President's Message

Recently I had a retinal detachment in one eye, a serious condition which required eye surgery and meant that, as part of my recovery, I would have to remain relatively sedentary for several months. Tough to take for someone who spends a lot of time out in nature at this time of year. Activities such as birding, botanizing, kayaking and hiking had to be greatly curtailed. This gave me cause to slow down and recognize how critically important vision is for almost everything we do in life. When one has good vision, it is easy to take it for granted. To appreciate nature, we see the colours of birds, patterns of wildflowers, the shades of green in the trees and find beauty in the balance of landscapes. If I totally lost my vision, how would I be able to experience nature? I would still be able to hear the songs of birds, frogs and insects, to smell the flowers and aroma of decomposition, and feel the textures of bark and stones. But not being able to see these things is unimaginable.

Humans are a visually dependent species but many mammals that are nocturnal have highly developed senses of hearing and smell that can be more important than vision for them as they move around in the dark. Raccoons and opossums, for example, can walk around with ease in minimal light. Bats are the best example of species that are not light dependent since they can navigate in caves where there is no light whatsoever. They use echolocation where their high-pitched vocalizations bounce back from objects to highly acute, specially shaped ears. Moles live mostly underground, burrowing and moving in complete darkness. Their muzzles and forelegs are highly tactile so that their movements and feeding are mainly guided by touch. Many other animals, such as cave creatures, deep sea fish and numerous invertebrates manage to get through life quite well without vision. These highly developed senses are not an option for me, so I will do what I need to so that I continue seeing the beauty of the world through my eyes.

James Kamstra, President, North Durham Nature – photo by Geoff Carpentier

Upcoming Events – Summer 2025

Upcoming Meetings & Outings – we've taken a break for the summer – more great talks and walks will be available this fall .. stay tuned for announcements or check the website later in the summer!

American Eel in Lake Scugog!

Article by James Kamstra and Photo by L. Barreca

A dead American Eel was found along the shore of Lake Scugog at Caesarea on April 22, 2025 by L. Barreca. Its head was caught in the bottom of a staircase at the water's edge. It was an adult, approximately 75 cm in length. The semi-decayed condition indicated that it had been dead for some time. How it got there is a mystery. Perhaps the eel had been caught in the winter by an ice fisherman who just tossed it on the ice. The head was too decomposed to tell.

The American Eel has an unusual and complex life history. It is a catadromous fish, meaning that it lives most of its life in freshwater, but breeds in salt water, the opposite of salmon. In fact, they swim all the way to the Sargasso Sea, somewhere southeast of Bermuda, to mate and lay eggs. The eggs hatch, then the tiny larvae drift out from there towards the North American coast. The larvae transform into tiny translucent glass eels, which become pigmented elvers as they make their way up freshwater rivers. The eel found in Lake Scugog would have had to make its way from the subtropical open ocean to the Gulf of St. Lawrence, then up the St. Lawrence River to Lake Ontario. From there, through the Bay of Quinte, up the Trent River to Rice Lake, through the Kawartha Lakes past Lindsay and into Lake Scugog. To get through the Trent system, the fish swam over 300 km through 32 locks! The entire trip from the Sargasso Sea to Lake Scugog would have been at least 4000 km. That is a long way to swim. American Eel is a species in trouble in Ontario and elsewhere, largely because humans have put too many obstacles in the poor fish's way, mainly in the form of dams. The American Eel Status Report by

the Committee on the Status of Species at Risk in Canada (COSEWIC) (2012) states that the population of this species in Lake Ontario and the Upper St. Lawrence River has declined by 99% since the early 1980s. All these eels must get past the massive Moses-Saunders Dam on the St. Lawrence near Cornwall. After living in freshwater for more than 10 years, the eels must make the long journey back to the Sargasso to breed, lay eggs and die. On their way downstream, very few Ontario eels can make their way through the hydro-electric dams that occur. Most of the water is diverted through turbines and the eels are sucked in with it. Numbers have been dwindling. Not surprisingly, the American Eel is listed as Endangered in Ontario.

