

# BC BIRDING

Newsmagazine of the British Columbia Field Ornithologists

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*A rare sight in the Prince George area – a Pacific Golden-Plover. Photo by Jeff Dyck.*



### SMITHERS CONFERENCE POSTPONED TO 2022

As everyone will have expected, the Smithers Conference has had to be postponed again, and will now take place on

**June 24-26, 2022**

The extension trip will follow the conference, on June 26–29, 2022.

### 2021 AGM

The 2021 AGM will be held via Zoom Communications on June 24, 7:00 pm Pacific Time. It will be followed by a keynote presentation on the Prince George curlew project. See page 5 for details.

### COVER PHOTOS

*Front page:* This female Pacific Golden-Plover was spotted in early May in Salmon Valley – one of a small handful of sightings ever in the Prince George area.

*Back page:* A Townsend's Solitaire photographed by John Gordon at Kilby Regional Park, Fraser Valley. You can read more about it, and see more of Gordon's great photographs, at:

[thecanadianwarbler.blogspot.com](http://thecanadianwarbler.blogspot.com)

## Contents

### BCFO News, Notices & Notes

BCFO Officers & Directors .....	3
President's Message.....	4
Welcome New Members.....	4
BCFO AGM 2021.....	5
Keynote Presentation .....	5
Letter to the Editor.....	5
Membership Report .....	6
Notes.....	7
The Prince George Curlews .....	9
Upcoming Meetings & Events.....	10
Internet Moments.....	11

### Features

Adam Dhalla's Birding Game Launched .....	12
Birding in China: Poyang Lake.....	14
Birding the Quebec City Area.....	16
"Big Bird Foot" – Evidence of an Ancient BC Denizen .....	18
East Kootenay Notes.....	20
Return of the Ospreys – There Goes the Neighbourhood .....	25

### Briefings

1. A Tangled Murder Mystery .....	15
2. How Does Speciation Occur? .....	19
3. Lighter or Darker? .....	20
4. Nocturnal Caprimulgid Capers .....	24

### Regular Columns

Ornithology Rules: Summary .....	19
Gone Pishing: Swan Lake Nature Reserve Park, Vernon .....	21
Featured Species No. 14: Brown Pelican .....	23

*Below: Osprey spotted on Page Road, Matsqui Trail, Fraser Valley  
by John Gordon, Surrey.*



**Publisher**

*BC Birding* is published four times a year by the British Columbia Field Ornithologists, P.O. Box 61670, RPO Brookwood, Langley, BC V3A 1K0.

A subscription to this quarterly is a benefit of membership in the society. Members will also receive a copy of the annual journal, *British Columbia Birds*.

**About the BCFO**

Membership in BCFO is open to anyone interested in the study and enjoyment of wild birds in British Columbia.

BCFO objectives include: fostering cooperation between amateur and professional ornithologists, promoting cooperative bird surveys and research projects, and supporting conservation organizations in their efforts to preserve birds and their habitats.

**Membership**

See the website (<http://bcfo.ca>) for details, or write to the BCFO address given above under "Publisher."

**Annual Membership Dues**

General Membership (Canada): \$30

Junior Membership (Canada): \$20

U.S. and International Membership: \$35

**Newsmagazine Submissions**

To submit material to this publication, contact the Editor by email ([clive\\_keen@hotmail.com](mailto:clive_keen@hotmail.com)). Books for review should be sent to 10790 Grassland Road, Prince George, BC V2K 5E8.

Topics may include birding experiences, casual observations about bird behaviour, bird project reports, site guides, birding equipment, bird photography, trip reports (including overseas trips), and other subjects of broad interest to BC birders. Brief items are always welcome, but average submissions tend to be in the 400–800 word range. For longer submissions the normal maximum length is 1,500 words. Note that this is a newsmagazine rather than an academic journal, so formal reference lists etc are inappropriate.

Articles should be in plain text, either as the content of an email, or as an attachment (preferably Word). Photographs – remember to give the name of the photographer and a caption – should be sent as separate attachments, not embedded in text.

Deadlines (i.e. final dates for submission) are as follows:

- March edition: February 15
- June edition: May 15
- September edition: August 15
- December edition: November 15

**Advertising Rates**

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Quarter page: \$40 per issue or \$36 each for four or more issues.

BCFO members are welcome to include classified ads, of up to 25 words, at no cost.

# BCFO Officers & Directors

**Directors**

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*Archivist/ Librarian:* Les Gyug

*BC Birding (Newsmagazine) Editor:* Clive Keen; *Associate*

*Editor:* Virginia Rasch. *Print Distribution:* June Ryder

*British Columbia Birds (Journal) Editor:* Art Martell.

*Production Editor:* Neil Dawe

*Canadian International Joint Venture:* Wayne Weber

*Christmas Bird Count Coordinator:* Monica Nugent

*Featured Photographer:* Carlo Giovanella

*Membership Secretary:* Larry Cowan

*Two-day Trips:* Vacancy

*Website:* George Clulow, Neil Dawe

**Committees**

*BC Bird Records Committee:* Catherine Craig (Acting Chair – Ex-officio), Cathy Antoniazzi, David Bradley, Dianne Cooper, Ian Cruickshank, Mark Phinney, Jeremy Gatten, Joachim Bertrands.

*Cannings Award Committee:* Wayne Weber (Chair), Art Martell, Dick Cannings.

*Conservation and Education Committee:* Gary Davidson (Chair), Art Martell, Gerald McKeating, Stephen Partington, Marian Porter.

*Young Birder Awards Committee:* Carlo Giovanella (Chair), George Clulow.



## President's Message

*Marian Porter, Salt Spring Island*

With COVID keeping most of us birding in relative isolation World Migratory Bird Day provided an opportunity to join a global team for the Cornell Lab Global Big Day on May 8. 51,816 people in 192 countries participated, recording 7,234 species of birds in one day. Four records in the 19-year history of eBird were broken with the greatest number of birders, countries, species and checklists during the 24-hour period. The billionth bird was listed since the start of eBird, an Australasian Swamphen.

I visited a restored wetland which used to be a golf course on Salt Spring Island, the Blackburn Lake Nature Reserve. Bird sightings recorded on eBird were entered onto maps on the Global Big Day page showing what others around the world were finding in real

time, giving a sense of participation in a real celebration of birds during World Migratory Bird Day.

Although group birding in our two- and three-day field trip program is still on hold until later in the year the new feature of members giving Zoom presentations of their birding travel adventures has been a popular success. I would like to thank Larry Cowan, Gary Davidson, Alan Burger and Rand Rudland for taking us to four continents to experience countless birds and exotic scenery. The board has decided to resume the Zoom talks in the fall after a summer break and intend to make Zoom communication a permanent feature for our membership.

We will finally be able to meet at the Smithers Conference and Annual General Meeting in June 2022. The extension trip to Terrace and Kitimat will be after the conference from June 26 to 29. Vernon and Creston are probable destinations for the conference after Smithers.

I would like to express my appreciation to outgoing Bird Records Committee members Guy Monty and Catherine

Craig for their contributions to the program and welcome Jeremy Gatten and Joachim Bertrands who will be replacing them. Jeremy has previous experience on the Bird Records Committee and Joachim has extensive experience in Europe, North Africa and the Middle East which gives him a unique familiarity with Eurasian vagrants. Applicants who were not chosen are encouraged to continue their interest in the organization and consider other volunteer positions such as board director or field trip leader. Please contact me if you wish to become more involved with BCFO.

In December 2020 along with other naturalist and conservation organizations I wrote a letter on the behalf of BCFO to the Ministry of Forests, Lands, Natural Resource Operations and Rural Development opposing the opening of the Mountainside Quarries Group mine at the base of Sumas Mountain in Abbotsford. The mining company had applied for a Wildlife Act Permit authorizing the destruction and removal of a Peregrine Falcon nesting

*Below: An American Avocet spotted at Frank Lake, Alberta.*

## Welcome New Members

**Mike Cronk - Vancouver**

**Sonia Erraud - Vernon**

**Scott Edwardson - Delta**

**Katherine Bausemer - Vancouver**

**Paul Foth - 108 Mile Ranch**

**Susan Green - Abbotsford**

**Betty Griffiths - Vancouver**

**Alexis Harrington - Sechelt**

**Kevin Hood - Nanaimo**

**Michelle Jackson - Langley**

**Marisa Myrah - North Vancouver**

**Kester Reid - Courtenay**

**Christopher Stephens -  
Parksville**

**Shawna Thirkell -  
Mission**

**Iwan van Veen -  
Powell River**

**Clay Zhou-Radies -  
Vancouver**



site at the quarry, and that was granted by the Ministry in January 2021. In March I applied for third-party status on behalf of BCFO to support the appeal of Christopher Kitt before the Environmental Appeal Board to stop the permit authorizing the destruction of the nest site. The appeal was rejected by the Ministry for "lack of standing" due to the interpretation that only the applicant or the Ministry has standing to appeal, denying other parties to appeal at the ministry level. Blasting has commenced at the quarry, and rock and debris now cover the nest site, with the peregrines who had previously nested at that location remaining near their breeding territory. I will continue to communicate with local biologists and naturalists who are monitoring the situation at the quarry and inform the membership of the outcome.



## BCFO AGM 2021

This year's AGM will take place via Zoom Communications on:

**June 24, 7:00 pm Pacific Time**

The AGM will be brief, with relevant documents available on the website for members to review prior to the meeting. The minutes from the 2020 AGM and the annual Financial Statement will be presented for voting and acceptance. Two nominees will be chosen to replace the outgoing board members, Mike McGrenere and Virginia Rasch.

### Keynote Presentation

There will be a keynote presentation after the meeting with Dr David Bradley speaking on the Long-billed Curlew project in the Prince George area. Tracking with satellite transmitters increased the knowledge of their breeding range expansion into the ranchlands and farmlands of Prince George. Migration routes were followed through British Columbia to wintering areas in California.

Dr. Bradley is the British Columbia Program Manager for Birds Canada overseeing the Coastal Waterbird Sur-

vey, Beached Bird Survey, the Long-billed Curlew migration tracking study, and the invasive species study in Haida Gwaii.

Dr Bradley joined Birds Canada in 2014 after his post-doctoral study at the University of Guelph, Ontario, on the migration and breeding phenology of Tree Swallows. His PhD was completed in New Zealand studying the ecology and conservation of the endemic and endangered North Island Kōkako. Studies of Neotropical birds were conducted in Mexico, Costa Rica, Panama and Columbia. Dr Bradley contributes his expertise for the conservation of birds and their environment as a board member of Pacific Birds Habitat Joint Venture.



## Letter

With the restrictions to travel brought about by COVID it was such a pleasure to have the BCFO Zoom Travel ses-

## CALL FOR NOMINATIONS

This notice is to inform members that the BC Field Ornithologists is looking for two new Board Directors to fill vacancies created by retiring Directors. Mike McGrenere and Virginia Rasch will be stepping off the Board at the June 24, 2021, Annual General Meeting (AGM).

Board Directors are elected annually at the AGM for a term of one year. Board Directors can serve a maximum of six consecutive years on the Board. The Board has a maximum of nine members and a slate of prospective Board Directors is presented for approval at the AGM.

Nominations for Directors may be made by any member, and must be sent to the Secretary, together with the signed consent of the nominee (email may be used for consent this year). Nominations must be received by May 24, 2021 (30 days before the date of the Annual General Meeting).

