THE WOODLAND OBSERVER

MAY 2021

NIPISSING NATURALISTS CLUB

THE WOODLAND OBSERVER

From the editor:

Spring?

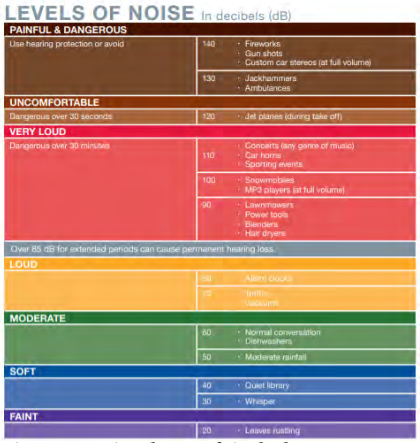
Spring is here. No, winter is back. Oh, spring has returned. Sorry, false alarm because now we have snow. It's been Whiplash Weather, and today (Sunday) spring is back again. Still, there have been some gorgeous days to get outside to see birds and the early spring flowers, such as Dutchman's breeches, trout lilies, and spring beauties.

Dutchman's Breeches

Trout Lily

Spring Beauty

Frogs and toads were also active during one of the passing spring warm periods. Spring peepers were so loud at the large pond on the bike path past Decair Road that your ears were left ringing. A decibel meter later measured the din at 88 dB, a level that can cause permanent hearing loss over an extended period of time.



American Academy of Audiology

Other frogs were calling as well. Wood frogs, leopard frogs, and at least one American toad were calling from the same pond. Leopard frogs and toads were calling earlier than normal, perhaps fooled by the unseasonably warm weather; or perhaps they just wanted to take advantage of the weather while it lasted.

Let's take advantage too. Feel free to send us your pictures of the things you see and discover while you're out and about. The return of flowers, frogs, and birds is like seeing old friends after an absence, and that feeling is what makes Spring feel like Spring, even if the weather doesn't always cooperate.

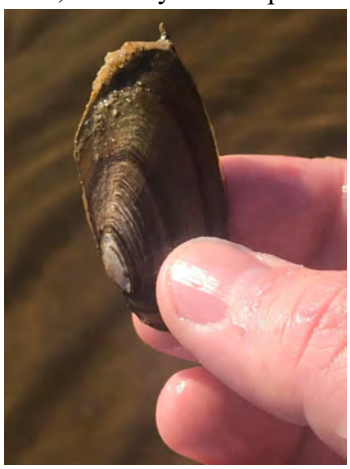
American toad

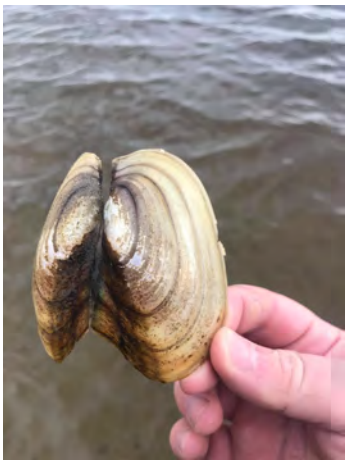
Spring peeper

Clam Counter

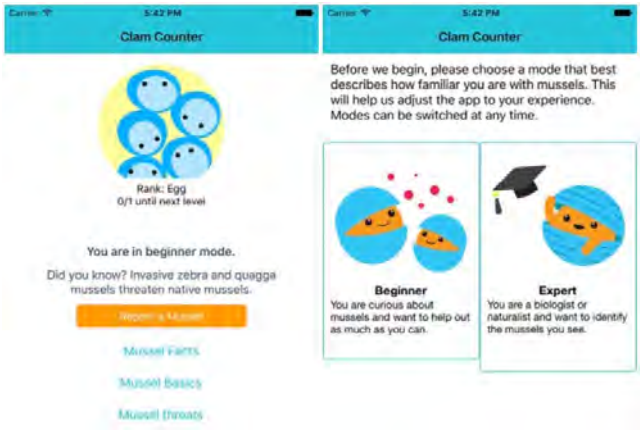
Club members, Olivia Brundia and Scott Rideout, have been using an app that functions similar to eBird, except it allows users to identify and report both living and dead clams. It is a citizen science project through the **Toronto Zoo** and **Fisheries and Oceans Canada**. Clams and other mussels do not get the press that birds and cute furry animals get, but clams are having difficulty too. Over 65% of freshwater mussel species are being endangered due to habitat loss, pollution, and competition from invasive species, such as zebra mussels. Native mussels are good indicators of lake health, and they perform important water filtering roles. When left undisturbed, clams can live 100 years.

