The Blue Bill

Quarterly Journal of the Kingston Field Naturalists

ISSN 0382-5655

Volume 68, No. 1 March 2021

Contents

2020/2021 Executive

Officers

Honorary President ..... Ron Weir

Immediate Past President ..... Anthony Kaduck

President ..... Kenneth Edwards

Vice-President ..... John Donihee

Recording Secretary ..... Janis Grant

Membership Secretary ..... Kathy Webb

Treasurer ..... Larry McCurdy

Members

Chair of the Kingston Junior Naturalists ..... Anne Robertson

Editor of The Blue Bill ..... Peter Waycik

Nature Reserves Chair ..... Erwin Batalla

Field Trips Chair ..... Carolyn Bonta

Bird Records Chair ..... Mark Read

Education Chair ..... Shirley French

Conservation Chair ..... Chris Hargreaves

Member at large ..... Janet Elliott

Member at large ..... Martin Roncetti

Member at large ..... Polly Aiken

Member at large ..... Jane Revell

To contact any member of the executive or for general inquiries about the Kingston Field Naturalists, please send an email to **info@kingstonfieldnaturalists.org**.

The Blue Bill is the quarterly journal (published March, June, September and December) of the **Kingston Field Naturalists**, P.O. Box 831, Kingston ON, K7L 4X6, Canada.

kingstonfieldnaturalists.org

Send submissions to the editor by the **FIRST** of the month of publication (i.e. the **1st** of March, June, September, or December) to

editor@thebluebill.ca

Submissions may be in any format. Equations should be in LaTeX. Please provide captions and credit information for photos.

Canadian Publications Mail Product Sales Agreement #047128

1 President's Preliminaries

by Ken Edwards

A year like no other.

It has been a full 12 months since COVID-19 changed the way we live our lives. The Kingston region has fared better than most of the province but physical distancing, lockdowns and the resulting social isolation have taken a toll on all of us.

The KFN has had to change the way we communicate, interact with each other and share our nature related activities. The end may be in sight but it still takes a powerful telescope to see it!

The changes are not all negative.

We can't meet face to face but the use of virtual meetings has expanded our pool of potential speakers, provided better quality images than can be produced by a projector, and has helped some of us become more comfortable in the digital world.

The Helen Quilliam Sanctuary crew, headed by Gaye Beckwith, has done extensive work in clearing/marking trails. New digital maps are expected soon.

Membership is up as travel is down and people are looking for new activities close to home.

If the region is able to remain in the COVID green zone we should be able to enjoy some of the local wildlife viewing opportunities that we were denied last spring. I am looking forward to the spring bird migration at Prince Edward Point! Unfortunately, we still won't be able to share telescopes with new birders. Nothing gets someone hooked on birding like a close up view of a male Scarlet Tanager in May.

2021 may or may not see the end of COVID-19 restrictions but it will definitely see the beginning of the third, 5 year long, Ontario Breeding Bird Atlas project. The Atlas is held every 20 years so it is likely the last one that older birders, like myself, will be participating in. I can't wait to pull out my smart phone, enter the location data for my destination, have it navigate me easily to my starting point, then record the bird sounds I hear for later review. Gone are the days of studying topographical maps on the side of the road to try and figure out were I am. Gone also are the days of hearing high frequency bird song, so the sound recording is essential!

You don't have to be an expert birder to participate so if you are interested you can contact Mark Read 'kingston@birdsontario.org' for the Kingston area or Nick Bartok at princeedward@birdsontario.org for the Prince Edward County area. The atlas website is birdsontario.org.

2 Kingston Region Birds—Autumn 2020 (August 1 to November 30)

by Mark D. Read

The KFN reporting area is centred on MacDonald Park, Kingston and extends for a radial distance of 50 km. An interactive map showing the KFN circle is available on the website. If errors are noted or significant observations omitted, please contact me and I will update accordingly. We also encourage you to submit all sightings, so that a better understanding of our region's birdlife can be achieved. Members already using eBird can very easily share their sightings with the username 'Kingston FN'. Alternatively, please email or phone me directly with your sightings (markdread@gmail.com / 613-217-1246). Please note the total below includes the following species that remain unconfirmed until accepted by the Rare Birds Committee: **Eared Grebe, 12 November,**

Amherst Island; Hudsonian Godwit, 6–22 October, Amherst Island; Hudsonian Godwit, 12–17 October, Wolfe Island; Pacific Loon, 29 October, Howe Island; Fish Crow, 3 September, Kingston; Bicknell's Thrush, 5 October, Prince Edward Point; Lark Sparrow, 24–25 October, Kingston; Connecticut Warbler, 19–20 September, Verona; Dickcissel, 5 October, Prince Edward Point.

In total, **259 species of bird** were recorded in our region during the reporting period, an increase of 9 over last year's autumn total. All observations were obtained from eBird.ca—17.92% of which were shared with the KFN account—a declining statistic. In total, 471 observers logged 6558 checklists, equating to 90 122 sightings, twice that of last year. Although the number of observers remained about the same, the stay-at-home/stay-local implications of COVID saw a huge increase in the number of checklists and sightings. As usual, an impressive number of individual birds (1 147 447) were recorded, though many of these were, of course, the same birds seen on subsequent days. A huge thank you goes out to every observer, without whom our understanding of bird distribution would be far more limited. Unfortunately, only observers with sightings in the current report are noted below.

The autumn of 2020 was fairly normal weatherwise but COVID had implications for where birders could visit with a noted increase in local records being submitted. With a positive winter finch forecast for 2020/21, it must be said that we were not disappointed in the region. With water levels more typical (lower) than has been the case for the last couple of seasons, more shorebird habitat was available, and this is also reflected in the diversity encountered this year. Here are the highlights of autumn 2020:

Snow Goose: It wasn't a great season for this species. The first returning bird was reported from Kingston's Penitentiary Farm on 12 September (EDB)—it then continued in that general location well into November. The 'largest' flock this season was just 5 birds seen near Waupoos, Prince Edward, on 29 October (DaS).

Ross's Goose: An adult bird was seen on Wolfe Island from 22–26 November (PaM, KSB), when it was shot by hunters.

Greater White-fronted Goose: A single bird was seen flying into Button Bay, Wolfe Island on 5 October (MDR), with an additional 2 birds seen at the Invista plant, Kingston, just an hour later (KFN).

Brant: The first birds of the season (70) were seen in Kingston on 8 October (NAK). The last bird was seen on Amherst Island on 13 November (NiS, ToB), with a high count of 240 near Marble Rock on 22 October (BON).

Cackling Goose: The first observation of this species came from Cataraqui Bay, Kingston, on 9 October. A high count of 20 seen on Wolfe Island's north shore on 24 November actually consisted of several smaller flocks (SEH).

Mute Swan: Numbers of this invasive species continue to increase in our area with a high count of 187 at Carpenter's Point Road, Wolfe Island, on 20 September (AEK, MiL).

Trumpeter Swan: A high count of 59 was received from Black Rapids on 5 November (BON, JET).

Tundra Swan: The first returning birds (3) were seen at Staley's Point, Wolfe Island, on 3 October (MDR). A high count of 375 birds was made at Three Mile Bay, NY on 27 November (StK).

Blue-winged Teal: There were 134 observations this autumn (compared with 43 last year), with an impressive high of 200 at Amherstview Sewage Lagoons on 18 September (CJG). The last bird of the season was seen on the K&P Trail, just north of Kingston at Bur Creek, on 6 November (PhH).

Eurasian Wigeon: A female-type was seen at the Invista pond, Kingston, on 15 November (ChA, AlS).

Canvasback: It was another poor season though the 10 observations were widespread. High counts of 3 apiece came from Bayfield Bay, Wolfe Island, on 12 October (MDR), and Invista, Kingston, on 15 November (ChA, AlS).

Redhead: A coordinated survey of Wolfe Is-

land on 7 November produced a total of 10 100 birds, approximately 1.7% of the global population (MDR).

Ring-necked Duck: This year's high count of 1800 was very impressive and came from Little Cataraqui Creek CA, Kingston, on 10 November (PhH).

Black Scoter: There were 14 records this season, with a high count of 20 birds seen at Three Mile Bay, NY, on 21 November (KeR).

Ruddy Duck: It was a reasonable year for the species with just 52 records. A high count of 13 was made at Cataraqui Bay, Kingston, on 23 October (LaM, JET).

Ring-necked Pheasant: All Ontario sightings of this species came from Amherst Island, with a high count of 3 seen on 11 November (ToB, NiS).

Pied-billed Grebe: A high count of 9 was noted at Cataraqui Bay, Kingston, on 9 October (CoG).

Horned Grebe: The first bird of the season was seen at Cape Vincent, NY, on the early date of 6 September (MoW). A season high of 72 was made on Amherst Island on 12 November (AlB, JPR).

Red-necked Grebe: There were 23 sightings this season, with a high count of 3 birds seen on Amherst Island on 9 October (JCG, NAK, JoL, VPM).

Common Nighthawk: Numbers were again much lower this year than is typical with a high count of 32 birds seen at Amherstview on 23 August (BER). A very late bird was seen at Ellisville on 7 November (WKR).

Sandhill Crane: There were 32 records this season—an increasing trend. A very impressive tally of 200 was made at Napanee on 21 November (AdG).

American Golden Plover: There were 19 reports this autumn—much better than in recent years; the first bird was seen on Wolfe Island on 12 September (BrL, JeN), with a high of just 2 at Martin Edwards Reserve, Amherst Island on 1 October (BER).

Ruddy Turnstone: There were 9 records this season; the first was seen on False Duck Island on 22 August (MJP); all further records were of single birds at Martin Edwards Reserve, Amherst Island, where the last was seen on 23 October (NiB).

Red Knot: A single bird was seen briefly at Amherstview Sewage Lagoons on 24 August (BER et al).

Stilt Sandpiper: The first bird was seen at Perch River WMA, NY, on 8 August (Alc, SaD). Another individual stayed at Amherstview Sewage Lagoons for the day of 29 August (BER et al), with a third bird back at Perch River WMA, on 3 September (StK).

Baird's Sandpiper: There were several sightings in Jefferson County, NY, but the only Ontario bird was seen at False Duck Island on 22 August (MJP).

White-rumped Sandpiper: A single bird was present at Martin Edwards Reserve, Amherst Island, from 22–25 September (CJG, KJH et al); with a single at Cataraqui Bay, Kingston, on 28 October (LuB, MaT); 2 at Prince Edward Point on 2 November (MeB, BlD); and 1 at Belle Park, Kingston, on 2 November (MDR).

Pectoral Sandpiper: There were 39 records this season, compared to last year's 9. Eight birds were seen together at Perch River WMA, NY, on 19 September (BrM).

Long-billed Dowitcher: A long-staying individual was present at Martin Edwards Reserve, Amherst Island, from 9–18 October (JCG, NAK, JoL, VPM et al), with another seen at Button Bay, Wolfe Island, on 2 October (MDR).

Red-necked Phalarope: An immature bird was present at Amherstview Sewage Lagoons on 8 and 9 September (KSB, KJH et al). Two birds seen at Marshlands CA, Kingston, on 13 September were presumed to be this species but were too distant to be 100% certain (EDB).

Black-legged Kittiwake: An immature was photographed at Tibbett's Point, NY, on 15 October

(StK).

Little Gull: An adult bird was seen at Adolphustown on 19 October (BER).

Lesser Black-backed Gull: A second-year bird was seen at Kingston Mills on 11 October (CoG), with a bird of undocumented age at the Invista ponds, Kingston, on 6 November (EDB, JaR).

Glaucous Gull: The first (and only) bird of the autumn was seen on Amherst Island on 25 November (TiS). There were no reports of Iceland Gull during this period.

Red-throated Loon: There were just 8 records, all of single birds.

Least Bittern: There were 8 autumn records with the last coming from Belle Island, Kingston, on 10 September (VaS).

Cattle Egret: A single bird stayed for the day at Finkle's Shore, Bath, on 17 October (BrL, JeN).

Osprey: The last bird of the year was seen on 22 October at Devil Lake (JeL).

Golden Eagle: There were 11 records this season from 6 locations, though, as usual, Prince Edward Point had the majority of observations. High counts of just two came from Prince Edward Point on both 14 October and 2 November (MeB, BlD).

Northern Goshawk: There were 18 reports during the season from a range of locations.

Red-shouldered Hawk: The last record of this species was from Davis Lock on 14 November (WTD, KAW).

Broad-winged Hawk: The last report of this species came from Prince Edward Point where 1 was seen on 3 October (KeG).

Rough-legged Hawk: The first bird of the season was seen on Amherst Island on 12 October (JoL). A high of 45 was seen there on 13 November (ToB, NiS).

Snowy Owl: The first occurrence of a poor season was seen on Amherst Island on 4 November (BoL).

Long-eared Owl: A single bird was present at a private location in Amherstview from 9 October to 9 November (NiB). Another bird was seen on Amherst Island on 10 November (BLB).

Northern Saw-whet Owl: Unfortunately, we again have no data from Prince Edward Point this year, though banding did take place as normal (without visitors). eBird reports do suggest some good results with 49 banded on the night of 12 October (PEPtBO).

Red-headed Woodpecker: The majority of the 8 reports came from Frontenac Provincial Park where 3 were seen on 4 October (MAJ, TAN).

Olive-sided Flycatcher: There were 21 records this autumn with the last being noted at Collin's Bay, Kingston, on 15 September (EDB).

Yellow-bellied Flycatcher: There were an impressive 99 records this year (just 15 last season), with 6 birds banded on a single morning at Prince Edward Point on 19 August (BlD).

