

BC BIRDING

Newsmagazine of the British Columbia Field Ornithologists

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An apparent McKay's Bunting found in Delta on December 7–12. See page 3. Photo by John Gordon.

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). Photographs should be in mid-resolution jpg (preferably 1–4 MB), and articles must be in plain text, either as the content of an email, or as an attachment (preferably Word). Illustrations should be sent as separate attachments, not embedded in text.

Topics may include birding experiences, casual observations about bird behaviour, site guides, birding equipment, trip reports (both home and away), book reviews, and other subjects of broad interest to birders. Brief items are always welcome, and average longer submissions tend to be in the 400–600 word range, with a maximum of 1,500 words. All submissions will be edited for style and length. Note also that this is a newsmagazine rather than an academic journal, and thus formal reference lists are in most cases not suitable.

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- December edition: November 15

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

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

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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

Larry Cowan, Pitt Meadows, 604-465-1402, lawrencecowan@shaw.ca

Charles Helm, Tumbler Ridge, 250-242-3984, helm.c.w@gmail.com

Art Martell, Courtenay, 250-334-2979, amartell@shaw.ca

Monica Nugent, New Westminster, 604-220-8816, monica_nugent@telus.net

Virginia Rasch, Kimberley, 250-464-0168, virginiaibc@gmail.com

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

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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.



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IMPORTANT DATES

SMITHERS CONFERENCE & AGM 2020

REGISTRATION

April 4

Online registration opens for Conference & AGM and pre-conference trip.

EVENT DATES

June 26 – 28

Smithers Conference & AGM.

June 23 – 26

Pre-conference extension trip to Terrace and Kitimat

CLOSING DEADLINES

June 5

Registration for the pre-conference extension trip.

June 12

Registration for Smithers Conference and AGM.

FRONT PAGE PHOTO

John Gordon, Surrey, writes:

This bunting was a lifer for me thanks to the keen eye of Mike Klotz and Liron Gerstman. Fellow birder and neighbour Carlo Giovanella thought it might be worthwhile me going down to the Tsawassen jetty and getting a few pictures of the bird as there were some doubts whether it was a Snow Bunting or a hybrid. As it turned out it has been named as a female McKay's, the third sighting in BC (subject to BC Bird Records Committee confirmation).

President's Message

Marian Porter, Salt Spring Island

2020 will be a year of exploration in the northwestern region of British Columbia, starting with a three-day field trip to the Bella Coola Valley and Anahim Lake from May 16 to 18 (see page 8). The 30th Annual Conference and AGM will take place in Smithers from June 26 to 28, with a pre-conference extension trip from Terrace to Kitimat from June 23 to 26. Our guides will be some of the most experienced birders in the region: members of the Bulkley Valley Naturalists, the Kitimat Valley Naturalists and BC Nature. We will also have the opportunity to meet BCFO members from the region, and hopefully inspire more birders to join our organization.

The survey on the conference and

extension trips received a good response from our membership and will assist the Board in planning future events. The Board discussed the possibility of planning a late summer-autumn conference and extension which could incorporate a pelagic birding trip. A list of conference delegates could be posted on our website to assist people wanting to share rides to distant conference locations. I would like to thank John Chandler for organizing the survey which will improve our ability to meet the expectations of our members and encourage them to travel to new locations throughout the province.

The BCFO Board has reluctantly accepted Melissa Hafting's decision to leave her position as program leader for the Young Birders' Program and wish her the greatest success in her future endeavours. A formal presentation to thank her for her dedicated service to BCFO and the Young Birder Program will be organized later on this year. We wish to continue the field program and hope to find a re-

placement with the equivalent of Melissa's knowledge, enthusiasm and leadership skills.

Three members of the Bird Records Committee are leaving due to the expiration of their terms: Nathan Henze, Mike Force and Peter Candido. I would like to thank them, and previous committee members Chris Charlesworth and Mike Toochn, for their contributions to a well-run committee, working to successfully deal with all records by consensus. (See page 10 for their latest report and notice of vacancies.)

It seems as though winter has progressed very quickly from the very active period when many of us are involved in Christmas Bird Counts to the promise of spring and a new migration season. I wish you good birding and hope to see you in Smithers.

*Below: A Song Sparrow reminding us that spring is not far away.
CNK photo.*

Doug Cooper -
Vancouver

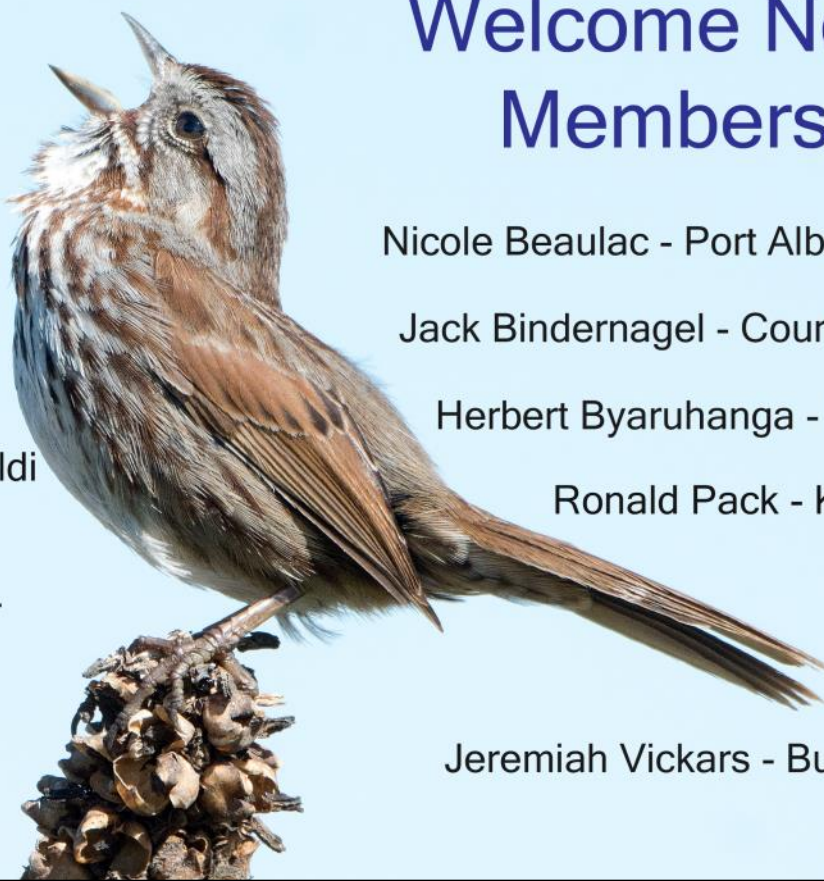
Creston Valley Bird
Festival - Creston

Jo Ellen Floer -
Cranbrook

Chris Murrell - Garibaldi
Highlands

Michael Simmons -
Central Saanich

David Wood -
Prince George



Welcome New Members

Nicole Beaulac - Port Alberni

Jack Bindernagel - Courtenay

Herbert Byaruhanga - Uganda

Ronald Pack - Kamloops

Jeremiah Vickars - Burnaby

BCFO 30th CONFERENCE & AGM, June 26 – 28, 2020, Smithers, BC

Schedule of Events

Location: Prestige Hudson Bay Lodge & Conference Centre, 3251 East Highway 16, Smithers, B.C.V0J 2N0.

Friday, June 26

5:00 PM to 8:30 PM – Registration and Social at the Prestige Hudson Bay Lodge, Cascade Room. Pick up your conference package, socialize with fellow birders and confirm your trip selections. There will be appetizers and a cash bar.

Saturday and Sunday, June 27 & 28

Breakfast: 5:30 to 6:00 AM, prior to field trips (both days).

Conference Field Trips: 6:15 AM departures both days from the Prestige Hudson Bay Lodge

- Trip 1 - Hudson Bay Mountain
- Trip 2 - The Bluff Trails
- Trip 3 - Telkwa High Road to Tyhee Provincial Park
- Trip 4 - Harvey Mountain Trail
- Trip 5 - Pacific Wetland Trail
- (see next page for details)

Lunch: 12:00 to 1:00 PM (both days).

Afternoon Speakers: 1:00 to 2:30 PM, Saturday. Frank Doyle: *Status of Northern Goshawk Breeding Areas in the Skeena Region*; Curt Gesch: *Habitat restoration for birds on farmland*.

Annual General Meeting: 2:30 to 3:30 PM, Saturday. Field trip selection for the Sunday trips will occur after the AGM.

Social Hour Cash Bar: 5:30 to 6:30 PM, Saturday.

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

Banquet Keynote: 7:30 to 9:00 PM, Saturday. Michael Kawerninski: *Birds of the Bulkley Valley*.

Registration Process

TO REGISTER FOR THE AGM/CONFERENCE

Via Regular Mail

Complete the registration form in this issue of *BC Birding* and mail it along with your cheque for payment to:

P.O. Box 61670
RPO Brookwood
Langley, BC V3A 1K0.

Via the BCFO Website (PayPal)

Go to the AGM/Extension Payments tab under the Events > Annual Conference drop-downs.

A fillable registration form is available for completion. *To pay for more than one registration*, simply make sufficient single payments for each person you wish to register.

TO REGISTER FOR THE EXTENSION TRIP

Via the BCFO website

Note: The only way to register for the extension trip is via the website.

Payment may be made either by cheque, or via the PayPal button.

Go to the *AGM/Extension Payments* tab under the *Events > Annual Conference* drop-downs. The fillable registration form will include the opportunity to indicate your desire to attend the post-AGM Extension.

To pay for more than one registration via PayPal, simply make sufficient single payments for each person you wish to register.

*Online registrations open on
April 1 at 9:00 am PDT.*

BCFO 30th CONFERENCE & AGM, June 26 – 28, 2020, Smithers, BC

Accommodation

Smithers

Prestige Hudson Bay Lodge

3251 East Highway 16, Smithers (250) 847-4581 Toll Free: 1 877 737-8443

Stork Nest Inn

1485 Main Street, Smithers (250) 847-3831.

Capri Motor Inn

3984 Highway 16 West, Smithers (250) 847-4226.

Sandman Inn

3932 Highway 16 West, Smithers (250) 847-2637.

Smithers Guesthouse Hostel

1766 Main Street, Smithers (866) 430-4982.

Terrace

Holiday Inn Express and Suites

3059 Highway 16 East, Thornhill, Terrace (778) 634-3977

The Lodge at Skeena Landing

4035 Motz Road, Thornhill, Terrace (250) 638-0444

These two locations are convenient to the extension-trip guide residence.

Conference Field Trips

Trip Selection & Waiver Form

Field trip selections for the morning of June 27 will be made during registration on Friday, June 26 at 5:00 PM. At the same time, you will be asked to complete your conference waiver form and review the BCFO Code of Ethics. Field trip selections for the morning of June 28 will take place after the AGM.

Where & When to Meet

Each trip departs at 6:15 AM, on both Saturday and Sunday, from the Prestige Hudson Bay Lodge.

Trip Leaders

Among the trip leaders will be Ken White, who has birded Smithers for 25 years in a 45-year history of birding internationally as well as in Canada. He has been involved with Christmas Bird Counts and conducted the local Breeding Bird Survey since 2004.

Hudson Bay Mountain

Alpine meadows are accessible on an easy hike from the T-bar at the base of the ski hill to Crater Lake where species such as Willow, Rock and White-tailed Ptarmigan as well as Gray-crowned Rosy-Finch, Horned Lark, Lapland

Longspur and American Pipit may be found. Below timberline will yield Clark's Nut-cracker, Spruce Grouse, Boreal and Mountain Chickadee, Pine Grosbeak, White-winged Crossbill and Hermit Thrush. Northern Goshawk and Golden Eagle are a possibility, with probable sightings of Mountain Goats and marmots. A wetland en route to the mountain will be checked for Blackpoll Warbler.

Harvey Mountain Trail

The Harvey Mountain Trail in Babine Mountains Provincial Park is another option for high-elevation birds where subalpine meadows are accessible after 4 km of a 4.5-km-long trail. The Malkow Lookout Trail is 3 km long through aspen forest and farmland ending in mountain and valley views of the region.

The Bluff Trails

The field trip begins with a 500-metre boardwalk traversing a willow-thicket wetland rich in warblers such as MacGillivray's and Yellow Warbler as well as American Redstart and Common Yellowthroat. The trail ascends to an aspen forest with birds such as White-throated Sparrow, Least Flycatcher and Western Tanager. The trail ends up in mixed deciduous and conifer forest with birds such as

Magnolia Warbler, Cassin's Vireo, Golden-crowned Kinglet and Pacific Wren. The morning will finish with a trip to a wetland which will add Sora, swallows, more warblers and Red-winged Blackbird.

Telkwa High Road to Tyhee Lake Provincial Park

Discover Calliope Hummingbird and Lazuli Bunting en route to the park with a varied list of waterfowl and wetland species as well as Red-breasted and Yellow-bellied Sapsucker, Alder, Least and Dusky Flycatcher, and White-throated and Lincoln's Sparrow.

Pacific Wetland Trail

This trail offers an extensive list of warblers including Blackpoll and Tennessee Warbler, Northern Waterthrush and Yellow-breasted Chat. Sparrows include White-throated and Lincoln's with a wide variety of flycatcher including Willow, Dusky, Least, Alder and Olive-sided Flycatcher. The Riverfront Park on the Bulkley River is another destination that has recorded Northern Shrike, American Bittern, Sora, Red-eyed Vireo and Magnolia Warbler. A canoe trip could be organized for interested conference delegates on Sunday morning.

BCFO 30th CONFERENCE & AGM, June 26 – 28, 2020, Smithers, BC

Registration Form

Name(s)

Address

.....

Phone Email

Conference Registration

Maximum registrations: 100. Attendance is limited to BCFO members and accompanying spouses/family members. If spaces are available, non-members may join BCFO at the same time as they register for the Conference.*

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

_____ @ \$195 /person = \$ _____

BCFO Young Birders _____ @ \$90 /person = \$ _____

Social events ONLY (Meet & Greet, and Banquet) _____ @ \$75 /person = \$ _____

*Membership fee for non-members _____ @ \$30.00 – single/family = \$ _____
(see BCFO website for membership details)

Total registration fee(s) for the Conference = \$ _____

Will you be attending the Friday evening reception: Yes No

Do you have any dietary requirements: Yes Requirement

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.

All fees are payable upon submission of this registration form. Please make cheque or money order payable to **BC Field Ornithologists**. If registering by mail, send your registration and payment to BC Field Ornithologists, P.O. Box 61670, RPO Brookwood, Langley, BC V3A 1K0. *Please submit AGM registrations by May 20, 2018.*

Pre-Conference Extension Trip to Terrace and Kitimat

Date: June 23 to 26

Walter Thorne and Diane Weismiller will be our guides for the trip. Walter conducts a Breeding Bird Survey in the Kitimat region and the BC Coastal Waterbird Survey at MK Bay. He is the Northern Clubs co-ordinator and is on the Education Committee of BC Nature, as well as a director of the Kitimat Valley Naturalist Club. Diane started birding in 1970 and has been the compiler of the Terrace Christmas Bird Count since 1973. She has conducted the local Kwinitsa Breeding Bird Survey since 1974.

Pre-conference participants will be based in Terrace. Field trips will begin early on the morning of June 23, with the

option of a dinner meeting on June 22.

Ferry Island is located in the Skeena River with park trails where we may find Black-backed Woodpecker, Merlin, Veery, Alder Flycatcher and a good variety of warblers including Magnolia Warbler. New Remo is a local birding hotspot on the Skeena River with waterfowl, shorebirds, a good variety of warblers and flycatchers including Alder and Least. Rusty Blackbird has been recorded, as well as Northern Goshawk. Exchamsiks River Provincial Park is 50 km west of Terrace with a short nature trail through old-growth Sitka Spruce forest and Kasiks Wilderness Resort is 5 km further with a lunch stop in old-growth forest. Lakelse Lake Provincial Park is another

site with waterfowl which may include Red-necked Phalarope.

The estuaries near Kitimat are rich in birdlife with the possibility of grizzly and whale sightings from the beach flats at Elmsley Cove. MK Bay, Kitimaat Village, Minette Bay and Magee Point are birding locations with many species of ducks, shorebirds, grebes and alcids including Long-tailed Duck and Marbled Murrelet.

Ross Lake Provincial Park near Hazelton will be a stop en route to Smithers. The lake has a wide variety of ducks, grebes, loons, gulls and shorebirds with the possibility of uncommon species such as Rusty Blackbird, Say's Phoebe, Townsend's Solitaire, and Golden Eagle.

BCFO Short Trips

How the Short Trips Work

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

The first day is all-day birding followed by an evening get-together at a restaurant to recap the day and tally species. On three-day trips, the second day is similar.

The final day is morning birding, with optional birding in the afternoon.

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 short trip, Adrian Leather would be pleased to hear from you at q-birds@xplornet.com.

Three Days: Bella Coola Valley & Anahim Lake, May 16–18, 2020

Leader

Local expertise plus Adrian Leather.

Registration

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

Itinerary

Saturday: (Lower Valley) Estuary, Clayton Falls, sloughs, airport, Snooka Trail, Nusatsum, Noosgulch.

Sunday: (Upper Valley) Burnt Bridge, Fisheries Pool, Stuie, Tote Rd, Atnarko and/or Talchako, to the plateau.

Monday: Anahim Lake area.

Accommodation

- Bella Coola Mountain Lodge & Brockton Bistro, Hagensborg (nights of May 15 & 16). 1-866-982-2298, Pete & Jayme.
- Eagle's Nest Resort, Anahim Lake (nights of May 17 & 18). 1-800-742-9055, Tim & Tena.