With the lake levels low, Olivia and Scott were finding many of the mussels stranded above the water line, and they've sent pictures (below).





The app is available in French and English, and for both Android and iOS phones and tablets.



There are two main choices when starting: beginner level and expert level. The beginner level is for those who are out for a walk by the water and spot a mussel. Users are asked to complete "*a short six-step survey to report the sightings and advance through the stages of mussel growth*".

The expert level allows people to use Clam Counter like a field guide. There is a species list, photos, and a detailed key to help identify freshwater mussels in the field, and then report them. The two modes can be switched any time.

The species list will show either all the species or just the species in the user's area. In Canada, there are 54 freshwater mussel species so it is recommended users narrow down the list of potential species to just the ones that are nearby. If no match is found in the area, then all the species can be examined: perhaps you have found a new record for the area.

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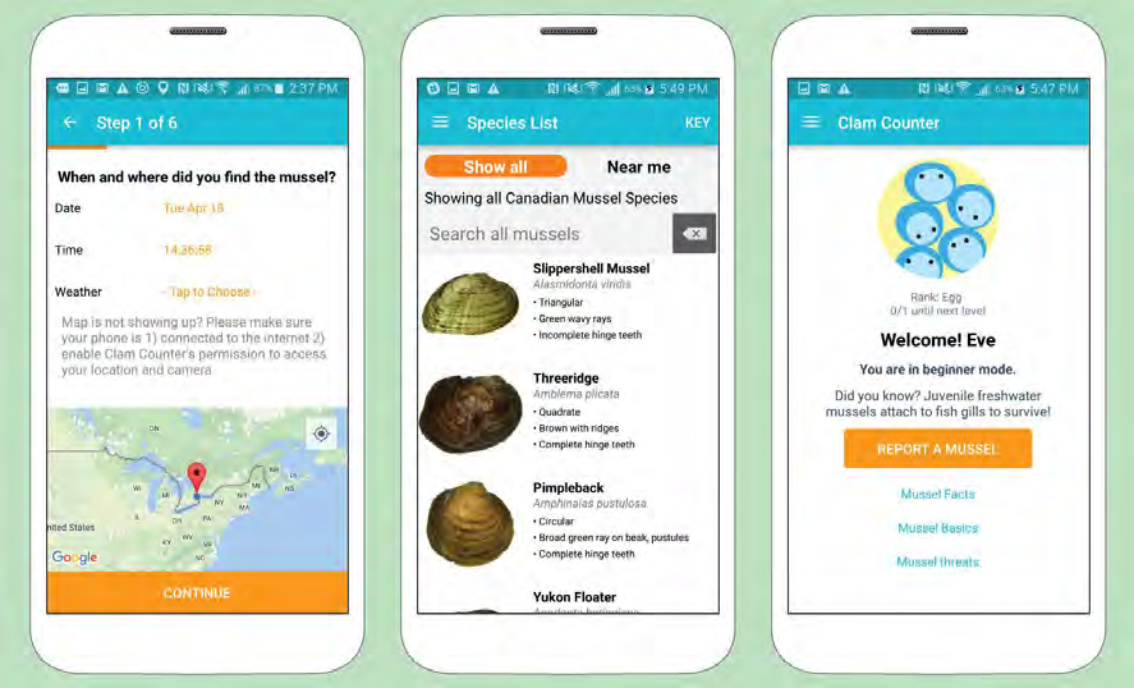
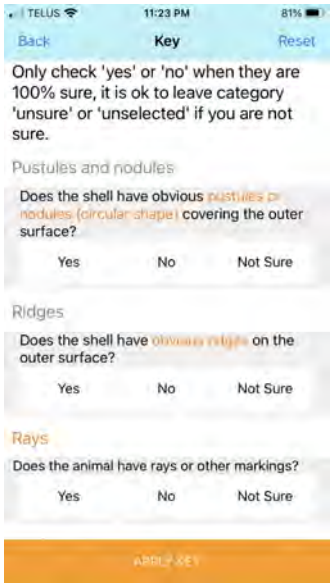
The app has a map that allows users to mark where the mussel has been found, and it has a history page that shows all previous records the user has entered and submitted.

