

Contamination of Port Credit waterfront with fishing lines/gear and toxic lead tackle and its effects on Trumpeter swans. Challenges and solutions.



Presentation prepared by Valeria Pirner and Dianne Horwath

Brief history

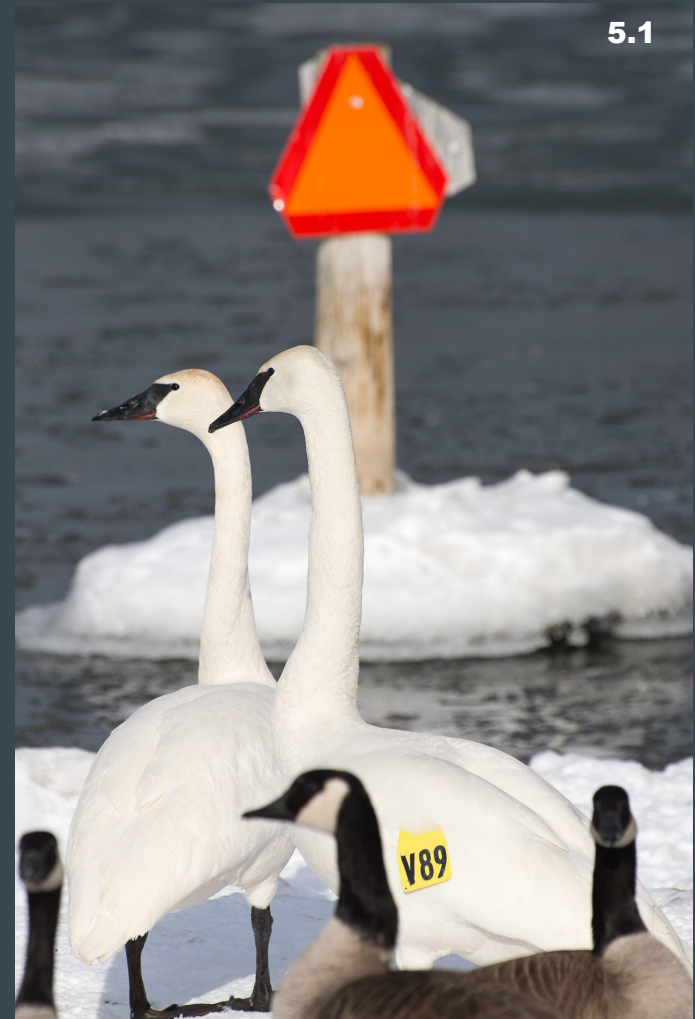
Trumpeter swans are native to Canada and were extirpated from Ontario in late 1800s. The restoration program in Ontario was initiated by retired Ministry of Natural Resources biologist, Harry Lumsden, in 1982, along with the Trumpeter Swan Society, with the objective to “restore the species to as much of its former range as possible”. After 40 years of hard work, the Southern Ontario population stands at over 1,200 birds. Port Credit was fortunate to be a winter home for 14 Trumpeter swans this year, a two-fold increase from the previous years. Scores of people visited our area this winter to observe these magnificent birds and share their images on social media.



©VP Pirner

Moving toward using lead-free fishing tackle

Credit River is “one of Mississauga’s most cherished waterways” with Port Credit waterfront being “one of Mississauga’s few truly natural”, unique and fragile wildlife areas. It is also a very popular fishing spot with recreational fishing activities being largely unregulated. “An average Canadian angler can lose 11 to 15 lead jigs and sinkers while fishing due to snags and other reasons. This adds to about 460 tonnes of lead jig and sinker lost into Canadian waterways every year.” Lead is a highly toxic metal and the ingestion of small lead fishing sinkers and jigs is a major cause of death in Trumpeter swans in Ontario, exceeding deaths due to trauma, entanglement in fishing gear and disease.



“It is well documented that wildlife, primarily piscivorous birds and other waterbirds, ingest fishing sinkers and jigs during feeding, when they either mistake the sinkers and jigs for food items or grit or consume lost bait fish with the line and weight still attached. Lead fishing weights that weigh less than 50 g and are smaller than 2 cm in any dimension are generally the size found to be ingested by wildlife. Ingestion of a single lead sinker or lead-headed jig, representing up to several grams of lead, is sufficient to expose a loon or other bird to a lethal dose of lead.” (*Environment and Climate Change Canada, 2018*)

Current Lead Research by Ontario Trumpeter Swan Restoration in Collaboration with Dr. Sherri Cox, Wildlife Veterinarian



Every year, many Trumpeter swans become sick from ingestion of lead. In some cases, birds require surgery to remove large pieces of lead from their ventriculus (stomach). Chronic lead toxicity could pose a threat to Trumpeter swan population. Lead interferes with several metabolic functions, and can cause neurologic signs, gastromotility changes, hematological changes, behavioural changes, and other medical concerns in birds.



