

THE HALIFAX FIELD NATURALIST



No. 186
March to May 2022



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Return address: HFN, c/o NS Museum of Natural History, 1747 Summer Street, Halifax, NS, B3H 3A6

HFN is incorporated under the Nova Scotia Societies Act and holds Registered Charity status with the Canada Revenue Agency. Tax-creditable receipts will be issued for individual and corporate gifts. **HFN** is an affiliate of Nature Canada and an organisational member of Nature Nova Scotia, the provincial umbrella association for naturalist groups. **Objectives** are to encourage a greater appreciation and understanding of Nova Scotia's natural history, both within the membership of HFN and in the public at large, and to represent the interests of naturalists by encouraging the conservation of Nova Scotia's natural resources. **HFN Talks** during COVID-19 restrictions are for members only, live and/or via Zoom, on the first Thursday of every month, 7:30 p.m. (except for July and August), at the NS Museum of Natural History. **HFN Field Trips** are held at least once a month; during COVID-19 restrictions they are for members only. **Participants** in HFN activities are responsible for their own safety. **Memberships** are open to anyone interested in the natural history of Nova Scotia. Forms are available at any meeting of the society, or by writing to: Membership Secretary, Halifax Field Naturalists, c/o N.S. Museum of Natural History. Members receive **The Halifax Field Naturalist**, along with its included **Programme**, quarterly. Our membership year is from January 1st to December 31st, and new memberships received from September 1st to December 31st of any year are valid until the end of the following membership year.



HFN ADDRESS

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Halifax Tide Table - Apr., May, Jun.**15**



GRAPHICS All uncredited illustrations are by H. Derbyshire or from copyright-free sources. **Front Cover** and **Back Cover** - Purple Finch on Amelanchier at Rolling Hills Drive, Peter Payzant; **p. 7, 8** - America. Toad, Wood Frog, Pickerel Frog, Spring Peeper, Rebecca Betts; **Tide Table** - Cdn. Hydrographic Service, Fisheries & Oceans Canada.

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FEES

Student

Individual

Family

2021 Counter to Covid - saving Salamanders

City Nature Challenge 2022 - Apr. 30th - May 3rd

Supermoons - a 'perigee syzygy' !

New and Returning - 3

HFN Talks

CWRC - the Cobequid Wildlife Rescue Centre

Reptiles at Risk - Snapping turtles; E. Ribbon Snakes ...

Piping Plovers - a detailed update

AGM and Member's 'Slide Night'

Almanac

HFN TIDBITS AND NATURE NOTES

ERRATA

On page 4 of our Fall 2021 Issue #184, under "CSCA Presentation", lichenologist Frances Anderson was inadvertently referred to as Marion Anderson. No thoughts of famous opera singers were about at the time, but Frances graciously said she didn't mind being thought of in such illustrious company!.

NATURE NOTES



JANUARY

Karen McKendry reported seeing **colour variations in the squirrels** around her area (Albion Road, Jollimore), and in the same area, Regine Maass spotted a white one! Carol Morrison of Oakfield spotted **two Bald Eagles** on the ice, and also fishing; they kept on returning to a tall fir and she surmised they could have going to a nest there. Tamar Elwood of Hammond's Plains has had a regular **male Pheasant** visit her yard, and has also spotted also a **Pileated Woodpecker**. Lesley Jane Butters noted that there are **many Pheasants** in the valley area, as people regularly feed them there. Burkhard Plache was skating the previous week on the Frog Pond and spotted **the invasive Fanwort Cabomba caroliniana** under the very clear ice. WRWEO, the Woodens River Watershed Environmental Organisation, reports this is likely due to aquarium 'dumping'.

FEBRUARY

On her dog-walking jaunts, Stephanie Robertson reported there seemed to be more than the usual number of **Pileated Woodpeckers** in Point Pleasant Park. Later in the month, talking with neighbour and birder Andrew Horn, this was confirmed; he said for about five years there has been a breeding pair there.

Jane and Don Flemming spotted a **Kingfisher** while walking the Musquodobit Trail on a very cold day when absolutely everything seemed to be frozen. They got to wondering how they could find fish under such conditions. Burkhard mentioned that Kingfishers can also fish in ocean waters, also, they are probably able to find some few spots of open, moving fresh water which Jane and Don didn't see. Carol Morrison spotted what she thought was a **flock of Terns** at Fish Lake. An audience member stated that Terns seem to be rare this year; it was surmised they may have been the smaller Black-headed Gulls. Bernie McKenna had a **couple of Flickers** at their suet log (also with peanut butter and safflower seeds); they had been around for most of the week. Mille MacCormack reported seeing a **Crow with 'Avian Pox'** on one of its feet. Bernie McKenna had a similar story and said Hope for Wildlife recommended live-trapping and taking it over to the wildlife veterinary hospital in Dartmouth.

MARCH

Stephanie Robertson mentioned she'd been hearing **Cardinals** in her neighbourhood and Point Pleasant Park; Burkhard Plache noted he'd seen some in Jollimore. Charles Cron noticed that the **Pussy Willows** were out on the only bush at Frog Pond.



Susan Holmes saw **six Brownheaded Cowbirds**, she thought only males, and a lot of Red-winged Blackbirds, near Carol's Corner, Musquodobit Valley. Cowbirds are brood-parasitical, laying their eggs in other birds' nests. Patti LeClerc noticed there were **many more Robins** around this winter in the Eastern Shore area; Ron Arsenault reported seeing many more this year as well. Patti also has **Pheasants** and **Blue Jays** in her back yard. Janet Dalton mentioned she had about a **dozen Robins** feeding on her Privet Hedge's berries, going through all kinds of contortions to get to them!

In Cole Harbour, Dennis Hippen saw a **Sharp-shinned Hawk** catch a bird and eat it. He also spotted both a male and a female Purple Finch, the first sighting since fall 2021. David Patriquin discovered a **Moose footprint** in the St. Margaret's Bay backlands on February 11th, and had it identified by an expert as genuine.

Shirley MacIntosh saw **Bald Eagles** at Sheffield Mills (but not being fed). Janet Dalton heard on CBC's Morning show that personnel from the Department of Natural Resource had spotted a **'wild goose'** which appeared to be suffering from **Avian Bird Flu**. Two weeks later a poultry farm nearby was quarantined and the flock destroyed because of the disease. Due to this, the Pancake Breakfast/Eagle Watch at Sheffield Mills was cancelled for this year. Burkhard Plache said he spotted a **Bald Eagle** flying over the Northwest Arm.

While Karen McKendry was cross country skiing in the woods at Beddeck, she spotted a type of blueish grey lichen, **Textured Lungwort – Lobaria scrobiculata**.



eNOTES

Lesley Jane Butters – In Halifax, on January 4th, a Watt St. front door sported a plastic Christmas wreath; a **Starling** flew past me, landed there, then meticulously examined each plastic branch, becoming agitated as it seemed it was not finding what it wanted. Looking across the street, I noticed there was a 'real' Christmas wreath on display with sprigs of Canada Holly or traditional holly. I guessed this Starling thought all Christmas wreaths should have brilliant red berries to feast upon!

One January semi-clear evening near the first quarter moon, I heard a **large Canada Geese skein** fly over; looking up, I saw their silhouette flying towards the moon. I hoped they would fly 'into the moon', but they missed it by a few degrees. It would've been a lovely sight to see the skein fly by it in formation.

In the Gaspereau Valley on January 23rd I saw **nine mature Bald Eagles** sitting in trees around Merk's Poultry Farm near the river. I quite often see Eagles there, but never feeding. I also spotted an old oak tree and at first, because of its foliate appearance, assumed it still had its last season's leaves (strange, as no other oaks in the area had any at all.) Driving closer, I saw they weren't leaves; instead they were a very **large murder of Starlings** which had congregated there an hour before sunset. Last week near the large shoreline anchor in Point Pleasant Park I saw a **Red squirrel** darting around on the rocks. It finally settled and began munching on something. I approached; it ran away, but soon returned and seemed to be **eating Bladderwrack!** Do squirrels eat seaweed? (cont'd on p. 9)

SPECIAL REPORTS

2022 AGM YEAR END REPORTS

FROM THE PRESIDENT

Over the last year, HFN has again started to offer its regular monthly presentations (mostly online) and organised a number of walks. We were co-host of Nature Nova Scotia's Celebration of Nature held in May 2021, with online presentations and a number of field trips. Our newsletter has been published on its regular schedule, and the conservation committee has been actively involved in a number of issues. In this context, I would like to mention Bob MacDonald, a long time member of the committee, and a strong voice for conservation, who passed away last year. He will be missed by the wider community involved in the protection of nature.

Looking forward, the program committee, consisting of a handful of dedicated and capable volunteers, is hard at work finding presenters and field trip leaders to places of interest. As always, if you have an idea, and ideally a contact for a potential presenter or field trip leader, the people involved would love hearing from you.

The following detailed reports will give updates on our finances, our membership status, our program activities, the newsletter, and our conservation involvement.

Our society only works because we have many volunteers who have chosen to get involved and to dedicate time and effort. Your efforts are making a difference, bringing us out into nature – learning something new from each other, the presenters, and the field trip leaders. On behalf of all members of The Halifax Field Naturalists, I want to say a big "Thank you for all your work."

