

BC BIRDING

Newsmagazine of the British Columbia Field Ornithologists

ISSN 1206-1611

BCFO.ca

Volume 29 Number 2 / June 2019



Dark-morph raptors can be hard to pin down – see page 3. Photo by Jeff Dyck.

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). Books for review should be sent to 10790 Grassland Road, Prince George, BC V2K 5E8.

Photographs should be in mid-resolution jpg (preferably 1–4 MB, and articles should be in plain text, either as the content of an email, or as an attachment (preferably Word). Topics may include birding experiences, casual observations about bird behaviour, site guides, birding equipment, trip reports (including overseas trips), and other subjects of broad interest to birders. Brief items are always welcome, but average submissions tend to be in the 400–600 word range. For longer submissions the normal maximum length is 1,500 words. Note that this is a newsmagazine rather than an academic journal, and thus formal reference lists are not needed.

Deadlines (i.e. final dates for submission of material) are as follows. Material received after the deadline will be held over to the subsequent edition.

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

Advertising Rates

Full page: \$125 per issue or \$112.50 each for four or more issues.

Half page: \$75 per issue or \$67.50 each for four or more issues.

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

President: Marian Porter, Salt Spring Island, 250-653-2043,

marianmporter@gmail.com

Vice-President: Gary Davidson, Nakusp, 250-265-4456,

gsd37@yahoo.ca

Past President (non-voting): George Clulow, Burnaby, 604-

438-7639, gclulow@shaw.ca

Secretary: Mike McGrenere, Victoria, 250-658-8624,

mi8624@telus.net

Treasurer: Josh Inman, Langley, 604-532-0455,

joshbirder@gmail.com

Jude Grass, Surrey, 604 219- 2043, judegrass@shaw.ca

Clive Keen, Prince George, 250-963-9520,

clive_keen@hotmail.com

Adrian Leather, Quesnel, 250-249-5561,

q-birds@xplornet.com

Art Martell, Courtenay, 250-334-2979,

amartell@shaw.ca

Monica Nugent, New Westminster, 604-220-8816,

monica_nugent@telus.net

Responsibilities

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: Adrian Leather

Website: George Clulow, Neil Dawe

Young Birders Program: Melissa Hafting

Committees

BC Bird Records Committee: Cathy Antoniazzi, David Bradley, Nathan Hentze (Chair), Peter Candido, Catherine Craig, Michael Force, Guy Monty.

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, Melissa Hafting.



Contents

Notices & Notes

President's Message	4
BCFO Statement of Ethical Considerations	4
Notes	6
Welcome New Members	8
BCFO 29th Conference	
Late Registration	8
Schedule of Events	9
BCFO Two-day Trips	
Port Alberni, September 14–15, 2019	10
Upcoming Meetings & Events	11

Young Birders Program

My First Pelagic	12
2019 Young Birder Trip Schedule	13

Avian Encounters.....14

Features

Columbia Wetlands Waterbird Surveys	16
eBird Those Baird's Sandpipers!	17
Birding with a Somewhat Different Twist	18
Swan Counting – Stuart, Tachie, Middle Rivers IBA	19
Birding Technology: Hear, Hear	24

Briefings

The Value of Small Populations.....	13
Like Father, Like Son	23
Penguin Catastrophes	24
Snooping Birds with a UAV	25

Regular Columns

Featured Species: White-tailed Ptarmigan	20
Gone Pishing: Song Sparrow, Part One	22
The Reflective Birder: Only Connect	26

GOLDEN CONFERENCE 2019

EVENT DATES

June 18 – 21

Pre-conference extension trip to Southern Alberta area.

June 21 – 23

Golden Conference.

CLOSING DEADLINE

June 1

Registration for Pre-conference trip.

June 10

Registration for Golden Conference.

Front Page Photo

This superb shot of a dark-morph raptor was taken by Jeff Dyck in early April at a well-known raptor location near the Prince George airport. Sharing it on the ncenbird listserv, Jeff pointed out that dark-morph raptors can be hard to separate, and he didn't offer an ID. Other Prince George birders soon chimed in – the bird had been seen a number of times, and had been assumed to be a very petite Red-tailed Hawk. Its small size had been remarked on, but so had the bill, which seemed wrong for a Red-tail. Perhaps something else. Swainson's?

Take a close look at the photo, and after you've made up your mind, head to page 7 to see if you are right.

Below: One of a series of shots taken by Melissa Hafting on her unforgettable Chicken Run – see daretobird.blogspot.com/2019/04/the-unforgettable-colorado-and-kansas.html



President's Message

Marian Porter, Salt Spring Island

A 1977 university owling field trip in Campbell Valley Regional Park that failed to produce anything but embarrassed teaching assistants trying to imitate their calls intrigued me enough to pursue owls every chance I could find. Soon after my first exposure I joined a group exploring Manning Provincial Park on a search for owls.

My first close encounter with an owl was witnessing a Northern Pygmy-Owl that was so blinded by spotlights that it flew into the power lines above us. I had nearly been rejected from the group due to my gender and lack of birding experience, but I questioned the validity of any birder that would harm their quarry for photos and a "tick." That experience stayed with me as I conducted my own owling trips as a naturalist guide in Manning Park years later, introducing people to the mysterious world of night creatures as a window into a fascinating world.

I stopped leading owling expeditions after two photographers on a BCFO trip to Manning Park returned to the location we had heard a Spotted Owl and harassed a pair with call playback. Any interruption of a successful pair during the breeding season could have had serious consequences. I had been fortunate

to have worked with the Federal and BC Provincial governments surveying owls, often on my own or with one other person only needing to elicit a response with as little disturbance as possible. Luring an owl away from a roosting or nesting area would prevent gaining insight into critical habitat requirements, so disturbance was kept to a minimum.

The ability to have a remarkable experience by observing rather than chasing nocturnal birds occurred at Shiripuno Lodge in Ecuador, a remote location in the Yasuni Biosphere Reserve. During a wild and stormy night evading dangling tree vipers and bushwhacking through thick jungle to find a Nocturnal Curassow roost by following their haunting, booming song, it really hit me that this was not good for me or the birds. The guide agreed to find our next quarry, the Rufous Potoo, at its roost by listening to the characteristic descending hoots and returning just before dawn. Our group was rewarded by seeing the beautiful plumage of the bird and witnessing the remarkable rocking behaviour as it sat on a branch resembling a large leaf slowly swaying in the wind. This is thought to be their camouflage, hiding in plain sight so to speak, and a unique experience that would have been missed using call playback, which earlier had caused the potoo to evade us in ever-widening circles.

The extreme remoteness of Shiripuno Lodge protected uncommon species from exploitation, and it was wonderful

to fall asleep to the hoarse and haunting cries of a Great Potoo and find a Spectacled Owl while drifting down the Shiripuno River in a dugout canoe in total darkness. I felt elated after the disappointment I encountered earlier on my Ecuador adventure at a location I had always wanted to visit after listening to cassette tapes of bird songs made many years ago by Ted Parker, the renowned field biologist. Instead I found silent trails with the remnants of a shelter that had been used to observe an Andean Cock of the Rock lek, and signs for rare birds that had long disappeared.

Easy access to rare birds can result in the desertion of their territory and breeding sites if they are repeatedly disturbed, and is a great disappointment for birders travelling long distances to find them. Birders and bird guides are becoming increasingly concerned about the long-term effects of their activities and many organizations have produced a code of ethics for their members in recognition of these problems and their desire to solve them. It is my wish that BCFO joins the more progressive birding groups by introducing ethical considerations into their activities. I hope that adopting an ethical philosophy will increase the enjoyment of members while participating in BCFO field trips and enhance their knowledge by observing the natural behaviours of birds less disturbed by human interference.

BCFO Statement of Ethical Considerations

The BCFO Board of Directors has been contemplating creation of a code of birding ethics, and to get the discussion rolling, President Marian Porter wrote the following, with a view to seeking comments from the membership at the Golden Conference.

Overview

Ethical guidelines are used to protect birds and their habitat, and show consideration for others impacted by human activity. The welfare of the birds should be the highest priority. Birders, photographers, sound recorders and filmmakers have an obligation to show the highest consideration for the birds they enjoy and especially if they profit from them. As-

sume birds will be impacted by your presence and understand that their welfare is more important than the needs of the observer. Be aware of signs of stress and modify your behaviour to minimize or eliminate it.

Artificial Attraction

Methods of artificial attraction such as playback sound recordings should be used very sparingly and ideally not used during the breeding season, when birds are distracted from important activities such as incubation and feeding young. Repeated disturbance could cause birds to abandon nest sites, roost sites or important display areas such as leks for extended periods or permanent-

ly. Playback should not be used to attract threatened, endangered or locally rare species. If used, it should be at a volume lower than the target bird for a very limited period of time. Play the sound for the target species for less than 30 seconds followed by longer periods of silence, limiting the total time period to about five minutes. Pygmy-Owl calls are very distracting for birds, exposing them to danger from predators. Consistent playback in heavily birded areas has been known to cause abandonment of the area by target species.

Flushing

Deliberate or accidental flushing of birds from natural cover may increase

the danger from predation or harassment from other species. Flushing birds from important feeding areas, especially during migration, could be very damaging during a critical period of their life cycle. Watch for signs that you are approaching too close, such as “freezing” when natural activities are interrupted, and a hunching or stretching preflight posture. Warning calls and agitated behaviours should also be heeded. Spotting scopes will assist birders in keeping a safe distance. Photographers should use a telephoto lens. Extended observation or photography requires cover such as a natural or artificial blind. Luring raptors with live prey should not be done and drones should never be used.

Artificial Light

Artificial light used for photography should be used with caution. Flash photography and spot lighting nocturnal birds can be extremely disturbing, causing temporary blindness and injury if they are flushed.

Disclosure

Locations of sensitive habitat or threatened and endangered species should only be revealed to an appropriate local or regional conservation authority.

