



NEWSLETTER

SOUTH LAKE SIMCOE NATURALISTS

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

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(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 7:30 p.m. at the York Region Police Building Meeting Room (Baseline Road between McCowan and Civic Centre Road) unless noted otherwise. Members events (insurance compliance). Visitors welcome.

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



Tuesday, Feb. 14 **The Amazon:** One of the true “Lungs of the world” the Amazon is a great warm up subject for the February depth of the winter meeting. Club members research and presentation.

This is the club Annual Meeting and administration review and election of offices will be undertaken.

Tuesday, Mar. 14 **Mining-The environmental Cost:** Mining of rock, ore and precious stones is an activity well known to Canadians. Infact it is responsible for much of our historical and contemporary wealth. Much of this activity occurs in Canada but also and increasingly in other countries in the world by Canadian Mining companies. This meeting will be a broad brush look at mining and practices and what impact this activity has on natural ecosystems, wildlife, water and other things here in Canada and abroad.

Tuesday, April 11 **Milkweed:** The milkweed plant is now well-known for its importance to Monarch butterflies. But it was not long ago that it was known as a pest plant and noxious weed. We will take a detailed look at this actually beautiful wildflower in our area, and consider recent efforts to encourage its introduction and expansion in Ontario as a grassland prairie meadow plant species.

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

NOTICE about Meeting hours – 7:30 to 9:30 p.m. only.

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

2017 WINTER

Saturday Feb. 18 **Winter Trail Outing:** A traditional club afternoon adventure in a Regional Forest location in the South Lake Simcoe area. Actual details of the trip will depend on weather and existing conditions snowshoeing, skiing, hiking. Meet at Coffee Time, Highway 48 south of Baldwin at 1:00 p.m. Dress for the weather. Phone 905-722-8021 if you plan to participate.

Saturday Feb. 25 **Deer Census in Rouge Park National Park:** Call to register 905-722- 8021. Participants dress for winter weather conditions.

Members please consider writing and submitting an article to the Talon Newsletter. Submit to one of the Executive members.

Articles in this Issue

Comments on Snapping Turtles and Bullfrogs Hunting in Ontario

Stop the Moose Calf Hunt !

Climate Change News - 2016 hottest year for 3rd straight year

Climate Change and Small Farms

Take a stand for snapping turtles and bullfrogs



Hunting in Ontario

Dr. Anne Bell, Conservation and Education Director

It's crunch time. After years of dithering, Ontario's Ministry of Natural Resources and Forestry (MNR) is poised to make a critical decision about the hunting of snapping turtles. Lamentably, the ministry is proposing to continue the hunt, with the addition of some restrictions. Regardless of added restrictions, the continuation of the hunt runs contrary to the best advice of scientific experts.

Make no mistake; this compromise approach will not work for the at-risk snapping turtle, given its late age of maturity, low egg and juvenile survival rates and exceptionally high adult mortality due to an array of human-caused threats. The proposal was open for public comment until January 30, 2017. **SLSN members were sent an E-Blast about this kind of wildlife management problem with Snapping turtle in Ontario. Members were asked to let the Ontario government know that the hunt must end, period (P.H.).**

The plan to continue the snapping turtle hunt is part of a broader policy proposal, to "streamline and modernize the management of small game and furbearer wildlife species in Ontario." Bullfrogs are also implicated, along with many bird and mammal species.

Admittedly, the snapping turtle proposal is an improvement on the current deplorable situation. Right now, snapping turtles can be hunted year round in some parts of the province and from July 15 to September 15 in other parts. The daily bag limit is 2 and the possession limit is 5. The proposal is to reduce the season to run from August 15 to September 15, with a daily bag limit of 1 and a possession limit of 2.

A change for the better, but certainly not what is needed. We need your help to convince the government to proceed to a full ban. Here's why:

Snapping turtle populations cannot sustain even small increases in adult mortality.

The science is clear. Evidence from snapping turtle studies shows that the removal of

adults from a population on a yearly basis will lead to decline. **Turtles are the most threatened taxa globally.**

Freshwater turtle abundances today represent only a fraction of their historical numbers. In fact, all but one of Ontario's turtle species are at risk. The vulnerability of several turtle species, including the snapping turtle, was highlighted by a recent decision to list them under **CITES** (the Convention on the International Trade of Endangered Species, an international agreement among governments), recognizing the pressure that harvest and trade have on this species.

