President's Message

Editor's Note: The President's Message is a new feature to our newsletter and it provides an ongoing important update on the perspective and focus of our club. Watch for it in each newsletter from now forward.

Message from James Kamstra: I am proud to be the new President of North Durham Nature, taking over from the excellent job done by Cara Gregory for the last three years. Cara is a tireless worker who puts herself fully to the task at hand and I thank her for how she has steered our club. She now has her hands full being President of Ontario Nature so she has passed the local torch on to me. Most of you probably know me, as I have been coordinating the guest speakers for the past five years. This has been an enjoyable task, often searching for speakers who could deliver presentations on subjects that I was particularly interested in. I am now looking to pass this important task on to someone else.

A club like North Durham Nature does not run itself but depends on a number of volunteers willing to give their time. Kim Adams has done a great job as our treasurer. NDN may not be a rich organization but there are monies to keep track of with membership, donations, special projects and hall rentals. Derek has arranged field outings (which have been limited through COVID) while Mark Humphrey has coordinated membership, but Kim Adams will add this to his Treasurer duties from now forward. Lynda who is still quite new to the role of secretary has done an exemplary job of keeping things (including me) organized.

Carol Apperson, who was a board member for several years, is stepping down and I thank her for her contributions. Mark Dorriesfield is our newest and youngest addition to the board. Mark's technical abilities have come in handy as he has recently modernized the NDN website. Jay has been getting the word out about club events through the media, while Pat Baldwin (assisted by Lynda) has been selling wildflower seeds as a club fundraiser. Although not part of the executive, Kim Lendvay manages our Facebook page and Geoff has done a fantastic job as editor of the newsletter since the beginning. I thank all of these people for their willingness to pitch in and keep the club running smoothly.

Other club members can also play a role, such as bringing interesting speakers to our attention, suggesting outings, volunteering to lead outings or perhaps even joining the board. We are always looking for new blood.

Upcoming Events - January to April 2022

April 26, 2022 – David T. Chapman
"Weird and Wacky Weather"

May 23, 2022 – Geoff Carpentier
"Ontario Big Bird Year"

June 28, 2022 – Marilyn Simonds
"Canada's Rachel Carson: Louise de Kiriline Lawrence - the Songbird Decline of the 1940s & 50s"

Piggy Pine Siskins

By James Kamstra
Photos by James Kamstra and Geoff Carpentier

Like many of our members, Lynda and I have set up several bird feeders around our home and take great pleasure in watching the feathered friends that we attract. Being able to see these wild creatures at close range helps us get through the long dreary winter in North Durham.

Our feeders include suet balls, two tubular finch feeders with Niger seed and a covered tray with mixed seed elevated on a pole. The most fun comes from a clear plastic feeder with suction cups that attaches directly to the outside of the dining room window. This feeder is filled with black oil sunflower seeds. Birds do not strike the window but fly in to feed, oblivious to us watching them from 1 or 2 metres away on the other side of the glass. Such close range offers the opportunity to observe the distinct behaviours not only of the different species, but also of different individuals. You will note that I have intentionally anthropomorphised the birds in the following accounts.

Chickadees are the polite ones. One bird flies into the window feeder, picks up a sunflower seed then immediately flies off. Another chickadee flies in and does the same. Occasionally one chickadee will stay a little longer and try to prevent others from landing, but this is only for a half minute or so before it too leaves. Chickadees find a perch some distance away where they will hammer away at the seed case with their tiny beaks to extract the delicious meat inside. Nuthatches exhibit much the same behaviour. Fly in, grab a seed, then fly off, letting others come in to get their share. The normally mild-mannered juncos are not so courteous. One bird flies in, and then takes its time, manipulating a sunflower seed while sitting in the feeder. It will eat several seeds and try to defend the feeder against others of its own and other species. The junco attempts to prevent chickadees from flying in, by opening its mouth and darting out at the intruder but the attempt is only half-hearted. Chickadees are often still able to fly in and grab a seed under the watchful junco's eye.