The Lake Scugog record seems to be an anomaly. Recently, this species has only been reported as far up the Trent River as Campbellford and the American Eel Recovery Strategy by Ontario Ministry of Natural Resources shows Lake Scugog as part of its historic but not current range. The occurrence of the dead eel on Lake Scugog may indicate that others are present, but certainly very few. Or was it inadvertently transported here with bait fish?

Summer Butterfly Count Results

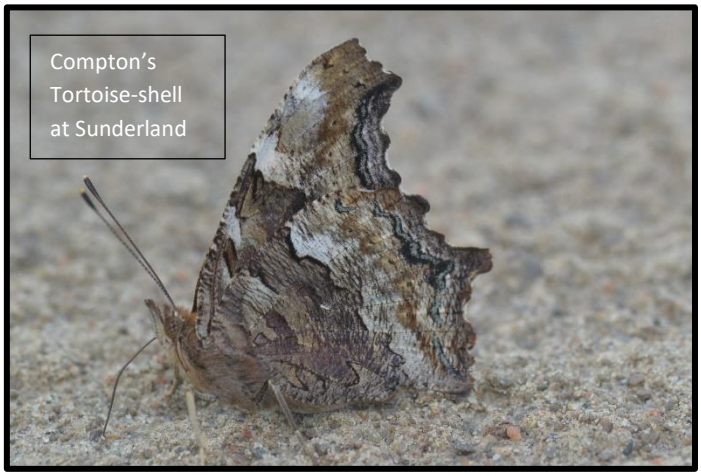
Oshawa & Sunderland Butterfly Counts in 2025

Photos and text by James Kamstra

The Oshawa butterfly count was conducted on June 29th marking its 31st year. Meanwhile, Sunderland count took place on July 6th in its 29th year. Counts involve participants going out in small groups to tally and identify all butterflies that they observe in their respective portion of a 24 km diameter circle. The circle of the Oshawa count stretches from north Oshawa to north of Port Perry, while the Sunderland count includes portions of Uxbridge, Brock and Georgina townships. Weather conditions on the Oshawa count were 22 to 26°C. with ample sunshine. Sunderland was very warm with temperatures ranging from 26° to 33°C.

Thirty-two species were tallied in the Oshawa circle which is the lowest in the count's history except for 2009 when part of the day was rained out. Sunderland had 48 species. The Sunderland circle contains more and better butterfly habitat generally, but the greater number of participants and field parties helped push up the species count.

The number of butterflies observed on both counts was considerably lower than in years past. There has been a marked decline in numbers starting in 2022 and populations have not improved since. A good measure of abundance is the number of individual native butterflies seen per hour of field effort. Just using the total number of individuals is not a good comparison since the number of counters varies from one year to another. Cabbage White and European Skipper are not included in this measure since they are not native and therefore not of conservation concern, and in addition, are often the most numerous species. Only 16.9 native butterflies per hour were tallied at Oshawa, well below the pre-2022 average of 49.0. Sunderland was only marginally better at 21.8. The pre-2022 average was 59.0 native butterflies per hour at Sunderland compared to 20.0 for the last four years.


Compton's Tortoise-shell at Sunderland

Clearly something is happening to butterfly populations in Ontario, since many other counts have been finding a similar trend. Certainly, there continues to be incremental loss of habitat with agricultural intensification as well as natural succession (since butterflies need sunny conditions). However, even many areas of apparently suitable habitat had few. Long time participants commented that fields that formerly supported robust butterfly populations had comparatively few this year. The cause is not clear -, is it pesticides, parasites or a new disease?

Even though the results are disappointing, it highlights the important contribution that citizen science programs like this one can make in monitoring wildlife populations.

The results of both counts can be found in the following table and the participants are listed below.

SPECIES	Oshawa	Sunderland
	June 29	July 6
Midsummer Tiger Swallowtail	30	86
Mustard White	4	118
Cabbage White	199	550
Clouded Sulphur	6	165
Orange Sulphur		1

SPECIES	Oshawa	Sunderland
American Copper		1
Harvester		4
Coral Hairstreak		1
Acadian Hairstreak		10
Eastern Tailed Blue	1	22
Northern/Summer Azure	21	105