– Respectfully submitted,
Burkhard Plache, President



PROGRAM

Because of the 2021 COVID restrictions, most of our monthly meetings were held via Zoom. When the restrictions were eased in the fall, in-person meetings were held at the Museum of Natural History in November and December.

Talks

March – The year started with a very informative talk given by Mike Gill on Global Nature Watch and the important role local observations play in tracking biodiversity.

February – Kristen Noel, project coordinator with Nova Scotia Invasive Species Council, gave an equally informative presentation in February on invasive species in the province with examples of non-native species which have become established in the province, the impact they have, and what we can do to help prevent more invasions.

April – Veterinarian Nelson Poirier gave a passionate talk on owls which live in the Maritimes along with those that are visitors. **May** – Andrew Hebda, retired zoologist with the Museum of Natural History, spoke on the subject of ticks, including their life cycle and the impact they have on both humans and wildlife.

June – Simon Gadbois, an animal behaviour scientist at Dalhousie University, gave an engaging talk on his research using specially trained dogs in wildlife conservation to successfully tracking Northern Ribbon Snakes and Wood Turtles. **September** – Cobequid

Wildlife Rehabilitation Centre's Operations Manager Brenda Boates along with veterinarian Jessica Rock talked passionately about the work they do to care for, rehabilitate, and release the wildlife that come into the Centre. **October** – Andrew Hebda joined us again to talk about beneficial insects and the important role they play in maintaining a healthy ecosystem. **November** – Emma Bocking of Ducks Unlimited spoke about the wetlands within Halifax Regional Municipality and how wildlife and flora depend on them.

December – Dr. Donald Gordon spoke about the water quality in the Blue Mountain-Birch Coves Lakes, following a spring survey of 21 lakes within this beautiful wilderness.

Field Trips

Restricted to Halifax Field Naturalists members only, nine field trips attended by 103 members were conducted in the spring, summer, and fall. **April** – In the Sackville area, participants helped salamanders to safely cross roads in order to reach their breeding areas. **Summer** – Field trips included a tour of the Public Gardens given by retired gardener Sheldon Harper; a Birds and Butterflies walk in Oakland Park led by Fulton Lavender; and a trek to Soldier's/Miller's Lake Falls led by Clarence Stevens. **September** – Field trips included a tour of Shaw Wilderness Park in Purcell's Cove led by Burkhard Plache, and a Mushroom Walk in Shubie Park led by John Crabtree. **October** – Clarence Stevens led a walk on the Russell Lake Trail in Dartmouth, and Burkhard Plache gave a guided tour of the Jack Pine Barrens in Spryfield. **November** – Burkhard led a walk on the trails of Cole Harbour Heritage Park.

I extend thanks to fellow planning committee members Carol Klar, Bernie McKenna, Burkhard Plache, and Clarence Stevens for their help in planning and organising all these diverse and interesting talks and field trips.

Respectfully submitted,
Mille MacCormack



MEMBERSHIP

In 2021 our membership figures indicate we collected dues for 56 Individual, 41 Family, 23 Supporting, and four Institutional memberships (one with two subscriptions) for a total membership of 114. It should be noted that these figures represent memberships, not 'members', as additional members from family and supporting memberships are not recorded. Twelve of the memberships were new and sixty-six memberships included a Nature Nova Scotia membership. This is a substantial jump from the forty-four the previous year.

A special thanks to Doug Linzey and to Bernie McKenna for all their help with membership related tasks.

Total memberships by year:

2012	/13	/14	/15	/16	/17	/18	/19	/20	/21
107	109	114	129	146	115*	123*	113*	113*	*114

*Based upon memberships received. Years prior to 2017 were reported as membership numbers at the end of December.

Note – This report does not include our Facebook Group members ($\pm 2,000!$), nor our Twitter followers.

– Respectfully submitted
Ronald Arsenaault, Membership Secretary

**Halifax Field Naturalists
Balance Sheet
December 31st, 2021**

Assets

Bank Account	1,293	
Accounts Receivable: HST Rebate	139	
Investments	8,841	
Pins	511	
Butterfly and Dragonfly Lists	119	
	<u>10,903</u>	<u>10,903</u>

Liabilities and Surplus

Liabilities

Accounts Payable: Nature Nova Scotia	<u>330</u>	330
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Surplus

Restricted: Endangered Spaces and Species	2,841	
Unrestricted (end of year)	<u>7,732</u>	
	<u>10,573</u>	<u>10,573</u>
		<u>10,903</u>

**Halifax Field Naturalists
Statement of Revenue and Expenses January 1st – December 31st, 2021
and Budget for 2022**

	2021 Actual	2021 Budget	2022 Budget
Revenues			
Membership Funds	2,890	2,600	2,990
Interest	42	42	45
Donations	174	50	120
Sales (Pins, Lists)	3	10	7
	<u>3,109</u>	<u>2,702</u>	<u>3,162</u>
Expenses			
Meetings	60	240	305
Field Trips	0	0	0
Newsletter Production	1,143	1,000	1,100
Newsletter Distribution/Mailing	1,057	740	1,000
Memberships and Fees	205	236	267
Socials	0	0	0
Grants, Donations	0	0	0
Special Projects	543	0	0
Insurance	295	255	295
Internet Service	158	200	160
General Supplies and Expenses	159	0	0
Bank Fees	31	31	35
	<u>3,651</u>	<u>2,702</u>	<u>3,162</u>
Net Income	-542		
Unrestricted Surplus, beginning of year	8,274		
Unrestricted Surplus, end of year	7,732		

*– Respectfully submitted,
Ingrid Plache, Treasurer*

CONSERVATION

Jointly, on behalf of HFN and the NS Wildflora Society, several sets of comments were written relating to current issues which were submitted to government, including:

- Comments on the proposed Old Growth Forest Policy submitted on Dec 8, 2021 on behalf of the Halifax Field Naturalists and the Nova Scotia Wild Flora Society;
- a Submission to the Law Amendments Committee re Bill 57, Environmental Goals and Climate Change Reduction Act, Law Amendments Hearing Nov.1, 2021;
- Nova Scotia Parks and Protected Areas Summer 2021 Consultation, Comments submitted on Sep 27, 2021 on behalf of the Halifax Field Naturalists and the Nova Scotia Wild Flora Society;
- Halifax Regional Plan Review 2021: Feedback from two Naturalist Societies - the Halifax Field Naturalists and the Nova Scotia Wild Flora Society, July 15, 2021.

As well, individual members of the Conservation Committee interacted with other naturalists and environmental groups and submitted comments on a variety of issues.

We were saddened this year by the passing of Bob MacDonald who had served on this committee for many years, and who with his spouse Wendy always kept us all abreast of ongoing environmental issues, as well as being very active in the field. Bob and Wendy were given the Colin Stewart Conservation Award jointly in 2009.

Presentation of the Colin Stewart Conservation Award for 2020 was delayed by the Covid outbreak; It was formally announced and presented via Zoom at the Halifax Field Naturalists 2020 AGM on March 4, 2021. The award was made posthumously to Wolfgang Maass (1929-2016) who pioneered lichen research and conservation in Nova Scotia. Nova Scotia Environment ecologist Robert Cameron spoke about Wolfgang's significant contributions.

– *Respectfully submitted,*
David Patriquin, Conservation Committee

NEWSLETTER

Spring 2021 Issue No.182 In this 20-pager HFN member Verna Higgins let us know about a new guide – *Ontario Moths - a Checklist*, and Lesley-Jane Butters, Carol Klar, Grace Beazley, and Gareth Harding submitted substantial nature sightings to our comparatively recent eNature Notes' column.

John Crabtree described how the rare and beautiful orchid *Platanthera orbiculata* var. *macrophylla* depends upon two mycorrhizal fungi, *Leptodontium orchidicola* and *Sepacina* sp. to ensure seed germination, and that a specific Moth, *Diachrysia balluca* is needed for its pollination. From PhD candidate Karen Vanderwolf we learned in great detail all about her Canadian Bat Box Project, and everything we ourselves can do to help these mammals thrive. Marianne Scholte shared her discovery of the invasive Himalayan Balsam *Impatiens glandulifera* Royle on her property in Cow Bay and also, the best methods for its eradication.

The reported 'Talks' were **Global Nature Watch** by Mike Gill, Fellow of the UN Environment Conservation Centre, about all his work on global biodiversity, all the latest inventive technologies to measure and monitor it, and what we can do to help support it; and **Invasive Species** by Nova Scotia's Invasive Species Council's (NSISC) Project Coordinator Kristen Noel, who outlined their strategies for the prevention and spread of these sometimes seriously deleterious aliens, to wit: Green Crab, Smallmouth Bass, Chain Pickerel, Yellow Floating Heart, the Hemlock woolly

Adelgid, the Emerald Ash Borer, Dog Strangling Vine, Giant Hogweed, White Nose Syndrome, and Glossy Buckthorn.

A one-page Almanac (due to COVID) and the Spring Tide Table rounded out the Spring Issue.

Summer 2021 Issue No.183 (12 pages and no printed program due to COVID) Our congratulations went out to the 217 HFN observers and recorders who took part in the annual international City Nature Challenge and who submitted 5,521 observations! April and May's always fascinating Nature Notes followed, then a wonderful submission by HFN member Brian Bartlett, "Melospiza Melodia Morning", one of over forty entries from his plein-air sunrise journal from April 2018 to November 2019. How to describe birdsongs with words, early morning bird behaviour, and spring's burgeoning plants were mused upon – all in the lovely ambience of early mornings at sunrise. Bernie McKenna described a reconnaissance trip to **Soldier's and Miller's Lake Falls** which had to be cancelled due to COVID (it finally took place on August 7th). These entries were rounded out with another COVID-affected one-page Almanac and the Halifax Summer Tide Table.

