President's Message

December was the month where COP15 took place in Montreal. COP15 is the United Nations Convention on Biodiversity. Many governments from around the world came together to set targets, guidelines and timelines in an attempt to slow down the rampant global loss of biological diversity - the 'sixth great extinction' as some are calling it. Part of the program is aimed at renewing the commitment for countries to protect 30% of their lands and marine areas by 2030. Are they likely to meet this target? Probably not, but it is a step in the right direction that countries are working together and coming up with solutions, unattainable though they may be. At the very least it should contribute to further expansion of protected areas to help slow down species' loss.

Meanwhile at the provincial level, it is not looking so good for curbing biodiversity loss, at least not in the short term. With the recent passing of Bill 23 (*More Homes Built Faster Act*), the provincial government is rolling back a series of environmental protections on the pretext of providing affordable housing. This single focused approach is likely to have serious repercussions not only for biodiversity but also for the quality of life for people in Ontario by reducing much needed greenspace. As if development wasn't happening fast enough in Durham, the government wants to accelerate the process. I hate to be a pessimist, but this trend is a definite step backwards for what COP15 was trying to achieve. The positive side is that there has been a strong public outcry against this bill, not only from environmentalists, but even some municipalities and the media. Will that help? We will have to wait and see. In the meantime enjoy our local biodiversity as much as you can, while you can.

James Kamstra – President, North Durham Nature

Photo of Barn Swallow by Geoff Carpentier

Upcoming Events – January to March 2022

Meetings

January 24, 2023 – Member's Night & Annual General Meeting
Meeting at Scugog Memorial Library

February 28, 2023 – David Hawke
"Carden Alvar" – meeting on Zoom

March 28, 2023 – Brian Joyce
"Prince Edward Point Bird Observatory" - Meeting at Scugog Memorial Library

Uxbridge CBC

By Derek Connelly compiler- spectacular photo of Red-tailed Hawk by Karen Bochmann

A snowy morning of - 8C with a light breeze greeted the early birders of Uxbridge area for the 18th year of the Uxbridge Christmas Bird Count (CBC). The CBC held across North America is now in its 123rd year and our data adds to the Birds Canada/National Audubon Society's database.

7258 individual birds of 53 species were recorded by the field teams representing a slight increase in numbers and species from last year's field data (6666 individuals and 49 species). The numbers were lower than hoped for with many participants commenting on the lack of birds seen at feeders. Also noted was the difference in high and low populations of some species. Snow Buntings were our highest at 1166 birds seen by seven separate parties with one flock of over 1000 birds. Frozen water cut waterfowl numbers by half. The winter finch invasion did not occur as expected with only Evening Grosbeaks visiting a few rural feeders. Increases were seen in pigeons, woodpeckers, blue jays and robins, while juncos and goldfinches appeared down in numbers.

Thirty-four people in nineteen parties travelled almost 950 km around the Uxbridge and Scugog area by car and walked 70 km to find the birds. Meanwhile over thirty more birders watched birds at feeders from home.

The traditional pot luck for those in the field was hosted by Geoff Carpentier and Kim Lendvay providing a great opportunity to share stories of the day and tally the count. Thanks to Geoff and Kim for hosting and to Kim Adams for inputting the data. Many thanks to all our birders in the field and at home and those who filled their feeders, and opened their gates to let us see their birds. Here is the final field tally:

474	Canada Goose
5	Trumpeter Swan
15	American Black Duck
99	Mallard
10	Ruffed Grouse
323	Wild Turkey
CW	Great Blue Heron
7	Sharp-shinned Hawk
4	Cooper's Hawk
2	Bald Eagle
7	Red-tailed Hawk
2	Rough-legged Hawk
5	Ring-billed Gull
3	Herring Gull
616	Rock Pigeon
514	Mourning Dove
1	Eastern Screech Owl
1	Great Horned Owl
2	Barred Owl
1	Belted Kingfisher
20	Red-bellied Woodpecker
50	Downy Woodpecker
24	Hairy Woodpecker
2	Pileated Woodpecker
1	American Kestrel
1	Merlin
7	Northern Shrike
520	Blue Jay
518	American Crow
22	Common Raven
85	Horned Lark
547	Black-capped Chickadee
43	Red-breasted Nuthatch
50	White-breasted Nuthatch
2	Winter wren
CW	Eastern Bluebird
2	Brown Creeper
1	Golden-crowned Kinglet
152	American Robin
764	European Starling
38	Cedar Waxwing
1160	Snow Bunting
200	American Tree Sparrow
473	Dark-eyed Junco
CW	White-throated Sparrow
1	Song Sparrow
2	Swamp Sparrow (rare)
87	Northern Cardinal
1	Red-winged Blackbird
6	House Finch
2	Purple Finch
6	Pine Siskin
294	American Goldfinch
57	Evening Grosbeak
27	House Sparrow