Respecting Property

Respect all laws and regulations regarding private and government property. Permission must be granted to enter private land. Relations between landowners and the birdwatching community may be permanently damaged if trespassing occurs. This will result in nega-

tive conservation impacts if researchers are denied access to important habitats. Avoid any environmental damage and keep vehicles on established roads and parking areas.

Birding in Groups

Birding ethics are especially important in group situations. Leaders are ethical role models and should promote awareness of the code to group members. They should determine an appropriate group size for the environment and situation, and assume responsibility for the behaviour of the group. A respectful attitude towards the rights of fellow birders is essential to the success of a tour. Respect the skill level of others and be willing to share your knowledge and expertise to improve the abilities of group members, especially beginning birders. Encourage ethical behaviour so that target birds are not flushed and all members have an opportunity to see them. Multiple call playback by several members in the group should not be tolerated, but used sparingly by the leader. Laser pointers should also be used only by leaders and never pointed directly on or very close to the target bird.

Bird quietly without the intrusion of loud conversation or cell phones to maximize the enjoyment of other birders. Assist the leader to ensure everyone has a chance to see the desired bird. Stay with the group and do not go ahead of the leader. Ensure you are not blocking the view for other participants when photographing or viewing a bird. Move away after locating a bird in a

spotting scope so others may have the same opportunity.

Pets

Pets, particularly dogs, do not belong on a birding field trip. Leashed dogs will still be perceived as predators. Disturbance to birds is inevitable.

Intervention

Careful intervention may be needed to minimize behaviour of individuals who threaten birds or their habitat. A courteous explanation of the negative impacts of the behaviour may be successful in stopping it. Document persistent unethical behaviour and notify appropriate individuals or organizations.

Conservation

Promote the conservation of birds and their habitats. Support research to expand our knowledge of birds and their environment in order to enhance their protection.

....

The above is a compilation of birding ethical guidelines from Birdlife Australia, American Birding Association, Marine Audubon Society, Ontario Field Ornithologists, *Sibley's Birding Basics* by David Sibley, and *Audubon Guide to Ethical Bird Photography*.

Below: A Lesser Prairie-Chicken photographed in April 2019 by Melissa Hafting at Oakley, Texas. Lesser Prairie-Chickens are rare, local and declining.



Notes

Bird Records Committee

David Bradley of Bird Studies Canada and Cathy Antoniazzi, a member from Prince George, have been appointed as two new members of the BCFO Bird Records Committee.

BCFO Membership

Golden Conference participants will be receiving updated information on membership from Membership Secretary Larry Cowan. As of April 30, however, he had reported that the organization had 284 members – down from 326 at the end of 2018, but with some months to go. Figures will no doubt be pleasantly updated for the Golden meeting.

BCFO Finances

Participants in the Golden conference will receive from Treasurer Josh Inman updated details of the organization's finances. In advance, it can be reported that as of March 31, the organization had \$48,815 earmarked for Education and Conservation, and total current assets of \$87,054.

Annual Conference, Not Annual AGM

At their meeting in April, BCFO Directors agreed that it was misleading to label the organization's annual event as the *AGM*. The Annual General Meeting takes up only an hour or so, and is for most attendees a minor part of the event, not its focus. Promoting the meeting as an AGM also gives the impression that the event is essentially concerned with administrative issues, which is certainly not the case. While

all members are encouraged to attend the AGM, most will be more interested in the field trips, the presentations, and the opportunities for socializing with other committed birders.

Past Steve Cannings Award Recipients

The 2019 Golden AGM will see this year's presentation of the Steven Cannings Award, which recognizes contributions over a long period of time to ornithology in BC in one or more of the following three categories: (1) research on bird biology and/or ecology, or detailed documentation of the avifauna of a portion of BC, (2) conservation of birds and/or bird habitats in BC, and (3) public education about birds in BC. Previous recipients have been as follows:

2007 Ian McTaggart-Cowan
2008 David Stirling

(continued next page)

Congratulations to the BCFO Membership Secretary, Larry Cowan (centre below), who has received the Charles & Kaye Ney Award for Extraordinary Service from Nature Vancouver. The Ney award is the premier award of the Society for lifetime exemplary service and dedication to the Society. Among the many reasons for the award were his leading 195 birding trips in the Lower Mainland, his contributions to all three editions of the superb *Birder's Guide to Vancouver and the Lower Mainland*, and his work on *The Seasonal Status of Vancouver Birds*. See

naturevancouver.ca/volunteer-appreciation-annual-awards.



2009	Madeloun Schouten
2010	Jeremy Tatum
2011	Ralph Ritcey
2012	Glenn Ryder
2013	Fred Zwickel
2014	Martin McNicholl
2015	Alan Burger
2016	Chris Siddle
2017	Art Martell
2018	Rick Howie

Farewell to Bill Thompson III

Many members will have been saddened to hear of the death at 57 of Bill Thompson III. Bill was the co-publisher and editor of *Bird Watcher's Digest*, author of *The New Birder's Guide to Birds of North America*, *Bird Homes and Habitats*, *Identify Yourself* and other books on birds. He was also co-host of the podcast "This Birding Life" and founder of the American Birding Expo. One of his trademarks was unpretentiousness. Rather than bludgeoning readers with expert-speak, he'd nudge them gently in the direction of understanding with a congenial smile.

More on Window Collisions

John Sprague writes:

Recent articles in the newsmagazine have described good remedies for bird collisions on windows. There are a couple of methods that were not mentioned. One remedy is a pattern of small dark squares on the outside of the window. The squares are five millimetres on a side, spaced in rows so that there are about five centimetres or two inches between any two of the little squares.

This material can be purchased from Convenience Group in Toronto, and the easiest way to find them is to do a computer search for "Feather Friendly." They will sell you rolls of tape which you apply to the outside of the window in horizontal rows two inches apart. Then you peel off the tape and leave the little dark squares on the glass. It is fairly expensive at \$14 to \$16 a roll depending on how much you purchase.

That includes shipping and a measuring tape to judge the distances. One roll does a couple of small windows or most of a double patio door.

We have had almost all of our windows treated that way for several years and as far as I can tell it is completely successful in stopping collisions. The birds see the little squares and will not attempt to go between them. So it cures the reflection problem also. Yes, you can see the pattern of small squares/dots from inside but it does not bother us, and visitors don't make a fuss about it.

Another method is to use fine black plastic garden netting as a screen held out a little way from the outside of the window. We used spacers from sections of bamboo pole. The birds see and avoid the netting, and even if they did not, there would be a trampoline effect as they bounced off the stretchy surface. This is relatively cheap and durable. We have had such netting on the glass panels around the deck for 18 years with good success. Even with a bird feeder on the deck there are no collisions. Again, there is slight interference with your view, but we are happy to avoid kills. This method, with a picture, is described in my article on window protection in this BCFO newsmagazine of September 2012, volume 22 no. 3, pages 12–15, available on the website at:

bcfo.files.wordpress.com/2012/09/newslettersept2012.pdf

Women in Birding

This feminist take on birding, covering issues of which males may be completely unaware, will be instructive to birders of all genders:

medium.com/@oliviagentile/a-feminist-revolution-in-birding-95d81f4ab79b

Books Gratis to Members

John Sprague is thinning out his book collection, and the following are available to members for the cost of shipping:

- *The Birds of British Columbia* (4 volumes) by R. Wayne Campbell et al.
- *Birds of Western Canada* by P.A. Taverner. 1928. Somewhat beat up.

- *The Birds of Canada* by W. Earl Godfrey. 1966. Classic, in good shape.

Contact John at sssprague@shaw.ca or 250-537-0760.

Point Pelee, May 2019

Several BCFO members were present at Point Pelee in the second week of May 2019, which seasoned observers said produced the finest maelstrom of migrants in 40 years. Listening to the guides calling out birds for their groups was like listening to ten overexcited hockey commentators at once. And then a Swallow-tailed Kite flew overhead....

That Dark-Morph Raptor

Prince George birders were still mulling over the identity of the bird shown on this edition's cover when Melissa Hafting provided the resolution. She made a number of observations:

- Leg feathering comes all the way down the tarsus, which points against Red-tailed Hawk, and towards Rough-legged.
- The dark subterminal band on the tail also points towards Rough-legged: Red-tailed never has one that wide.
- The bill is stubby, with a white mask above the bill: classic for Rough-legged.
- There's a forward-looking eye and rounded crown with steep forehead. Again: Rough-legged.

Readers might find this an easier test than the slightly befuddled Prince George birders. In their defense, it needs to be pointed out that the bird really was very small—a lot smaller than the Red-tails in the area, and far smaller than the two easily identified light-morph Rough-legs making their presence felt close by. Which provides two useful lessons:

1. Just because a bird in its normal morph is easy to identify, don't suppose that the dark-morph will be too.
2. Birds can vary in size far more than the field guides might indicate.

Welcome New Members



Joanne Vinnedge - Fort
St. James
Ross Waters - Vancouver

David Bradley - Surrey
Rick Gee - Kelowna
Darren Kirby - Penticton
Ken & Theresa Krause - Coquitlam
Myles Lamont - Surrey
Gerhardt Lepp
Shawn Mason & William Caufield - North
Vancouver
Lesley Robertson - Kelowna
Craig Sandvig - Castlegar
Marion Shikaze - Burnaby
Christopher Stephens - Parksville

Blue-Gray Gnatcatcher, Point Pelee. May 2019, C Keen photo.

BCFO 29th CONFERENCE, June 21 – 23, 2019, Golden, BC

Late Registrations for the Conference

Registration remains open until 10 June. To register, go to bcfo.ca, and follow the links. A fillable registration form appears for completion, allowing payment by PayPal. To pay for more than one registration, simply make sufficient

single payments for each person you wish to register.

Pre-Conference Trip

To check whether places are available, perhaps due to late cancellations, contact Adrian Leather at:

q-birds@xplornet.com

Field Trip Selection and Waiver Forms

Field trip selections for the mornings of June 22 and June 23 will be made when checking in on Friday, June 21. At the same time, you will be asked to complete your conference waiver form.