Fall 2021 Issue No.184 Another lightweight 12-pager started off with the very sad news that long time active member Michael Downing, a founder of Nature Nova Scotia, had passed away in July. September Zoom meeting Nature Notes followed, with Monarch caterpillars, the rare Goldencrest, Snapping Turtles, a Common Weasel, and a male Northern Cardinal. The September 17th posthumous Colin Stewart Award was presented to lichenologist Dr. Wolfgang Maas at beautiful Chebucto Head. Wolfgang's years of lichen collections will provide research material for many lichenologists both locally and internationally. Mille MacCormack wrote up June's **Special Tracking Dogs** talk by Dalhousie ethologist (animal behaviour scientist) Simon Gadbois. Ordinary pet dogs are trained to track and find specific and elusive species in hard to access environments. Ribbonsnakes fill that bill, and this canine tracking will improve knowledge about and protection of this vulnerable species.

Despite COVID, we offered some outdoor trips. Patti Leclerc wrote up our July 21st **Public Gardens Tour**. Many tidbits of information were shared about all the beautiful plantings and trees. Bernie McKenna submitted his write up on the August 7th **Soldier's/Miller's Lake Falls** field trip. Interesting plant and berry facts, the area's geology, and expert birder Fulton Lavender's knowledge of birds and their calls made this a very satisfying nature hike. Fulton Lavender also led a hike for us on July 3rd to **Oakfield Provincial Park** (advertised in our program as "Birds and Butterflies"), written up by Brian Bartlett. The absence of butterflies allowed more observation of birds and once more Fulton shared his extensive knowledge about bird behaviour and calls. On Sept. 15th, flora-savvy Burkhard Plache led a trip to **Shaw Wilderness Park**. With its different habitat areas, Burkhard once again helped everyone to learn to recognise our native plants and shrubs. eNotes, but *no* Almanac (COVID), and the Halifax Fall Tide Table finished off this issue.

Winter 2021 Issue No.184 This 12-page issue started off with a good book review by Ron Arseneault and his recommendation to acquire the 2020 *Mammals of Prince Edward Island by and Adjacent Waters*. Then, the always interesting Nature Notes by Lesley Jane Butters, and next – Pat Leader shared an item about Cormorants in distress

in the Bedford area due to entanglement with discarded fishing lines and hooks.

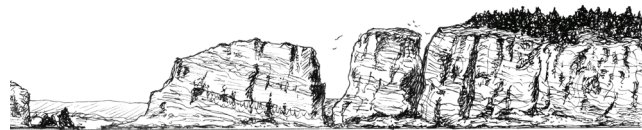
Due to COVID there were no monthly presentations to report. The first field trip written up was a 'Part Two' of **Shubenacadie Wildlife Park** trip on September 19th, continuing with a description of all the wonderful animals there and their stories. Gillian Webster did the description of our trip to the Noel Shore, **Noel Shore Geology**, which included a stop to rainy Cove, one of the most important and exciting geological field stops in Canada. Kerrie Wilcox, Canadian Coordinator for the 2020 Global Bird Count,

urged us to take part with exciting data from 2019's count. Nature Notes were only from October and the Almanac was once again only a one-pager.

Thanks to all who so ably and willingly contributed under all the Covid-restricted conditions.

– *Respectfully submitted,*
Stephanie Robertson

ARTICLES PLUS...



THE CONTINUING MORAR TREE SWALLOW SAGA

– *Gareth Harding, Renée Lyons,*
Millie Harding-Lyons, July 2021

Our 2021 Morar nature observations were abbreviated with us confined to Halifax from late April. We finally returned to Morar on a sunny day (June 3rd) to find the male Tree Swallow sitting on our powerline. Everything was just as it should be. The blackflies were out in force and between the three of us we accumulated 100 plus ticks while checking out our 15-minute circular walking trail!! Fortunately, only two of these were Deer Ticks. The moist weather had also encouraged a spring hootenanny of slugs in the not yet turned-over garden. Renée removed a full litre of slugs from the remains of last year's Brussels Sprouts which had never 'sprouted'. I carried them to the far side of Bonnie's field while continuously nudging them back from the lip of the yoghurt container.

Back to the Swallows. The next day our Swallows were spending a lot of time together. The lady was definitely ready for a family. There were plenty of discrete, very brief encounters on the powerline. He landed on her back, ever so lightly, and instantaneously became air bound only to repeat the ritual over and over again. We watched their chest-to-chest flight encounters high, high above us over the field from our deck chairs. Once attached, the pair fluttered rapidly down and only separated just feet above the field. I decided it was time to spread some white chicken feathers – saved from one of our leaking old pillows – in the meadow.

On our next Morar visit, on June 11th, the swallows were nowhere to be seen. A sultry Mourning Dove was "cooo cooo oo ing" from the powerline where the swallows liked to perch. I noticed that the Dove managed to make this call without opening its beak. I convinced myself of this after first failing to locate another dove nearby and then secondly noticing slight rhythmic pulses of its chest feathers upon very close observation. The Dove got tired of me ogling him through binoculars and flew over and alighted on the top of a nearby dead spruce tree. The cooing followed him.

The next day, the Swallows returned from wherever they had disappeared to and re-established proprietary rights of the line above their power pole nesting box. A Merlin did a brief glide past over our feeders located in the lilac hedge late in the afternoon. Merlin Falcons are very apprehensive of humans which the Chickadees know full well.

On our June 18th visit the Swallows were now frequenting the powerline early in the morning and around mid-

afternoon. I suspect they know of a very buggy swamp somewhere close by. On our second day I decided to rejuvenate our squash mounds in a small clearing by our cherry trees. I was surprised to find a Tree Swallow with her head poking out from a Bluebird nest box. I was very glad I had put the feathers out in the field at the beginning of the month because I had lost a clutch of Tree Swallows to a flea infestation a number of years ago. The Swallow paid close attention to my gardening but showed no fear nor concern about my presence. A Bald Eagle soared over our field and was promptly escorted out of sight with some dramatic aerial manoeuvres by our resident Raven. The Ravens had two very raucous youngsters this year. The male Tree Swallow had a lot 'of time on his feet' and was doing a lot of sitting on the powerline.

On the night of June 19th-20th we had a violent thunderstorm with torrential rainfall and a boisterous wind. The next morning, bright and sunny, my heart sunk when I noticed that the front flap of the bluebird box was down. My initial thoughts were that a predator had come during the night. I looked inside the box and saw four perfect white eggs deep in the pillow feathers I had scattered in the field several weeks ago. I closed the door which obviously had not been secured properly and had wiggled loose in the wind. Later in the morning Renée pointed out a Swallow flying around the field. When I returned to do some gardening there was the mother back in the box with her head poking out. I don't know when the door wiggled open but the overhanging roof on this bluebird box design is certainly weather proof. Feeling much happier, I decided to garden in our fenced location and give the Swallow some solitude. The rest of the morning was spent peacefully gardening and listening to Chestnut-sided Warblers singing "so glad to meet yah" from the bordering Elderberry shrubbery. The male Ruby-throated Hummingbird was doing his whirring U-dance above our Weigela bush. All was well.

We returned July 5th under a grey sky with no sign of Tree Swallows but the place was alive with bird song. Chickadees, Goldfinches, since the thistle feeders still had seeds, and Magnolia and Mourning warblers were calling from various directions. The male Tree Swallow turned up and perched on the powerline in the afternoon. This lackadaisical behaviour became disturbing because this is the time when parents with nestlings should be in a dawn to dusk feeding frenzy. The next day our lone Tree Swallow was sitting on the line, around noon, while I was drinking coffee in the deck chair. I was writing my morning field notes. I looked up just as a Goshawk came out of nowhere with a tiny bird in its claws and then disappeared behind



the bank of spruce bordering the field. The Tree Swallow which had been sitting on the powerline was nowhere to be seen. It was hard to believe that such an aerial acrobat as a Swallow could be captured so easily. The next day, with no Tree Swallows to be seen, I opened the nest box to find four dead nestlings, all within about one week of fledging. One of our avian predators must have caught the mother but it is strange that the male would have stopped feeding the young since he had also fed the young in the past during this frantic feeding-week before fledging!

This is the way it has to be for life to persist, although it's impossible to avoid becoming emotionally involved in the success of our trusting tenants. Next year we are planning on taking this nesting box out of commission, or rather relocating it, so that it will be in a more open location to make next year's Swallows less vulnerable to surprise aerial attacks.



BOOK REVIEWS

– Patti LeClerc

Chances are that some of our esteemed membership may have copies of Chris Harvey-Clark's ***Eastern Tidepool and Reef*** published 25 years ago in 1996. Well hang on to your snorkels because Chris has just published a new marine guide, and it's much broader in scope!

Maritime Marine Life – Field Guide to fishes, invertebrates and plants of the Northwest Atlantic covers a very large percentage of the marine fish and invertebrate biodiversity you are likely to encounter in our region – whether at the seashore and/or diving. At 96 pages, featuring over 200 species, and with glorious photos, it has something for the novice and aficionado alike.