It isn't a difficult app to use. Last month someone unfamiliar with mussels was able to identify the mussel she and her husband found in the Haileybury area: creek heelsplitter. As the name implies, the broken shell of this large mussel can cut open an unwary foot.



The identification key requires you select **Yes, No**, **Not Sure** for a series of characteristics. For example, does the mussel have nodules?



For those who don't know what a nodule is, the highlighted link brings you straight to scrollable pictures.

Interested in serving on a forest advisory panel?

The Nipissing Forest is looking to add more Local Citizens Committee (LCC members. Currently one member of the Nipissing Naturalists Club serves on the LCC. If you are interested in also serving please see below:

What is the Local Citizens Committee?

A group of individuals with different local interests that participate in the forest management planning process of the Nipissing Forest Management Unit, that is the Crown forest around North Bay, Sturgeon Falls and Mattawa. The purpose of this group is to communicate their interests and discuss management options with the forest products industry and the MNRF North Bay District, and to advise the MNRF District Manager on issue resolution.

Resources Interests that need representation:

Anglers and Hunters
Environmental Groups
Municipalities, Chambers of Commerce, Economic Development
Prospectors, Mining Industry, Aggregates
Silvicultural Contractors
Local Cultural Heritage Groups
Education
Wood Workers and Trade Unions
Independent Loggers
General Public

When and how often does the LCC meet?

Meetings are usually once a month (~6 or 7 meetings a year 3rd Tuesday of each month from 6:00pm – 8:00pm. We usually have a field trip once a year to view how the forest is being managed.

What does the MNRF offer?

MNRF reimburses out of town members for mileage to attend in-person meetings. Meetings at present are being held remotely due to Covid-19.

If you have any questions or require more information please email or call Francisco Murphy R.P.F. Management Forester at 705-491-5875 or at francisco.murphy@ontario.ca

My Favourite Tree

Editor's Note: Club members are encouraged to send in their pictures of their favourite tree and why it is their favourite tree. This month's submission comes from Janis Reed.

I have many favourite trees of different species but one stands out. It was (note the word "was") a giant Black Ash (*Fraxinus nigra)* on one of the trails at our camp in Nipissing Township. This beauty had a diameter of about 20 inches (50 cm.) and a circumference of about 60 inches (150 cm.) and stood about 90 feet (27 m.) tall. My resident tree expert (and husband) says it was probably 100 years old.

I always looked forward to surveying this giant as we hiked our trails. It had a coat of green moss on its lower trunk. Its trunk was straight, perfect for making high quality lumber. On the ground around this tree grows several groupings of Christmas Fern (*Polystichum acrostichoides*), the only area where we have found Christmas Ferns on our 200 acre property.

Sadly my favourite tree showed signs of stress a few years ago as the canopy started to die and branches fell. We saw no signs of the dreaded Emerald Ash Borer. Perhaps it just died of old age. Its skeleton is still standing, for how long, we don't know.

It will probably have a second life providing a home to an assortment of wild creatures: birds, bugs, tree frogs, etc. Perhaps an offspring of this giant will rise now that there is an opening in the canopy.

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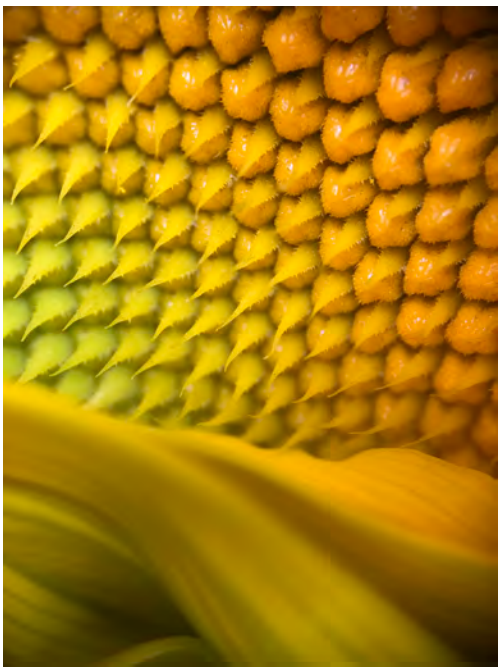
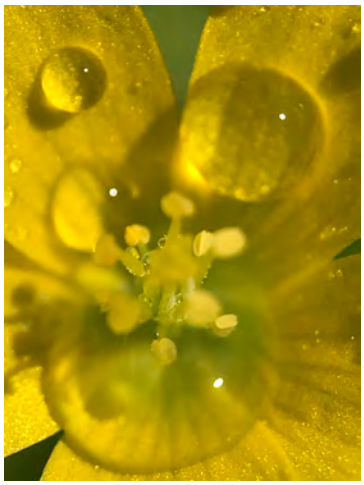
DIY Macro-lens for Phones