Loggerhead Shrike: The last sighting of birds (4) from the known breeding location of Napanee Plain IBA was on 5 August (KGDB).

Tufted Titmouse: There were 35 records this season compared to the 3 of last year. The majority came from the US side of the circle but 4 birds were seen in Ontario: 1 near the eastern terminal of the Howe Island ferry on 29 October (SHE, GJP); 1, Howe Island, 7 November (SED, PeW); 1, Gananoque, 9 November (JET); and 1, Newboro, 12 November (TeS).

Sedge Wren: A single bird was seen at Marble Rock on 19 October (BON), a full month later than the average departure date of this elusive species.

Carolina Wren: There were 38 widespread observations this season, compared to the 7 of last year. Whether this is a genuine range expansion is unclear but the species certainly 'feels' more common, particularly within Kingston itself.

Northern Mockingbird: One to two birds continued on Front Road at Lemoine Point CA, Kingston through to 10 November (KFN). Other birds were

seen at Big Sandy Bay, Wolfe Island, on 14 August (BCB); Amherst Island 10 September (ShJ); Gananoque Waterfront Trail on 23 September (NLB); and again, on Amherst Island on 9 November (DSJ).

Grey-cheeked Thrush: A remarkable 55 records were received this season (compared to 8 last year). About half of these records came from Prince Edward Point.

Bohemian Waxwing: A single bird was seen at Bedford Mills on 30 October (LJN); another single was at Prince Edward Point on 31 October (BlD, PaJ); and 20 were at Gananoque on 17 November (LeF, JoV).

Evening Grosbeak: The first of the 165 records received this season were seen at Amherstview on 28 August (NiB). A high count of 50 was seen at Prince Edward Point on 27 October (BlD, PaJ).

Pine Grosbeak: The first of 24 records was a single bird near Verona on 7 November (TAN). Six birds were seen at Bur Brook Road, just north of Kingston, on 24 November (PRM).

Common Redpoll: There were clear signs of an influx into the region with 277 records received; the first (1) being encountered at Prince Edward Point on 24 October (JoL).

Hoary Redpoll: Along with the Common Redpolls came this species too, the first of which was seen at Big Sandy Bay, Wolfe Island, on 5 November (MDR).

Red Crossbill: Birds were already in the area in August with several sightings noted at various locations. A high count of 25 was noted on the Cataraqui Trail at Sydenham Lake on 22 October (TAN).

White-winged Crossbill: As with Red Crossbills, birds were already in the area by August but the high count (of the 24 records received) came from Amherst Island, where 30 were seen on 29 November (BGB).

Pine Siskin: There was an impressive flight of this species through the area (381 records), with a high count of 180 noted at Prince Edward Point on 22 October (BlD).

Lapland Longspur: Good numbers were seen at the start of the season but then dropped off. Twenty-three birds were seen at Martin Edwards Reserve, Amherst Island on 9 October (JCG, NAK, JoL, VPM), with a high of 30 seen on Wolfe Island on 4 November (MDR).

Clay-coloured Sparrow: The last bird of the season was seen at Marshlands CA, Kingston, on 28 September (JeL).

Nelson's Sparrow: A single bird was seen at Martin Edwards Reserve, Amherst Island, on 27 September (KJH), with 2 seen there the following day (VPM, PeW). Another bird was seen at Staley's Point, Wolfe Island, on 4 October (MDR).

Orchard Oriole: The only record during this period was of a single bird seen at Martin Edwards Reserve, Amherst Island, on 18 August (VPM).

Rusty Blackbird: The largest flock of the season (80) was seen at Charleston Lake on 22 October (VPM).

Orange-crowned Warbler: There were 31 records this autumn, with the first seen at Amherstview on 28 August (NiB), just 4 days later than the record early date for this species. The last sighting was at Marshlands CA, Kingston, on 28 October (KJH).

Mourning Warbler: Four of the 8 records came from Prince Edward Point.

Cerulean Warbler: The only record was of a male at Charleston Lake Provincial Park on 19 August (Anonymous).

Palm Warbler: A number of the eastern or yellow subspecies were noted this year including 1 at Prince Edward Point on 5 October (BlD); 1 at Robert G. Wehle SP, NY, on 11 October; 1 at Prince Edward Point, 24 October (BlD); and 1, Bur Brook Road, 25 October (PRM).

Prairie Warbler: A single bird was seen at Robert G. Wehle SP, NY, on 28 August (RaS).

Summer Tanager: A female-type was seen on

Amherst Island on 29 November (JCG, VPM).

Other species observed during the reporting period: Canada Goose, Wood Duck, Northern Shoveler, Gadwall, American Wigeon, Mallard, American Black Duck, Northern Pintail, Green-winged Teal, Greater Scaup, Lesser Scaup, Surf Scoter, White-winged Scoter, Long-tailed Duck, Bufflehead, Common Goldeneye, Hooded Merganser, Common Merganser, Red-breasted Merganser, Ruffed Grouse, Wild Turkey, Rock Pigeon, Mourning Dove, Yellow-billed Cuckoo, Black-billed Cuckoo, Eastern Whip-poor-will, Chimney Swift, Ruby-throated Hummingbird, Virginia Rail, Sora, Common Gallinule, American Coot, Black-bellied Plover, Semipalmated Plover, Killdeer, Upland Sandpiper, Sanderling, Dunlin, Least Sandpiper, Semipalmated Sandpiper, Short-billed Dowitcher, American Woodcock, Wilson's Snipe, Spotted Sandpiper, Solitary Sandpiper, Greater Yellowlegs, Lesser Yellowlegs, Bonaparte's Gull, Ring-billed Gull, Herring Gull, Great Black-backed Gull, Caspian Tern, Black Tern, Common Tern, Common Loon, Double-crested Cormorant, American Bittern, Great Blue Heron, Great Egret, Green Heron, Black-crowned Night-Heron, Turkey Vulture, Northern Harrier, Sharp-shinned Hawk, Cooper's Hawk, Bald Eagle, Red-tailed Hawk, Eastern Screech-Owl, Great Horned Owl, Barred Owl, Short-eared Owl, Belted Kingfisher, Yellow-bellied Sapsucker, Red-bellied Woodpecker, Downy Woodpecker, Hairy Woodpecker, Pileated Woodpecker, Northern Flicker, American Kestrel, Merlin, Peregrine Falcon, Eastern Wood-Pewee, Alder Flycatcher, Willow Flycatcher, Least Flycatcher, Eastern Phoebe, Great Crested Flycatcher, Eastern Kingbird, Yellow-throated Vireo, Blue-headed Vireo, Philadelphia Vireo, Warbling Vireo, Red-eyed Vireo, Northern Shrike, Blue Jay, American Crow, Common Raven, Black-capped Chickadee, Horned Lark, Northern Rough-winged Swallow, Purple Martin, Tree Swallow, Bank Swallow, Barn Swallow, Cliff Swallow, Golden-crowned Kinglet, Ruby-crowned Kinglet, Red-breasted Nuthatch, White-breasted Nuthatch, Brown Creeper, Blue-grey Gnatcatcher, House Wren, Winter Wren, Marsh Wren, European Starling, Grey Catbird, Brown Thrasher, Eastern Bluebird, Veery, Swainson's Thrush, Hermit Thrush, Wood Thrush, American Robin, Cedar Waxwing, House Sparrow, American Pipit, House Finch, Purple Finch, American Goldfinch, Snow Bunting, Grasshopper Sparrow, Chipping Sparrow, Field Sparrow, American Tree Sparrow, Fox Sparrow, Dark-eyed Junco, White-crowned Sparrow, White-throated Sparrow, Vesper Sparrow, Savannah Sparrow, Song Sparrow, Lincoln's Sparrow, Swamp Sparrow, Eastern Towhee, Bobolink, Eastern Meadowlark, Baltimore Oriole, Red-winged Blackbird, Brown-headed Cowbird, Common Grackle, Ovenbird, Northern Waterthrush, Golden-winged Warbler, Blue-winged Warbler, Black-and-white Warbler, Tennessee Warbler, Nashville Warbler, Common Yellowthroat, American Redstart, Cape May Warbler, Northern Parula, Magnolia Warbler, Bay-breasted Warbler, Blackburnian Warbler, Yellow Warbler, Chestnut-sided Warbler, Blackpoll Warbler, Black-throated Blue Warbler, Pine Warbler, Yellow-rumped Warbler, Black-throated Green Warbler, Canada Warbler, Wilson's Warbler, Scarlet Tanager, Northern Cardinal, Rose-breasted Grosbeak, Indigo Bunting.

Observers: Christian Artuso (ChA), Bonnie L. Bailey (BLB), Nick Bartok (NiB), Erwin D. Batalla (EDB), Tony Beck (ToB), B. Gaye Beckwith (BGB), Alison Bentley (AlB), Luke Berg (LuB), North Leeds Birders (NLB); Kevin S. Bleeks (KSB), Bruce and Christine de Boer (BCB), Began Buers (MeB), Ken G. D. Burrell (KGDB), Alex Cook (AlC), Sharon E. David (SED), William T. Depew (WTD), Blair Dudeck (BlD), Sarah Dzielski (SaD), Lev Frid (LeF), Cole Gaerber (CoG), Ketha Gillespie (KeG), Janis C. Grant (JCG), Adam Gray (AdG), Chris J. Grooms (CJG), Stew Hamill (SEH), Phil Harvey (PhH), Kurt J. Hennige (KJH), Sherri Jensen (ShJ), Michael A. Johnson (MAJ), Paul Jones (PaJ), N. Anthony Kaduck (NAK), Andrew Keaveney (AEK), Steve Kelling (StK), Brenda Leduc (BrL), Jesse Lewis (JeL), John Licharson (JoL), Bonnie Livingstone (BoL), Michelle Locke (MiL), V. Paul Mackenzie (VPM), Lana Marion (LaM), Paul R. Martin (PRM), Paul McElligott (PaM), Brian Miller (BrM), Kingston Field Naturalists (KFN), Jenny Newton (JeN), Todd A. Norris (TAN), Linda J. Nuttall (LJN), Prince Edward Point Bird Observatory (PEPtBO), Barbara O'Neill (BON), Mark J.

Patry (MJP), Mark D. Read (MDR), Wallace and Karen Rendell (WKR), Jane Revell (JaR), Bruce E. Ripley (BER), Jon P. Ruddy (JPR), Ken Rosenberg (KeR), Tina Sawicki (TiS), Dave Shannon (DaS), Vanessa Skelton (VaS), Raymond Spahn (RaS), Nina Stavlund (NiS), Diane St Jacques (DSJ), Ted Stewart (TeS), Alex Stone (AlS), James E. Thompson (JET), Matthew Tobey (MaT), Josh Vandermeulen (JoV), Morgan Walker (MoW), Peter Waycik (PeW), Kathy Webb (KAW).

3 Fall Round-up 2020 Continued

by Erwin Batalla

During the Fall Round-up, thirty-two unusual species were observed. The report, published in the last Blue Bill, showed pictures of eight of these, photographed during the weekend of Nov 6. We asked the membership to send us pictures, taken during 2020 in the Kingston area, of the remaining twenty-four species. The pictures of eleven species submitted by Phil Harvey (SNGO, BWTE, TUVU, CAWR, GRCA, PIGR, SASP), Anthony Kaduck (RCKI), Judy Olacke (CONI) and Gaye Beckwith (WWSC, WWCR) are shown below.

Figure 1: Pine Grosbeak. (Phil Harvey)

Figure 2: Grey Catbird. (Phil Harvey)

Figure 3: Savannah Sparrow. (Phil Harvey)

Figure 4: Snow Goose. (Phil Harvey)

Figure 5: Blue-winged Teal. (Phil Harvey)

Figure 6: White-winged Crossbill. (Gaye Beckwith)

Figure 7: Common Nighthawk. (Judy Olacke)

Figure 8: Ruby-crowned Kinglet. (Anthony Kaduck)

Figure 9: White-winged Scoter. (Gaye Beckwith)

Figure 10: Turkey Vulture. (Phil Harvey)

Figure 11: Carolina Wren. (Phil Harvey)

4 75th Mid-Winter Waterfowl Inventory (2021)

by Mark D. Read

The Mid-Winter Waterfowl Inventory (MWWI) is carried out throughout North America. In Canada, a coordinated ground survey of Lake Ontario typically takes place on the first Sunday during the period 6-12 January. Typically, Canadian Wildlife Service (CWS) offshore aerial data is then added to the shoreline ground counts to form the final Lake Ontario count. Due to COVID-19 restrictions, the aerial survey was not conducted this year. These data get added to the other lower Great Lakes to form the Ontario contribution to the Mississippi Flyway totals. These numbers are then used in waterfowl management decisions on a continent-wide basis (habitat restoration, research direction, bag limits etc.).

An incredible 41 observers (22 on Amherst alone) surveyed the Kingston region, all the way from Ivy Lea to Prince Edward Point and the Bay of Quinte, as well as north along the Rideau Canal towards Westport. In total, these observers logged nearly 44 hours of effort. The day was overcast with temperatures averaging roughly $-5\,°C$. Visibility was generally good but Prince Edward County was enshrouded by heavy fog and the count there was severely affected. Most of the inland waterways were frozen, as was the north shore of Wolfe Island and the Bay of Quinte. Lake Ontario itself remained open. Participants were Cheryl Anderson, Ethan Bartok, Nick Bartok, Erwin Batalla, Sally Bowen, Richard Brault, Dianne Croteau, Sharon David, Stephanie Davison, Bill Depew, Sharen English, Ken Edwards, Peter Fuller, George Gavlas, Ida Gavlas, Dayle Gowan, Kayleigh Graham, Chris Heffernan, Kurt Hennige, Paul Jones, Anthony Kaduck, Richard LaPointe, Fred Lemire, Bonnie Livingstone, Richard Lott, Darlene Martin-Stuart, Julie McKee-Grabell, Jenny Newton, Diane Pearce, Nancy Pearson, David Pickering, Mark Read, Emma Showalter, Kathy Showalter, Amanda Roncetti, Martin Roncetti, Alex Scott, Janet Scott, Wendy Shelley, Kathy Webb, and Peter Waycik. Sincere thanks go to all participants.