CW means seen 3 days before or after the count but not on count day

Note: Since all the field data has not yet been received, it will eventually add species and change final numbers which will be submitted to Birds Canada and Audubon.

Beaverton CBC

By John McLean

The prospects for a successful 48th Beaverton Christmas Bird Count did not look promising as the count approached: Lake Simcoe was frozen over and a forecast of all day rain, strong southerly winds and poor light conditions with fog were not encouraging. Weather forecasts, being what they are, were partially correct about southerly winds, warm temperatures (for winter) and heavy overcast skies. The rain didn't really impact our birding efforts to any great extent and the southerly winds managed to push some of the Simcoe ice out of our count circle. In retrospect, the results were satisfying even though numbers were significantly lower than last year. In addition, warmer temperatures made winter birding almost comfortable – who would expect to complete a Christmas Bird Count without gloves and hats.

At time of writing, our final tally was 43 species on count day with an additional five species in the count week period. The total number of individuals was under 6000, about average for the count, but well below the 9700 we counted last year. Anyone with a bird feeder during the post-Christmas period will vouch for the fact that the warmish wet week was a downer for bird observations.
Our outstanding bird for the day was the Townsend's Solitaire which has been attracting birders from across the province. This particular bird, a western visitor, has been very cooperative to most that were looking for a lifer or an addition to their year's list.

In general, both passerine and raptor numbers were low. In areas where the ice was pushed out from the Simcoe shore, we were able to add significant numbers of Canada Geese, Trumpeter Swans and Common Mergansers and modest numbers of Common Goldeneye. We were pleased to identify two Hooded Mergansers, uncommon visitors on our count.

The Great Horned Owl was the bird that got away. One was heard on one of our observer's "Merlin" App. However, it was not heard by human ears – despite repeated attempts. The rules say that birds must be heard or seen by one of our official team members to be included on the count. This ruling also prevented us from counting a Red-breasted Merganser noted by an eBird lister on count day. But then nobody is interested in what we didn't see (or couldn't count). Our complete list will be posted on our website once all data is finalized.

The success of our count is dependent on our numerous field observers and feeder watchers. Included amongst these is North Durham Nature members Carol and Doug Apperson, Derek Connelly, Willa Worsley, Karen Vanderlee, Garry Patterson and Cara Gregory. We missed the expertise of Mark Dorriesfield who was recovering from Covid – just another one that got away.

A New Year's Quiz

Compiled by Geoff Carpentier

Note – this is a long quiz but you don't have to rush – take all the time you need! Learning doesn't have deadlines!

1. Ants can be vampires. True or False?
2. All butterflies can fly. True or false?
3. Spiders have antenna like insects. True or false?
4. A water buffalo will sink because of its heavy horns. True or False?
5. A group of which animals is known as a wake?
6. What was the first animal that humans domesticated for food?
7. How much of its body weight can a Nile Crocodile eat at one time?
8. What is the only living bird with 2 toes on each foot?
9. Based on body length, which type of bird migrates the farthest?
10. Which animal swims in a vertical position?
11. What is the most commonly used animal for research trials?
12. On which planet of the solar system does the sun rise in the west and set in the east?
13. What do you call a bunch of otters?
14. What do you call a group of rhinoceroses?
15. What animal has the longest tongue relative to its size?
16. Ants can be used to predict weather. True or false?
17. Which animal uses a cloud of excrement to repel predators, similar to a squid's ink?
18. How many years does it take Jupiter to complete one revolution around the sun?
19. What is another name for a panda?
20. How many bones does a dog have in its spine?
21. How many eggs can an American Toad lay?
22. What animal has killed the most humans?
23. What is the world's longest poisonous snake?
24. The males of which group of birds are known for creating elaborately decorated structures in order to entice mates?
25. What part of her mate's body does a female sagebrush cricket eat?
26. Name the only animal on earth, other than man, known to contract leprosy:
    (a) Nine-banded Armadillo (b) Elk (c) Tiger (d) King Cobra
27. Which tree yields the heaviest wood in the world?
    (a) Black Iron Wood (b) Balsa (c) Durian (d) Mango
28. What is the speed per minute at which earth revolves around the sun?
29. Name the only country in the world where both the lion and the tiger are found in the wild.
    (a) Uganda (b) Zaire (c) Pakistan (d) India
30. Which group of fish can remain out of water for the longest duration?
    (a) Salmon (b) Mudskipper (c) Pike (d) Shark

Nature Quiz – What am I?

