



Geoff Carpentier wins Ontario Nature award!

By Geoff Carpentier

Every year Ontario Nature honours various naturalists who contribute to the understanding, teaching, reporting and support of Ontario wildlife.

There were 10 awards offered this year:

- Ontario Nature Corporate Award - Calstone Distribution
- Ontario Nature Achievement Award - Stewart Hilts
- W.E. Saunders Natural History Award - Huron Fringe Birding Festival
- Steve Hounsell Greenway Award - Jack Gibbons
- J. R. Dymond Award - Pollination Guelph
- Richards Education Award - Kelly Wallace
- W.W.H. Gunn Conservation Award - Paula Davies
- Ian Shenstone Fraser Memorial Award - Rick Levick
- Margaret and Carl Nunn Camp Scholarship - Reed Fitzsimmons



For more info check out: <https://ontarionature.org/take-action/conservation-awards/>

But wait! There's more. I am so honoured to have been awarded the Carl Nunn Media and Conservation Award for the writing I do about conservation issues in the books, magazines, on-line chat venues and nature columns to which I contribute. I was so surprised to be nominated and even more surprised to be selected by Ontario Nature for this award! My sincerest thanks go out to the Board of North Durham Nature who nominated me and to the selection committee at Ontario Nature. For me this is recognition of the very reason I write. I want to share what I see and help others appreciate the beauty and the wonder that surrounds us. This award shows me that people are listening!

If you want to learn more about what nature is all about, you may also choose to read my bi-weekly column in The Standard Newspaper published in Port Perry.

<https://thestandardnewspaper.ca/category/columns/geoff-carpentier/>

Bird Window Strikes

Join North Durham Nature's Global Bird Rescue Team

By Brenda Near and James Kamstra

Photos by Geoff Carpentier

The number of birds that lose their lives by flying into windows is staggering. According to the Fatal Light Awareness Program (FLAP), approximately 1 billion birds die every year in North America alone due to window collisions. FLAP is a volunteer based organization that is working hard to raise awareness and reduce the effect of this calamity. They are promoting their annual *Global Bird Rescue* in which the public can get involved.

From Oct. 5th to 11th, team members will document bird collisions with windows in their homes, cottages or even places of work. Participants should check the outside of their windows daily for possible bird collisions. This important citizen science initiative from FLAP Canada is an opportunity for NDN to help spread awareness around the numerous bird fatalities that occur each year due to window strikes and to increase the use of effective window treatments that can help decrease these fatalities.

Team members will enter their data into the Global Bird Collision Mapper. This vital information “will help incentivize new policies and laws designed to reduce bird-building collisions worldwide.”

In addition to mapping out bird collisions, members of the NDN Global Bird Rescue team will receive a manual that will help them rescue birds that are still alive after a window strike. The more team members we have, the more chance that a number of birds will be rescued.

Join the team today! Contact Brenda Near at brendaanear@gmail.com to register. Let's do this for the birds!

For more information and to find out more about how to add protective window coverings to your home, visit www.Flap.org ... www.Birdsafe.ca ... www.globalbirdrescue.org or <https://birdmapper.org/app>



This Ovenbird (above) was a lucky one that survived after a window strike; the Dark-eyed Junco to the left was not so fortunate

Counting Butterflies

DURHAM REGION BUTTERFLY COUNTS IN 2020

Photo of Coral Hairstreak and text by James Kamstra

Photo of James in the field by Kathryn Lloyd and photo of Atlantis Fritillary by Rayfield Pye



The COVID-19 pandemic has resulted in the cancelling of so many events this year including about one-third of the butterfly counts in Ontario. I did not see the need to cancel our two counts however since small groups (often two people) cover their respective areas without the need to come into contact with others while adhering to social distancing rules. Normally all participants meet up at a restaurant at day's end to tell of their butterfly adventures and go through the species tally. Clearly those had to be cancelled this year.

Butterfly counts entail a noble attempt to count all of the butterfly individuals within a 25 km diameter area on the count day, similar to a Christmas Bird Count. The Oshawa count extends from the north side of Oshawa to north of Port Perry, while the Sunderland count includes parts of

Uxbridge and Brock Townships in north Durham, and part of Georgina Township in York Region. This was the 26th year for Oshawa and the 24th year for Sunderland.