Table 1 shows results of the ground survey for the Kingston area. In total, 23 132 individuals were counted of 23 species (a direct comparison with previous years is not possible due to the lack of aerial data). A few long-staying dabblers were missed on the day of the count including Green-winged Teal, Northern Pintail and Northern Shoveler. A great showing of 35 Bald Eagles compared to the 10 of last year was encouraging, though still short of the 52 seen in 2019. Since this species relies somewhat on ice cover concentrating food sources, these numbers do make sense in that in 2019, Lake Ontario was frozen, in 2020 it was open,

and in 2021 it was partially frozen. These results were then submitted to the Lake Ontario compiler (Glenn Coady) who then returned the overall data found in Table 2. Areas surveyed along Lake Ontario from east to west were Kingston, Quinte, Presqu'ile, Port Hope, Durham, Toronto, Hamilton and Niagara.

As noted by Glenn,

> "We now have an unbroken string of 75 years of data collection to benefit the management of the waterfowl that we all cherish. We have upheld a tradition into its ninth decade now and founders like Ott Devitt, Jim Baillie and Murray Speirs would certainly be most gratified that the count they began has so faithfully endured.
>
> Our data are added to those from the entire Mississippi Flyway to give a very statistically robust assessment of waterfowl population patterns. These data are used to determine bag limits for hunting, to decide on priorities for limited research dollars, to decide on land acquisition priorities for wintering duck habitat, and to assess geographic shifts in wintering numbers of waterfowl in response to climate change. Along with Christmas Count and Breeding Bird Survey data it is some of the most practical citizen science data generated each year.
>
> The 75 Lake Ontario Mid-Winter Waterfowl Inventory has been perhaps our most successful ever. Our 117 participants and 215.6 party-hours rival our very best years, so clearly enthusiasm is high despite the pandemic. And it would appear that EVERY route/sector had highlight birds this year. The 185.000+ waterfowl we counted was the best since 2015, despite the fact that we know our Aythya duck totals were missing ducks still found on the fully open lakes Erie. Simcoe and St. Clair back on January 10.

This year we set records for species diversity. Lake-wide, the incredible total of 42 species observed this year bested the totals of 40 seen in both 2000 and 2019.

New all-time for the count was the long-staying juvenile Pacific Loon in Hamilton Harbour. This is the 49 species found for the count all-time. It would seem we will soon reach the 50 species plateau. Will it be a new goose, duck, loon, grebe or cormorant?

After being recorded on the count for the first time with a lone bird last year, Hamilton and Kingston combined to provide a new record high count for Ross's Goose this year.

The Rouge River to Whitby Harbour route had their best year ever for species diversity, with all three swans, all three scoters, four Snow Geese, and the lone Greater White-fronted Goose and Barrow's Goldeneye for the count!

The Hamilton counters had one of their best years ever, with an impressive 33 species, and saw an incredible 139 Black Scoters, pushing us to a new record high count for the species, besting even the early years of the zebra mussel invasion.

The total of 424 Trumpeter Swans sets a new record high for the count. And the tilt of the numbers to the eastern sectors now has the number of Mute Swans once again threatening to set a record high count in future years.

After bemoaning last year the ongoing decline of American Black Duck numbers to a record low 299, they staged an impressive comeback to 701 birds, with some recorded on every route and sector.

To put things into perspective, one need only look to the 7 count on January 13, 1952, when the teams who covered the original seven routes from Bronte Harbour to Whitby Harbour found a record low 8 species! We are certainly around in a time of bounty.

What started as a post-war initiative suggested by Ott Devitt to honour the success of the Francis H. Kortright and Terry Shortt book on the *Ducks, Geese and Swans of North America*, has grown mightily since that first count in 1947, when just 3502 birds of 10 species were counted! This year we have counted 53 times that many waterfowl and more than 4 times that number of species. The founding counters would be gobsmacked to see where their initiative has led."

Next year's ground survey is scheduled to take place on **Sunday, 9 January**. Please contact markdread@gmail.com if interested in taking part.

Table 1: Ground survey results for the Kingston area.

	StL	HI	WI	King	AI	Bath	CP	Bv	PN	Rid	Totals
Snow Goose	-	-	-	-	1	-	-	-	-	-	**1**
Ross's Goose	-	1	-	-	-	-	-	-	-	-	**1**
Canada Goose	170	1417	2978	1462	455	1331	300	146	260	321	**8840**
Mute Swan	36	236	56	115	84	39	-	18	-	23	**607**
Trumpeter Swan	-	-	-	-	-	-	-	-	-	80	**80**
Tundra Swan	-	27	127	19	14	-	48	-	-	-	**235**
Wood Duck	-	-	-	-	-	-	-	-	1	-	**1**
Gadwall	-	-	-	177	-	-	-	-	-	-	**177**
American Wigeon	-	-	-	1	-	-	-	-	-	-	**1**
Mallard	126	246	366	1367	197	76	12	274	147	12	**2823**
American Black Duck	-	12	197	15	-	1	-	1	10	-	**236**
Canvasback	-	-	-	2	-	-	-	-	-	-	**2**
Redhead	-	-	4	50	-	-	-	-	-	-	**54**
Ring-necked Duck	-	-	-	101	-	-	-	-	-	1	**102**
Greater Scaup	-	-	78	1086	28	-	-	-	-	-	**1192**
Lesser Scaup	-	2	-	-	-	-	-	-	-	-	**2**
White-winged Scoter	-	-	-	-	-	-	32	-	-	-	**32**
Long-tailed Duck	-	2030	210	37	28	1	338	-	-	-	**2644**
Bufflehead	-	2	26	8	11	-	15	-	-	1	**63**
Common Goldeneye	6	13	574	134	350	136	67	8	-	-	**1288**
Hooded Merganser	-	3	-	66	-	-	-	-	-	1	**70**
Common Merganser	108	3061	60	150	38	1	-	-	-	9	**3427**
Red-breasted Merganser	-	28	887	118	58	125	27	-	-	3	**1246**
Goose sp.	-	-	-	-	-	2	-	-	-	-	**2**
Swan sp.	-	-	-	-	-	2	-	-	-	-	**2**
Scaup sp.	-	-	-	6	-	-	-	-	-	-	**6**
Species = 23	5	13	12	17	11	10	8	5	4	9	**23122**
Bald Eagle	2a	7a, 7i	4a, 1i	2x 1i	5x	-	1i	-	-	2a, 3i	**35**

Key: StL = 1000 Island Bridge west to Howe Island; HI = Howe Island; WI = Wolfe Island; King = Treasure Island to Collin's Bay; AI = Amherst Island; Bath = Amherstview to Glenora Ferry; CP = NE and SE peninsulas of Prince Edward County from Glenora ferry to Cressy, Waupoos, Black Creek, South Bay and on to PEPT; Bv = Belleville north and south shores of Bay of Quinte east to Hwy 49 and west to (but not including) Trenton; PN = Bay of Quinte east of Hwy 49 bridge, including Picton, Napanee and Hay Bay; Rid = Kingston Mills north to Jones Falls, and including Bedford Mills. For Bald Eagles, 'a' indicates an adult, 'I' is an immature and 'x' is unknown/unrecorded. The species count of 23 does not include 'sp.' such as Goose sp. etc.

Table 2: Results of ground surveys for Lake Ontario by region (east to west).

Species	Kingston	Quinte	Presqu'ile	Port Hope	Durham	Toronto	Hamilton	Niagara	Total
Red-throated Loon	-	-	-	-	1	1	-	-	**2**
Pacific Loon	-	-	-	-	-	-	1	-	**1**
Common Loon	-	1	-	-	2	1	10	5	**19**
Pied-billed Grebe	-	-	-	-	-	-	3	1	**4**
Horned Grebe	-	-	-	-	-	2	4	-	**6**
Red-necked Grebe	-	-	-	-	-	2	3	1	**6**
Double-crested Cormorant	-	-	-	-	-	2	15	33	**50**
Tundra Swan	235	41	-	-	-	4	-	-	**280**
Trumpeter Swan	80	5	16	-	3	221	99	-	**424**
Mute Swan	607	498	469	-	76	337	73	4	**2064**
Greater White-fronted Goose	-	-	-	-	-	1	-	-	**1**
Snow Goose	1	-	-	1	-	4	-	-	**6**
Ross's Goose	1	-	-	-	-	-	2	-	**3**
Canada Goose	8840	4136	1091	3885	4008	16371	2998	597	**41926**
Cackling Goose	-	-	-	-	-	3	1	-	**4**
Wood Duck	1	-	-	-	-	6	-	-	**7**
Green-winged Teal	-	-	-	-	-	3	-	-	**3**
American Black Duck	236	11	7	48	38	221	92	48	**701**
Mallard	2823	-	-	970	595	6579	4128	583	**15678**
Northern Pintail	-	-	-	-	-	4	1	-	**5**
Northern Shoveler	-	-	-	-	-	2	4	8	**14**
Gadwall	177	-	-	-	27	587	41	13	**845**
American Wigeon	1	-	-	-	-	71	-	7	**79**
Canvasback	2	-	1	-	-	4	167	8	**182**
Redhead	54	65	394	-	-	3494	82	41	**4130**
Ring-necked Duck	102	-	1	-	-	2	63	-	**168**
Greater Scaup	1192	50	343	483	5201	12839	636	814	**21558**
Lesser Scaup	2	-	2	-	-	50	55	-	**109**
King Eider	-	-	-	-	-	-	9	-	**9**
Harlequin Duck	-	-	-	-	-	3	-	-	**3**

Species	King-ston	Quin-te	Pres-qu'ile	Port Hope	Dur-ham	Tor-onto	Ham-ilton	Niag-ara	Total
Long-tailed Duck	2644	3808	5271	163	962	13689	34015	2488	**63040**
Black Scoter	-	-	-	-	-	3	139	1	**143**
Surf Scoter	-	-	-	-	-	8	314	2	**324**
White-winged Scoter	32	25	9	-	-	192	4202	1623	**6083**
Common Goldeneye	1288	208	852	722	1746	4360	4054	574	**13804**
Barrow's Goldeneye	-	-	-	-	-	1	-	-	**1**
Bufflehead	63	14	17	20	160	975	552	87	**1888**
Hooded Merganser	70	-	2	-	1	20	75	1	**169**
Common Merganser	3427	-	-	21	16	176	1092	481	**5213**
Red-breasted Merganser	1246	47	135	169	492	1667	580	681	**5017**
Ruddy Duck	-	-	-	-	-	1	376	-	**377**
American Coot	-	-	-	-	-	5	61	-	**66**
Canvasback x Redhead	-	-	-	-	-	-	1	-	**1**
Mallard x Gadwall	-	-	-	-	-	-	1	-	**1**
Mallard x American Wigeon	-	-	-	-	-	1	-	-	**1**
Mallard x Northern Pintail	-	-	-	-	-	1	-	-	**1**
Mallard X Black Duck	-	-	-	2	-	10	4	-	**16**
Scaup sp.	6	-	-	-	-	-	20	-	**26**
Duck sp.	-	-	-	120	-	3	360	1	**484**
Goose sp.	2	-	-	-	-	-	-	-	**2**
Swan sp.	2	25	-	-	-	1	-	-	**28**
waterfowl sp.	-	-	-	-	-	-	500	-	**500**
Total Birds	23134	8934	8610	6604	13328	61927	54833	8102	**185472**
Total Species	23	13	15	10	15	38	33	23	**42**
Participants	41	1	7	3	5	23	23	14	**117**
Party-hours	43.75	9	25	7.5	15.5	63.75	28.6	22.5	**215.6**
Bald Eagle	35	4	-	2	-	7	-	3	**51**

5 Kingston and Area Christmas Bird Counts

by Kathy Webb

Despite some restrictions due to COVID-19, the 121st Audubon Christmas Bird Count (CBC) was successfully completed in this region! All CBCs take place within a fixed 24 km diameter circle on a single day between December 14 and January 5 (More Info). The Kingston count always falls on the first Sunday within that time frame: the recent count took place on Sunday, December 20, 2020 and the next count will take place on Sunday, December 19, 2021. Kingston's first CBC was held in 1948. Other CBCs established within the KFN birding area include: Moscow (1964), Westport (1964), Napanee (1965), Thousand Islands (1974), Prince Edward Point (1977), Amherst Is-

land (1990), Delta (2000), Gananoque (2014) and Frontenac (2015). Thank you to the coordinators/compilers of this year's local counts: Kathy Webb and Bill Depew, Kingston; Bonnie Bailey, Moscow; Wendy Briggs-Jude, Westport; Kurt Hennige, Gananoque and Napanee; Josh Van Wieren, Thousand Islands; Peter Fuller, Prince Edward Point; Janet Scott, Amherst Island; Jim Thompson, Delta; and Carolyn Bonta and Michael Johnson, Frontenac.

