2023 LOON INITIATIVES REPORT: MADGE LAKE, DUCK MOUNTAIN PROVINCIAL PARK



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In 2023, the ice went off the lake on 13 May. As in previous years, once there was enough open water for them to land and take off, loons began to arrive, which was about a week before the ice disappeared. Our first spotting of loon chicks was on 18 June — about the same time as last year. The two chicks spotted that day were less than a week old.

Total numbers of Common Loons this year were similar to previous years, with a high count of 79 adults (Table 1). We found 10 chicks/juveniles on the lake, all of which survived into September. Four of the 10 were only spotted as of 17 July. On 29 August, we spotted two additional juveniles swimming in relatively close proximity to the two adults and their two juveniles at Bird Island. The Bird Island pair and their offspring were first spotted on 18 June as the first pair of the season, and additional chicks/juveniles were never spotted in the same area, so we are confident that the two extra juveniles were fly-ins from neighbouring lakes. Extra juveniles have been spotted on the lake in late August and September every year once the adults start leaving. They likely gravitate to Madge from the nearby smaller lakes once their parents have left to fly south.

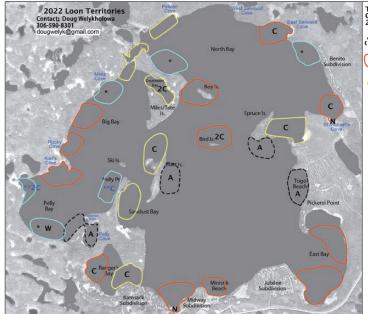
A total of 24 nesting territories were observed this year, compared to last year (Figures 1 and 2).

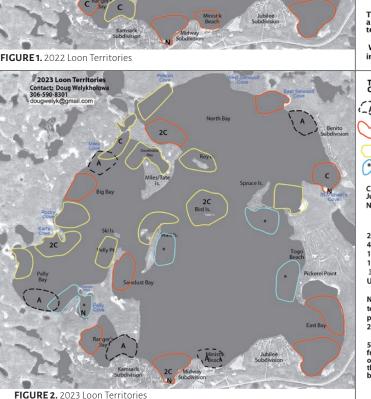
One item of note is that over the years. we have noticed that the 29 occupied and abandoned territories depicted in Figures 1 and 2 rarely vary in location. Sites that are abandoned in one year will often be reoccupied in later years. For some reason, the loons prefer these locations over other areas of the lake. It may have to do with availability of fish in those locations, water depth, shore development or some other factors.

Three nests were directly observed on

SURVEY YEAR	TOTAL ADULTS	# OF TERRITORIAL PAIR	SURVIVING JUVENILES	# OF CHICKS OR JUVENILES LOST
2010/13 AVERAGE		25	29	
2013	75	26	14	2
2014	86	26	9	2
2015	78	26	6	2
2016	82	26	10	0
2017	78	25	16	1
2018	72	26	12	0
2019	75	25	7	1
2020	72	26	10	2
2021	80	23	14	1
2022	82	25	10	2
2023	79	24	10	0

TABLE 1. Madge Lake Loon Count Summaries 2010-2023.







Modified From 2021 New for 2022

SurvivingChicks/ Juveniles - Known Nest Chick lost

during season

25 Occupied Territories 50 paired adults 13 Chicks Observed 10 Juveniles survived 2 Observed nests Up to 32 unpaired adults

Note: 5 of the 6 new territories for 2022, were previously occupied in 2020.

This was offset by abandonment of 4 territories from 2021.

W - Loons arrived in Winter plumage

TERRITORIES & CHANGES FROM 2022

ABANDONED During Summ RE-OCCUPIED FROM 2022

New for 2023

C - SurvivingChicks/ N - Known Nest

24 Occupied Territories 10 Chicks Observed 10 Juveniles survived 3 Observed nests Up to 29 unpaired adults

Note: All 4 of the new territories for 2023, were previously occupied in 2021-

5 territories were abandoned from 2022, for a net loss of 1 over the previous years. 4 of those were in areas of high boat traffic.

the lake this year. The one at St. Michael's Camp was on the same beaver lodge that the same pair occupied in previous years. Two eggs were spotted there, but only one chick survived. The second was located on the edge of the small island in the old boat lagoon (Figure 3). Two chicks hatched successfully at that location (Figure 4). After the loons left the nest, it was occupied by a family of Northern Shoveler ducks with five chicks. The third nest was spotted in a bunch of drowned willows in the small cove off Pelly Bay. In 2021, that nest was built on a beaver lodge in the middle of the cove. That beaver lodge was drowned in 2022. There were no successful hatchings from that pair this year.

Based on their size and colouring, eight of the 10 chicks hatched between the middle and end of June. One pair of chicks in Pelly Bay was first spotted on 17 July. At this time, they were approximately one week old, and were riding on one of the loon's back, making them at least three weeks younger than the others. They may be the product of a second laying, after the first eggs were likely lost.