During the Oshawa count held on June 28, 41 species were recorded, slightly less than the average of 45. Meanwhile 52 species were tallied on the Sunderland count on July 5. This is close to the long-term average of 54 for that count.

The counts assist in documenting population trends both at local and regional scales, but it is especially exciting when a new discovery is made. Rayfield Pye, accompanied by counter Cara Gregory, found and photographed an Atlantis Fritillary near Blackwater, which not only was a new species for the Sunderland count, but it had not been previously recorded anywhere in Durham Region! Atlantis is quite similar to the two other large fritillaries, Great Spangled and Aphrodite, but it has a black rim on the wing's upper edges. It is a more northern species that occurs regularly just a short distance to the north in Kawartha Lakes and Simcoe County and throughout most of the province north of there. There are also historic records from York Region immediately to the west, so its confirmation in Durham was long overdue.

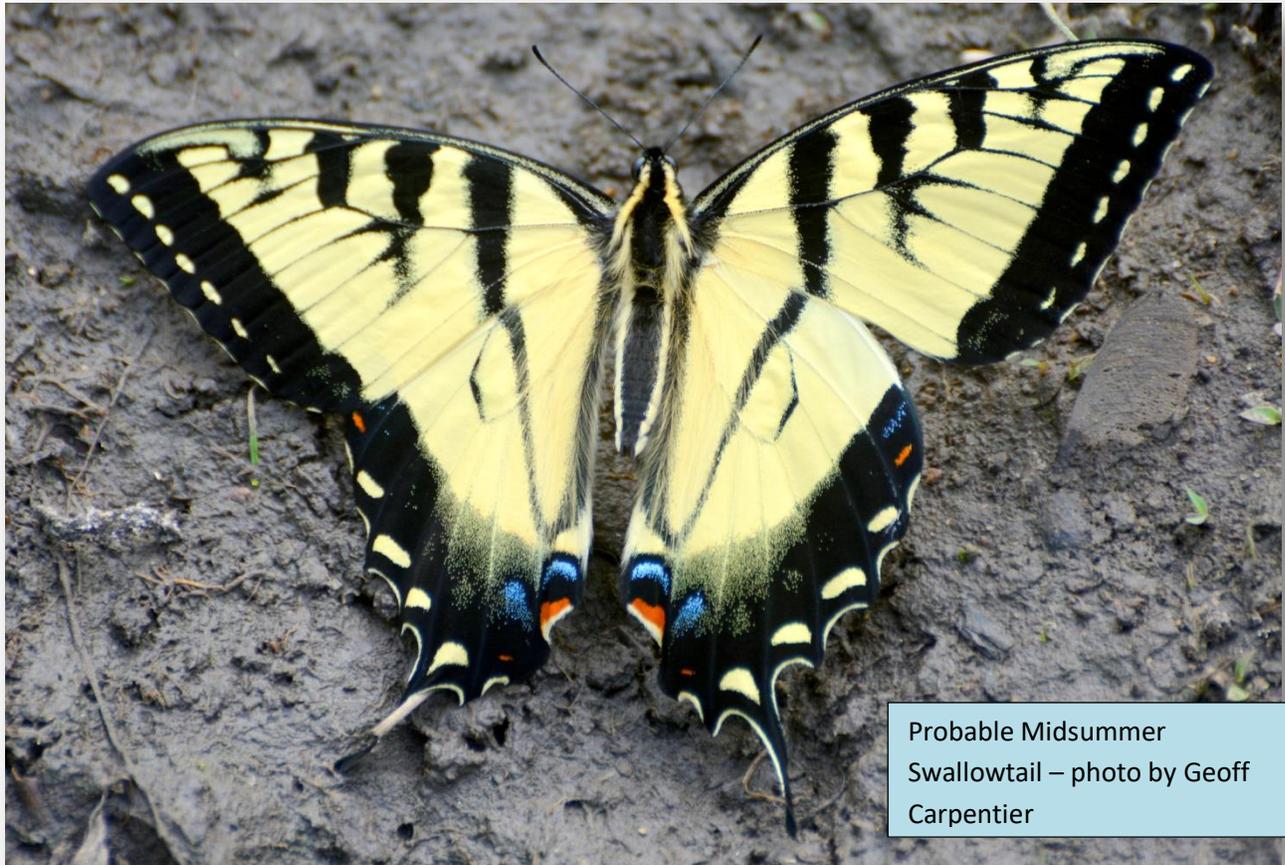


Atlantis Fritillary

Although the Baltimore Checkerspot is common in North Durham and has been tallied on every Sunderland count, it is quite rare in the southern part of the Region. The 6 recorded by Tom Mason on the Oshawa count is the 5th time it has been recorded and represents the highest count in 26 years. Interestingly, every Baltimore recorded on the Oshawa count was always in the vicinity of Lake Scugog at the north end of the circle. Margaret Carney caught sight of a hairstreak near Raglan, which she thought was a Gray Hairstreak, which would have been an exceptional find. Unfortunately her brief glimpse of the fast flying gossamer was not sufficient to conclude its identity.

The migrant species were very low in number this year, including Red Admiral and Painted Lady. Only a single Question Mark was seen at Oshawa and none at Sunderland, the first time in the 24 years of the count. American Ladies were not present on either count. Monarchs were found in lower than average numbers on both counts, and far below those of the past two years. They average about 90 for Oshawa and 123 for Sunderland.

Sunderland recorded a record high Tiger Swallowtail count of 169, well above the previous high of 100 in 2017.