Silvery Blue		1
Great Spangled Fritillary	7	20
Silver-bordered Fritillary	6	3
Meadow Fritillary		2
Pearl Crescent	14	13
Northern Crescent	463	343
Baltimore Checkerspot		113
Question Mark		4
Eastern Comma	7	12
Gray Comma	1	2
Mourning Cloak	1	
Compton's Tortoise-shell		1
Red Admiral	3	4
White Admiral	22	17
Viceroy	6	8
Northern Pearly-Eye	27	10
Eyed Brown	36	117
Appalachian Brown		5
Little Wood Satyr	15	15
Common Wood Nymph	2	95
Common Ringlet	18	22
Monarch	27	40
Silver-spotted Skipper	31	31
Juvenal's Duskywing	2	
Northern Cloudywing		4
Arctic Skipper		3
Least Skipper	36	25
European Skipper	260	165
Peck's Skipper	3	14
Tawny-edged Skipper	3	9
Crossline Skipper		17
Long Dash Skipper	11	18
Northern Broken Dash		7
Little Glassywing		3
Delaware Skipper	1	58
Hobomok Skipper	9	10
Broad-winged Skipper		3
Dion Skipper		6
Dun Skipper	3	53
Crescent sp.		33
grass skipper sp.		11
TOTAL SPECIES	32	48
TOTAL INDIVIDUALS	1180	2380
Native Butterflies per Hour	16.9	21.8
No. of Field Parties	7	12
No. of Participants	14	25
Total Hours of Field Effort	42.75	76.5

Participants

Oshawa: Jon Alsop, Susan Blayney, Geoff Carpentier, Carly Davenport, Karen de Groot, Cathy Galberg, James & Lynda Kamstra, Helen Lam, Steve Laforest, Martha Lawrence, Tom Mason, Bev & Jay Thibert.

Sunderland: Jon Alsop, Dennis Barry, Susan Blayney, Margaret Carney, Derek Connelly, Carly Davenport, Jennifer Ganthous, Sam Ganthous, Karen de Groot, Paul & Debra Harpley, Brian Henshaw, James Kamstra, Mithushan Kirubananthan, Steve LaForest, Helen Lam, Craig Lloyd, Carolyn Mancey, Tom Mason, Ed Poropat, Willa Worsley, Dave & Mary Beth Worthington, Bob & Karen Yukich.

Waterways of North Durham

Text and photos by James Kamstra

Lake Simcoe

Lake Simcoe, in the heart of southern Ontario, is well known to most Ontarians. It is the fourth-largest lake that lies entirely within the boundaries of the province of Ontario (only Nipigon, Nipissing and Lac Seul are bigger). The lake's outline is round with long arms jutting out into the west (Kempenfelt Bay) and south (Cook's Bay) giving Simcoe its recognizable shape. Lake Couchiching forms a third arm to the north, separated by "The Narrows" at Orillia. Lake Simcoe is not particularly deep with an average depth of 15 m, and a maximum depth of 42 m in Kempenfelt Bay. Consequently, Kempenfelt Bay is the last section of the lake to freeze over in winter. The lake originally bore a Wendat name, *Ouentironk,* meaning clear water, but the name was changed by Governor John Graves Simcoe, who named it in honour of his father, Captain John Simcoe (and in effect, named it after himself!).

In total, Lake Simcoe covers an area of 722 km^2 and lies in a watershed of about 3400 km^2, which is the jurisdiction of the Lake Simcoe Region Conservation Authority (LSRCA). The lake outflows to the north through "The Narrows" into Lake Couchiching and through the Severn River to Georgian Bay. Many streams and rivers flow into the lake from all sides, including Beaver River, Talbot River and Uxbridge/Pefferlaw Brooks from North Durham. Nearly all of Brock Township, as well as portions of Scugog and Uxbridge Township, form part of this watershed.

For such a large water body, it is surprising that only eight islands occur within the lake. Thorah Island, shaped like a lamb chop, is the second largest at 6 km^2, and the only one within the Durham section. The forests of Thorah Island were mostly cleared historically and farmed until several decades ago. These lands have been abandoned and are now covered with dense thickets. A rarely visited marsh and surrounding forest occupy the southern quarter of the island. Another interesting feature of Thorah Island are exposed outcrops of layered limestone along the north shore, which are not present elsewhere in Durham.