Snapping turtles face many threats; hunting adds to the cumulative impact.

The main threats are habitat loss and road mortality. Other threats include boat mortality, fishing by-catch, mortality from dredging and construction, invasive species, persecution, illegal collection, exposure to toxic contaminants and more. Hunting is just one more peril that these turtles must face, on top of all the others. It's completely unnecessary, could easily be addressed by the government.

The hunt contradicts proposed provincial and federal management objectives, which aim to sustain populations. The hunt is not sustainable. It is in direct conflict with the management objectives of both the proposed provincial policy, which is "sustainable populations," and **the proposed federal management plan which is to sustain or increase populations across the country.**

The snapping turtle is a species at risk. How can Ontario justify a hunt for a species that is on **the road to extinction**? It is also contrary to the purpose of the Endangered Species Act, 2007, which is to protect and promote the recovery of species at risk. If the hunt continues, Ontario will be one of only two provinces in Canada to allow it. Definitely not in good company.

Ontario Nature is calling for an end to the hunting of snapping turtles and bullfrogs by the.

As noted above, MNRF is also proposing to continue the hunting of bullfrogs, a species in decline in many parts of Ontario. Bullfrogs have suffered catastrophic habitat losses across much of the province, and are also threatened by agrochemicals, road salt, road mortality and invasive species. As noted in *ON Nature* magazine, "**some commercial operators have reported ceasing their**

frogs.” A precautionary approach to conservation would suggest that the hunt should end now, before this animal joins the ever-expanding ranks of species at risk.

Stop the Moose Calf Hunt !



Moose Have Declined 20% in the last decade.

Comments from the Canadian Parks and Wilderness Society

Janet Sumner, Executive Director, CPAWS Wildlands League 2017-02.

Moose are in trouble in Ontario. The Environmental Commissioner recently reported that their numbers have dropped by 20% over the last 10 years. They are facing many threats that are made worse by climate change, but there are factors that could be addressed immediately.

What are the issues?

Ontario permits calves to be killed by licensed hunters. Calf hunting can have serious negative impacts on moose populations.

Poaching is a problem. The Ontario Ministry of Natural Resources and Forestry does not know how many moose are taken illegally. They don't even have the capacity to know, let alone stop it.

Moose need roadless space. Logging roads are constantly expanding, with the support of a subsidy from the Ontario government. Moose need a place of respite from hunters and poachers who use the roads.

Why does this matter?

Moose are important components of a healthy forest, essential country food for Indigenous people and a driver of the tourism economy of northern Ontario. They are part of Canadian identity.

What can you do?

It is crucial that the provincial government hears from Ontarians on this issue. They are now determining the rules for next year's hunt. **Your voice will be most effective if it reaches the Government by March 1!**

SLSN Members can take Action. Write a letter to the Ontario Ministry of Natural Resources and Forestry asking them to work to:

- End the calf hunt;
- Increase the funding for science, monitoring and enforcement; and,
- Create Moose Refuge Areas free of roads.

Go to <http://www.cpaws.org/> to make your comments.

Climate Change News

Earthsky

2016 hottest year for 3rd straight year

Eleanor Imster in EARTH | January 18, 2017

NASA and NOAA announced today that 2016 was the hottest year on record globally – and the 3rd year in a row of record warming – continuing a decades-long warming trend.

Scientists at NASA's Goddard Institute for Space Studies (GISS) analyzed measurements from 6,300 locations across the globe. They say that Earth's average surface temperature has risen about 2.0 degrees Fahrenheit (1.1 degrees Celsius) since the late-19th century, largely a result of human emissions into the atmosphere.

Scientists report that Earth's 2016 surface temperatures were the warmest since modern record-keeping began in 1880, making 2016 the third consecutive hottest year in a row. The findings, announced today (January 18, 2017), are based on independent analyses by NASA and the National Oceanic and Atmospheric Administration (NOAA).