Text and photos by Geoff Carpentier

I am a beautiful flower
As you can see;
Do I grow in your garden
Or on a tall tree?

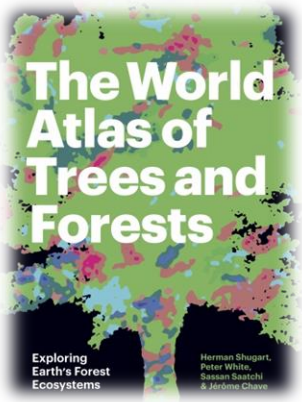
My flowers are many,
All white, red and mauve;
I like to grow singly
And not in a grove!

Answer on pages 11

Book Reviews

By Geoff Carpentier

The World Atlas of Trees and Forests. 2022. Herman Shugart, Peter White, Sassan Saatchi & Jerome Chave. Princeton University Press, Princeton, New Jersey, 08540. 400 pages - hardcover $50.00 USD. ISBN -13:978-0-691-22674-3.



I read a lot, scientific and fun stuff alike, but seldom do I get really excited about reading what amounts to a textbook – until now! I love forests and claim to have an understanding of them – form, function, usefulness and protection. But I must admit that the more I read about them the more I find I know very little. Humans developed from forest-based ancestors and only after savannahs were explored did we move to more open habitats and agrarian pursuits. We have an innate understanding of forests as they have formed part of our development from the beginning of time.

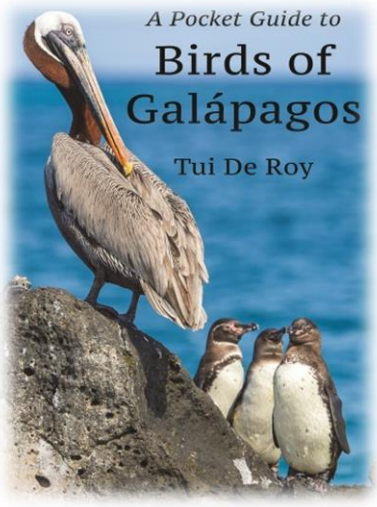
However as we look at climate change and the impact we have on ecosystems, we read about the importance of trees and their preservation. Frankly, I really don't think we get it however! We plant a few trees here and there but in pursuing our developmental goals we destroy unseen habitats underground simply because we don't

understand how they work or how important it is to preserve them. We scold foreign democracies for cutting down rainforests while we plough the land for more homes.

Jumping off my bandwagon, let me sing the praises of this book. It is long and complex, but I think worth the read if we truly are trying to understand what we can do about climate change and the health of your planet. I'm not sure how to inspire you to read this but maybe a couple of tidbits will suffice: Did you know that temperate forests are almost entirely northern hemisphere phenomena? With the exception of a small area in Australia/New Zealand and Argentina/Chile all else is north of the equator. Did you know that giant rainforest trees may wait more than a century to reach the canopy and sunlight? The earth is comprised of 15 distinct biomes. Each biome represents a unique set of plants, environmental conditions and ecosystem structures. With the exception of tundra and rock & ice, can you name the other 13? Ever wonder why cerrado forests can have at least five different faces when one looks at plant diversity, structure and density? Well, you get the idea.

The book is lavishly and beautifully illustrated with photos and sketches that describe and explain all the principles covered in this book.

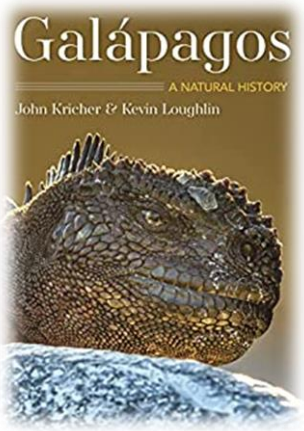
The Pocket Guide to Birds of Galapagos. 2022. Tui de Roy. Princeton University Press, Princeton, New Jersey, 08540. 136 pages - softcover $17.95 USD. ISBN -13:978-0-691-23363-5.