All counts were conducted in a COVID-safe manner and complied with public health guidelines. A total of 262 birders in the field and 212 feeder-watchers took part in the 10 counts within the KFN birding area. They contributed a cumulative total of 962 hours, drove over 4500 km and walked more than 400 km to tally 93 768 birds and 114 species. As always, the continued efforts of everyone involved in the local counts are greatly appreciated.

Table 3 shows some statistics for the ten counts held within our area. Participation was highest for the Kingston, Amherst Island and Frontenac circles. A record number of backyard feeder watchers took part in the Kingston CBC this year, with a good number in the Westport and Frontenac counts as well. Temperatures hovered at or below zero for most of the local counts with a general lack of significant precipitation except for the Kingston count's full day of rain and snow. For most counts, there was very little snow cover and there was little ice on the main large bodies of water. However, shallow and inland bodies of water were mostly frozen, thereby impacting the diversity and numbers seen in several counts.

Table 3: Overall statistics for the Kingston area 2020 Christmas Bird Counts

	ONKG	ONWE	ONNA	ONTI	ONPE	ONAI	ONDE	ONGQ	ONFR	ONMS
	20-Dec	14-Dec	27-Dec	18-Dec	19-Dec	02-Jan	16-Dec	23-Dec	19-Dec	2-Jan
Species	79	44	65	66	63	63	47	66	55	36
Birds	24211	4575	15339	8527	12173	7049	3810	10143	5349	2592
Participants: field + feeder	52 + 136	16 + 22	20 + 9	18 + 8	19 + 1	38 + 8	13 + 1	21 + 6	44 + 19	21 + 2
Low °C	-1	-2	-8	-15	-4	-3	-15	-4	-7	-4
High °C	3	0	-2	-3	2	4	-10	3	1	2
Wind, km/hr	20-45	0	0-5	0	5-9	5-20	0-20	4-15	19-24	0-10
Rain/Snow	Light rain & snow	Light snow	None	None	None	None	None	None	None	None
Sun/Cloud	Cloudy	Partly cloudy	Partly cloudy	Clear	Cloudy	Partly cloudy	Cloudy	Cloudy	Cloudy	Partly cloudy

ONKG= Kingston, ONWE= Westport, ONNA= Napanee, ONTI= Thousand Islands, ONPE= Prince Edward Point, ONAI= Amherst Island, ONDE= Delta, ONGQ= Gananoque, ONFR= Frontenac, ONMS= Moscow

Table 4 provides species counts and averages over the last 15 years. On average across counts, the number of species seen this year was 7% higher than the average over the previous 15 years. The number of species seen in most counts was near or better than in the past 15 years except for Kingston. Possibly due to inclement weather on count, the number of species and the total number of birds seen in the Kingston count were well below the 20 year averages of 99 and 49 119, respectively (**Figure 1**).

Table 5 contains a breakdown of species for each count as taken from the Audubon website. The abbreviation 'CW' indicates a species seen during 'count week', consisting of the 3 days before and after the actual count day. An interesting statistic not included in the table is the combined total number of species across all counts within the KFN birding area. This year, 114 species with an additional 2 count week species were seen. This illustrates the great diversity of species that can be found in this area during the winter months.

Table 4: The number of species found since 2005, with the average over the previous 15 years (*no count held)

	ONKG	ONWE	ONNA	ONTI	ONPE	ONAI	ONDE	ONGQ	ONFR	ONMS
2005	103	*	50	60	76	64	38	-	-	-
2006	104	52	56	64	71	54	48	-	-	-
2007	*	34	51	60	65	54	40	-	-	-
2008	106	36	57	55	63	57	42	-	-	-
2009	101	33	60	50	55	56	42	-	-	-
2010	102	37	59	63	55	57	40	-	-	-
2011	105	51	59	54	69	69	38	-	-	-
2012	108	47	58	55	70	61	44	-	-	-
2013	96	39	51	55	63	54	41	-	-	-
2014	104	42	66	55	74	74	41	56	-	-
2015	84	44	66	59	61	51	46	63	37	-
2016	96	39	59	64	64	50	44	74	37	36
2017	82	55	60	63	80	53	41	51	49	40
2018	86	52	53	63	69	63	36	55	49	*
2019	69	42	59	56	51	54	38	53	38	37
2020	79	44	65	66	63	63	47	66	55	36
Avg.	96.1	43.1	58.1	58.9	65.6	58.4	41.6	59.7	44.2	37.3

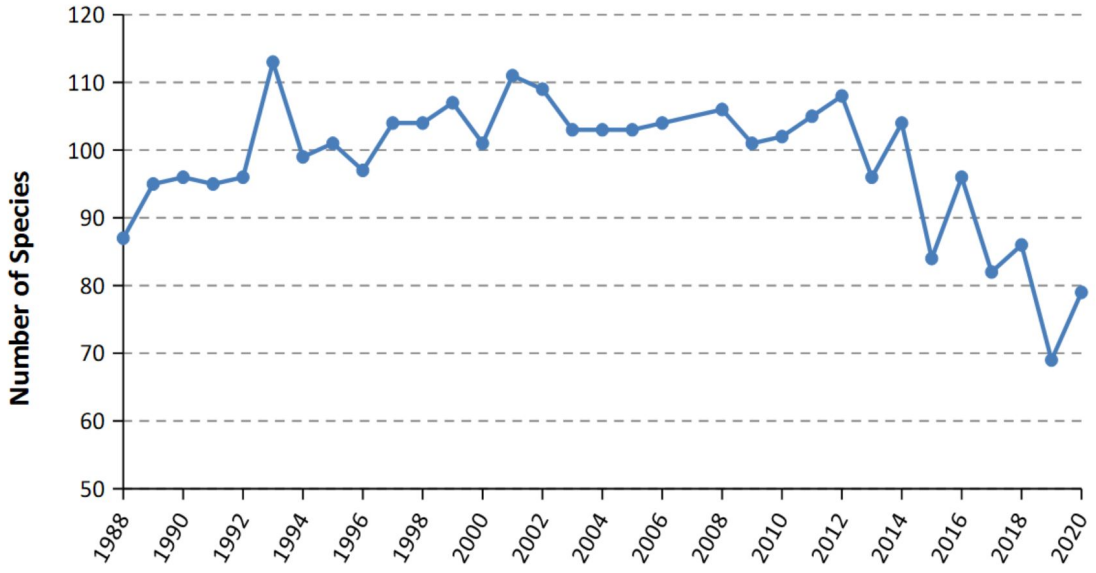


Figure 12: The number of bird species seen in the Kingston CBC since 1988.

Count day highlights included: Wood Duck (Frontenac), Red-necked Grebe (Frontenac), Northern Goshawk (Frontenac), Red-shouldered Hawk (Napanee), Killdeer (Kingston, Amherst Island), Wilson's Snipe (Kingston), 2 Lesser Black-backed Gulls (Amherst Island), Glaucous Gull (Napanee), Eastern Screech Owls (Kingston, Gananoque), 2 Red-headed Woodpeckers (Frontenac), Tufted Titmouse (Kingston, Gananoque, Napanee, Thousand Islands), Carolina Wren

(Kingston), Hermit Thrush (Thousand Islands), Northern Mockingbird (Amherst Island), Yellow-rumped Warbler (Gananoque), Chipping Sparrow (Frontenac), Swamp Sparrow (Gananoque, Kingston), Eastern Towhee (Frontenac, Napanee, Thousland Islands), White-winged Crossbill (Kingston), Hoary Redpoll (Amherst Island, Delta, Gananoque, Kingston, Prince Edward Point, Thousand Islands). Notable count week species included: Long-eared Owl (Kingston), Marsh Wren (Kingston).

Notable high counts common to a few CBCs were found for Mute Swans, Bald Eagles, American Crows, Common Ravens, Red-bellied Woodpeckers, Red-breasted Nuthatches and Northern Cardinals. Also of interest, Napanee had a record high count of 10 Cooper's Hawks. The Thousand Islands count also had several interesting high counts: 26 Canvasbacks, 13 Tufted Titmice, 14 Eastern Bluebirds and 15 Red Crossbills (their first in nearly 30 years). The large number of backyard feeder watchers in the Kingston count likely resulted in good numbers of birds that attend feeders such as House Finch, American Goldfinch, Dark-eyed Juncos, Downy Woodpeckers, Northern Cardinals and Blue Jays.

Tyler Hoar's "Winter Finch Forecast" indicated that this looked to be a flight (irruption) year for several winter finches in the East. Accordingly, the following birds were seen in our area this year: Purple Finches, Pine Grosbeaks, Evening Grosbeaks, Pine Siskins, Common Redpolls, Red Crossbills, a few Hoary Redpolls and a White-winged Crossbill. The Red-breasted Nuthatch is another irruptive species that was seen in record high numbers.

Although there were more Snow Buntings this year than last, only 2 Horned Larks (Thousand Islands) and 3 Lapland Longspurs (Napanee) were seen. Raptor and owl counts were generally low. Low numbers were also found for many of the waterfowl. Notable misses included the Green-winged Teal, Northern Pintail, Northern Shoveler and American Coot.

Figure 13: Bald Eagles, Howe Island, December 23, 2020. (Peter Waycik)

Further information regarding count dates and locations can be found on the Bird Studies Canada website.

To view or download current or historical results from any location, please visit the Audubon website.

Table 5: KFN Area Christmas Bird Counts 2020

	ONKG	ONWE	ONNA	ONTI	ONPE	ONAI	ONDE	ONGQ	ONFR	ONMS	Total
Snow Goose	2		1		1	1					**5**
Cackling Goose	3		1				1	2			**7**
Canada Goose	7815	769	9690	919	5510	2449	659	3115	1034	305	**32265**
Mute Swan	363		220	112	463	51		571	4		**1784**
Trumpeter Swan		68		66		1	33	2	64		**234**
Tundra Swan	283		12	12	191	55		45			**598**
swan sp.	15				52						**67**
Wood Duck									1		**1**
Gadwall	361										**361**
American Wigeon	15										**15**

	ONKG	ONWE	ONNA	ONTI	ONPE	ONAI	ONDE	ONGQ	ONFR	ONMS	Total
American Black Duck	160	9	5	39	30	8		4	119		**374**
Mallard	1141	165	220	749	501	228	15	92	180	4	**3295**
Canvasback			2	26							**28**
Redhead	125				255						**380**
Ring-necked Duck	135								CW		**135**
Greater Scaup	1345				85	5		1	CW		**1436**
Lesser Scaup		32		16							**48**
scaup sp.	300			8	50						**358**
eider sp.					1						**1**
White-winged Scoter	1				74						**75**
Black Scoter					2						**2**
Long-tailed Duck	377		2		233	3					**615**
Bufflehead	42		11	18	18	24	1	27			**141**
Common Goldeneye	386	97	92	70	371	134	35	23			**1208**
Hooded Merganser	133	55		2	3		4	18	12		**227**
Common Merganser	290	794	14	2046	1059	45	158	743	78		**5227**
Red-breasted Merganser	520		19	90	132	164	1	105			**1031**
merganser sp.	106										**106**
duck sp.	53			8	46				57		**164**
waterfowl sp.									1		**1**
Ruffed Grouse	3	1	1	1	6		1	1	11	2	**27**
Ring-necked Pheasant						1					**1**
Wild Turkey	283	203	64	69	64	9	37	37	79	76	**921**
Common Loon		3		11			CW		2		**16**
Red-necked Grebe									1		**1**
Horned Grebe					3	1					**4**
Double-crested Cormorant		1		3		7					**11**
Great Blue Heron	6			1	1						**8**
Turkey Vulture					1						**1**
Northern Harrier	6		4		2	37	1	4			**54**
Sharp-shinned Hawk	3		2								**5**
Cooper's Hawk	4		10	1	3	2	1	1			**22**
Northern Goshawk									1		**1**
Bald Eagle	12	9	3	31	35	22	16	17	21	8	**174**
Red-shouldered Hawk			1								**1**
Red-tailed Hawk	29	8	24	18	11	16	8	43	8	9	**174**
Rough-legged Hawk		1		1		57	2	10		1	**72**
accipiter sp.	1										**1**
buteo sp.						7					**7**
hawk sp.				1					2		**3**
Killdeer	1					1					**2**
Wilson's Snipe	1										**1**

	ONKG	ONWE	ONNA	ONTI	ONPE	ONAI	ONDE	ONGQ	ONFR	ONMS	Total
Ring-billed Gull	314	40	53	13	315	1	95	23	29		**883**
Herring Gull	207	13	142	239	173	34	52	141	80		**1081**
Iceland Gull			1						2		**3**
Lesser Black-backed Gull						2					**2**
Glaucous Gull	CW		1								**1**
Great Black-backed Gull	10		6	7	4			1			**28**
gull sp.	6			1		49			16		**72**
Rock Pigeon	678	178	456	131	76	28	106	591	94	311	**2649**
Mourning Dove	266	139	678	171	118	247	52	241	121	178	**2211**
Eastern Screech Owl	2							2			**4**
Great Horned Owl	2					1			1		**4**
Snowy Owl	2				CW	13					**15**
Barred Owl	5	3		2	1	3		1	3		**18**
Long-eared Owl	CW										**CW**
Short-eared Owl						72		2			**74**
Northern Saw-whet Owl						4					**4**
Belted Kingfisher	3			2	2			1	3	2	**13**
Red-headed Woodpecker		CW							2		**2**
Red-bellied Woodpecker	16	12	7	17	10	11	10	21	8	2	**114**
Downy Woodpecker	94	41	36	57	19	31	27	72	69	17	**463**
Hairy Woodpecker	25	54	11	24	13	5	30	37	51	6	**256**
Northern Flicker	1		3	1	2	1		6		1	**15**
Pileated Woodpecker	5	6	4	12	2	2	2	7	19	6	**65**
woodpecker sp.	1								3		**4**
American Kestrel	2		5		2	6		2	1		**18**
Merlin	2	CW	2		2			1		1	**8**
Peregrine Falcon	1						1				**2**
Northern Shrike	1	1	3	3	1	2				3	**14**
Blue Jay	237	393	370	244	248	179	267	379	329	155	**2801**
American Crow	1048	29	250	125	152	49	139	138	98	34	**2062**
Common Raven	64	22	17	38	13	37	40	46	49	29	**355**
Horned Lark				2							**2**
Black-capped Chickadee	1111	424	359	528	311	272	334	429	763	281	**4812**
Tufted Titmouse	2		1	13				1			**17**
Red-breasted Nuthatch	50	42	5	36	5	9	24	19	66	8	**264**
White-breasted Nuthatch	223	115	63	113	65	50	62	92	220	31	**1034**
Brown Creeper	9	7	3	7	1	5	1	4	9		**46**
Winter Wren	1			2			1				**4**
Marsh Wren	CW										**CW**
Carolina Wren	2										**2**