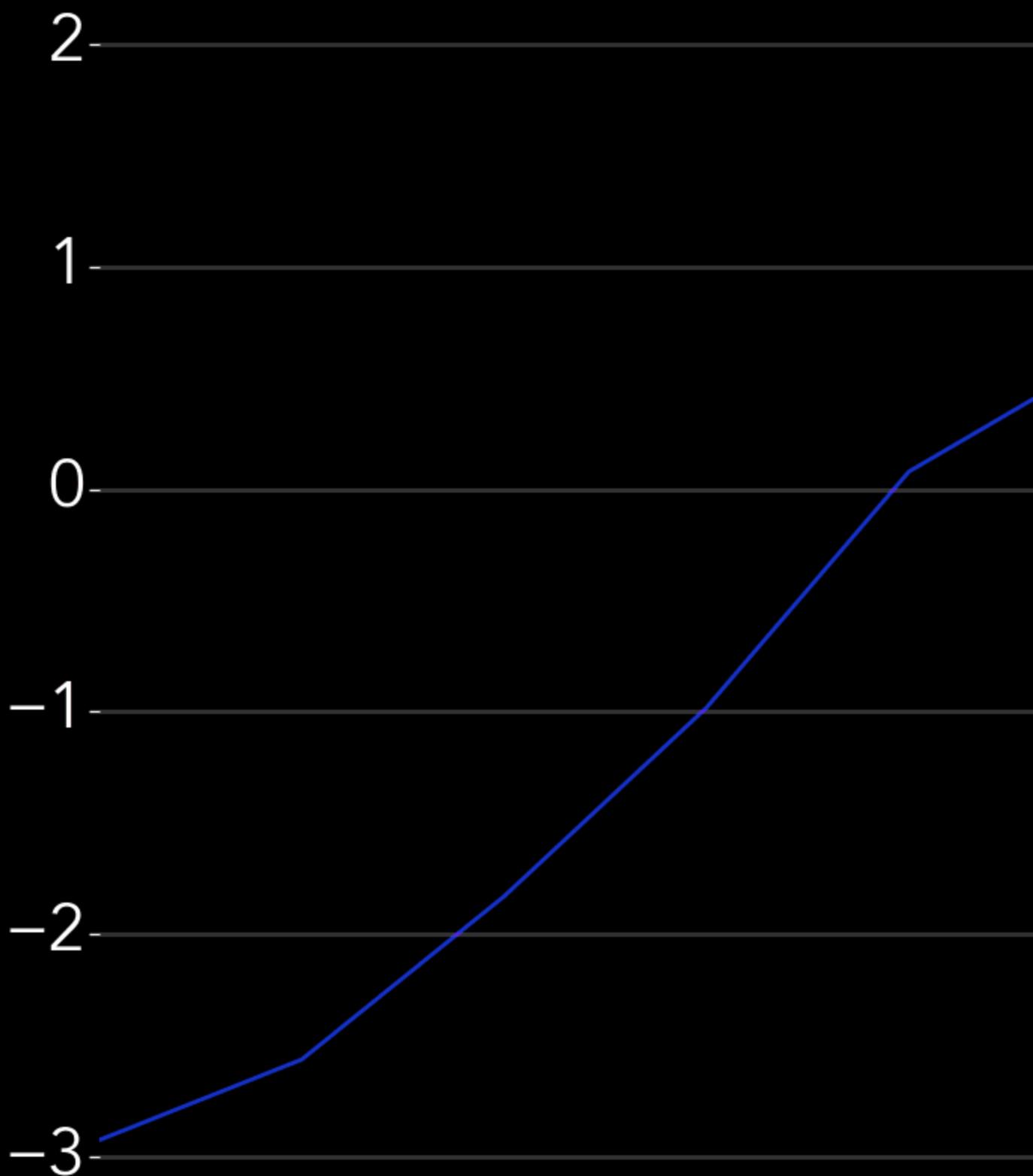
The data showed that in 2016, the average global temperatures were 1.78 degrees Fahrenheit (0.99 degrees Celsius) warmer than the mid-20th century mean. The 2016 temperatures continue a long-term warming trend, according to analyses by scientists at NASA's Goddard Institute for Space Studies (GISS) in New York. The video above has more about those analyses.

GISS Director Gavin Schmidt said in a statement:

2016 is remarkably the third record year in a row in this series. We don't expect record years every year, but the ongoing long-term warming trend is clear.