Report from the Toronto Wildlife Centre on Port Credit swan admissions

In the past year, a total 5 Trumpeter swans from Port Credit were admitted and treated by the TWC for different ailments related to water pollution and human interference:

- 2 were treated for lead ingestion and toxicity
- 2 swans (V89 and P56) were treated after the diesel spill in November 2020
- the same 2 swans were readmitted shortly after; one for sprained wing (reportedly, from a car strike in the marina parking lot), the other for puncture wounds (likely dog)
- 1 swan (Z43) was admitted and treated for swallowed fishing hook that TWC was not able to remove due to the complex nature of the injury. The swan passed away shortly after being released.

TWC Mute Swan report:

A total of 10 mute swans were admitted and treated by TWC since 2017;

- 4 - fishing hook/line injury/entanglement
- 3 oil/diesel exposure
- 3 lacerations/wounds
- 1 fractured wing

“In general most fishing line/hook patients will recover if objects are removed and any issues are addressed at the hospital. Most fractures would mean euthanasia especially when severe on such large birds. Laceration and wound patients usually have a good prognosis depending on the severity of wounds. Lead, in our experience, is most likely from lead sinkers used when fishing. Most of these birds are so sick when we get to them, that they will pass away [in care] or will have to be humanely euthanized.” ~Toronto Wildlife Centre staff.

SUMMARY: Current dangers to the future of Trumpeter Swans in Port Credit

Lead poisoning from ingesting lost and discarded lead fishing sinkers and jigs

Trauma and injuries related to fishing line entanglement and swallowed fishing hooks/gear

Loss and degradation of wintering grounds due to garbage pollution

Human interference such as harassment by people and dogs and illegal feeding of waterfowl

Poster by Jill Ramsay

Hook, line and sinker: All of them deadly!