Sunflower

To see a World in a Grain of Sand
And a Heaven in a Wild Flower,
Hold Infinity in the palm of your hand
And Eternity in an hour. – William Blake



Water droplets on a marsh marigold

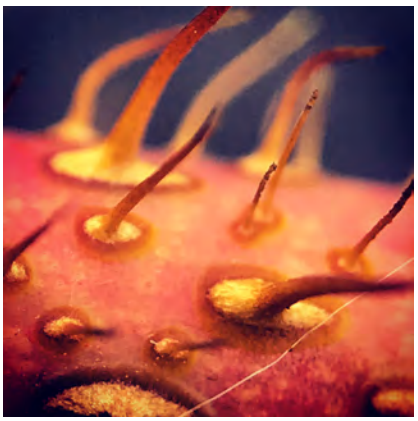
Beach sand

Most people have high-quality cameras on their phones, and there are lenses for sale that extend the capabilities of the camera, such as macro lenses for close-up photography. However, it isn't necessary to spend money on a store-bought lens as there are numerous do-it-yourself (DIY) ways to do macro photography. At its simplest, DIY macro photography for phones is placing a magnifying lens in front of your camera lens, then finding a method of holding the lens in place.

Magnifying lenses are readily available. Cheap plastic ones are in dollar store laser pointers and reading glasses. Peepholes in doors have a series of better-quality glass lenses, one of which is a magnifying lens. Non-functioning binoculars have several good high-quality lenses as do old film cameras. Last year, Photo Metro on Lakeshore Drive had a dozen point-and-shoot film cameras that people had turned in for recycling. The owners kindly gave me the cameras when I explained I wanted to salvage lenses for close-up phone photography.

Between discarded binoculars and cameras, I have a collected a wide variety of lenses. Larger binoculars lenses work when only a bit of magnification is required. Smaller higher powered lenses work well for stationary things like flower parts or lichens. Moderate magnification on other lenses give a greater depth of field for moving things such as insects, snakes, and frogs.

Top: Discarded cameras
Bottom: Selection of lenses from cameras, binoculars. Note blue mac tac for adhering lenses to phone. See next page for info on the popsicle stick.



Far left:Pistil and anthers of crocus
Middle: Wild rose stem
Right: Stamens of chives
All photos taken with high magnification lens

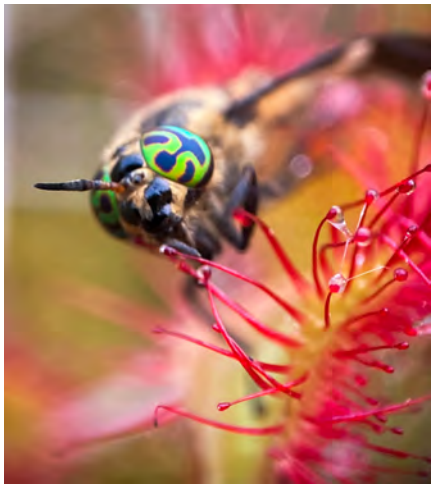
Online, there are several examples of how to keep the lens in place. Larger ones can be held over the camera with fingers, or with rubber bands. Mid-sized ones can be hot-glued to a popsicle stick, which then can be held in place with elastics or fingers (right picture). Small ones can be held in place using mac tac or other similar sticky putty brands used for holding posters on walls.