The Nominations Committee is comprised of Mike McGrenere and Art Martel. Please contact Mike or Art if you are interested in assisting the BCFO as a Board member. Contact information is at the bottom of the Members section of the website or on page 3 of this magazine. You can also contact any of the other Board members for information.

*The BCFO is a volunteer-run organization and we need new volunteers to continue the smooth operation of the society.*

Mike McGrenere, Secretary and Nominations Committee Member,  
mi8624@telus.net  
Art Martell, amartell@shaw.ca

sions this spring. Those virtual travels made us long for the time when we might once again travel for real. The sessions provided a reminder of why we have all enjoyed getting out with friends to immerse ourselves in both the wonders of Nature and the thrills of birding itself.

Marilyn and I would like, very much, to commend the BCFO Executive for getting this initiative off the ground. We also want to thank the presenters for stepping in and for providing such interesting and informative sessions. If there is some way to get more such presentations, either during or after COVID, I am certain the BCFO membership would welcome them with enthusiasm.

Kudos to all!

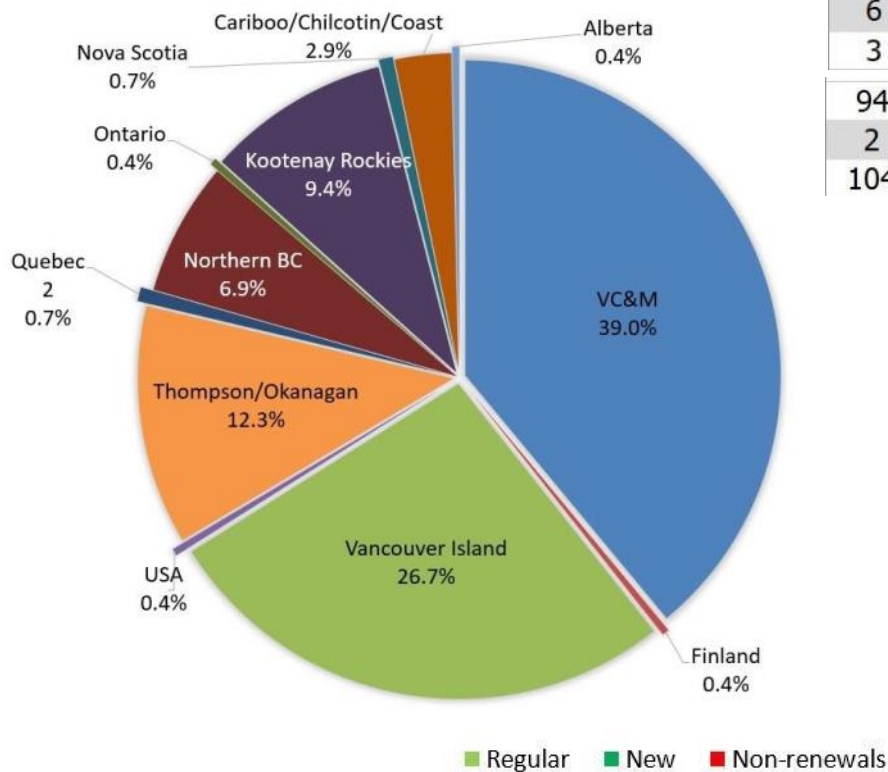
Andy & Marilyn Buhler, Vernon,  
BC



# Membership Report

As of May 10 2021

Larry Cowan (Pitt Meadows), Membership Secretary



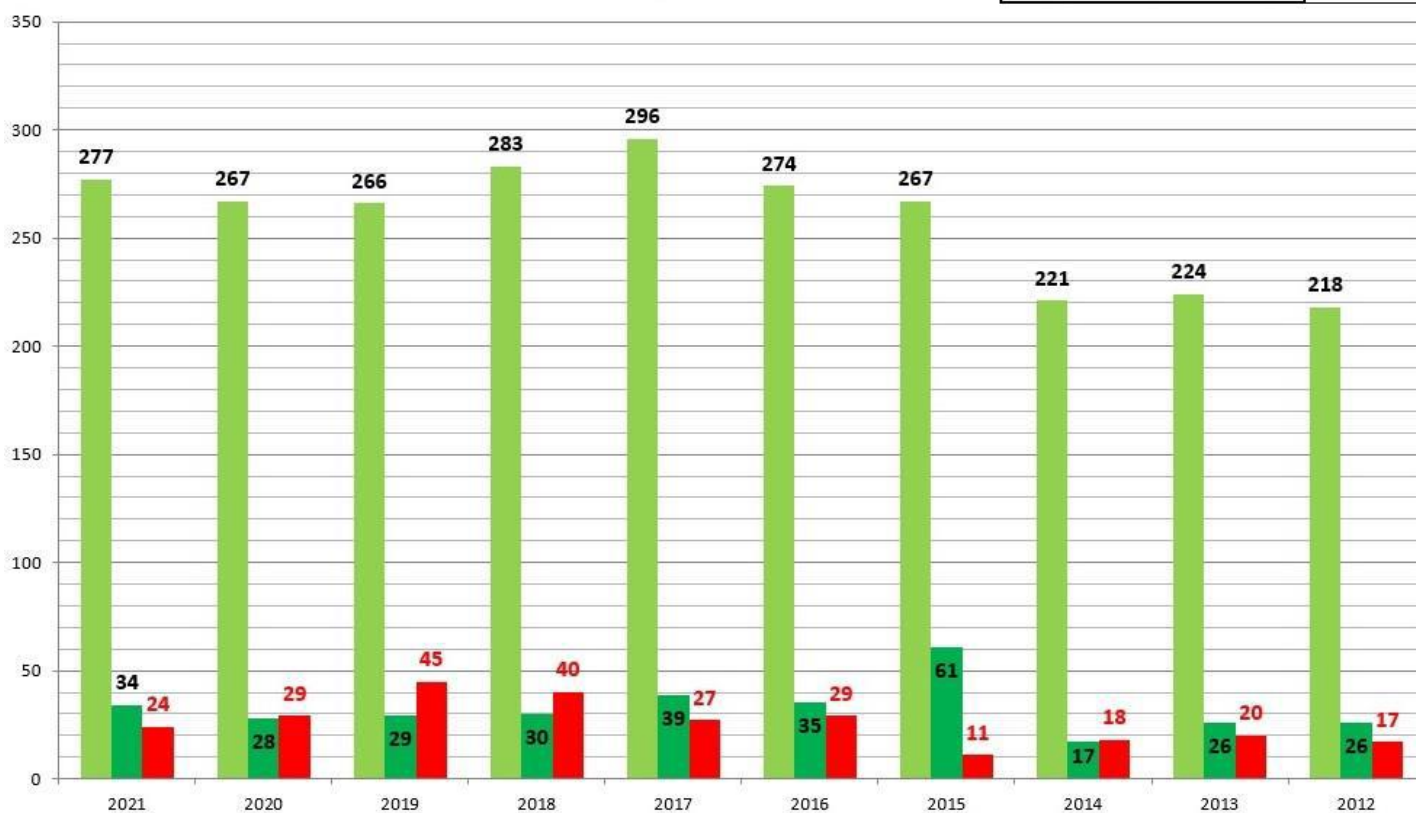
2021		2020
305	Total	295
277	Regular	267
3	Honourary	3
16	Jr. award winners	16
6	Institutional	6
3	Complimentary	4
94	Paid BC Birding	82
2	No email	3
104	BC Birds, website	88

New Renewal 2020 to 2021	
2020 >	28
2021 >	19
To go >	9

30% 2016
43% 2017
40% 2018
41% 2019
30% 2020
57% 2021

Fam/M/F 2019 vs 2020		
Family	♂	♀
11%	60%	29%
13%	60%	26%

< 2020
< 2021



## Notes

### Additional 2022 Conference Trip

In addition to the various trips previously reported, Ray Sturney will lead a group on Sunday, June 26 into the Suskwa River Valley southeast of New Hazelton. The wide, high-elevation valley has lakes and wetlands, forest and clearcuts plus a four-year-old forest fire burn that will yield a diverse species list of birds. Mountain and Boreal Chickadee, Fox Sparrow, Black-backed Woodpecker, Townsend's Solitaire and Golden-crowned Sparrow inhabit the valley and with luck a Northern Hawk Owl is possible. Rich in warblers, Tennessee, Yellow, Wilson's and Blackpoll as well as Orange-crowned Warblers will be found in the mixed forests and wetlands. You will be surrounded by forest at the base of the spectacular Skilokis Mountain range in an area unknown to most birders.

### Birdathon Prize for Roger Simms

Roger Simms (Parksville) is the 2020 Great Canadian Birdathon Grand Prize winner. In announcing the award, Birds Canada said "For more than 30 years Roger has been a very active and dedicated supporter of Birds Canada, participating in not only the Great Canadian Birdathon, but in a very long list of Birds Canada conservation projects."



The prize is an Eagle-Eye Tours birding adventure of Roger's choice. Nice. Well done Roger.

### BCFO Featured Photographer

Val George (Victoria) is the latest BCFO Featured Photographer. You can see a number of his images, including this charming shot of a Red-winged Blackbird chick at:

[bcfo.ca/val-george-march-2021](http://bcfo.ca/val-george-march-2021)



### Bald Eagle Preserve Plans for VI

A campaign to create a Bald Eagle preserve on Vancouver Island has been launched by The Save Estuary Land Society and the Friends of French Creek Conservation Society. Funds are needed to purchase five acres of estuary land, to add to twelve gifted acres and existing park land. With the purchase, a 23-acre preserve would be created. More information can be found at:

[www.saveestuarylandsociety.ca](http://www.saveestuarylandsociety.ca)

### Mega Longspur Fallout

On 8 May Mark Phinney (Dawson Creek) reported the extraordinary sight of some 40,000 Lapland Longspurs at a location north of Dawson Creek. On the local birders' listserve he wrote: "The fields were full of longspurs this morning. I estimated about 40,000. Yes, 40,000, and I might have been way un-

der! ... I searched as best I could for a Smith's Longspur but no luck. The scattered Snow Buntings stand out a lot better! Obviously the birds are most visible in flight, but the ground can be crawling with them – invisible until they start moving."

Alerted by Mark, other Peace Region birders went to see the spectacle, and noted the inevitable: Merlins, Harriers and Red-tails profiting from the bounty.

### Curlew Friendly Farms

Birds Canada has started a Curlew Friendly Farm Stewardship project between Vanderhoof, Prince George and Quesnel. A team will be visiting the area in May and June, and are planning to meet with The BC Cattlemen Association and other farmers and landowners to discuss ways of protecting the breeding curlews in the area.

### Another Awful Bird Name

Tony Greenfield (Sechelt) has offered a can-you-beat-it entry in the Awful Bird Names stakes. He is in the lead so far. He writes:

In my book, the winner of this contest by a country mile is the OLEAGINOUS PIPROMORPHA.

An early field guide to Mexican birds (1972) was *A Field Guide to the Birds of Mexico and Central America* by L. Irby Davis. Speciation and nomenclature were unstable and evolving at that time and Davis frequently used his own nomenclature. Leafing through the book I was immediately drawn to/repelled by Oleaginous Pipromorpha.