Our understanding of Tiger Swallowtail taxonomy is changing causing confusion and an identification challenge. Until recently it was assumed that both Canadian (*Papilio canadensis*) and Eastern Tiger Swallowtails (*Papilio glaucus*) are present in Durham Region. The Canadians being a smaller, single-brooded early flying species with a forewing yellow band, while Easterns are larger, double brooded and the underside of the forewing border is a yellow row of spots. Most of the swallowtails seen on counts were assumed to be Easterns since they appear large and freshly emerged. Current thought however is to label these larger later season butterflies as Midsummer Tiger Swallowtails since they are single brooded, fly later than Canadians and earlier than the second brood of Eastern Tigers. The Midsummer Swallowtails appear to be hybrids since they are midway in size and show an intermediate yellow border pattern. There is some evidence that they may be another species distinct from Canadian and Eastern. It seems now that the true Eastern Tiger Swallowtails may be a more southern species that do not occur in Durham. To be consistent with previous year's counts however the Midsummers will be considered Easterns for this report until research on the taxonomy is more conclusive.

The results of the two counts are shown on the table below and the participants are listed below that.

BUTTERFLIES OBSERVED ON THE DURHAM COUNTS IN 2020

SPECIES	Oshawa	Sunderland
	June 28	July 5
Black Swallowtail		5
Canadian Tiger Swallowtail	12	
Eastern Tiger Swallowtail	37	169
Mustard White	20	64
Cabbage White	93	332
Clouded Sulfur	13	588
Orange Sulfur		7
American Copper	4	5
Bronze Copper	5	24
Coral Hairstreak		9
Acadian Hairstreak		22
Banded Hairstreak		3
Striped Hairstreak		9
<i>Hairstreak</i> sp.	1	
Eastern Tailed Blue	1	6
Summer Azure	4	105
Silvery Blue	17	5
<i>Blue</i> sp.		2
Great Spangled Fritillary	28	72
Aphrodite Fritillary	1	
Atlantis Fritillary		1
<i>Speyeria</i> sp.		3
Silver-bordered Fritillary		2
Meadow Fritillary		17
Pearl Crescent	57	18
Northern Crescent	777	799
<i>Phyciodes</i> sp.	40	
Baltimore Checkerspot	6	137
Question Mark	1	
Eastern Comma	6	2
Gray Comma	1	4
<i>Polygonia</i> sp.	1	2
Mourning Cloak	2	2
Milbert's Tortoiseshell		3
Painted Lady		2
Red Admiral	3	11

White Admiral	57	38
Red-spotted Purple	5	3
Viceroy	6	18
Northern Pearly-Eye	58	17
Eyed Brown	56	285
Appalachian Brown		15
Little Wood Satyr	60	21
Inornate Ringlet	72	37
Common Wood Nymph	6	91
Monarch	24	49
Silver-spotted Skipper	93	50
Northern Cloudywing	5	22
Juvenal's Duskywing	1	
Dreamy Duskywing	2	
Least Skipper	10	60
European Skipper	590	519
Peck's Skipper	9	137
Tawny-edged Skipper	5	107
Crossline Skipper		17
Long Dash Skipper	37	160
Northern Broken Dash		11
Little Glassywing		4
Delaware Skipper	2	86
Hobomok Skipper	16	17
Broad-winged Skipper		4
Dion Skipper		7
Dun Skipper	3	53
TOTAL INDIVIDUALS	2247	4258
TOTAL SPECIES	41	52
No. of Participants	14	21
No. of Parties	7	9
Km. on foot	47.5	75
Km. by car	146	151.5
Hours on foot	38.5	65.75
Hours by Car	5	3.5
Total Hours	44	69.5



James Kamstra – one serious butterflyer!