CONFERENCE COSTS

Conference Fee

Full conference fee includes: Friday night Meet & Greet, Saturday & Sunday breakfasts, lunches and Saturday evening Banquet plus all field trips and talks.

	_____ @ \$175 /person =	\$ _____
BCFO Young Birders	_____ @ \$87.50 /person =	\$ _____
Social events ONLY (Meet & Greet, and Banquet)	_____ @ \$75 /person =	\$ _____
*Membership fee for non-members` (see BCFO website for membership details)	` _____ @ \$30.00 – single/family =	\$ _____
Total registration fee(s) for the Conference =		\$ _____

Waiver

All registrants for the conference and extension trip are required to complete the WAIVER OF LIABILITY AND RELEASE OF CLAIMS form. Forms will be made available at the AGM at the time of registering for the field trips.

Participation in the AGM is not possible without payment of applicable fee(s) by the registration date.

BCFO 29th CONFERENCE, June 21 – 23, 2019, Golden, BC

Schedule of Events

Location: Golden Civic Centre, 806 10th Avenue South, Golden, situated in downtown Golden on Highway 95 South, adjacent to the Kicking Horse River.

Friday, June 21

Registration and Social: 5:00 PM to 8:30 PM, at the Golden Civic Centre, Great Hall. Pick up your conference package, socialize with fellow birders and confirm your trip selections. There will be appetizers and a cash bar.

Saturday & Sunday, June 22–23

Location: Golden Civic Centre, 806 10th Avenue South.

Breakfast: 5:15 AM to 5:45 AM, prior to field trips.

Conference Field Trips: 6:00 AM departures from the Golden Civic Centre.

There will be a varied selection of field trips encompassing the rich habitats of the Columbia Valley Wetlands and three merging biogeoclimatic zones: Interior Douglas Fir, Interior Cedar-Hemlock and Engelmann Spruce–Subalpine Fir.

Brian Gustafson of Golden is leading an exploration of the Blaeberry Valley. He is currently working on a Master's Thesis project identifying active nesting areas with infrared imaging in forests due to be logged. The lower Blaeberry River Valley is a crossroads for two migration routes: the Rocky Mountain Trench, channelling migrating birds from south to north from Montana to Mount Robson, and the Blaeberry and Howse Pass, leading long-distance migrants northeast to southwest across the Rocky Mountains to and from prairie regions. 237 species of birds have been recorded from the lower Blaeberry region, including field-trip destinations such as Moberly Marsh and the Blaeberry River Valley.

Higher elevation field trips will be in nearby Yoho National Park. A hike is planned with BCFO Founder Wayne Weber for Wapta Falls and Emerald Lake in search of the Three-toed Woodpecker, Spruce Grouse, Boreal Chickadee, White-winged Crossbill and Solitary Sandpiper. Join BCFO Vice-President Gary Davidson on Bush River Road near Donald, and travel through mixed and coniferous forest, sedge meadows, marshy wetlands and small lakes.

Rachel Darville of the Columbia Wetlands Waterbird Survey will guide a trip to Edelweiss Slough and Reflection Lake near Golden, and explore wetlands near Parson. Verena Shaw, Program Assistant for the Columbia Wetlands Waterbird Survey is field trip leader for Moberly Marsh, a large wetland where the Blaeberry River creates an estuary at the junction of the Columbia River. Sandhill Cranes and Bobolink have nested at this location, identified as an eBird hotspot. On Sunday morning Gerhard Lepp, a BCFO member will offer a tour of his property near Spillimacheen with private access to the west side of the Columbia River and wetlands. Marian Porter, BCFO President, will continue to the Wilmer Unit of the Columbia National Wildlife Area with conference participants travelling the southern route back to western areas of the province.

Lunch: 12:00 to 1:00 PM.

Saturday, June 22

Afternoon Speakers: 1:00 PM to 2:00 PM.

- Rachel Darvill: The Columbia Wetlands Waterbird Survey and Marsh Bird Monitoring Project.
- Vance Mattson: Breeding Population of Golden Eagles in the Southern BC Rockies.

Annual General Meeting: 2:00 PM to 3:15 PM.

Social Cash Bar: 5:00 PM to 6:30 PM.

Banquet: 6:30 PM to 7:30 PM.

Banquet Keynote Speaker: Lisa Larson, Resource Management Officer for Mount Revelstoke and Glacier National Park: "Long term monitoring of songbird populations of Mount Revelstoke and Glacier National Park with case studies of species at risk."

BCFO

Two-day Trips

**Port Alberni,
September 14–15, 2019**

Leaders

Daryl Henderson, Annette Bailey.

Registration

Adrian Leather, 250-249-5561,
q-birds@xplornet.com.

Itinerary

Saturday: Road trip for coastal birding between Ucluelet and Tofino. Possible stops include Amphitrite Point, Pacific Rim NPR, Kwistis Visitor Centre, Florencia Bay, Combers Beach, Tofino Airport, and an IBA. Bag lunch.

Tally-up 6:30 PM at Starboard Grill, 5440 Argyle St, Port Alberni, 778-421-2826.

Sunday morning: Somass Estuary and sewage lagoons, Stamp River PP. Bag lunch.

Sunday afternoon: optional birding

Accommodation

- Best Western Plus Barclay Hotel, 4277 Stamp Ave, Port Alberni, 250-724-7171. The trip leaders will meet with birders here on Friday evening.
- RV/Camping: Arrowvale Campground & Farm, 5955 Hector Rd, Port Alberni. 250-723-7948.

The Port Alberni area is well-birded, with around two dozen eBird hotspots in the immediate area. A number of the hotspots are on the Somass Estuary, which is a nature reserve – the sewage lagoons area of the Somass Estuary has recorded 179 species.

Below: An Orange-crowned Warbler spotted in Joe Brown Park, Surrey BC, by John Gordon.

How the Trips Work

BCFO two-day field trips are member-led, but participants make their own arrangements for accommodation, food, and travel.

- Day 1: all-day birding and then evening get together at a restaurant to recap the day and tally species.
- Day 2: morning birding, afternoon optional birding.

Carpooling is encouraged and will be arranged on the morning of Day 1.

Register at least two weeks in advance. The leader will give specific details of when and where to meet.

Cost: No cost to members; fee to non-members: \$30, which covers BCFO membership.

If you have ideas for a two-day trip, Adrian Leather would be pleased to hear from you at

q-birds@xplornet.com.



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.

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 e-mail 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 this URL: <https://www.allaboutbirds.org/birding-festivals>.

June 1-2– OREGON BIRDING ASSOCIATION annual meeting, Portland, OR. For details and to register, please check the OBA website at <https://oregonbirding.org>.

June 14-16– MANNING PARK BIRD BLITZ, Manning Provincial Park, BC (based at Loneduck Campground on Lightning Lake). For information and to register, check the website at hopemountain.org/programs/manning-park-bird-blitz-june-14-16-2019. Inquiries may be made to Ashley Tyler at atyler@hopemountain.org or at 604-869-1274.

June 21-23– BC FIELD ORNITHOLOGISTS ANNUAL GENERAL MEETING, Golden, BC. For further information, please check the BCFO website at a later date (<https://bcfo.ca/2019-agm-golden-june-21-23>).

June 24-28– 137th STATED MEETING, AMERICAN ORNITHOLOGICAL SOCIETY, Anchorage, Alaska. For further information,

check the AOS website at <http://www.americanornithology.org/content/upcoming-meetings>.

Aug. 21-25– WESTERN FIELD ORNITHOLOGISTS CONFERENCE (44th annual) at Albuquerque, New Mexico. For further details, check the WFO website at <http://www.westernfieldornithologists.org/conference.php>.

Sept. 13-15– PUGET SOUND BIRD FESTIVAL, Edmonds, WA. For information and to register (starting Aug. 1), check the festival website at <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.

Sept. 29-Oct. 3– 26TH ANNUAL CONFERENCE OF THE WILDLIFE SOCIETY, Reno, Nevada. For information, check the TWS conference page at <http://wildlife.org/2019-conference>.

Oct. 27-30– Joint meeting of the WILSON ORNITHOLOGICAL SOCIETY and ASSOCIATION OF FIELD ORNITHOLOGISTS, Cape May, New Jersey, USA, hosted by the Cape May Bird Observatory. For details, check the society websites (<http://www.wilsonociety.org> for WOS, http://afonet.org/wp_english/meetings for AFO) closer to the conference date.

Nov. 5-9– RAPTOR RESEARCH FOUNDATION annual meeting, Fort Collins, Colorado, USA. For further details, visit the society website at raptorresearchfoundation.org/conferences/upcoming-conferences.

Nov. 6-9– 43rd ANNUAL MEETING OF THE WATERBIRD SOCIETY, Salisbury, Maryland, USA at the University of Maryland, Eastern Shore campus. For details, check the society website at <https://waterbirds.org/annual-meeting>.

Dec. 14 to Jan. 5, 2020– 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*.

Right: Another of the difficult bird-in-flight shots by John Gordon – a Cliff Swallow in Langley's Glen Valley, one of a colony living under a busy bridge on River Road. While large birds can be relatively easy to photograph in flight, special conditions and a lot of patience are called for when photographing smaller species.