Today we know this species as Ochre-bellied Flycatcher. Other English names for the species have been Oily Flycatcher and Oleaginous Flycatcher.

In Davis the species was *Pipromorpha oleaginae* but is now officially *Mionectes oleagineus*.

Dictionary definitions of "oleaginous" are: rich in, covered with, or producing oil; oily or greasy. Usage includes: exaggeratedly and distastefully complimentary; obsequious.



## Virtual Bird Banding Training

This spring's bird-banding workshop by Rocky Point Bird Observatory in Victoria is online. The two-day workshop, held by Zoom on May 23–24, focuses on bird aging and sexing, molt, and the Wolfe-Ryder-Pyle (WRP) cycle-based aging system.

The organizers note that though the field and lab components will be missed, the above topics can be covered in much greater detail than in the usual workshop.

Details can be found at:

[rpbo.org/rpbworkshop21.php](http://rpbo.org/rpbworkshop21.php)

## Vaux's Swifts Converge on Courtenay Museum

A video of thousands of swifts entering the chimney at Courtenay Museum was shown first on the local CBC TV station, and then on CBC national news. This is the fourth year that the spring-time spectacle has been reported, with some 4,500 swifts making a pit stop on their annual migration north.

The birds usually roost in the chimney for about two weeks before continuing their migration. Understandably, the dusk event is becoming a local attraction, and museum staff are making their brick chimney as welcoming as possible.

## Global Big Day, May 8, 2021

BC topped the Canadian table for species seen on the Big Day, with 271 species spotted from 2,653 checklists. Second-placed Ontario, with far more birders, found seventeen fewer species (254), and required 6,425 checklists for that tally. Clearly BC is the best place in the country for birding.

Saskatchewan gets an honorable mention. There were just 373 checklists, but 192 species were tallied.

Hats off to the solitary Big Day eBirder in Nunavut, Clare Kines, who spotted two species: a Common Raven and Glaucous Gull out on the sea ice.

## Xanthic, Anyone?

There was an interesting discussion on oddly coloured birds on the Vancouver Island birders' listserv. A particular bird was said to be – not albino or melanistic, which we all know about – but xanthic, meaning that its feathers were unexpectedly yellowish. That led to a question about further potential enhancements to birding vocabulary covering odd-coloured plumage. *Erythristic* was offered for birds with unusual reddish tints. This magazine can offer *cyanic*, for feathers with an unexpected blue tint. Are there any classics scholars out there with further additions to the birding lexicon?



## Unnamed Hawk

The hawk (right) in the March edition was added in anticipation of the annual is-it-a-coop-or-sharpie questions in the various birders' listservs. This particular one was easy: juvenile sharpies have coarse brown streaks on the breast, whereas juvenile coops have thin dark streaks.

The more difficult examples prestened by various photographers met with a wide variety of ID pointers. One of the more interesting, given by several people, concerned the difference in the facial expression of the two birds. They

pointed to the “angrier eye” of Cooper's vs the “softer, slightly bug-eyed look” of the Sharp-shinned.

If you'd prefer more objective pointers, one of the more approachable guides can be found at:

[freidaybird.blogspot.com/2020/12/twenty-four-ways-to-tell-sharp-shinned.html?m=1](http://freidaybird.blogspot.com/2020/12/twenty-four-ways-to-tell-sharp-shinned.html?m=1)

*Northern Rough-winged Swallow photographed by John Gordon at Willband Creek Park, Abbotsford.*





# The Prince George Curlews

Clive Keen, Prince George

Regular readers of this magazine will know that springtime has brought particular excitement to Prince George birders, as Long-billed Curlews, some with transmitters and leg bands, wend their way back to their Prince George breeding grounds.

The Shelley pipeline fields were under tight surveillance in early spring, and right on time, a small flock flew in on April 6. The hordes of birds that some of us are used to gave this year a miss. Just a dozen or so curlews, with no tags or transmitters, were spotted in the field, compared with eighty-plus in previous years. The reason seems to have been that snows had disappeared over a much wider area than usual, so foraging was not limited to the pipeline-warmed soil. Rather than concentrating at their trusty field of early worms, the birds quickly dispersed to their nesting sites.

Two transmitters were still functioning, and the birds carrying those transmitters – Ivan and Peter – were tardy, not reaching Prince George until a couple of weeks after the earliest arrivals. The transmitters nevertheless allowed Jack Bowling to give local birders continued updates on the whereabouts and activities of the birds as the season progressed.

Below is one of Jack Bowling's regular reports on the local birders listserv. He was responding to a request about the bird known coincidentally as Jack, named after a well-known local doctor and naturalist, the late Jack McGhee.

*Jack [tag AJ] had a most interesting year in 2020. A human would call it sad. Jack waited around for his mate of the previous year, Jill [tag LJ], for a long time before he settled down with a new female. Not long after he hooked up with the new female, Jill finally showed up. ... She immediately approached Jack at the previous year's nest site but she realized what had happened and took off. Jack then mated with the new female and she laid four eggs very near*

*the previous year's location. But I think they left it too late. The cold, wet summer last year was conducive to rapid grass growth but not to keeping the eggs warm when the adults were away from the nest (which happens more frequently than people realize). Eventually, the nest and eggs were abandoned. It is unknown if they were sterile or the adults just gave up. With the total failure of the grasshopper horde last summer, I would not be surprised if many of the adult curlews had to choose their own survival over that of their eggs.*



The second commentator giving us near-daily updates on the curlews is Martha Griesbach, on whose farmland a number of the curlews were outfitted with tags and transmitters. Most of the birds tagged around her farm had returned, and local birders benefited from her close observations. Here is an example of her reports:

*30 April. Another cold windy rainy day with the curlews today. Ivan [tag KY] has been spending time still on the north end of the ridge field near the back. Still busy chasing hawks. Everyone is still out and about with their mates during the day, some courtship behaviour happening. Martha [tag AM] and her mate are spending lots of time fairly near their 2019 nest site. ... Konrad [tag KN]*

*always seems to be by himself, just like last year.*

As time passed we learned a lot more about the activities not just of Ivan, Martha, Jack and Konrad but of Lane (tag LN), Schalin (tag AE), Jill (tag LJ), Raven (tag AV) and anonymous others. We heard about amusing courtship and marital problems, but also about the trials of nesting. A Northern Harrier attack on Konrad's nest saw Konrad and three others drive off the hawk, but apparently too late. A little later, Martha (the human) looked for the nest and reported "All that was there were bits of curlew eggshells scattered here and there! Awful sight!" Then a Labrador was seen wandering near Schalin's nest, possibly causing her to abandon the area, and reminding us of the many problems caused by loose dogs to ground-nesting birds. These and other trials, involving coyotes, ravens and foxes – most of the initial nests were predated – seem to have caused the early departure of both Jack and Jill.

Another regular report was from Karen, on whose land a little south of Prince George other curlews had been tagged, including Peter (tag KP). The curlew project by Birds Canada has touched many hearts locally, and Karen spoke for several when she sent the following email to the birders' listserv:

*Some of you may not know that having Peter nearby has special significance for us as we named him after our late son who was a bird enthusiast. We feel a unique emotional connection to this little bird and have been very moved by the whole curlew project. Many thanks to David Bradley and Graham Sorenson for giving us the opportunity to participate.*

David Bradley will be giving the keynote presentation after this year's BCFO AGM on June 24 (see page 5). By then a Bird Studies team will have visited Prince George to remove the transmitters, giving the volunteer birds some respite from our prying eyes. But they will have given us a huge amount of new understanding, which will surely benefit their descendants.

See also a post by Graham Sorenson about the project, uploaded on World Curlew Day, April 21, 2021.

[www.birdscanada.org/celebrating-curlews-in-canadas-west-and-beyond](http://www.birdscanada.org/celebrating-curlews-in-canadas-west-and-beyond)

# Upcoming Meetings & Events

Compiled by Wayne C. Weber

The following meetings and other events are those that take place in BC and immediately adjacent areas or that potentially include information on birds that occur in BC.

NOTE: Because of the Covid-19 epidemic, many scheduled meetings and events for the next few months have been cancelled, gone virtual, or been postponed. Events that have not yet been cancelled could still be cancelled at a later date. Please be sure to check event websites before you plan to attend or register for any events. Also, note that you will not be able to attend events in the USA until the international border is reopened.

For most meetings, festivals and other events, the website is the main source of information, and registration can usually be accomplished online as well. Wherever information can be obtained through a phone number or email address, we have included these as well; if no contact information is listed, it can be assumed that none was provided by the organization, at least not on the date when this listing was compiled. It is usually not necessary to contact a particular individual, except for scientific meetings when one is interested in making a presentation. Names and contact information for individuals are listed whenever they are available.

For a detailed listing of birding festivals all over North America, please check the Cornell "All About Birds" website at [www.allaboutbirds.org/birding-festivals](http://www.allaboutbirds.org/birding-festivals).

June 1–July 7: NORTH AMERICAN BREEDING BIRD SURVEY. This long-established program, supervised by the Canadian Wildlife Service and US Fish & Wildlife Service, is for experienced birders who are skilled at identifying birds by songs and calls as well as by sight. It involves running a roadside survey route once every year during June or very early July. There are several "vacant" (i.e., unassigned) routes in various parts of BC. If you are interested, check the Canadian Wildlife Service website at [www.canada.ca/en/environment-climate-change/services/bird-surveys/landbird/north-american-breeding/overview.html](http://www.canada.ca/en/environment-climate-change/services/bird-surveys/landbird/north-american-breeding/overview.html), which includes further details and has contact information for the CWS staff in charge of the program.

June 11–13: MANNING PARK BIRD BLITZ, Manning Provincial Park, BC (based at Loneduck Campground on Lightning Lake). This year's event will be "Do-it-yourself"; birders are welcome to do a count in a section of the park (assuming that travel restrictions have been lifted), but there will be no organized program. For information and to register, check the website at [hopemountain.org/programs/manning-park-bird-blitz-june-11-13-2021](http://hopemountain.org/programs/manning-park-bird-blitz-june-11-13-2021). Inquiries may be made by email to Ashley Tyler at [atyler@hopemountain.org](mailto:atyler@hopemountain.org) or by phone at 604-869-1274.

June 19: First WESTPORT SEABIRDS pelagic birding trip of the summer from Westport, WA.

Westport Seabirds will be operating 20 trips in 2021 from June through October. For the trip schedule and other information, please check the website at [westportseabirds.com](http://westportseabirds.com).

June 24: BC FIELD ORNITHOLOGISTS ANNUAL GENERAL MEETING by Zoom. For further information, please check the BCFO website at [bcfo.ca/annual-conference-smithers-june-24-26](http://bcfo.ca/annual-conference-smithers-june-24-26).

Aug. 9–14: 139th STATED MEETING, AMERICAN ORNITHOLOGICAL SOCIETY. This will be an online meeting. For further details, please visit the AOS website at [americanornithology.org/meetings/annual-meeting](http://americanornithology.org/meetings/annual-meeting).

Sept. 11–12: PUGET SOUND BIRD FESTIVAL, Edmonds, WA. For information and to register (starting Aug. 1), check the festival website at [www.pugetsoundbirdfest.org](http://www.pugetsoundbirdfest.org), or contact Jennifer Leach at the City of Edmonds Parks Dept. (phone 425-771-0227), or email her at [jennifer.leach@edmondswa.gov](mailto:jennifer.leach@edmondswa.gov).