In the first section Chris discusses the specific forces (such as the gulf stream and the ocean's depths) which create our Northwest Atlantic's unique environment. He reviews where and how to find and observe marine life, provides several clever tips and hints, and includes a brief refresher on taxonomy.

Mindfully, the author focuses on the importance of conservation amidst our curiosity. "When looking at seashore life, keep in mind that as a rule, animals and plants in cold northern waters grow slowly, heal slowly, and should be handled gently." (p.6).

Using handy reference symbols, this guide then takes us on a delightful journey, complete with beautiful photographs detailing all manner of ocean spectacles. Well organised, it divides its different species into categories, with a handy reference symbol for each section, including Marine Plants such as Seaweeds and Kelp; Invertebrates including Sponges, Cnidaria (such as several species of Anemones, Hydroids, Jellyfish, and Coral); Phylum Ctenophora (Comb Jellies); Minor Phyla (Brachiopods, Bryozoans and Nemer-teans); Marine Worms; Molluscs; Echinoderms; Arthropods; and Chordates such as Tunicates, Finfish, and Cartilaginous Fishes.

The last section, 'Summer Visitors', also includes a concise overview by Chris along with Sarah Burko about such unique factors as the 'Atlantic Meridional Overturning Circulation System' and of course – climate change, which causes abnormal oceanic temperature fluctuations.



Regardless what you do at our seas and seashore, be it diving, snorkeling, or combing through tidepools, this handy guide will appeal to all levels of nature lover from beginner to expert. I for one am eager to get out and take a look through now-awakened eyes! I highly recommend this book for all naturalists.

Luckily, Halifax Field Naturalists are excited that Chris will be our guest speaker for May 5th, presenting "Great White Sharks in Maritime Waters". Copies of *Maritime Marine Life* can be purchased via e-transfer at chrisharveyclark@gmail.com for \$21.95 plus \$5.00 for shipping. This is definitely one to add to your collection!

(Chris Harvey-Clark is University Director of Animal Care at Dalhousie University. He has written and published over 30 Natural History documentaries for Discovery Channel, BBC, National Film Board of Canada, History Channel, Netflix, and National Geographic. His extensive research encompasses a wide variety of expertise including investigating the biology of the leatherback sea turtle, the endangered Atlantic Whitefish, the Greenland Shark, and Great White Sharks. Notably, Chris was the first underwater photographer in Canadian waters to photograph the Great White.)



A 2021 COUNTER TO COVID

– Clarence Stevens

In the spring of 2021 a brand new type of HFN field trip was created as a way to help counter the necessary social restrictions caused by Covid – and – it was an amazing success! Using our Facebook page, HFN announced a thirty day, province-wide event titled 'Saving Salamanders'.

'Saving Salamanders' was an HFN & EOP (Environmentalists on Patrol) joint event which was open to nature lovers across the province to assist our giant-sized Yellow-spotted Salamanders which live underground for most of the year.

Usually, on rainy nights in April, individuals come out just after dark to race for their breeding ponds. For their entire life Yellow-spotted Salamanders follow the same routes to get there (they can live 32 years); but now, these days, many have to cross roads to reach their mating sites, and it was at these very crossings where our volunteers were waiting to lend a hand.

Even though the event was officially scheduled to start on April 1st, things got off to an early start on March 26th. Below are highlights from the event's progress:

An Early Start on Friday, March 26th Yellow-spotted Salamanders in HRM began emerging from hibernation – a full eighteen days earlier than 2019 and 2020! So right away we had to change the event from 'Upcoming' to 'Now Active'.

April 2nd The event expanded to include other amphibians. While our focus was on helping the Salamanders, at the same time we happily helped all the other amphibians we encountered – a total of seven other species of amphibians were saved. This brought our combined saves that evening to 76 amphibians – 45 Yellow-spotted Salamanders, 20 Spring Peepers, six Wood Frogs, two Red-backed Salamanders, one Mink Frog (our first ever), one Pickerel Frog, and one very early Bullfrog.

April 7th As this event began to expand across the province, Allison Gilby reported helping a Blue-spotted Salamander get safely across the road near Enfield. This was a first for us as most teams' efforts had been limited to the Metro area where Blue-spotted Salamanders are rarely if ever seen.

April 21st More new species were added. Libby Bolton reported that her team working the Walton Woods Road aided two Four-toed Salamanders and over a dozen Red-Spotted Efts (which are the land-based juveniles of the Eastern Newt).

April 22nd An Earth Day Event from 8:00 to 10:00 p.m. Despite the lack of any real rain, we had a great group of participants and were able to save about 40 amphibians, with roughly half being Yellow-spotted Salamanders and the other half being Spring Peepers. The Spring Peepers were the dominant species on the roads that evening (mostly males), but we also found a couple of females, so people were able to see first hand how they differ. We were also able to scoop up both male and female Green Frogs from the roads, and the children who helped out were delighted in the size difference between the Green Frogs and the Spring Peppers in their hands. In addition to our road saves, we were *hearing* hundreds of Spring Peepers and Wood Frogs. Peepers do a good job hiding when they are calling, but the Wood Frogs put on a good show. We were also able to spot several singing Wood Frogs, locating some of them by the expanding ripples created in the water by their vocal sacs!

April 23rd 'From Night to Day' – our first daytime Salamander Saving outing for 2021, on which hundreds of eggs were rescued from a large puddle which sees daily ATV and dirt bike activity. We also created and expanded pools of water adjacent to the ones on the ATV tracks. The expansion activity was pretty easy, – we simply created channels which would drain the water from the pools being run thru by vehicles to safer pools. This decreased hazardous breeding sites while increasing safer breeding sites.

2021 SALAMANDER EVENT SPECIES:

American Bullfrog		<i>Rana catesbeiana</i> or* <i>Lithobates catesbeianus</i> or* <i>Rana (Aquarana) catesbeiana</i>
E. American Toad		<i>Anaxyrus americanus</i>
Northern Leopard Frog		<i>Rana pipiens</i> or* <i>Lithobates pipiens</i>
Northern Spring Peeper		<i>Pseudacris crucifer crucifer</i>
Northern Green Frog		<i>Rana clamitans melanota</i>
Mink Frog		<i>Lithobates septentrionalis</i>
Pickerel Frog		<i>Lithobates palustris</i>
Wood Frog		<i>Rana sylvatica</i> or* <i>Lithobates sylvaticus</i>
Blue-spotted Salamander		<i>Ambystoma laterale</i>
Eastern Newt		<i>Notophthalmus viridescens</i>
Eastern Red-backed Salamander		<i>Plethodon cinereus</i>
Four-toed Salamander,		<i>Hemidactylium scutatum</i>
And, last but not least, the species that started it all, the Yellow-spotted Salamander		<i>Ambystoma maculatum</i> (* – depending on the authority)

Going Forward in 2022 Due to the great success of the 2021 event, HFN will be repeating it in the spring of 2022. Here's how it works. Participants have the option of saving Salamanders at a spot of their choosing, or joining a team at one of our Lower Sackville Salamander sites. And, we have sites suitable for participants of all ages. All during the month of April, people will report their saves to our HFN

Facebook Group, where a running tally will show the results of our combined efforts.

Contact: If you are interested in participating, contact us on Facebook or send the HFN volunteer coordinator Clarence Stevens a private message via Facebook; pre-registration is mandatory. We will meet anywhere in Nova Scotia or Lower Sackville on rainy April nights just after dark. Full details will only be available upon registration due to ever-changing Covid restrictions and guidelines.

eNOTES (cont'd from p.3)

I suppose it might be rather tasty – even for a squirrel. Shortly after sunrise on February 13th, I observed a beautiful, fairly large, **white-tipped-tailed Red Fox** trot across a front garden, Ridge Rd., Wolfville. When the fox spotted me in my brilliant red jacket it suddenly bolted full tilt to the adjacent field.

Recently on a winter's day outing on the Harvest Moon Trail not far from the Memorial Church, in Grand-Pré, I observed a **huge Eagles' nest** in the highest branches of an old mature Poplar tree. Although the nest seemed firmly secure in the thick crotched branches, it still looked vulnerable to all of winter's wind, rain, and snow. The Eagles ought to be back on the nest very soon if it is still an active one.

Stephanie Robertson – In early March she observed **Wych Hazels in full bloom** at a neighbours' garden – the usual yellow, plus, unknown before to her, a red variety.

CITY NATURE CHALLENGE 2021!

Get ready to once again put HRM on the global nature scene! This year it will take place from April 29th to May 3rd. Cities large and small from across the planet will compete for the title of the 'Most Biodiverse City'. Whether you're an avid naturalist or a dog walker, everyone can participate; it's easy, fun, and will encourage you to get outdoors!

As usual, we'll be using iNaturalist to record observations and send in observations. Sign up to iNaturalist today and join our "City Nature Challenge 2021: Halifax Regional Municipality" project. By joining, you'll be notified when new items are added to our project page.

SUPERMOONS

On the evening of July 14th, there will be a 'Supermoon', rising at 21:49. A Supermoon is a Full Moon, or a New Moon, which nearly coincides with perigee – the closest that the Moon comes to the Earth in its elliptic orbit. This results in a slightly larger-than-usual apparent size of the lunar disk as viewed from Earth. The technical name is 'perigee syzygy' (pronounced si-zuh-jee), or more simply, – a full Moon around perigee.