Participants

Oshawa: Dennis Barry, Susan Blayney, Dan Bone, Margaret Carney, Geoff Carpentier, Cathy Galberg, James Kamstra, Steve Laforest, Tom Mason, Greg Moon, Brenda Near, Rayfield Pye, Bev & Jay Thibert.

Sunderland: Dave Bishop, Susan Blayney, Dan Bone, Jon Boxall, Cara Gregory, Brian Henshaw, Simon Henshaw, Jim Hopkins, James & Lynda Kamstra, Steve Laforest, Thom Lambert, Craig & Kathryn Lloyd, Tom Mason, Greg Moon, Brenda Near, Dave Paddock, Ed Poropat, Rayfield Pye, Bob & Karen Yukich.

Fact or Fiction?

By Dave Mudd and Cara Gregory

- 1. PORCUPINE WILL SHOOT THEIR QUILLS IF YOU GET TOO CLOSE.**
- 2. MOLES ARE BLIND.**

What do you think? Please see page 10 to find out if these statements are fact or fiction.

Native Plant Spotlight

Blue-stemmed Goldenrod (*Solidago caesia*)

Photos and text by Brenda Near

Solidago caesia is an elegant perennial goldenrod in the aster family and is native to Ontario, Quebec and the Maritimes.

Its preferred habitat is forest edge conditions, part sun/shade, in sandy, well-drained soil. It is quite tolerant of poorer soils and drought.

The specific epithet in its name, “caesia”, means blue, hence the common name Blue-stemmed Goldenrod. While younger stems seem to lack the blue hue, older and more substantial stems indeed have a deep blue to purple colour. These blue stems are often ‘glaucous’, meaning that they have a whitish powder on them that can be rubbed off.

Blue-stemmed Goldenrod is a spectacular addition to any garden. Blooming from mid-August to late September, the stems gracefully arch over, laden with bright, delicate yellow blooms. It has a friendly, compact growth habit rather than the free roaming thug-like growth of some of its relatives. And no, it does not give you hay fever! The allergy culprit is the much less pretty ragweed that blooms at the same time.

Short-tongued bees, wasps and butterflies find this goldenrod particularly attractive as it gives them a late season boost of nectar. It is also a larval host for several moth and beetle species.



References:

<http://www.missouribotanicalgarden.org/PlantFinder/PlantFinderDetails.aspx?kempercode=y370>

<http://ontariowildflowers.com/main/species.php?id=49>

https://www.illinoiswildflowers.info/woodland/plants/bl_goldenrod.htm

Arrow Arum - New Provincially Rare Plant from North Durham

Text and photos by James Kamstra

Doug Apperson was inspired by the iNaturalist challenge to enter records of as many species as possible from one's property in August 2020. As you may know, iNaturalist is a website program where anyone can submit photos of all kinds of life forms, pinning them to a geographic location,

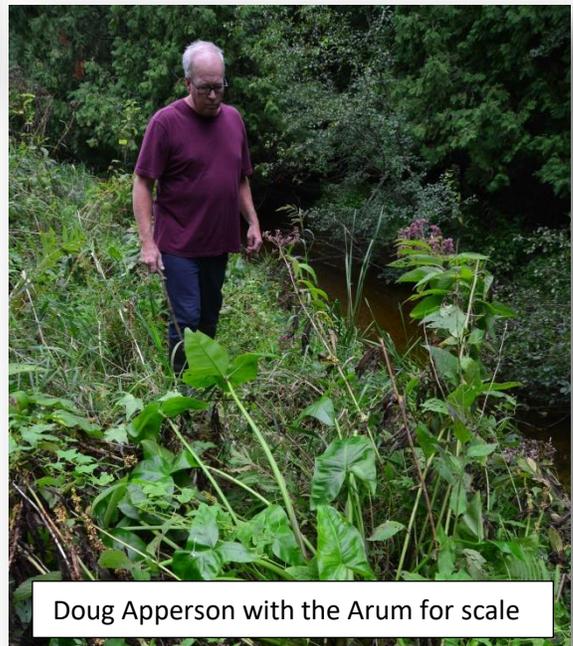
as a means of documenting the biodiversity across the planet. The website first suggests an identification of the organism which is eventually confirmed or corrected by taxon experts. Doug submitted various photos of insects, fungi and vascular plants from their 2.5 hectare property along the Layton River. One of his photos was of an Arrow Arum, a distinctive plant that had not been previously recorded anywhere in Durham Region.