Temperature Anomaly ($^{\circ}\text{C}$)

(Difference from 1980-2015 annual average)



The planet's long-term warming trend is seen in this chart of every year's annual temperature cycle from 1880 to the present, compared to the average temperature from 1880 to 2015. Record warm years are listed in the column on the right. Image via NASA/Joshua Stevens, Earth Observatory

According to a NASA statement:

The planet's average surface temperature has risen about 2.0 degrees Fahrenheit (1.1 degrees Celsius) since the late 19th century, a change driven largely by increased carbon dioxide and other human-made emissions into the atmosphere.

Most of the warming occurred in the past 35 years, with 16 of the 17 warmest years on record occurring since 2001. Not only was 2016 the warmest year on record, but eight of the 12 months that make up the year – from January through September, with the exception of June – were the warmest on record for those respective months. October, November, and December of 2016 were the second warmest of those months on record – in all three cases, behind records set in 2015.

According to the scientists, phenomena such as **El Niño** or **La Niña**, contribute to short-term variations in global average temperature. A warming El Niño event was in effect for most of 2015 and the first third of 2016. Researchers estimate the direct impact of the natural El Niño warming in the tropical Pacific increased the annual global temperature anomaly for 2016 by 0.2 degrees Fahrenheit (0.12 degrees Celsius).

Although 2016 was the hottest year on record globally, not every region on Earth experienced record average temperatures last year. For example, both NASA and NOAA found the 2016 annual mean temperature for the contiguous 48 United States was the second warmest on record. In contrast, the Arctic experienced its warmest year ever, consistent with record low sea ice found in that region for most of the year.

Bottom line: In a joint announcement on January 18, 2017, NASA and NOAA reported that 2016 was the hottest year on record globally, for the third consecutive year, continuing a decades-long warming trend.

Trudeau asked to Reject Trump's Climate Denial and Say NO to the Keystone XL Pipeline

Aaron V. The Care2 Petitions Team Position

Immediately after scientists announced that 2016 was the hottest year on record, President Trump used executive orders to try and advance plans to force through two environmental nightmare projects: The Keystone XL pipeline and the Dakota

Access pipeline.

Canadian Cabinet members welcomed the news of Trump's decision, hailing the revival of the pipeline project. Prime Minister Trudeau has voiced support for numerous pipeline projects in the past several months. **And now, he has pat Trump on the back and agreed to work with him on TransCanada's Keystone XL.**

Climate scientists have called Canada's tar sands "game over" for the climate. If Keystone XL is built, it is game on to pump those fossil fuels into the atmosphere. **Amidst such blatant climate denial from the Trump Administration, PM Trudeau must take a firm environmental stance.**

PM Trudeau proudly signed the Paris climate agreement and is moving forward with efforts to put a price on carbon. But his pipeline leadership is lacking.

PM Trudeau needs to hear from all of us that we do not support the Keystone XL pipeline. The pipeline was killed by President Obama, and we need this climate monster to stay dead. To do that, Canada must take on environmental leadership and stop building pipelines.

You can sign the Care2 petition to Prime Minister Justin Trudeau urging him to end support for the cross-border Keystone XL pipeline at web site below.

<https://www.google.ca/webhp?sourceid=chrome-instant&ion=1&espv=2&ie=UTF-8#q=care2+petitions>

Climate Change and Small Farms

FARMERS-MARKET SHARE – QUARTZ NEWS.

Small farms are just as important as big agriculture in the fight against climate change

Just when you thought going local was a good idea. (AP Photo/J. Scott Applewhite)
SHARE

Duda Cardoso - Initiative for Smallholder Finance

November 27, 2016

Just four days before the US elections, the Paris Agreement officially became international law after receiving formal sign-off from 55 countries that contribute 55% of global greenhouse-gas emissions. This landmark deal marked a pivotal moment in the fight against climate change, particularly given its ratification by a majority of the world's largest emitters of greenhouse gases, including India, China, the United States, and the European Union.

However, the election of Donald Trump has ushered in a new administration that has vocalized opposition to the agreement, leaving a wake of uncertainty. Now, more than ever, it's important that we make every dollar and every action count in the fight against climate change.

To make this happen, the Paris Agreement needs to include one key group that has been largely left out of the most prominent plans to combat climate change: smallholder farmers. Smallholder farms are defined as single-plot farms that are often run by families, not by large corporations, such as those behind the cashier at farmers markets and farmers who supply small food chains. The world's 450 million smallholder farmers are critical to addressing climate change and meeting the world's food-security needs. New research from the **Initiative for Smallholder Finance (ISF)**, "The climate conundrum: Financing smallholder productivity and resilience in the age of climate change," suggests that achieving zero poverty, improving food security, and combating climate change can only be made possible with substantial efforts to help smallholder farmers adapt to climate change and reduce their emissions.