Participants are encouraged to book early as there is a range of suites, rooms, and cabins to select from, space might be limited at one location, and we want to keep the group together at single sites.

Description

Bella Coola claims to be "the real BC" and offers spectacular scenery. A local birder will lead us around a good variety of habitat, and altitude, starting at the oceanfront and working along the valley up The Hill to the tundra-like plateau, and exploring the Anahim Lake area.

The valley has Black-throated Gray Warbler and Sooty Grouse, among many others. Anahim Lake often has American White Pelican, and has hosted breeding American Bittern, Least Sandpiper, Lesser Yellowlegs, and Yellow Rail. The folks at Eagle's Nest Resort maintain bird feeders, and the resort is situated on a small peninsula which attracts numerous species. Great Gray Owl and Great Horned Owl have been recorded. Birders might choose to continue birding across the Chilcotin Plateau, where vast lakes attract coastal species, and Eagle Lake holds breeding Arctic Tern and Semipalmated Plover. Of course, some species will have returned, others not. Who knows what we will find on this exciting mid-migration foray?

Transport

- Bella Coola and Anahim Lake have airports.
- BC Ferries offers service from Port Hardy to Bella Coola (check for availability).
- Hwy. 20 from Williams Lake is a beautiful drive.

Party Size

The trip is limited to a maximum of 15 birders.

Two Days: Nakusp June 5–7, 2020

Leader

Gary Davidson.

Registration

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

Accommodation

The Lodge at Arrow Lakes, 1-800-663-0100.

Further Details

Updated information will be provided on the BCFO website.

BC Bird of 2019

Kevin Neill's annual Bird of the Year competition, run on several BC birder listservs, had the following entries:

- Fieldfare, Salmon Arm
- Dusky Thrush, Nanaimo
- Short-tailed Albatross, off Tofino
- Rustic Bunting, Bull River
- Great Black-backed Gull, Kelowna
- Sedge Wren, The Peace
- Common Ringed Plover, Vancouver
- Guadalupe Murrelet, Tofino
- Hawaiian Petrel, Haida Gwaii
- Garganey, Kelowna
- Brown Shrike, Victoria
- Common Crane, The Peace
- Yellow-browed Warbler, Victoria
- Ivory Gull, Wardner
- White Wagtail, Prince Rupert

The winner, by a canter, was the Yellow-browed Warbler, garnering 53% of the votes. Brown Shrike was a distant second at 21%, followed by Fieldfare at 17%, with honourable mentions for Rustic Bunting and Dusky Thrush at 3%. A write-in addition to the list, Cape May Warbler, also managed to log 3% of votes.

Kevin is dreaming of a tropicbird, Spectacled Eider, or kite of any description, in 2020. Be on the lookout.

Young Birder Awards

The 2020 BCFO Young Birder Award recipients are Nicholas Croft and Gaelen Schnare. They join the ranks of a remarkable group of BC young people who are already making their mark on the birding world.

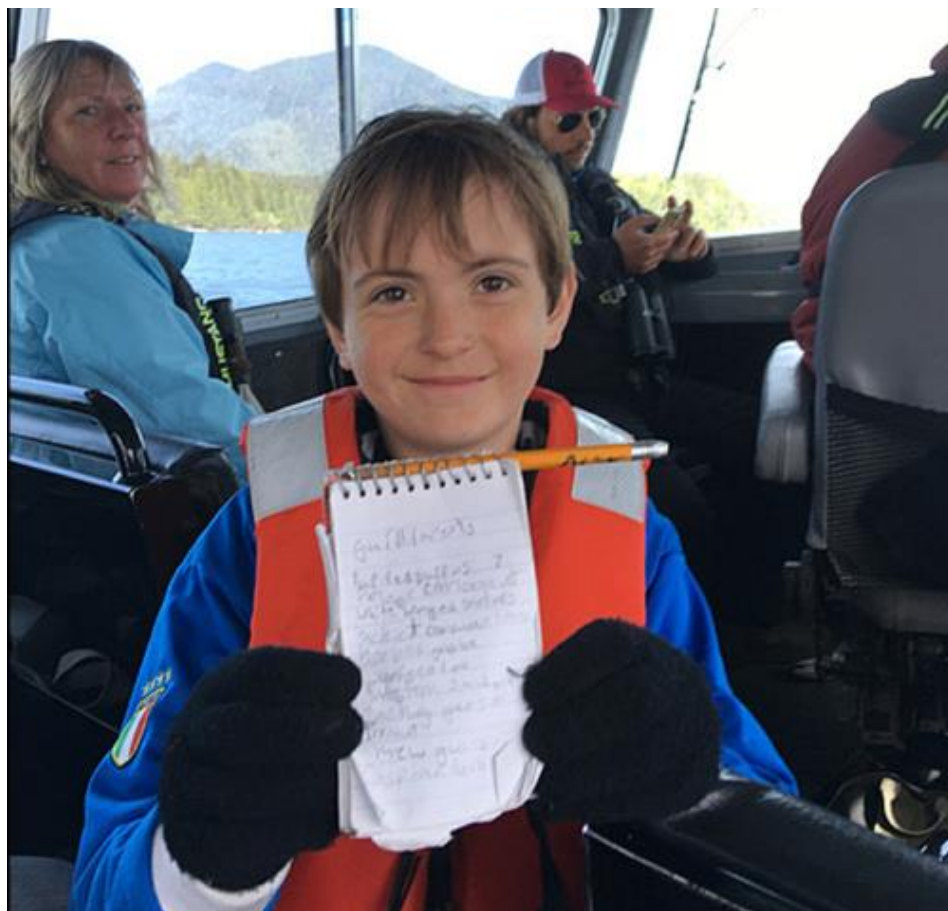
Gaelen Schnare

Gaelen (right) is an impressive birder with a keen eye, unbridled enthusiasm, and excellent photography skills. As a citizen scientist, he contributes his bird observations through eBird, and his natural history observations to iNaturalist. He regularly gives presentations about birds at the annual Creston Valley Bird Festival, and has led tours at that festival for young birders, acting as a mentor already. In addition, he gives presentations to local Nelson schools, and participates in the Nelson Christmas Bird Count.



Nicholas Croft

Nicholas's passion for birds was rewarded at the Vancouver Island Regional Science Fair where he won an award for his project assessing winter bird use of the Hope Bay estuary. He also contributed to citizen science through the annual CBC4Kids on Pender Island, and helps out with the BC Coastal Waterbird Survey, a program of Birds Canada and Environment Canada. Recently he helped OWL with the release of an injured and rehabilitated Northern Saw-whet Owl. Birding for Nicholas has also honed his photography skills, resulting in four photo exhibitions on Pender Island.



About The Awards

2020 is the seventh year of the BCFO Awards Program as we continue to find many young, keen, committed birders from around BC. Each recipient receives a free membership to BCFO until age 18, a memorial plaque, and a stylish BCFO ball cap. If you have ideas for a potential recipient, details can be found at: bcfo.ca/bcfo-young-birder-program.

Bird Records Committee

The accepted records for Round 27 are listed below. Notable, are new additions (BC firsts) to the Main List: Yellow-browed Warbler and Brown Shrike; and Hawaiian Petrel is elevated to the Main List from the Provisional List.

- **Ash-throated Flycatcher**, 25 May 2019, Kelowna, Michael Force
- **Parakeet Auklet**, 24 March 2019, ocean west of Tofino, Joachim Bertrands
- **Chestnut-sided Warbler**, 30 June – 06 July 2018, North Vancouver, Quentin Brown
- **Snowy Plover**, 23 May 2019, Wickaninnish Beach, Pacific Rim National Park, Lorraine Hall
- **Acorn Woodpecker**, 4 July 2019, Christmas Hill, Victoria, Robert Fraser
- **Hawaiian Petrel**, 21 August 2019, NW of Graham Island, Haida Gwaii, Michael Turso.
- **Garganey**, 18 – 19 September 2019, Kelowna Landfill, Chris Charlesworth
- **Yellow-browed Warbler**, 18 – 24 October 2019, Panama Flats, Victoria, Geoffrey Newell
- **Brown Shrike**, 1 – 3 October 2019, Rocky Point Bird Observatory, Siobhan Darlington (extractor), David M Bell (bander), Joachim Bertrands, Ian Cruickshank
- **White Wagtail**, 10 – 15 November 2019, Triple Island, north coast of BC, Erik Milton
- **White Wagtail**, 9 – 11 December 2019, Green Island lighthouse ~32 km NE of Triple Islands Lighthouse, Jim Redden

The Committee asks observers to continue to take careful field notes to support all submissions, as they are extremely important to the committee's decision-making even when photographs are provided. A full account of all the decisions made by the committee will be published in an upcoming issue of our journal *British Columbia Birds*.

MEMBERSHIP VACANCY – BCFO BIRD RECORDS COMMITTEE

Needed

Three (3) individuals to serve as participating members of the BC Bird Records Committee (BCBRC).

Duration

We are seeking three individuals who are willing to commit to a three-year term, beginning April 2020. As per BRC operating guidelines, up to two consecutive terms may be served, for a total of six years. Renewal for a second term is optional and subject to BCBRC approval. Members may not sit for more than two consecutive terms before taking a mandatory one-year absence. Following this absence, individuals may be re-nominated for additional terms, and placed in the candidate pool for available positions. Monthly time commitments vary, but candidates should be willing to put in approximately ten (non-consecutive) hours.

Qualifications

Candidates should be knowledgeable on bird identification and distribution of all bird species in the province, as well as familiar with the identification and distribution of avian taxa from the remainder of North America, and ideally also Eurasia and Mexico. Preferred candidates will have first-hand experience with the majority of species that may be reported (see the current Review List). In addition to field experience, candidates should have access to sufficient resources (e.g., books, web resources) to provide critical, independent commentary and evaluations of bird records by set deadlines. Knowledge of aging and sexing of birds is a plus.

Candidates must be courteous and respectful of fellow committee members and to individuals whose records are being reviewed, including confidentiality of observer names and committee discussions. Previous experience with committees is beneficial, but not mandatory; however, candidates must be able to work effectively in a committee operating under a consensus framework. In addition to birding experience, candidates must be able to reliably communicate electronically. This includes frequent and reliable access to the internet and the ability to email, Skype (or similar alternative), and send/receive files in MS Word and MS Excel formats.

Prior membership to BCFO is not a requirement, but non-members are expected to join the organization upon appointment to the committee. All BCBRC members are expected to maintain their membership to BCFO in good standing for the duration of their tenure. Candidates should reside in British Columbia for the majority of each calendar year for which they are serving.

Selection

The committee strives to maintain representation of the entire provincial birding community by selecting members from varied regions of the province. To further ensure that the committee is representative of the provincial birding community, women are strongly encouraged to apply.

The BCBRC is a committee of the BCFO. Applicants, or a short-list of applicants, will be discussed by the current BCBRC membership for nomination to the committee. Final appointments are made by the BCFO Board of Directors.

How to apply

You may nominate yourself or someone else who you believe is qualified. All nominations should be sent electronically to the Chairperson of the BCBRC, at bcbrc.chair@gmail.com. In the email include a brief description of your qualifications, or, if nominating someone else, highlight why you think that person would fit well on the committee. Make sure to include your full name and contact information (email address and/or phone number), or the full name and contact information of the nominee. All information should appear in the body of the email; formal cover letters, CVs, etc., are not required. Please apply as soon as possible, and no later than March 15. The positions will remain open until filled.

Upcoming Meetings & Events

Compiled by Wayne C. Weber, Delta

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: www.allaboutbirds.org/birding-festivals.

Mar. 14: First WESTPORT SEABIRDS pelagic birding trip of the year from Westport, WA. Westport Seabirds will be operating 22 trips this year from March through October. A detailed schedule of trips for 2020 can be seen at the Westport Seabirds website (<http://westportseabirds.com>).

Mar. 20–22: 18th ANNUAL WINGS OVER WATER NORTHWEST BIRDING FESTIVAL, Blaine, WA. For information, check the website at www.wingsoverwaterbirdingfestival.com or contact Debbie Harger (phone (360) 332-8311; email, dharger@cityofblaine.com).

Mar. 20–22: 23rd ANNUAL OTHELLO SANDHILL CRANE FESTIVAL, Othello, WA. For information, check the festival website at www.othellosandhillcranefestival.org, or phone (509) 989-5606.

Mar. 21–Apr. 19: BRANT WILDLIFE FESTIVAL, Qualicum, BC. For information, phone Elvira Grondin at 1-866-288-7878 (in Greater Vancouver, 604-924-9771, ext 222), or check the festival website at <http://brantfestival.bc.ca>.

Apr. 2–3: COLLEGE OF PROFESSIONAL BIOLOGISTS OF BC AGM and conference, Kelowna, BC at the Manteo at Eldorado Resort. For information and to register, visit the College conference webpage at www.cab-bc.org/news/2020-conference-registration-open.

Apr. 15–21: 25th ANNUAL GODWIT DAYS birding festival, Arcata, California. This is one of the premier birding festivals in North America, with dozens of field trips to various places. For information or to sign up, visit the festival website at www.godwitdays.org.

Apr. 16–19: HARNEY COUNTY MIGRATORY BIRD FESTIVAL, Burns, Oregon (focusing on Malheur National Wild-

life Refuge). For further information, check the festival website at www.migratorybirdfestival.com.

Apr. 17–19: OLYMPIC BIRD FESTIVAL, Sequim, WA. For information, visit the festival website at <http://www.olympicbirdfest.org>, or contact the Dungeness River Audubon Center by phone (360-681-4076) or by e-mail (info@olympicbirdfest.org).

Apr. 24–26: GRAYS HARBOR SHOREBIRD FESTIVAL, Aberdeen, WA. For information, contact the festival office at PO Box 470, Montesano, WA 98563 (phone 360-289-5048) or check the website at www.shorebirdfestival.com.

Apr. 28–29: ASSOCIATION OF PROFESSIONAL BIOLOGISTS OF BC annual conference, Nita Lake Lodge, Whistler, BC. For further information and to register, visit the APBBC website at <https://professionalbiology.com>.

Apr. 28–May 1: Annual meeting of the SOCIETY FOR NORTHWEST VERTEBRATE BIOLOGY at the Doubletree Inn in Spokane, Washington. This is a joint meeting with The Wildlife Society (Washington Chapter) and NW Partners in Amphibian and Reptile Conservation. For information and to register, check the SNWVB website at <http://thesnwb.org/annual-meeting>.

May 1–3: TOFINO SHOREBIRD FESTIVAL, Tofino, BC, sponsored by the Raincoast Education Society. Events are not scheduled yet, but for information, please visit the festival website at <https://raincoasteducation.org/what-we-do/events/tofino-shorebird-festival>.

May 8–10: 8th annual CRESTON VALLEY BIRD FEST, Creston, BC. For information and to register, visit the festival website at <http://www.crestonvalleybirds.ca>. Requests for information may be sent to info@crestonvalleybirds.ca.

May 8–10: SKAGIT VALLEY BIRD BLITZ, Skagit Valley Provincial Park, BC. For information and to register, check the event website at <http://hopemountain.org/programs/skagit-valley-bird-blitz-may-8-10-2019>. Inquiries may be made by email to Ashley Tyler at atyler@hopemountain.org or by phone at 604-869-1274.

May 11–17: WINGS OVER THE ROCKIES FESTIVAL (23rd annual), Invermere, BC. For information, contact the Pynelogs Cultural Centre, PO Box 2633, Invermere, BC V0A 1K0, phone 1-855-342-2473, e-mail info@wingsovertherockies.org, or check the website at www.wingsovertherockies.org.

May 14–17: LEAVENWORTH SPRING BIRD FEST, Leavenworth, WA. For information, email info@leavenworthspringbirdfest.com or check the festival website at www.leavenworthspringbirdfest.com.

May 14–18: 23rd Annual MEADOWLARK NATURE FESTIVAL, Penticton, BC. The schedule of events and registration should be available soon; please check the festival website at <http://meadowlarkfestival.ca>.

May 28–31: BC NATURE ANNUAL GENERAL MEETING, Princeton, BC, hosted by Vermilion Forks Naturalists. For information or to register, visit the BC Nature website at

<http://www.bcnature.ca/agm-2019-cowichan-valley>. Registration fees increase after March 31.

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

June 5–7: 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-blitzjune5-7-2020. Inquiries may be made by email to Ashley Tyler at atyler@hopemountain.org or by phone at 604-869-1274.

June 26–28: BC FIELD ORNITHOLOGISTS ANNUAL GENERAL MEETING in Smithers, BC. For details, visit our website at <https://bcfo.ca/2020-annual-conference-smithers-june-26-28>. Registration will open on April 4.

Aug. 10–15: Seventh NORTH AMERICAN ORNITHOLOGICAL CONFERENCE, San Juan, Puerto Rico. This joint meeting of the American Ornithological Society, Wilson Ornithological Society, and Association of Field Ornithologists takes place once every four years. For details, check the AOS website at a later date at

<https://americanornithology.org/meetings/annual-meeting>.

Sept. 9–13: WESTERN FIELD ORNITHOLOGISTS CONFERENCE (45th annual) at Reno, Nevada. For further details, check the WFO website at www.westernfieldornithologists.org/conference.php. Registration should open in June 2020.

Sept. 11–13: PUGET SOUND BIRD FESTIVAL, Edmonds, WA. For information and to register (starting Aug. 1), check the festival website at <http://www.pugetsoundbirdfest.com> or contact Jennifer Leach at the City of Edmonds Parks Dept. (phone 425-771-0227), or email her at jennifer.leach@edmondswa.gov.