What was very unusual about this pair and their chicks is that they showed no concern with us being near them. In fact, they allowed us to approach to within 15 feet, and made no attempt to swim away. They appeared calm and made no noise, other than a couple of low-level hoots. When we first approached them, there were no signs of the two chicks, but I noticed that one bird's wings were bulged up, so I suggested to Mieka and Derek Tomlin and Ron Nimetz, who were

accompanying me, that we wait for a bit to see what happens. Shortly afterward, one chick popped up from beneath one wing, then a second appeared from under the other. We then watched as one chick got in the water in order to be fed by the second adult. We got fantastic pictures (Figure 5 and 6).



FIGURE 3. Loon on nest in boat lagoon, 17 June 2023. All photos courtesy of Doug Welykholowa.



FIGURE 4. Adults and chicks from boat lagoon nest, 25 June 2023.



FIGURE 5. Loon in Pelly Bay with two chicks on back, 17 July 2023.

FIGURE 6. One Chick being fed in Pelly Bay, 17 July 2023.



FIGURE 7. Older chicks being fed near boat lagoon, 17 July 2023.



FIGURE 8. Juveniles being fed near Bird Island, 13 August 2023.



FIGURE 9. Bald Eagle with large fish in its talons.

As in previous years, the lake played host to a large number of unpaired young adults (three-to-five-year-olds). These loons were often spotted in different locations on the lake with each count. and group size varied from three to 24 birds, depending on the day. It is quite common for these young adults to gather in larger groups in the middle of the lake during the evening, learning to socialize, while dispersing during the day to feed in other locations, including the many nearby kettle lakes surrounding Madge. Most of these groups allowed us to get fairly close to them, without them getting too concerned, unlike the majority of the territorial pairs, which usually warned us away if we got closer than 100 m to them.

The loon population on the lake appears to have remained stable over the last 14 years of data collection. Total numbers of adults have varied between 72 and 86. As mentioned in last year's report, the one steady factor is the number of occupied nesting territories, which average just over 25 territories per year.

The disturbing trend continues to be the average number of surviving juveniles produced on the lake. Long-term studies by Birds Canada and organizations in the northern states show that in order to maintain a viable loon population, the average number of surviving chicks (reaching six weeks maturity) has to be above 0.47 chicks per breeding pair. Over the last 14 years, Madge Lake has averaged only 0.41 chicks surviving to six weeks per breeding pair. This indicates that the loon population on the lake may not be sustainable at the current levels in the future. As I have noted in previous reports, this is a trend right across North America. In the eastern provinces and northeastern US, acid rain, pollution and resulting increases in methyl mercury are a main cause. Climate change is also a contributing factor.

Here at Madge, pollution and heavy metals are not thought to be significant, but this is an area that has not been properly studied. Predators, such as eagles, are also not believed to be a significant problem; however, other predators could be a problem. The one

trend that we have observed, which is of concern, is a significant increase in power boat traffic each year since we have kept records. Our observations indicate that the breeding pairs are taking extra measures to hide their young and keep them out of the high traffic areas, in most cases. In addition, most pairs that occupy territories with high boat traffic are usually unsuccessful in producing viable chicks. More research is required to produce definitive answers, but this is well beyond our local capabilities. Whatever the answer is, the loons are an excellent indicator of the health of our environment. What affects them will have broad-reaching consequences in the future, and that should concern us all.

In addition to the loons, we spotted a number of other species, including a Bald Eagle flying with a large fish in its talons (Figure 9), a family of six otters in east bay, and a Coyote swimming off Watt Island, toward Miles Island. Pelicans, Osprey and Great Blue Heron were also seen, as well as at least one pair of Trumpeter Swans. The lake is also host to a large number (>120) of Red-necked Grebes.

Thanks to everyone who accompanied Bob Wynes and I on our surveys — Nancy Welykholowa, Lorne and Barb Koroluk, Rob and Shevon Wilson, Barb and Doug Elsasser, Delaney Boyd, Morley, Paula, and Jennifer and Jamison Maier. A special thanks to Mieka and Derek Tomlin and Ron Nimetz who accompanied me for one survey, then went out on their own to assist in the counts. Thank you to Greg Podovinnikoff and the Park for the support they provide us every year. Thank you to YFBTA, the Kamsack Times and Nature Saskatchewan, which continually publish this annual report. Also, a special thanks to Friends of Madge Lake (FOML) for agreeing to partner with us in our future endeavours.

This winter, Rob Wilson and I will be applying for a grant from the Saskatchewan Fish & Wildlife Fund to revamp our loon awareness signs, teaching materials, teaching aids, loon brochure and handouts in order to help us continue to educate visitors in the park on the Common Loon. 🖊

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