A relatively small portion of Lake Simcoe lies within the Durham Regional Municipality, roughly 35 km^2 which is only about 5% of the total area of the lake. The rest occurs within Simcoe County and York Region. Approximately 14 km of shoreline occurs in Durham, stretching from the mouth of the Talbot River in the north to Port Bolster in the south. This is not a particularly interesting stretch of shore, for it lacks any sheltered bays and is mostly lined with private cottages (many of which have been converted into permanent residences). In a section north of Beaverton, a railway runs along the immediate shoreline, effectively cutting off any public access to the water. Public access to the lakeshore is very limited, with only three small municipal parks maintained by Brock Township: Centennial Park, Thorah Park and Beaverton Harbour. It's a shame that more public access had not been established on this large lake so close to a large human population, for there are few places to get to the water along the entire shoreline. The only sizeable areas are McRae and Mara Point Provincial Parks near Orillia, and Sibbald Point Provincial Park on the south side. In addition, the City of Barrie has several highly manicured shoreline parks.

Simcoe may not be a pristine lake, but it is well known for recreational fishing and is famous for ice fishing. Over 50 fish species are present in the waters, but sport fishers are mainly interested in a select few game fish. Coldwater species, notably Lake Trout and Lake Whitefish, are showing little or no natural reproduction, and their continued presence is only through stocking.

With the intensive agriculture and urban expansion within its watershed, Lake Simcoe receives high amounts of phosphorus and other nutrients causing excessive plant growth which in turn accelerates the natural eutrophication process. LSRCA conducted a study of aquatic vegetation and reported that in 1984 plants grew down to a maximum depth of 6 m, but by 2008 they were down as deep as 10.5 m. The main reason for this was the colonization by Zebra Mussels. First detected in1995, these invasive molluscs multiplied rapidly, which clarified the waters due to filter feeding by their sheer numbers. Most of this submerged vegetation is dominated by the invasive Eurasian Water-milfoil. Clearer water might sound like a good thing, but the resulting dominance of this invasive species is having negative effects on fish populations.

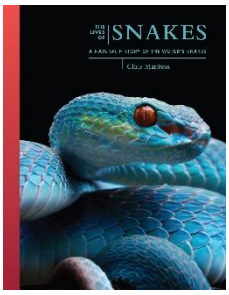
Despite these issues, Lake Simcoe continues to be an important lake for wildlife. Large numbers of fish swim in the waters which in turn attract fish-hunting predators such as mink, otters and Osprey. Huge numbers of waterfowl use the lake as a migratory stopover in spring and autumn, feeding on fish and Zebra Mussels. Thorah Island contains a lakeshore wetland that is largely inaccessible and therefore provides important habitat for marsh birds and reptiles such as Northern Water Snakes. A deep bulrush marsh is present offshore from Centennial Park near the Talbot River mouth, where a sizeable population of Map Turtles occur, and can be easily seen on a sunny summer day. This species is rarely seen elsewhere in Durham.

North Durham Nature regularly leads a waterfowl hike to Lake Simcoe in November. This is a good opportunity to see the lake at a quiet time of year.

Book Reviews

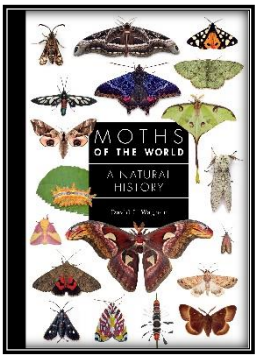
By Geoff Carpentier

The Lives of Snakes – A Natural History of the World's Snakes. Chris Mattison. 2025. Princeton University Press, Princeton, New Jersey, 08540. 364 pages. Hardcover. $35.00 USD. ISBN: 978-0-691-25060-1.



Continuing with the series of books that offer an overview of large groups of animals, Princeton recently published this book on how snakes of the world survive. How does one even consider what information to include to give a reasonable overview of snakes, bearing in mind that they cover most habitats on earth, are nocturnal, crepuscular and diurnal, some lay eggs and others don't, and some are arboreal, aquatic or terrestrial? Some are blind while others see well. So, you can see what a challenge it is to speak to all these variables. To accomplish this the author breaks the book into sections – form & function, dealing with the environment, reproduction, diet & feeding, enemies & defense, and dealing with humans. Within each of these broad categories, he deals with the intricacies and variables between species and families, using indicator species to explain the features he's speaking about. Subjects included in these sub-categories include: What is a snake? What looks like a snake but isn't? Why do snakes come in different colours? Why do some have elaborate adornments? Well, I need not list everything – suffice to say there is a tremendous amount of fascinating detail in this book and it's definitely worth a long, hard look!