The American Goldfinch, although tiny, is more aggressive at the window feeder. Once a bird has landed it will do its best to prevent any others from being able to land or feed there. It will open its beak in a threatening gesture at any bird that tries to land. A chickadee flies in, but before it can land, the goldfinch boldly thrusts its head at it, and the chickadee usually flies off. Sometimes when the goldfinch's attention is on another bird, a chickadee is able to land long enough to steal a sunflower seed. When a larger Purple Finch flew in however, the goldfinch could not drive it off. The Purple Finch was not so obsessed with hoarding the feeder, so the two species fed together.

One individual Pine Siskin was convinced that it had full squatter's rights to the window feeder and would tolerate no others. The little siskin desperately opened its pointed beak and jabbed aggressively at any other bird that attempted to land. Many a chickadee tried to fly in but were thwarted with each attempt. Goldfinches and juncos had no better success. This siskin hogged the feeder for many minutes, filling its face with seed whenever there was no other bird to chase off. The siskin was particularly excited by the Red-breasted Nuthatch. The nuthatch came in once, was chased and off it flew. A couple minutes later, it landed again but the threatening siskin sent it off again. After a few more minutes, the nuthatch returned but this time decided that it had enough of the irritating pipsqueak. The nuthatch landed, and then held its ground. It opened its beak back at the advancing siskin. For a moment the two birds looked as though they would start fencing with their bills. The standoff only lasted seconds. The siskin must have realized that its beak was shorter, so it backed down and flew off in defeat.

Meanwhile on the nearby tubular finch feeder, goldfinches and siskins feed together cooperatively. The configuration of that feeder presents a large area of seed such that one individual is not able to prevent others from feeding, so no-one can be 'king of the feeder'. Since the window feeder is smaller and enclosed it can be defended by a single bird, and certain individuals take it upon themselves to do so. It seems that being greedy is not only an inherently human trait!

Focus on Nature

A Brief Environmental History of North Durham

by Pat Baldwin

photo of White Pine by Geoff Carpentier

Durham Region has a much longer history of settlement than many of us realize. We think of it as covered by virgin forests at the time of European settlement but this is not true.

The Oak Ridges Moraine is believed to have been home to Indigenous populations since the last glacial period, 10,000 years ago. Research has found that land near the southwest corner of Scugog, and other locations in the Uxbridge area were once altered due to occupation by people who would come to be known as the Huron-Wendat. They were an agricultural society, which utilized burning as a common means for land clearing. These ancestral peoples of Ontario grew crops such as sunflowers and tobacco with the most favoured plants being "the three sisters", a companion planting of corn, squash and beans. This agricultural practice has been carried out for so many years in North America that the Hoary Squash Bee (*Peponapis pruinose*) has adapted to specialize in pollinating these three plants. Following 10 to 20 years of farming, these farming areas declined in fertility.

In the Uxbridge/Scugog area, these agriculturalists were presumed to have abandoned the land about the year 1450, according to archeological records.

Photo copyrighted by the Royal Ontario Museum and used with permission Courtesy of the Royal Ontario Museum

SAW MILL & RESIDENCE OF JOHN WEIR. LOT 22. CO. 7. UXBRIDGE TP.

After these original people resettled to other areas, new forests of mostly White Pine and fire-resistant oaks grew into these abandoned areas. Other changes took place on these lands between the time the agriculturalists left and the French arrived in the mid-1600s. It seems that trapping had resulted in beavers and other fur-bearing animals becoming scarce in Durham.

By the time Britain began sending settlers and United Empire Loyalists to Canada, with promises of free land, the formerly cleared agricultural lands had grown into magnificent forests of very old White Pine trees suitable for the ships of the British Navy. They were once considered very important and are now recognized as our provincial tree. Mast Road in Scugog is a reminder of the past existence of these magnificent trees. But, while this species was reserved for the navy, other species were considered to be so plentiful that they had almost no value except to be made into potash for use in Britain. This required the hardwood to be burned and the ashes soaked in water and reduced in an iron pot. It was shipped overseas in huge barrels, 560 lbs in weight, for $80 to $120 a hogshead (a measure of a large cask equal to 238.7 liters). It was sometimes possible for farmers to use potash to earn much needed cash. The town of Ashburn was named for its considerable number of asheries that existed in the area. Many saw mills existed in the region, too.

