

## 2023 Madge Lake Loon Survey Final Report

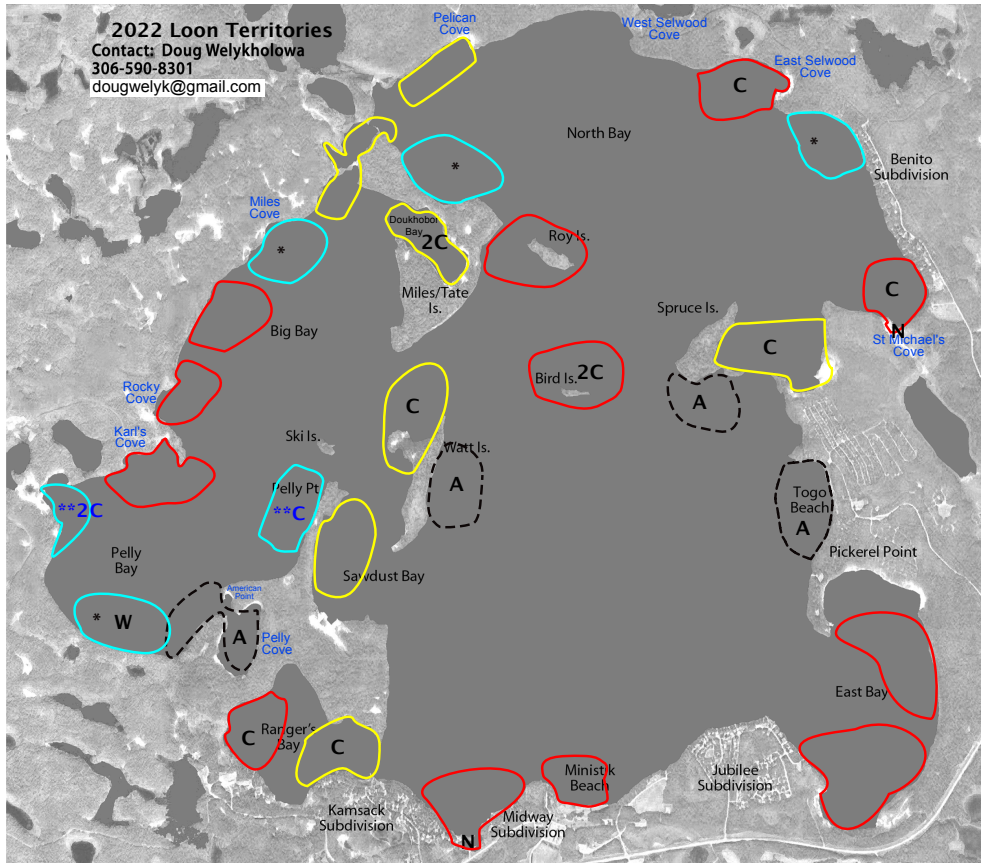
This year the ice went off the lake on 13 May. As in previous years, once there was enough open water for them to land and take off, loons began to arrive about a week before the ice disappeared. Our first spotting of loon chicks was on 18 June, about the same time as last year. The two chicks spotted 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 (figure 1 below). We found 1 chicks/Juveniles on the lake, all of which survived into September. 4 of the 10 were only spotted as of 17 July. On 29 August, we spotted 2 additional juveniles swimming in relatively close proximity to the 2 adults and their 2 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.

**Figure 1 - Madge Lake Loon Count Summaries 2010 - 2022**

Survey Year	Total Adults	# of Territorial Pair	Surviving Juveniles	# of Chicks or Juveniles Lost
<b>2010/12 average</b>		25	9	
<b>2013</b>	75	26	14	2
<b>2014</b>	86	26	9	2
<b>2015</b>	78	26	6	2
<b>2016</b>	82	26	10	0
<b>2017</b>	78	25	16	1
<b>2018</b>	72	26	12	0
<b>2019</b>	75	25	7	1
<b>2020</b>	72	26	10	2
<b>2021</b>	80	23	14	1
<b>2022</b>	82	25	10	3
<b>2023</b>	79	24	10	0

A total of 24 nesting territories were observed this year. (See **Figures 2 & 3** below for comparison).



**TERRITORIES & CHANGES FROM 2021**

- A ABANDONED During Summer
- RE-OCCUPIED FROM 2021
- Modified From 2021
- \* New for 2022

C - Surviving Chicks/ Juveniles  
 N - Known Nest  
 \*\*C - 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

**Figure 2 - 2022 Loon Territories**



**TERRITORIES & CHANGES FROM 2022**

- A ABANDONED During Summer
- RE-OCCUPIED FROM 2022
- Modified From 2022
- \* New for 2023