I must admit I'm a bit torn about how I feel about this book. At first, I thought – wow this is really detailed and covers so much in such a small book; then I feel overwhelmed for exactly the same reason. I decided my opinion should be based, in part, on how the author treats the Galapagos finch complex. To say I was impressed would be an understatement. I still find this group of 17 finch species to be troubling and confusing, but using Roy's tables and excellent photos I think I may have a better understanding - finally.

The balance of the birds covered is handled very well in other publications such as Fitters and Hoskings "Wildlife of the Galapagos" so the value may be lost here. The author does seem to take liberties with some of the science as I understand it. For example, she had declared the Vermilion Flycatcher and Lava Heron to be full endemic species. This runs contrary to what Cornell and the AOU have stated, as both are still considered subspecies of mainland species. The range of the Vermilion (aka Darwin's Flycatcher) does not coincide with what eBird shows based on documented sightings. For example, eBird says they occur only on Santiago, Isabella and Santa Cruz, but Roy says they also occur on Marchena, Pinta and Fernandina. The author may very well be correct, but if so perhaps her data should be entered into eBird so reviewers such as me can better determine the accuracies of their offerings. All in all, a very nice book and worth the price simply for its treatment of the finches.

Galapagos: A Natural History. 2022. John Kricher & Kevin Loughlin. Princeton University Press, Princeton, New Jersey, 08540. 496 pages - softcover $39.95 USD. ISBN -13:978-0-691-21724-6.



When can you have too many books about the same geographic area? Well sometimes it is obvious and the market is saturated, but sometimes there's room for another – but it must be great! I think I may have found one of the latter. This new book builds on what was already out there and makes it better. I think the book mentioned above, "The Pocket Guide to Birds of Galapagos" deals with the finches better than this one. However overall I think this book has much more to offer as it deals with all aspects of the Galapagos, not just the birds. It is a thorough and timely treatise on the flora, fauna and ecosystems of this archipelago. Over 650 colour photos and pages and pages of interesting text will assuredly quell the curiosity of any reader. It is broken into nice "bite-sized" chunks so if one chooses to use it as a resource over time, it can be consumed and digested at your leisure. One thing I continue to find puzzling is why the authors deem to put their own science above the greater knowledge of the broader scientific community. In this case, they have again declared the Lava Heron to be a separate species, but much of the world has yet to adopt that protocol.

One aspect I really liked was they way they described and defined the various islands in the archipelago. Talking about their origins, history and wildlife in a concise and detailed manner went way beyond what most other books do. The one thing I did find a bit distracting was the apparent inclusion of some photos that seemed to serve no real purpose except to allow the authors to showcase some of their photos. Why is there a photo of someone lying on the grass photographing a frigatebird, when the bird wasn't even visible beyond a shadow on the ground? What value is there in a wave that crashes on a shore in a fuzzy depiction of movement? That said and this criticism aside, this is yet another great book to consider adding to your library.

The 3rd Ontario Breeding Bird Atlas Update

Year three of the Atlas is underway and there's a lot to do this year. Starting right now! This is the time to be looking for old nests from last year and to start doing the owl surveys that have to be completed by early spring in some cases … so, if you're unsure what to do, check out the resources on the Atlas website or drop me a line and I will help you figure it out. Happy atlassing everyone!

Photo of Eastern Screech-owl by Geoff Carpentier

Nasty & Nice Nature News

Compiled by Geoff Carpentier

Norwich, England's badgers targeted by youth. A new phenomenon on social media is to injure wild animals and torture them and then set dogs on them to kill the poor animals. Online and live-streaming posts of badgers are made and sometimes bettors get involved to see "who" wins. This is done simply to give stature to the troubled youth who are perpetuating these devastating activities. *Source: Norwich Evening News.*