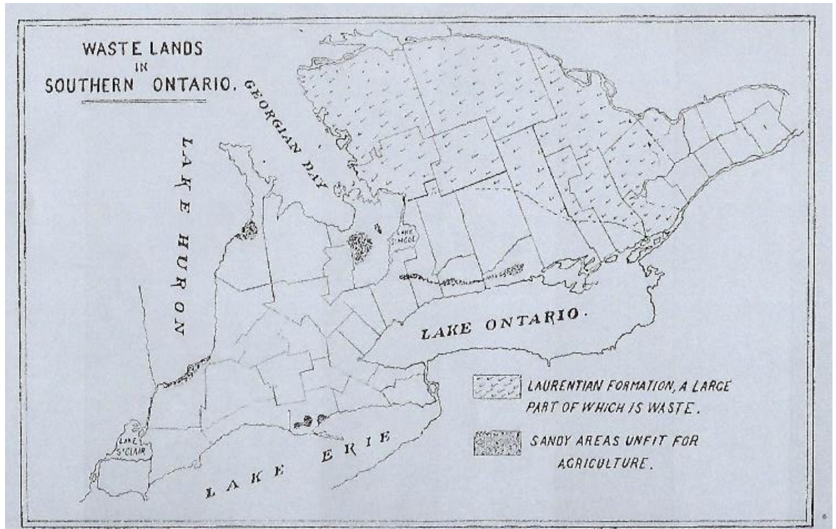


Fig. 1. Waste Lands in Southern Ontario.

Early naturalists such as Catharine Parr Trail began to suggest that this deforestation was excessive. As a direct result of deforestation, rivers began to silt up, and fish populations declined or disappeared.   The soil began to blow away creating huge problems. Roads in the Uxbridge area were once cleared of blowing sand much like they are now cleared of blowing snow. Properties had to be abandoned as they became unfit for use.

Meanwhile, a new profession was being developed in Europe and especially Germany, as residents began to realize that over-harvesting of wood had also resulted in negative effects on the environment. It was thought, in the early 1800s that forests could be ecologically and economically sustainable if clearcutting and bare forest soils were avoided. This philosophy is also why Algonquin Park, established in 1893, is still logged but has also been set aside to preserve important headwaters and protect wildlife and forests.

The Canadian government began to investigate the emerging practice of forestry and soon hired its first provincial forester to help salvage these lands. The 1908 *Reforestation of Waste Lands in Southern Ontario* suggests that these lands be put under forest management. See map above from the original document. These lands included the Oak Ridges Moraine, where devastation was especially notable. It led to the planting of trees in the Durham Regional Forest. Look around the Uxbridge area and you will see numerous properties planted with rows of pine trees. Like Durham Regional Forest, these plantations were planted in depleted soils utilizing mainly pine trees which are able to grow in poor soil.

We've come a long way in learning about environmental protection. It is interesting that it was often due to the efforts of individual property owners who helped so much in recovering a damaged land. I'm grateful to those early environmentalists who took it upon themselves to restore what had been damaged. Many local woodlot owners are also doing their part in keeping the land stable and in good health. Long live the trees!

Fact or Fiction?