Young Birders Program

My First Pelagic: Tofino, March 2019

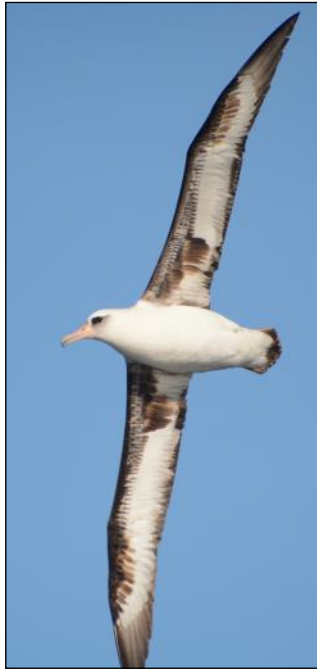
Joshua Brown

It was with great excitement that I ventured out on my first pelagic trip this past March. For years I had heard stories of the fantastic seabirds seen on boat trips and looked on with envy. Last year I made up my mind to go and had myself booked on a trip in September, but unfortunately strong winds caused the trip to be cancelled. I jumped at the opportunity when it came up in March, but with a windy weather forecast I was again unsure if the boat would sail. Whilst leaving Vancouver the day before I was notified that the go-ahead had been given and the pelagic would happen. I travelled to Ucluelet and fell asleep to the sound of wolves howling around my cabin.

On the day of the trip I woke up early, excited and hopeful for the pelagic. Driving to the boat from Ucluelet to Tofino I even saw a Western Screech-Owl fly in front of my car – an excellent indication of things to come.

The group met and boarded the boat early in the morning and set out to Clayoquot Canyon, more than 60 kilometres offshore. Passing through the harbour, the group spotted a sea otter, which was the first of a number of great mammal sightings during the day. As the boat travelled farther out we started to see our first alcids: many Common Murres, Rhinoceros Auklets, Marbled Murrelets, and Pigeon Guillemots, as well as a few Cassin's Auklets (which was only the second time I had seen them). I saw my first lifer of the day, Sooty Shearwater, as we continued out to sea; two individuals crossed the horizon far away in front of the boat, but fortunately I had a much better view of another later in the day.

Continuing on, we began to encounter groups of Black-footed Albatrosses, which were numerous around the underwater canyon and wonderful to watch as they flew effortlessly over the waves. While the group was watching these albatrosses from the open deck at the back of the boat, Ilya Povalyaev spotted a Laysan Albatross, another lifer for me. The group was thrilled to see such a rare bird and our boat followed it hoping for a better look as it soared around the ocean. However, we need not have worried about another sighting, as before long we sighted another two Laysans. Incredibly, that was



not the end of them, and as we neared a large fishing boat we saw even more individuals with the other Black-footed Albatrosses.

Whilst the boat was situated on the water over Clayoquot Canyon, we spent the rest of our time surveying the birds around three other fishing boats. While observing the many fulmars and albatrosses behind one boat in particular, Doug Martin spotted a Short-tailed Albatross, my third lifer of the day. The largest and rarest albatross occurring in BC, there are approximately only 4,200 individuals left in the entire population (according to the American Bird Conservancy). Incredibly, it flew beside and over our boat multiple times to the delight of the elated onlookers. More Laysan Albatrosses also made an appearance, and a few lucky photographers, including myself, were able to photograph all three albatross species in the same shot. After fifteen minutes watching that fantastic bird-of-the-day the group lost sight of the Short-tailed Albatross and we carried on.

During the trip we also came across some uncommon cetaceans, including a pod of 30 Risso's Dolphins, which appeared scarred all over their heads due to their pursuit of large squid for food, and four Northern Right Whale Dolphins, which look bizarre as they completely lack a dorsal fin. Near the end of the trip a Humpback Whale breached close by the boat, too.

As we were heading away from the last fishing boat and back to land, we spotted nine Laysan Albatrosses sitting together in a flock on the water, increasing our total of individuals for the trip to an astonishing fifteen. The only time I had seen any albatrosses before this trip was by seawatch from shore in Monterey, California, during which I saw just two Black-footed Albatrosses a few kilometres away, so to see so many albatrosses at such close proximity, let alone three different species, was a great privilege. Additionally, I was afforded the full pelagic experience when part of the way into the trip I caught seasickness and subsequently spent much time at the back of the boat. However, feeling unwell made me no less appreciative of the spectacular birds, and despite my discomfort I thoroughly enjoyed the trip and would love to travel offshore once again.

I would like to extend my gratitude to the wonderful group of birders on the trip who spotted birds and made the day so enjoyable, and in particular I would like to thank Melissa Hafting for organizing the tour and inviting me on it. I am very grateful for all of the time and effort that she has given to the young birder program to promote and encourage a love of birds and nature in youth from around the province.

Pelagic birding is a completely different approach to birding than I had previously experienced, and I would encourage others who may be considering it but have held back before to try it out and experience some of the incredible nature that is just off our coast. I was fortunate to experience such a remarkable day of unusual sightings, and a fantastic introduction to pelagic birding.

Laysan Albatross (above) and Short-tailed Albatross by Joshua Brown.



Young Birders, Continued

Off to University

The following graduates of the Young Birders Program are now off to prestigious universities to study sciences:

- Bridget Spencer goes to the University of California, San Diego.
- Josh Brown heads to McGill University in Montreal, Quebec.
- Cole Gaerber goes to Queen's University in Kingston, Ontario.

Off to Long Point

Both Rebecca Reader-Lee and Sasha Fairbairn have won places on the Young Ornithologists Workshop at the Long Point Bird Observatory (LPBO) in Ontario. This is a 10-day program for Canadian birders ages 13–17 where participants learn how to identify, age and sex birds, and to study their populations and behaviour.

Briefing 1

Summary by M. Church, Vancouver

The Value of Small Populations

We are used to the fact that, as animal populations grow smaller, they begin to suffer the deleterious effects of inbreeding: weaker physical development, poorer fitness, increased susceptibility to disease, and reduced reproductive success. These conditions might eventually generate a spiral to extinction. The effect bedevils not just universal populations, but much more commonly causes the extirpation of isolated sub-populations of an organism. Many animals face this possibility as their habitat is fragmented by human activity so that relatively small populations become isolated within a residual habitat patch. Such circumstances have overtaken the Florida Scrub Jay, the only bird that is endemic to Florida and now a threat-

ened species on account of habitat destruction. (The bird thrives only in xeric oak scrub forests found only in Florida and is non-migratory.)

A substantial population of the Jays resides at the Archbold Biological Station, a 4,200-acre reserve in the headwater region of the Everglades with extensive stands of scrub oak. The population consists of about 75 family groups and appears to be stable in numbers. A 19-year-long population fitness study involving genetic analyses over 14 generations of every bird in the population (for a total of 3,583 birds) examined their fitness. Despite the size of the resident population, the birds exhibit reduced genetic variety – the signature of inbreeding. However, immigrant birds regularly arrive from other, smaller populations outside the reserve. These birds, as expected, exhibit more severe reduction of genetic variety than the reserve birds. Over the length of the study, the numbers of immigrants arriving at the reserve decreased significantly. What has been their effect on the reserve population?

Researchers found that the “inbreeding depression” (degree of reduction in genetic variety) increased significantly for resident-resident pairs over the 19 years, and also for resident-immigrant pairs, but not for immigrant-immigrant pairings. Consequently, the researchers studied some expected consequences of increasing levels of inbreeding, including hatching success, nestling weight, juvenile survival, breeder lifespan and lifetime reproductive success. Pairwise inbreeding de-

pression of the parents was strongly associated with hatch failure and poor nestling weight. In turn, nestling weight was a strong predictor of survival to later life stages. Inbreeding depression was accordingly correlated with reduced lifespan and with the lifetime breeding success of females.

Over the span of the study, reduced immigration was associated with increased inbreeding in the Archbold reserve. The immigrants, despite being significantly inbred themselves, imported fresh genetic variety into the colony and became the most successful breeding birds. But their diminishing numbers meant that their effect was insufficient to maintain the fitness level of the reserve population. The overall effect of immigrants on the genetic fitness of a population evidently depends on the ratio of numbers of immigrants to numbers of residents. In the present case, the immigrants were too few. Nevertheless, his study draws attention to the potential importance of small residual populations of animals, so long as they retain the capability to join larger, more viable groups. It also shows that stability of numbers is not a sufficient measure of the likely long-term viability of a population.

Reference

Chen, N., Cosgrove, E.J., Bowman, R., Fitzpatrick, J.W. and Clark, A.G. 2016. Genomic consequences of population decline in the endangered Florida Scrub Jay. *Current Biology* 26: 2974–2979. doi: 10.1016/j.cub.2016.08.062.

2019 YOUNG BIRDER TRIP SCHEDULE

June 22

A day photographing loons and their chicks up close by boat in Kamloops.

July 8–9

An overnight trip to Penticton to see Flammulated Owls and Poor-wills. Great Gray Owls, Western Screech-Owls and Boreal Chickadees are also likely to be seen.

July 20

A Pemberton trip to look for Alder Flycatcher, plus a special surprise.

August 24

Manning Park

Avian Encounters

Avian Socialism?

Adrian Dorst, Tofino

In December of 2018 I noticed an adult Bald Eagle at Long Beach appearing to glare at his own reflection, so I took a photo. Only much later, while looking at the photo, did I notice the bird was missing tarsus and foot. That this large raptor was surviving while lacking one of its essential tools for survival amazed me. Then I recalled that the previous winter while in Mexico, I had observed an adult bird that was lacking a foot, being fed by another adult. The bird was a San Blas Jay. Members of this species have a yellow bill as a

juvenile and a black bill as an adult. Both birds had black bills indicating they were both adults. Here was a case of a disabled bird being supported by a

member of his tribe, or possibly by his community (there were several other birds in this particular band). Avian socialism? It (continued next page)



John Sprague of Salt Spring Island sent the shot below left: an ambitious Pileated Woodpecker's pile of chips from a balsam fir. By coincidence, at the same time the photo was received, the pileated woodpecker on the right was drilling large holes in one of the Editor's trees.



would be interesting to know if the eagle at Long Beach also received assistance from one of his kind, or managed to survive on his own. I often marvel at how we tend to underestimate our wild relatives. They are much more like us than we care to admit.

Birds in Flight

John Gordon, Surrey

This Mountain Bluebird was photographed on April 2, 2019, at Beach Grove in Tsawwassen. A brisk wind was blowing and a single bluebird was making its way along the beach. The wind caused the bird to hang in the air, allowing me the rare opportunity to capture its flight movements. When it landed on a branch nearby I took a few more shots but they seemed lifeless in comparison.