Not long afterward I was perusing the maps on the iNaturalist website when a reported observation of Arrow Arum (*Peltandra virginica*) near Lake Scugog jumped out at me. Knowing that Arrow Arum is quite like the common Broad-leaved Arrowhead (*Sagittaria latifolia*), which is sometimes misidentified, I was skeptical. The photo confirmed its identity however, so I contacted Doug and Carol who invited me to come over and check it out.

They showed me three plants they had found in meadow marsh on the semi-shaded floodplain. The plant has an exotic appearance, as it grows in compact patches with large shiny arrow-shaped leaves that stand upright on long stalks. It is in the arum or araceae family that is related to Jack-in-the-pulpit, Wild Calla and Skunk Cabbage (also present in north Durham). The flower is unusual as it has no petals or sepals but instead consists of a rod-like spadix, partially covered by a sheath known as a spathe.

I walked further downstream along the Layton River from the Apperson property where I found 10 more Arrow Arum patches. Then I drove to several locations where a road crossed the Layton River to see if I could find more of the distinctive plants. I found several patches along Brock



Concession 2, approximately 2 km north of the Apperson property, but not at any of the other sites I checked. Arrow Arum likely occurs elsewhere along the Layton River, and since it is a tributary of the Nonquon, it may occur more widely in the Nonquon River watershed.

Arrow Arum is essentially a southern or Carolinian species that mainly occurs in Niagara, Hamilton, Norfolk and Essex Counties as well as the Thousand Islands. With the number of people recently submitting their observations on iNaturalist, the species is turning up at more locations and is now known to occur in the Kawartha Lakes, and Prince Edward, Northumberland and Peterborough Counties. Keep your eyes open for it.

Answers to Fact or Fiction Quiz

Text by Dave Mudd and Cara Gregory

Photos by Geoff Carpentier



PORCUPINE WILL SHOOT THEIR QUILLS IF YOU GET TOO CLOSE.

This is **FICTION**. Porcupine (*Erethizon dorsatum*) do indeed use their sharp quills for defense, but the loosely rooted quills only release from the Porcupine's skin when contact is made with another animal. If it is attacked, it will lower its head, in a defensive posture, and may swing its quilled tail toward the threat. They cannot however launch their quills through the air like missiles!

Porcupines have approximately 30,000 quills. The quills are stiff, modified hairs which are hollow and have microscopic barbs on their black tips. The barbs allow the quills to move only in a forward direction and swell with blood, making them harder to extract. Every time an animal moves, the quills work in more deeply. If not removed, the quills could go right out the other side

of an animal, and if they encounter an organ along the way, they could prove fatal. Quills in the mouth could prevent an animal from eating and lead to starvation.

The quills contain a fatty acid that acts as an antibiotic. This would explain why animals that have been pricked by porcupine quills rarely develop an infection as a result of this. Most animals though will seldom attack a porcupine. They will eat a dead porcupine by turning it on its back and eating it from the belly, leaving the hide, head and feet. However Fishers and Great Horned Owls will prey on live porcupine.

Porcupines have been known to fall out of trees fairly often, being stabbed by their own quills!

MOLES ARE BLIND



This is **FICTION**. Moles (family *Talpidae*) are not completely blind. Living underground poses some challenges and limitations when it comes to typical mammalian senses. Some moles have tiny visible eyes, the size of pinheads, but often they are hidden below fur, so they are hard to locate. The eyes are normally kept closed, so that they don't get filled with soil while digging their tunnels. Moles can see movement and tell light from dark, but cannot distinguish colours. Their hearing is limited as well, but low frequencies and vibrations can be detected. Moles do however have an acute sense of touch. They use a unique sensory organ in the skin on the tip of their nose, called Eimer's organ, to explore their tunnels and search for invertebrate prey.