Results will vary, depending upon subject, lighting, and steadiness of hands or type of bracing. Low subjects, such as frogs on the ground, can be photographed by bracing the phone on the ground itself. Frogs, though, don't usually stay in one place while a camera is stuck near their face; they can, however, be approached at night when a light is shone in their eyes (right). The light temporarily immobilizes them (usually), and multiple photographs can be taken.

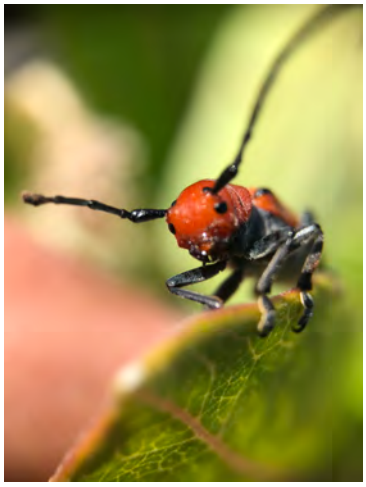
Snakes are harder to photograph close-up, but with patience—and if the snake is resting in a place it feels protected, like a small cozy rock crevasse—it is possible to obtain fairly close shots (below).

Left and middle: Gartersnake. The blue mac tac holding the lens in place can be seen reflected in the snake's eye. Right: Leopard frog

Of course, the higher the magnification the shallower the depth of field. A beetle's face may be focused, but not the antennae (right). Combining different lenses can give a greater depth of field, but that's a great deal of trial and error. Another way is to let the computer do the work with focus stacking. Focus on the front of the subject and take a picture; then focus partway down the subject and take a picture, and so until the entire subject has been photographed. Then using software like Photoshop (some software is open source and free), stack the images and let the program pick out the sharp focus areas to combine them into one picture of your subject, all of which should now be in focus (instead of just the head). It does require you move the phone only in a perpendicular plane as you focus. Moving side-to-side to move may result in some "interesting" stacked imagary.

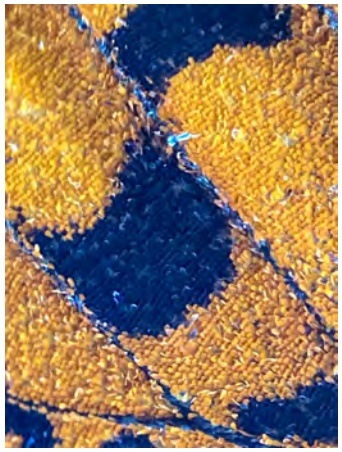


Deerfly on sundew



Milkweed beetle

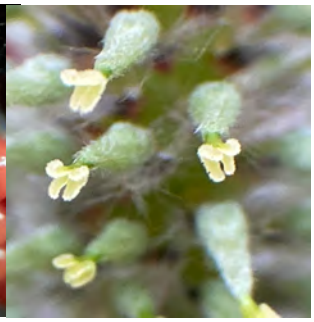






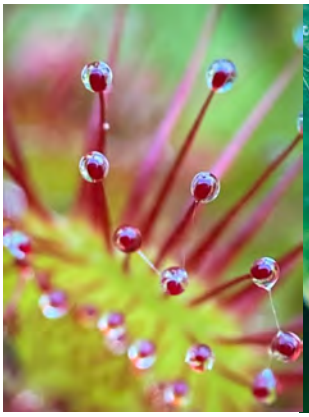
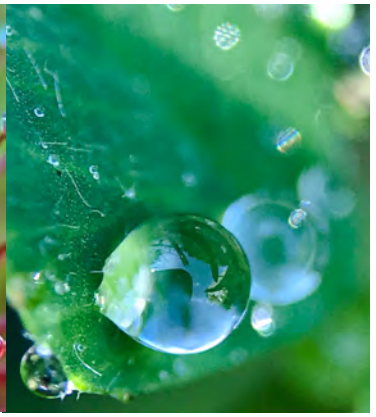




But, that's not really important. The important part is focusing on the close-up items also leads to seeing larger everyday objects in new ways. Tree bark, maple flowers, horsetails, mosses, lichens, butterflies, grasses, feathers, dirt and sand: what do they look like close-up, what hidden beauty lies within the small? Having a magnifying lens or two in your pocket can turn even the backyard flower pot into a wonderous wild world of its own.