	ONKG	ONWE	ONNA	ONTI	ONPE	ONAI	ONDE	ONGQ	ONFR	ONMS	Total
Golden-crowned Kinglet			1					3	1		**5**
Eastern Bluebird			5	14	8						**27**
Hermit Thrush	CW			1							**1**
American Robin	74		12	14	35		5	9		3	**152**
Northern Mockingbird						1					**1**
European Starling	3302	188	770	821	608	1266	395	1403	565	307	**9625**
Bohemian Waxwing		23									**23**
Cedar Waxwing	39	95	16	17					12	6	**185**
Lapland Longspur			3								**3**
Snow Bunting	32		217	26		543	30			62	**910**
Yellow-rumped Warbler								1			**1**
American Tree Sparrow	102	87	213	58	102	110	55	192	96	87	**1102**
Chipping Sparrow									1		**1**
Dark-eyed Junco	496	84	313	167	140	50	155	201	160	147	**1913**
White-crowned Sparrow			1					1			**2**
White-throated Sparrow	35		4		1			2	2		**44**
Song Sparrow	5		1	5	1	2	1	4	5	1	**25**
Swamp Sparrow	2							1			**3**
Eastern Towhee			1	1					1		**3**
sparrow sp.	2								2		**4**
Northern Cardinal	216	31	122	30	25	47	30	57	26	14	**598**
Red-winged Blackbird	10	1		12		3	2	55			**83**
Rusty Blackbird								8			**8**
Common Grackle	1					3	1	1			**6**
Brown-headed Cowbird				2		4		65	1		**72**
Pine Grosbeak			5	12				5	26	9	**57**
House Finch	241	12	74	13	12	17	3	17		4	**393**
Purple Finch	9		8	5	3			1	2		**28**
Red Crossbill				15					7		**22**
White-winged Crossbill	1			CW							**1**
Common Redpoll	299	153	538	935	374	221	768	793	528	350	**4959**
Hoary Redpoll	1			1	2	1	6	2			**13**
Pine Siskin	5		1		1	4		3	6		**20**
American Goldfinch	449	97	120	98	104	139	90	144	163	55	**1459**
Evening Grosbeak	3	2		CW					11		**16**
House Sparrow	177	68	40	174	19	197	53	57	18	77	**880**
bird sp.									5		**5**
Total species	79	44	65	66	63	63	47	66	55	36	**114**
Count week species	4	2	0	2	1	0	1	0	2	0	**2**
Total individuals including 'sp'	24211	4575	15339	8527	12173	7049	3810	10143	5349	2592	**93768**

6 Articles

6.1 Some Common Sedges and Rushes in the Kingston Area

by Paul Mackenzie

Sedges are a very common and diverse group of plants. In the genus *Carex* (True Sedges) alone we have over 130 species in our area. We have about 50 species in other sedge genera. Some are wetland species and others occupy fields and forests. Then there are 24 rushes of the Family Juncaceae, which are not sedges but might be confused with sedges.

Features of *Carex* sedges to look for include the habitat (wetland, field or forest), the time of year they bloom (some are spring ephemerals), whether the plants are growing in tufts or not, the arrangement of the spikes and spikelets that bear flowers and fruit (inflorescence), the height of the plants, the width of the leaves, the colour of the base of the leaf sheaths, and the size and shape of the perigynia (seeds). Some species may require a microscope to identify.

Many of the sedges you will encounter in the field are not covered here. This article is only meant to whet your appetite and draw your attention to these fascinating plants. If you get more interested, Wetland Plants of Ontario (Newmaster et. al.) gives a good introduction to local sedges.

6.1.1 Wetland sedges with hanging spikelets

Fringed Sedge (*Carex crinita*) has perigynia (seeds) borne on long hanging stems. It grows in wet habitats. Long bristly awns protrude from the cylindrical hanging spikelets.

Figure 14: Fringed Sedge (*Carex crinita*), Helen Quilliam Sanctuary (HQS). (Paul Mackenzie)

Figure 15: Fringed Sedge (*Carex gracillima*), Depot Creek Nature Reserve (DCNR). (Paul Mackenzie)

Graceful Sedge (*Carex gracillima*) has hanging spikelets but they are much thinner than Fringed Sedge. The seeds are oval and lack awns.

Figure 16: Graceful Sedge (*Carex gracillima*) at home. (Paul Mackenzie)

Figure 17: Graceful Sedge (*Carex gracillima*). (Paul Mackenzie)

Long-beaked Sedge (*Carex sprengelii*) is an open woodland species and has seeds along drooping stems. The perigynia are loosely aggregated and have obvious long beaks protruding from their tips.

Figure 18: Long-beaked Sedge. (Paul Mackenzie)

6.1.2 Spiky upright sedges of roadsides and fields

Fox Sedge (*Carex vulpinoidea*) is a prickly looking sedge in an irregular long upright spike. The stem is firm and thin (compare the one below). Note also the bristles coming out of the head at irregular angles. Wet fields and roadsides.

Figure 19: Fox Sedge (*Carex vulpinoidea*), DCNR. (Paul Mackenzie)

Figure 20: Fox Sedge (*Carex vulpinoides*), Bath Road. (Paul Mackenzie)

Awl-fruited (*Carex stipata*) is another prickly looking sedge in a long irregular spike but with a thick spongy triangular stem. Common in wet fields, roadsides and ditches.

Figure 21: Awl-fruited Sedge (*C. stipata*), Marble Rock. (Paul Mackenzie)

Figure 22: Awl-friuted Sedge (*Carex stipata*), HQS. (Paul Mackenzie)

6.1.3 Sedges with spikes of large inflated perigynia by ponds and pools

Hop Sedge (*Carex lupulina*) has large inflated perigynia (seeds) bunched in fat upright cylindrical spikes along the stem, It grows in vernal pools in the woods. From below the lowest spike a long leafy bract arises.

Figure 23: Hop Sedge at DCNR Bridge. (Paul Mackenzie)

Figure 24: Hop Sedge (*Carex lupulina*), Gan Wildlife Area. (Paul Mackenzie)

Greater Bladder Sedge (*Carex intumescens*) has a few greatly inflated perigynia in each spike.

Figure 25: Greater Bladder Sedge (*Carex intumescens*). (Paul Mackenzie)

Bristly Sedge (*Carex comosa*) has long cylindrical spikes with bristles like velcro and perigynia which taper to two spreading teeth.

Figure 26: Bristly Sedge (*Carex comosa*). (Paul Mackenzie)

Figure 27: Bristly Sedge (*Carex comosa*). (Paul Mackenzie)

Porcupine Sedge (*Carex hystericina*) has perigynia that are not quite so inflated.

Retrorse Sedge (*Carex retrorsa*) has perigynial teeth point backwards (downwards).

Figure 28: Porcupine Sedge (*Carex hystericina*). (Dale Kristensen)

Figure 29: Retrorse Sedge (*Carex retrosa*). (Paul Mackenzie)

6.1.4 Narrow-leaved (grass-like) woodland sedges

Early flowering Sedge (*Carex pensylvanica*) is a very common grass-like sedge in woods It blooms in early spring with the spring ephemeral flowers. Many of the plants do not flower, but those that do have the flowers at the top of upright stems. The seeds are dispersed by summer leaving grassy looking leaves where there is some light on the forest floor.

Figure 30: Early-flowering Sedge. (Paul Mackenzie)

Figure 31: Early-flowering Sedge blooms. (Paul Mackenzie)

Long-stalked Sedge (*Carex pedunculata*) also blooms in April with spikes on straight stalks a few cm long arising from the stems. Grows in dense clumps.

Figure 32: Long-stalked Sedge (*Carex pedunculata*), Rogers Rd. (Paul Mackenzie)

Rosy Sedge (*Carex rosea*) is one of many sedges which grow in shaded woods. This one has thin leaves growing in grassy looking tufts Small star-shaped spikelets are spaced out along the stems. The perigynia are oval and measure 2.6 to 4.2 mm long by 1.1 to 1.8 mm wide.

Figure 33: Rosy sedge (*Carex rosea*) at home. (Paul Mackenzie)

Figure 34: Rosy sedge (*Carex rosea*). (Paul Mackenzie)

Eastern Star Sedge (*Carex radiata*) (not illustrated) is very similar with even narrower leaves,less than 2 mm wide.

6.1.5 Wide leaved sedges of woodlands

Broad-leaved Sedge (*Carex platyphylla*) is one of several woodland sedges with broad leaves growing in tufts. The leaves alone are enough to ID this species as they spread in a circle close to the ground and are pale green and waxy with whitish basal sheaths.

White Bear Sedge *Carex albnursina* has broad pale leaves which are more erect and the spikelets are hidden among the leaves.

Figure 35: Broad-leaved Sedge. (Paul Mackenzie)

Figure 36: Plantain-leaved sedge. (Paul Mackenzie)

Plantain-leaved Sedge (*Carex plantaginea*) also has broad spreading leaves which are are deep green and the basal sheaths are reddish purple. Some leaves have a wavy seersucker appearance. Both these species have the seeds on spikes along stems which exceed the leaves.

Figure 37: Plantain-leaved Sedge (*Carex plantaginosa*). (Paul Mackenzie)

Figure 38: White Bear Sedge (*Carex albersina*), Gananoque. (Paul Mackenzie)

6.1.6 Cyperoideae (Ovales) sedges topped by heads of overlapping flat perigynia with side wings

Pointed Broom Sedge (*Carex scoparia*) is one of a large sub-group of *Carex* sedges called Cyperoideae or Ovales which are challenging to identify. They are mostly sedges of fields and roadsides. The perigynia are flattened with winged margins and borne on crowded spikelets. The shape of the head of this species resembles a pointed broom and the perigynia are long and oval shaped.

Figure 39: Pointed Broom sedge (*Carex scoparia*), Gananoque. (Paul Mackenzie)

Figure 40: Pointed Broom Sedge (*Carex scoparia*). (Paul Mackenzie)

Blunt Broom sedge (*Carex tribuloides*) (not illustrated) is quite similar but the "broom" is less pointed.

Bebb's Sedge (*Carex bebbii*) has a more rounded head of perigynia.

Figure 41: Bebb's Sedge (*Carex bebbii*). (Paul Mackenzie)

Figure 42: Bebbs Sedge (*Carex bebbii*), Amherst. (Paul Mackenzie)

Crested Sedge (*Carex cristatella*) has a rounded head of spreading crowded perigynia but is not in the Cyperoideae subgroup since the perigynia are not winged.

Figure 43: Crested Sedge (*Carex cristatella*). (Paul Mackenzie)

Figure 44: Crested Sedge (*Carex cristatella*). (Paul Mackenzie)

6.1.7 Tall Sedges of marshes and lake edges

Lakeside Sedge (*Carex lacustris*) is one of several tall leafy sedges that grow near or in water. The leaves are M shaped in cross section and often form extensive colonies without many fertile stems and thus could be mistaken for tall grasses. The spikes are long, cylindrical and ascending with many smooth perigynia pointing upwards.

Figure 45: Lakeside Sedge (*Carex lacustris*). (Paul Mackenzie)

Figure 46: Lakeside Sedge (*Carex lacustris*). (Dale Kristensen)

Water Sedge (*Carex aquatilis*) (not illustrated) is often in water and has V-shaped leaves in cross section, and perigynia which are somewhat flattened.

Tussock Sedge (*Carex stricta*) often forms large tussocks in wetlands and the flattened perigynia are in tall cylindrical spikes. The stems are thick and three-sided.

Figure 47: Tussock Sedge (*Carex stricta*), HQS. (Paul Mackenzie)

Figure 48: Tussock Sedge (*Carex stricta*), DCNR. (Paul Mackenzie)

6.1.8 Three-Way Sedge (*Dulichium arundinaccum*)

Can you see how from above the leaves are arranged in tier of three pointed leaf whorls? We have left the *Carex* genus and the rest of the species are in several other genera.

Figure 49: Three-way Sedge (*Dulichium arundinaccum*). (Paul Mackenzie)

6.1.9 Bulrushes (Genera *Scirpus* and *Schoenoplectus*)

Dark Green Bulrush (*Scirpus atrovirens*). Bulrushes generally grow in wetlands. Many are tall with fuzzy looking tops. This one has a firm green stem and erect groups of close packed heads.

Figure 50: Dark-green Bulrush (*Scirpus atrovirens*). (Paul Mackenzie)

Figure 51: Dark-green Bulrush. (Paul Mackenzie)

Wooly Bulrush (*Scirpus cyperinus*). As the name suggests this sedge has heads that are wooly looking and tend to droop with the weight of many branched seed heads.