Text by Dave Mudd and Cara Gregory

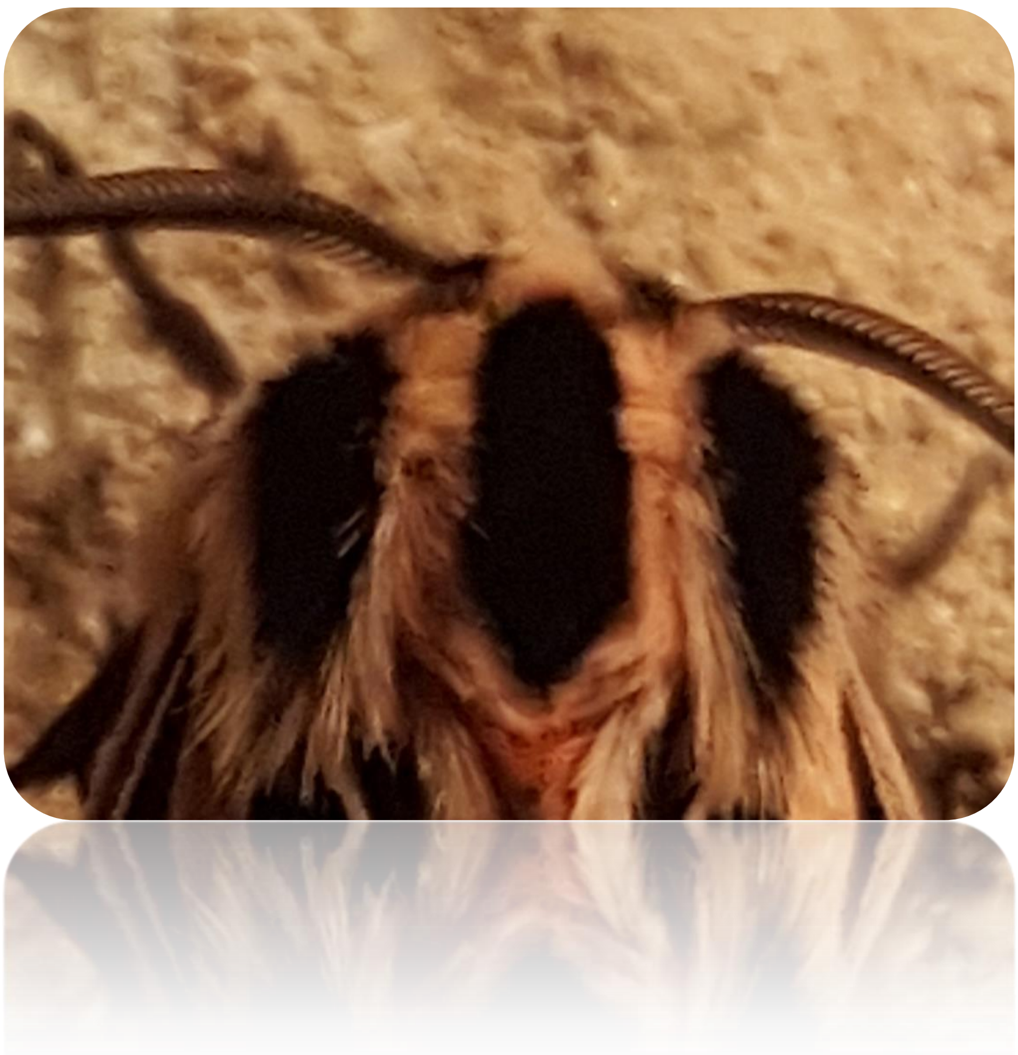
A POISON IVY RASH IS CONTAGIOUS

ONLY FEMALE MOSQUITOES BITE

What do you think? Please see page 9 find out if these statements are fact or fiction.

Nature Quiz

Text and photos by Geoff Carpentier



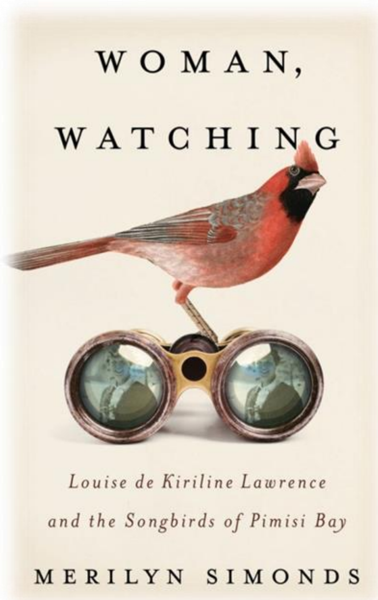
Well I'm clearly a fuzzy looking creature so is it possible I am some sort of mammal? But if so, what are those odd appendages? Maybe some type of bat? Here's a hint - I am tiny and have many similar looking cousins but I am not a mammal at all .. So maybe think smaller?!?

