



NEWSLETTER

SOUTH LAKE SIMCOE NATURALISTS

SLSN is an incorporated not-for-profit Member of Ontario Nature.

Telephone 905-722-8021

(www.slsnc.ca)

Research Partner with The Zephyr Society of Lake Simcoe (www.zephyrsociety.ca)

Member: Rescue Lake Simcoe Coalition

Member: Ontario Greenbelt Alliance

Note: Please renew your membership to receive future Newsletters

Meetings and Outings

Meetings: All Meetings start at 4:00 p.m. at the York Region Police Building Meeting Room (Baseline Road between McCowan and Civic Centre Road) unless noted otherwise. No July or August and January Meetings. Members events (insurance compliance).

York Regional Police, 3 District Community Meeting Room
3527 Baseline Road, Georgina.



NOTE: Consistent with York Region Police recent procedures in place regarding meeting use of their Community Meeting Room (CMR). Attendees of SLSN meetings

must be current members of SLSN in good standing, and may be asked to provide further information, as requested by York Region Police representatives.

Sunday March 8: "Palm Oil" One of the greatest conservation issues of our time for loss of forests and important wildlife species is happening daily, and with concurrence from our daily lives. **What can we do!** Come out and learn about this world conservation issue, how urgent it is, and what we can all do to influence change and conservation in the future. Club members research, presentation and conversation meeting. **Note: Daylight Savings Time begins.**

Sunday April 19: Iceland, Travelogue – Gord Zwaigenbaum

SLSN member will present an illustrated talk on the "Land of Fire and Ice". A naturalists wonderland. From the magnificent waterfalls, moon like lava fields to the snow-covered mountains, there are really no words to describe the inspiring natural beauty of Iceland. Gord has recently returned from a trip and will show us his experiences in this wild world. **Note: This meeting is the 3rd Sunday in April, as the 2nd Sunday is Easter Sunday.**

Sunday May 10: Plastic in our Environment- details to follow.

Outings: All regular outings – Note: **Paid-up members in good standing may participate (for insurance compliance).**

2019 Winter

Monday April 6: Hiking and Nature Study Expedition: An afternoon adventure exploring early spring for early bird arrivals, pop-up spring wild flowers, trees waking up, and ferns and their allies, in a forest and field area. **Meet at 3:30 p.m. at the Coffee Time in the**

Baldwin Plaza parking lot, Highway 48, south of Baldwin. Dress for the weather. Bring binoculars etc.

Members, please consider writing and submitting an article to the Talon Newsletter.

Phone Paul 905-722-8021 or Norma 905-476-4747 for further information about meetings and naturalist outings.

2020 SLSN Officers:

President: Paul Harpley
Vice-President: Gord Zwaigenbaum
Treasurer-Membership Secretary: Norma Knowlton
Appointment: Meeting Secretary: Christine Legree

The Future of Conservation Authorities in Ontario Consultation Sessions

2020-02-24

Environmental Defence advises that over the last several weeks, the Ministry of Environment, Conservation and Parks has been hosting invitation-only in-person consultation sessions regarding the Conservation Authorities Act. The primary audiences involved in these multi-stakeholder meetings were: municipalities, development corporations and associations, land owners' associations, and conservation organizations. **While there was a lot of positive support and feedback at these sessions, there were also strong and adamant messages that conservation authorities be removed from the planning process and have their mandate and scope limited.**

The workbooks presented at the meetings have now been [adapted into a survey, and posted on Ontario.ca](#). The deadline to respond is **March 13, 2020**. Considering the extremely limited environmental voice at the in-person sessions, we're hoping the broader community will participate in large numbers for the online consultation. **We encourage groups and individuals from across Ontario to submit feedback in the survey. Below are some bullet points for consideration while responding to the questions. Don't feel compelled to answer everything. If relevant, think about your personal experiences with conservation authorities and conservation areas and include your stories when responding.**

Conservation Ontario has posted a backgrounder and their presentation from the meetings which will also be helpful. Those resources can be found here: <https://conservationontario.ca/policy-priorities/conservation-authorities-act/>

Some other things to keep in mind for the survey:

- The conservation authorities' (CAs) role in planning decisions under the *Planning Act* and the *Environmental Assessment Act* ensure that developments do not result in changes to the floodplain and the natural heritage that would put communities at risk of flooding. The role of CAs in planning needs to be maintained.
 - Other jurisdictions, such as Ohio, who have watershed coordinators without any legislative or regulatory authority, have found that to be a major barrier in meaningful watershed planning and flood protection.