Thinking about the little guy

Of the \$148 billion in public financing dedicated to combating climate change as of 2014, only \$6 billion (4%) went to efforts in the agricultural sector. This investment is shocking when compared to the fact that the agriculture sector accounts for almost a quarter of annual global greenhouse gas emissions (GHGs).

More alarming still, while smallholder farmers' contributions to GHGs is concentrated and limited, they are the population most affected by the consequences of climate change. The frequency and severity of extreme weather events, crop pests, and plagues are expected to increase despite the best mitigation efforts, which puts small farms at more risk as they have less crops to fall back on in tough times. Africa, for example, is expected to face average crop losses between 10-50% by 2055.

Without measures to help the world's smallholder farmers adapt to climate change, many will struggle to maintain current levels of productivity. This is in spite of the fact that global markets are expecting smallholder farmers to play a major role in meeting the 70% increase in global food production required to feed the estimated 9 billion people who will be alive in 2050.

Developing a framework

Climate change represents an unprecedented challenge to agricultural production in developing countries, but governments and the development community can use existing frameworks and policies to address it while also pursuing rural poverty and food security goals. Climate-smart agriculture provides one such framework of practices and interventions that enables smallholders to improve their productivity and adapt to climate change while, in many cases, also mitigating their GHGs. Here are three factors that will help:

Governments can set national agendas: While the Paris agreement is legally binding, the way in which each country goes about executing the agreement is not. With global leaders meeting at the COP22 climate-change meeting and each government bearing the responsibility of developing climate-action plans of their own, we see an immense opportunity for governments to begin integrating smallholder farmers into the picture. Governments can then form partnerships with a variety of actors including NGOs, impact investors, and local banks to allow climate-smart agriculture activities to grow more rapidly.

Institutions and donors can subsidize funding: Development-finance institutions (DFIs) and donors can drive the adoption of climate-smart agricultural practices through subsidized funding.

These funds can decrease the risk financial institutions face in providing loans to farmers, provide more training through technical assistance to farmers, and help test and scale local programs. Going forward, blended public and private finance should be incorporated into smartly designed subsidy programs that incentivize farmers to adopt resilient and productive practices.

Multinational companies can promote sustainable supply chains: A number of multinational companies have made commitments to improve the sustainability of their supply chains, and several are beginning to fulfill their commitments by making direct investments. A combination of factors drives this movement: most notably, increasing pressure from consumers in developed countries. Companies are realizing that the \$7 trillion global food and beverage industry will not continue to deliver the financial returns it expects without investing in improved smallholder productivity in the face of climate change.

Collaboration is key

To combat climate change we will need significant investments in climate smart agricultural practices for smallholders. Going forward, our research suggests that a number of crosscutting actions are particularly important if programming and investments aim to make optimal use of climate-smart agriculture funding:

Funders need to become better communicators. Climate finance and agricultural development specialists must start communicating and collaborating more effectively. This requires multi-disciplinary teams, inter-departmental working groups, and dedicated knowledge networks that bring these two sets of professionals together for knowledge sharing opportunities.

Helping farmers deal with the effects of climate change needs to be a priority. Climate change has already started to affect smallholder farmers' livelihoods and will do so increasingly over the coming decades regardless of the success of mitigation efforts. When developing financing and technical assistance packages for smallholder farmers, more emphasis should be put on helping smallholder adapt to climate change and creating more resilient supply chains.

Funders and investors need to use innovative finance structures to catalyze markets. More patient design funds (e.g., grants) should be allocated towards creation and experimentation with

blended-investment structures that combine market-based returns with subsidies and monetization of natural assets.

The ratification of the Paris Agreement represents a pivotal moment in the fight against climate change. Although the political landscape of the US presents many unanswered questions for the climate finance space, we must continue to push forward and evaluate how to best address climate change. Our research suggests that to truly make a difference, we will need a concerted effort from stakeholders across the value chain—including governments, development finance institutions, multi-nationals, and investors—to unlock finance for smallholders and foster opportunities for them to build resilience in the age of climate change.