Sept. 11–14: First joint meeting of WASHINGTON ORNITHOLOGICAL SOCIETY and OREGON BIRDING ASSOCIATION, Astoria, OR. For information and to register, check either the WOS website at <http://wos.org/annual-conference> or the OBA website at <https://oregonbirding.org> next spring.

Sept. 27–Oct. 1: 26TH ANNUAL CONFERENCE OF THE WILDLIFE SOCIETY, Louisville, Kentucky. For information, check the TWS conference page at <https://wildlife.org/2020-conference>.

Oct. 4–8: RAPTOR RESEARCH FOUNDATION annual meeting, Boise, Idaho, USA. For further details, visit the society website at <https://raptorresearchfoundation.org/conferences/upcoming-conferences>.

Dec. 14 to Jan. 5 (2021): 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*.

Briefing 1

Summary and comments by M Church

Being Like Humans?

Kagu (*Rhynochetos jubatus*) or Cagou is an endemic bird of the dense, high-altitude forests of New Caledonia (a French territory in the southwest Pacific). Kagu is a crested, greyish-white bird with long red legs and stout orange bill. Measuring 55 cm in length and weighing up to a kilogram, in appearance one imagines a cross between a heron and a rail. Kagu is the only member of its genus; its closest relative is thought to be a South American sunbittern, hence it appears to be a bird with Gondwana origins. A ground dweller with limited flying ability (but full wings), it has been severely predated since Europeans brought their dogs, cats and rats to the island (the only native mammals are bats). Classified now as “endangered,” there are thought to be

fewer than a thousand Kagus left. It is of unusual interest, however, for its peculiar social structure.

Kagus practise facultative, fraternal polyandry (yes, that’s a mouthful). “Facultative” implies that they have adopted this social structure by choice rather than by nature (of which, more below). “Fraternal” means that families of birds form on the basis of brothers, and “polyandry” means that a group of males (all brothers or half-brothers) form a family with one female. Polyandry is not so rare among birds but fraternal polyandry (the males are all related in the first order) is unique to the Kagu. The only other creature known to have practised this form of family organization is us – though it is illegal in almost every country today.

A Kagu family consists of one to four breeding males, all brothers, and one female. Including immature birds, there may be up to ten members currently in the family. One male – usually the oldest – is dominant and usually mates with the female. But the second-



ranked male gets his oar in (so to speak) in about 10% of matings. Male chicks remain in the family and share rearing duties (food provision) and defence of the family territory, which varies between 10 and 30 hectares. However, females leave their birth family whilst still immature and shop around for a male partner, either a young male or the dominant male in a family that has lost its female. In this way, inbreeding is avoided. This behaviour also provides relief for male families that

have grown too big: a young male will strike out with a female and start a new family, usually on a territory adjacent to that of his birth family. This establishes a Kagu clan (group of families related via the male line).

Kagu behaviour within clans is also exceptional. Male birds within the clan regularly return to their birth family to renew acquaintance with their mother and, albeit less frequently, their father. Inasmuch as Kagus can live for more than twenty years, family and clan groups may be very stable over extended periods. Altogether, these birds have a strong claim to be the most sociable birds on the planet.

Why might this form of social organization be facultative? It is regarded as an effective means of population control in the face of variable resources. In resource-rich areas the restriction in the number of reproductive males keeps the population under reasonable control; in resource-poor areas, the family structure guarantees that there will be a male available to serve the female. In New Caledonia, some forest terrains are rich in food sources (for Kagus, worms, snails, small lizards, large insects); others are poor (terrain on ultramafic rocks that supply few nutrients for general growth). But the family structure does imply a predominance in numbers of

males over females. Oddly enough, the observed statistics correspond with asymmetrical birth statistics: more chicks are male than female. That is probably another reason why the birds have evolved polyandrous families and would be a “natural,” rather than facultative, reason for their social organization.

Reference

Theuerkauf, J., Kuehn, R., Rouys, S., Bloc, H. and Gula, R. 2018. “Fraternal polyandry and clannish spatial organization in a flightless island bird.” *Current Biology* 28: 1482-1488.

Feederwatch

Frozen in Time

Carlo Giovanella, Cloverdale

We have been getting goodly numbers of Pine Siskins at our feeders over the past fall and winter. It is not unusual to see the seed table loaded with the little guys (top right). Normally they are very active, constantly coming-and-going, flitting, feeding, jostling, and sparring, as if in Brownian motion. One day I noticed something very odd. A group of four Siskins were sitting absolutely motionless, frozen in time. I watched them through binoculars for several minutes – not a trace of movement. I glanced up at the clock. More minutes went by, still not so much as a flinch, like a display of stuffed mounts in a Cabela's store. I went and fetched my camera and took some images (bottom right) – had I taken video, it would have shown nothing different. When they suddenly flew off together, I glanced at the clock again. Those birds had remained statuesquely motionless for at least ten, and possibly up to fifteen minutes!

Editor's Note

Carlo never did spot the visiting raptor, and most of us who notice such freezing will scan the area without success. If you do manage to spot a perpetrator, or have any other Feederwatch stories, don't forget to send them in for future *Feederwatch* items.



Some Christmas Bird Count Highlights

The following gives a small selection of highlights from initial BC CBC reports. All the numbers are subject to change, as many Audubon figures for 2019 (Audubon collates North American CBC results) were not available at publication time. Check the following URL for the updated details:

netapp.audubon.org/cbcobservation/

The Best Number

Perhaps the best single number from the 120th CBC was for the overall count, not of birds, but of counters. Vancouver, for instance, had 207 volunteers, compared to an eleven-year average of 158. Prince George had for the first time so many volunteers that it was no longer possible to meet at the organizer's house, and the local fish hatchery was pressed into service.

For Lots of Species

Victoria seems to have seen the most species in BC, at 135 – and yet it was their lowest number since 2006. Ladner had 128; Vancouver 126; and White Rock 124. Pemberton was among many areas reporting the absence of finches, crossbills, siskins and grosbeaks, which seems to have dampened many overall counts. Kelowna, however, still managed a species-count record of 110.

If You Like Owls

Kelowna also seems to be the place to go for owls: among its record count were six species of owl, including a Barn, three Western Screech, ten Great Horned, a Northern Pygmy, two Barred, and two Northern Saw-whet Owls. Vernon also did well with owls, spotting four Barred Owls, and though the Big White CBC tallied just 27 species in all, this did include Great Gray, Saw-whet and Northern Pygmy-Owls.

But where were the Snowy Owls? After six years with hardly any Snowies, some might have thought that we were due for an invasion. But not so – there was just one report, from Vancouver, where Mike Fung found one sporting a radio tag.

Raptors

Those searching for raptors in vain will be boggled at Kelowna's all-time high count of Red-tailed Hawks: 156! There was a record 145 Bald Eagles at Prince

George, and a record 59 at Kelowna, but Terrace experienced a major decline – just 18 Balds compared to a previous 262. Local hints of a major overall expansion in Bald Eagle numbers are not in fact supported by the data. The Audubon database shows just a modest overall increase in the last decade.

The most exciting moment at the Whistler count came as one of the counters, photographer Liz Barrett, was setting up a shot of a Varied Thrush: a Goshawk let her know she was trying to photograph his proposed meal by swooping down and frightening both her and the thrush.

Anna's Hummingbird

Salt Spring spotted 182, Comox had a high count of 142, and Deep Bay found 68. A trend? Definitely. Just a handful were counted in the province until their numbers started to take off in 2003: 447 were counted at that year's CBC, nearly three times the number of the previous year. Since then, there has been an increase almost every year. Perhaps their fearlessness is part of the reason. The report for the Sunshine Coast CBC included the following:

Anna's Hummingbirds (and hummers in general) are noted for their fearlessness and belligerent behaviour. On the other hand Peregrines and Merlins are noted for their acute predatory instincts. Thus, it was notable that the Porpoise Bay party observed an Anna's harassing a Peregrine, and the Sechelt party saw an Anna's harassing a Merlin. One has to admire this feisty, but improbable and totally useless behaviour!

Goldfinches

Fort St. James recorded American Goldfinches for the first time. This is another species that seems to be marching northwards, no doubt in response to a warming climate. Indeed, a record total of 5,574 were reported in 2018 BC CBCs.

Collared-Doves

Dawson Creek spotted no Eurasian Collared-Doves for the first time in five years, and Smithers saw a drastic de-

cline, with only two compared to 59 a year earlier. Could this be a pattern? Fort St James' CBC figures might seem to contradict the decline, since it found a record 20, but this is where the Audubon database again comes in handy. This invaluable resource tells us that BC had for a while been experiencing an explosion in Collared-Dove numbers, with just 91 reported in the 2007 CBC, increasing each year, with just one hiccup, to 5,601 in 2016. Since then there had been a decline to 4,214 in 2018 (2019 figure unfortunately not yet available). Perhaps our raptors took a while to get a taste for Collared-Doves and are now tucking in.

Bohemian Waxwings

Dawson Creek saw no Bohemian Waxwings for the first time in 20 years, and other counts reported a notable dearth. Kelowna reported fewer than 500, though it often counted ten times that number. Bowax numbers, though, are known to vary hugely each year, as it depends on where winter fruit can be found. 2011 saw just 11,135 counted in BC, compared to 42,381 in 2014, but the wildly varying figures don't show a clear trend.

Christmas Overindulgence

The following Christmas-time owl-sighting item was reported in *The Times* (London):

An owl found in a ditch had become so fat she was unable to fly The female owl, nicknamed Plump, was found looking "soggy" in a ditch by a passerby near Saxmundham, Suffolk, who thought she was injured. However, when staff at Suffolk Owl Sanctuary examined her they found that she was just extremely obese.... "We found that the area where she was rescued was crawling with field mice and voles due to the warm and wet winter."

After two weeks on a strict diet, the Little Owl was again able to fly and was released.

Golden Eagles in the Rocky Mountains

Vance Mattson, Wasa

Citizens of British Columbia are no doubt familiar with the Bald Eagle. Its prevalence near lakes, rivers and oceans, and its large gatherings at celebrated salmon runs, have exposed and endeared this species to birders and non-birders alike. However, North America's other eagle is much less seen and discussed: the Golden Eagle. The Golden Eagle is found across the Northern Hemisphere, and in North America its population is concentrated mainly in the West, mostly in mountainous, rugged terrain.

When Peter Sherrington and Des Allen of the Rocky Mountain Eagle Research Foundation (RMERF) discovered the Mount Lorette migration site (the largest Golden Eagle migration site in the world) near Canmore, Alberta in 1992, new publicity was brought to the species. Migration counts have been conducted at this location ever since and, commencing in 2009, at a less voluminous flyway in the Rocky Mountain Trench, near Cranbrook, BC by the present author. Accordingly, a clear picture has been captured of Golden

Eagle migration numbers and trends. However, what is virtually unknown is the breeding population of the species in both BC and Alberta. Given this gap, I ventured to determine the Golden Eagle breeding population focusing, for starters, on the Rocky Mountains of Southern British Columbia.

The methodology was ground surveys through multi-day field trips in the backcountry. The original study area was approximately 8,200 square kilometers (approximately from Radium, BC south to the US border and east across this range to the Alberta border). And the project did not disappoint. Over a two-year span (2018–19), through observations conducted throughout the breeding cycle, 90 distinct home ranges have been discovered.

A nesting territory was determined by a combination of indicators, including the species' spectacular undulating display flight. Multiple flights, pair flights, the discovery of nests or home rocks/perches, confirmation of the same site on separate dates, observing fledgling birds, and chasing flights against

intruding eagles were also used. Multiple flights were witnessed in most instance (91%), pair flights in 63% of cases, and display flights in 43% of cases.

The study has also confirmed the ideal Golden Eagle habitat: rocky, broken terrain on steep mountainsides which offer cliffs for nesting and grassy slopes and meadows for hunting. Additionally, a significant distance from human intrusion is typically found. And while the Rocky Mountains offer an abundance of such habitat, obstacles to Golden Eagle habitation do exist, specifically human settlements, several broad densely forested valleys, and industry disturbances (both mining and logging).

The home-range size over the entire study area is currently estimated as 91 km² but will be reduced as more nesting territories are discovered. The average distance between nest sites, given favourable and consistent habitat, is approximately 6–8 km. Challenges in accurately determining the breeding population, in addition to the sheer time involved, come in the form of inaccessi-

Golden Eagle habitat at Maiyuk Creek. Photo by Vance Mattson.



ble valleys, topographical irregularity, road closures, and provincial parks that allow only foot travel. Nonetheless, if the study continues successfully, a reasonable range size estimate may be ~50 km² (for instance, if 60 additional territories are discovered).

In any case, once a reliable baseline population is established, which will be the first of its kind for such a large area in Canada, research aimed at conserving Golden Eagles and their habitat becomes possible. This is especially true since Golden Eagles use the same territories each year, and thus annual monitoring becomes possible and thereby fluctuations in the population can be detected and the causes identified; for instance, threats posed by mining, logging, recreation, and climate change (especially forest fires) can be evaluated. Furthermore, comparative analyses



with known populations (some US States, the Swiss Alps, the Scottish Highlands, etc.), the breeding success in the region, prey species identification, and the resident-to-migratory populations within the Rocky Mountains may be determined.

Most broadly, it is hoped that the study will sensitize the public to the role that birds of prey play in preserving a vital ecosystem, and no less that one of most magnificent of all world raptors still soars free in our nearby wilds.

The author would like to thank the British Columbia Field Ornithologists for their generous financial assistance for the 2019 season.

Left: Adult Golden Eagle soaring at Bull Mountain. Vance Mattson photo.

Briefing 2

Summary and comments by M Church

Kindly Shoot the Harrier

On the upland moors of private estates in the British Isles, grouse shooting is a traditional upper-class sport. The moors, more properly characterized as Calluna heath (*Calluna vulgaris* = Scotch heather) are managed for Red Grouse (*Lagopus lagopus scoticus**) which, in late summer and autumn, are the target of “shoots” (i.e. hunting, though the manner of the shoot, in which gamekeepers beat the heath to flush the birds and drive them toward the shooting hides, scarcely deserves that name). Shoots are organized on a commercial basis.

Enter the Hen Harrier (*Circus cyaneus*) a.k.a. Northern Harrier (to us). To a harrier, a Red Grouse – especially a chick or juvenile – is lunch. This does not please the gamekeepers who are responsible for delivering a good shoot, so harriers are subject to a different and altogether more surreptitious shoot, or to poisoning. The problem is that Hen Harriers have become rare on the English uplands and are a protected species. Killing them is illegal, hence the under-cover nature of the activity.

Natural England (NE), an office of the British government responsible for preserving “natural” countryside, is attempting to establish a recovery strat-

egy for the harrier. They propose a six-point program to include monitoring harrier numbers; diversionary feeding (to discourage predation on grouse); nest and roost protection; reintroduction of the Hen Harrier into southern England (where there are no grouse); improved monitoring and enforcement of the law; and brood management (hand rearing of harriers).

NE has thereby stepped into a blazing controversy between the grouse shooters (who are relatively few but influential) and bird enthusiasts (of whom there are millions in Britain).

A group of researchers has also stepped into the controversy in the hope of finding a way to resolve the issue. They initially identified four “constituencies”: “country sports” enthusiasts; non-raptor conservationists; raptor conservationists; and general bird conservationists. (“Country sports” includes the grouse shoot and fox and badger hunts.) They issued a questionnaire to elicit opinions from members of each constituency. They obtained 536 responses (a 19% return rate), approximately equally distributed among the constituencies. They found that the first two constituencies – with no special interest in raptors – returned a very similar pattern of answers, and so did the second two, so the analysis came down to non-harrier interests versus harrier interests.

Unsurprisingly, they found that the non-harrier interests were only modestly concerned with harrier welfare on the

uplands, while the pro-harrier interests were, of course, strongly concerned. Accordingly, the country sports group asserted that “preserving the country way of life” (meaning, amongst other things, preserving grouse shoots) is more important than harrier conservation, that gamekeepers are important land managers, and that raptor conservation groups are unhelpful in countryside management. The raptor supporters returned opposite opinions, except that they tended to be neutral over the role of gamekeepers.

The country sports group was modestly in favour of all aspects of the proposed harrier management program while the raptor supporters were generally strongly in favour, except that they notably opposed brood management; presumably the prospect of long-term intervention to support the population was not attractive. Support for southern reintroduction was only modest, probably because it is not seen as resolving the conflict in the northern uplands. Nest and roost protection and increased monitoring (presumably to increase knowledge of both harrier behaviour and gamekeeper activity) were most strongly advocated among all groups. Of all the proposed strategies, only diversionary feeding has been tried and it was found to be reasonably effective, but the raptor groups do not favour it. Again, the problem seems to be that it constitutes artificial support of what should be a truly wild population.

(Continued bottom next page)

The BC Parks iNaturalist Initiative

John Reynolds and Brian Starzomski

Many birders are used to uploading their photos to eBird, Flickr, Instagram, and so on. But there's another place to drag-and-drop your photos that is growing exponentially: iNaturalist.ca.

iNaturalist is run by the California Academy of Sciences in partnership with the National Geographic Society. So far, over 30 million observations of more than 254,000 species have been submitted from around the world, by over 844,000 people. This is a doubling of observations and participants in the past year. iNaturalist has over 4.5 million observations of birds, including 9,530 species.