Sept. 16–20: Joint annual meeting, WASHINGTON ORNITHOLOGICAL SOCIETY and OREGON BIRDING ASSOCIATION, Astoria, Oregon. For further information, check the WOS website at [wos.org/annual-conference/current-year](http://wos.org/annual-conference/current-year), or the OBA website at [oregonbirding.org](http://oregonbirding.org).

Nov. 1–5: 28TH ANNUAL CONFERENCE OF THE WILDLIFE SOCIETY. This will be a virtual meeting. For information, check the TWS conference page at [twsconference.org](http://twsconference.org).

Dec. 14 to Jan. 5 (2022): CHRISTMAS BIRD COUNTS. For information on dates of counts and contact information for count organizers, check the BCFO website in November and December, or check the December issue of *BC Birding*.

*Below: A House Finch photographed by eleven-year-old Narayana Howe at Ta Ta Creek.*



## Internet Moments

Here are a few internet moments that have caught the attention of members. If you see any interesting ones, send them in.

- A webcam following the progress of a Northern Spotted Owl chick:

[fwcp.ca/owlwebcam](http://fwcp.ca/owlwebcam)

- Yellow-breasted Chats require roses to survive in BC:

[www.timescolonist.com/rare-yellow-birds-need-wild-roses-to-survive-in-british-columbia-researcher-1.24316851](http://www.timescolonist.com/rare-yellow-birds-need-wild-roses-to-survive-in-british-columbia-researcher-1.24316851)

- Preventing window collisions: a short video provided by the Vancouver Avian Research Centre:

[www.youtube.com/watch?v=CM13CY7A6k0](http://www.youtube.com/watch?v=CM13CY7A6k0)

- The Biden administration announces it will side with Canada in a dispute over an environmental protec-

tion for birds that migrate across the border:

[www.cbc.ca/news/world/biden-birds-canada-1.6018609](http://www.cbc.ca/news/world/biden-birds-canada-1.6018609)

- Discovery of an Anna's Hummingbird nest has stopped construction of the Transmountain oil pipeline:

[www.theguardian.com/world/2021/apr/28/canada-hummingbird-halt-construction-pipeline](http://www.theguardian.com/world/2021/apr/28/canada-hummingbird-halt-construction-pipeline)

- Precision flying by a Harris's Hawk:

[twitter.com/RitaPanahi/status/1385913207550738434](https://twitter.com/RitaPanahi/status/1385913207550738434)

- Birds' blood functions as a heating system in winter:

[phys.org/news/2021-04-birds-blood-functions-winter.html](http://phys.org/news/2021-04-birds-blood-functions-winter.html)

- There are 1.6 billion House Sparrows on the planet:

[www.bbc.com/news/science-environment-57150571](http://www.bbc.com/news/science-environment-57150571)

- Interview with Margaret Atwood on her late partner Graeme Gibson, and their shared love of birds:

[www.cbc.ca/listen/live-radio/1-63/clip/15834139](http://www.cbc.ca/listen/live-radio/1-63/clip/15834139)

- Hooded Oriole found in Sidney:

[www.oakbaynews.com/community/rare-bird-spotted-visiting-a-backyard-feeder-in-sidney](http://www.oakbaynews.com/community/rare-bird-spotted-visiting-a-backyard-feeder-in-sidney)

- A poignant historic recording of the song of a Nightingale, while in the background Lancasters assemble for a raid on Germany. Heavy stuff:

[twitter.com/WildFTweeting/status/1388237794280103941](https://twitter.com/WildFTweeting/status/1388237794280103941)

- How an eagle blinks:

[www.youtube.com/watch?v=BuhVuur6rRU](http://www.youtube.com/watch?v=BuhVuur6rRU)

- Birding brings as much happiness as money:

[thehill.com/changing-america/well-being/mental-health/544722-new-study-finds-birds-give-people-as-much-happiness?amp](http://thehill.com/changing-america/well-being/mental-health/544722-new-study-finds-birds-give-people-as-much-happiness?amp)

*Lee Harding (Coquitlam) took this photo of a gravity-defying California Scrub-Jay at Ladner Harbour Park in early April.*





## Adam Dhalla's Birding Game Launched

Previous editions of this magazine have reported on the plans of Adam Dhalla, a BCFO Young Birder Award recipient, to create a game to encourage young people to take up birding. The game has now been launched: a great achievement, and I'm sure we'll be hearing a lot more about it in coming months and years. Adam writes about it below.

*Adam Dhalla, Coquitlam*

Every morning, the dawn chorus echoes through my neighbourhood, and others next to mine. An entire world of song hidden to most of us, and as the opposite of a morning person, usually me.

This unawareness of a world hidden in front of our eyes, the world of birds, is the biggest obstacle to bird conservation. The foremost goal of any bird conservation education endeavour should be to help break this barrier. Unfortunately, this unawareness sometimes

appears to be growing with the rise of digital technology and all the distractions it can bring, especially in the new generation, of which I am very much a part.

Throughout my years of birding in British Columbia, I often found myself the youngest in the group and indeed the only child, or now, teen. Birding isn't naturally, perhaps due to lack of patience and too many distractions, a young person's activity – but it easily *can* be. In fact, for bird conservation efforts to continue into the next generations, we must inspire young people specifically to observe and appreciate birds. Only then can they be galvanized to help them.

There seemed to be a bit of a gap in bird-conservation education aimed at youth and kids. Other than the classic give-them-a-pair-of-binoculars tactic (which still is very necessary!) the tools

that the digital age offers for education seemed to be underutilized in the bird conservation community.

I was around eleven at the time and was spending a lot of my time on the family iPad playing games. As a young bird enthusiast, it occurred that birding is quite like a game – exploring habitats, finding bird species, and taking photos. So, with my dad, I co-created the rather natural idea of a mobile game about birding and conservation: *Find the Birds* ([www.findthebirds.com](http://www.findthebirds.com)). The idea is that this digital medium would serve as “a bridge from screen time to green time.”

A few years passed, with some progress – I was mostly developing the art style of the game, creating digital illustrations of levels and birds to understand how things would work. We reached out to organizations constantly, but with no actual gameplay to show, it

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*Below: Adam Dhalla. All images are courtesy of Thought Generation Society, the non-profit organization now producing the game.*



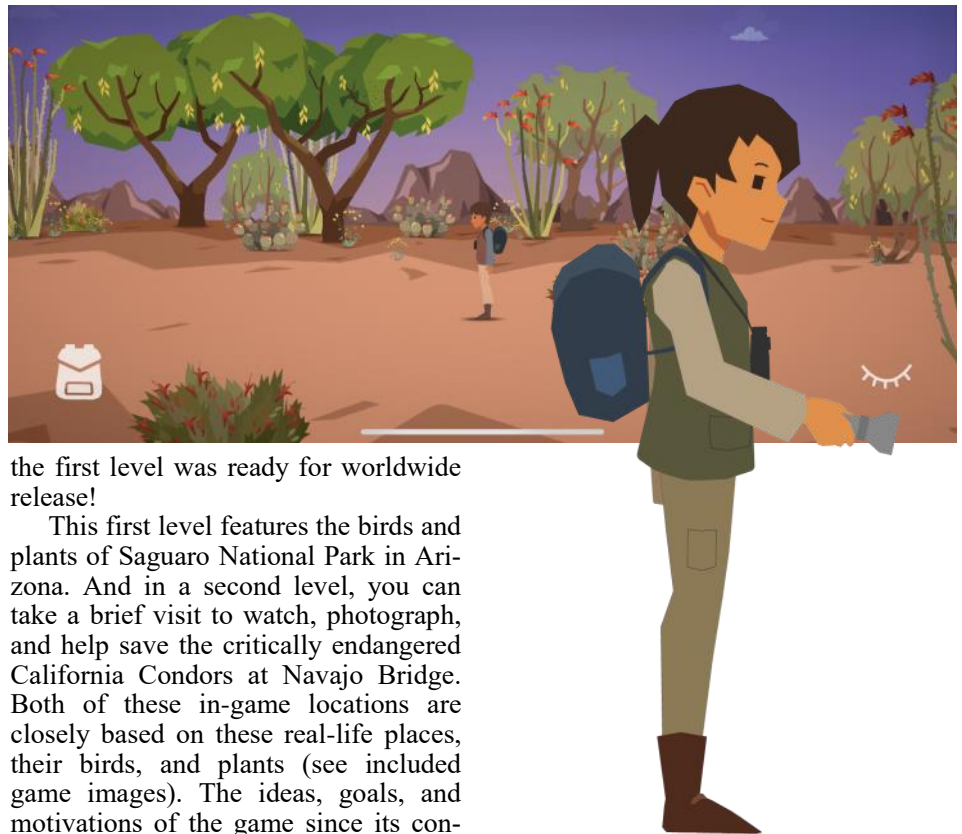
was hard to get support. We also had some express support, but COVID suddenly caused them to have to focus on other programs.

Flash forward to the first few days of 2021. As a part of an initiative of the Government of Canada, the non-profit Thought Generation Society ([www.thoughtgeneration.org](http://www.thoughtgeneration.org)) that my dad is the volunteer Executive Director of was selected to receive some program funding. And, in just a few days, the game, that remained just a *concept* for so long a time, became a *project*. And soon, after bringing together a team of talented game-design college graduates, it became a *game*.



Above: The game logo. Other illustrations on this page are from the game.

My role was creating all the initial bird drawings, which were then animated by the talented animators on our team. It is hard to understate how inspiring it was to see these drawings and ideas being put together after all the years of hope, speculation, and work. By the time this March came to an end,



the first level was ready for worldwide release!

This first level features the birds and plants of Saguaro National Park in Arizona. And in a second level, you can take a brief visit to watch, photograph, and help save the critically endangered California Condors at Navajo Bridge. Both of these in-game locations are closely based on these real-life places, their birds, and plants (see included game images). The ideas, goals, and motivations of the game since its conception many years ago remain unchanged. It is still a unique tool to get people interested in birds and conservation. The only difference now is that I could download it to my phone or tablet!

The game is completely free to download and play and has no in-app purchases or annoying ads. We wanted to make sure that *Find the Birds* is, and remains to be, as accessible as possible, with few income barriers. It is available on the Google Play Store for Android phones and tablets and the App Store for Apple devices. We aim to soon expand it to personal computers (PCs) too.