NEW AND RETURNING

Charles Bull
Kathleen Law
Meaghan Quanz

HFN TALKS

THE CWRC

2 SEP

– Bernie McKenna

The Cobequid Wildlife Rehabilitation Centre This talk was given by two very knowledgeable people who are obviously dedicated to CWRC – Brenda Boates, a wildlife rehabilitator and the Wildlife Operations Manager of CWRC, and Dr. Jessica Rock, a volunteer veterinarian and key educational speaker for the Centre. Very long in the planning, (dating back to pre-Covid) this Zoom meeting was the first of the HFN season, and as such, was a tremendous way to kick off the year!

Jessica led us through a discussion on what CWRC does as well as two things they don't do. Firstly, they *don't* do rescues; however, drop-offs are accepted but *please call ahead first*. Secondly, they don't do public tours of the facility. With veterinary care, rehabilitation, and eventual release being their primary goal, the least human contact as possible is best for the animals concerned. It was explained that young animals, especially owlets, are inclined to become easily attached or familiar with humans often to their detriment later on after release. The Centre even has two non-releasable adult owls which they use to mentor young ones to not place their trust in us humans. CWRC takes in native birds, amphibians, reptiles, and animals up to the size of a fox, always aiming to make that animal fully releasable.

Basically, the facility operates on a three step process – intake, treatment, and release. All arrivals are given a full assessment as to their concerns, whether they be injury(s), illness, dehydration, or any combination of those. Annually, CWRC takes in approximately 350 animals of which birds make up 90%! At the time of the talk they had 28 birds in their care. They specialise in raptors, seabirds, and oiled and/or poisoned birds. As such, the CWRC is recognised and respected both nationally and internationally. In this vein they do extensive public education, wildlife advocacy, and collaboration with similar facilities.

CWRC have the only continuous eagle flyway in Canada and it's one of only five in the world. It is a double oval in shape, with its centre portion containing pens and/or enclosures suited for specific birds. The outer flight area is 16 to 18 feet in height and well over 100 feet in length. When you consider it is oval in shape, it gives the birds over two hundred feet of continuous flight area. It's wide enough that eagles have room for flight maneuvering and even doing a 180 degree turn in mid-flight. I find that impressive, as Bald Eagles for instance have a wing span of 6 to 7 1/2 feet. This large amount of well-designed space allows for great conditioning prior to a bird's release. Brenda emphasised the extent of community participation they have because this flyway was built entirely with volunteer labour along with donated funds and materials.

Jessica said most birds taken in suffer from at least one of the following – window strikes, lead and other types of poisoning, oiled feathers, cat grabs, nest destruction (forestry), and car collisions. With these being the main causes of why they are brought to the Centre, it's all too easy to see how much humans negatively impact them.

Once the injuries are identified, the animal is taken to the veterinary treatment area. Treatments required run the full gamut – everything from hydration, protection from

elements, proper feeding, and/or in some cases surgery. Here, CWRC are fortunate to have access to an offsite, fully equipped veterinary surgical facility which can administer a wide range of excellent and specific care.

Besides orphaned young needing nursery care, there are a multitude of other problems, such as car strikes, malnutrition, and always – animals injured from contact with humans. A fairly common ailment is the dreaded mange which, while looking terrible, can be successfully treated with timely and effective care. We were shown before and after photos of a young, severely mange-affected fox; the before and after photos were like night and day. Jessica said that animals with mange appeared to be mostly those fed by well intentioned people. They have also treated turtles struck by vehicles, and in every case it is best that the animal be taken to a rescue centre as opposed to leaving them to recover themselves.

This leads me to two compelling cases studies. The first involved two Painted Turtles which had been kept in an aquarium for 15 years and fed only pelleted food. When received and assessed by the centre they were found to be about the physical size of two-year old turtles. They were found unsuitable for release into nature and another course of action had to be found. Fortunately, they were taken by a suitable facility where their appropriate living conditions could be met. The second study is truly inspiring and for me was impossible not to view it with human emotions. It involved a fully mature Bald Eagle which when received was so ill she could not even keep her head up. Considering how feisty and combative an eagle can be this was very concerning to staff. Assessment and blood tests indicated advanced lead poisoning, necessitating extensive treatment and rehab. A sad situation but here it improves markedly. After full assessment, and lengthy veterinary treatment and rehabilitation, she was able to be released back into her original territory. During all this time her mate had stayed around the Centre's area while she was being rehabilitated elsewhere. Eventually released back at the Centre when they knew her mate would be present, she joined him there. (However, In doing so, she at first flew scared from another female which had moved in and claimed her old location!) As previously stated, all bird releases are done in the area where the bird was found.

Jessica said the main problem with birds ingesting lead is that it gets ground up very finely in the bird's gizzard; this increases the amount of systemic uptake, leading to a longer and more involved recovery with all the extra effort and necessary veterinary care that entails.

A lively question and answer period followed and many points were discussed and further amplified by both Brenda and Jessica. I have to point out that CWRC has a very informative website and one well worth viewing regularly. Burkhard thanked Brenda and Jessica on behalf of all the HFN members who were lucky enough to hear this presentation.



REPTILES AT RISK

6 JAN.
– Patti LeClerc

Based out of Mahone Bay since 1993, Coastal Action is dedicated to restore and protect the environment through research, education, and action. Coordinators Taylor Creaser and Noah Hardy gave this wonderful presentation on their Species at Risk and Biodiversity Project, which is funded by the Habitat Conservation Fund and the Habitat Stewardship Program.

This Zoom presentation aimed at dispelling myths about Snapping Turtles and Eastern Ribbonsnakes, showing us why we should want to, and how best to, protect them.

TURTLES

We were shown the four turtle species which call Nova Scotia Home. Sadly, all four – the Eastern Painted Turtle, the Wood Turtle, Blanding's Turtle, and the Common Snapping Turtle – are at risk.



Focusing on the Snapping Turtle, which is the largest freshwater turtle and which can reach close to 50 lbs fully grown, we saw its wide, large head and hooked upper jaw. Very dull coloured, its large shell can sometimes be covered in algae. It has a pointy nose and beak, and the spines on its tail give it an almost prehistoric look.

These turtles can be found in or at the edges of established ponds and muddy marshes with either still or slow-moving water, such as golf course ponds, irrigation canals, and/or port areas (where they are at risk of being seen as a nuisance due to the belief that they are aggressive, will bite you, or harm the ecosystem when in fact they actually do it good). Being scavenger feeders, they clear the water of CO₂-releasing dead and decaying organisms thereby helping to keep ponds, lakes, and wetlands cleaner, and at the same time reducing CO₂. They also contribute to the balance of the food chain, as their eggs are food for Skunk, Fox, Raccoon, and Mink.



Snapping Turtles' populations can be extra vulnerable because they live for so long (up to 70 years) and have a late age of maturity (17 – 19 years) so their reproduction is slow. A population loss of even a few adult turtles every year is enough to cause that population to decline over time.

Turtles have a seasonal cycle which can be classified into four phases. **Hibernation** - occurs from October until about March; **'Ice Off'** - around March and April; **Nesting** - from late May to late July; and **Hatching** - from late August to October. Because of the high mortality and risks which turtles face, they've evolved to produce large clutches of 25-45 eggs, ensuring a few will survive.

Conversion of aquatic or riparian habitats for agriculture and urban development is incompatible with the species' needs. Water level management, dredging, road networks, collisions with boats, legal and illegal harvesting, chemical contamination, and persecution are the risks turtles face which impact their survival. One often overlooked area of risk which is easily prevented with a bit of care is fishing bycatch and/or the accidental ingesting of fishing hooks. Whether caught directly, or after consuming dead fish with embedded hooks in them, or being caught in nets that are infrequently checked, turtles, especially young ones, may not recover from these injuries. It was great to get the following tips on how to minimise damage if you accidentally hook a turtle. First, reel the turtle in slowly and gently to avoid getting the hook stuck in deeper; do not cut your line and release the hooked turtle – an embedded hook can



lead to its death. Use a net or grab the back end of the turtle's shell to lift it out of the water. To prevent further injury, don't lift it by either the fishing line or its tail. Turtles may bite or scratch to protect themselves so be careful – Snapping Turtles have long, flexible necks and a powerful bite. If the hook is difficult to remove, caught in the mouth, or swallowed, medical care is required.

Another threat to Snapping Turtles is collisions with vehicles. If you see turtle in the road let it cross on its own or, if it is in eminent danger, help it move in the direction it was travelling. If you come across an injured animal contact the ova Scotia Lands and Forestry offices at 1-800-565-2224.

Sadly, there is also risk to these marvelous creatures from 'harvesting' and/or hunting. Whether taken alive or dead – hunting of Snapping Turtles is illegal throughout Canada. Reasons why turtles are harvested include: food, medicine, recreation (as pets), and/or decoration (trinkets).

Unfortunately, their reputation as aggressive animals which prey on waterfowl and fish does not encourage the community to rally to protect these wonderful and important animals. To mitigate this, Coastal Action engages in nest monitoring (recording nesting activity, predation, and emergence); trail-camera monitoring (to better understand human-subsidised predators such as dogs); and adult population monitoring (to watch for any changes in numbers, in addition to gathering baseline population data).

Fortunately, there are several things we can do to help conservation efforts of these two important creatures.