A Different Twist

Something birders (well me anyways) have often wondered – do the top bills on crossbills always curve in the same direction or does it vary? This photo was of two different birds out of a flock of six Red Crossbills and solves the centuries-old mystery. On to the next birders' problem – Brian Stech, Vancouver



Columbia Wetlands Waterbird Surveys

Rachel Darvill, Golden

With the BCFO conference coming up in Golden, you may be keen to learn a little about the bird research that is taking place in the Columbia Wetlands. Since 2015, the Columbia Wetlands Waterbird Survey (CWWS) has been underway, and this project has recently wrapped up its fifth year of coordinated bird counts during spring bird migration. There were 95 volunteers, who counted 25,496 birds at 103 survey stations over the three April survey dates. This was a relatively low count when compared to the previous couple of years that had a comparable amount of survey effort. For example, 48,266 individual birds were counted on the same three dates last spring. We are not sure why counts were lower, but it could have had to do with the weather.

Since 2015, the CWWS has engaged approximately 200 volunteer citizen-scientists in documenting nearly 350,000 birds over 22 survey dates in the Columbia Wetlands. The CWWS also takes people of all ages outside to learn about birds. The main objective of this project is to collect baseline data on waterbirds, which prior to this project was lacking. This data will be used to nominate the Columbia Wetlands into

the Important Bird and Biodiversity Area (IBA) program. The CWWS is a project of Wildsight Golden that was designed and is managed by me, registered professional biologist and consultant Rachel Darvill.

As another part of the CWWS project, this spring ten waterfowl nesting boxes were installed on private lands for eight different landowners in the Columbia Valley. These were mounted according to best management practices, on free-standing poles with predator guards in place. These volunteer landowners are keen to monitor the occupancy and nest success of these boxes, and to maintain them over the long term.

On April 8, 2019, the fourth annual Aerial Swan Survey was completed in order to count Trumpeter/Tundra Swans in the Columbia Wetlands. There were 669 swans counted from Canal Flats to Golden.

In order to potentially help achieve IBA status, osprey nests are being monitored in the Columbia Valley this year. So far 34 osprey nests have been detected, with 25 of those nests occupied. On May 11, I conducted a waterbird survey on Columbia Lake and counted a number of birds including at-risk Western Grebes (36), Horned Grebes (38), and one Eared Grebe.

Furthermore, I also manage another bird-research project in the Columbia Wetlands in collaboration with Environment and Climate Change Canada's Canadian Wildlife Service: it is called the Columbia Wetlands Marsh Bird Monitoring Project (MBMP). This year, I am collecting baseline data for the fourth year in a row and this data is being used to form population estimates for focal birds including the Virginia Rail, Sora, Pied-billed Grebe, American Bittern and American Coot. For instance, estimates using data from 2018 suggest that there were 689–1,468 Pied-billed Grebes in the Columbia Wetlands last spring (May–June). Numbers such as this may be enough to assist us in achieving the IBA designation for the Columbia Wetlands.

If you are coming to the AGM this spring in June, you will hear and learn more about these two bird-research projects. I will also be guiding a field trip on June 22 where we are likely to hear and/or see species such as the Sora, Pied-billed Grebe, Bullock's Oriole, Osprey, along with many other marsh-bird species.

*Below: Wilmer Training.
Photo by Rachel Darvill.*



eBird Those Baird's Sandpipers!

Anne Murray, Delta

I like connecting with other birdwatchers on the social media account, Twitter, which has a world-wide network and interesting birding posts. One recent discussion was on Baird's Sandpipers and the route they take on migration. These small sandpipers, relatives of the Western Sandpiper, are among the world's longest and fastest migrants. An indication of their ability to fly vast distances is given by the length of their wings: long and streamlined relative to their body size. The majority of BC observations are of juvenile birds on their southward migration. I thought it would be interesting if birders collectively made a point of noting Baird's Sandpipers on eBird, so that more could be learnt about their distribution in BC.

Most Baird's Sandpipers breed above the Arctic Circle, from western Alaska right across the north to Greenland. A breeding record in July 1996 in the Haines Triangle was the first for BC, and a single nest record was found near the Alsek River during research for the five-year BC Breeding Bird Atlas project. Their post-breeding migration route takes them across the North American Great Plains, down to South America where they spend the austral summer in Peru or Chile, reaching as far south as Tierra del Fuego. While the adults tend to stick to the central continental route, juveniles spread out to both coasts. The females begin the southward journey slightly before males and juveniles. In BC, stopover flocks tend to be relatively small, with at most 10 or 12 birds, reaching up to a 100 or more in some years.

Baird's Sandpipers breeding in the western or central Arctic may follow a Pacific coastal route, or more unusually for a Calidridine shorebird, use an inland mountain route. As a result, they can be encountered from the Fraser estuary at sea level, to small mountain lakes in the Canadian Rockies. Their southward journey takes them through Central America and down the chain of the Andes and preferences inland sites to coastal ones. Observations on eBird (www.ebird.org) show an intense density of sightings in the United States' Great Plains and more scattered coastal

observations in the US, Mexico and Central American countries. My Costa Rica field guide describes the Baird's as a "very uncommon" migrant "chiefly in the highlands but sparingly, along the Pacific coast," and the Panama guide states it is a "rare passage migrant." Baird's is uncommon in Columbia while, in Ecuador, it is most often found in paramó grasslands of the high Andes. Peru and Chile are the main non-breeding areas, during the Austral summer. In Peru, Baird's is mainly seen at altiplano lakes (3,200 – 4,600 m) between August and May, with a few birds recorded from coastal mudflats, and it is widely distributed in Chile, as far south as Terra del Fuego, on the southern tip of South America, as eBird records confirm.

The peak time to spot a Baird's Sandpiper in BC is August or September. Apparently, most birds on the coast will be juveniles, so it is worth paying attention to plumage and documenting this. It would be interesting to know numbers too, which would help identify population trends. *The Birds of British Columbia* considered Baird's an abundant migrant through BC in some years, although generally seen in small groups and often passing unnoticed through the Okanagan, "perhaps above the treeline." Midsummer records cited include a flock of seventeen feeding in a glacial stream at 1,950 metres on Mount Tatlow, and one foraging in a snowbank at 2,400 m in Cathedral Park. They also mention Salmon Arm and Creston, at much lower altitudes, as areas that regularly have flocks.

Nature Vancouver's seasonal checklist of the birds of Greater Vancouver shows Baird's Sandpiper as "rare" (1 - 10 birds a year) from mid-April to end of May and rare to "fairly common" (5 - 25 birds) from the end of June to the end of October, with the peak between the last week of July and the first week of September. This matches the distribution given in *Shorebirds of the Pacific Northwest* that describes coastal birds arriving a little earlier and lingering later in the year than Interior birds. Lower Mainland birders, at sea level, regularly see small groups of Baird's Sandpipers on post-breeding migration in the Fraser Estuary, especially on the

mudflats of Boundary Bay, Delta and at Iona Regional Park in Richmond. The Delta Naturalists Casual Birders group observed six on the beach at Sidney Spit in the Gulf Islands National Park, on 29 August, 2018. Eva Durance, a birdwatcher who frequently hikes in the Canadian Rockies, has a record of eight Baird's Sandpipers at the headwaters of Brazeau Lake, Jasper National Park on the boundary with the White Goat Wilderness, Alberta, at about 1,700 m, on August 18, 2008. She also saw one at Salmon Arm, at 415 m, on September 9, 2018.

We could learn more about important migration locations if all of us birders enter our sightings on eBird. For newer birders, Baird's Sandpiper may appear a little difficult to identify, since it is similar to other Calidris sandpipers. Like them, Baird's Sandpiper is brown on the back and pale below. It has short legs and a relatively short, straight bill. The most helpful field mark is its extra-long wings, typical of long-distant migrants. When seen in a standing position, the primaries extend well beyond its tail tip, particularly in juveniles. Breeding plumage birds are mottled brown and buff above, with streaky brown breasts, while the juveniles have darker brown backs, with buff-coloured scallops on the edge of the feathers, which are also quite distinctive. Baird's can be confiding and small groups may be approached quite closely as they feed. Get too close, and the flock will startle into flight giving their distinctive rolling trill call note. Once learnt, the call, which is given quite frequently, is another good way to identify this little migrant.

I hope birders will feel inspired to document their sightings of this interesting shorebird so that we can learn more about its occurrence and numbers in British Columbia. If you haven't yet tried putting records on eBird, I would encourage you to do so, as it is becoming an extremely valuable source of bird distribution data.

Birding with a Somewhat Different Twist

Carlo Giovannella

One day I happened to find myself at the grand opening of a large retail specialty store which offered wines – lots of them. After poking about and sampling a few vintages, I was about done and ready for the next adventure. But then, because I was a known bird nerd, my attention was called to a particular brand whose labels featured a Calliope Hummingbird, an iconic species from the Okanagan region, an area that also happened to be known for its fine wines.

This got me thinking: since I'm stuck here, why not see if I can find other wines with birds on the label? Indeed, I was soon able to compile an impressive checklist of 18 species of avian fauna from around the world! A more detailed account of the story can be seen at the URL given below, and featured on this page are a few of the favourites that I have ticked to date. Have a look – it might even open a new window for the compulsive listers among us.

rokman61.wordpress.com/2018/05/07/adventures-in-birding-with-a-somewhat-different-twist



Swan Counting – Stuart, Tachie & Middle Rivers IBA

Joanne Vinnedge, IBA Caretaker

The BCFO provided support funding to the Important Bird and Biodiversity Areas (IBA) Program of BC Nature to coordinate and conduct a Trumpeter Swan survey during the winter of 2019.