Nature Quiz

Text and photos by Geoff Carpentier



Wow this might be a tough one. What is this? It likes to live in fields and is a vital source of food for many predators. It can be a pest but does more good than harm. Born hairless and blind it soon develops into a scurrying, furry critter that is often misidentified. The picture shows babies in a nest, so you can see it is a mammal of some kind!

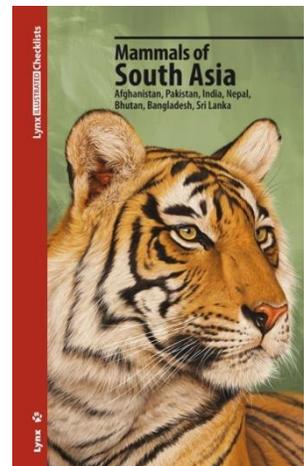
Book Reviews

Text and photos by Geoff Carpentier

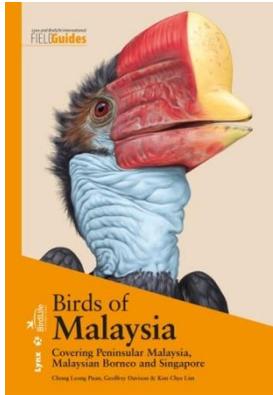
This time I am featuring two new books from Lynx Edicions from Spain.

Mammals of the South Asia – Afghanistan, Pakistan, India, Nepal, Bhutan, Bangladesh & Sri Lanka. Compiled by Andrew Elliott and Albert Martinez Vilalta. Lynx Edicions, Barcelona, Spain. 2020. 28€. 173 pages, softcover. ISBN: 978-84-16728-27-5.

This is the second in an ambitious project by Lynx Edicions to present in book form depictions of all the mammals in the entire world in a concise and useful format. As the title indicates, this book covers a variety of countries that comprise South Asia. This is a huge diverse area and the only other books I am aware of that touch these regions are old and vague in nature. This is a most useful addition to my library!



Each plate shows 2-5 species with a range map for each, with details of habitat and distinguishing features. The paintings are spectacular and accurate. The maps are small but totally readable. This will be an asset to any traveler who can appreciate how rare good mammal books are for regions around the world outside of Africa, North America and Europe. Whether you plan to travel to East Asia or just love mammals, you will love this series!



Birds of Malaysia. Chong Leong Puan, Geoffrey Davison & Kim Chye Lim. Lynx Edicions, Barcelona, Spain. 2020. 46.95€. 416 pages, softcover. ISBN: 978-84-16728-30-5.

Lynx, in my opinion, is a world leader in producing field guides that cover regions of the world where the existing guides are out of date or poorly detailed. Additionally, the science is changing so fast that many excellent books of the past simply have “old info” that doesn’t match with current knowledge and confuses the user of certain bird apps such as eBird, as new species are “created” or new names applied.

The book follows proven formats designed by Lynx, where each species is treated in detail. Lovely illustrations, accurate and useful, accompany each species report. The reports themselves include information on size, scientific name, subspecies, range, preferred habitats, identification tips, voice, similar species and conservation status. Each account is also accompanied by a useful range map, showing seasonal movements where applicable.

Thinking of going to Malaysia, Borneo or Singapore? This is a must addition to your travel gear! If COVID ever ends I will be taking it with me on my next trip to this gorgeous region.

Nasty Nature News

by Geoff Carpentier

The news from around the world always seems so gloomy when it comes to wildlife. In New Mexico hundreds of birds are dropping dead, perhaps due to the effects of the wildfires. More fires in Oregon may in fact kill many more as they make their way south to their wintering grounds.

The Giant Ibis (*Thaumatibis gigantea*) is a very large and very rare bird that can stand more than a meter tall. It was once thought to be extinct in Cambodia, but in 1993, scientists working with the Wildlife Conservation Society (WCS) rediscovered a small population on the border with Laos. In March 2020, in the Chhep Wildlife Sanctuary, in Cambodia, 3 of the estimated 300 birds left in the wild, were taken by poachers, who used the pesticide carbofuran to poison a water hole! There has been a sudden upsurge in poaching in Cambodia since the start of the COVID-19 pandemic. In addition to the three ibises reported above, more than 100 Painted Storks (*Mycteria leucocephala*) have been killed, and hunters have also poisoned White-winged Ducks (*Asarcornis scutulata*), Sarus Cranes (*Antigone antigone*) and many other bird species in recent weeks. (Source: Wildlife Conservation Society (WCS)).

