article 'Bird educated thousands about conservation,' by Martin Zeilig, printed in the *Winnipeg Free Press* on 15 October 2005. Used with permission from the *Winnipeg Free Press*.]



Lady Grayl represented the Manitoba provincial bird emblem at Manitoba Heritage Day on 12 May 2005 in Gimli, Manitoba. To relax prior to the event, Bob Nero serenaded Lady Grayl and others with a jazzy piano tune. Jim Duncan



“We took Grayl on her first overnight trip in September 1989, driving to Duluth for a presentation that evening to the Minnesota Ornithologists Union. Jim Duncan came along to help drive and manage things—a big help. I was worried about a lot of things in connection with this trip, but keeping Grayl overnight was my main concern....It wasn’t a bad night—her first free flight around the [motel] room seemed awfully noisy for an owl, especially when she landed on the metal coat-racks, then flew onto the TV. We slept, aroused a few times by the wings of this eagle-sized bird flapping overhead. Once, early in the morning, I heard Jim give a shout and looked over to see Grayl perched on top of the covers, balancing on his foot. Long before it was time to get up, we were awake, enjoying the unusual treat of Grayl dropping onto first one bed and then the other, as if she were pouncing on a mouse.”

Robert W. Nero, *Lady Grayl, Owl with a Mission*, p. 155-156