Watershed scale monitoring and planning support the “core” programs of flood mitigation, natural hazards, drinking water source protection, and the Lake Simcoe Protection Plan. Monitoring programs are necessary for delivery of these “core” programs prescribed by the province. Additionally, they hold significant value in broader environmental protections including land conservation, issues of water quality, and ecological restoration.

The [Flood Advisor's report](#) showed strong support for the conservation authority model in protecting Ontario from the risks of climate change. This model only works if CAs are given the regulatory power necessary to intervene on planning decisions in terms of watershed resilience to climate change and flooding.

CAs partner with local environmental and conservation groups, farmers, and their communities to deliver regionally significant projects including rehabilitating natural heritage, implementing agricultural best practices, and restoring or creating wetlands. They often provide match funding, in addition to the on-the-ground expertise and relationships with the local community.

In addition to flood mitigation, several environmental issues are best addressed at the watershed scale therefore CAs play a key role in the sustainability of our province across multiple issues. For example, the Canada-Ontario Lake Erie Action Plan relies on the Lake Erie CAs for delivery of several projects, as well as monitoring and modeling phosphorus reductions.

As mentioned, there may be survey questions that are not relevant to you or your organization – feel free to leave those sections blank. Any concern or feedback you want to relay that is not prompted by the questions can be expanded on in Section 5: Additional feedback.

Thank you for taking the time to respond to this important consultation opportunity! Please feel free to reach out to me with any questions or to organize on this issue in the future.

Kind regards,

Kelsey

Kelsey Scarfone

Water Program Manager, Environmental Defence

Keswick Secondary Plan, Georgina – Have your Say

2020-02-28 Town of Georgina

You are receiving this email as you are identified as an interested party in relation to the Keswick Secondary Plan Review. If you are an organization or association receiving this email, it would be appreciated if you could circulate this to your members for their consideration.

The project team is looking for your input on how key undeveloped areas in Keswick should evolve to meet the needs of current and future residents and businesses.

Take the [land use and design options survey](https://keswicksecondaryplan.metroquest.ca) (keswicksecondaryplan.metroquest.ca) and let us know your thoughts. The concept designs used in the survey were created at Public Workshop #2 held in January. The survey ends March 25th.

To learn more about the Keswick Secondary Plan Review, visit www.georgina.ca/KSPR.

Tolek A. Makarewicz, BURPI, MCIP, RPP, Senior Policy Planner | Town of Georgina

Rescue Lake Simcoe Coalition Municipal Resolution, “Protect Our Plan”

2020-03 South Lake Simcoe Naturalists

We will be asking the Mayor and Council of the Town of Georgina to review, approve, endorse and support passing the “Protect our Plan” Resolution for Lake Simcoe in our community, and for strengthening foundations for healthy communities, healthy people and economy.

On April 1, 2020, I will present the **“Protect our Plan” Resolution** on behalf of the South Lake Simcoe Naturalists (SLSN), a member organization of the Rescue Lake Simcoe Coalition since 2003 when it was formed. Our Organization has been

active in natural heritage conservation, recreation, and natural history research for over 30 years in the South Lake Simcoe region. SLSN was instrumental in the movement to establish and support implementation of the **Lake Simcoe Act and Plan (LSAP)**. Since 2008, when it was enacted, **we have eagerly anticipated the ten-year review of the Act and Plan, that we were expecting in 2019**. Especially recognizing the considerable documented increase in phosphorus loading, increasing urban development pressures and climate change impacts we feel this review of the LSAP should be formally initiated and undertaken by the Province of Ontario as soon as possible, and we are asking our Municipal political representatives to join us in this important environmental review. Stay tuned at our regular meeting in March for more information, and support for the LSAP review.

Paul Harpley SLSN

Ontario Government Considering Reinstating Spring Bear Hunt in the Province

2020-02-12

As you may have heard, the Ontario Government is undoing a 1999 decision to cancel the Spring bear hunt and is instead, reinstating it across Ontario.

Ontario Nature was calling for support in voicing your concerns. Comments were submitted by February 18th **by Ontario Nature and others**.

Ontario Nature and others are opposed to the reinstatement of the spring bear hunt which was closed for good reason back in 1999. The economic gains that our province outlines could be made from a renewed hunt are not a good enough reason to reinstate it - there are NO good reasons but definitely some good reasons to AVOID reinstating the spring bear hunt -- for example

- Most hunters are non-residents who hunt by baiting bears
- Many hunters at bait stations are unable to distinguish between male and female bears
- Female bears are killed, including nursing mothers
- Orphaned cubs – about five to six months old and typically weighing about five kilograms – starve to death or are killed by other predators
- Despite the threat of large fines, regulations prohibiting the killing of females accompanied by cubs are unenforceable

Environmental Defence is opposed to reinstating the hunt. Our wildlife is Not For Sale. Our biodiversity is Not For Sale. Ontario is Not For Sale.