Moths of the World – A Natural History. David L. Wagner. 2025. Princeton University Press, Princeton, New Jersey, 08540. 240pages. Hardcover. $29.95 USD. ISBN: 978-0-691-24882-8.



Worldwide there are over 160,000 named species of moths. We say "named" because many species are yet to be identified as any mother (that's moth-er not your Mom) can attest. I know several people who have "discovered" new species in their travels. I always found moth study a difficult challenge because finding accurate information on such a large pool of subjects is difficult. I haven't solved that riddle yet but can start the process by studying books such as this to at least learn the broader categories of moths. It gets even more complicated when one throws in the larval stages of these intriguing creatures. Rarely is there a hint of what the adult will look like when we see that squirmy little creature crawling along. This book certainly won't help you identify every species in the world, but by the end of it you will certainly understand them much better. Wagner is an expert on this group of Lepidoptera and shares his knowledge through these pages. He tells us about form and function, moults, sound production (yes, some moths and larvae do make audible sounds), movement through the ecosystem through flight and assisted drifting on air currents, thermoregulation, mimicry and much more. Did you know that hummingbirds are not the only creatures that can fly backwards? Some moths can as well. All the information provided in the book is written in a reader friendly fashion and supplemented with outstanding photographs. I'm left in awe as to the scope of the book and now if only I could find out what the difference is between a Macro and a Microlepidoptera and a Ditrysian and Non-Ditrysian Moth!

Nature Quiz – What am I?

by Geoff Carpentier

Wow – what is going on here .. Does that duck have some weird kind of tumour?

Wait - is that even a duck? Looks like a Pintail but …

Maybe that pink stuff is a type of caviar – looks about right – colour and shape are good – let's go with that!

Here's a hint: This "phenomenon" does not occur in Durham Region or even Canada

Nasty & Nice Nature News

Compiled by Geoff Carpentier

The salmon return: The Klamath River which flows between Oregon and California used to be an important spawning ground for salmon. Then four dams were built and things changed for the worse. In 2024, these dams were removed, and almost instantly, the spawning salmon returned to breed and lay eggs in this critical waterway. Success was celebrated by the indigenous tribes of the area (Yurok, Karak and Klamath nations). (*Source: Good News Network*)

Will we never learn? The Alaskan government will resume the "barbaric" practice of shooting bears and wolves from helicopters to reduce their numbers, with the hope that it will boost moose and caribou herds. The renewed program would permit hunters to kill as many of the natural predators across 2,000 acres of state lands. The newest plan would allow 80 percent of wolves to be killed by aerial hunters until their numbers are reduced to 35 individuals, reducing the black bear population by 80 percent to 700 individuals, and bringing the number of brown bears down 60 percent to a population of 375. (*Source: Ecowatch*)

Under threat – here and abroad: The US government is proposing to amend the Endangered Species Act to redefine the word harm. Formerly, this meant one could not destroy the habitat of an endangered species, but if this law is enacted, it would now be okay to remove the habitat if you didn't directly harm the individuals. In Ontario, Bill 5 likewise removed many safeguards, including the protection of essential habitat, that protected these imperilled species. Again, when will we ever learn? (*Source: The LA Times and the Toronto Star*)

Does heavy traffic affect the way spiders hunt? A study conducted in Georgia looking at the spread of an Asian species of spider (Joro Spider) revealed that spiders living near busy roadways had no trouble hunting and in fact changed their strategies (compared to the same species hunting in rural areas) by taking less but larger prey. The study focused on different hunting techniques and successes between individuals of the same species of spider that hunted beside or distant from busy roadways. (*Source: Arthropoda Journal*)