Top row: Pine sap. Water drops in dandelion seed. Fritillary wing. Aphids
2nd row: Grass seeds. Shadfly. Argiope (?) spider
3rd row: Spiny puffball. Slug. Skipper(?)
Bottom row: Slime mould sporophytes. Willow catkin
Right: Sundew. Water droplets on leaf

Upcoming Zoom Talk May 11

Presenter Bio

Taylor Tabobondung is an Indigenous scientist from Wasauksing, which is a First Nation community in Central Ontario. Taylor received an Honours Bachelor of Science in Conservation Biology and Environmental Science from the University of Toronto in 2015, a Master's Degree in Environmental Science also from the University of Toronto in 2019 and is currently a PhD student in the department of Physical and Environmental Sciences, at the University of Toronto.

Presentation

Indigenous Knowledge and Conservation – a presentation on working with Indigenous knowledge systems in conservation science and how Indigenous knowledge systems can be represented in a Zoological setting. A brief critique on the lack of historical inclusion of Indigenous knowledge systems in conversation and ways that current conservation scientists can work to mend that lack of inclusion will also be included.

Upcoming Zoom Talk May 18

Presenter Bio

Samara Andrade is an entomologist from Brazil. She received her BSc degree in Biology from the Federal University of Lavras, Lavras, Minas Gerais, Brazil in 2015. In 2013 she was granted the Science without Borders scholarship program to study Biology abroad at Algoma University, Sault Ste Marie, Ontario, Canada for 1 and ½ years. During this time, she assisted in a research project conducted by Dr. Jeremy Allison at Natural Resources Canada (NRCan) focused on characterizing the role of volatile and contact sex pheromones in mate location and reproductive isolation of two longhorned beetle species of the genus *Monochamus* (Coleoptera: Cerambycidae). In 2018 Samara received her MSc in Entomology from the Federal University of Paraná, Curitiba, Paraná, Brazil, in which she developed research under the supervision of Dr. Paulo H. G. Zarbin and Dr. Jeremy Allison focused on the role of cuticular compounds in the communication systems of the green maté borer, *Hedypathes betulinus* (Coleoptera: Cerambycidae). She is currently a PhD candidate in Forestry at the University of Toronto developing research under the supervision of Dr. Jeremy Allison and Dr. Sandy Smith focused on investigating the mechanisms of premating reproductive isolation in longhorned beetles (Coleoptera: Cerambycidae).

Presentation

Title: Love is in the air: how longhorned beetles find the perfect match

If you search “how to find the perfect match” on Google, you get more than 1,500,000 results for a variety of topics that range from how to use dating apps in your favour to discussions about the science behind it. We do not have to go through all those results to notice that all five of our senses (sight, hearing, touch, smell and taste) play a role when it comes to physical attraction. Surprisingly, this is not different for longhorned beetles. I am a PhD candidate in the Department of Forestry at the University of Toronto who has been investigating the mechanisms that mediate mate location and recognition in longhorned beetles for 6 years. I will be speaking about some of my research findings on Tuesday, May 18, 2021, at 7PM (EST time). Join me to figure out some strategies that these beetles use to find the perfect match in a world without internet!

Snowshoe Hares and the Colour Changes of Their Pelt

by Fred Pinto (all photos by Fred)

Snowshoe hare populations peaked in our region in 2020 though they are still plentiful. As we are locked in our houses you may enjoy watching their antics if you have snowshoe hares in your neighbourhood as I do. You will see them chasing one another. Both sexes chase each other; these chases and the occasional jousting are supposed to be signs of hare affection – at least that is what people who study them suggest.

The snowshoe hare is also called by another common name: varying hare as they change the colour of their fur from white in the winter to brown in the growing season when daylight hours increase. I took a series of photos this spring to document the change in fur colour of my neighbourhood snowshoe hares. The quality of the photos are variable as the hares are wary of humans and move very fast when they see someone looking at them. I often only have one chance to point my camera and click.

Many people speculate that as our winters get shorter with warmer springs and autumns the colour change of the snowshoe hare may get out of synch with snow cover and leave the hares visible to predators. Their thinking goes like this: as the change in daylight hours is not affected by temperature the hours of sunlight will vary with the rhythm of the Earth around the sun and so the trigger for a change in fur colour will not occur leaving the hare white as the snow melts in an early spring or start to turn white before the snow falls and accumulates in the autumn.