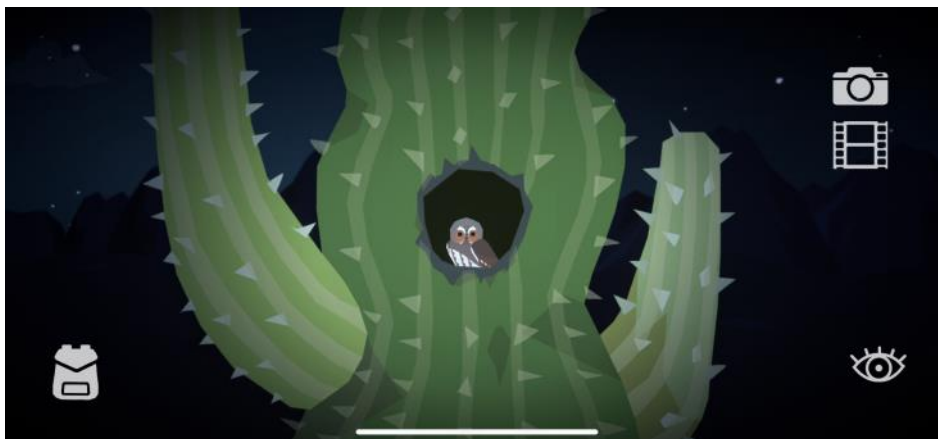
As of writing, approximately a month has elapsed since the launch and

the feedback has been both heartwarming and inspiring. I often hear of parents or grandparents passionate about birding using the game to connect to their kids or grandkids. The conversations that this game has prompted, and will continue to prompt, will hopefully set many on the path to conservation and environmental awareness. The game already has thousands of players in over 45 countries on six continents and the average player review is 4.7/5. In addition, the game is ranked in the top 100 of Apple App Store's educational games.

As production begins now on the second in-game location, that of my home province of British Columbia, I am excited to watch this project grow over the coming months and years. Working on this exciting game has changed my perspective on birds and education, and the stories I have heard so far as a result of its launch make me optimistic about the future of birds and conservation.

You can learn more and download *Find the Birds* on Google Play or the App Store at:

[www.findthebirds.com](http://www.findthebirds.com)





# Birding in China: Poyang Lake

*Lee E. Harding, Coquitlam*

## Getting There

In December, 2006, having a scientific meeting in Qingdao, on the east coast north of Shanghai, I decided to add a few days for birding. I detoured on a domestic flight from Beijing to Nanchang, the capital of Jiangxi Province. From there I would find ground transportation to the Poyang Lake National Nature Reserve.

At 3,841 km<sup>2</sup> when full in summer, Poyang is the largest freshwater lake in China. In the winter dry season, the water level drops about seven metres and Poyang breaks into several smaller lakes, each named separately. In winter it hosts almost the entire world populations of Siberian cranes, 60% of White-naped Cranes, 80% of Oriental White Storks, 30,000 Swan Geese, over 25,000 Bewick's Swans, Whooper Swans, three other species of crane and hundreds of hundreds of thousands of other waterbirds. It is a National Nature Reserve, a Ramsar (Wetlands of International Importance) site, and an IBA (Important Bird Area), and it figures prominently in virtually all of the conservation action plans for endangered waterbirds in East Asia. It is only a half day's drive from Nanchang.

As famous as it is for wintering waterfowl, I quickly discovered that Poyang Lake was not actually easy to get to. It still isn't. Before leaving Canada, I had failed to find on the Internet any accommodations at the refuge, in Wu Cheng, the nearby town, or even in Nanchang. There were no ecotours there, and none of the tourist agencies I contacted had ever heard of it. After an email referral from the International Crane Foundation (ICF), however, I heard from the Director of the reserve, based in Nanchang, who promised to get me to the refuge and a room at the Reserve's guest house. At least, I thought he had, as his emails were poorly translated. Moreover, he had not replied to my query as to what I should do upon arrival, since my plane was scheduled to land at 9:30 PM.

I went without hotel reservations anyway, trusting that he would be there. He was not.

First, my flight from Beijing was delayed, so that I arrived at the Nanchang airport at 11:00 PM. Second, the Director was not there to meet me. Third, my suitcase (with optics) was missing and there were no English speakers in the small airport. My few words of Mandarin and a Chinese-English dictionary helped track the errant bag, which the agent finally assured me would arrive by 2:00 PM the next day. Great, I thought, already a day gone from my birding and I'm not even there yet. Fourth, by now it was midnight and the taxi drivers had all gone home.

From there, luck improved—somewhat. The airline agent took me by the hand—literally—and dragged me in a freezing wind 2 km to a darkened hotel, banged on the door, and got a sleepy, pajama-clad woman to admit me.

In the morning, after a great breakfast in the cafeteria, I wandered around looking at mynahs, wagtails and sparrows with no binoculars. But even with language help at the hotel, and my Chinese-English dictionary, I was unable to find a phone number for the Reserve Director, or even the Nature Reserve itself. At the airport, on a borrowed airline computer, I emailed the Reserve Director saying "If I have not heard from you by 1600 hours, I will hire a taxi and go to the Nature Reserve."

After my bag arrived, invigorated with a spicy lunch and the cheerful camaraderie with patrons in a packed restaurant who were unused to seeing strangers, and with a good map of the county (not, however, showing the Nature Reserve), I hired a taxi and set off for Wu Cheng.

## Wu Chen

I'll omit the taxi driver's several navigation errors, frequent stops to query passers-by, none of whom had heard of the nature reserve, and roads that appeared on the map but not on the ground. The last few kilometres were on a causeway under construction that crossed a vast grassland that would be flooded in high water. Flocks of Common Cranes flew across and a distant lake was dotted with waterfowl and shorebirds. The road left the grassy flats

and climbed a red-earth hill up onto what would be an island in summer—finally reaching Wu Cheng at dusk. I could not see a hotel or restaurant and shops were closed. The driver, anxious to get back across the causeway before dark, let me out on the nearly-deserted main street and quickly left.

A pair of women understood my meager Mandarin: "Where is the National Park for birds?" and pointed. Shouldering my bag, I walked up the main street, right out of town, and in a kilometre came to a two-story building behind an elaborate, locked gate with a sign in English and Chinese: "Jiangxi Poyang Lake National Nature Reserve."

I got the attention of a couple who were just locking up for the night and, after some confusion, was given a room in the guesthouse. I had not been expected and there were no other guests. They walked me back into the village to a rustic, nearly empty restaurant with lights off outside, but the kitchen staff were still there and gave me a delicious dinner.

*Below: White-naped Crane at Poyang Lake. Photos by author.*







*Above: Hooded Crane at Poyang Lake.*

Back at the guest house, a message from the Reserve Director said that a Mr Wang, a Nature Reserve ecologist, would meet me tomorrow.

### Miss Wang

In the morning, after a savoury breakfast watching Oriental White Storks fly over Wu Cheng, the guest house man drove me back to the causeway to wait for Mr Wang. My notes show Common cranes, White-naped Cranes, Eurasian Spoonbills, Pied Avocets, shorebirds, ducks, geese and swans.

A van drove up and disgorged 16 birdwatchers from Nanchang with binoculars and spotting 'scopes. One was a very petite young woman with a 'scope almost bigger than she was.

"This is Mr. Wang," said the guest house man, clearly losing something in the translation. Miss Wang spoke excellent English.

### Poyang Lake

The first day we spent hiking across grassy prairies past herds of water buffalo to reach ponds filled with birds. On the second and third days, Miss Wang and I took a motorized sampan to see more distant lakes.

I listed 93 new species (I had been to China twice before) for the three-day trip. Around the lake edges were Hooded, White-naped, Common and Siberian Cranes, as well as Eurasian Spoonbills, Eurasian and Far-eastern Curlew, Pied Avocets, Grey Herons and three species of egrets, and multiple species of snipe, sandpipers, tringas and plovers. Waterfowl included thousands of Taiga Bean Geese, Greater and Lesser White-fronted Geese, Swan Geese and many kinds of ducks. On the uplands of the island of Wu Chen were terrestrial birds

such as Yellow-bellied Tits, Plain Prinias, Daurian Redstarts, Vinous-throated Parrotbills, shrikes and Crested Buntings. In ponds on the island and along river edges were four kinds of kingfisher (White-throated, Crested, Pied and Common), Oriental Reed-warblers, and Brown Crakes. In the grasslands and rice paddies were Upland and Richard's Pipits. Above all lurked eagles, buzzards, kites, harriers, hawks and falcons.

Besides birds, I saw a pod of rare Yangtze River finless porpoises and a rare Chinese

Water Deer (a deer with tusks but no antlers) and a dhole (a wild canid).

So far, the seasonal flooding and drying have prevented development, making the marshy prairie a mecca for wintering waterbirds and rare mammals. However, a dam was proposed decades ago and is still under serious consideration. I hope it will never be built.



## Briefing 1

*Summary by M. Church, Vancouver*

### A Tangled Murder Mystery

About 25 years ago, wildlife managers in Arkansas began to report finding Bald Eagles that were convulsive, paralyzed or dead. Their brains were pocked with lesions not before ever observed. The evident disease has been named "vacuolar myelinopathy." Soon, coots and owls joined the list, as did some ducks and geese. Owls and eagles are both predators; coots are omnivorous, but largely feed on aquatic vegetation. A common fact about the victims is that they were all found near lakes.

Eventually, the cause was traced to a previously unknown cyanobacterium found growing on an invasive water weed, waterhyme [*Hydrilla verticillata*]. Waterhyme is an old-world aquatic plant that was introduced to North America in the 1950s as a candidate aquarium plant. It proved unsuccessful (too vigorous) and was dumped in waterways in Florida, whence it has spread

across the U.S. (and now occurs in Canada too). Cyanobacteria (aka blue-green algae) are photosynthesizers, thought to be the original organisms to employ the photosynthetic process to acquire energy, and the engine of the oxygenation of the atmosphere of the ancient Earth.

But this does not end the mystery. In the laboratory the cyanobacterium (now named *Aetokthonos hydrillicola*) proved harmless when fed to chickens. Subsequently, it was found that when bromine salts (aka bromides) are added to the bacterial culture medium, the bacteria begin to produce a neurotoxin. In addition to birds, it kills fish, insects and worms. It is expected that it would kill mammals as well. It has further been determined that the neurotoxin is fat-soluble, meaning that it can accumulate in animal tissue. The birds are likely killed by eating contaminated prey; a common story of environmental catastrophe.

But bromides are unusual in freshwater. Certain (uncommon) rocks and coal-fired power plants are possible sources. Certain industrial chemicals (flame retardants, road salt, fracking fluids) may also be sources of waterborne bromides. The waterhyme initially magnifies the problem by concentrating bromides from the lake-bottom sediment in its leaves, whence the cyanobacterium acquires it. A likely source in lakes is the herbicide *diquat dibromide*, applied to kill the waterhyme! Experimental removal of the waterweed from a reservoir on the Georgia-South Carolina border has ended the occurrence there of sick and dying birds.

This detective story played out over 25 years. It is a startling example of the damage that can be done by thoughtless treatment of the natural environment. Neither the waterhyme nor the bromine salts were meant to be part of the lake environment in North America. The upshot is that the problem could now reoccur at localities across much of the continent.

### References

Breinlinger, S. + 20 others. 2021. Hunting the eagle killer: a cyanobacterial neurotoxin causes vacuolar myelinopathy. *Science* 371: 1335.

Article summary only. Full article available online. <https://doi.org/10.1126/science.aax99050>

Stokstad, E. 2021. Mysterious eagle killer identified. *Science* 371: 1298 (Commentary: same issue).

# Birding the Quebec City Area

Larry Joseph, Hazelton

## Introduction

From June 2–7, 2019, my international workplace was in Quebec City. Being a bird lover, I went birding on my arrival day. Then I went for walks every morning for two hours before work to observe birds. So birding was an incidental part of my visit.

Nonetheless, this essay will share my experiences, give a sense of place, and provide an indication of bird life at two principal locations: Huron-Wendat territory at Wendake and the Cap Tourmente National Wildlife Area (RNF du cap Tourmente), La Côte-de-Beaupré County, Quebec.