Book Reviews

By Geoff Carpentier

Woman, Watching. 2022. Merilyn Simonds. ECW Press, Toronto, Ontario. 396 pages. $36.95. ISBN – not yet assigned.

This is an intriguing book about Louise de Kiriline Lawrence and her incredible life and the amazing contributions she made to several different facets of society. When you read the book you will understand that she is much more than a woman who just studied birds in Ontario in the mid-1900s and beyond. Her contributions were manyfold.



Ms. Simonds adopts an intriguing style that turns this from a chronology of Louise's life to a story where we begin in Stockholm as Louise is a young girl with an immense admiration for her father and mother and a mild interest in birds. She morphs into a young woman who survived the atrocities of war, life in rural Russia and then a new beginning in Canada in the 1930s, where she was the primary nurse to the Dionne quintuplets. Only much later did she become a birder. I was spellbound as the story unfolds of how she travelled through war torn Europe to find and share her life with her husband Gleb de Kiriline in Russia, followed by their escape from Archangel. The story continues when in 1919, Louise and Gleb fled the Red Army only to get forced to surrender days later after defying death from freezing and starvation. She was later to lose Gleb when he was captured and held prisoner and eventually executed.

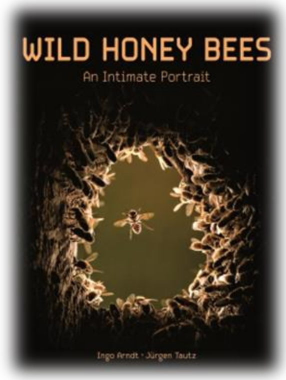
As a young girl, she lived near the Baltic Sea near Stockholm and only as a young woman in Canada, almost 40 years later, did she take up the study of birds. The story is a progression of how her interest grew from an escape to the wilderness of Canada near Pimisi Bay to a passion, almost an obsession, with birds. Self-taught as a naturalist she learned how to study and document birds and their behaviours. The format of the book is interesting and intriguing as it is not merely a sequential chronology of her life, but rather a chronicling of how her skills and abilities grew over time,. The author goes backwards and forwards in time to show how events and people influenced her as she made inroads into the male-dominated culture of birding in North America at the time. But even beyond that, she was not classically trained as an ornithologist so she also had to overcome that stigma as well.

Two things bothered me a bit. One is the cover, which depicts a Northern Cardinal sitting atop an old pair of binoculars. The cardinal was an extremely rare bird at the time and Louise seems to have chronicled one sighting at her property early in her life. However, the cardinal was not a prominent feature of her studies which actually focussed on woodpeckers, Evening Grosbeaks and vireos, amongst others. So why choose this bird above all others? The other aspect I found a bit troublesome as the book progressed is the detailing of the number of times Louise is cited as rewriting this or that book or paper and the difficulty of trying to get things published. Ultimately she had hundreds of works in print, but I found the detail of her publishing trials unhelpful and a bit overwhelming, especially near the end of the book as it describes her later years. I think much of this could have been synthesised and condensed to keep the reader's attention better.

That said, I read the book cover to cover and was intrigued by her skill, determination, ability and perseverance at a time when few women were regarded as ornithologists or even publishable. One of the fascinating aspects of the story is how the author weaves in the many famous ornithologists and women of the day into the story of her life. You will recognize almost all of them when you read the book.

So bottom line – if you want to learn about how ornithology evolved in the mid-1900s, about the role of women in that progression and most importantly the incredible story of Louise de Kiriline Lawrence, then do not miss out on getting this book!

Wild Honey Bees. Ingo Arndt (photographer) and Jürgen Tautz (author). 2022. Princeton University Press, Princeton, New Jersey, 08540. Hardcover 192 pages. $29.95 US. ISBN 13:978-0-691-23508-0.

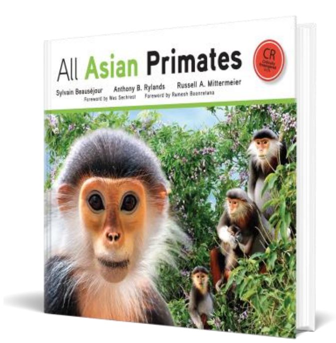


Although "domesticated" Honey Bees are not native to North America, this new book will give insights into their status and behaviour across their altered range. Notwithstanding their status in North America, this is an amazing compilation of their life history supplemented with incredible photographs. But more importantly, this book explores not only the human controlled members of this genus but rather the wild Forest Honey Bees that are now critically endangered.