- 1) Protect riparian buffers and their trees, shrubs, and other vegetation along any stream or waterway. These plants filter any runoff, keeping the water clean by managing nutrients and – so importantly – reducing harmful chemicals.
- 2) Slow down – especially near water which may contain nesting sites.
- 3) Leave fallen trees and branches in place along shorelines, as both turtles and snakes use these to bask in the sun and warm themselves.
- 4) Practice proper nutrient and chemical management on your own property near waterways.
- 5) Avoid driving ATVs across sensitive areas such as beaches and gravel roadsides where turtles lay their eggs.
- 6) Dispose of any waste/garbage properly as it will attract turtle predators such as raccoons.

SNAKES

Another misunderstood reptile is the snake; there are five species in Nova Scotia – the Maritime Garter Snake, the Red-Bellied Snake, the Eastern Ribbonsnake, the Northern Ring-Neck Snake, and the Smooth Green Snake.

Ribbonsnakes are Coastal Action's main concern. They can be easily recognised from the other four based on appearance (but it does resemble the Garter Snake just a little so photos were shown to show the differences between them). Ribbonsnakes have white lips and a very characteristic white spot in front of their eyes, whereas Garter Snakes have yellow lips and no eye spot; Garter Snakes have their Yellow stripe lower down on the body than Ribbonsnakes do; and they differ in their **eponymous** markings – one can be said to 'wear' garters and the other, ribbons.

Just like turtles, snakes also go through distinct seasonal cycles, but – only three of them: **Hibernation** - this starts in October; **'Ice Off'** - occurs around March and April; **Hatching** - of young occurs in late summer, and Ribbonsnakes birth live young rather than eggs. In October, they get ready for hibernation again.

A lively and informative round of questions and answers

followed, and we were given the following phone numbers should we see a snake or a turtle in the following predicaments:

If you have hooked a turtle while angling and cannot remove the hook, contact Atlantic Wildlife Institute, 1-506-364-1902, or email info@atlanticwildlife.ca.

Report Snapping Turtle/species-at-risk road sightings to 1-866-727-3447; or email sightings@speciesatrisk.ca. Best of all, volunteer with Coastal Action by contacting taylor@coastalaction.org or noah@coastalaction.org.

PIPING PLOVERS



3 FEB.

— Bernie McKenna

Having been both the Nova Scotia Coordinator for the Birds Canada Piping Plover Conservation Program and the Space to Roost Program since 2019, Laura Bartlett was just the person to tackle this topic. While I'm sure the majority of you – maybe all of you – are well aware of Birds Canada activities, I feel a very brief refresher on them is in order. Birds Canada is a non-profit, non-governmental organisation stretching from coast to coast, with 60 full time staff working constantly for the betterment of all Canadian Birds.

After a very long journey here, every spring the Piping Plovers are immediately faced with finding suitable nesting sites and then successfully raising their chicks. This necessitates a healthy and dynamic coastal environment upon arrival, with hopefully as few obstacles as possible. But unfortunately, there are many of them – both natural and man-made. Considering all this, the fact that these birds are still able to persevere and successfully produce broods is truly amazing.

Laura covered all aspects of Eastern Canada Piping Plovers under the following topics:



IDENTIFICATION

Piping Plovers are a fairly small shorebird averaging 15 to 19 cm in length. Breeding plumage sports orange legs and orange beaks with a black tip, with a distinctive black neck collar and a black forehead strip which Laura likened it to a 'unibrow'. Underbellies are a light whitish shade and back feathers a soft sand-grey. Four other N.S. shorebirds are somewhat similar – Semi-palmated Plovers, Semi-palmated Sandpipers, Sanderlings, and Killdeer. One thing to note is that all Piping Plovers have a beak which is about ½ the length of their head. The other four shorebirds' beaks are much longer – the length of their head or more. As well, the others have neither orange legs nor beaks. With these characteristics in mind, coupled with the fact that Piping Plovers are solitary by nature, accurate identification becomes a bit easier.

BREEDING/NESTING

Most birds arrive here between April and May, with nesting being underway by mid-May. Their nests are only a mere scrape or depression on flat pebbly or sandy terrain and may or may not be lined with pieces of shells or bits of vegetation. Placed well above the high tide mark in front of any dunes (not *in* the dunes), preferably on recently disturbed soil, a clutch of three to four dark-flecked, dirty-white eggs are laid then tended by both parents. If the first clutch fails early enough in the season a second may be attempted; however, only three eggs will be laid the second time. The eggs hatch in 21 days and the young fledge after 28 days. The chicks are precocial – mobile from birth



and able to feed themselves right away (precocial birds produce protein-rich eggs, thus their young hatch in an early fledgling stage). Their diet may include spiders, bugs, crustaceans, and invertebrates, with sand fleas being very popular. Even though they are fully able to feed themselves, the young ones still rely on their parents for warmth and protection until fully fledged.

DISTRIBUTION

There are two separate groups of Piping Plovers. One group range from the Great lakes westward to the Northern Plains of North America. Our Eastern Piping Plover *Melospiza* sp. range from Quebec down through the four Atlantic provinces. Our own Nova Scotia birds are split into two breeding populations, one of which nests on the Northumberland shores and northern Cape Breton, while the other nests on the Atlantic side mainly in the southwest but with some nesting east of Halifax. On a percentage split it's 40% in the north and 60% on the Atlantic. There are no known nestings on the Bay of Fundy side of the province.

Normally, there is only one or possibly two pairs per beach. However, one beach in Shelburne seems very popular and last year had nine pairs nesting there! Once the clutch has hatched the birds do not return to the nest, they stay mobile, feeding as they go. Once they head south for the winter, they may spend their time on Florida or Texas shores as well as those of Mexico or even the Caribbean.

Last year was a very good year for our province's Eastern Piping Plovers; 54 nesting pairs were documented. Bird Canada's yearly goal for Nova Scotia is 60 pairs, so let's keep our fingers crossed. For the other three Atlantic provinces, Newfoundland/Labrador had five pairs; P.E.I. had eight to ten, and New Brunswick had the most of any province, making up the bulk of last year's 174 nesting pairs.

THREATS

These birds have been on the endangered list since 1975 and for good reasons. The various threats to them are very extensive, in my mind enough so you'd wonder how they do as well as they do. By category, they are;

Predators – crows, gulls, foxes, rats, raccoons, skunks, and really any other carnivore which happens to find them.

Beach use – vehicles and unmindful people on the beach, and unattended and off-leash dogs.

Development – 'armouring' beaches for erosion control and habitat destruction and/or degradation. With 70% to 80% of our coastline being privately owned, there is ample opportunity for countless obstacles now and in the future.

Human – human garbage and trash left around attracts predators – not a good thing. Also, peoples' choice of walking above the high tide mark where nests are, rather than lower down on wet sand is deleterious. The former choice can make a beneficial difference to Piping Plovers' nesting success.

This ended Laura's excellent presentation. However, I feel there's still more that should be said about Birds Canada itself and what they do because to me it's very clear what a critical role they play for all our Canadian birds. Briefly, they support CWS's bird banding; monitor over 50 Nova Scotia beaches which have had a nesting in previous years, constantly monitoring and documenting every other aspect of Piping Plover activity; supply and track beach-signage and perform beach stewardship; educate the public and special interest groups about them; and liaise with enforcement agencies and national and international and

academic organisations. Because of all their valuable hard work, we now know that shorebirds, aerial insectivores, and also grassland birds are all in varying degrees of decline, some dramatically so. In closing, I would like to note that some of the previous information could be had through Tufts' or Audobon Society books, or other means. But to me, to have such up-to-date and knowledgeable information collated and provided all in one presentation is a very wonderful and valuable experience, and for that I know all members are truly appreciative.

AGM & SLIDE NIGHT 3 MAR. – Stephanie Robertson

After our short Zoom AGM, three members shared some of their nature images for our annual Members' Slide Night. First up was **Brian Bartlett** with "Selected Dawns and Sunrises".

In 2018 and 2019, Brian arose before 43 sunrises to observe and record this very special time's ambience, birds, skies, and vegetation. Out of this came *Daystart Songflight: A Morning Journal* (Pottersfield Press, 2021). He showed us not only this book's beautiful sunrise cover by Pictou artist and friend Mark Brennan, but also two other choices of sunrise paintings which Mark had done. Brian had captured mostly Nova Scotia sunrises, but had also recorded and photographed some in New Brunswick, Newfoundland, California, and even Sweden. As he pointed out, some of these 43 mornings did not present a visible sunrise to photograph!

Some highlights: The first three slides, taken sequentially, recorded the sun rising at Lake Vänern in Sweden, its largest lake at 5,650 km². As the sun rose, the sky presented intense dark oranges in dramatic clouds over an almost black lake; a later shot showed pale pink and grey clouds in a pale blue sky reflected in the now visible water. Brian soon learned how quickly skies can change as sunrises progress, with dramatic shifts of colour in only minutes. In half an hour, this sunrise had completely lost its blazes of brilliant orange.

At Kallandsö Peninsula, Sweden, we saw two Canada Geese on the water in a beautiful reflected pool of early sunrise. In Halifax Harbour, with the moored vessel 'Morning Star' serendipitously in the scene, a blue and grey mottled mackerel-sky surprisingly changed to darker shades as the sun rose. In contrast, from the top Mount Royal in Montreal at 5:30 a.m. with 35 others, he showed the sky progressing from rather foreboding dark mottles to lighter, brilliant oranges and yellows.