We have joined forces with BC Parks and the BC Parks Foundation to photo-document as many species of plants and animals as possible within our provincial parks and conservancies. Provincial parks staff want to know how many species are in their parks, including threatened species, and where they are, and how to manage parks to protect them. Birds are under-represented, and this is where you come in. It's just a matter of dragging and dropping your photos into iNaturalist, because we've set up iNaturalist "projects" to automatically capture your observations in every provincial park, conservancy, and protected area in the province.

You can easily drag and drop 100 or more photos into iNaturalist at a time. If your camera has a GPS, iNat will automatically display your photo in the relevant park, and it'll bring the date and time with it. You don't have to type anything other than the name of the species. If your camera doesn't have a GPS, you can place the photo in the appropriate location on a map. Every

photo you upload to iNat will automatically be collected by the right park. If you're unsure what you've seen, you can ask iNat's advanced photo recognition feature for suggestions. It nearly always gets it right!

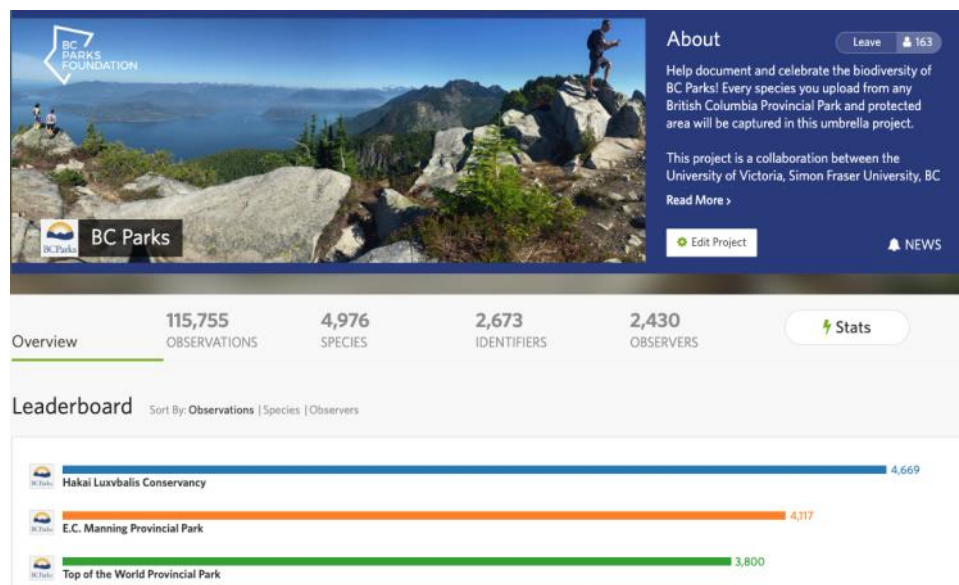
We have also created an "umbrella project" so that all of the observations from all of BC's provincial parks are gathered together and displayed along with various summary statistics. You can see the results so far at inaturalist.ca/projects/bc-parks or go to iNaturalist, select "Community," then "Projects;" and then type "BC Parks." At the time of writing, there are over 115,000 observations of over 5,000 species of plants, animals, and fungi in BC parks. Want to see just birds? Click on "Stats," hover your mouse over the pale blue "birds" colour on the circle, and click. Or check out mammals, insects, or fungi.

As the information accumulates, we will be able to get minimum estimates of the number of species in provincial

parks for the first time and do statistics to extrapolate to the total number of species that may be in each park. We will also learn about the distributions of rare and threatened species, and iNaturalist automatically blurs their locations to protect them.

So, next time you're uploading photos to eBird, which we always do, consider also dropping them into iNaturalist. Any photo from the past can be uploaded, as long as you have a date and location for it. Check in now and then to watch the observations in our provincial parks grow, with birds getting a stronger representation. And don't forget to add your photos of plants, insects, fungi, herps, and everything else, too: it's a people's census of nature. Questions? Feel free to email us: John Reynolds (Simon Fraser University; reynolds@sfu.ca) and Brian Starzomski (University of Victoria; starzom@uvic.ca).

Below: a BC Parks website screenshot..



(...continued)

The researchers are cautiously optimistic that there may be a basis for effective compromise here, to be achieved through dialogue that might change the underlying values of all parties. That seems doubtful to this writer. The case is, however, interesting for the way it highlights the more general conflict between naturalists and those who would commit land to narrowly exclu-

sive uses, most seriously the conflict between developers and those who recognize the value and importance of green space in our towns and cities.

*Red Grouse is a local subspecies of the Willow Ptarmigan, called "Willow Grouse" in Europe. It occurs on the British and Irish uplands and is distinguished in having entirely dark brown plumage and no winter white phase. It

is also slightly smaller than the Willow Grouse.

Reference

St. John, F.A.V., Steadman, J., Austen, G. and Redpath, S.M. 2019. "Value diversity and conservation conflict: Lessons from the management of red grouse and hen harriers in England," *People and Nature* 1: 6-17.

Palaeo-ornithology in BC and South Africa

Charles Helm, Tumbler Ridge

What do Tumbler Ridge and the Cape south coast of South Africa have in common, other than good birding (at least in spring, in the case of BC)? The answer is simple: good palaeo-birding, or, to be more precise, good fossil tracks of birds that existed in distant times.

The theory that birds evolved from theropod dinosaurs in the Middle Jurassic Period has become widely accepted. In a sense, therefore, visiting Tumbler Ridge and going on the Tumbler Ridge Museum's guided tours to see theropod tracks is a type of palaeo-birding.

However, BC's Peace Region has many more specific claims to fame. Because bird skeletons are so fragile and are infrequently preserved, tracks often provide the best means of learning about ancient birds. The first Mesozoic fossil bird tracks were described from Colorado in 1931. A report of Lower Cretaceous bird tracks from South Korea followed in 1969. The third report in the global literature of Mesozoic bird tracks came from the Peace River Canyon (upstream from Hudson's Hope) in 1981, with a report by Philip Currie of *Aquatilavipes swiboldae*, tracks made by a type of shorebird similar to a sandpiper. These have been inundated under the Peace Canyon Dam, but specimens were salvaged. The number and diversity of fossil avifauna known from North America remained relatively low, until further discoveries were made in the Tumbler Ridge area.

In 1994 a loose slab containing 100



Figure 2: Multiple avian tracks from Mt. Babcock (*Paxavipes babcockensis*), along with two theropod tracks.

million-year-old avian tracks was identified near the summit of Mt. Roman. The slab, weighing over 300 kg, was airlifted by helicopter to the Tumbler Ridge Museum in 2014, where under optimal lighting fifty tracks were discernible, and are now on exhibit (Figure 1). A scientific paper may follow if these turn out to be previously undescribed tracks; however, they may possibly be ascribed to *Aquatilavipes swiboldae*.

In contrast, tracks discovered in the Boulder Gardens hiking area were defi-

nately distinct from anything that had been reported before. *Paxavipes babcockensis* – “the Peace Region bird foot from Mt. Babcock” – became the second type of fossil bird track described from BC (in 2015, by a team led by Dr Richard McCrea). Containing tracks somewhat similar to those of modern plovers, the loose block was of Lower Cretaceous age, about 110 million years old. A theropod trackway and a single ornithopod track can be seen beside the 72 bird tracks on this slab, which is also on display in the Tumbler Ridge Museum (Figure 2). These tracks are preserved in “convex hyporelief”: they represent the infill layer of sand that filled in the tracks, rather than the original surface in which the tracks were made.

Fossil bird tracks have subsequently been identified from three further localities in the Tumbler Ridge area. These have not yet been formally described, but one rock slab, discovered in 2014 and containing both theropod and avian tracks, is close to the Jurassic-Cretaceous boundary in age. These are therefore some of the oldest bird tracks in the world, and are on exhibit in the Tumbler Ridge Museum (Figure 3).

Figure 1: Avian trackway, possibly of *Aquatilavipes swiboldae*, from Mt. Roman.





Figure 3: Replicas of two avian tracks (some of the oldest known in the world) from Tumbler Ridge from near the Jurassic-Cretaceous boundary.

To round out this suite of Peace Region fossil bird tracks, another track replica is on display in the Tumbler Ridge Museum. It features *Limiaivipes curriei*, tracks made by a crane-like species on a surface that was exposed near Hudson's Hope (Figure 4).

It is no accident that the track-makers are from families like sandpipers, plovers and cranes. Birds don't leave tracks when they fly, or when they perch in trees or on cliffs, and their tracks are very unlikely to be preserved in forest and other vegetated settings. The avian track record thus comes largely from beach and dune and wetland palaeo-environments, where their footprints were recorded (alongside those of dinosaurs in the Jurassic and Cretaceous Periods, after which the dinosaurs disappeared).

A visit to the Tumbler Ridge Museum enables a rarity in birding: guaranteed sightings of the specimens on exhibit. The annual BCFO Conference was held in Tumbler Ridge in 2017, and palaeo-ornithology formed a prominent theme, including a lecture on the topic by Dr. Lisa Buckley.

South Africa Connection

Fast forward to the Middle and Late Pleistocene, a mere 100,000 – 140,000 years ago. These are recent times compared with what the Tumbler Ridge specimens demonstrate. Yet they have a fascination all their own precisely because they are relatively recent, and are connected with climate change, and

have a bearing on our own times and birds. Since 2007 I have been researching fossil track sites on the Cape south coast of South Africa. Our team of researchers has encountered more than 250 track sites in a 350-km stretch of coastline. Twenty-nine of these are avian track sites. Instead of finding dinosaur tracks along with bird tracks on

these surfaces, we may find elephant, crocodile, buffalo and even human trackways. Through describing some of our reptile and mammal tracksites in scientific papers, we have demonstrated that the ichnological (track) record can complement the traditional skeletal fossil record. For example, the presence of giraffe, crocodile and hatchling turtles in this region has only been established as a result of the track sites that we have discovered in our explorations.

As in the case of BC, these tracks were made on dune and beach surfaces which have subsequently turned to rock. Some of these tracks are preserved in exquisite hyporelief, and show subtle features, or are surrounded by infill of small crustacean burrows. We take samples to have these tracks dated, so as to establish where these surfaces fit within the wild climate swings and resulting sea-level changes that characterized the Pleistocene.

Furthermore, we can compare the tracks we find to those of the extant avifauna. For example, I can watch flamingos in the morning, measure their track dimensions and study how they create feeding traces, and in the afternoon I can go and compare these findings with fossil equivalents that are over 100,000 years old. At one site we

Figure 4: *Limiaivipes* track, a crane-like bird that left tracks near Hudson's Hope.



recorded two of the longest reported bird trackways in the world, made by guineafowl. In this case a layer of dark biofilm preferentially attached to the convex track surfaces, rather than onto the light-coloured surrounding smooth surface – as a result the trackways are visible from over 100 metres away (Figure 5).

Other surprises were in store for our research team. Some of the tracks were larger than expected. This raises the possibility of “chrono-subspecies” – larger forms of extant species. Elsewhere in the world larger Pleistocene species have been reported, so we may be seeing part of this pattern. Alternatively, we might be finding evidence of Late Pleistocene species extinctions, a phenomenon which has also been de-

scribed from elsewhere, and which might be a result of habitat loss due to climate change, perhaps coupled with the emerging presence of modern humans.

The mountains and canyons of northeastern British Columbia and the shores of southern Africa... it would be hard to imagine two more different localities. Not only are they geographically widely separated, but geologically one is far more ancient than the other. Yet they have features in common: in both cases birds walked or ran on these surfaces, and left tracks that in near-miraculous fashion became preserved and have become re-exposed, for explorers and scientists to find and describe today. My personal opinion is that lovers of birds may be well served

by not only enjoying watching them today, but also by sparing a thought for the birds of yesterday. Perhaps then we, as members of the *Homo sapiens aviophilus* tribe, may be better equipped to think about the birds of tomorrow and what influence we might have on their survival.

Footnote: A useful resource for tracking extant birds in British Columbia is Elbroch's *Bird Tracks & Sign: A Guide to North American Species*. 2001.

A modified version of this article is now available online at:

bcfo.ca/palaeo-ornithology-in-british-columbia/

Figure 5: Two long guineafowl trackways on the South African coastline, enhanced by a biofilm layer.



Ornithology Rules

No. 3: Gloger's Rule

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

There are two main explanations for this rule. First, it may be due to the need for darker camouflage in moist

habitats, which are usually well vegetated and thus tend to lack pale colours. A second explanation is the increased resistance of dark hair or feathers to degrading bacteria in humid environments. Dark feathers or hair are more difficult to break down because of the higher melanin load.

The rule gives a nice explanation for some of the confusingly different plumages of Song Sparrows. BC birders travelling in the arid southwest will know that Song Sparrows there look like a different species, being so much lighter than BC birds. In 2004, a study showed that feather degradation from

bacteria was indeed a much greater problem in the moist Pacific northwest than in desert areas.

Gloger's Rule has been found to be true of more than 90% of applicable North American birds. The rule was proposed in 1833 by the German zoologist Constantin Wilhelm Lambert Gloger (1803–63).

Eponymous Laws Still to Come

Lack's Principle, Allen's Rule, Rensch's Rule, and Schmalhausen's Law. Following Cunningham's Law (you'll have to look it up), the editor asserts that there are absolutely no other such laws applicable to birding.

Migration Monitoring at Tatlayoko Lake

Avery Bartels

The Tatlayoko Valley is one of those rare places that can instill awe and a sense of inspiration no matter how long one has the fortune to spend there. For me, returning for my eighth season at the Tatlayoko Lake Bird Observatory (TLBO), this was still true from the first glimpse of the purple hues of the pre-sunrise peaks on August 3 right up until bidding adieu to the snow-dusted slopes at the end of September. The narrow valley is nestled between the towering Niut Mountains to the west and the rolling Potato Range to the east. At the north end of Tatlayoko Lake, the TLBO operates annually on the Tatlayoko Ranch property owned by the Nature Conservancy of Canada (NCC). The program was initiated and operated by the NCC from 2006 to 2015 but since 2017 has been run by BC Spaces for Nature. As a member of the Canadian Migration Monitoring Network, the TLBO collects data on the bird populations that breed and/or migrate through the valley. This data is used, alongside that of the 25+ other bird observatories across the country, to create long-term population trends for Canada's birds.

For the second year running I had the pleasure of being joined by Sachi Dell-Snively as the other bird bander hired for the project and, as always, we were helped out by several volunteers over the course of the season. The volunteer program affords an opportunity for aspiring biologist, bird banders and researchers to get hands-on experience working with birds and hone their bird identification skills as they assist us with the bird banding and visual counts.

Every year is different and with the 2019 season following on the heels of a record low season (just 1,039 birds banded in 2017) and record high season (1,911 birds banded in 2018) we were curious to see how the coming two months would unfold. There was an inauspicious start on Day 1. Twenty-four birds banded was our lowest-ever total for a first day of the season, but was followed by a very consistent August, over the course of which we were to band a respectable 860 birds. This included a whopping 193 Swainson's



Swainson's Thrush with Motus tag. Photo by Avery Bartels.

Thrushes and this species would, unsurprisingly, be our most-banded bird at the end of the season with 232 banded. An impressive haul, this was our second-highest total after the 253 banded in 2018. This long-distance migrant would have an added emphasis for us this year as researchers from Texas A&M University spent three days in late August fitting 25 individuals with VHF transmitter tags as part of a Motus Wildlife Tracking (www.motus.org) study looking into the migratory route choices of intergrade Swainson's Thrushes compared to the pure interior (what we mainly get at TLBO) and coastal subspecies.

Thrushes, as well as Song Sparrows, made up for the lower-than-average numbers of most of the locally breeding birds in August. The cool summer with more rain than usual likely contributed to low breeding success for most of these species. Interestingly, in the case of the Song Sparrows we continued catching juvenile-plumaged birds into mid-to-late September. As this species can have multiple broods per season it seems likely that they had their highest

success in August once the more consistent better weather arrived.

The arrival of September saw a decrease in the numbers of birds we were catching as a couple weeks of consistent sunny days and cool, clear nights made for good migrating conditions which usually coincide with these lower numbers. Around the middle of the month we got a patch of poor weather which served to stop up the birds north of us with the result of our busiest period of the season following the break in the weather. Of note during this period was a day where we banded 26 Savannah Sparrows, a single-day record for TLBO, and we estimated that there were over 100 in the area on that day alone! This was followed, two days later, by our busiest day of the season where we banded 81 birds including season highs of 15 "Oregon" Juncos and nine Hermit Thrushes.

After this flurry of activity we had a very slow end to the season banding just 117 birds over the final 10 days of the season. In some years we catch big numbers of Ruby-crowned Kinglets and Yellow-rumped Warblers during this

period. However, while we noted fairly high numbers of both in the area, they were typically not foraging around where our nets are.

While things slowed down for us during our daytime songbird banding, the last two weeks of September were excellent for our evening Northern Saw-whet Owl banding program. On suitable nights we would go out for up to three hours. This was a real hit among the locals of whom several came down to visit and get the chance to see these cute little owls up close and learn about their various special adaptations – did you know that their ears are not symmetrical and this off-set positioning helps them triangulate their prey? We were fortunate this year to band 62 Saw-whets over eleven nights, a record since we started the program in 2012.

There are always plenty of highlights each year and 2019 was no exception and we even managed to add six new species to the station list, crossing the milestone of 200 species (with the honours going to the two Caspian Terns that flew over the banding station on September 13) in the process! Some of these new species were locally (American Goldfinch) or seasonally (American Tree Sparrow) rare birds but we had some genuine surprises as well. An Upland Sandpiper was spotted flying over the station on three different

days in August. We presume that it was the same individual that spent a couple weeks in the area. In mid-September Sachi came back from census with photos of a juvenile Sabine's Gull that he had found along the lakeshore. This was followed a couple days later by a Lark Sparrow that arrived on a windy day when we couldn't open nets. It was present for two days in the field out in front of the banding lab and though it approached our nets on a couple occasions it would ultimately elude them, much to our chagrin.