C - Surviving Chicks/ Juveniles  
 N - Known Nest

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

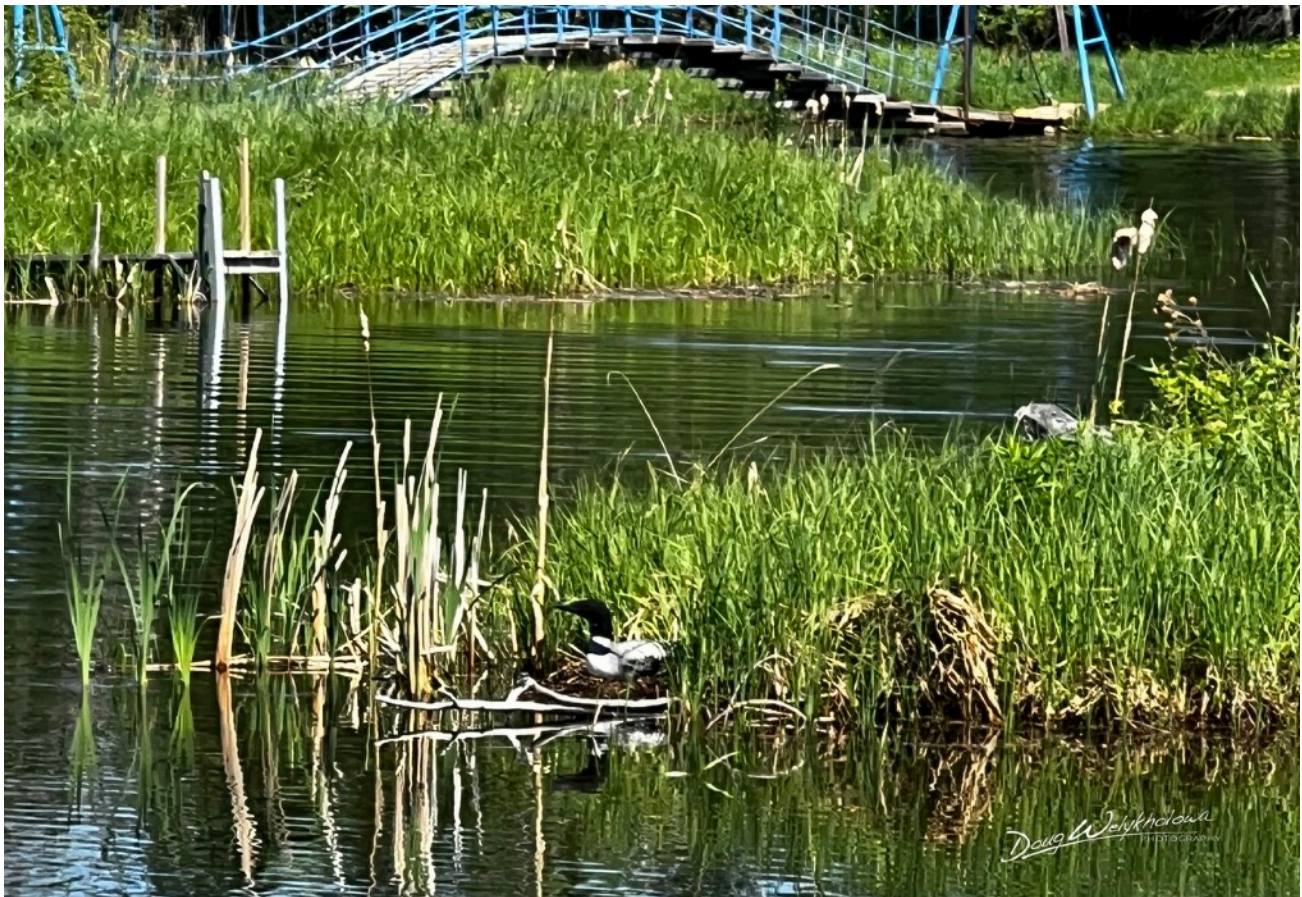
Note: All 4 of the new territories for 2023, were previously occupied in 2021-2022.

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.

**Figure 3 - 2023 Loon Territories**

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 above 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 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. 2 chicks hatched successfully at that location. After the loons left the nest, it was occupied by a family of Northern Shoveler ducks with 5 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.



**Figure 4 - Loon on Nest in Boat Lagoon 17 June 2023**

Based on their size and colouring, 8 of the 10 chicks hatched between the middle and end of June. One pair of chicks in Pelly Bay were first spotted on 17 July. When first spotted, they were approximately one week old, and were riding on one of the loon's back, making them at least 3 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 the 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 and see what happens. Shortly afterwards, 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 from this.



**Figure 5 - Adults and Chicks from Boat Lagoon Nest 25 June 2023**



**Figure 6 - Loon in Pelly Bay with two Chicks on back 17 July 2023**



**Figure 7 - One Chick being fed in Pelly Bay 17 July 2023**



**Figure 8 - Older Chicks being fed near Boat Lagoon 17 July 2023**



**Figure 9 - Juveniles being fed near Bird Island 13 August 2023**

As in previous years, the lake played host to a large number of unpaired young adults (3-5 year olds). These loons were often spotted in different locations on the lake with each count, and group size varied from 3-24 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 most 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 6 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 6 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 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, that 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. Also, Most pairs that occupy territories with high boat traffic, usually are unsuccessful in producing viable chicks. More research is required to produce definitive answers, but this is well beyond our local capabilities. What ever 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, a family of 6 Otters in east bay and a Coyote swimming off Watt Island towards Miles Island. Pelicans, Osprey and 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.



**Figure 10 - Bald Eagle with large fish in its talons**

Thanks to everyone who accompanied Bob Wynes and I on our surveys - Nancy Welykholowa, Lorne & Barb Koroluk, Rob & Shevon Wilson, Barb and Doug Elsasser, Delaney Boyd, Morley, Paula, Jennifer & Jamison Maier. A special thanks to Mieka & 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 who 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.

A handwritten signature in black ink, appearing to read 'WD Welykholowa', with a long horizontal flourish extending to the right.

Doug Welykholowa  
Chairperson, YFBTA Loon Initiatives Committee  
24 October 2023

**Distribution**

Bob Wynes  
Mieka & Derek Tomlin  
Birds Canada  
Duck Mountain Provincial Park  
Friends of Madge Lake  
Nature Saskatchewan  
YFBTA  
Kamsack Times