Figure 52: Wooly Bulrush (*Scirtpus cyperinus*). (Paul Mackenzie)

Figure 53: Wooly Bulrush (*Scirpus cyperinus*). (Paul Mackenzie)

Soft-stemmed Bulrush (*Schoenoplectus tabernaemontani*) has a very soft compressible stem which when pinched causes the stem to bend over. The spikelets are on long pedicles at the top of the stem It grows large groups in shallow water.

Figure 54: Soft-stemmed Bulrush (*Schoenoplectus tabernaemontani*). (Paul Mackenzie)

Figure 55: Soft-stemmed Bulrush (*Schoenoplectus tabernaemontani*). (Paul Mackenzie)

Hard-stemmed Bulrush (*Schenoplectus acutus*) has a firm stem that does not bend when pinched.

Figure 56: Hard-stemmed Bulrush (*Schenoplectus acutus*). (Paul Mackenzie)

6.1.10 Rushes. Family Juncaceae

Soft Rush (*Juncus effusus*). Rushes are not sedges but in their own family Juncaceae. This one is a common perennial in wetlands and like Soft-stemmed Bulrush it has leafless soft stems growing in clumps. The flowers and capsuled seeds are borne on branching peduncles which appear to arise from the side of the main stem.

Figure 57: Soft Rush (*Juncus effusus*), DCNR. (Paul Mackenzie)

Path Rush (*Juncus tennuis*) is a short rush that is often found in compressed soil along footpaths.

Figure 58: Path Rush, Gananoque. (Paul Mackenzie)

Figure 59: Path Rush, Gananoque Wildlife Area. (Paul Mackenzie)

6.1.11 Flowering Rush (*Butomus umbellatus*)

This introduced plant is in a separate family Butomaceae, the Flowering Rushes. It grows in water and has colouful flowers at the top of tall stalks. Many readers will have noticed and even photographed it.

Figure 60: Flowering Rush (*Butomus umbellatus*). (Paul Mackenzie)

6.2 Exploring the Backyard: Getting an Early Start to Spring Cleaning

by Carolyn Bonta

For the past seventeen years the Little Cataraqui Creek has been my playground: A secluded waterway to paddle from spring to fall and an open canvas to decorate with ski, skate, and snowshoe tracks when winter conditions permit. Many things have changed over the years: A series of small docks at Frontenac Institution have fallen into disrepair and inmates no longer fish along the shore. Otter tracks and slides in the snow have become more frequent, although I have yet to see an otter. Mute Swans now nest among the cattails and a clump of Yellow Iris has recently become established. And, most impactful considering I used to be able to spend hours alone on the creek, there have been dozens of people walking on the ice this winter. While I am glad to see people getting outdoors in nature, with new areas of thin ice beginning to appear on the creek—be they from brine or beaver—I worry about the fate of those new to the area, inexperienced with ice travel, and heavier than me who obliviously follow my tracks.

Figure 61: Lacing up my skates. (C. Bonta)

Despite all the changes, a series of Wood Duck nest boxes still dot the eastern edge of the creek. These nest boxes were erected by long-time KFN member George Vance, now deceased, in the late 1980's or early 1990's. Tilted and worn by age, these silent sentinels have always watched over my creek ac-

tivities. While paddling the creek in the spring I once peeked into a particularly low box and found it to have duck eggs. Did these eggs hatch successfully? Several cavity-nesting ducks are found on the creek: Wood Ducks, Hooded Mergansers, Bufflehead. Which species use these boxes? I watch another pair of boxes during my Marsh Monitoring Program bird surveys in May and June, but the only activity is the cormorant that favours the taller box as a perch.

Figure 62: Carving tracks on the glass-like ice. (C. Bonta)

Last spring, my first paddle on the creek was March 19 when fellow KFN member Chris Grooms asked for help with maintaining the boxes. He has been maintaining these boxes for the past eight years, but ice that winter hadn't been good for long and now the work needed to be done by canoe. Together we cleaned out seven boxes along the main channel and added fresh wood shavings. Many boxes contained unhatched eggs. In the past, data were collected on nest box contents, but KFN no longer requests this information so patterns and trends in nest success for these boxes isn't available—or at least not to our knowledge.

Because I live so close to the creek, it made sense that I take over maintaining the boxes. As soon as ice conditions became suitable last month, I set off with a backpack of wood shavings and tools and a ladder over my shoulder and, joined by KFN member Michael Johnson, tackled the first task on my spring cleaning list. Each box held something different: Most boxes had unhatched duck eggs (clutches of 8, 9, 12, 16 and 22) that, when broken showed no or minimal embryonic development. Were the eggs infertile? If the eggs were fertilized, why did they not hatch? Or are these "dump nests," where ducks are competing for a limited number of cavities and claiming territory through egg-laying? Was the nest abandoned early on? Most boxes still contained only the wood shavings that Chris had provisioned the previous spring, suggesting incubation hadn't begun or been attempted. Cattail fluff supplemented nest material in one box, while another box was lined with large, pure white feathers. Swan? What hen would use another bird's feathers to line their nest when she could pluck from her own breast? So many questions!

Figure 63: Michael approaching a nest box. (C. Bonta)

Figure 64: Unhatched eggs nestled in a bed of large white feathers. (C. Bonta)

But most importantly: Are these nest boxes beneficial to local waterfowl, or are they a trap—a population sink? Perhaps the boxes are too close together... or too far apart. Have the entry holes gotten too big for the cavity to be secure? Like Chris, we added about 2-3 inches of fresh wood shavings, but is this enough... or too much? Perhaps a parasite load has built up within the boxes over time. What can we, as waterfowl managers, do differently?

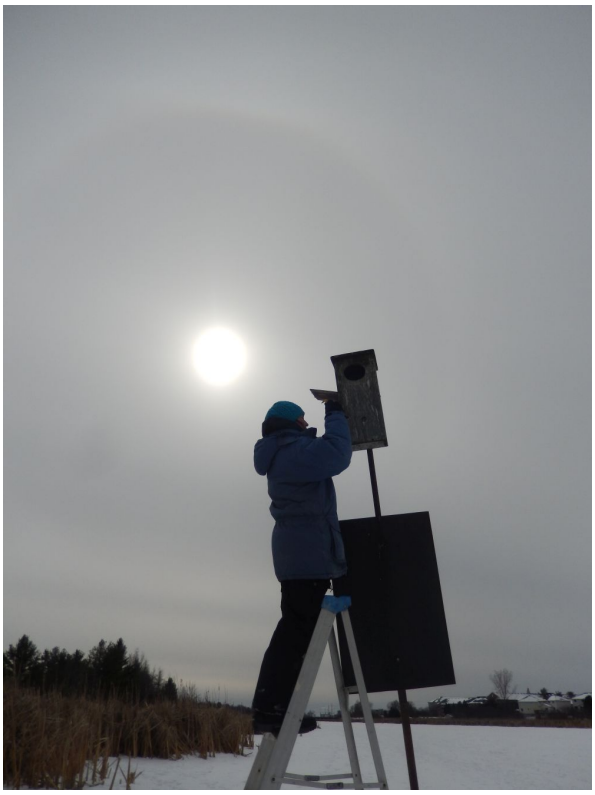


Figure 65: Carolyn checks a nest box under the late-afternoon sun. (M. Johnson)

As someone who has extensively studied upland nesting ducks, I came to realize how little I know about cavity-nesting birds. In addition to the duck eggs, two nests contained one or a few much smaller eggs. We guessed that the tiny pinkish-white eggs belonged to Marsh Wren, or possibly the less frequently-seen Tree Swallow. Slightly larger than these, and all white, were eggs that puzzled us. Flicker perhaps? Yet why nest in a large-holed box in a wetland when the adjacent woodland contains so many of their preferred poplar? And back to the ducks: To which species do these slightly-less-than-chicken-size whitish eggs with the pale olive sheen belong? Or would these eggs have been all-white or pinkish when fresh? I've read that mergansers have distinctly thicker-shelled eggs than Wood Ducks, but didn't notice eggshell thickness while out maintaining the boxes. I do know that evidence of a successful nest is the presence of the thin membrane that lines the inside of the egg, which ducklings tend to flatten during and shortly after hatching. None of the boxes along the creek's main channel contained the three elements of a successful nest: Down feathers, flattened membranes, and small pieces of crushed eggshell.

The next day Michael and I set off along Princess Street to check on three nest boxes in the ponds near the Ambassador Hotel. These boxes are not accessible by canoe, and therefore were not cleaned in winter 2020. Two boxes were packed nearly full with cattail fluff, but beneath this in one box were eggshells and flattened membranes! Dare we say... success? We couldn't find the third box, vaguely described by Chris as "on the other side of a long island-sort-of-thing with a tree. It's low, barely above the water level. You have to crawl on your knees." We didn't look too hard, though, before deciding it would be a nicer walk home if we followed the creek. With the sun rapidly setting, we pushed through thick cattails, working up a sweat as we stomped and crawled in the direction of the east channel. In summer we often hear Common Gallinules calling from this area and had presumed them to be within small patches of open water. The sheer density of the cattails and lack of open water areas surprised us. And where was the "Bittern Channel" that we poke into in summer to look for Least Bitterns? That would have made for easy walking. Exasperated, Michael climbed up the ladder (yes, I was still hauling a ladder through this!) and was relieved to see the creek channel nearby. Treading carefully to circumvent an area where ice is typically weakened by beaver activity, we then enjoyed a quiet walk home in the dark.

6.3 Water, Birds, and Us

by Shirley French

Figure 66: Common Loon teaching her young to fish. (Shirley French)

I am quite sure we can all agree, freshwater is essential for wildlife and for us. Despite this indisputable fact, according to the World Wildlife Fund Living Planet Index, freshwater vertebrate populations have declined by 83% between 1970 and 2016, a much greater decline than for terrestrial or marine environments. If we use the WWF broad definition of a watershed, the area around the Great Lakes and the area that extends up to and including Ottawa, are all regions that are under "very high" to "high" threats of habitat loss. We can add to the urgency of that message, the fact that water quality in Ontario has "multiple stressors" at play and this is leading to more frequent harmful algae blooms (Smol, J.P. 2019). If one considers the number of cyanobacterial blooms reported between 1994 and 2016; just a few cases in the 90s jumped to ~50 confirmed algal blooms in 2015 and 2016 (Favot et al., 2017).

In February of this year Dr. Kathy Vakil, a family physician in Kingston, outlined the "impacts of climate change on human health" for an online audience hosted by "350 Kingston." One of her nine main categories was "Water and Food Supply" which was broken down further into "malnutrition, diarrhea and harmful algae blooms." The health of waterways is a global issue and a local one. By extension, it not only can affect our health but the health of wildlife that drink the water and those that are aquatic by nature.

A local event that grabbed my attention was a severe blue-green alga bloom in 2016. BGA's are potentially harmful because this group, the cyanobacteria, can produce toxins. You have probably heard how they have caused the death of ~350 elephants in Botswana in 2020, and have killed dogs along the St. John River in New Brunswick in 2018 and 2019. In 2016 beginning in the month of August, pea soup like growth could be found upstream of the Cataraqui River along the Rideau Waterway. Cranberry Lake was where I collected samples of this disconcerting bloom, it was an exceptionally warm, dry summer. The drought conditions of 2016 were also problematic for the Quinte watershed, our neighbours to the west (Mark Boone, hydrogeologist for Quinte Conservation). Unfortunately, climate change is happening faster than initially predicted and for many lakes in Ontario it means that these harmful algae blooms are more frequent or happening as a new development (Dickson Lake in 2014/15, Algonquin Park; Favot et al., 2019).

This past summer when I signed up for my first Loon survey with Birds Canada I naturally wondered if BGA blooms could adversely affect loons. And what about other waterbird species? We know that toxins from cyanobacteria accumulate in fish. Fortunately for people who like to catch warm water fish such as Bass and Northern Pike, the toxins accumulate in their kidney's and liver but not as much in the muscle tissues. If you remove the organs, eat only the flesh, wash your hands after handling, and don't eat fish every day; you will not likely be acquiring harmful amounts of toxins (René Shahmohamadloo; PhD. Candidate; WHO guideline testing). Waterbirds relying on fish as a major nutrient source do not have the option of removing the organs, they swallow fish whole. Likewise, during a BGA bloom the visibility in a lake becomes very poor. Would the loons tend to move off the lake and similarly would the Osprey, terns, Bald Eagles and kingfishers go elsewhere? I asked Kathy Jones, Volunteer Manager at Bird Studies Canada if she had any information on

the effects of BGA blooms on loons and other waterbirds. Kathy was very helpful and shared some interesting information which I only have space to mention in part.

Fortunately, on Cranberry Lake, if a BGA bloom is going to develop it will be in August/September when loons are preparing to stage in groups and are starting to move on towards the south, the juveniles however stay on a little longer. I say 'fortunately' because BGA blooms that start earlier in the summer season can potentially impact loons while still in the nest. This was one hypothesis tested by Dr. Jim Haney's (U. of New Hampshire) students when a loon chick death made the animal available for analysis. Even though the loon chick was found from the veterinarian's examination to have died from trauma (perhaps from an attack by an adult bird in a territorial dispute), the students also found an accumulation of the neurotoxin BMAA in the chick's organs and tissues. Even though BMAA did not cause the chicks death, it nonetheless was found to be in significant amounts in several organs, notably the liver and lung. That is worthy of note because it suggests that BMAA was getting into the chick's body, not only through the food chain, but through aerosols; by breathing in the neurotoxin.