In our nets we were thrilled to band our first-ever Spotted Sandpiper and Mourning Dove which were both caught in one of our "non-standard" hawk nets that we set up along the bank of the Homathko River. Our hawk nets also provided us with two beautiful juvenile Northern Harriers. A few years back we found a good location to set up a net to catch this species and since then we have banded eleven of these spectacular birds. Our second banding record of Veery, third of both American Pipit and Evening Grosbeak and fourth of Merlin were also memorable.

Highlights don't always come in the form of rare species. We were thrilled to encounter two very interesting recaptures in our nets this season. The first being a Northern Waterthrush that we recaptured on August 26 that was origi-

nally banded in May 2013 (as part of a different banding program in our same location) and aged at the time as an after-second-year, meaning it was hatched in 2011 or earlier. This meant that it was a minimum of eight years old, making it, as near as we can tell, the second-oldest record anywhere for this species! The second notable recapture was of a Swainson's Thrush on September 18 that was originally banded in August of 2012, then aged as a second-year making it eight years old in 2019. These two recaptures represent our oldest-ever recapture events since the program started.

One last memorable experience to cap off another excellent season was a large movement of American Robins on our final day of operation. In total we estimated that over 400 passed overhead along with a smattering of their cousins, the Varied Thrush. The season finished with 1,433 birds banded as part of our standard day-time banding operation and a total of 25,439 birds were detected including our visual counts. We surpassed 20,000 birds banded at TLBO and are within a few hundred of a quarter million birds counted over the 13 seasons that the TLBO has operated!

Funding

With funding being an uncertainty ahead of the 2019 season the TLBO and BC Spaces team are deeply grateful to the BCFO for their contribution of \$2,000 that provided us with the financial boost needed for us to commit to undertaking this year's program. It is through organizations such as the BCFO and private donations from conservation-minded individuals that the TLBO continues to be able to operate each year. Other funding sources for the 2019 TLBO program include the Canadian Wildlife Service, Avocet Tours, Avery's Birdathon fundraiser and several private donors. For more information about the TLBO visit our website:

www.tatlayokobirds.wordpress.com.

Here you can find daily blog posts from each season as well as season reports which can be found on the Migratory Bird Count page. To make a donation please get in touch with us at tatlayokobirds@hotmail.com.

Northern Saw-whet Owls by Avery Bartels.



Columbia Wetlands Update

Rachel Darvill

The Columbia Wetlands are the largest contiguous wetlands in North America, making them an important refuge for species that rely on wetlands for important stages of their life history. Marsh birds are dependent on wetland habitats with reports increasingly indicating that many marsh bird populations are in decline. Many marsh bird species are inconspicuous and challenging to detect, resulting in significant gaps in our understanding of their population status and how best to support them.

The Columbia Wetlands Marsh Bird Monitoring Project (CWMBMP) was a multi-year study developed and imple-

mented by biologist Rachel Darvill in collaboration with the Canadian Wildlife Service. This project was used to estimate marsh bird populations, assess the distribution of target species, and identify significant breeding areas or habitat types within the Columbia Wetlands. A standardized call-broadcast protocol was used to conduct point count surveys at stations throughout the Columbia Wetlands. These stations were surveyed multiple times during the breeding season and most stations were visited annually across the course of the study. Call-broadcast recordings were focused on five focal species of secretive marsh birds: American Bittern, Virginia Rail, Sora, Pied-billed Grebe, and

American Coot. Visual and aural observations of all bird species present during a 15-minute survey were recorded. Additional habitat surveys, focusing on major habitat types and the vegetation community, were conducted annually at each survey station.

All five focal and most primary species were present in the Columbia Wetlands over the course of this study, including nine species considered to be at-risk either provincially and/or federally. Of these, four of the focal species and five primary species were observed with enough frequency to estimate their abundance within the Columbia Wetlands. The abundance estimates for Pied-billed Grebe in particular are significant in that they are being used to nominate the Columbia Wetlands as an Important Bird and Biodiversity Area. A decision on this nomination is currently pending. CWMBMP results supported the existing literature proposing that a “hemi-marsh” state (a well-interspersed 50:50 ratio of emergent vegetation and open water) is important habitat condition for many marsh bird species. Based on point-count surveys, key areas with particularly abundant species richness and/or hosting at-risk species were identified, including Reflection Lake, Radium Mill Pond, and the wetlands surrounding Brisco. The data collected in this study is unique as it relates to elusive species identification and will continue to be influential in design of future projects in the Columbia Wetlands, including management recommendations, restoration projects, and outreach programming.

Left: Rachel Darvill monitoring the Columbia Wetlands, May 2019. Photo by Mary McGovern.



Essay Contest

The WFO (Western Field Ornithologists) is holding an essay contest for grade 9–12 students on the impact of climate change on bird populations. The essay should focus on climate change, its causes and consequences, and the effect of these environmental changes on bird populations today and likely in the future. The essay could consider climate change broadly or it

may explore a narrow or specific aspect of climate change. It could concentrate on a region or a group of birds, or a specific type of environmental impact related to a changing climate such as rising sea levels, warming air temperatures, drought, wildfire, or disease.

The objective of the essay contest is to give high school-aged students and birders an opportunity to become familiar with some of the scientific literature on climate change and birds, and to summarize their readings into a well-written and persuasive essay. In the process of preparing their essay and

doing the necessary research, students will develop their writing and critical thinking skills.

The student who submits the winning essay will win a pair of either Zeiss 8x42 “Terra ED” binoculars or Nikon 8x42 “Monarch 7” binoculars. Deadline is May 24, 2020.

Full details and guidelines can be found at:

www.westernfieldornithologists.org/index2.php

CD Review: *There Are Birds*

John Gordon, Surrey

There Are Birds by Stephanie Seymour, 12 tracks, \$15 for CD or \$10 digital download, available from:

www.stephanieseymour.bandcamp.com/releases

Recently a listserv group based in Vancouver (vanbcbirds) had a very interesting thread, where birders sent in examples of their favourite songs with birding titles and themes.

The threads went on for weeks and it was lots of fun. During my search for songs with birds as subject matter I came across a delightful and recently released album by New Jersey songstress Stephanie Seymour titled *There Are Birds*.

Stephanie is not only an accomplished musician backed by exceptional musicians, she's also an avid birder. The liner notes have a picture of Stephanie with her 500th ABA bird, pictures of her birding in New Jersey, and one of her birding on the way to a wedding.

One of my favourite songs from the CD is the evocative *Veery*. Having chased the elusive Veery this summer I could easily relate to the lyrics. Another favourite track is a song about an injured House Sparrow that Stephanie nursed back to life after the hapless sparrow hit a window. I was there all through the song as would any one of us who has ever nursed an injured bird back to health.

There are eleven others songs about Blue Jays, Black-throated Blue Warbler, Ruby-crowned Kinglet and other bird species. Stephanie has managed to garner a lifetime of birding memories into a memorable collection of songs that has been playing non-stop in our house.

The following is an extract from Stephanie's website:

"Many of the songs arose from actual events. For example, *Veery* is about going to my local nature center, Flat Rock Brook, when we lived in Englewood, NJ, and happening upon an unusually friendly Veery during migration. I sat down on the hill overlooking the horseshoe boardwalk, and the Veery



The front cover of the CD.

kept hopping around me and listening to me talk to it. I went back the next day and there it was, and we did the same thing again. I visited the bird for a couple weeks until one day, it was gone.

"*House Sparrow* was written about a bird that Bob rescued when he was mowing the lawn. She was nearly dead, but we took her inside and I put her in a box and gave her some water and food. I sat with her for a couple hours and sang to her, and I named her Emily. When she recovered, we tried to get her to fly out the window, but she got disoriented and started flying all over the room. Bob found a broomstick and got her to sit on it, and we took her over to a window and extended the broomstick far outside, so she wouldn't mistakenly fly back in. Before she took off, she turned around and looked right at us, as if she were saying, 'thanks for helping

me,' and then she flew away and landed in a tree next to some other House Sparrows. I understand that House Sparrows are not native to this country, and I know they are considered pests (to put it nicely), but that bird needed help, and I wasn't going to let her die if I could help it.

"Other songs came about from the desire to write about specific birds, such as the Black-throated Blue Warbler, which is my favorite warbler. I was searching through my old lyric books on a whim and found what are now most of the verses for *Black-throated Blue Warbler*, although I rewrote some of them to fit the sentiment of the song. I wrote new lyrics for the choruses, and I thought it all fit together perfectly. My goal was to convey how migration evolved over a great expanse of time and how it is innate within the birds."

Featured Species No. 9

Adrian Dorst, Tofino

Surfbird (*Calidris virgata*)

Status: Common-to-abundant spring and fall migrant. Fairly common in winter. Uncommon in May. Rare in June.

This is another of the rock sandpipers, that small group of shorebirds that live mostly along the rocky shore. Like the Black Turnstone, with which it frequently mingles, this species is also seen on pebble beaches and in estuaries. In protected waters, birds may be seen resting on log booms at high tide, usually in the company of Black Turnstones. Surfbirds earned their name because of their habit of feeding in the surf-washed intertidal zone, where they can be seen evading breaking waves just in the nick of time.

Surfbirds breed in the uplands of the Yukon and Alaska, often far into the interior and away from the ocean. The entire population, estimated at 70,000 to 100,000 birds, winters or migrates along the Pacific coast, from Kodiak Island and Prince William Sound, Alaska, south along the entire length of the Pacific coast to Tierra del Fuego. On our coast, this bird has been recorded in all months of the year, though far less in May and rarely in June. The southward migration begins in the second half of July. Ten birds were recorded at Chesterman Beach on 21 July 2003, and again on 17 July 2010. There is one very early record of 10 birds seen on 29 June 1970 at Cleland Island. In 1970, numbers peaked at 100 birds on 24 July. By August, birds are passing through in much larger numbers.

There are old records from Barkley Sound of 700 to 1,000 birds at Fleming Island on 10 August 1967 and 2,000 or more on Tzartus Island on 14 August 1968. Most records are of smaller flocks, though some are still of substantial size. A total of 450 birds were seen at the south end of Long Beach on 29 August 2004, and 150 at Sulphur Pass Provincial Park on 18 September 1997. At Tranquil Creek, 137 birds were seen on 23 September



2012, and 245 were present at Green Point on 10 November 2013. The fall movement continues through October, November, and December. There are 16 records for October, 17 for November,



Top: Surfbird November 6, 2016; above: July 17, 2108. Adrian Dorst photos.

and 12 for December. By January, sightings are few in number.

By mid-February we again begin to see an increase in numbers, and by March more so. This is the beginning of the spring movement. On 17 February 2013, 170 birds were recorded at Green Point, Long Beach, and on 8 March 1990, there were 1,500 along the north shore of Barkley Sound. Although there aren't many records for April, the largest flock on record occurred during this month. On 25 April 1972, David F. Hatler estimated 4,500 to 5,000 birds off Turtle Island in Barkley Sound. On 28 April 1974, 300 birds were reported from Ucluelet. It would be interesting to determine whether Barkley Sound is a staging area for this species in spring, as Paulson speculated.

Although *The Birds of British*

Columbia states that Surfbirds rarely frequent the heads of inlets, this is not the case in Clayoquot Sound. Here, birds are often found 30 km up Tofino Inlet, roosting on Rankin Rocks (Wayne Barnes, personal communication). It is interesting that two of the sightings occurred during late April, which appears to be the peak migration period in spring. On 26 April 1989, I found 100 birds at Deer Bay, at the head of Tofino Inlet, and on 28 April 1989, I found 350 birds at the mouth of Tranquil Creek in the company of a large number of Black Turnstones.

While *Birds of Pacific Rim National Park* listed eight records for May, the intervening years have produced only one additional sighting in that month, suggesting that by the beginning of May the spring migration is largely over and only stragglers remain. We have three

June records, one each on the 10th, 25th, and 29th of that month. The first is almost certainly a nonbreeding bird, while the latter two could be very early southbound migrants.

Surfbirds can be remarkably tolerant of human presence. On one occasion, I was thrilled to find myself sitting on the rocky shore at Chesterman Beach in the midst of hundreds of birds, some of them little more than an arm's length away. On another occasion at Tranquil Creek (28 April 1989), I was able to photograph birds in breeding plumage no farther than 3 m (10 ft) away.

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 ubcpress.ca.

Gone Fishing

Chris Siddle, Vernon

Two Big Books for Saskatchewan & Montana

To pass the time pleasurably during these long winter days I often flip through fat regional bird books, admiring the illustrations, and pausing to read the accounts of species I especially admire or would like to see in the flesh. Over December two books have become my recent favourites, the new *Birds of Saskatchewan* (2019) and the not-quite-so-new *Birds of Montana* (2016). Now having browsed both extensively and having read substantial portions of both, I have concluded that these books are essential purchases for any birder who has evolved or wants to evolve beyond the checklist-ticking level.

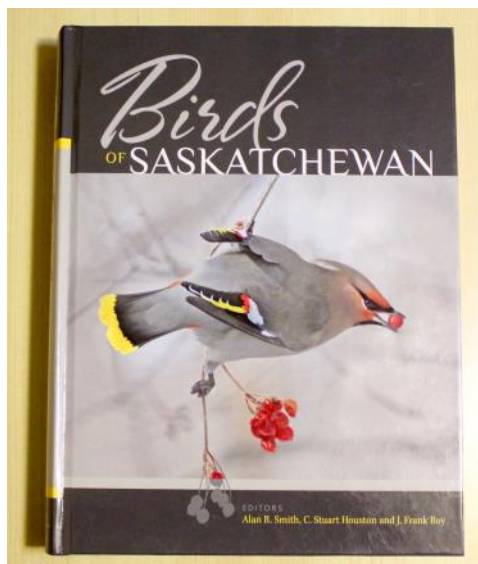
Saskatchewan and Montana are significant geographical parts of Western North America and for the birder who wants to gain a sense of how diverse the West is, these books supplement our knowledge of dozens of western species that occupy a diversity of habitats from boreal forest (e.g. Northern Hawk Owl, Yellow-bellied Flycatcher), prairie (e.g. Greater Sage Grouse, Sprague's Pipit) and cordillera (e.g. American Dipper, Varied Thrush). Importantly both volumes include detailed and up-to-date summaries of the biology, habitat, historical background, and conservation issues of almost 500 species. Given the impressive amount of current and historical information contained within each, *Birds of Saskatchewan* and *Birds of Montana* are highly significant provincial and state bird books and are certainly worth their rather modest purchase prices.

Birds of Saskatchewan

Following the obligatory and highly detailed introductory essays on the province's natural vegetation, the impact of human settlement on the flora and fauna, the ornithological history of the province, and an introduction to the species accounts, there follow accounts of the 437 species that compose the official Saskatchewan bird list as of 31 December 2016. For each regularly occurring species expect separate sections on history of the species in Saskatche-

wan, status, habitat, spring, breeding, hybridization, fall, winter, Saskatchewan research, and significant banding data.

Most of these section titles will be familiar to anyone who owns a state or provincial book, but the sections on history and Saskatchewan research deserve explanation. Although Saskatchewan has a comparatively short history as a province, it has a rich ornithological history because of explorers in the



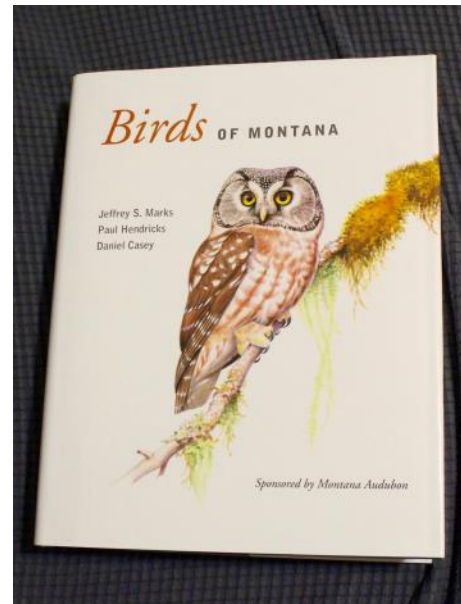
early fur trade like Samuel Hearne, founder of the Hudson Bay trading post at Cumberland House in 1774. Such outposts enabled scientists like John Richardson, surgeon-naturalist for John Franklin's overland Arctic expeditions of 1819–1822 and 1825–1827, to collect hundreds of specimens. The extensive collecting and observations of Richardson and Thomas Drummond, assistant naturalist to the second Franklin expedition, were catalogued in the four volumes of *Fauna Boreali-Americana*, possibly the most complete pre-European-settlement natural history inventory available in North America. In the late 1850s Thomas Blakiston and Eugene Bourgeau contributed many specimens while employed by the Paliser expedition. From 1872 to 1876 the International Boundary Survey included bird and mammal observations made by George Mercer Dawson and Thomas Duckworth. By the first decade of the 1900s, word was spreading about the richness of Saskatchewan's birdlife. The young province became a must-visit destination for other scientists and hobbyists including A.C. Bent who led expeditions from the Cypress Hills to the Great Sand Hills, Frank M. Chap-

man (who originated the Christmas Bird Count) and Louis Agassiz Fuertes, one of North America's top bird artists.