Throughout the Democratic Republic of Congo and many other areas around the globe, including the UK, poachers are taking endangered species such as pangolins, tigers, elephants, rhinos, bonobo (a dwarf chimp) and so much more as economies falter and enforcement wanes. You would hope that in the face of a pandemic people would be nicer but money rules the world after all!

Did you know that the California fires in November 2018 were more severe than ever and yet the amount of forest that was lost in all the combined fires in California in November 2018 makes up only a fraction of Indonesian forests that are burned every year in slash-and-burn practices clearing land for palm oil plantations? In 2015 alone, the area of Indonesian forest burned was more than 26 times greater than in California in 2018! How is wildlife such as Orangutans supposed to survive?

And in closing, as the number of bear attacks in the USA rises due to more people camping and hiking to escape the boredom of the pandemic, the US. National Park service is offering sage advice: If you encounter an aggressive bear, do not run or try to climb a tree and most importantly “Do NOT push down a slower friend (even if you think the friendship has run its course).” They actually said this!

Answers to Quiz

Okay – we know this is a mammal and likely a small one. It has a medium length tail, small ears and some sharp little claws, but not many other clues are offered in the photo. The nest material indicates it might be a mouse or vole or shrew as the nest is quite elaborate and clearly on the surface of the ground. Since the area around the nest is devoid of plant material it seems to have nested under something – perhaps a board? Most predators’ nests will be underground in a burrow and not so fancy!

Well to be honest, when I found this nest I was tricked and thought it was a Short-tailed Shrew as the young were grayish in colour and the size and tail length matched the shrew. Baby mammals can be very tricky to ID. Turns out it was a Meadow Vole, which I confirmed when I went back a few days later and they now were furred and mobile.



Ontario Breeding Bird Atlas

By Geoff Carpentier

Wow it's hard to believe that the first breeding bird atlas was held in 1981 through 1985 – that's 40 years ago! Many of the Durham birders were involved in this epic task and the following one in 2001-05. But wait – what exactly is a breeding bird atlas?

Across many jurisdictions, the health of the environment is monitored by looking at avian nesting success over long periods of time. In this case the time frame is 20 years. That will allow comparisons to see which species are declining or increasing, which have disappeared and which are new to the area.

The province is divided up into 10 x 10 km squares and birders try to visit every one of those



and record every breeding species over a 5-year period. Wow what a task! But at least in the south it will happen. In the north they will have to be a bit lenient on the criteria. How do you survey every inch of the James Bay Lowlands for example? Simply – you can't. In the far north the squares are 100 x 100 km. which will make the task easier.

In Durham Region, Glenn Coady and I will be the Co-Regional Coordinators. That means we take responsibility for Durham Region to ensure that enough birders are out and about to find everything we can over the five-year period.

We are looking for volunteers who want to help – a lot or little. So if you want to know more or are interested in helping at any level please let me know as soon as possible as the planning is well underway. The official provincial launch is next week!

Email Geoff.carpentier@gmail.com

Nests shown above – Willow Flycatcher and American Robin

Nature's Pretty Side



Clockwise from upper left: Gypsy Moth laying eggs; Deadly Nightshade; Twelve-spotted Skimmer; Bald-faced Hornet nest; and Red-headed Woodpecker – all photos by Geoff Carpentier

Welcome to our new proof reader

Cyndi Barron has kindly stepped up as our new proof-reader for this newsletter. She will join Derek Connelly and Cara Gregory in this important task. Welcome Cyndi!

Secretary Wanted

The Board is looking for someone to sit on the Board of Directors and to take over the role of Secretary for NDN. This is an important task that has been administered by Brenda Near for some time but she is stepping down from the Board shortly. Thanks so much to her for her dedicated service. If interested or you would like more information please email northdurhamnature@gmail.com

Editor's Note

Since the NDN newsletter was first published in January 2014, we have used a two-column format to present our news and articles. In the last newsletter, I offered a format change to a single column style, rather than the two-column format. The response was overwhelmingly in favour of the single column format .. so that's what we will use from now on. Thanks for all your feedback!

Geoff Carpentier, Editor

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www.northdurhamnature.com

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