If you would like to know more about the neurotoxin BMAA I suggest that you try searching the Internet regarding associations between ALS (Lou Gehrig's disease) in people, and cyanobacteria. It will take you to cycad trees that have a symbiotic relationship with cyanobacteria and the Chamorro people of Guam who through their diet have been exposed to BMAA either through the consumption of cycad flour or by eating Flying Foxes (fruit bats), or both. These are considered hypotheses, but this is what has led to some of the aforementioned research in the U.S. on loons and studies of high frequency cases of ALS in humans living around Lake Mascoma, NH (Haney, JF. Researchgate abstracts) and elsewhere.

Clearly more research needs to be done on the toxins produced by cyanobacteria. The Ministry of Environment, Conservation and Parks (MECP) collect samples from lakes where a BGA bloom has been reported. They measure microcystin and anatoxin levels in the water samples but not BMAA. The World Health Organization (WHO) and Health Canada do not have well-tested guidelines (based on lethal dose testing) either for anatoxins or for BMAA. WHO drinking water quality reports often refer to a lack of sufficient studies. This is essential research that needs to be done. In the meantime, I guess it is up to citizens like us to keep an eye out for signs of problems in our waterways.

As a group of ~2000 mergansers, mostly Common Mergansers but also Hooded Mergansers, staged over the month of November, 2020, on Cranberry Lake; I was relieved that this year had not been a "bad" year for BGAs. Given the number of fish that they likely eat, I hate to think how these toxins could be bioaccumulating. So many questions and not enough resources to answer them.

Figure 67: Common and Hooded Mergansers, November 2020. (Shirley French)

Figure 68: Common Mergansers, November 2020. (Shirley French)

I will end with one point of praise for the cyanobacteria and it is a substantial one. The cyanobacteria are credited with producing the oxygen that we breath on earth today. Before plants rose to such distinction and abundance these microscopic cyanobacteria were photosynthesizing and producing oxygen over 2.8 billion years ago (D. Biello, 2009). By ~2.45 billion years ago oxygen was becoming significant and changing the potential trajectory of life on earth. For more insight into the cyanobacteria try searching the keywords "endosymbiotic theory" and the origin of chloroplasts. Despite their abilities to produce deadly toxins they can be a awe-inspiring group.

References

Biello, D. (2009). *The Origin of Oxygen in Earth's Atmosphere*. [URL]

Friends of the Napanee River. (2021). *Recent Droughts Across Quinte - What can we do ? Zoom Event 26 Jan 2021* [Video].

Favot, EJ. et al. (2017). *Assessing Water Quality Trends in Affected Ontario Lakes*. NALMS LakeLine Quarterly e-magazine. Summer 37-2.

Favot, EJ. et al. (2019). *Climate variability promotes unprecedented cyanobacterial blooms in a remote, oligotrophic Ontario lake: evidence from paleolimnology*. J Paleolimnol 62:31–52.

Haney, JF. *James F Haney's Lab*. University of New Hampshire. [URL]

Smol JP. (2019). *Under the radar: long-term perspectives on ecological changes in lakes*. Proc. R. Soc. B 286: 20190834. [URL]

Michelle Verstratten. (2020). *Did Bioaccumulation of BMAA in a Food Chain Contribute to the Death of a Common Loon (Gavia immer) in Province Lake, NH?* [Video].

6.4 Wildlife Photography Tips #7—How to Carry Heavy Lenses

by Anthony Kaduck

Figure 69: Binoculars and camera sling. (A. Kaduck)

In the last episode we learned about how to protect your expensive camera equipment from damage. Today we will discuss how to prevent damaging yourself while carrying large and heavy camera set-ups in the field.

This article is written from the perspective of birding. It should also apply to photography of large mammals, though perhaps not to frog, moth or moss photography. :-)

The first key distinction to make is where your photography fits within your wider interest in the natural world. Are you a birder who carries a camera, or a photographer interested in birds? In the first case the camera is secondary in importance to your binoculars: you want to see and identify the bird before you start photographing it. If it's the latter—if the quality of the image is the main consideration—then you probably want to operate with really big lenses, which will drive you down the road towards tripods, gimbal heads and other not-very-portable paraphernalia. But if you con-

sider yourself birder with a camera, read on.

Figure 70: Photographers of Birds. (A. Kaduck)

So we are now in the problem space of how to safely cart around camera/lens combinations that are big enough to capture distant birds, but still manageable when hand-held. For birds these would typically include telephoto lenses in the 300-500mm range.

Professional-grade lenses are very large and heavy (not to mention stratospherically expensive), but there are a number of enthusiast or "pro-sumer" lenses that fit the bill in terms of weight vs. capability. A typical set-up for high-quality bird images would be (in Nikon terms) a D500 body with the 200-500mm f/5.6 VR lens. I am familiar with this rig having lugged it over hill and dale for three years. It's a capable combination, but at a combined weight of over 3 kg it's a heavy beast to carry around all day. In addition to being heavy, a camera/lens combination needs to be carried in a way that keeps it readily accessible yet protected from damage caused by renegade branches.

I used a BlackRapid camera strap for a few years but the key mechanical bits are about worn out so I went in search of a replacement. Annoyed at the eye-watering price BlackRapid demands for what is essentially a strap with a clasp, I decided to experiment with some newer solutions. Here is what I discovered.

Options:

1. The neck strap supplied with your camera
2. Peak Design Capture camera clip
3. BlackRapid Curve Breathe strap
4. Peak Design Slide V2
5. Cotton Carrier G3 Camera and Binocular Harness (a.k.a. Bat Utility Belt)

Assessment criteria:

- The set-up needs to be secure, with low-to-no risk of inadvertently dropping the camera.
- It must not impede the use of binoculars.
- The camera must be easy to access.
- The camera should not be banging around or creating problems when walking through woods or over rough ground.
- It should not create excessive delays when getting in and out of cars.
- It should not unduly restrict adding or subtracting clothing layers.
- Ideally it should spread the weight evenly rather than focusing it on the neck or one shoulder.
- Bonus points are awarded if it facilitates keeping the camera dry during rain showers.

1. Neck strap

The first option is the neck strap that came with your camera body. This is not a very realistic choice for the large camera/lens combination.

Pro: It's the cheapest option.

Con: Hanging a long lens from the camera body without support will put a lot of stress on the mounting surfaces that connect the lens to the camera body. It will also hang at an odd and uncomfortable angle. All of the weight will rest on the back of the neck, which can lead to a stiff neck at the end of a long day. But the critical problem is

that the camera will be resting in the same place as your binoculars. Perhaps I am just uncoordinated, but I found this method led to lots of interference and annoyance as the straps seemed determined to get tangled up with each other. Moreover when I wanted the camera it was always underneath the bins and vice versa.

Figure 71: Small camera and bins. (A. Kaduck)

Summary: Workable for a small camera. Otherwise not recommended.

2. Peak Design Capture camera clip

This device assumes you will be wearing a backpack, as it is designed to attach to the strap. A gubbins attached to the camera clips into a quick-release housing on the strap and, in principle, you have instant access to your camera.

Figure 72: Peak Design quick-release housing. (A. Kaduck)

Pros: A rain cover is available. The camera attaches in a reasonably secure manner, provided you have correctly understood the microscopic print in the instruction leaflet that describes how to lock and unlock the quick-release. And therefore avoid, to pick a theoretical example, dropping a P900 into a shallow Amazon swamp.

Cons: Attaching the housing to your pack strap and the clip to the bottom of your camera requires an Allen key, which they helpfully provide. But that's one more small, easily-lost thing that you need to remember when you go out birding, because if the clip or housing loosens there is no way to tighten them without said Allen key.

In use it felt awkward and unbalanced with even a moderate-sized camera, so it would only really be usable for a small point-and-shoot camera. Superzooms like the P900, much less a DSLR with a long lens, are beyond its capability.

Summary: A good way to carry a small camera while hiking, but not up to the task of supporting a large camera set-up.

3. BlackRapid Curve Breathe strap

Variations of this strap are used by many professional photographers. The strap attaches to the lens's tripod foot with a screw and a locking carabiner.

Pro: The strap is easy to use. It can be adjusted to hang at hip level, which is optimal. Getting into and out of cars is easy. It does not require tools to install, tighten or remove (the attaching screw can be easily turned using the carabiner). It works well in most circumstances, though you will want to steady it with one hand whilst manoeuvring through bush. Addition or subtraction of clothing layers is simple.

Con: Amazingly expensive considering what it is. Includes two annoying buckles whose only purpose seems to be to dig into your skin. Putting the camera in a dry bag when it rains is not easy because the attachment point is mid-length. All of the weight rests on one shoulder.

Figure 73: BlackRapid Strap. (R. Lott)

Summary: Generally a good option, but expect to have tired shoulders after a long day.

4. Peak Design Slide V2

This was designed to be a less expensive alternative to the BlackRapid strap, with a few cunning ideas thrown in.

Figure 74: Peak Design Slide V2. (L. Kerr)

Pro: It is noticeably cheaper than a BlackRapid strap. The connections to the camera are fiddly but secure. The strap has a rubber gripping surface on one side, so it tends to stay in place but can be flipped over when you want the strap to move freely.

Con: The camera mounting device is installed and tightened by an Allen key, which is disadvantageous. Because it attaches to two points instead of the BlackRapid's one, it may end up sitting at an odd angle. But the key problem for me is that the strap is too short to allow easy movement of the camera, especially when wearing winter gear.

Summary: A reasonable option as long as you are not taller than 5'10".

5. Cotton Carrier G3 Camera and Binocular Harness

This rig is designed to hold a camera and long lens securely even when clambering over rough terrain. It's a bit strange-looking, but in principle it works like the webbing that soldiers wear to carry their equipment.

Figure 75: Cotton Carrier Harness. (R. Lott)

Pro: There is no doubt that this Canadian-made rig provides the best way of spreading the weight of equipment across both shoulders. The gubbins that attaches the camera is quick to use and locks securely. An Allen key is needed to install

or tighten the camera clip but the rig has a pocket designed to hold the key. It also includes safety tethers as a backup system to prevent drops, and a rain cover for the camera.

Con: The binoculars attach by means of a clip that is held onto the binos by velcro straps. The clip is one-size-fits-all, so it is not as tight as I would like it. A bit of looseness and a velcro attachment do not inspire as much confidence as I would like to have.

Figure 76: Cotton Carrier Harness. (R. Lott)

Moreover the binoculars are held in a position that is awkward to get at, and they rest horizontally so they will tend to collect rain, snow, and gunk on both sets of lenses. The harness design makes them the least desirable option if your trip includes getting in and out of cars and or adjusting clothing layers.

Figure 77: Cotton Carrier binocular attachment. (A. Kaduck)

Summary: Some good thought has gone into this and if I were heading out into the wilds with only a large camera it might be a good choice. But the binocular attachment looks like an afterthought and it really does not work well. Not recommended if, like most birders, your binoculars are your primary weapon.

So what will I use? Will probably grit my teeth and get another BlackRapid strap. I will use the Cotton Carrier harness situationally—especially where clambering or bush-bashing are likely to be involved. The two Peak Design devices will be rehomed.

And what would the ideal solution look like? I remain convinced that what I really need is a Sherpa.

Figure 78: BlackRapid and Cotton Carrier attachment. (A. Kaduck)

Figure 79: Peak Design Slide attachment points. (A. Kaduck)

7 KFN Outings

7.1 Teen CBC Birding Trip to ELEEC (December 19, 2020)

by Beckett Robertson

Seven Kingston Teen Naturalists met up at 9:00pm on December 19th at the gate to the ELEEC (Elbow Lake Environmental Education Centre).

The temperature ranged from minus 4 degrees Celsius to minus 1 degree Celsius. There was no precipitation, but there was light wind. The ice on the lake and pond was making pinging noises that sounded like a raven!

We were on foot for the entire time. We went to the feeders from 9:30 am to 9:40 am and observed 1 Chickadee and 2 Crows (though we may have seen the same Chickadee the next time we visited the feeder).

We went on the nature trail when we finished watching the feeders (at 9:40 am) and ended at 11:40 am. On the trail we viewed 1 Crow and 1 Raven. Near the pond we saw 1 unidentified species flying. It had big, slow flaps, and was brownish (not a Gull). It was bigger than a crow.

We saw 2 species fly into the cedars across the pond, also unidentified, and saw 4 Ruffed Grouse.

At the pond we checked a downed nest box, which a mouse had likely taken up residence in (we saw some chewed nuts in the fallen box). Throughout the trail there were many patches of Gypsy Moth eggs on trees. On the snowy pond we noted that there were tracks of a squirrel and a coyote, and near the pond we saw some mouse tracks. The pond had ice about 3-4 inches thick covering it. An interesting thing we noted about the pond was the fact that the rocks were cleanly split into 2 colours, pink and grey. The pink rocks we learned were the same as the grey rocks, but the pink ones had no lichens, dirt, and mosses on them because as the water level lowered, the ice scraped against the rocks, cleaning their surfaces.

On our way back to the feeders, we passed a rocky cliff face that had a good view of the beaver pond and learned the rocky area was a good habitat for Five-lined Skinks. We also saw an area that used to have nesting Eastern Whip-poor-wills in it.

Once we arrived back at the feeders, we sat down for lunch. While eating we saw 7 Chickadees, 2 White-Breasted Nuthatches, 1 Male Hairy Woodpecker, and 1 Dark-eyed Junco.

After lunch we walked around the cabins from 12:15 pm to 12:40 pm. Around the cabins, we walked by the lake, and checked the bat boxes (empty). The highlight of the trip was having a close-up and clear view of an Ermine, though we never got a picture.