The "Saskatchewan Research" section summarizes major research studies carried out within the province or studies that address direct influences upon species with Saskatchewan. For example, a great deal of waterfowl research has been conducted within the province as have studies of endangered grassland species like Chestnut-collared Longspur.

Birds of Montana

Covering 433 species, *Birds of Montana* follows a similar format with a similar emphasis on ornithological history. The Montana "story" begins with a smattering of 19th century reports of California Condor feeding on dead bison on the plains. In the early 1800s Lewis and Clark, sent by President Jefferson, explored potential routes to the Pacific across America's newly acquired Louisiana Purchase, encountering Lewis's Woodpeckers and Western Tanagers for the first time. About 30 years later two German princes, early adopters of extreme tourism, explored the area. One prince published his findings, including a discovery of a new species, the Pin-



yon Jay. In 1843 John James Audubon visited Montana to collect specimens of western species for his monumental *Birds of North America*, his project to paint every species of bird then known in North America. A couple of decades later naturalists employed on railway surveys, a border survey, and military

expeditions dominated the last half of the nineteenth century. A towering figure in American ornithology, George Bird Grinnell, was lucky enough to be too busy back east to accept his friend General George Custer's invitation to accompany him on his ill-fated military expedition to Montana that ended abruptly at the Little Big Horn on 25 June 1876. Like Saskatchewan, by the late 1880s Montana had gained such a reputation as one of the last wild places in the contiguous states that it became the focus for specimen and egg collectors.

The Birds of Montana species accounts omit sections dedicated to the seasons. General statements about the phenology of arrival, nesting and departure are blended into "Status and Occurrence." Habitat, conservation, and noteworthy banding results are similarly covered by both books. A section titled "Contemporary Work" is similar to "Saskatchewan Research," covering selected aspects of a species' ecology or conservation based where possible on scientific investigations conducted in state since 1955.

Comparisons & Comments

The books differ in how they were written. *The Birds of Saskatchewan* was written by a team of 107 authors, all Saskatchewan based, who compiled various species' accounts and who are named at the end of each account for

which they are responsible. These accounts were edited by Saskatchewan authorities Alan R. Smith, C. Stuart Houston and J. Frank Roy. Since authorship was spread so widely among knowledgeable amateurs and professionals *Birds of Saskatchewan* has the feeling of being a province-wide community effort. Reinforcing this theme is an appendix giving brief biographies of the editors and authors, as well as others who contributed to the book. In contrast, although hundreds of observers contributed data to *Birds of Montana*, the book was written by three authors only: Jeffrey S. Marks, Paul Hendricks and Daniel Casey of Montana and in that respect is a much more conventional state work.

Illustrations enhance everyone's appreciation of bird books. *Birds of Montana* and *Birds of Saskatchewan* differ greatly in the number and type of illustration. The bulk of *Birds of Montana* is text interrupted every few pages for the sake of book design by attractive black and white sketches by Shawneen Finnegan. In general, the sketches are reproduced well, though one or two are printed too dark. On the other hand, *Birds of Saskatchewan* is illustrated with hundreds of colour photographs. Most species are illustrated with multiple images. Image quality is high; however, captions are either weak or, more

often the case, non-existent. The absence of captions is such a notable feature of *Birds of Saskatchewan* that I think the editors must have made a conscious choice to avoid cluttering the book with technical terms like *juvenile* and *first-winter*, perhaps in an effort to make their book less technical and friendlier for the general public. I can't help but think that they made a poor decision.

Neither Saskatchewan nor Montana had up-to-date provincial or state bird books previous to the publication of these texts. Both books are highly readable and very informative and help British Columbian birders to understand better the birds and birders of our American neighbour and of our Canadian near-neighbour.

- *Birds of Saskatchewan* edited by Alan R. Smith, C. Stuart Houston and J. Frank Roy. 2019. Nature Saskatchewan, Room 206, 1860 Lorne St., Regina, SK. \$79.95. www.naturesask.ca.
- *Birds of Montana* by Jeffrey S. Marks, Paul Hendricks, and Daniel Casey. 2016. Buteo Books, 2731 Arrington Road, Arrington, VA 22922. \$75.00 U.S. <https://buteobooks.com>.

Briefings 3& 4

Summaries by M. Church

New Birds!

A joint Singaporean-Indonesian team has discovered ten birds previously unknown to science on three small islands off the east coast of the large Indonesian island of Sulawesi. Five of the discoveries are accorded full species status while the other five are considered to be subspecies of nearby species. The "new" birds include two flycatchers, two leaf-warblers, two mountain leaf-toilers, one thrush, one fantail, a myzomela and a grasshopper-warbler. Leaf-warblers were formerly classified as Old-World warblers but were moved to a newly defined family, *Phylloscopidae*, in 2006. Mountain leaf-toilers are small, kinglet-like birds; myzomelas are honeyeaters; and grasshopper-warblers constitute a genus of

Old-World warblers. Fantails are bush-tit-like birds of Australasia.

The ten species, found in a single six-week expedition, are the greatest number of new descriptions from a limited area in over a century. Through most of the 20th century, discoveries were reported at the rate of one or two a year. Indeed, species-splitting often accounted for more new species than field discovery. Since about 1990, though, the pace has picked up so that, through 2019, 160 species have been added in 30 years. Since 2000, the rate of discovery has averaged six species per year. Increased access to remote areas and a significant increase in resources for scientific exploration are important reasons for this acceleration. (However, some "new" discoveries, including some of the presently reported finds, have been informally known from birdwatchers' efforts before scientific "discovery.")

Most recent discoveries have been

made in the tropics and of these, about half on tropical mountains. An important characteristic of the tropics, especially of the mountains, is the juxtaposition of many highly varied habitats that present niche environments that might encourage the development of closely related endemic species.

The new finds were made in part of the region explored by Alfred Russel Wallace, the great 19th century naturalist, who alone described around 200 birds – about 2% of all living species (currently between about 10,500 and 11,000 species, depending on which recent world checklist you consult). In fact, Wallace figures in the present discoveries since the researchers consulted records of prior discovery expeditions in the region and consciously chose those islands that appeared to have been least investigated by Wallace and his successors.

Another decision made by the researchers was to choose islands that are

separated from Sulawesi by waters of greater than 120 metres depth, meaning that they have never (at least, never in recent geological history) been directly connected to the large island (120 m being the maximum drawdown of world sea level at the height of the recent ice ages). Hence there is an increased chance of significant endemism on these islands. Nine of the ten new birds were discovered in uplands of around 1,000 m elevation on two of the islands, Taliabu (peak elevation 1,400+ m) and Peleng (1,000+ m). (The third island, Batudaka, has only low relief.)

The researchers accordingly recommend hill and mountain environments on “isolated” islands (i.e., ones surrounded by deep water and little explored) as prime places for further finds. Nearly all such islands are in the southwest Pacific Ocean and the Indonesian archipelago. Yet 61% of the post-1990 discoveries come from the Andes and Amazon regions of South America. What all of these environments have in common, however, is rapid development today for logging, mining and agriculture, meaning that species still unknown, all of which must be local in occurrence, might be exterminated before scientific discovery. Among the present finds, the Taliabu Grasshopper-Warbler may occupy only a few square kilometres at the top of Taliabu’s mountains, some of which have been logged and burned. It may already be critically endangered, but there is still too little information to know.

References

Rheindt, F.E. + 7 others, 2020. “A lost world in Wallacea: description of a montane archipelagic avifauna,” *Science* 367: 167-170.

Kennedy, J.D. and Fjeldsa, J. 2020. “Completing Wallace’s journey.” *ibid.* 140-141 (commentary on the main article.)

Mountains and Biodiversity

The recent discovery of ten new bird species in the uplands of three Indonesian islands (see New Birds! above) draws attention to the significance of the mountains of the world in promoting and protecting birds. Mountains occupy about 10% of Earth’s terrestrial surface, but host more than a quarter of Earth’s tetrapods (birds, mammals, amphibians); estimates range up to 33 per-

cent. The range of elevation in mountains and the complexity of mountain topography and climate on quite local scales support highly diverse local habitats. This encourages large species diversity as the result of both local evolution and successful establishment of immigrants.

As a generality, warm, wet mountains support the greatest species diversity. Moisture is important as much for the diversity of vegetation it supports (an important habitat feature) as for its direct role as an essential resource for all life forms.

There are, however, interesting variations. The highest number of bird species – up to 2,000 – occurs in the Andes Mountains of South America. The North American Cordillera, with about 500 species, is comparatively species-poor, though the southern ranges (California, Nevada, Mexico and Central America) are richer than the northern ranges (Canada, Alaska). The Himalaya is rich (1,000 species), but the mountains to the west, extending into the European alpine ranges are relatively poor (500). The Japanese Alps and the Southern Alps of New Zealand, along with the Scandinavian uplands, are poorest of all. The former two are isolated island groups.

In all mountain regions, bird species numbers decline with increasing elevation, so the richest bird life is encountered in the foothills. Seemingly paradoxical, however, is that ongoing species diversification is highest among the less diverse populations at higher altitudes. Further, communities that have experienced high rates of temperature change in the past exhibit more rapid diversification. These circumstances, along with the present-day geography of species richness discussed above, point squarely to the recent ice ages as a dominant factor in the observed distributions of species and of species diversification. Temperate and boreal mountains that experienced glaciation and significant reductions in mean temperature during the glacial epochs are systematically poorer in species today, hence there is more niche room for expansion of species. In this respect, comparison of the Andes with the Himalaya is revealing. Both nominally tropical in large part, the Himalaya today, receiving the full brunt of the Indian monsoon, is much more extensively glaciated still than the high Andes, and has only about half the number of species.

Considering the prospect of further diversification, it is likely that, in tropical and subtropical mountains with long histories of relatively stable climate, local environmental niches are already more nearly saturated with competing species. Another factor supporting the rich avifauna in such environments is low rates of natural species extinction (that is, extinction leaving aside the impact of human invasion).

From these findings, we see that both topography, in the form of the distribution of the world’s uplands and lowlands, and climate control bird distributions, species richness, and rates of species diversification. These two principal factors interact as well, to create greater or lesser local environmental (hence habitat) variety. Geology also has local influence through the agency of weathered rock minerals that determine soil fertility, hence the character of plant communities. In the long term, climate and geology have worked together through the ice ages to create the global history that still strongly affects bird distributions.

References

Antonelli, A. + 14 others. 2018. “Geological and climatic influences on mountain biodiversity,” *Nature Geoscience* 11: 718-725.

Quintero, I. and Jetz, W. 2018. “Global elevational diversity and diversification of birds,” *Nature* 555: 246-250.

Zizka, A. and Antonelli, A. 2018. “Mountains of diversity,” *ibid.* 173-174 (commentary on the preceding article).

The shot below demonstrates the great value of today's cameras for ID purposes. The bird was too far away for John Gordon to identify, but a click of his Nikon Coolpix P1000 gave a clear and instant answer.



BCFO Listers' Corner

2019 Lists

Welcome to the 2019 BCFO Listers' Corner.

Tables: the number under “ % ” is the percentage for an individual's total compared to the total species in that particular area/list. “**incr**” indicates an increase from 2018. “ * ” preceding a number indicates an updated total wasn't submitted. **Red bold** indicates largest increase from the previous year. *Red italics* indicates reaching of a significant plateau or other significant increase.

NOTE: If a total is not supplied after two consecutive years the listing will be dropped.

Submissions were received from 62 members, six less than 2018. There was only one new member to Listers' Corner, Michael Force. 2018 totals were used for nine previous members who failed to provide 2019 totals.

BC: John Gordon had the highest increase at 16. *Chris Charlesworth* and *Hank Vanderpol* reached the 400 level. *Rosemary Clapham* surpassed the 300 level.

BRITISH COLUMBIA - 532					
#	2019	Name	%	incr	2018
1	483	Mike Tootchin	90.8	5	478
2	457	Sharon Tootchin	85.9	4	453
3	*451	Tom Plath	84.8		451
4	*450	Dale Jensen	84.6		450
5	445	Roger Foxall	83.6	4	441
6	444	Dan Tyson	83.5	5	439
7	442	Wayne Weber	83.1	1	441
8	440	Carlo Giovanella	82.7	3	437
9	438	Peter Candido	82.3	5	433
10	436	Melissa Hafting	82	11	425
11	435	Michael Force	81.8	new	
11	435	Brian Self	81.8	2	433
13	*433	Guy Monty	81.4		433
14	432	Val George	81.2	1	431
15	*431	Brian Stech	81		431
16	429	Kevin Neill	80.6	3	426
17	428	Tony Greenfield	80.5	1	427
18	427	Murray Brown	80.3	1	426

BRITISH COLUMBIA - 532					
#	2019	Name	%	incr	2018
19	*422	Ilya Povalyaev	79.3		422
20	420	Mike McGrenere	78.9	2	418
21	*417	Lloyd Esralson	78.4		*417
22	414	Keith Riding	77.8	4	410
22	414	Dick Cannings	77.8		414
24	411	John Voos	77.3	2	409
24	411	Larry Cowan	77.3	2	409
26	405	Len Jellicoe	76.1	4	401
27	404	Bryan Gates	75.9	2	402
28	403	Nathan Hentze	75.8	2	401
29	402	<i>Chris Charlesworth</i>	75.6	6	396
30	401	Russ Tkachuk	75.4		401
31	400	<i>Hank Vanderpol</i>	75.2	2	398
32	398	Barbara Begg	74.8	1	397
33	387	Rand Rudland	72.7	5	382
34	386	Gary Davidson	72.6		386
35	383	Quentin Brown	72	3	380
36	375	Eric Tull	70.5	3	372
37	374	Don Wilson	70.3	1	373
38	373	John Chandler	70.1	2	371
39	370	Ken Morgan	69.5	2	368
40	368	Monica Nugent	69.2	9	359
41	367	Laird Law	69	1	366
42	366	Gwynneth Wilson	68.8	4	362
43	365	Bruce Whittington	68.6	2	363
44	362	Art Martell	68.0	1	*361
45	361	John Gordon	67.9	16	345
46	359	Ben Keen	67.5	4	355
47	351	Andy Buhler	66		351
47	351	Marilyn Buhler	66		351
49	339	Paul Clapham	63.7	4	335
50	338	Josh Inman	63.5	5	333
51	333	John Sprague	62.6		333
52	329	Peter Boon	61.8	7	322
53	326	Ted Goshulak	61.3	2	324
54	323	John Hodges	60.7	7	316
54	*323	Dorothy Copp	60.7		323
56	318	Neill Vanhinsberg	59.8	5	313
57	313	Janice Arndt	58.8	2	311
58	310	Lee Harding	58.3	2	308
59	307	<i>Rosemary Clapham</i>	57.7	10	297
60	300	Mike Mulligan	56.4	0	300
61	297	Krista Kaptein	55.8	14	283
62	295	Kathryn Clouston	55.5	5	290
63	*283	Ken Willis	53		283

BRITISH COLUMBIA - 532

#	2019	Name	%	incr	2018
64	*279	Susanne Hayer	52.4		*279
65	276	Eric Newton	51.9	2	274

Canada: John Chandler had the largest increase at 36 pushing him over the 400 plateau. Roger Foxall topped the 550 mark by adding four to his total. Other milestone achievers were Sharon Toochin reaching 500, Hank Vanderpol making 450, and John Gordon besting 400.

CANADA - 691

#	2019	Name	%	incr	2018
1	553	Roger Foxall	80	4	549
2	*527	Tom Plath	76.3		527
3	517	Mike Toochin	74.8	5	512
4	509	Michael Force	73.7	new	
5	504	Dan Tyson	72.9	4	500
6	503	Eric Tull	72.8	2	501
7	500	Sharon Toochin	72.4	4	496
8	496	Brian Self	71.8	1	495
9	*490	Dale Jensen	70.9		490
10	484	Wayne Weber	70.0	1	483
11	481	Kevin Neill	69.6	3	478
12	479	Peter Candido	69.3	5	474
13	478	Russ Tkachuk	69.2		478
14	477	Carlo Giovanella	69.0	3	474
15	474	Mike McGrenere	68.6	2	472
16	472	Dick Cannings	68.3		473
17	466	Murray Brown	67.4		466
18	463	Keith Riding	67.0	2	461
19	460	Len Jellicoe	66.6	6	454
20	*459	Brian Stech	66.4		459
21	*457	Ilya Povalyaev	66.1		457
22	456	Chris Charlesworth	66.0	10	*446
22	456	Larry Cowan	66.0	1	455
22	456	Mike Mulligan	66.0		456
25	455	Barbara Begg	65.8	1	454
26	453	Rand Rudland	65.6	5	448
27	452	John Voos	65.4	2	450
28	450	Hank Vanderpol	65.1	4	446
29	448	Art Martell	64.8	1	*447
30	447	Nathan Hentze	64.7		447
31	441	Monica Nugent	63.8	10	431
32	*440	Lloyd Esralson	63.7		*440
33	439	Tony Greenfield	63.5	1	438
34	437	Ken Morgan	63.2	4	433

CANADA - 691

#	2019	Name	%	incr	2018
35	426	John Chandler	61.6	36	390
36	425	Quentin Brown	61.5	3	422
36	425	Bryan Gates	61.5	2	423
38	424	Gwynneth Wilson	61.4	4	*420
39	420	Don Wilson	60.8		420
40	419	John Sprague	60.6		419
40	419	Sandra Eadie	60.6	1	418
42	414	Gary Davidson	59.9		414
43	413	John Gordon	59.8	14	399
44	409	Josh Inman	59.2	8	401
45	402	Janice Arndt	58.2		402
46	400	Andy Buhler	57.9		400
46	400	Marilyn Buhler	57.9		400
48	397	Laird Law	57.5	1	396
49	390	Ted Goshulak	56.4	1	389
50	*381	Dorothy Copp	55.1		381
51	374	Neill Vanhinsberg	54.1	12	362
52	373	John Hodges	54.0	10	363
53	370	Paul Clapham	53.5	4	366
54	355	Peter Boon	51.4	1	354
55	352	Lee Harding	50.9	2	350

ABA (Continental): Two listers added 18 which was the highest increase for 2019. Melissa Hafting's 18 pushed her over 700 plateau. Monica Nugent's moved her to 618. Hank Vanderpol added Great Black Hawk, Cassia Crossbill & Antillean Palm-Swift to reach the lofty total of * 802 *.