Discarded fishing tackle KILLS AND INJURES swans and other wildlife



Fishing line can strangle, choke, cut off blood supply



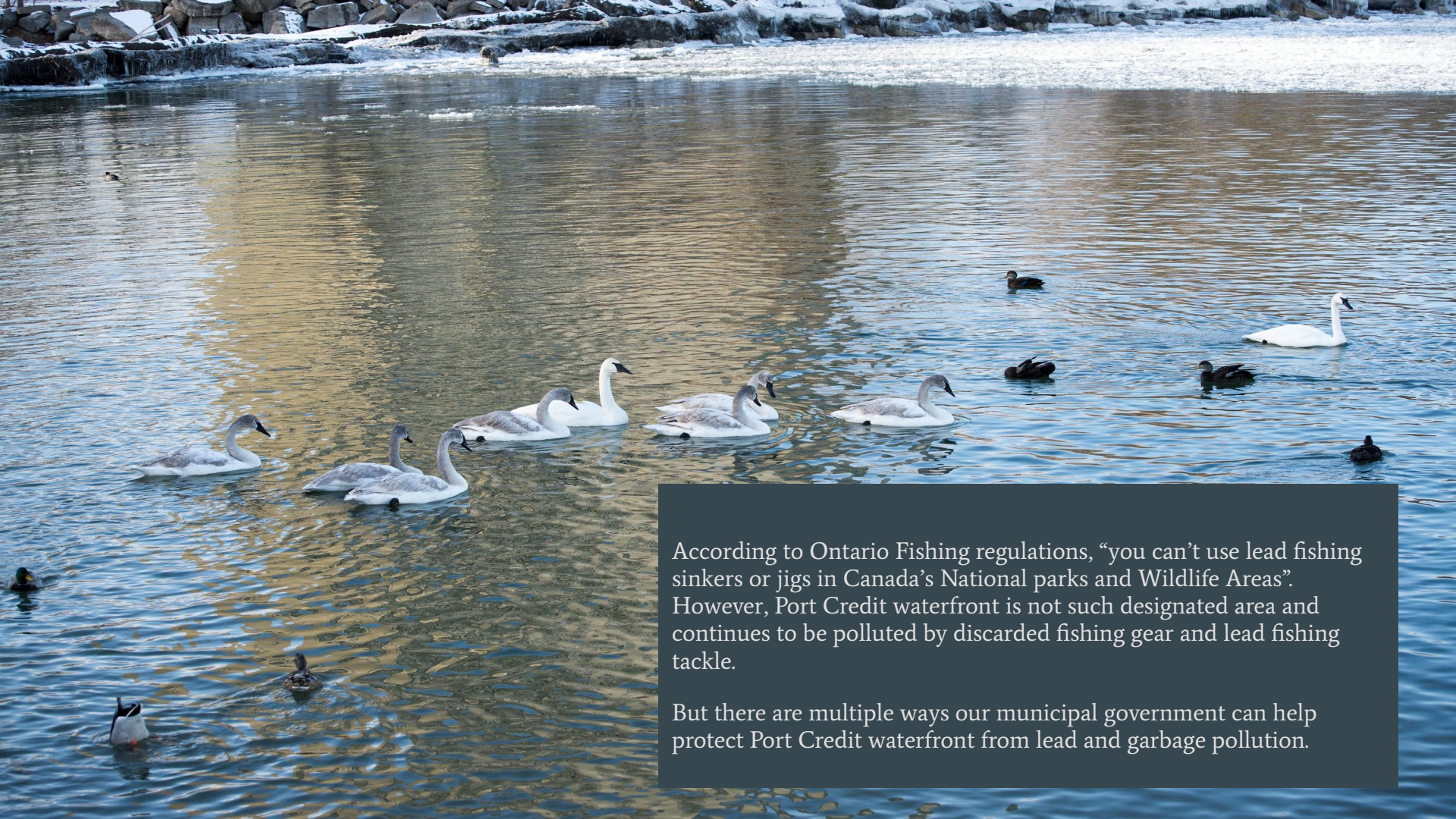
Lead sinkers cause a slow, agonizing death



Hooks cause lacerations, nerve damage, infections

PLEASE!

Use steel sinkers, not lead
Retrieve all broken lines, hooks and sinkers
Dispose of all tackle carefully



According to Ontario Fishing regulations, “you can’t use lead fishing sinkers or jigs in Canada’s National parks and Wildlife Areas”. However, Port Credit waterfront is not such designated area and continues to be polluted by discarded fishing gear and lead fishing tackle.

But there are multiple ways our municipal government can help protect Port Credit waterfront from lead and garbage pollution.

Solutions

Promote the use of non-lead fishing tackle with appropriate signage and public education campaign

Mandate the local sporting goods stores to carry non-lead fishing tackle

Implement designated fishing areas in Port Credit, instead of allowing uncontrolled fishing along the mouth of Credit River, at public boat launch area and Waterfront Trail

Install fishing line receptacles and signage in designated areas to promote proper disposal of used fishing line/gear/tackle

Install better “DO NOT FEED WATERFOWL” signage in the specific areas where general public tends to feed local waterfowl (PC Public Marina, JC Saddington Park boardwalk, Lakeshore bridge underpass)

Consistent By-Law enforcement; hire seasonal by-law enforcement officers



References

- Callan, I. (2020, October 24). Up to 2,000 litres of diesel leaks into Credit River threatening Mississauga's natural oasis. Retrieved March 25, 2021, from <https://www.thestar.com/news/canada/2020/10/24/up-to-2000-litres-of-diesel-leaks-into-credit-river-threatening-mississaugas-natural-oasis.html>
- Environment And Climate Change Canada. (2018). Study To Gather Use Pattern Information On Lead Sinkers And Jigs And Their Non-Lead Alternatives In Canada. Retrieved March 25, 2021, from http://publications.gc.ca/collections/collection_2018/eccc/En14-308-2018-eng.pdf
- Environment and Climate Change Canada. (2018, May 03). Government of Canada. Retrieved March 25, 2021, from <https://www.canada.ca/en/environment-climate-change/services/management-toxic-substances/list-canadian-environmental-protection-act/lead/using-more-lead-free-fishing-tackle.html>
- Government of Ontario. (2019, December 10). Rules On Using Fishing Tackle. Retrieved March 25, 2021, from <https://www.ontario.ca/page/rules-using-fishing-tackle#section-2>