We walked around 1/2 kilometre before stopping to write in our field notebooks. Pickup happened at 1:00 pm.

Records will be added to the Christmas Bird Count for Frontenac County.

Figure 80: Teen Naturalists take a break from recording bird species at the Christmas Bird Count 2020 at the Elbow Lake Environmental Education Centre. (Anne Robertson)

7.2 Teen Trip to Monitor Wood Duck Boxes at Helen Quilliam Sanctuary (February 13, 2021)

by James Howlett

Figure 81: Everett on ladder, Ryan recording and Billy looking on. (Anne Robertson)

On Saturday February 13, 2021 Ryan, Paige, Mackenzie, Billy, Everett and I along with our two leaders Anne and Erwin headed to the Helen Quilliam Sanctuary to observe duck nesting boxes. As soon as we stepped into the brisk −30 °C winter air, we were equipped with snowshoes; it was the first time wearing them for a few of us, including my brother and me.

When we eventually got to the pond, we took a quick pit-stop to investigate an ice shelf. Mackenzie, Erwin, and I walked across the frozen water to repair a nesting box that had sunken into the boggy mud. While we were doing that, the others cleaned out an abandoned Common Grackle nest with a deceased fledgling left to rot in it. The second box had another abandoned Common Grackle nest, but there was nothing dead in it this time. This was the one that had sunk, so we raised it from two feet above water level to fifteen feet above water level.

The third nest was that of a Hooded Merganser (or a 'Hooded Mabanza,' as my brother calls them). The Hooded Merganser young stay in the nest longer than the common Wood Duck; we were able to easily identify the nest because of the trampled egg shells. We found plenty of broken egg shells, a lot of egg membranes, and a Paper Wasp's nest. The fourth and final box also had a Hooded Merganser nest, but there was a partial Common Grackle nest built on top of it. After we examined each box, we cleaned it out and added new wood shavings for next year's nesting season. The nests were all very intriguing, with each having their own little surprises, making it a very fun job.

Figure 82: Mackenzie and Erwin work to raise pole of nest box with James, Paige, Everett and Billy watching. (Anne Robertson)

After we left the first pond, we headed to 'Buffalo Pond.' It looks like a buffalo from an overhead view, if one could not already interpret that from its name. In this new pond, we stopped and had our lunch on snowy, wet rocks and fallen trees. The main purpose for us visiting this pond was to inspect the boxes that the senior Naturalists had worked on. I believe that there were three boxes in total, but there could have been more.

When we finished off with those, Erwin left us and joined the other Naturalists. Then, Anne brought us to an acidic swamp where we studied various species of plants. In the bog, there were: Labrador Tea, Leather-leaf, Bog Rosemary, Black Spruce, sphagnum Moss, and cone-bearing Tamarack. Anne remembered that she had found cranberries in that particular bog on a previous excur-

sion, but after a while of fruitless searching, it was quite apparent that there were none to be found. That swamp was the last phase of our woodland adventure, leaving us only with the daunting task of trekking out of the forest.

Figure 83: Tamarack trees in summer. (Paul Mackenzie)

Figure 84: Leather-leaf. (Paul Mackenzie)

When we finally broke through the nearly impenetrable vegetation, we were all aching and sore, but we agreed that the pain was well worth it because we helped the ducks and learned fascinating things.

Table 6: Summary Use of Wood Duck Nest Boxes Helen Quilliam Sanctuary (Breeding Years 2010-2020).

Year	Box 145	Box 171	Box 174	Box 181
2010	-	WODU	-	HOME
2011	HOME	-	HOME	-
2012	HOME OR WODU	HOME COGR	HOME COGR	HOME
2013	WODU	HOME	HOME	HOME
2014	HOME	-	HOME	HOME
2015	HOME	-	HOME	HOME
2016	HOME	HOME	-	HOME
2017	-	-	-	-
2018	HOME	HOME	-	HOME
2019	-	HOME	HOME	HOME
2020	COGR	COGR	HOME	HOME
Total HOME	4-5	5	7	9

Notes: HOME = Hooded Merganser; WODU = Wood Duck; COGR = Common Grackle. Boxes not checked in 2017.

Conclusion: Most common nesting bird is Hooded Merganser. All boxes unused at least once. Common Grackle may nest after HOME on top of HOME nest.

7.3 Centennial Bridge Ramble (March 2, 2021)

by Liz Harrison

Figure 85: Viewing bright green Watercress plants in the water emerging from the rocks. (Janis Grant)

It was a frigid but beautiful day under a bright blue sky and sun that 12 ramblers met with Anne Robertson for a walk along a west-side branch of the Cataraqui Creek. This trail under the Centennial Bridge with its access from Malabar Drive was a new discovery for a few of us, while for others it was familiar territory. Changeable weather and temperatures had made the walking rather tricky in parts but we all made it to the train tracks at the end of the walk and back to the start with no tumbles. As usual, Anne shared wonderful tidbits of information about what was around us. Memorably she demonstrated the difference in the way squirrel and rabbits move (to help us identify tracks in the snow) and cut open a thick casing on a Goldenrod plant (the gall of Goldenrod Gall Fly) to reveal a concealed larva which we were invited to eat. No takers! We also thought it wiser not to sample the watercress growing in a small running stream. We were delighted to take our time watching a Red-tailed Hawk perched on the branch of a deciduous tree as he nonchalantly watched and wondered about us! We learned to identify a raven by the shape of its tail and how the chickadee's call indicates its level of anxiety and what a remarkable brain it has. A highlight was the discovery of a dismembered barred owl not too far from the train track. Little remained except a few soft feathers, a claw (with its sharp-as-needles talons) and a beautiful, intact wing. We marveled at the soft feathers and the "combs" on the first couple of primaries that enable an owl to fly soundlessly. It was hard to surmise how this powerful predator might have met its end—maybe hitting a passing train?

Figure 86: Talons of Barred Owl showing feathered toes. (Janis Grant)

Figure 87: Wing of Barred Owl. (Janis Grant)

8 Clipped Classics

Edited by Alexandra Simmons

Excerpts from past issues of The Blue Bill

[One of the KFN's most popular offerings is the Rambles (slow walks to notice nature in all its forms) led on the 1st and 3rd Tuesday of the month by Anne Robertson. By limiting attendance, gathering contact information, observing social distancing and wearing masks, it has been possible to continue this activity over much of the past year (not during lock down). Their popularity is no surprise; the article below describes a similar type of outing (including tasting wild plants!) that took place FIFTY-NINE years ago, which was enjoyed by all. Many of the same observations will be possible in the coming weeks, whether you choose to explore on your own or register for a Ramble. Enjoy our local Nature coming back to life this spring!—ed.]

Botany Field Trip April 28, 1962—An Impression by B. I. England

We left the Old Arts Building at Queen's shortly after 8 a.m. Al Warren, in whose car we were, drove on to Division St., then north to a road running east across Bell's Swamp, where we were met at a little clearing about halfway by Mr. A. E. Garwood who was to identify some trees for us. He showed us a dozen or more kinds of trees within a few yards, and explained their identification by the winter buds. His demonstration of the different shaped winter buds was lost on most of us, I'm afraid. However, from the dead leaves at their bases, he showed us how to distinguish the White Oak with the rounded lobes from the Red Oak with the pointed lobes. He showed us a Bur Oak with its corky-barked twigs, a White Pine with its long slender needles in bundles of five, an Austrian Pine with its five-inch long coarse sharp bristly needles in bundles of two, and the Red Pine, also with its bundles of two needles. He showed us how to identify the Blue Beech or Ironwood by its muscular-looking trunk under its smooth beech-like bark. The true Beech was there for comparison. He pointed out the Speckled Alder, the Cherry and other trees identified by their bark such as the Bitternut Hickory, the Aspen and the Birches. We were invited to taste the refreshing wintergreen flavour of the twigs of the Yellow Birch. (Historical lore is that the Indians used an infusion prepared from the twigs of this tree to cure the scurvy suffered by the first Europeans to winter in Canada. In recent years, when Vitamin C was better known, a brew made from pine needles was used by a medical man for the same purpose in Alaska.) Mr. Garwood also showed us White Ash, maples, a spruce or two and a few fragrant Balsam Fir, all competing for the good soil and plentiful water but moreso for the sun in this crowded location.

Anne Hutchison showed us some Hazelnut branches with the male catkins and the female flowers on the same branch, and pointed out the similar arrangement of the alders with the catkins at the tip of the branch and the female flowers on a separate twig of the same branch. She showed us the male and female Pussy Willows, which grow on separate trees and are insect pollinated. These were in full bloom and, like the flowers of the maple, are strikingly beautiful when seen under a magnifying glass. She later pointed out a clump of Wood Horsetails, a beautiful but rather primitive spore-bearing plant, with its stem in sections like a bamboo, which is a miniature of those plants of long ago which helped to form the coal seams of today.

Several kinds of mosses were pointed out by Nora Mansfield, the leader of the trip, some with minute "crowns." Three of the most memorable were 1) the Trailing Club Moss—one specimen was over two feet long, 2) the Deer Moss, which Nora explained was really a lichen and was not always as dry and brittle as was the patch which we were examining, and 3) the Sphagnum Moss that holds so much water—it keeps worms nice and fresh when you go fishing. There was Water Cress in profusion at one spot and there was an occasional fern with its last year's fronds flat on the ground but

still green. The Marginal Woodfern and the Spinulose Woodfern were there and someone turned up with a handful of the fertile fronds of the Cinnamon Fern.

We went back to the road for a coffee break (we had not gone much more then a hundred yards from it). Other things noticed at this location were a Mourning Cloak Butterfly which settled on a tree trunk. Gar explained that it was the only butterfly that hibernated here in the adult state. There were some small Leopard Frogs in the water beside the road, but not a sight or sound of a Spring Peeper. On a half-submerged fencepost, a half-grown Eastern Painted Turtle sunned itself at such an angle that the regularly-spaced red spots along its side shone in the sunshine like the lighted portholes of a ship at night.

Shortly after 11 a.m. we drove on, past banks of Pussy Willows on the north side of the road, past a recently put-together shack in a small clearing to the south and a very decrepit looking jalopy in the bushes beside the road. We stopped at Gar's house where he showed us his wildflower garden. He had White Trillium and Wild Ginger with its small bell-like red flowers in full bloom. Others such as the Jack-in-the pulpits were not fully out yet. Among the well-spaced trees around his lawn there is a Mulberry, a Cottonwood and the unusual Ginko, a deciduous conifer rediscovered in China in fairly recent years after having been considered extinct for centuries. On the hill on the other side of his garden we were shown a good-sized Buckthorn bush with some of last year's berries still on it. They have a flavour all their own as we discovered. Its bark is the source of the veterinarians' "syrup of buckthorn" and the doctors' "cascara" both emetics. Gar said that as far as he knew this was the only specimen of this shrub in this area. *[If this truly was a cascara bush, it would be Rhamus purshiana, or Pursh's Buckthorn, a species native to western North America and indeed not expected to be found in the Kingston area—ed.].* He showed us a patch of Wild Hop Vines and how to distinguish the twig of the Butternut from that of the similarly-leaved Walnut (the leaf scar is straight across at the top).

There was a large patch of Red Osier Dogwood on this hillside. On one of them there were two green shoots. Gar suggested that he might try to propagate them as they were apparently a sport. There was a Wild Plum tree there with a few of last year's dried fruit still on it. We were shown how to identify this tree by the thorn-like twigs growing out of the trunk. In the many open spaces on this hillside, patches of Addertongue or Dogtooth Violets were in full bloom.

We left about noon and were home by 12:30 after a very full and interesting morning.

Figure 88: Eastern Bluebird, 2021-02-26, Highway 2 west of Escott-Rockport Road. (John Licharson)

Figure 89: Red Crossbill, 2020-03-02. (John Licharson)

Kingston Field Naturalists

Objectives

The Kingston Field Naturalists (KFN) is an active, local club of over 500 members interested in a wide variety of natural history. The objectives of the club are:

- to acquire, record and disseminate knowledge of natural history;
- to stimulate public interest in nature and in the protection and preservation of wildlife and natural habitats; and
- to acquire, receive and hold lands for the purpose of preserving their natural flora and fauna, and to encourage and assist other organizations and individuals to do likewise.

Nature Reserves

The KFN owns properties that are designated as nature reserves.

Helen Quilliam Sanctuary at Otter Lake: A 217 hectare (536 acre) property of mixed forest located in the Canadian Shield in the Township of South Frontenac accessible to members through a trail system..

Martin Edwards Nature Reserve: A 100 hectare (247 acre) property of fields and marshland located on the southeast shore of Amherst Island.

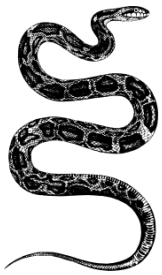
Sylvester-Gallagher Nature Reserve: An 80 acre (32.4 hectare) parcel of forest and grassland, adjacent to the Martin Edwards Nature Reserve.

Conservation and Education

The KFN actively supports conservation efforts. Issues such as park creation, wildlife and habitat protection, and environmental welfare are of on-going concern. The club also makes natural history resources and knowledge available to the community through education programs which include field courses, talks, awards and a loan library.

Be a Contributor!

This edition of The Blue Bill could have contained your article, anecdote, fantastic photo, nature sketch, report, puzzle, quiz, conundrum, cartoon, or other contribution.



(If it did, many thanks!)

Email The Blue Bill (editor@thebluebill.ca) for more information.

Kingston Field Naturalists

Box 831

Kingston ON K7L 4X6

https://kingstonfieldnaturalists.org