ABA (Continental) - 1,015

#	2019	Name	%	incr	2018
1	802	Hank Vanderpol	79	3	799
2	791	Mike Toochin	77.9	3	788
3	785	Roger Foxall	77.3	2	783
4	778	Mike Mulligan	76.7		778
5	740	Wayne Weber	72.9	9	731
5	740	Russ Tkachuk	72.9		740
7	724	Art Martell	71.3	1	*723
7	724	John Voos	71.3	2	722
9	*719	Dorothy Copp	70.8		719
10	714	Melissa Hafting	70.3	18	696
11	*714	Brian Stech	70.3		714
12	*711	Dale Jensen	70.0		711
13	710	Eric Tull	70.0	1	709
14	708	Sharon Toochin	69.8	4	704
15	689	Dan Tyson	67.9	4	685

ABA (Continental) - 1,015					
#	2019	Name	%	incr	2018
16	*685	Chris Charlesworth	67.5		685
17	671	Brian Self	66.1	2	669
18	667	Peter Candido	65.7	4	663
19	659	Gary Davidson	64.9		666
20	655	Nathan Hentze	64.5	2	653
21	*652	Keith Riding	64.2		652
22	649	John Sprague	63.9		649
23	642	Dick Cannings	63.3	1	641
24	641	Andy Buhler	63.2		641
24	641	Marilyn Buhler	63.2		641
26	639	Kevin Neill	63.0	5	634
27	632	Gwynneth Wilson	62.3	1	631
28	631	Don Wilson	62.2		631
29	625	Carlo Giovanella	61.6	2	623
29	625	Barbara Begg	61.6	1	624
31	618	Monica Nugent	60.9	18	600
31	*618	Mike McGrenere	60.9		618
33	615	Tony Greenfield	60.6	1	614
34	611	Len Jellicoe	60.2	6	605
35	595	Sandra Eadie (ON)	58.6	1	594
36	588	Ken Morgan	57.9	4	584
37	575	Larry Cowan	56.7	1	574
38	571	Rand Rudland	56.3	5	566
38	571	Bryan Gates	56.3	1	570
40	561	Laird Law	55.3		561
41	557	Murray Brown	54.9		557
42	554	Val George	54.6	1	553
43	546	John Chandler	53.8	14	532
44	540	Clive Keen	53.2	17	523
45	525	Josh Inman	51.7	7	518
46	519	Ted Goshulak	51.1	1	518
47	466	Lee Harding	45.9		466
48	444	Paul Clapham	43.7	3	441
49	441	Janice Arndt	43.4	2	439
50	419	John Hodges	41.3	9	410
50	*419	Susanne Hayer	41.3		*419

ABA + Hawaii: Monica Nugent had the largest increase with 18. Mike Toochin improved by 5 (847) increasing his lead over second place Roger Foxall (828) to 19. John Vooy's reached the 750 plateau and Rand Rudland the 600.

ABA + Hawaii 1,120					
#	2019	Name	%	incr	2018
1	847	Mike Toochin	75.6	5	842

ABA + Hawaii 1,120					
#	2019	Name	%	incr	2018
2	828	Roger Foxall	73.9	2	826
3	791	Mike Mulligan	70.6		791
4	776	Art Martell	69.3	1	*775
5	766	Sharon Toochin	68.4	6	760
6	*762	Dale Jensen	68		762
7	761	Eric Tull	67.9	1	760
8	750	John Vooy's	67	1	749
9	672	Gwynneth Wilson	60	1	671
10	666	Gary Davidson	59.5		666
11	662	Kevin Neill	59.1	5	657
12	647	Monica Nugent	57.8	18	629
12	647	Carlo Giovanella	57.8	2	645
12	647	Barbara Begg	57.8	1	646
15	642	Don Wilson	57.3		642
16	622	Mike McGrenere	55.5	4	618
17	612	Larry Cowan	54.6	1	611
18	606	Ken Morgan	56	6	600
19	601	Rand Rudland	53.7	12	589
20	582	Val George	52	1	581
21	581	Bryan Gates	51.9		new
22	579	Josh Inman	51.7	7	572
23	571	Laird Law	51		571
24	569	Clive Keen	50.8	17	552
25	*542	Ted Goshulak	48.4		542
26	475	Janice Arndt	42.4	2	473
26	475	Lee Harding	42.4		475
28	465	Paul Clapham	42	3	462

World: Josh Inman's increase of 491 moved him over the 2,000 mark and up to 25th place. Others passing notable plateaus were: Keith Riding 7,500, Brian Self 4,000, and John Chandler 2,000.

WORLD - 10,589					
#	2019	Name	%	incr	2018
1	7,655	Keith Riding	72.3	249	7,406
2	5,851	Roger Foxall	55.3	33	5,818
3	5,703	Nigel Mathews	53.9	57	5,646
4	5,450	Mike Toochin	51.5	123	5,327
5	4,933	Peter Candido	46.6	206	4,727
6	4,835	Sharon Toochin	45.7	251	4,584
7	4,768	Eric Tull	45	99	4,669
8	4,689	Art Martell	44.3	66	*4,623
9	4,003	Brian Self	37.8	78	3,925
10	*3,966	Peter McIver	37.5		*3,966
11	3,600	Mike Mulligan	34		3,600

WORLD - 10,589					
#	2019	Name	%	incr	2018
12	3,577	Rand Rudland	33.8	9	3,568
12	3,577	Laird Law	33.8	69	3,508
14	*3,400	Dale Jensen	32.1		3,400
15	*3,279	Brian Stech	31		3,279
16	3,276	Barbara Begg	30.9	3	3,273
17	*3,274	Dorothy Copp	30.9		3,274
18	3,233	Hank Vanderpol	30.5	2	3,231
19	3,223	Dick Cannings	30.4	19	3,204
20	3,188	Val George	30.1	144	3,044
21	2,940	Gary Davidson	27.8	27	2,913
22	2,778	Nathan Hentze	26.2	243	2,535
23	2,739	Don Wilson	25.9		2,739
24	2,434	Michael Force	23	new	
25	2,431	Josh Inman	23	491	1,940
26	2,397	Andy Buhler	22.6	171	2,226
26	2,397	Marilyn Buhler	22.6	171	2,226
28	2,385	Ken Morgan	22.5	101	2,284
29	2,383	Sandra Eadie	22.5	2	2,381
30	2,359	Lee Harding	22.3	7	2,352
31	*2,258	Chris Charlesworth	21.3		2,258
32	2,123	Monica Nugent	20	190	1,933
33	2,120	Bryan Gates	20		2,120
34	2,109	Paul Clapham	19.9	94	2,015
35	2,062	John Chandler	19.5	306	1,756
36	1,841	Rosemary Clapham	17.4	127	1,714
37	1,669	Mike McGrenere	15.8	369	1,300
38	1,664	John Hodges	15.7	231	1,433
39	1,650	Larry Cowan	15.6		1,651
40	1,601	Tony Greenfield	15.1	1	1,600
41	1,484	Ben Keen	14	169	1,315
42	1,223	Wayne Weber	11.5	79	1,144
43	1,043	Peter Boon	9.8	38	1,005
44	1,011	Kevin Neill	9.5	4	1,007
45	*974	Ken Willis	9.2		974
46	951	John Sprague	9		951

World Families: Bryan Gates' thorough scan of his data brought his total to 93. Lee Harding & John Chandler up their totals by 12 and 14 respectively.

World Families 248					
#	2019	Name	%	incr	2018
1	235	Bryan Gates	94.8	93	142
2	232	Peter Candido	93.5	2	230
3	230	Roger Foxall	92.7		231
4	224	Eric Tull	90.3		225
5	221	Mike Toochin	89.1		221

World Families 248					
#	2019	Name	%	incr	2018
6	217	Brian Self	87.5	3	214
7	215	Art Martell	86.7		*215
8	213	Rand Rudland	85.9	3	210
8	213	Sharon Toochin	85.9	3	210
10	210	Laird Law	84.7	4	206
11	202	Barbara Begg	81.5	new	
12	180	Ken Morgan	72.6	3	177
13	178	Sandra Eadie	71.8		180
14	175	Paul Clapham	70.6	2	173
15	*174	Peter McIver	70.2		*174
16	168	Rosemary Clapham	67.7	new	
17	167	Keith Riding	67.3	new	
18	160	Lee Harding	65	12	148
19	143	John Chandler	58	14	129
20	124	Kevin Neill	50	2	122
21	119	Larry Cowan	48	2	117

North America: As defined by the ABA. Kathryn Clouston had the largest increase at 133 pushing her over the 800 mark. Four members added their totals too this year's listing.

North America 2086					
#	2019	Name	%	incr	2018
1	*1,619	Brian Stech	77.6		1,619
2	*1,612	Dorothy Copp	77.3		1,612
3	1,476	Mike Toochin	70.8	2	1,474
4	1,469	Roger Foxall	70.4	20	1,449
5	1,427	Keith Riding	68		*1,427
6	1,346	Art Martell	64.5	46	*1,300
7	1,168	Rand Rudland	56	5	1,163
8	1,115	Barbara Begg	53	new	
9	1,078	Eric Tull	51.7	1	1,077
10	1,051	Gary Davidson	50.4		1,051
11	1,040	Monica Nugent	49.9	32	1,008
12	*1,018	Peter McIver	48.8		*1,018
13	992	John Hodges	47.6	6	986
14	967	Laird Law	46		967
15	856	Larry Cowan	41		856
16	853	John Chandler	40.9		862
17	808	Kathryn Clouston	38.7	133	675
18	751	Paul Clapham	36	new	
19	708	John Sprague	33.9		708
19	*708	Ted Goshulak	33.9		708
21	696	Sandra Eadie	33.4	1	695
22	674	Krista Kaptein	32.3	12	662

North America 2086					
#	2019	Name	%	incr	2018
23	657	Rosemary Clapham	31.5		new
24	612	Lee Harding	29		new

AOS North (AOU): As defined by the ABA.

AOS North (AOU) 2,160					
#	2019	Name	%	incr	2018
1	1,196	Rand Rudland	55.4		new
2	1,182	Dick Cannings	54.7		1,182
3	892	Larry Cowan	41		892
4	674	Krista Kaptein	31	12	662
5	615	Ken Morgan	28		new

US "minus" Hawaii: Art Martell joined the list in first place at 672. Two other birders joined the list.

United States (minus Hawaii) - 1,007					
#	2019	Name	%	incr	2018
1	672	Art Martell	67		new
2	606	Gary Davidson	60		606
3	431	Rand Rudland	43		new
4	409	Larry Cowan	41		409
5	378	Ken Morgan	38		new

ATPAT: John Chandler made the best improvement adding 202 closely followed by Josh Inman at 196 moving Josh over the 1,000 plateau.

All Ticks Provinces And Territories - 5,263					
#	2019	Name	%	incr	2018
1	3,030	Eric Tull	58	3	3,027
2	2,971	Roger Foxall	56	4	2,967
3	1,865	Dick Cannings	35	7	*1,858
4	1,784	Wayne Weber	34	47	1,737
5	1,703	Mike Mulligan	32		1,703
6	1,495	Dan Tyson	28	7	1,488
7	1,484	Janice Arndt	28	7	1,477
8	1,272	Barabara Begg	24	1	1,271
9	1,258	John Sprague	24		1,258
10	1,199	Laird Law	23	1	1,198
11	1,100	Josh Inman	21	196	904
12	986	Sandra Eadie	19		new
13	910	Larry Cowan	17	1	909
14	*904	Brian Stech	17		904
15	812	John Chandler	15	202	610
16	*759	Dorothy Copp	14		759

BC Winter: "Winter" - Dec/Jan/Feb to Dec. 31, 2019. Janice Arndt had the highest increase at 10.

B.C. Winter List - Dec / Jan / Feb					
#	2019	Name		incr	2018
1	311	Dan Tyson		1	310
2	306	Mike Toochin		1	305
3	*301	Tom Plath			301
4	*293	Brian Self			*293
5	271	Wayne Weber			271
6	*244	Carlo Giovanella			244
7	228	Larry Cowan			228
8	206	Paul Clapham			206
9	192	Eric Tull		2	190
10	138	Janice Arndt		10	128

Non-Motorized Transport: Mike McGrenere shared the improvement prize at 3 with Janice Arndt.

Non-Motorized Transport					
#	2019	Name & location		incr	2018
1	312	Mike McGrenere - Victoria		3	309
2	162	Janice Arndt - Nelson		3	159
3	115	Barbara Begg - Sidney		1	114
4	113	Larry Cowan - Pitt Meadows			113
5	*97	Lee Harding - Coquitlam			97

Alberta: Chris Charlesworth improved by 16 over a two year span. Josh Inman improved by 9.

ALBERTA - 425					
#	2019	Name	%	incr	2018
1	364	Mike Mulligan	85.6		364
2	361	Eric Tull	84.9		361
3	323	Hank Vanderpol	76		323
4	*276	Melissa Hafting	64.9		276
5	*273	Tom Plath	64.2		273
6	248	Wayne Weber	58.4	4	244
7	244	Chris Charlesworth	57.4	16	*228
8	241	Roger Foxall	56.7		241
10	235	Dan Tyson	55.3	2	233
11	222	Bryan Gates	52.2		222
12	220	Gary Davidson	51.8		220
13	215	Monica Nugent	50.6		215
14	214	Len Jellicoe	50.4		214
14	214	Dick Cannings	50.4		*214
16	208	Josh Inman	48.9	9	199
17	190	Larry Cowan	44.7		190
18	185	Tony Greenfield	43.5		new

ALBERTA - 425

#	2019	Name	%	incr	2018
19	184	Mike Toochin	43.3		184
20	*181	Dale Jensen	42.6		*181

YUKON TERRITORY - 333

#	2019	Name	%	incr	2018
1	172	Dick Cannings	51.7		*172
2	165	Tony Greenfield	49.5		165
3	155	Eric Tull	46.5		155
4	142	Roger Foxall	42.6		142
5	126	Laird Law	37.8		126
6	123	Gary Davidson	36.9		123
7	113	John Sprague	33.9		113
8	112	Rand Rudland	33.6		112
9	109	Wayne Weber	32.7		109
10	106	Art Martell	31.8		*106
11	102	Brian Self	30.6		102
12	91	Dan Tyson	27.3		91
13	86	John Hodges	25.8		86
14	*80	Dale Jensen	24.0		*80
15	*64	Dorothy Copp	19.2		64
15	*64	Brian Stech	19.2		64
17	53	Paul Clapham	15.9		*53

NORTHWEST TERRITORIES - 302

#	2019	Name	%	incr	2018
1	189	Laird Law	62.6		189
2	180	Eric Tull	59.6		180
3	155	Tony Greenfield	51		155
4	133	Rand Rudland	44		133
5	*129	Janice Arndt	43		129
6	105	Roger Foxall	35		105
7	98	Brian Self	32.5		98
8	97	Barbara Begg	32		97
9	86	Mike Toochin	28.5		86
10	84	John Sprague	27.8		84
11	71	Art Martell	23.5		*71
12	70	Paul Clapham	23.2		*70
12	70	Rosemary Clapham	23.2		70
14	64	Lee Harding	21		64
15	54	John Hodges	17.9		54
16	*53	Gary Davidson	17.5		*53
17	52	Wayne Weber	17.2		52
18	40	Dick Cannings	13		*40

Washington: Eric Tull had the highest increase at 14.

WASHINGTON STATE - 518

#	2019	Name	%	incr	2018
1	412	Wayne Weber	80	2	410
2	*344	Melissa Hafting	66		344
3	335	Dan Tyson	65	4	331
4	327	Mike Toochin	63		327
5	311	Brian Self	60.0	1	310
6	*303	Tom Plath	58.5		303
7	*286	Hank Vanderpol	55		286
8	265	Roger Foxall	51.2	2	263
9	256	Keith Riding	49		new
10	*247	Brian Stech	48		247
11	*236	Dale Jensen	45.6		*236
12	*235	Lloyd Esralson	45.4		*235
13	232	Eric Tull	44.8	14	218
13	*232	Dorothy Copp	44.8		232
15	231	Art Martell	44.6		*231
16	224	Larry Cowan	43.2		224
17	192	Josh Inman	37		192

ALASKA - 537

#	2019	Name	%	incr	2018
1	217	Eric Tull	40		217
2	183	Wayne Weber	34		183
3	163	Bruce Whittington	30		new
4	151	Monica Nugent	28		new

MONTANA - 434

#	2019	Name	%	incr	2018
1	207	Eric Tull	47.7		207
2	205	Wayne Weber	47.2		205

Vancouver: Josh Inman added a list high of 20. Paul Clapham added 9 to surpass the 300 mark.