## Huron-Wendat Territory

The FSC international meeting venue was Hôtel-Musée Premières Nations (4

star), La Traite Restaurant, a longhouse, and the Museum of the Huron-Wendat, all under the same roof at Wendake, a northern suburb of Quebec City. The small museum preserves the rarest collections of the Huron-Wendat, an Iroquoian-speaking Indigenous people.

A beautiful river flows past this outstanding hotel and cultural centre. The Huron call it the Akiawenhrahk River while Quebecers say it is the Rivière St-Charles.

A 32 km trail follows the entire length of Rivière St-Charles. The river empties Lake St. Charles and flows into the St. Lawrence River at Quebec City. During Jacques Cartier's second voyage to the New World, he spent his first winter in Canada (1535–36) at the estuary of the Rivière St-Charles.

The best eBird birding hotspot at Wendake was 3 km upstream from the

hotel. Year-round, 138 species had been observed here. During June, 92 species had been observed (23 checklists) for all years. So, Wendake is not a popular birding location.

The river flows through deciduous forest, wetlands, and a coniferous forest. I restricted myself to walks along the river in the forest between Wendake and La Haute Saint-Charles.

Between 6:00AM–8:00AM from June 2 to 6, I walked the river. Colleagues from Denmark, Sweden, Canada, and Holland, joined me to experience the Tsonywa'ndiyonhrat ("We all share a single spirit") trail.

During five mornings, I observed 37 species. Surprisingly, 26 of the species were common in the Hazelton, BC,

*Below: Greater Snow Geese at Cap Tourmente. All photos by author.*





area. Naturally, my highlights were birds I do not see at home: Philadelphia Vireo, American Goldfinch, Bay-breasted Warbler, Northern Cardinal, Blue-headed Vireo, Gray Catbird, Ovenbird, and House Finch.

### Cap Tourmente National Wildlife Area

Just a one-hour drive from Wendake a spectacle unfolds every year during the spring and fall migrations. Huge flocks of Greater Snow Goose migrate from the east coast of the United States to Canada's High Arctic.

Cap Tourmente, upstream 60 km from Quebec City, consists of marshland, floodplains, mudflats at low tide and forests. A giant species of sedge, American bulrush, established marshes at this location on the north shore of Fleuve St-Laurent.

Greater Snow Geese love roots or rhizomes of American bulrush. As a consequence, flocks of tens of thousands stop over at these marshes. The flocks usually stay over for 16 days between April 25 to May 20. Therefore, Environment Canada established a refuge for this critical habitat in 1978.

The refuge opens at 8:30AM which is late for birders. It closes at 4:30PM which is early.

My arrival at RNF du cap Tourmente was at 8:00AM. As I sat in my vehicle waiting in line to enter the gate of the refuge I witnessed a drama.

Three birders had entered the refuge early. They went into the refuge but remained within sight of the main gate. Nevertheless, security personnel fined the early birds right beside me in my vehicle.

A large variety of birds have been observed at RNF du cap Tourmente. In fact, 310 species of birds have been observed year around, all years. In June, there were sightings of 213 species in recent years.

The Government of Canada website for the wildlife area provides useful information. The website indicates that 180 bird species make it their home during breeding season. Twenty duck and goose species, ten birds of prey species and thirty warbler species have been observed in the refuge.

On June 7, I walked 10 km over six hours in RNF du cap Tourmente. I was very pleased to see nine warbler species. I tried hard to find the Peregrine Falcon. It can be seen from a safe distance at a publicly known nest location



on a cliff face. Bobolink, a species at risk, was along my route. During two self-directed visits, I observed 33 species of birds.

Expert birders have observed 90 species in one day. Interestingly, they began at 6:00 AM and remained for nine hours. My impression is that they sneak around in RNF du cap Tourmente. They would have to conceal their movements for three hours until 9:00 AM to avoid fines and to accomplish this impressive feat.

During my day-long walk, I encountered RNF du cap Tourmente officials. I mentioned there were only a few hundred Greater Snow Goose in the wildlife area. One of the officials informed me, "The Snow Goose spring migration ended May 20. The Snow Goose at the wildlife [reserve] now were probably shot by hunters. So, they cannot travel long distances anymore. They stay

here."

### Concluding Remarks

During my visit, I encountered the farmhouse of the famous explorer Samuel de Champlain. Very strong feelings stirred in me as I gazed in wonder at his little farmhouse. RNF du cap Tourmente, therefore, also possesses the stature of a national historic site.

My visit was too short. Obviously, something is better than nothing. There are so many bird species at the wildlife refuge during the spring and fall migrations. As a consequence, birders should plan to visit RNF du cap Tourmente for a minimum of three days during the migrations. Stay near the refuge, not Quebec City, to minimize accommodation and restaurant costs.

*Above: Riviere St-Charles. Below: Cap Tourmente National Wildlife Area.*





# "Big Bird Foot"

## Evidence of an Ancient Denizen of the Peace Region

Charles Helm, Tumbler Ridge

Back in 2010, the kids of the Tumbler Ridge Karate Club were out cleaning the ditches off Hwy 29, close to town, in an effort to raise funds for a trip to a tournament. One of the adult supervisors, my friend Bert, approached the outflow of a culvert that drained water under the highway. It was buttressed by a bunch of rocks that had been transported from a rock outcrop 100 m away. He put down his garbage bag and gazed intently at what he saw: on the surface of one of those loose rocks was unequivocally a large track in the rock, with three toes.

Dinosaur fever had already gripped Tumbler Ridge for a decade, and these rocks were part of the 97-million-year-old Dunvegan Formation, so Bert had a pretty good idea of what he was looking at. Charissa, on the board of directors of the Tumbler Ridge Museum Foundation (and a future karate world champion in her division), was collecting trash on the other side of the highway, so he called her over to have a look. Within hours palaeontologist Dr McCrea was made aware of the discovery, and an identification had been made: the track likely belonged to the ichnogenus *Magnoavipes*, Latin for "big-bird-foot." And Bert had draped himself like a model on the rock for photos, framed by the track in the foreground and an incongruous-looking culvert behind him.

So what was the trackmaker? Opinions differ on this. It is well known that birds as a group diverged from theropod dinosaurs towards the end of the Jurassic period. However, distinguishing bird tracks from dinosaur tracks can be extremely challenging in some cases, and *Magnoavipes* tracks fall into this category.

There are those who say that, as its name suggests, it was a big bird, something the size of a very large crane.

However, no body fossils of birds of this size from this time period have been found, but that does not mean that they did not exist. Others will say that small-to-medium-sized theropod dinosaurs made the tracks, or the group known as ornithomimids, which as their name implies, were very bird-like dinosaurs. Regardless of which camp one falls into, it was a bird-like creature that made a large bird-like track.

Four ichnospecies of *Magnoavipes* have been identified: *M. lowei* from Texas, *M. caneeri* from Colorado (Figure 1), *M. denaliensis* from Alaska, and *M. asiaticus* from China. The Tumbler Ridge specimen has not been assigned to any of these ichnospecies, as only a single track was present and more information would have been gleaned from a trackway. It was recorded by Dr McCrea as having a length of 23.4 cm, and a width of 36.7 cm. In *Magnoavipes* tracks the hallux (Digit I) does not register. The divarication angle between the outer digits (II and IV) is one factor that can help in the distinction between bird and dinosaur tracks, tending to be greater in the former, and it was an impressively high 126°.

This was the first *Magnoavipes* track to be track recorded from BC and Canada. However, subsequent tracks resembling *Magnoavipes* have been identified at the Six Peaks dinosaur tracksite near Hudson's Hope from the slightly older Gething Formation (about 117 million years). In addition, a further site with possible *Magnoavipes*

tracks has been identified near Tumbler Ridge, also in the Gething Formation. When this site has been well documented, it may be possible to tell whether or not the Peace Region examples can be assigned to one of the existing ichnospecies, or whether they may justify the erection of a new ichnospecies.

Charissa Tonnesen recalls the discovery day: "The last thing we were expecting when we went out clearing the ditches was to find the only example in Canada of a rare Cretaceous fossil track. I enjoy birds, and have been to the Galapagos to see Darwin's finches. The privilege of being on hand at the discovery of a possible large bird track so close to home is something I will never forget."

The moral of the story is clearly to keep looking. Almost certainly, there are more examples of the "big bird foot" to be found with dedicated searching. And when in Tumbler Ridge, one never quite knows what may happen next; even a day of cleaning up the ditches for a good cause can yield the unexpected.

### Postscript

After an interval of more than 97 million years, large cranes returned to Tumbler Ridge one day in the 1980s, when *Grus americana* was identified on the first hole of the local golf course.

Below: *Magnoavipes caneeri* track from Colorado, courtesy of Martin Lockley; scale bar is in cm.



## Briefing 2

Summary by M. Church, Vancouver

### How Does Speciation Occur?

Speciation can occur when two parts of an ancestor population are isolated from each other for long periods of time, such as happened during the Pleistocene ice ages due to the occurrence of continental scale ice sheets. But it evidently can also happen when the descendent species continue to occupy the same range. The descendent species may remain capable of cross-breeding (hybridizing), but they usually do not. What's going on?

Observation of two South American seedeaters throws light on the issue. The Tawny-bellied Seedeater [*Sporophila hypoxantha*], an Emberizine finch (also known as the Ruddy-breasted Seedeater) is found in marshes and grasslands near water in the Iberá wetlands (Parana drainage) of extreme northeastern Argentina. In 2001 *S. iberaensis* (Iberá Seedeater) was first observed. In contrast to the male Tawny-belly, its breast and belly are off-white and its head entirely black. Indeed, it looks much like the females of the two species, which are effectively indistinguishable in appearance. Genetic analysis reveals that these two species differ by only three genomic regions, each consisting of about 50 000 base pairs (a base pair is the fundamental structural unit of DNA). That is about 0.01% of the birds' complete genome. *S. iberaen-*

*sis* evidently is recently descended from *S. hypoxantha*. Two of the variant sets of base pairs influence plumage colouration and one of them also influences sexual selection. *S. iberaensis* has also developed a distinctive song.

Investigators demonstrated the effectiveness of these changes in a novel way. They manufactured full-scale, accurately painted models of birds of each species and set them up in the territory of the other species (with female present), then played the song of the wooden bird through a speaker mounted just below it. Males responded to the wooden males of their own species with intense territorial displays, but largely ignored wooden males of the other species. A further genetic test was conducted by examining the parentage of offspring. Extra-pair mating is common in songbirds and was detected in 52% of offspring examined, but always only within each species (i.e., no cross-species mating was detected). Sexual selection based on genetic variation is thereby demonstrated.

It is not known whether songs of the two species are genetically or culturally (i.e., offspring learns song by imitating the father) determined. Songbirds have the latter capacity, along with hummingbirds and parrots, cetaceans, seals and sea lions, elephants, bats and humans (think learning language). Nonetheless, it is clear that genetic drift is responsible for the initial isolation of the new species from its founder population. When it involves factors that influence sexual selection the distinction can be sustained even as the species continue to share habitat – as in

this case – until additional mutations eventually render the species entirely distinct – no longer able to hybridize. There are lessons in such histories even for the course of human evolution.

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## Ornithology Rules Summary

Unless members know of any additional biological rules applicable to birds, the *Ornithology Rules* column now wraps up with the following summary:

### Bergmann's Rule

- Species and sub-species tend to be larger in colder climates.