The Stuart, Tachie and Middle Rivers IBA comprises a series of connected rivers in north-central BC. This IBA includes three separate rivers: the Middle River (30 km), Tachie River (40 km) and part of the Stuart River (40 km). Trembleur Lake lies between the Middle and Tachie Rivers, and Stuart Lake lies between the Tachie and Stuart Rivers. The town of Fort St. James is located at the junction of Stuart Lake and Stuart River and marks the northern end of the Stuart River portion. The rivers all discharge from large lakes, and do not typically completely freeze in winter.

This IBA supports globally significant numbers of wintering Trumpeter Swans, the northernmost wintering population of this species. The majority of this IBA is inaccessible by road. Approximately 6 km of the Stuart River is ground-accessible during the winter, and both the Tachie and Middle Rivers may each be accessed by a small First Nations village and one bridge crossing. Only the bridge location at the head of the Middle River has consistently accessible open water. Because of this inaccessibility, aerial swan surveys or anecdotal swan counts were gathered opportunistically by the volunteer IBA caretaker during the course of other government work. This information has been used in the review of resource development proposals, such as the Enbridge Northern Gateway oil pipeline (which was proposed to cross the Stuart River), or the proposed TransCanada Prince Rupert LNG pipeline (proposed to cross the Middle River).

Eventually, a local pilot began to volunteer to fly the IBA in his personal plane to count swans in late January. Data provided included specific GPS'd locations and photographs when possible.

Until this count, the pilot, Dave Van Dolah, had absorbed all costs himself. This specific project was undertaken to enable a complete IBA winter survey for 2019 while covering the flight fuel costs.

The 2019 IBA survey was undertaken February 24th, later than the ideal January survey period and hampered by a particularly cold February. Pilot Dave Van Dolah was accompanied by one observer. Each location with swans was numbered and UTM coordinates taken.

Photographs were taken where possible, and later recounted to verify swan numbers. Ground observers included Joanne Vinnedge (IBA Caretaker) and Grant Vinnedge. Unfortunately additional observers were unavailable on count day. Between ground and aerial observations, a total of 292 swans were seen. This number is significantly less than that observed in previous years. Dave noted that all three rivers were mostly all frozen.

Ground observers were only able to access the Stuart River portion of the IBA. Morning temperature was -30 C, with early morning fog on the river that cleared by approximately 11 AM. Observations included:

- Trumpeter Swan 60 (no Tundra Swans noted)
- Canada Goose 1
- Mallard 2
- Common Goldeneye 6
- Goldeneye sp 11

Sightability may have been an issue, as aerial observers missed 43 swans tallied by ground observers on the ice at Site 1. Site 8 was photographed, tallied, and then recounted and adjusted later. During aerial surveys of this type, it would be beneficial to photograph flocks wherever possible.

The number of white swans wintering within the Stuart, Tachie & Middle

Rivers IBA appear to vary depending on weather and ice conditions. Dave King (retired Omineca Regional Habitat Biologist, personal communication) recalled counting over 400 birds while conducting other surveys, but also noted that during very cold winters numbers were significantly fewer. The 2015 aerial count of all three rivers tallied 573 birds, and pilot Dave Van Dolah noted that all the rivers were mostly open.

The winter of 2018-19 has experienced record low water levels in the Stuart River. These low water levels, coupled with colder winter temperatures, may have contributed to increased ice cover on the rivers and associated loss of effective foraging habitat.

Two residents along the Stuart River between Sites 1 and 2 have reported predation attempts. One noted seeing coyotes on the ice hunting swans, and another reported watching a bald eagle drag away an immature swan by a wing.

Summary

292 white swans were observed during a February 24th flight of all three rivers comprising this IBA. Cold weather and significantly low water levels may have contributed to all three rivers being mostly frozen. A loss of effective habitat and potentially increased predation risks may have also contributed to lower swan numbers.

Sincere thanks to the BCFO for supporting this survey. Special thanks to David Van Dolah for his interest and support to fly these rivers. Colin Kingsley accompanied him. Paul Inden provided water level data, Kelly Izzard mapping support and Grant Vinnedge extra ground support.

Swan Survey February 23, 2019

Swan Site #	Adult Swans White	Immature Swans Grey	Total Swans	Swan Site # Coordinates
1	47		47	N54 24.267 W124 15.757
2	3		3	N54 25.287 W124 16.174
3	15	2	17	N54 47.659 W124 53.298
4	18		18	N54 48.692 W124 57.344
5	23		23	N54 49.088 W124 58.018
6	2		2	N54 57.783 W125 19.772
7	22	3	25	N54 59.989 W125 23.386
8	147	8	155	N55 02.087 W125 27.599
9	2		2	N55 02.726 W125 28.458
Total Swans	279	13	292	

Featured Species, No. 6

White-tailed Ptarmigan (*Lagopus leucura*)

Adrian Dorst

Status: Uncommon resident at high elevation. Breeds.

Ptarmigan are grouse that inhabit treeless barrens, be they in the far north or at high elevation above the treeline in more southern latitudes. In winter they turn entirely white in order to become invisible against the snow. In summer, their plumage is designed to blend in with the rocks and low vegetation, which it does superbly. White-tailed Ptarmigan inhabit high elevations throughout much of interior British Columbia, the Yukon, and Alaska. There is a population on Vancouver Island that is isolated from the mainland. These are considered a separate subspecies with

the name Vancouver Island White-tailed Ptarmigan (*L. l. saxatilis*).

The breeding distribution of White-tailed Ptarmigan on Vancouver Island covers the central region of the island and historically has changed very little, ranging from Mount Brenton in the south to as far north as Tsitika Mountain. They are also found in the west coast region on mountain peaks on both sides of Highway 4, north and northeast of Kennedy Lake.

On a solo climb to the summit of Canoe Peak in the Mackenzie Range on 25 August 1973, I had my first memorable encounter with this species when I found a female with young at the edge of a snowfield. So fearless are these birds when it comes to interactions with humans that they sometimes allow one to approach within an arm's length. Fourteen years later, on 27 July 1987, I had a second encounter, this one on Steamboat Mountain on the Clayoquot

*Below: A White-tailed Ptarmigan
photographed by Adrian Dorst on
Steamboat Mountain, now part of
Clayoquot Plateau Provincial Park.*

Plateau. Like the first, this bird was entirely unafraid and was perfectly camouflaged against the grey rock. It was detected only because a hiking partner heard the "clacking of its feet" on the rocks while resting. Despite my having made a good number of climbs and seeing evidence of their presence in the form of scat, these were my only visual encounters with the species in the west coast region.

In 2008, the BC Conservation Corps, in partnership with the BC Ministry of Environment, conducted a survey in the west coast region between Sproat Lake and Kennedy Lake. The search team found 14 adults and 13 juveniles, and/or evidence of their presence at the following locations: Steamboat, Pogo, Adder, Klitsa, Half Pipe, Jack's Peak, 5040, Nahmint, Hall, Canoe, and Triple Peak. There are numerous other peaks and ranges in our west coast region high enough to potentially support this species, although its presence has not been confirmed at those locations.

Anyone searching for this bird without the aid of a helicopter will need a great deal of stamina and a very sharp



eye. It is worth noting that during the breeding season this ptarmigan feeds on two plants: white mountain-heather (*Cassiope mertensiana*) and pink mountain-heather (*Phyllodoce empetrifolia*). It also prefers to be close to pools of water, a snowfield, or both, in order to regulate body temperature during the warm summer. In winter, birds are said to move down into the subalpine Mountain Hemlock Zone and the adjacent upper montane forest. Because of its unique subspecies status and low population on Vancouver Island, the species is on the provincial Blue List.

The White-tailed Ptarmigan population has almost certainly been affected, for better or for worse, by the decrease in ice and snow in alpine areas of the west coast region over the past 40 years. On my excursion to the top of the Mackenzie Range in August 1973, I estimated the snowfield to be 15 to 20 feet deep. By the late 1980s, that same slope was entirely bare by late July due to the current warm trend.

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.

Below:

A male Greater Sage-Grouse photographed by Melissa Hafting in April at a lek near Walden, Colorado. There were dozens of birds lekking, with females bunched in the centre surrounded by males who were not averse to a serious fight.



Below: This scene at the Langley Memorial Hospital amused John Gordon so much that, in the absence of his usual high-resolution cameras, he resorted to a shot with his cell phone. The reason for amusement? Puns such as "Anyone need a quack?" were irresistible.



Gone Fishing

Chris Siddle, Vernon

Song Sparrow, Part One

March 10 – It's the morning of the time change and I'm in a bit of a mental fog, nursing a second cup of coffee, trying to wake up. The weather is brilliantly clear and crisp and white. Winter refuses to leave, even here in the Okanagan, Canada's Palm Springs. The sun's behind the eastern mountain but in a few minutes will begin to clear the ridge. Oriented to face the sun is a Song Sparrow in our birch. He's singing, not that I can hear him through the double-paned glass, but I can see him opening his beak, and wisps of condensing breath exhaled as he sang. After a February of record-setting low temperatures, his spring behaviour is welcome to me indeed.

Three signs of spring in southern British Columbia: the long-calling of Northern Flickers, the twig gathering of magpies, and the singing of Song Sparrows. Lately I have noticed all three and given thanks. It has been a long winter.

I have lived my life with Song Sparrows around me, sometimes near, sometimes far. They lived year-round in the dense wild shrubs and damp forest edge a metre or two from the house I was raised in outside Mission in the Fraser Valley. They came to the food I put out for them, and I wondered what bird they were. My main source of printed ornithology at the time was Herbert L. Zim and Ira Gabrielson's *Birds: A Guide to the Most Familiar American Birds*, a small paperback featuring "125 Birds in Full Color." Unfortunately, the Song Sparrow painted by James Gordon Irving on page 127 looked nothing like the big rusty sparrows around our acreage. So, as a 12-year-old beginning birder, the only birder in my hometown that I knew of, the only birder in the Fraser Valley as far as I knew, I was perplexed by the brown sparrows around the yard. One of my early field notebooks from this period still survives and its scribbles reveal my confusion. There are lines, very messy, where I had written Song Sparrow, crossed it out, inserted Fox Sparrow above it, then changed my mind, crossing out Fox and re-inserting Song in the sliver of space remaining above the entry.