There are so many interesting facts presented in this book, it's hard to decide what to include herein , but perhaps I can simply pose a few questions. Do bee colonies have dehumidifiers and how do they work? Who directs all the activities in the hive? How do bees process the nectar using heat and enzymes? What is bee bread? Can any larvae be transformed into a queen? When hives or swarms relocate how do they choose their new colony site? Who else might share a hive with these bees?

Well you get the idea. The wild bees live a very different life than those in typical human made enclosures. If you'd like to delve very deeply into their lives, this is the book for you.

All Asian Primates. Sylvain Beauséjour, Anthony B. Rylands, Russell A. Mittermeier. Lynx Edicions, Barcelona, Spain. 2021. 55.00€. 536 pages, Softcover. ISBN: 978-1-7372851-1-3.



I guess my first impression when looking at this book is I had no idea how many primates occur in Asia. I thought maybe 30 or 40 species??? But no, it has 193 species. I must admit that, despite what many of you think, I love mammals almost as much as birds so I appreciate a great book when I see it. And this is such a book.

This is not a pocket guide but rather something you could use for research or to read about what you have seen or might see on your travels. The layout is attractive and fulsome. Each species gets two full pages in the book. The first page is a composite of several gorgeous photographs showing salient features and different poses. The second page has a concise map showing range. This is supplemented with notes on range, taxonomy, threats, conservation and its Red List status. There are also linked QR codes to add more information to the descriptions. At the beginning of each chapter there is a descriptor of some features of the genus and at the end of each chapter there is a detailed reference list that adds more value.

What I didn't like is the fact that details of identification were not generally included and I have to rely on what I can see in the photographs or go to the QR code or another source to find these. I also don't like the size and structure of the book. It is large, doesn't fit on a shelf and is not rigid so it flops over if I try to stand it on my book shelf. So frankly I'm of mixed feelings about this one. I love the info they provided but I think it would be more fulsome if at least some basic information on identification was included.

Fact or Fiction – Answers Revealed

FACT OR FICTION?

Text by Cara Gregory and David Mudd, photo of Poison Ivy by Geoff Carpentier and mosquito from online free source.

THE POISON IVY RASH IS CONTAGIOUS.

This is **FICTION (sort of).** The Poison Ivy rash itself is generally not contagious (but see the last paragraph on this page).

All of the plant tissues in a Poison Ivy plant contain an oil called urushiol. It is the bodily contact with this oil that can cause a painfully itchy rash. Depending on the amount of the oil on your skin, it can take minutes or hours for the resin to be absorbed and the rash to appear.

The rash will occur only where the plant oil has touched the skin, so it can't be spread to other parts of the body by scratching or rubbing, and can't be spread to someone else who has touched the rash. It is the oil that is contagious. Even if blisters break, the fluid in the blisters is not plant oil, so it cannot further spread the rash.

It may seem like the rash is spreading if it appears over time instead of all at once. This is either because the plant oil is absorbed at different rates on different parts of the body or because of repeated exposure to contaminated objects or plant oil trapped under the fingernails. The oil can remain active on objects like unwashed shoes or clothing, and even pets' fur, for weeks or even years. If someone still has oil on their hands and they touch your skin, transferring the oil, then there is a possibility that you could develop the Poison Ivy rash. This can be deemed to be indirect contagious transfer.

ONLY FEMALE MOSQUITOES BITE.

This is **FACT**. Only female mosquitoes bite humans and animals. Males feed exclusively on flower nectar, so they will avoid you completely and head for the flowers instead. Female mosquitoes need protein for their eggs' development, so they must take a blood meal after mating.