### Allen's Rule

- Species adapted to colder climates have shorter limbs and body appendages.

### Gloger's Rule

- Species are darkly pigmented in humid climates and lightly coloured in dry ones.

### Foster's Rule

- Species on islands tend to become either dwarfs or giants, depending on the resources available.

### Gause's Law

- Complete competitors cannot coexist.

### Fisher's Principle

- One female to one male will be the norm, as this is the most stable ratio.

### Lack's Principle

- The clutch size of bird species correspond to the largest number of young for which parents can on average provide enough food.

*Red knots are an unusual sight in Tofino, but on 15 May, 23 were seen at Grice Bay and one at Chesterman Beach. Photo by Adrian Dorst.*





# East Kootenay Notes

*Daryl Calder, Cranbrook*

## The Won-hundred-ful Month

The quiet days of February are behind us and each week, the number of birds that are observed in the East Kootenay becomes more interesting. Some birds, of course, remain in our area throughout the year. Many of these are formally recorded during the Christmas Bird Count. Some species leave this area in search of suitable habitat at higher elevations or further north.

The migrations of birds were probably among the first natural phenomena to attract the attention and intrigue the imagination of man. Records date back nearly 3,000 years, and this phenomenon is the accepted sign of the imminence of spring and of warmer weather. Aristotle, naturalist and philosopher of ancient Greece, (384–322 BC) was one of the first to discuss the subject of bird migration.

Migration makes it possible for some species to inhabit two different areas during the seasons when each presents favorable conditions.

The mysteries of migration were not fully understood until the advent of techniques to mark birds. Bird ringing or bird banding is the attachment of a small, individually numbered metal or plastic tag to the leg or wing of a wild bird to enable individual identification. This helps in keeping track of the movements of the bird and its life history. Storks injured by arrows traceable to African tribes were found in Germany in 1822 and constituted some of the earliest evidence of long distance migration in European birds.

In North America, John James Audubon and Ernest Thompson Seton pioneered the marking of birds way back in 1805 and 1882. Banding “schemes” were established in the early 1900s, and in 1909, the American Bird Banding Association was founded.

Certain bird species are, for various reasons, unsuitable for ringing. In this area, American Dippers are dangerously handicapped by ringing because the

rings induce drag which makes it extremely difficult for them to catch prey in fast-flowing water.

A marked bird can be reported through the North American Bird Banding Program, either online or by toll-free call.

For those of us who report to eBird and/or follow the list of recent sightings in the East Kootenay, each of two days in late April were the first occurrence in 2021 when one hundred or more bird species were recorded. In early May, several daily counts exceeding 100 species were celebrated. The tally for Global Big Day on May 8th, indicates that almost 150 species were detected in the East Kootenay. The migrants had returned!

One in particular, the Common Loon, is a medium-distance migrant. Common Loons (COLO) require clear, unpolluted water in order to see and catch fish. In Western Canada, during spring, they move to clear northern lakes to breed, and in fall, they return to Pacific coastal waters. While some migrating birds fly at night and feed and rest during the daytime, the loon does not fly or feed at night.

The Canadian Lakes Loon Survey is supported by volunteer participants, including a few Rocky Mountain Naturalists. 38 years of CLLS data from over 1,500 lakes helps to explain why COLO are producing fewer chicks. A new study found that declines in the number of loon chicks in Ontario over the past four decades may also apply elsewhere in Canada. These declines likely result from a complex interplay between damage from acid rain, mercur-

ry in fish and climate change. Human activity, particularly motorboats, can disturb loons on breeding lakes. Volunteer monitors, including Marianne and myself, carefully observe three local lakes at least three times each spring and summer. By canoe, kayak or on foot, we look for adults, evidence of nesting and count the chicks without disturbing these wonderful birds.



## Briefing 3

*Summary and comments by M. Church,  
Vancouver*

### Lighter or Darker?

At the turn of the 19<sup>th</sup> century naturalists (I think that's probably the best term for observers of nature in that period) were busy propounding rules by which they supposed nature is governed. One rule, known as “Gloger's Rule” (after Constantin Gloger; 1803–1863, Prussian ornithologist/zoologist) stated that animals, including birds, in warmer climates have darker pigments in their hair/fur/feathers. One reason why this may be so is that melanin pigments in darker plumage apparently better resist bacterial infections.

The climate-coat colour issue has recently resurfaced in the context of climate change. Does that promise a future of darker birds and animals? One prominent case concerns Tawny Owls, whose feather colour varies from pale gray to russet brown. In Finland, the proportion of russet owls has risen from about 10% to 40% over the second half

*Common Loon by Bob Whetham.*





of the 20<sup>th</sup> century. It certainly has got warmer in Finland during that time. But the incidence and persistence of snow have accordingly declined too. The grey-phase Tawny Owl is better camouflaged in snow. The change of feather hue may very well be a matter of selection for (non)detection by the owl's prey and enemies in a changing environment. Truly "tawny" owls are more successful in the shadows of the evolving forest environment.

A major complication raised by some biologists is that temperature can create conflicting needs. Warmer and drier environments certainly will lead to greater need to avoid overheating, which should dictate lighter colour, not darker. And temperature is only one part of the sensible environment – humidity is also important. In warm, wet places lush plant growth provides superior hiding places for darker individuals. So in places that will become warmer and wetter, such as the boreal forests, temperature and humidity present conflicting conditions for adaptation.

Insight might possibly be gained by considering the distribution of wide-

spread species that include various colour phases. In North America, the Pacific (or Sooty) Fox Sparrow [*Passerella iliaca*] is distinctly darker than the inland Taiga (or Red) race. It is similar with the Pacific (or Peale's) Peregrine [*Falco peregrinus*] and Pacific (or Black) Merlin [*Falco columbarius*] versus successively lighter Taiga and Prairie races. The Pacific or Sooty subspecies of the Blue Grouse [*Dendragapus obscurus*] of the coastal forests is, similarly, darker than the interior race. Returning to the owls, the Pacific Great Horned Owl [*Bubo virginianus*] is, again, darker than eastern birds. The hypothesis of dark hiding places in heavy forest – characteristic of the Pacific coast – might be the reason for these cases, and others. It is a plausible argument that does not depend in a primary way on temperature.

Changing climate will no doubt influence bird pelage in the future as changing conditions alter the odds on survival for individuals who fade more or less well into their changing environment. But it will also prompt range shifts and other behavioural changes that might eliminate the need for a

change in appearance. Major changes of the increasingly human global landscape – entailing additional climate change locally – will be an important factor to assess. Birds, perhaps even more than humans, face an uncertain future environment. The topic of colour phases is under renewed investigation.

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Delhey, K., Dale, J., Valcu, M. and Kempenaers, B. 2020. Why climate change should generally lead to lighter coloured animals. *Current Biology* 30: R1406–R1407.

Kean, S. Will warming make animals darker – or lighter? *Science* 371: 115. (A short commentary on the preceding articles.)

## Gone Fishing

Chris Siddle, Vernon

### Swan Lake Nature Reserve Park, Vernon

Swan Lake Nature Reserve Park is a recently developed regional park encompassing an old field and wetlands around the south end of Swan Lake, a shallow body of water some 7 km long situated a km north of Vernon, B.C. The park is becoming popular with local birders but few birders outside the North Okanagan know about it. Since it's easily accessible and home to several interesting species of birds, it's an important and easily accessible for birders visiting Vernon.

A mostly level 1.78 km long path known locally as the Grassland Trail loops around the dry field section of the park. A new three-storey viewing platform was added at the northeast extreme of the trail during the winter of 2020-2021 thanks to the efforts of the North Okanagan Naturalists Club and

member Norbert Maertens who supervised construction of the project. For the first time birders on the east side of the creek will have a superb view of the marsh and the lake, and in some springs a temporary pond that forms off park property. Observers can maximize their viewing by using a spotting scope. Only for short periods in the spring and fall are waterfowl close enough to the tower for binocular-only viewing.

A grassy lane (sometimes flooded) branches off the loop at the creek to continue around the southern and eastern limits of the typha marsh. By taking this lane to its end (about a km) at the culvert beneath Highway 97 one can access a large stand of very old willows and cottonwoods. Recent wind storms have toppled a couple of willow giants. Their prone trunks block the rudimentary trail and present a challenge to walkers. Eventually after some dodging and weaving the birder will find himself at the wood's northwest shore where there's an elevated bird blind, unfortunately surrounded by fast growing willow saplings that often obscure the view. The woods are worth exploring for riparian species including Bald Ea-

gles, Brown Creepers, Yellow Warblers, Willow Flycatchers, Swamp Sparrows (rare in fall and winter), Red-eyed Vireos and Barred Owls. The north Okanagan's only verified record of a Bewick's Wren comes from these woods, as does its most recent sighting of a Barn Owl.

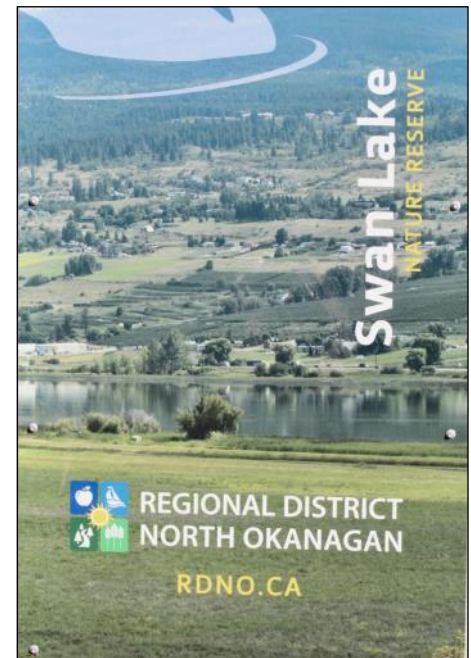
Spring can be long in coming to the park. The marsh thaws weeks before Swan Lake does. Red-winged Blackbird males leave their winter flocks to take up singing stations in the marsh as early as February, if it's a warm one, and the occasional Wilson's Snipe, Virginia Rail and Marsh Wren may overwinter. However, don't expect Soras, until mid-April. Great Blue Herons traditionally start to return to the North Okanagan around March 1<sup>st</sup>. There's a colony of about 40+ pairs along 24<sup>th</sup> Street north of 48<sup>th</sup> Avenue in Vernon, in a small grove of cottonwoods now surrounded by stores, industrial outlets and housing. That the colony exists at all amid this busy, noisy urban sprawl is a testament to the generosity of local school teacher, the late Jan Bos who, with his wife Rita, loved the herons and protected the colony. For the adult her-

ons who have chicks to feed at this colony, Swan Lake Nature Reserve is important as the closest feeding ground to the colony.

