

# 2022 LOON INITIATIVES REPORT: MADGE LAKE, DUCK MOUNTAIN PROVINCIAL PARK



SURVEY YEAR	TOTAL ADULTS	# OF TERRITORIAL PAIR	SURVIVING JUVENILES	# OF CHICKS OR JUVENILES LOST
2010/12 AVERAGE	25	9		
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

TABLE 1. Madge Lake Loon Count Summaries 2010-2022.

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This year the ice went off the lake on 16 May, with the loons starting to arrive about a week before as the ice receded from the shorelines, which allowed the birds access to the water. Our first spotting of loon chicks was on 19 June — about the same time as last year.

Circumstances beyond control resulted in us not doing a count until 26 June, when we spotted our first chicks. Of the six chicks initially seen, four were less than a week old and two were approximately two weeks old. This would put the first hatchings at about the middle of June.

Total numbers of Common Loons this year were similar to previous years, with a high count of 82 adults on 6 August (Table 1). We found 13 chicks/juveniles on the lake, of which 10 survived into mid-September. Six of those were only discovered as juveniles in early-to-mid-August. We are fairly confident that they were hatched on the lake, as they were closely accompanied by adults in known nesting territories. It is quite possible that the chicks avoided our previous counts by hiding in the reeds, which are quite extensive in those territories. This has become more prevalent over the years as boating traffic has increased on the lake.

A total of 25 nesting territories were noted this year, which is an increase of two territories from 2021. Four old territories were initially occupied, then abandoned during the summer, and five of six new territories were re-established from 2020 (Figures 1 and 2).

We had a very wet spring and early summer, with the water levels rising over a foot from 2021. This resulted in most of the previously occupied nesting sites having to be relocated to higher ground. As a result, we were only able to directly observe two nests.