Laura Severinac, Environmental Defence

Glycosphate – Canada Forests

2020-01-29, Sum of Us

Airplanes are flying over indigenous land in Canada and pouring thousands of litres of toxic glyphosate on their forests.

Plants are being wiped out. Animals are disappearing. And Indigenous people who live on the land are facing a crisis.

The Canadian government is refusing to protect indigenous territory from glyphosate -- **but, you could help stop this rain of death.**

This small group of **brave Indigenous elders have hired top-notch lawyers to fight the Canadian government in court** and stop the glyphosate rain, **but without your help, the lawsuit is dead in the water.**

Suing the government will cost them over \$100,000 -- **can you donate today to keep this battle of a lifetime going?**

Glyphosate is Bayer-Monsanto's favorite pesticide. It kills bees. And it's dangerous to humans too -- **over 13,000 people are suing Monsanto, blaming glyphosate for causing their cancer.**

And as planes drench their forests with this poison, Indigenous communities have watched in horror **as beavers, rabbits, songbirds, and porcupines disappear from their land.** They also can't eat, or make medicine out of, glyphosate doused plants.

Legal battles are long and expensive, and because of the backing of SumOfUs members like you, these courageous elders have started the legal process. **But they can't pay the legal fees to keep the lawsuit going, and ban glyphosate spraying on their land, without your help.**

SumOfUs members are **bringing toxic glyphosate to an end.** We fought the re-licensing of glyphosate across Europe, and thousands of you donated to Monsanto cancer-victim Dewayne Lee Johnson throughout his historic legal case.

And together, we're winning. Countries across the world are banning the toxic pesticide. Retailers like Costco are getting glyphosate off store shelves. Bayer-Monsanto's value is plummeting, and even its own shareholders are revolting against glyphosate!

We show time and time again that when ordinary people come together, we can take on even the biggest corporate giants. **And with your help today, this small group of Indigenous elders in Canada can make history.**

SumOfUs is a worldwide movement of people like you, working together to hold corporations accountable for their actions and forge a new, sustainable path for our global economy.

#LessSalty solutions: How to de-ice sidewalks and be nice to our lakes and rivers at the same time.

2020-01-27 Safeguarding Freshwater

Our urban rivers, creeks and waterways are suffering from a steady stream of sodium that has no signs of letting up. **Road salt is the culprit.** Tonnes of salt are showing up in our waterways from overuse on parking lots, sidewalks, and other public spaces. The problem is so bad that some areas of the GTA have **salt spikes in freshwater that come close to ocean levels!**



Image by Flickr user Pat Pilon

At Environmental Defence, **we've been working to make Ontario #LessSalty** by telling the Ontario government to follow through on its promise to address this salty situation.

Thousands of you have already taken action—thank you! By doing so, you're **helping us defend freshwater in Ontario.** Many of you also asked us what are the alternatives to using road salt to de-ice pavement. In this blog, we'll go through a

few new methods that municipalities and private companies are experimenting with and offer ways **we can all make Ontario #LessSalty.**

A menu of de-icing options



Municipalities and large-scale private contractors have the most options when it comes to alternatives. An increasingly common alternative is to use a brine liquid before snow events to **pre-treat the roads and stop ice from forming.** This way, roads stay clear longer and need less rock salt to keep them ice-free. The City of Toronto has implemented this alternative in preparing for certain storm events. It's number one way that Ryerson University keeps its walkways clear. Last year, Ryerson reduced its salt use by an average of 40 per cent! By pre-treating their roads and walkways, the university has kept **thousands of tonnes of rock salt out of the environment.**

Other municipalities, like Calgary, have seen fantastic benefits of using a beet juice brine instead of rock salt—a program that started in 2017. Each time the City of Calgary uses beet brine instead of rock salt, **they save nearly 6,000 kg of salt from entering the environment.** There are more examples from across North America where cities and towns get even more creative with de-icing. In the cheese state of Wisconsin, Polk County has begun using liquid cheese brine to pre-treat their roads.

Homeowners are not to blame for super salty sidewalks

The biggest culprits when it comes to overuse of road salt **are contractors applying large amounts of salt** to retail and commercial spaces all winter long. Those companies can have the biggest impact on reducing salt contamination by being smart about their salt use. Studies show that, in some cases, they're overdoing it by 30 to 100 times over. By using calibrated equipment that efficiently spreads salt, and by getting Smart About Salt certified, contractors **can reduce salt use and be better stewards of the environment.**

How we can all be #LessSalty



There are also steps homeowners can take to reduce the amount of road salt they use:

1. **Shovel first and shovel well.** Clear as much snow as possible so your salt goes a long way in keeping the sidewalk clear.
2. **Less is more.** You only need a salt shaker or film canister amount for a square metre of pavement (about one sidewalk slab).
3. **Only salt the walkways and pavements you use.** Only clear the amount of space that you need to get around.