Then came 1963 and my purchase of Roger Tory Peterson's *Field Guide to*

Western Birds, second edition (1961). On Plate 57: "the majority of these [sparrows] have streaked breasts" the sparrows were laid out neatly, like specimens on a table but with "arrows" pointing to features on each that I should note in particular. Oh, how this plate helped me. I could eliminate the top row, three forms of Fox Sparrow – both the "dusky-brown" and the "slaty" form were too plain-faced and dark-backed. Besides, the "dusky-brown" form of Fox Sparrow I recognized as a bird I had encountered in winter once or twice.

The second row contained two examples of Song Sparrow, the huge Unalaska form and a smaller, more typical Song Sparrow, looking close enough to my smudgy birds to let me accept my initial identification.

Incidentally, because Peterson didn't pander to children but communicated his best, and clearest, to everyone, he trusted himself to include details in his field guide that the reader might have to look up, details like "Unalaska." I bet that I was the only child in Grade 7 at Mission Central Elementary who knew where and what Unalaska was. Some of my earliest misinterpretations of Peterson's field guide were the fault of my older brother who in the unworring absence of knowledge, just made things up when I asked him a question about vocabulary. As I pondered Plate 32 with

some shorebirds illustrated in two forms, I asked the family why some sandpipers were labelled breeding and some were labelled non-breeding. "That's because the non-breeders are chicken to DO IT," sniggered my brother. Since Graham was four years older than me and presumably knew about mysteries like sex, for a while I entertained his interpretation as plausible.

In 1975, about 13 years after I had first started birding, I moved from Vancouver to Fort St. John in the North Peace River area. Less than a year into our 14-year residency, my wife got a job as a clerk with the municipal library and made me a photocopy of Ian McTaggart-Cowan's seminal paper, *The Vertebrate Fauna of the Peace River District of British Columbia*, a detailed account of the first serious surveys of the Peace River District's bird and animal life. McTaggart-Cowan was a collector for the BC Provincial Museum and Martin was his slightly younger assistant. After travelling from Victoria to Swan Lake, they camped on 5 May, 1938 where Tupper Creek flowed into Swan Lake (south of Dawson Creek). This remained their camp while they "worked the area north to Dawson Creek and Rolla and southwest to Pea Vine Lakes." By "worked," McTaggart Cowan meant "identified and collected specimens of vertebrate fauna and plants." Then they moved about 90 kms

Song Sparrow at Kelowna, March 2, 2019. Photo by Chris Siddle.



(as the crow flies) northwest to Charlie Lake which lies west and north of Fort St. John. There poisoned water made them ill, forcing them to return to Tupper Creek until 30 June when they began their return to Victoria.

Their expedition was very successful. The Peace had been very poorly known from a zoological point of view, with only cursory, fragmentary observations published by naturalists passing through the area in the first quarter of the twentieth century. McTaggart and Cowan were able to sample the birdlife in particular through most of May and June as migrants and summer residents flooded into the area. Their collecting efforts resulted in 14 species being added to the list of British Columbia birds, including the first Franklin's Gull, Cape May Warbler, Bay-breasted Warbler, Connecticut Warbler, LeConte's Sparrow, Nelson's Sparrow, and Rose-breasted Grosbeak.

Although the publication was 36 years old at the time, it was my most detailed guide to the area which had become my new home. I studied the report's descriptions of the habitat preferences of various species, located places where such habitats still existed and found the same species that McTaggart-Cowan had found.

My familiar Song Sparrow appeared to be missing from the BC Peace avifauna. McTaggart-Cowan mentioned it only as a species that they had not encountered. Studying Alberta sources, I realized that Song Sparrows were known around the Grande Prairie area which was only a couple of hundred kilometres to the southeast.

Then I found a copy of Leo Jobin's short note published in *Canadian Field-Naturalist*. He had collected the species in the South Peace but not until May 1954. Was the Song Sparrow extending its range northwest?

Sure enough as I increased my efforts farther afield, I found that Song Sparrows could be found in the Peace River valley, on the shrubby edges of sandbars. The bird seemed to become more widespread in the valley as the 1980s passed. Not only had I been reunited with an old familiar friend, but I had had the pleasure of sleuthing out the bird myself.

The icing on the cake was that these Song Sparrows belonged to a different-looking subspecies. They wore a much more contrasting plumage, like that of

the birds shown in eastern field guides. Well, well, here at last were birds like the painting on page 127 of Mr. Zim's book.



Briefing 2

Summary by M. Church, Vancouver

Like Father, Like Son

How do new species arise? There seems to be two routes to speciation: genetic mutation and selective breeding. Relatively little is known about either mechanism among wild animals. Peter and Rosemary Grant, who have long studied Darwin's finches, have made some tentative progress by showing that selective breeding – also called sexual imprinting – may be effective. Using comprehensive pedigree information (i.e., who is whose offspring) ranging from 1976 through 1998 for the Medium Ground Finch and Cactus Finch on the Galapagos island of Daphne Major, they have examined mechanisms associated with mate selection that may encourage or discourage hybridization. The subjects are appropriate because both finches have similar plumages and similar courtship and nesting behaviour.

There are two routes to speciation: a new species may arise if one species splits into two or, much less commonly, individuals of two different species might successfully mate and give rise to a viable new species. By what mechanism might breeding occur in such a manner that either occurs? Analysis of their pedigree list by cross-generation correlation of physical characteristics revealed that, in the Medium Ground Finch, the body size of the chosen mate is strongly correlated with the body size of the chooser's father. In the Cactus Finch, the beak length and shape of the male partner is significantly correlated with that of the female's father. Superficially, this is a selective mechanism to ensure species fidelity, but it can lead to speciation from one founding species when the critical characteristics drift so far from the average that exceptionally endowed birds choose each other and pass on the variant character. Additionally, if the critical characteristic in one species drifts into conformity with the same characteristic in the other of these

physically and behaviourally similar species, then a cross-species mate choice might lead to a viable third species (which the Grants have observed on Daphne Major). Genetics must, however, also enter the matter since the offspring generation's genes must preserve the critical characteristics and ensure that the descendants are not barren. Indeed, most cross-species matings do yield barren offspring, which is one reason why speciation by this route is rare.

Why are the father's features the key arbiters of these creative mixups? The male finches sing (the females do not) so young birds first learn their lineage via their father's song. Further, mate choice appears largely to be a matter of the female choosing her male, so focus on the male characteristics by the choosing female makes elementary sense.

Correlation is not causation (I think we've said that before) but it can be strongly suggestive. Associations in the single parent species case are strong. The case of two parent species is, however, still rather tentative simply because successful speciation by cross-species pairing is so rare that there are still too few cases from which to draw firm conclusions, especially as most such pairings do not give rise to a viable new species. One way to accelerate the investigation of this case would be to deliberately swap eggs between nests of the two species so that the young imprint on a surrogate parent of the opposite species, thence to see what issues from their eventual mate choices. Darwin's finches still have much to teach us.

Reference

Grant, P.R. and Grant B.R., 2018. Role of sexual imprinting in assortative mating and premating isolation in Darwin's finches. *Proceedings of the National Academy of Science (USA)* 115: 10 879–10 887. doi: 10.1073/pnas.1813662115.

Birding Technology

Hear, Hear

Clive Keen, Prince George

One of the best things about getting long in the tooth is hearing loss. Those teenage pop songs and distracting coffee-shop conversations get pleasantly muted. Traffic noise doesn't keep you awake at night. No longer is it necessary to keep shouting "WHAT?" to a wife who insists on asking questions from the other end of the house: you have an excuse for staying silent. But, you might say – what about birdsong? Doesn't hearing loss blight a birder's life?

Au contraire: the problem is easily solved. All you have to do is hand over a king's ransom to an audiologist, and you can have the peace and quiet you've earned (just turn the sound down) while bird songs can come in really loud and clear (turn the sound up as much as you like). Your ears have a volume control – how cool is that?

I'm writing, of course, about relatively mild age-related hearing loss, which sneaks up on all birders eventually. I'll bet that half the readers of this fine magazine are wondering if they'd currently benefit from technology tucked behind the ear. The answer from this satisfied customer is a decisive "Er, probably." Sooner or later, undoubtedly, they'll be of use to each birder. The question is more about *when*.

Modern hearing aids don't simply provide any extra volume required, but provide clarity. With age, treble in particular starts to go missing, and frequencies in the treble range carry lots of information. Today's hearing aids are clever little devices, and can be tuned to deliver only what's needful. They are too smart to amplify loud noises – we don't need that – and sensibly focus on amplifying the particular frequencies that have been getting in short supply. When I turn off my diminutive new aids, I find that sound seems two-dimensional; it is flatter, lacking the depth and richness that can be delivered electronically to boost under-represented frequencies. This is particularly significant for bird songs, since most of their utterances are in the treble range.

I have to admit that, though the aids are useful in other circumstances such as at crowded gatherings and presentations, I wouldn't have bothered with them as yet if it hadn't been for spring-time birding. I *like* quiet and tend to avoid crowded gatherings, but I'd been getting fed up with "Ooh, do you hear that!" comments from other birders when I've been hearing nothing. And I knew, from the bird songs I *could* hear, that aural birding greatly enhances the whole outdoor experience. Birding with hearing loss, even quite mild hearing loss, is like birding with a pair of ancient Walmart porro prisms. The only real problem I've found is that it takes some time to get used to those things in my ears. I'm still looking at nearby bushes for birds that in fact are singing from trees sixty yards away. And the rustling clothes and footfalls from fellow birders are yet to be filtered out by my not-yet-retrained brain. These are problems I'm glad to have, though, in a world that is now gloriously replete with birdsong.