VANCOUVER AREA - 430

#	2019	Name	%	incr	2018
1	378	Mike Toochin	88	2	376
2	363	Dan Tyson	84	3	360
3	358	Carlo Giovannella	83.3	3	355
4	357	Brian Self	83.0	1	356
5	356	Wayne Weber	82.8		356
5	*356	Tom Plath	82.8		356
7	348	Roger Foxall	80.9	4	344
8	347	Keith Riding	80.7	1	346
9	341	Peter Candido	79.3	3	338
10	339	Quentin Brown	78.8	3	336

VANCOUVER AREA - 430					
#	2019	Name	%	incr	2018
11	*333	Lloyd Esralson	77.4		*333
12	330	Larry Cowan	76.7	1	329
13	*329	Brian Stech	76.5		329
14	*323	Ilya Povalyaev	75.1		323
15	*319	Melissa Hafting	74.2		319
16	311	John Chandler	72.3	1	310
17	310	John Voos	72.1		314
18	301	Paul Clapham	70	9	292
19	295	John Gordon	68.6	12	283
20	294	Kevin Neill	68.4		294
21	288	Dick Cannings	67	2	286
22	282	Rosemary Clapham	65.6	13	269
23	279	Monica Nugent	64.9		279
23	279	Neill Vanhinsberg	64.9	5	274
25	277	Ted Goshulak	64.4		277
26	*253	Ken Willis	59		253
27	238	Josh Inman	55.3	20	218
28	235	Bryan Gates	54.7		235
29	234	Don Wilson	54.4		234
30	212	Eric Tull	49		212

Vancouver Island: Kathryn Clouston added 28 to her total. Kevin Neill added 16 putting him just shy of the 300 plateau. Barbara Begg reached 350 & Krista Kaptein topped 250.

Vancouver Island - 388					
#	2019	Name	%	incr	2018
1	358	Mike McGrenere	92.3	4	354
2	350	Barbara Begg	90	2	348
3	*341	Guy Monty	87.9		341
4	339	Bryan Gates	87.4	2	337
5	320	Mike Toochin	82.5	4	316
6	316	Bruce Whittington	81.4	3	313
7	295	Kevin Neill	76	16	279
8	287	Ken Morgan	74	1	286
9	*283	Tom Plath	72.9		*283
10	280	Eric Tull	72.2	6	274
11	278	Art Martell	71.6		new
11	278	Wayne Weber	71.6	4	274
13	269	Dan Tyson	69.3	5	264
14	268	Roger Foxall	69.1	2	266
15	252	Krista Kaptein	65	11	241
16	225	Kathryn Clouston	58	28	*197
17	212	Larry Cowan	55	1	211

Vancouver Island - 388					
#	2019	Name	%	incr	2018
18	206	John Sprague	53.1		206
19	*203	Keith Riding	52.3		*203

Victoria: Kevin Neill added 15 to his total. Mike McGrenere who is over the 90% mark managed to add another 4 to his total.

Victoria Area - 362					
#	2019	Name	%	incr	2018
1	344	Mike McGrenere	95	4	340
2	335	Barbara Begg	93	2	333
3	321	Bryan Gates	89	1	320
4	304	Bruce Whittington	84	1	303
5	271	Neill Vanhinsberg	74.9	1	270
6	268	Kevin Neill	74	15	253
7	262	Eric Tull	72.4	5	257
8	259	Wayne Weber	71.5	4	255
9	*242	Tom Plath	66.9		242
10	235	Keith Riding	64.9		*235
11	226	Dan Tyson	62.4	4	222
12	177	Larry Cowan	48.9	1	176
13	169	Neill Vanhinsberg	46.7	3	166
14	156	Monica Nugent	43	6	150
15	*141	Lloyd Esralson	39		*141
16	131	Ted Goshulak	36	1	*130

Okanagan Valley: Hank Vanderpol had the best increase at 9. Michael Force entered the list in 5th at 285. Neill Vanhinsberg added his total to the list at 163.

Okanagan Valley - 332					
#	2019	Name	%	incr	2018
1	321	Chris Charlesworth	96.7	2	319
2	310	Gwynneth Wilson	93.4	3	307
3	310	Dick Cannings	93.4	4	306
4	297	Don Wilson	89.5	1	296
5	285	Michael Force	86		new
6	275	Mike Toochin	82.8	2	273
7	268	Hank Vanderpol	80.7	9	259
8	267	Wayne Weber	80.4	1	266
9	*262	Gary Davidson	78.9		*262
10	260	Dan Tyson	78.3	1	259
11	*235	Tom Plath	70.8		235
12	234	Tony Greenfield	70.5		234
13	*229	Keith Riding	69.0		*229
14	*224	John Voos	67.5		*224

Okanagan Valley - 332					
#	2019	Name	%	incr	2018
15	220	Laird Law	66.3	1	219
16	*215	Lloyd Esralson	64.8		*215
17	193	Bryan Gates	58.1		193
18	*189	Brian Stech	56.9		189
19	175	Eric Tull	52.7		175
20	174	Larry Cowan	52.4		174
21	163	Neill Vanhinsberg	49.1	new	
22	*162	Dorothy Copp	48.8		162

North Pacific Pelagic Waters					
#	2019	Name	%	incr	2018
1	199	Michael Force			new
2	136	Mike Toochin		1	135
3	105	Ken Morgan		1	104
4	*86	Tom Plath			86
5	78	Bruce Whittington			78
6	72	Art Martell			new
7	71	Kevin Neill		1	70
8	*63	Lloyd Esralson			*63
9	49	Monica Nugent			new
10	45	Bryan Gates			45

Peace River Area - 272					
#	2019	Name	%	incr	2018
1	245	Laird Law	90		245
2	*228	Tom Plath	84		228
3	209	Tony Greenfield	76.8		209
4	207	Mike Toochin	76.1	4	203
6	184	Bryan Gates	67.6		184
7	180	Wayne Weber	66	1	179
8	167	Keith Riding	61.4	10	*157
9	165	Dan Tyson	60.7		165
10	155	Larry Cowan	57		155
11	*144	Lloyd Esralson	53		*144
12	*128	Dorothy Copp	47		128
12	*128	Brian Stech	47		128

West Kootenay Area - 313					
#	2019	Name	%	incr	2018
1	293	Gary Davidson	94		293
2	261	Janice Arndt	83.4	3	258
3	*260	Peter McIver	83.1		*260
4	182	Wayne Weber	58		182
5	144	Lee Harding	46	4	140

Creston Valley Area - 303					
#	2019	Name	%	incr	2018
1	*215	Peter McIver	71		*215
2	*193	Gary Davidson	64		*193
3	176	Janice Arndt	58		176
4	142	Wayne Weber	47		142

Prince George: I'm slowly inching my way to respectability on this list.

Prince George Area - 297					
#	2019	Name	%	incr	2018
1	276	Laird Law	92.9		276
2	275	Cathy Antoniazzi	92.6		275
3	214	Nathan Hentze	72.1		214
4	193	Don Wilson	65.0		193
5	168	Dan Tyson	56.6		168
6	144	Larry Cowan	48.5	15	129
7	*133	Gary Davidson	44.8		*133

Manning PP - 206					
#	2019	Name	%	incr	2018
1	155	Mike McGrenere	75.2	1	154
2	*141	Melissa Hafting	68.4		141
3	125	Wayne Weber	60.7		125
4	*115	Keith Riding	55.8		*115
5	111	Dan Tyson	53.9		111
6	108	Brian Self	52.4		new
7	91	Larry Cowan	44.2		91
7	91	Neill Vanhinsberg	44.2		new

Fraser Valley - 318					
#	2019	Name	%	incr	2018
1	252	John Voos	79.2		253
2	249	Dan Tyson	78.3	2	247
3	207	Wayne Weber	65.1	6	201
4	*205	Lee Harding	64.5		205
5	164	Larry Cowan	52	2	162
6	*154	John Gordon	48		154

Blackie Spit (Vanc) - 236					
#	2019	Name	%	incr	2018
1	186	Wayne Weber	78.8	1	185
2	182	Dan Tyson	77.1		182
3	*141	Keith Riding	60		*141
4	123	Brian Self	52.1	2	*121
5	121	Larry Cowan	51.3		121
6	101	Neill Vanhinsberg	43	3	98

Sea & Iona Islands (Vanc) - 300

#	2018	Name	%	incr	2017
1	287	Mike Toochn	96	2	285
2	*276	Tom Plath	92		276
3	*255	Keith Riding	85		*255
4	245	Dan Tyson	81.7	2	243
5	240	Wayne Weber	80	2	238
6	*204	Lloyd Esralson	68		*204
7	182	Larry Cowan	61		182
8	170	Neill Vanhinsberg	57	7	163

Westham & Reifel Islands (Vanc) - 280

#	2019	Name	%	incr	2018
1	227	Wayne Weber	81.1	1	226
2	225	Brian Self	80.4	2	223
3	210	Dan Tyson	75	1	209
4	*194	Lloyd Esralson	69		*194
5	*183	Keith Riding	65		*183
6	160	Larry Cowan	57		160
7	149	Neill Vanhinsberg	53		new

Semiamhoo Peninsula (WA) - 245

#	2019	Name	%	incr	2018
1	228	Carlo Giovanella	93	4	224
2	*215	Roger Foxall	87.8		215
2	215	Dan Tyson	87.8	1	214

City of Pitt Meadows - 224

#	2019	Name	%	incr	2018
1	204	Wayne Weber	91	1	203
2	199	Larry Cowan	89	2	197
3	*157	Keith Riding	70		*157
4	121	Neill Vanhinsberg	54	6	115

Princeton Area - 254

#	2019	Name	%	incr	2018
1	110	Larry Cowan	43		91
2	*103	Lloyd Esralson	41		*103
3	90	Bryan Gates	35		90

Comox Valley - 319

#	2019	Name	%	incr	2018
1	259	Art Martell	81	12	*247
2	244	Nathan Hentze	76		244
3	234	Krista Kaptein	73	4	230
4	220	Kathryn Clouston	69	7	213

Salt Spring Island - 239

#	2019	Name	%	incr	2018
1	187	Ren Ferguson	78	8	179
2	173	John Sprague	72		173
3	131	Marian Porter	55	2	129
4	114	Wayne Weber	48		114

Sunshine Coast - 307

#	2019	Name	%	incr	2018
1	282	Tony Greenfield	92		282
2	267	Rand Rudland	87		267
3	257	John Hodges	83.7	2	255
3	257	Russ Tkachuk	83.7		257
5	*235	Susanne Hayer	77		*235
6	179	Dan Tyson	58		179
7	138	Wayne Weber	45		138

Haida Gwaii - 188

#	2019	Name	%	incr	2018
1	134	Mike Toochn	71		134
2	108	Bruce Whittington	57	2	106
3	97	Laird Law	52		97
4	79	Krista Kaptein	42	7	72
5	78	Mike Mulligan	41.5		78

Revelstoke - 215

#	2019	Name	%	incr	2018
1	*215	Michael Morris	100		*215
2	150	Wayne Weber	70		150

Yukon - NWT - Nunavut - 903

#	2019	Name	%	incr	2018
1	*205	Eric Tull	23		205
2	173	Dick Cannings	19		new
3	106	Wayne Weber	12		new

Over 1,500m

#	2019	Name	%	incr	2018
1	112	Mike McGrenere			112
2	106	Wayne Weber			106

The remaining listings are for areas with single submissions, grouped where possible, by Tourism Zones as set out by BC Tourism. This should be of assistance in determining which lists to consider tracking while travelling to destinations around the Province.

Vancouver Coast & Mnt.	2019	Name	+	2018
Abbotsford	218	John Vooys	1	217
Colony Farm RP	170	Larry Cowan	1	169
Iona	274	Mike Tootchin	2	272
Nathan Creek	*75	Ted Goshulak		*75
Richmond (+ Sea & Iona)	298	Mike Tootchin	2	296
Trinity Western U Campus	154	Ted Goshulak	2	152
Vancouver CBC Circle	308	Dan Tyson	3	305
Vancouver Winter	230	Carlo Giovannella	1	229

Vancouver Island	2019	Name	+	2018
Nanaimo	212	Peter Boon	26	186
Saturna Island	102	Tony Greenfield		102
Yard List - Oak Bay	103	Bryan Gates		103
Yard List-Saratoga Beach	153	Bryan Gates		153

Thompson/Okanagan	2019	Name	+	2018
Kamloops	256	Wayne Weber		257
Nicola Watershed	254	Wayne Weber		254

Cariboo/Chilcotin	2019	Name	+	2018
Cariboo Plateau	*144	Michael Sather		144
Williams Lake Area	160	Bryan Gates		160

Other	2019	Name	+	2018
ABA Birds Photographed	*641	Brian Stech		641
BC / Alaska	542	Mike Tootchin		new
Canada Winter List	307	Mike Tootchin		new
Gwaii Haanas NP	87	Bruce Whittington	1	86
Idaho	214	Wayne Weber		214
USA (lower 48)	551	Dick Cannings		new

A reminder, there are other opportunities for your listings with categories not encompassed by BCFO Listers' Corner. These include the **American Birding Association** and **Canadian Listers' Corner**.

<http://www.neilyworld.com/neilyworld/listerscorner/listers-corner.htm>

I would like to thank all those who submitted their life totals for this article. Wishing everyone continued good birding in 2020. See you at the BCFO AGM and Conference in Smithers this coming June.

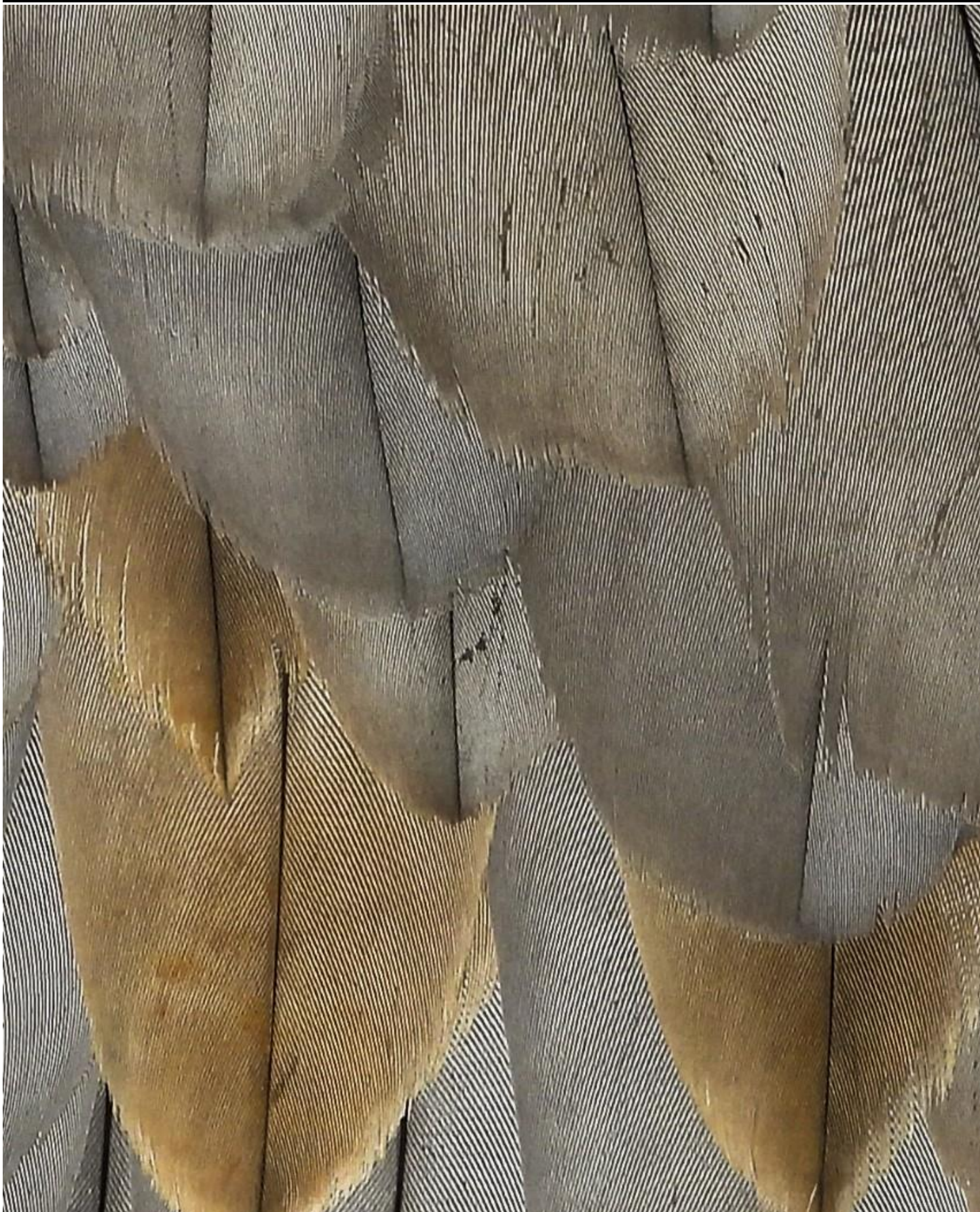
Larry Cowan

Cold Comfort

John Gordon, Surrey

Below: A Pileated Woodpecker searching for food during a severe cold spell in Surrey during the second week of January. Sub-zero temperatures and heavy snow took a toll on Lower Mainland birds, especially Anna's Hummingbirds, with reports of fledglings coming to some feeders. Mortality rates were abnormally high and area rescue centres were inundated with hummers in distress. Temperatures dipped to minus 10, which was unusually cold for the coast. Also hard hit were the area's Barn Owls, which are unable to hunt with snow on the ground.





Close-up of the wing feathers of a Sandhill Crane at Reifel Migratory Bird Sanctuary, by John Gordon.