A good news story. Spix's Macaw until recently were extinct in the wild in Brazil. Thanks to ongoing breed and release programs a few now fly over their traditional territories in eastern Brazil. The source of the "parents" came from caged bird enthusiasts who still had live birds that could be used in the breeding program. According to the article in *the Guardian* "The German zoologist Johann Baptist Ritter von Spix, who first gathered a specimen of the Spix's Macaw in 1819, gave the bird its name. In the 19th century, the Caatinga area in northeastern Brazil, a region of shrubland and thorn forest, was overgrazed by goats and other livestock as farming spread throughout South America. The number of macaws decreased as a result of the habitat destruction and the highly degraded terrain." What peaked the public's interest and the ultimate breeding program was the 2011 film *Rio* which tells the tale of Blu, a domesticated male Spix's Macaw, who is brought to Rio de Janeiro to mate with Jewel, a wild female. The movie made the threat to the species known to a large audience and the rest is history. *Source: The Guardian.* *Photograph: DPA/AFP/Getty Images.*

An appalling practice continues in the USA! Oregon is just one of several states that encourages the sport hunting of predatory mammals. In the last 4 years sanctioned hunts have taken over 1000 coyotes out of the ecosystem in Oregon. Called Killing Contests, their purpose is simple – kill as many animals as you can in a specified time and do it so your buddies can pat you on the back for being such a great "sportsman". Cash and trophies, also awarded, make it somehow more acceptable (??). Oh yes and they can lure the coyotes closer to make it easier to shoot them … A whopping 80% of Americans oppose killing contests, according to a January 2022 poll by the bipartisan firm Remington Research Group. *Source: A Humane World.*

Lead in your tummy? The story of the strategy to save the California Condor from extinction is well known, but did you know that lead poisoning is still threatening the condor? From a low of only 22 birds in the 1980s, over 550 now exist in breeding facilities or are free roaming across the southwest USA. Lead shot is still legal in many areas and, as the condors find carcasses that die of gunshot wounds, they can ingest these tiny pellets and die a slow death. As an odd aside – "According to the Center for Biological Diversity, lead ammunition also poses health risks to

people. Fragmented lead bullets can leave tiny particles in meat that humans eat. Studies show that even dust-sized particles of lead can infect a radius of 18 inches from the bullet wound. Venison that has been donated to feed the hungry has been recalled by state authorities because of lead contamination from lead bullet fragments." *Source: The Animal Rescue Site*

Bats rescued. 1500 Mexican Free-tailed Bats that roost under bridges in Texas near Houston were negatively impacted by the recent cold snap in Texas. All fell to the ground in a state of hypothermic shock but were rescued by caring rehabilitators. Warmed and given fluids, 700 of them were released shortly back into the wild. The fate of the balance of the bats was not reported. *Source: The Associated Press.*

Final Thoughts. The Canadian government has introduced a phased schedule of bans on certain types of plastics. These regulate six waste streams but exclude plastic bottles for the time being and don't come into full effect until 2025. According to the government's own figures this will mean a doubling of the amount of waste generated over the next ten years to 2.9 million tonnes, while only taking 1.6 million tonnes out of the waste stream. This increase is a direct result of the use of these alternatives to the plastics currently used. Additionally the replacement products are more expensive and are targeted to cost $2 billion more than traditional plastics. The replacement will take 1.8 million tonnes of Greenhouse Gases (GHG) out of the picture (which is a good thing), but some of the replacement products generate even higher GHGs than the plastics. Bottom line – we need to find solutions but at what price? *Source – The Associated Press*

Answers to Nature Quiz

Looks like I'm not a flower you might find in your flower bed, but rather a tall tree that grows throughout Durham Region. I am a Catalpa tree. Hundreds of beautiful, showy flowers adorn this tree in early summer. Once flowering is done, broad deciduous leaves adorn its crown. First cultivated in 1754, the wood was used for fence posts and railroad ties because of its resistance to rot and the tree's fast growth rate. The trees produce many seed pods later in the summer – these pods can be up to 20" in length! Hummingbirds relish its fragrant blossoms and Catalpa Sphinx Moth uses it as its sole host.