Recent research suggests that this idea of the change in camouflage-enhancing pelt being out of synch with snow cover is incorrect. The colour change of the snowshoe hare is controlled by a single pigmentation gene that is activated during the autumn molt. The research showed that the pigmentation gene in west coast snowshoe hares was recently modified by hybridization with

the closely related black-tailed jack rabbit. The black-tailed jack rabbit stays brown all through the winter months in its home range where the accumulation of snow on the ground is rare. The research shows that simple projections of nature that people often want to make are often wrong. This year the snow cover disappeared early in our region and the colour of the pelt of the snowshoe hare, as can be seen in the photos, kept pace with the early arrival of spring.

Fantastic Birds

Fred Pinto was asked by North Bay Tourism if any of the club members wished to write an article on birding areas in North Bay. Someone did.

The resulting article is Fantastic Birds and Where to Find Them.

There won't be anything new to club members who like to bird, and space limitations kept the number of birding spots to just four. These were Laurier Woods, Education Centre Trails, Cranberry Trail, and Sunset Park. There was no room for places like Cache Bay or Jocko Point, which also deserve highlighting too. The sewage lagoons were not mentioned due to possible liability or trespassing issues.

Check the article, look at the bird pictures, and browse through some of the other blog articles. The latest one on **North Bay's Legendary Waterways** by Jennifer McCourt is particularly good.

An Unexpected Guest

On April 24, Oriana Pokorny and Sarah Wheelan took advantage of low water levels to walk south along the sandbars at the end of Cranberry Trail. They spotted an American Avocet. The bird doesn't breed in Ontario although a few are often seen at Point Pelee every spring migration. A previous sighting was in May 2015 at the Verner lagoon, seen by club member Therez Violette, so it is a rarity for North Bay.

Avocet at Verner Lagoon. Photo by Therez Violette

All About Birds, Cornell Labs

Oriana and Sarah's track

Oriana and Sarah managed to see the bird three times: once at the start of their walk, then again near the end, and a third time near the beginning of the trail. Unfortunately, they only had phone cameras so were not able to obtain close-up pictures.

Oriana texted me (Kevan) about the avocet. I grabbed my camera and cycled out to Cranberry Trail and down to the point. I thought the bird had gone, but found it sitting on the sand bars to the south. I took some long-distance pictures with my 60x zoom while it sat. When it eventually stood up, I took another picture, and then began walking back towards Cranberry Point so as not to disturb it.

As I walked, I looked over my shoulder and the avocet was now traveling on a parallel course to me, feeding as it went. I was able to snap a few more pictures as it wandered closer to me before I moved away again. Based on the slightly curved bill, this bird appears to be a male (female bills are more curved). By the time I got back to the Cranberry Point, the avocet was barely seen with binoculars, but was still feeding and moving towards the point.

A big thank you to Oriana for putting out the word about our rare visitor.

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Please feel free to send photos, articles, thoughts, poems, favourite trees, book reviews, things you've observed and found interesting to Kevan at kncowcill@gmail.com.

Membership

Membership fees are listed below. Renewals are usually at the beginning of the calendar year.

- **One Year Single membership $20**
- **One Year Family membership $30**

Renewal for **Bird Wing** can also be included with your **Nipissing Naturalists Club** renewal. One Year Single **Bird Wing** $5.00

An e-mail transfer can be sent to sturge@sympatico.ca or a cheque can be sent to our Club Treasurer, Connie Sturge, at 537 Hwy 534, Powassan P0H 1Z0.

If you send a cheque, please make the cheque payable to "**Nipissing Naturalists Club Inc.**".

If you are also paying for Bird Wing by cheque, please send a **separate cheque** for that payable to "**Bird Wing**".

Keith Pearson, Membership Director

Bird Wing

Dick Tafel, Chairman: rtafel@sympatico.ca. 705-472-7907

Gary Sturge, Treasurer

Renee Levesque, Bird Wing Scribe

Monthly Bird Wing and Bird Bash reports are sent to members by email and posted on Nipissing Naturalists Club's website:
https://www.nipnats.com/bird-wing/bird-wing-meetings-outings/, and
https://www.nipnats.com/bird-wing/bird-bash-reports/

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