Once Swan Lake thaws, usually around earliest April, waterfowl appear in significant numbers. On a good day in April or May a birder may find as many as 20+ species around the lake. The fields north of the park attract Canada Geese and often one can find a few Snow, Greater White-fronted and Cackling Geese among them. In spite of the lake's name, swans are not common on the lake. However a drive just under 9 km NW from the lake to the fields around OKeefe Ranch in March and April will usually produce up to 200 Trumpeter Swans. Due north of the viewing tower, in the field next to the lake there's a long, low spot that sometimes floods in spring. During a cool, wet year this flood pond can remain until the heat of late July eliminates it. When full it's a spot for dabbling ducks, and as it evaporates, the exposed mud draws in gulls, terns, and shorebirds. Although it's on private property and birders are warned not to trespass, the pond can be viewed from the tower if the birder uses a scope. It's a local hotspot for vagrant birds including the occasional Caspian Tern, Franklin's Gull, Great Egret, and Sanderling. Unfortunately, this spring has been unusually dry; the pond has already dried up. I've encouraged the North Okanagan Naturalists to have their own shallow pond excavated on park property, but so far it has not been a popular idea.

Raptor watching is good all year. Some winters Short-eared Owls are present. The park is an excellent location in which to study various ages and morphs of the highly variable Red-tailed Hawk. During recent winters one or two Harlan's Hawk (presently officially considered a subspecies of Red-tail) have been found around the marsh next to Highway 97. Swainson's Hawks are found from late April through August along Old Kamloops Road north of the park. In late March or early April Vernon's only breeding pair of Northern Harriers breeding begin their domestic interactions which often include the showy "prey exchange." After executing a series of deep loop-the-loops, the male circles with his prey clutched tight while the female flies, calling below him, eager to fly up and grab the vole or mouse.

Spring and early summer can be enlivened by migrant warblers in the young willows growing along the creek, as well as the marsh species which include a colony of Yellow-headed Blackbirds. In late summer and fall the birder can spend hours sorting through sparrows, including migrant Lincoln's, White-crowned, American Tree, and Clay-coloured sparrows. Recently a Brewer's Sparrow was seen in September. The species may prove to be a regularly migrant. It's just a matter of time before the first Grasshopper Sparrow is found (the species used to breed only three kms away near Goose Lake). April through early July can be a good time if the floodwater pond north



of the park contains water. Shorebirds are generally uncommon in the Okanagan Valley simply because of lack of suitable habitat. If shallow water and muddy edges exist during spring and summer migration almost all of the shorebirds that regularly pass through interior B.C. can show up including the occasional Black-necked Stilt, American Avocets, Dunlins, Baird's Sandpipers, Stilt Sandpipers, and Wilson's Phalarope.

The park is a good location to see Coyotes, White-tailed Deer, River Otters, and even American Mink.

Like many Interior hotspots, Swan Lake Nature Reserve Park can be quiet and dull birdwise especially around midday in summer, when you will be tempted to rename the park The Savannah Sparrow Reserve of the North Okanagan. However, much of Swan Lake NRP is a marsh, full of life forms from Pacific Tree-frogs to muskrats, a vibrant world that's rarely boring.

To reach Swan Lake Nature Reserve Park drive west along 43rd Avenue, Vernon, west to Old Kamloops Road. Turn north on Old Kamloops Road and drive about 2.4 km (away from town) to the driveway/parking lot of Stawn Honey on the right (east) side of Old Kamloops Road. Drive across the parking lot to the park's signed entrance. An entrance road will take you to a small parking lot where the grasslands trail begins.

Google "Swan Lake Nature Reserve Park" for a map and local information.





## Featured Species No. 14

Adrian Dorst, Tofino

### Brown Pelican

(*Pelecanus occidentalis*)

**Status:** Formerly a casual visitor in spring, summer, and fall. Now a fairly common visitor in some years. Absent or rare in most years.

Brown Pelicans are large birds adapted to catching fish by plunging into the ocean from as high as 65 feet above the surface. A flexible pouch beneath the bill balloons underwater and acts as a net to catch the fish. Anyone who has spent time on the coast of the southern United States or Mexico will have seen flocks of these birds flying low over the water, one behind the other. I recall a pescadero in Baja California gesturing to a squadron of pelicans skimming by us. "Mexican Air Force," he offered.

On the Atlantic coast, Brown Pelicans breed from Virginia to northern South America. On the Pacific coast, they breed from southern California to Chile. Nonbreeding birds normally venture as far north as the mouth of the Columbia River. British Columbia, therefore, lies well outside the normal range for this species. The first Brown Pelican recorded in BC waters was seen at Burrard Inlet in 1880. During the next 100 years, the species was recorded in the province 15 additional times.

In the west coast region, surprisingly, I could find only a single record prior to the 1980s, and the Brown Pelican was not listed at all in *Birds of Pacific Rim National Park* in 1978. The first record for the region is of a single bird seen at Long Beach on 28 July 1979. However, the status of this species on our coast was about to change quite dramatically, beginning with an El Niño event in 1983. On 23 August of that year, a flock of 24 birds was seen at Port Renfrew, and on 29 August, a single bird was

seen off Cape Beale. As late as 11 November of that year, 15 birds were observed off Carmanah Point. More observations followed in 1985, with 16 birds seen at Port Renfrew on 3 August, and 6 birds at Bamfield on 29 August.

Since 1985, Brown Pelicans have been seen in at least 17 separate years up to 2014. In 1997, assistant lighthouse keeper Jerry Etzkorn recorded numerous flocks passing by Carmanah Point from 5 September to 19 October. He recorded a flock of 76 birds on 15 September and two flocks of more than 70 birds each on 19 September. From 2000 to 2016, birds have been recorded in our region in every year except 2003 and 2015. The largest numbers are seen south of Barkley Sound, off the West Coast Trail. On 29 August 2006, as many as 200 birds were recorded off Port San Juan by John Reynolds.

While the species is not as numerous on the central west coast north of Barkley Sound, there have nevertheless been numerous sightings off Long Beach and Clayoquot Sound. Besides the record from 1978, there were sightings in 1993, 1997, 1998, and 1999. On 7 June 2006, a flock of 35 was seen off the south end of Long Beach, and on 8 June 2009, 29 birds were seen from Incinerator Rock. It does not appear that birds often venture past Estevan Point, although there is at least one sight record off Kyuquot Sound. Birds have also been seen by tour-boat operators along the central coast, though these sightings

were not recorded.

Brown Pelicans have been recorded from May to December. On several occasions during the months of November and December, when sea conditions on the outside are fierce, Brown Pelicans have sought refuge in Tofino harbour. In 2012, a bird with a head wound was captured by locals and transported to a wildlife facility for treatment.

In the late 1960s and early 1970s, the widely used pesticide DDT was found to cause thinning of the eggshells of Brown Pelicans and other birds, resulting in nesting failure. This deadly pesticide was subsequently banned in the United States in 1972, and the population gradually recovered.

Population recovery and expansion, combined with a trend of slightly warmer ocean water, is believed to be responsible for the northward expansion of this grand bird in recent years. In 2014, Brown Pelicans nested for the first time on an island in the Columbia River, thereby expanding their breeding range northward by hundreds of miles.

#### Note

This is an extract from Adrian Dorst's *The Birds of Vancouver Island's West Coast*, UBC Press, which covers 360 species in its 550 pages. The book can be ordered at [ubcpres.ca](http://ubcpres.ca).



## Briefing 4

Summary by M. Church, Vancouver

### Nocturnal Caprimulgid Capers

Many migratory bird species conduct their migration flights at night. Darkness may confer a measure of safety from possible predators (though not, evidently, urban window panes). Perhaps more significantly, birds – other than those that undertake continuous long distance flights – may use the daylight hours to refuel. But what about birds that feed nocturnally, in particular the Caprimulgids? A study of the migration behaviour of the European Nightjar throws (moon)light on their migratory strategy.

These birds feed by visually hawking for flying insects; accordingly, they need sufficient light to see their prey. Consequently, they are crepuscular birds – mostly active around dawn and dusk. But the light of the near-full moon is sufficient to allow them to extend their period of daily activity from about three hours on dark nights to seven hours or more on bright ones. This information, and the balance of insight

discussed here, was gained by a group of investigators who “instrumented” 39 Nightjars with GPS and motion sensors and followed their activity for two years. The birds spend their summers in southern Scandinavia, near the northern limit of their range, and winter in south-central Africa. Migration occurs over one or two months with extended stopovers to refuel in central or southern Europe and on the southern margin of the African Sahel (that is, before and after crossing the Mediterranean Sea and the north African deserts).

Because of the light-mediated variation in daily potential feeding hours, the timing and duration of migration stages and stopovers is set by the lunar cycle. Observed average stopover duration in autumn varied from 16 to 22 days, and on the spring northbound flight 20 to 33 days. Autumn stopovers were centred on the occurrence of the full moon in September-October (Europe) and October-November (Africa). On the northbound flight in spring full moon stopovers occurred between February and April and in April-May.

Average departure dates occurred 11 nights after the full moon – that is, as the approximately 30-day lunar cycle was entering its dark phase. This schedule serves to both optimize major feeding periods and provide maximum pro-

tection during nocturnal migration flights. The imprint of the lunar cycle on the birds’ activities means that most birds undertake their main migration flights at the same time, a common phenomenon observed over many species. But synchronization with the lunar cycle is not perfect: weather introduces a measure of variability. Favourable tail winds may induce birds to depart early from their stopover; a series of cloudy dark nights near full moon may constrain feeding and cause the birds to delay their next flight stage. In either case, the bird then arrives at the next stopover point “off-schedule” and spends an unusually long or short time there.

It is likely that many night migrants, in particular night feeders such as the rest of the Caprimulgids, are similarly governed. That remains a question for further observation.

#### Reference

Norevik, G. + 4 others. 2019. The lunar cycle drives migration of a nocturnal bird. *PLoS Biology* 17(10): e3000456. <https://doi.org/10.1371/journal.pbio.3000456>.

*The bird below, seen at Tofino on May 10, is the first Bar-tailed Godwit spotted on the central west coast since 2010. Photo by Adrian Dorst, Tofino.*





## Return of the Ospreys

### There Goes the Neighbourhood

*Gordon F. Brown, Kaslo*

Last year, a young couple built a magnificent new home in a previously unsettled location. Because of the time and effort it took to build from scratch, they were late starting a family but did persevere, managing to raise and school a daughter before taking her out into the world. Although later than all other regional families, they still made a decision to chance it and head south for the winter.

They returned on April 22 full of optimism at the prospect of being able to start a new family on a more typical schedule. So, imagine their disappointment upon arriving home only to discover their sturdy and capacious abode occupied by squatters: a Canada Goose was on the nest.

Although this is a scenario that often confronts returning osprey, it didn't prevent our pair from doing all they could to suggest the goose really ought to reconsider. But, no matter how much they harassed her – diving-bombing and shrieking – the goose was resolute and held her ground, ducking the dives and honking rejoinders.



*Above: Harassing the goose. Below: Gathering new nesting materials.*  
*Photos by author.*

The osprey did not abandon their goose-bothering and continued to make the goose feel as unwelcome as possible, but in desperation finally decided to begin construction of a new nest on another of the nearby dolphins (group of pilings lashed together) that had made up the old sternwheeler wharf. However, this presented a new challenge because, unlike last year's nest location, there was no platform (constructed by accommodating members of another species) on this secondary dolphin, so only a much smaller surface area was

available on which to build.

Just as the new nest acquired sufficient structure to suggest it might develop into something viable, the goose and her brood suddenly vanished; a couple of days later, eight adults and thirteen goslings were seen in the area, but the number attributable to the osprey nest is unknown. At last, the osprey were able to resume their former digs, and while they may again be a bit late getting started, at least they won't have to start from scratch.