Cole Harbour's Salt Marsh Trail showed a pale sky, dark pink-tinged clouds, and darkest black silhouetted trees and landforms. In New Brunswick, sunrise shots at the Nashwaak River held special significance, as Brian's father was in palliative care at the time and these photos, shared in the hospital room, were the last images of sunrise his father would ever see. Also there, at Killarney Lake, an almost cloudless sky allowed the large solar disc to be seen as it rose, while shots at Washademoak Lake presented startling deep blues and pinks changing to orange and almost black in both the sky and the reflecting water; Brian showed one of Mark's paintings catching the same dramatic colours. As one of Brian's friends had pointed out, "Best skies are before sunrise!"



And, Brian's last and whimsical photograph was of the black silhouette of a cat, on a deck looking east towards sunrise and Campbello Island from Eastport, Maine.

Emma Bocking worked for Ducks Unlimited studying and recording urban wetlands in HRM. Photos taken during that work were shared under the title "I'm Tired of Winter!". She opened with a vernal pool full of unbelievably tiny dragonfly nymphs – just dots in the water. Then, on the North River near Antigonish there *she* was, fly-fishing, so tiny amidst all the magnificent greenery (so longed for in March).

Emma's work ranged widely, so she encountered many good photo opportunities. We saw the Musquodobit River in a lovely sunset, then pictures of a Pitcher Plant in flower and a tiny blue iris also in flower, both in a very small wetland between two houses! She showed us the cover of her *Little Dead Waters* publication, sporting a scenic Shubenacadie River photo she had also taken.

Then, a deciduous swamp Beside Cole Harbour Trail; fungi Fungi in Lower sackville; Swaine's bog near Barrington Nova Scotia; the Atlantic Coastal Flora plant Black-toothed Sedge; a restored salt marsh on the Cornwallis River, Annapolis Valley; and the salt marsh Cord Grass *Spartina alterniflora*. In Ontario in August, close to Kingston, she found and photographed the aggressive invasive Phragmites – Reed Canary Grass. Back here in Nova Scotia at Indian Path Commons, she had taken a beautiful shot of its wetland and wetland forest. Emma finished up with a stunning *Amanita muscaria*, taken from both below and above, and then a shot of colourful layers of red and green mosses and lichens on the Crowbar Lake Trail.



Burkhard and Ingrid Plache Last August, Burkhard and Ingrid had taken their canoe and cameras to spend two wonderful days camping based in and around St. Peter's, Cape Breton. Near Lime Hill along Marble Mountain Road on a Bras D'Or Lake there was a beautiful wetland with its sweet rich soil full of plant-nourishing minerals. Here they showed the good pictures they obtained of Labrador Tea, Honeysuckle, Tamarack/Larch, Goldenrod, wild orchids, abundant and tiny Brook Lobelia, Mountain Avens *Geum pickii*, and Cinquefoil. Paddling to the northeast corner of Isle Madame where the shores were quite gravelly they saw two types of crab. They also saw and photographed Sanderlings and Black-headed, or Common, Terns, (the first image was of an immature, so it did not sport any black head-colouring). They also saw Sea Lavender, but it was absent in some spots where it still should have been. This plant is very popular, and people have always gathered it copiously for dried flower arrangements. (*It seems to be gone completely now from Melmerby Beach Provincial Park; it used to be there in great abundance - ed*).

When they made it out to the point, they came upon an expansive and superb beach. Slowly and silently they paddled through the large nearby salt marsh, experiencing the wonder of the area's welcome natural quietness and beauty.

This presentation sparked audience dialogue about how soil pH influences the abundance and types of which plants grow where.

ALMANAC



This almanac is for the dates of events which are not found in our HFN programme: for field trips or lectures which members might like to attend, or natural happenings to watch for, such as eclipses, comets, average migration dates, expected blooming seasons, etc. Please suggest other suitable items.

"... sometimes the eye cannot see / the life force of growth / entrusted to a darkened bare tree limb / latent, powerful yet invisible / it will once again bud and blossom / thus the promise / winter never fails to turn into spring ..."

– *Honey Novick (Canadian poet/singer/songwriter)*

NATURAL EVENTS

- 1 Apr.** New Moon.
- 4 Apr.** Start of Mi'kmaw moon cycle Penatmuiku's (Birds Laying Eggs).
- 16 Apr.** Full Moon rises at 20:03.
- 22-23 Apr.** Peak Lyrids Meteor Shower (meteors radiate from the constellation Lyra).
- 30 Apr.** New Moon (Black Moon – 2nd New Moon in a month).
- 5 May** Start of Mi'kmaw moon cycle Sqolijuiku's (Frogs Croaking).
- 6 May** Average date of the last spring frost for the Halifax area (Environment Canada)
- 6-7 May** Peak Eta Aquarids Meteor Shower (meteors radiate from constellation Aquarius).
- 15-16 May** Total Lunar Eclipse (Blood Moon) visible in Halifax; max eclipse at 01:11 AST (16 May).
- 16 May** Full Moon rises at 21:39.
- 30 May** New Moon.
- 5 Jun.** Start of Mi'kmaw moon cycle Nipniku's (Trees Fully Leafed).
- 8 Jun.** World Oceans' Day
- 10 Jun.** -**20 Jun.** Earliest mornings of the year (sunrise at 05:28)
- 14 Jun.** Full Moon (a 'Supermoon') rises at 21:49.
- 20 Jun.** -**2 Jul.** Latest evenings of the year (sunset at 21:03)
- 21 Jun.** Summer Solstice (first day of summer in the Northern Hemisphere) occurs at 05:05 AST.
- 29 Jun.** New Moon.



– *Sources: Sea and Sky Astronomy Calendar, SkyNews, Mi'kmaw Moons Connects with Two-Eyed Seeing (Brunjes 2021)*

SUNRISE AND SUNSET ON SPRING SATURDAYS FOR HALIFAX: 44 39 N, 063 36 W



5 Mar.	06:44	18:07	2 Apr.	06:53	19:44
12 Mar.	06:32	18:16	9 Apr.	06:40	19:51
19 Mar.	07:19	19:25	16 Apr.	06:28	20:00
26 Mar.	07:06	19:34	23 Apr.	06:16	20:09
			30 Apr.	06:05	20:18
7 May	05:56	20:26	4 Jun.	05:30	20:55
14 May	05:47	20:34	11 Jun.	05:28	20:59
21 May	05:40	20:42	18 Jun.	05:28	21:02
28 May	05:34	20:49	25 Jun.	05:30	21:03

– *Source: www.timeanddate.com*

ORGANISATIONAL EVENTS (Note: Events lists are limited while COVID restrictions are in place; the few items below are listed with optimism, hoping for the lifting of restrictions in the near future.)

LOCAL

Blomidon Naturalists Society: For more information go to <https://blomidonnaturalists.ca/>.

10 Mar. "Chimney Swifts and the Swift Watch Program", by webinar.

Nova Scotia Bird Society: It is understood that the presentations below are intended for NSBS in-person meetings if COVID restrictions allow. If not, they may be conducted on Zoom. For more information go to <https://www.nsbirdsociety.ca/calendar/upcoming-events>.

31 Mar. "Lessons Learned from Lockdowns: How did North American birds respond to decreased human activity during COVID-19?", with speaker Dr Michael Schrimpf.

28 Apr. "The Incredible Spatial Memory of Mountain Chickadees", with speaker Ben Sonnenberg.

26 May "The Birds of Sable Island National Park Reserve", with speaker Greg Stroud, Operations Coordinator.

INTERNATIONAL

29 Apr. to 2 May "City Nature Challenge"; people find and document wildlife in their cities using iNaturalist. You'll need to join iNaturalist and enter your urban wildlife pictures. For more information go to <https://citynaturechallenge.org/>.

14 May "Global Big Day", a spring bird count. People record their finds on eBird. You'll need to join eBird and enter your observations for that day. For more information go to <https://ebird.org/home>.