The nest on a beaver lodge near St. Michael's Camp was moved higher on

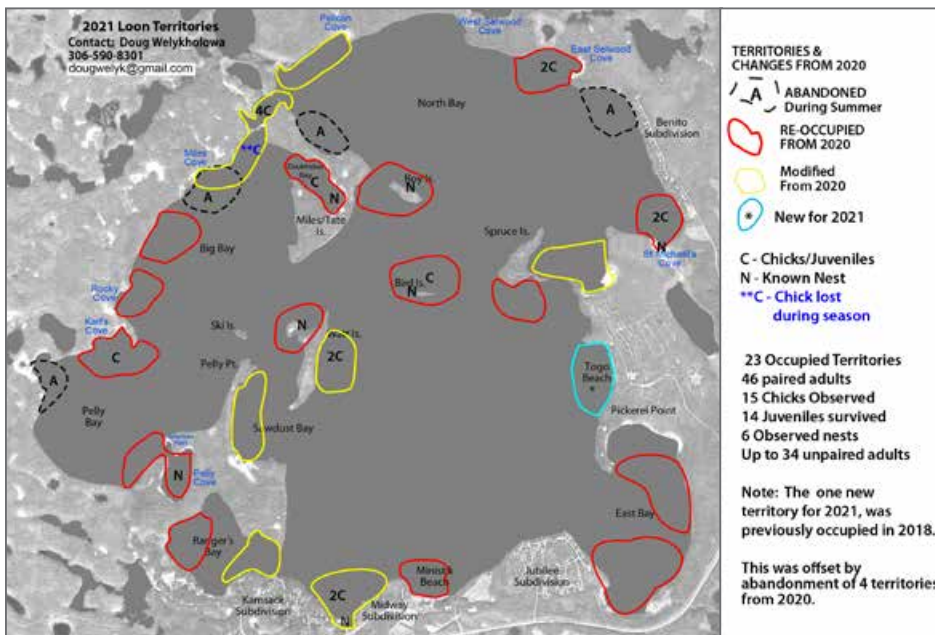


FIGURE 1. 2021 Loon Territories

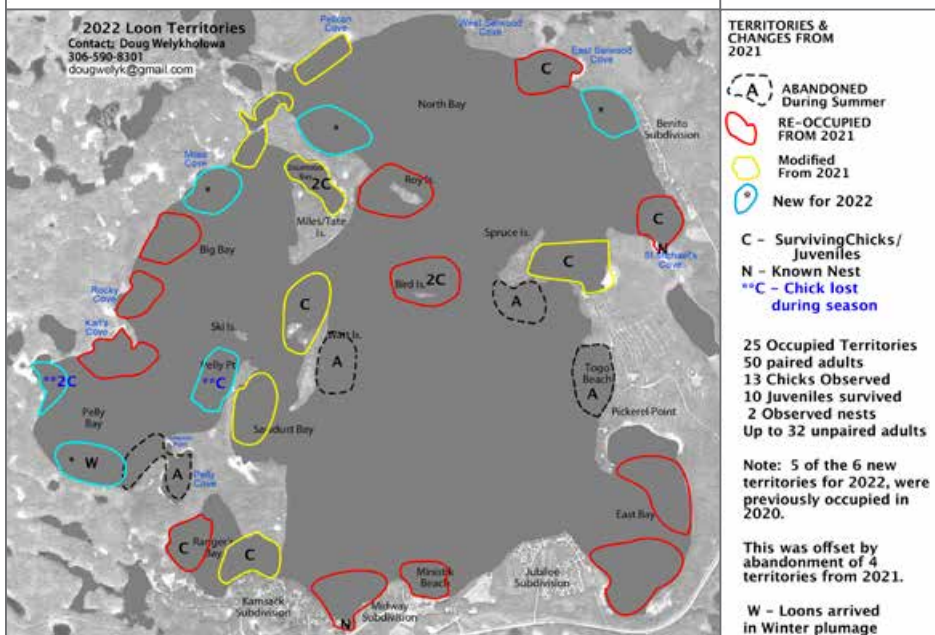


FIGURE 2. 2022 Loon Territories

the lodge, while the one in the old boat lagoon had to be moved about 10 feet deeper into the reeds and positioned on the shore. Previously, that nest was built at the edge of the reeds on an old grebe nest (Figure 3). This pair lost their first set of eggs, then laid another two. Unfortunately, the second set were also lost. This was likely due to predators that had easy access to the shore.

One unusual surprise this year was the arrival of a pair of loons that were still in their winter/non-breeding plumage, into a new territory in Big Bay/Pelly Bay (Figure 4). This pair remained throughout



**FIGURE 3.** Loon nest in foreground with two eggs. The nest was moved from approximately where the adult loon is due to high water drowning the old location.

the summer, and while the larger bird (likely the male) did eventually moult into its breeding colours by August, the other bird remained in its winter plumage the entire summer (Figures 5 and 6).

While there is normal variation of up to a week in when chicks hatch, we noticed at least one pair, new to the lake and in a new territory, had what was likely a chick from a second laying. On 24 July, when most of the chicks on the lake were around five weeks old, this chick was only about three weeks old (Figures 7 and 8). This is common and usually happens every year.

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 10 to 32 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. Normally you can get into the middle

of the group with your boat without the birds getting disturbed.

While the loon population on the lake appears to have remained stable over the last 13 years of data collection, we are beginning to see some disturbing trends in the data. Total numbers of adults have varied between 72 and 86. The totals are not absolute, however, given the difficulties in obtaining an accurate count. For instance, there are a large number of loon pairs residing on the larger kettle lakes within the park boundary, as well as those just across the border in Manitoba. Many of these birds likely fly to Madge periodically to feed, and thus can get caught up in our counts.

The one steady factor is the number of occupied nesting territories, which average 25.3 per year. The variables are the unpaired adults and any fly-ins. The disturbing trend, with variations from year-to-year, are the number of surviving juveniles produced on the lake. Long term studies by Birds Canada and organizations in the northern United States show that in order to maintain a viable loon population, the average number of surviving chicks (reaching



**FIGURE 4.** Loons in winter plumage, July 2022.



**FIGURES.** One loon has moulted into its breeding colours, while its mate remains in winter colours, 6 August 2022.

six weeks maturity) has to be above .47 chicks per breeding pair. Over the last 13 years, Madge Lake has averaged only .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.

This is also 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 as well. Here at Madge, pollution and heavy metals are not thought to be as significant, but this is also an area that has not been properly studied. While some predators, such as eagles, are not believed to be a significant problem, other predators may be a problem.

One trend that we have observed, since keeping records, is a significant increase in power boat traffic each year. As previously mentioned, our observations indicate that — in most cases — breeding loon pairs are taking extra measures to hide their young and keep them out of the high traffic boat areas. More research is required to produce definitive answers, but this is well beyond our local capabilities. Whatever the cause 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.

### Acknowledgements

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FIGURE 6. Loon in winter plumage feeding on a crayfish.



FIGURE 7. Adults with three week-old chick, 24 July 2022.



FIGURE 8. Loon and five week-old chicks.



All photos courtesy of Doug Welykholowa.