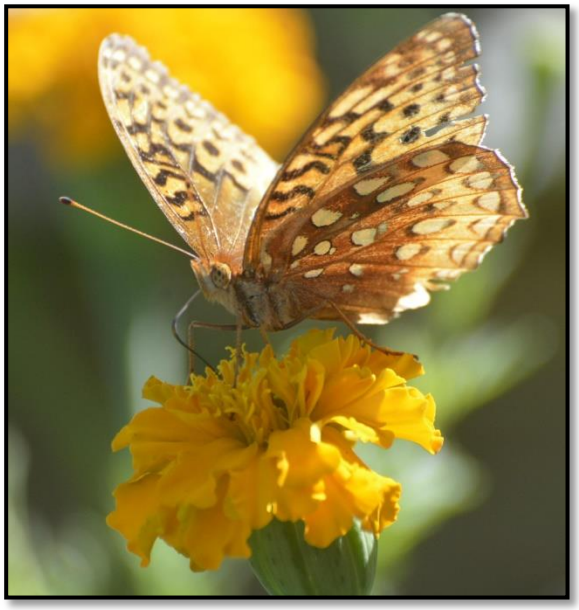
A New Year's Nature Challenge – Answers Revealed

1. Ants can be vampires. True or False? True - The aptly named Dracula Ant, which resembles a wasp, is an ant species that feeds on the blood of its own young.
2. All butterflies can fly. True or false? False - On the Kerguelen Islands near Antarctica live butterflies that cannot fly. The wind is so powerful that flying is dangerous and so they have lost that ability.
3. Spiders have antenna like insects. True or false? False - Unlike insects, spiders have no antennae. Spiders have two appendages near their mouths that are often confused with insect antennae. These structures, called pedipalps, are used to manipulate prey while feeding or for other specialized functions.
4. A water buffalo will sink because of its heavy horns. True or False? False - A water buffalo's horns are very light. They help the animal float on water in fact.
5. A group of which animals is known as a wake? Vultures
6. What was the first animal that humans domesticated for food? Goat
7. How much of its body weight can a Nile Crocodile eat at one time? Half
8. What is the only living bird with 2 toes on each foot? Ostrich
9. Based on body length, which type of bird migrates the farthest? Hummingbirds
10. Which animal swims in a vertical position? Seahorse
11. What is the most commonly used animal for research trials? Fly
12. On which planet of the solar system does the sun rise in the west and set in the east? Venus
13. What do you call a bunch of otters? A romp
14. What do you call a group of rhinoceroses? A crash
15. What animal has the longest tongue relative to its size? Nectar Bat
16. Ants can be used to predict weather. True or false? True
17. Which animal uses a cloud of excrement to repel predators? Pygmy Sperm Whale
18. How many years does it take Jupiter to complete one revolution around the sun? 12 years
19. What is another name for a Panda? Catbear
20. How many bones does a dog have in its spine? 27
21. How many eggs can an American Toad lay? 20,000
22. What animal has killed the most humans? Rat
23. What is the world's longest poisonous snake? King Cobra
24. The males of which group of birds are known for creating elaborately decorated structures in order to entice mates? Bowerbirds
25. What part of her mate's body does a female sagebrush cricket eat? Wings
26. Name the only animal on earth, other than man, known to contract leprosy
    (a) Nine-banded Armadillo (b) Elk (c) Tiger) (d) King Cobra Answer: Nine-banded Armadillo
27. Which tree yields the heaviest wood in the world?
    (a) Black Ironwood (b) Balsa (c) Durian (d) Mango. Answer: Black Ironwood
28. What is the speed per minute at which earth revolves around the sun? More than 1600 km.
29. Name the only country in the world where both the lion and the tiger are found in the wild:
    (a) Uganda (b) Zaire (c) Pakistan (d) India Answer: India
30. Which group of fish can remain out of water for the longest duration?
    (a) Salmon (b) Mudskipper (c) Pike (d) Shark Answer: Mudskipper

So how did you do?

30 correct? You are a super nature star
20-29? Excellent – you know your stuff
15-19? We're still impressed – way above the norm!
9-14? Better step back and hit those books.
0-8? Maybe you should look for another pastime!

Nature's Pretty Side



Great Spangled Fritillary (Geoff Carpentier); Red-legged Grasshopper, Double rainbow & Wheat field (Kim Lendvay)

For more information about NDN

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

NDN Executive Committee

President / Programs: James Kamstra
Past President: Cara Gregory
Treasurer / Membership: Kim Adams
Secretary: Lynda Kamstra
Outings: Derek Connelly
Promotion: Jay Thibert
Member at Large: Mark Humphrey
Member at Large & Website: Mark Dorriesfield

Newsletter Editorial Board

Geoff Carpentier – Editor

Proofreaders – James Kamstra, Cyndi Barron & Derek Connelly

Facebook coordinator

Kim Lendvay