– *compiled by Don Flemming*

HALIFAX TIDE TABLE



April-avril

May-mai

June-juin

Day	Time	Metres	Feet	jour	heure	mètres	pieds	Day	Time	Metres	Feet	jour	heure	mètres	pieds	Day	Time	Metres	Feet	jour	heure	mètres	pieds
1	0220	0.3	1.0	16	0136	0.2	0.7	1	0236	0.2	0.7	16	0201	0.0	0.0	1	0319	0.3	1.0	16	0331	0.0	0.0
	0800	1.8	5.9		0732	1.7	5.6		0822	1.7	5.6		0754	1.7	5.6		0924	1.7	5.6		0923	1.8	5.9
FR	1433	0.2	0.7	SA	1344	0.2	0.7	SU	1445	0.5	1.6	MO	1403	0.3	1.0	WE	1528	0.7	2.3	TH	1548	0.4	1.3
VE	2021	1.9	6.2	SA	1948	1.9	6.2	DI	2025	1.8	5.9	LU	2000	2.0	6.6	ME	2114	1.7	5.6	JE	2128	2.0	6.6
2	0301	0.3	1.0	17	0221	0.1	0.3	2	0311	0.2	0.7	17	0251	0.0	0.0	2	0353	0.4	1.3	17	0427	0.0	0.0
	0843	1.8	5.9		0815	1.7	5.6		0903	1.7	5.6		0843	1.7	5.6		1002	1.6	5.2		1017	1.8	5.9
SA	1511	0.3	1.0	SU	1426	0.2	0.7	MO	1518	0.6	2.0	TU	1456	0.3	1.0	TH	1601	0.8	2.6	FR	1653	0.4	1.3
SA	2059	1.9	6.2	DI	2028	1.9	6.2	LU	2102	1.8	5.9	MA	2049	2.0	6.6	JE	2153	1.7	5.6	VE	2222	1.9	6.2
3	0341	0.3	1.0	18	0308	0.1	0.3	3	0345	0.3	1.0	18	0344	0.0	0.0	3	0429	0.4	1.3	18	0525	0.1	0.3
	0925	1.8	5.9		0900	1.7	5.6		0944	1.7	5.6		0934	1.7	5.6		1040	1.6	5.2		1110	1.8	5.9
SU	1546	0.4	1.3	MO	1512	0.2	0.7	TU	1549	0.7	2.3	WE	1556	0.4	1.3	FR	1642	0.8	2.6	SA	1759	0.5	1.6
DI	2136	1.8	5.9	LU	2111	1.9	6.2	MA	2139	1.8	5.9	ME	2139	1.9	6.2	VE	2233	1.7	5.6	SA	2315	1.8	5.9
4	0419	0.3	1.0	19	0358	0.1	0.3	4	0420	0.4	1.3	19	0441	0.1	0.3	4	0509	0.5	1.6	19	0622	0.1	0.3
	1006	1.7	5.6		0946	1.7	5.6		1023	1.6	5.2		1025	1.7	5.6		1118	1.6	5.2		1204	1.7	5.6
MO	1619	0.5	1.6	TU	1603	0.3	1.0	WE	1623	0.7	2.3	TH	1702	0.5	1.6	SA	1732	0.8	2.6	SU	1903	0.5	1.6
LU	2213	1.8	5.9	MA	2155	1.9	6.2	ME	2218	1.7	5.6	JE	2231	1.9	6.2	SA	2312	1.6	5.2	DI			
5	0458	0.4	1.3	20	0452	0.1	0.3	5	0458	0.5	1.6	20	0541	0.1	0.3	5	0555	0.5	1.6	20	0010	1.7	5.6
	1046	1.6	5.2		1034	1.7	5.6		1102	1.6	5.2		1119	1.7	5.6		1159	1.6	5.2		0719	0.2	0.7
TU	1654	0.7	2.3	WE	1706	0.4	1.3	TH	1707	0.8	2.6	FR	1812	0.5	1.6	SU	1827	0.8	2.6	MO	1259	1.7	5.6
MA	2251	1.7	5.6	ME	2243	1.8	5.9	JE	2257	1.6	5.2	VE	2324	1.8	5.9	DI	2354	1.6	5.2	LU	2004	0.5	1.6
6	0540	0.5	1.6	21	0552	0.2	0.7	6	0541	0.6	2.0	21	0643	0.2	0.7	6	0643	0.5	1.6	21	0109	1.6	5.2
	1127	1.6	5.2		1125	1.6	5.2		1142	1.6	5.2		1216	1.6	5.2		1247	1.6	5.2		0815	0.3	1.0
WE	1740	0.8	2.6	TH	1816	0.5	1.6	FR	1805	0.9	3.0	SA	1920	0.6	2.0	MO	1924	0.8	2.6	TU	1356	1.7	5.6
ME	2330	1.7	5.6	JE	2333	1.8	5.9	VE	2339	1.6	5.2	SA				LU			MA	2102	0.5	1.6	
7	0627	0.6	2.0	22	0656	0.3	1.0	7	0631	0.6	2.0	22	0022	1.7	5.6	7	0041	1.5	4.9	22	0214	1.5	4.9
	1210	1.5	4.9		1220	1.6	5.2		1228	1.5	4.9		0744	0.3	1.0		0733	0.5	1.6		0911	0.4	1.3
TH	1840	0.8	2.6	FR	1927	0.6	2.0	SA	1906	0.9	3.0	SU	1320	1.6	5.2	TU	1339	1.6	5.2	WE	1456	1.7	5.6
JE				VE				SA				DI	2024	0.6	2.0	MA	2019	0.8	2.6	ME	2158	0.4	1.3
8	0014	1.6	5.2	23	0030	1.7	5.6	8	0026	1.5	4.9	23	0128	1.6	5.2	8	0138	1.5	4.9	23	0323	1.5	4.9
	0718	0.6	2.0		0800	0.3	1.0		0724	0.6	2.0		0843	0.3	1.0		0823	0.5	1.6		1005	0.5	1.6
FR	1259	1.5	4.9	SA	1326	1.5	4.9	SU	1323	1.5	4.9	MO	1432	1.6	5.2	WE	1435	1.6	5.2	TH	1553	1.7	5.6
VE	1945	0.9	3.0	SA	2034	0.6	2.0	DI	2004	0.9	3.0	LU	2125	0.5	1.6	ME	2113	0.6	2.0	JE	2251	0.4	1.3
9	0104	1.5	4.9	24	0137	1.6	5.2	9	0120	1.5	4.9	24	0244	1.5	4.9	9	0244	1.5	4.9	24	0429	1.5	4.9
	0811	0.7	2.3		0903	0.3	1.0		0817	0.6	2.0		0940	0.3	1.0		0913	0.5	1.6		1100	0.5	1.6
SA	1404	1.4	4.6	SU	1450	1.5	4.9	MO	1431	1.5	4.9	TU	1541	1.6	5.2	TH	1529	1.7	5.6	FR	1645	1.7	5.6
SA	2045	0.9	3.0	DI	2138	0.6	2.0	LU	2059	0.8	2.6	MA	2223	0.5	1.6	JE	2207	0.5	1.6	VE	2341	0.4	1.3
10	0208	1.5	4.9	25	0259	1.6	5.2	10	0227	1.5	4.9	25	0359	1.5	4.9	10	0353	1.5	4.9	25	0526	1.5	4.9
	0905	0.6	2.0		1003	0.3	1.0		0909	0.5	1.6		1035	0.4	1.3		1005	0.5	1.6		1153	0.5	1.6
SU	1526	1.5	4.9	MO	1612	1.6	5.2	TU	1538	1.6	5.2	WE	1636	1.7	5.6	FR	1619	1.8	5.9	SA	1731	1.7	5.6
DI	2140	0.8	2.6	LU	2239	0.5	1.6	MA	2151	0.7	2.3	ME	2318	0.4	1.3	VE	2302	0.3	1.0	SA			
11	0324	1.5	4.9	26	0421	1.6	5.2	11	0338	1.5	4.9	26	0500	1.5	4.9	11	0455	1.5	4.9	26	0027	0.3	1.0
	0959	0.6	2.0		1100	0.3	1.0		0959	0.5	1.6		1129	0.4	1.3		1059	0.4	1.3		0616	1.5	4.9
MO	1634	1.5	4.9	TU	1709	1.7	5.6	WE	1630	1.6	5.2	TH	1721	1.7	5.6	SA	1708	1.9	6.2	SU	1242	0.6	2.0
LU	2231	0.7	2.3	MA	2336	0.4	1.3	ME	2243	0.6	2.0	JE				SA	2356	0.2	0.7	DI	1814	1.7	5.6
12	0430	1.5	4.9	27	0523	1.6	5.2	12	0438	1.5	4.9	27	0008	0.3	1.0	12	0551	1.6	5.2	27	0109	0.3	1.0
	1050	0.5	1.6		1154	0.3	1.0		1049	0.4	1.3		0551	1.6	5.2		1154	0.4	1.3		0703	1.6	5.2
TU	1722	1.6	5.2	WE	1753	1.8	5.9	TH	1711	1.7	5.6	FR	1219	0.4	1.3	SU	1757	1.9	6.2	MO	1326	0.6	2.0
MA	2319	0.6	2.0	ME				JE	2333	0.4	1.3	VE	1802	1.7	5.6	DI			LU	1855	1.7	5.6	
13	0521	1.6	5.2	28	0029	0.3	1.0	13	0531	1.6	5.2	28	0053	0.3	1.0	13	0050	0.1	0.3	28	0147	0.3	1.0
	1138	0.4	1.3		0612	1.7	5.6		1137	0.4	1.3		0637	1.6	5.2		0644	1.7	5.6		0746	1.6	5.2
WE	1800	1.7	5.6	TH	1244	0.3	1.0	FR	1751	1.8	5.9	SA	1306	0.5	1.6	MO	1251	0.4	1.3	TU	1403	0.6	2.0
ME				JE	1834	1.8	5.9	VE				SA	1841	1.8	5.9	LU	1848	2.0	6.6	MA	1936	1.7	5.6
14	0005	0.5	1.6	29	0115	0.3	1.0	14	0023	0.2	0.7	29	0134	0.2	0.7	14	0143	0.0	0.0	29	0223	0.3	1.0
	0606	1.7	5.6		0657	1.7	5.6		0619	1.6	5.2		0721	1.7	5.6		0736	1.7	5.6		0827	1.6	5.2
TH	1221	0.3	1.0	FR	1328	0.3	1.0	SA	1225	0.3	1.0	SU	1347	0.5	1.6	TU	1348	0.3	1.0	WE	1435	0.7	2.3
JE	1835	1.7	5.6	VE	1912	1.8	5.9	SA	18														



NEXT DEADLINE

**21st of May for the June 2022 Issue
Send submissions to 'Newsletter', c/o NS Museum of Natural History,
or by email to hayderbyshire@gmail.com**