So, if you're wondering about it, should you go ahead and visit your friendly audiologist? For many of us, the issue can be one of cost. Today's tiny hearing aids must be carved out of dilithium crystals, given the price, so are not exactly an impulse buy. The supposedly good news is that there's no up-front expense. Most audiologists don't charge for testing, and will lend you hearing aids for a test drive, so you can walk away with no expense at all if you decide against. But, having once tried them, it would be hard not to make the purchase. So my advice is this: If you'd be willing to buy a Swarovski scope to improve your birding experience, then you should have no qualms about treating yourself to sharper birding ears. If a Vortex scope would be the limit of your ambitions, then head to Costco, which surprisingly enough offers aids at around half the price available elsewhere. If you are more in the *currently-not-worth-it* category, then give it a few more years, until you get fed up cupping your ears at presentations and saying "pardon?" a lot. Once you get to the point of needing aids for more than birding, you'll find the expense less daunting.

Editor's Note: Articles on birding technology of any kind will be welcome in future editions of this magazine.

Briefings 3 & 4

Summaries by M. Church, Vancouver

Penguin Catastrophes

Recent seasons have been disastrous for the breeding success of Antarctic Adélie Penguins. At Pétrels Island (66° 40'S, 140°01'E) in 2013/14 all of the chicks in a colony of 34,000 birds perished due to heavy summer precipitation of both rain and snow. Renewed chick mortality occurred in 2015. Unlike the adults, the chicks lack waterproof plumage, so that prolonged wet conditions lead to death by hypothermia. Since 2000, similar conditions elsewhere around Antarctica have led to rapid declines in breeding populations of the penguins and to the extinction of some colonies. For example, at Litchfield Island (66°46'S, 64°06'W) the colony became extinct in 2007 after 16 years of steady decline. Paradoxically, in the same period weakened katabatic winds (winds blowing outward from the Antarctic ice cap toward the sea) have led to the persistence of extensive floating ice on the coastal sea, making foraging more difficult and food supply more tenuous.

However, these events evidently are not exceptional. Researchers have discovered Adélie "graveyards" at Vestfold Hills and Long Peninsula (in the vicinity of 68°30'S, 77°30'E, East Antarctica). Here mummified carcasses are found in densities of up to 10–15 bodies per square metre. Slope parallel alignment of both carcasses and nest stones indicates that they have been washed downslope by running water. The ages of the carcasses (determined by radiocarbon method) are about 750 years and 200 years, indicating two sub-recent episodes of mass die-offs, each occurring within a period of one or a few decades. Other such accumulations of penguin remains are known from around maritime Antarctica with a wide range of ascribed dates extending to more than a thousand years ago, suggesting that these events are by no means exceptional. Yet there are still large colonies of Adélies today. The penguin population evidently can recover from such events.

Breeding failure and colony failure are associated with exceptional weather. A particular weather situation can develop in which a triad of high pres-

sure cells develops over the southern ocean. On the east flank of each such zone southward flowing air streams from as far north as 30° (subtropical) bring exceptionally warm and moist air to the Antarctic coasts and are the source of the unusual precipitation and a contributor to the weakened off-ice winds. A worrying problem is that this is the weather situation around Antarctica today. The serious aspect of it is that, with ongoing global climate change, it may become persistent. That would be truly catastrophic indeed for the Adélies and probably for other penguin species as well.

Reference

Gao, Y., Yang, L., Xie, Z., Emmerson, L., Southwell, C., Wang, Y., and Sun, L. 2018. Last millennium Adélie penguin mortality and colony abandonment events on Long Peninsula, East Antarctica. *Journal of Geophysical Research: Biogeosciences* 123: 2878–2889. <https://doi.org/10.1029/2018JG004550>.

Additional note

There are, as well, current reports of the loss of entire Emperor penguin colonies. These iconic birds nest near the sea edge of fast ice shelves along the Antarctic coast. The intrusion of warm surface waters, driven by the anticyclonic wind pattern, is accelerating the melt and foundering of this ice in places where the northerly winds impinge on the continent, essentially, then removing the birds' home from beneath them. Whether or not the birds can successfully establish new colonies is not clear.

Snooping Birds with a UAV

Well, the birds probably see it that way. But we humans have a variety of reasons for wanting to find and track the movements of individual birds. These days, large birds can be tracked by attaching to them a radio-GPS combination that periodically (or continuously) transmits the coordinates of the bird's position. The birds can be tracked for long distances by the use of space satellites to receive and retransmit the signals. But small birds object to lugging the load; in fact they cannot do it. For them, there remains the classical method of affixing a small radio transmitter to the bird and searching for it by wandering around in the bird's (hoped for) vicinity with a directionally sensitive

radio receiver that – once it picks up a signal – will lead you to the bird.

There are substantial problems with this classical technique. The radio transmitters are small (weighing of order 2 or 3 grams) and have little power, so they operate in the VHF (very high frequency) band for maximum range (which is hundreds of metres). But VHF signals can be detected only by direct line of sight so, if the person tracking the bird drops below a hill summit or encounters heavy bush, the signal is momentarily lost. The birds evidently know this for they invariably choose that moment to move, leaving the tracker to start the search all over. And that compounds the basic problem of having, in the first place, to crash around in the bush searching for signal and bird.

Enter robot scientists, these days more glamorous even than rocket scientists. Some Australian “roboticists” have developed a radio receiver system that is mounted on a UAV (unmanned aerial vehicle; a.k.a. a drone) and detects the azimuth (horizontal direction) and range to the bird, then flies toward it, all the time correcting the information of the bird's position and retransmitting the information to the human tracker's smartphone or radio receiver. Once the UAV approaches the bird's position – the present precision is to within ± 50 m of the bird's actual perch – the tracker can easily find the bird. As the UAV flies above topography and vegetation, the line of sight problem is solved and the information it relays to the tracker greatly simplifies the tracker's path. Nor do the UAVs appear to spook the birds (as they sometimes do humans concerned with spies in the skies), at least not with a final proximity of probably tens of metres.

The UAV-based apparatus has been tested in the field to find Swift Parrots, a small Australian parrot that is endangered (there are about 2,000 of the budgerigar-sized birds in the wild). In trials matching the UAV against experienced and inexperienced human trackers using the classical radio tracking

technique, the UAV-assisted method consistently matched or exceeded the humans in locating the target bird. But although the UAV initially homed in on the bird more rapidly than the humans, the final location error was, of course, smaller for the trackers, who actually pinpointed the bird. And one still has somehow to make the first contact with the bird independently of the UAV in order to affix its tiny radio transmitter to it.

Reference

Cliff, O.M., Saunders, D.L. and Fitch, R. 2018. Robotic ecology: Tracking small dynamic animals with an autonomous aerial vehicle. *Science Robotics* 3: eaat8409; 10pp. (published online only)

The paper is largely about the mathematical-statistical algorithms used by the UAV's onboard computer to optimize its search for the bird.

Below: A Red-breasted Sapsucker, one of the more common birds sighted during the 2019 Skagit Valley Bird Blitz. For more, see thecanadianwarbler.blogspot.com/2019/05/skagit-valley-bird-blitz.html Photo by John Gordon



The Reflective Birder

Clive Keen, Prince George

Only Connect

It was early January, and I thought I really ought to start on my year list, and so headed out for four hours of birding.

Nothing much happened for the first two hours, hum ho, but then I spotted two young beginner-birders, probably aged 18 or so, and went to talk to them about the Short-eared Owls that were seen regularly around the spot they were watching: I'd seen a goodly number there on previous days. When one appeared, they were thrilled, and said that the day would be sensational if they could add the Hawk Owl or the



Gyr Falcon that they'd heard were in the area.

I said farewell and wandered off to a spot a kilometre away, where I met a first-rate birder who knew where both the Hawk Owl and Gyr Falcon could be found.

Bearing this news, I returned to the youngsters, and helped them find first the Gyr Falcon, and then the Hawk Owl. Rarely have such ecstatic young people been seen. They were hopping with glee and talking about a glorious day of birding that had been beyond their wildest dreams.

The reason I am telling this tale is that I've been haunted by the last part of a memorable comment by Simon

Barnes:

"Birds are life-enhancing: they bring joy when you see them, and it is a constant joy to share your life with them, and to share that joy with fellow human beings."

This birding trip left me in no doubt that sharing the joy with fellow human beings is indeed one the greatest pleasures of birding. I'd found only twelve species at the end of my four hours, so it should have been a bust, and yet I have rarely had such delight from my birding trips. But why, exactly?

The answer might seem obvious: it's good to make others happy. Perhaps we might want to add that it's doubly pleasing when we can be proud of our achievement in so doing.

But this is wide of the mark. Sure, nearly all of us get pleasure from having done a good deed, but our good deeds tend to be quietly warming, even when we've made someone really happy. And I didn't feel in the least bit proud of my achievement, because all I was doing was passing on information from a birder I recognize as much better than me.

What, then is the explanation? One thought is that such sharing allows us to relive the delight we received when we first saw a special bird. Do you remember seeing a Hawk Owl for the first time? Or a Gyr Falcon? It's likely to have been so good that you'd love to repeat the experience. And you can, by showing them to somebody who, like you, had longed to see them. Perhaps, too, the delight is enhanced by the reaffirmation we receive for our avocation. When you've been birding in the cold for two hours and have seen nothing of interest, doubts can creep in about whether it's all worth the effort. Experiencing the joy of beginners blasts those doubts into oblivion.

But perhaps there's something deeper still. I've written elsewhere about the joys of connecting with the world of nature. It satisfies something fundamental in the hu-



man psyche. What can be better? Well, how about connecting with nature, and at the same time connecting in triumph with like-minded human beings? E.M. Forster's *only connect* might then be doubly powerful.

I always used to think that birding at its best was a solitary activity, involving private contemplation of special moments. I am having second thoughts. Perhaps we should see it as preferably, not so much a team activity, but at its very best always a shared activity. Another reason we should actively participate in organizations such as the BCFO, and should always be ready on our birding trips to involve others.

Short-eared Owl, Gyr Falcon and Hawk Owl photos by Clive Keen.