The downside of dogs: Over 500 million dogs are kept as pets worldwide, providing comfort and companionship to owners everywhere. Unfortunately, many are allowed to run free (in our forests and parks) or simply wander from their home properties unattended. While some directly kill wild things, their greatest impact is that they cause prey animals stress by their very presence leading to reduced feeding, weight loss and frequently the selection of less desirable habitats. Even when dogs are leashed their very presence acts as a deterrent or repellent to wildlife and the impact lingers even after the dog is gone because the scent remains. Not sure what to do, but I guess at least we should keep our dogs at home and on leash when we walk them in our forests and fields. Many municipalities (e.g., Uxbridge), require pet owners to keep their pets leashed except in designated leash-free areas. (*Source: Protect Nature TO*)

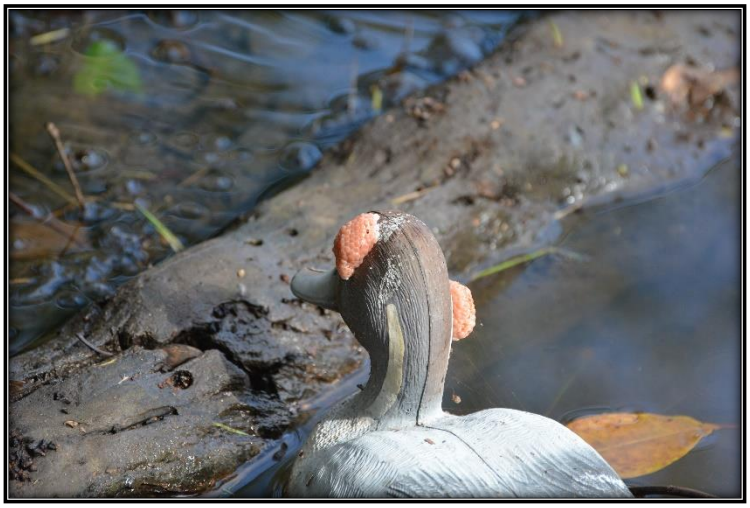
And in closing a bit of good news - Plastic for dinner? Scientists at the University of Hawaii have been studying marine fungi to see if they can be used to eat the plastics that threaten our oceans. Researchers have discovered a species of fungi around the island of O'ahu that is eating polyurethane plastic. The results of studies examining whether it could be a viable recycling agent look promising.

The 3rd Ontario Breeding Bird Atlas Update

Well Atlas #3 is almost done, but there's lots of work to do still – finish entering data, analysing it, validating it, writing the report, etc. Thank-you, to all of you out there who worked so diligently to make this incredible project a success!

Until next time- wait I'll be 92 years old – might not be involved in that one but I sure hope that I am around to see others who are!

Answers to Nature Quiz – What am I?



Okay first of all – the duck isn't a duck at all – it's a decoy of a Northern Pintail, but it seems it has become the home for a strange life form. Those pink things are the eggs of the Apple Snail. The snail is not actually a single species but rather a group of similarly behaving species that occupy many parts of the world.

They have been widely introduced around the world, where they are reared for food. These invasive apple snails are technically edible (which is why there were attempts to cultivate them in Asia for human consumption in the first place), but people who eat them need to be wary of parasites, like the rat lungworm, which can infect humans when raw or undercooked snails are eaten. Many wild animals eat them both here and abroad.

Apple Snails (*Pomacea* spp.) are native to the New World and are represented by several species of snails. In USA and the Caribbean there is the native Florida Apple Snail, but the invasive South American Giant Apple Snail has been introduced to US. One source said that the Giant Apple Snail is so huge that Snail Kites have a hard time eating them. Others are native to Central and S. Am.

Perhaps our most "famous" North American bird that relies on them is the Snail Kite (*Rostrhamus sociabilis)* (formerly known as the Everglades Kite) which relentlessly hunts these though its range in the southeast USA.

Nature's Pretty Side!

By Geoff Carpentier

This is the time of year to be watchful for the turtles are egg-laying – often alongside our roadways!

Photos below by Geoff Carpentier – Blanding's Turtle, road sign, Snapping Turtle and


CROSSING
AREA
22227
INJURED/ORPHANED WILDLIFE?
SANDY PINES
WILDLIFE CENTRE
INFO@SANDYPINESWILDLIFE.ORG
Wildlife Emergencies: 613-354-0264

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