The **very best thing** we can do, however, is to **take action** and let our government representatives know that it's time to be #LessSalty. The **Made-in-Ontario Environment Plan** commits to addressing road salt contamination, but **the government has been slow to act**. Our streams, lakes and rivers can't take any more abuse from over-salting. The time to be #LessSalty is now.

Kelsey Scarfone
Program Manager, Water, Environmental Defence

2020-02-08

New Kind of Northern Lights

Earth Sky

Citizen scientists identify new form of northern lights

Posted by Deborah Byrd in EARTH | February 4, 2020

Space researchers and amateur photographers in Finland have categorized a new type of aurora, or northern lights. They call them “dunes.” Read more.

Something new under the sun! Or new to science, at least. Working together with space researchers, Finnish amateur photographers have announced a form of aurora, or northern lights. The form existed in the past, of course, but was never before described by science. They call the green-tinged aurora *dunes*, because, they said, it appears as an evenly spaced pattern of waves, resembling:

... a striped veil of clouds or dunes on a sandy beach.

The scientific community has acknowledged the newly categorized northern lights via the publication on January 28, 2020, of a study in a peer-reviewed journal, *AGU Advances*. The study tracked the origin of the dunes to the mesosphere and its boundary, the mesopause.

A statement from University of Helsinki explained how aurorae are made:

The sun releases a steady flow of charged particles, known as the solar wind. Reaching the Earth’s ionized upper atmosphere, the ionosphere, they create auroral emissions by exciting atmospheric oxygen and nitrogen atoms. The excitation state is released as auroral light.



Finnish nature photographer Matti Helin took some of the photos that led to the new categorization and understanding of the dune-like northern lights. Image via Matti Helin.

Like most scientific discoveries, the new form of northern lights came to be identified both serendipitously and also with some serious effort. Matti Helin, a northern lights and astronomy hobbyist who took part in the study, told EarthSky:

On October 7, 2015, there was a magnificent storm of auroras. One observer, Mikko Peussa, uploaded his photos and wondered what were these strange stripes in the picture. The same phenomenon was photographed by several people that night, including me.

He said the photos were posted at the website Taivaanvahti, which is an observation system maintained by Astronomical Association Ursa of Finland. A discussion began about the unusual lights. Helin said:

Taivaanvahti was the initial place where the seeds for this project were planted.

Aurora expert Minna Palmroth was writing a book – with the help of aurora photographers – when the hobbyists pointed out to her the new form of northern lights not previously categorized.

Then, in late 2018, Minna Palmroth, an aurora expert at the University of Helsinki, published a book titled *Revontulibongarin opas (A guide for aurora borealis watchers)*:

The book was born out of Palmroth's cooperation with northern lights enthusiasts and the answers she provided to questions about the physics of the phenomenon in the hobbyists' Facebook group [the group is called Revontulikyttäjät or *Aurora Stalkers*). Thousands of magnificent photographs of the northern lights taken by hobbyists were surveyed and categorized for the book. Each auroral form is like a fingerprint, typical only of a certain phenomenon in the auroral zone.

During the classification, hobbyists pointed out that a certain auroral form did not fit into any of the pre-existing categories. Palmroth set aside these unusual forms for later consideration.

By an almost unbelievable coincidence, just days after the book was published, the hobbyists saw this unusual form again and immediately informed Palmroth.

Matti Helin commented:

One of the most memorable moments of our research collaboration was when the phenomenon appeared at that specific time and we were able to examine it in real time.

The new observations helped them all identify and categorize the new form. Helin said:

It was like piecing together a puzzle or conducting detective work. Every day we found new images and came up with new ideas. Eventually, we got to the bottom of it...

Palmroth and the citizen scientists believe that the dune-shaped auroral emissions are created when solar wind charges the oxygen atoms in a particular way. It happens when a rare gravity wave rising up in the atmosphere is filtered and bent to travel between the mesopause and an inversion layer intermittently formed below the mesopause. The mesopause and the

inversion layer are colder than the other layers of the atmosphere. A wave channel is established between the two layers. In that channel, gravity waves coming from below can travel long distances without subsiding.

It's gravity waves surging through the channel that create the dune-shaped northern lights.

Palmroth and the citizen scientists said this new auroral form provides researchers with a novel way to investigate conditions in the upper atmosphere.