A rainy April or warm May nurtures mosquito larvae into adulthood, as frigid vernal nursery pools containing eggs that overwintered, warm up. Mosquitoes emerge from the eggs as larvae known as wrigglers, go through four moults, and metamorphose inside brown pupal castings, called a tumbler, before emerging as a winged adult. The females initially feed on nectar from flowering trees and shrubs for a day or so after emerging. They then find males to mate with and a few days later go looking for a blood meal.

It is interesting to note, that of the approximately 3,500 mosquito species worldwide and 57 species of mosquito native to Ontario, not all of them feed on human blood. For example, *Uranotaenia sapphirina* is known to feed on reptiles and amphibians and *Wyeomyia smithii*, in Ontario, breed only in Pitcher Plants and don't take a blood meal.

The 3rd Ontario Breeding Bird Atlas Update

Photo and text by Geoff Carpentier

Young Great Horned Owl

The second year of the atlas is underway but we have lots of work left to do. As you read this the early nesting species are already hard at it, while many migrants haven't even arrived yet. If you haven't signed up for the atlas already or if you have a significant nesting species (or any confirmed nest for that matter) on your property let me know and I can help you sign up for the atlas or enter the data about "your" nest for you so it can be included the atlas.

[Ontario Breeding Bird Atlas (birdsontario.org)]

Nasty & Nice Nature News

Compiled by Geoff Carpentier
Photo by Geoff Carpentier

Electric cars are in the news all over the world. But what are we to do with the mountains of waste that will be generated when the batteries reach the end of their lifespan? And how can we offset some of the devastating impacts the mining of rare earth metals cause as we create these e-cars in the first place? According to the BC government, by 2040 there will be over 2.5 million e-vehicles in BC alone. Manufactured with components such as manganese, lithium, cobalt, nickel and graphite, they can weigh several kilograms each and last between 8 and 15 years. Currently few jurisdictions are even considering recycling old e-batteries but we must move in this direction to offset mining and production costs and deal with waste management. (Source Matt Simmons, The Narwhal)

Who is killing the sea eagles and why? Historically the White-tailed Sea Eagle was native to parts of the UK, but in the 18th century landowners killed them mercilessly to protect their games birds for personal hunting. Recent efforts to reintroduce them have hit a snag as two of the birds were found dead from suspected poisoning. This is not a recent trend as 52% of all hen harriers (another type of hawk) banded between 2009 and 2019 were either missing or known to have been killed by people. The Royal Society for the Protection of Birds reported 137 incidents of raptor persecution in 2020. One MP from West Dorset in the UK blatantly told the police they should not be investigating these deaths as the eagles “are not welcome in the skies over his constituency”! (Source: Helena Horton, the Guardian magazine)

Albatrosses divorcing more frequently. The ‘Great Albatrosses’, which include the Wandering and Royal, are monogamous and only rarely do couples abandon each other unless one dies. However a study by the New Zealand Royal Society indicates that climate change may be disrupting this behavioural relationship. As the sea temperature rises, food becomes scarcer and it’s harder to raise a brood as the birds have to travel farther to hunt. This can create stress that can lead to avian divorce. Studies on the Falkand Islands show that the rate of mate abandonment in stressful years can be, on average, twice what it is in normal years. (Source: Washington Post)

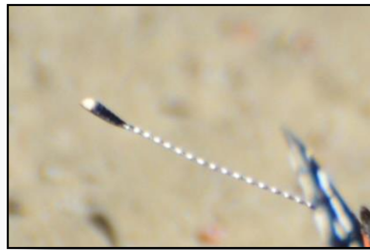
What the heck is a nurdle? Anything made from plastic will first appear as a tiny plastic particle of roughly a round shape. Through various processes, these will then be made into countless products. In May 2021, a ship, the Xpress Pearl sank off the coast of Sri Lanka releasing its cargo into the ocean. Included in that spill were 1680 tonnes of nurdles – in essence billons of individual pellets that are washing up along shorelines and more importantly being ingested by marine creatures. From many sources, 230,000 tonnes are deposited into the ocean annually. They act like tiny sponges attracting various pollutants to adhere to their surface and the impacts to wildlife are devastating. (Source: Karen McVeigh for the Guardian magazine)

A bit of good news. The government of Scotland has promised to use 20% of its 5.3 billion dollar climate fund to protect and enhance habitat biodiversity in developing countries around the globe. This unprecedented promise is founded in the simple fact that climate change is a global issue and the solutions must also be global. Areas mentioned but not confirmed for financial assistance include the Amazon Basin, the peatlands of southeast Asia and the Congo Basin (Source: The Canadian Press)

An odd outcome of climate change. We have all heard that the glaciers and ice fields are melting and the impacts that causes. In the Italian Alps, this same melting is occurring but as a result an amazing historical event has been uncovered. A WWI bunker has emerged from the ice and snow in an almost perfectly preserved state. The encampment occupied originally by Austro-Hungarian troops contained books, munitions, cigarette paraphernalia and more. In 1915 these caves were created by blasting out parts of the face of the mountain and troops used them for shelter and as a base for armed attacks. Ironically the troops stationed here were more likely to die from frostbite, falls and avalanches than enemy bullets. Seeds found in the hay used for bedding were so well preserved that a hundred years later they were still viable and actually germinated and thrived when planted recently.

Answers to Nature Quiz

Well as you can now see, it am an insect. But is it a moth or a butterfly. It’s a bit hard to tell but its antennae (the appendages mentioned in the introduction to this article) are fuzzy or maybe saw-edged, meaning it is not a butterfly which has smooth antennae with a small club at the end (see photos below). It’s hard to tell from the photo but it’s about ½ inch or 1.25 cm long with a wingspan of about 7.5 cm.



Moth antennae on left and butterfly on right

This is a Parthenice Tiger Moth (*Apantesis parthenice*) and is one of several similar looking species of moth. It is found in south-eastern Canada and the eastern United States. The moths are common in fields and woodland edges from June to late September. It gets its name from the complex patterning on its back, which resembles the patterning of a tiger. This is an adaptive protective mechanism and it tastes unpleasant and so predators are warded off by its colours. Its offspring (caterpillars) are also toxic to predators and have hairy bodies. They can hear quite well and forage on many common garden plants such as thistles and dandelions.

Nature's Pretty Side

This beautiful Purple Finch is a regular but uncommon nesting species in North Durham

Photo by Geoff carpentier

For more information about NDN

Visit Us On Facebook
and our website
www.northdurhamnature.com

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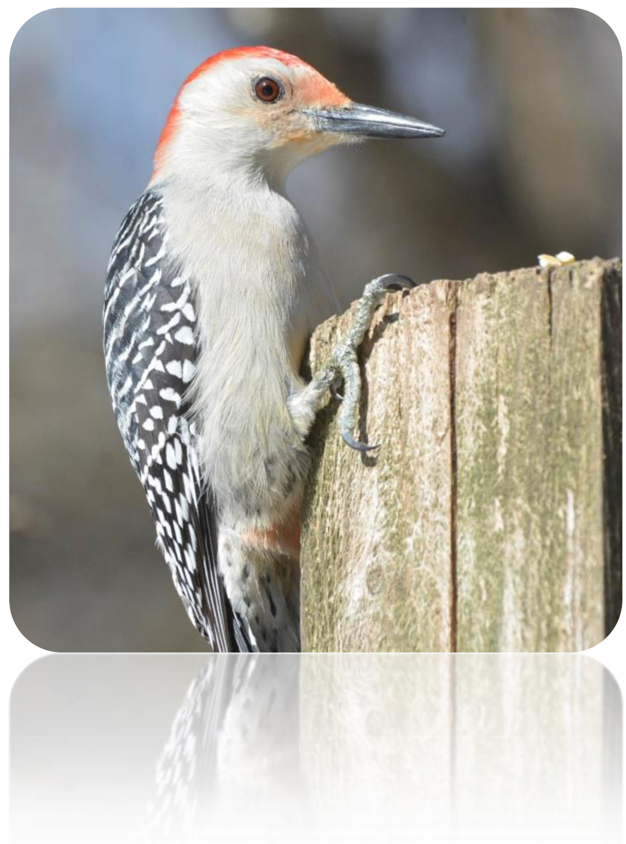

NORTH DURHAM NATURE