BC BIRDING

Newsmagazine of the British Columbia Field Ornithologists

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Cooper's-or-Sharp-shinned season is with us again. This photograph by Bob Steventon gives some practice. *See page 3.*

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

A subscription to this quarterly (online version) is a benefit of membership in the society. A hard-copy version will be posted to members for a $12 annual premium.

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

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

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

Annual Membership Dues
General Membership (Canada): $30
Junior Membership (Canada): $20
U.S. and International Membership: $35

Newsmagazine Submissions
To submit material to this publication, contact the Editor by email (clive_keen@hotmail.com). Books for review should be sent to 10790 Grassland Road, Prince George, BC V2K 5E8.

Topics may include birding experiences, casual observations about bird behaviour, bird project reports, site guides, birding equipment, bird photography, trip reports (including overseas trips), and other subjects of broad interest to BC birders. Brief items are always welcome, but average submissions tend to be in the 400–600 word range. For longer submissions the normal maximum length is 1,500 words. Note that this is a newsmagazine rather than an academic journal, so formal reference lists etc are inappropriate.

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

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

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

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

BCFO Officers & Directors

Directors
President: Gary Davidson, Nakusp, 250-265-4456, gsd37@yahoo.ca
Vice-President: Marian Porter, Salt Spring Island, 250-653-2043, marianmporter@gmail.com
Secretary: Krista Kaptein, Courtenay, 250-338-9962, kapteink@shaw.ca
Treasurer: Josh Inman, Langley, 604-356-3501, joshbirder@gmail.com
Larry Cowan, Pitt Meadows, 604-307-0931, 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
Paul Foth, 108 Mile, 250-948-0849, paulrfoth@gmail.com

Responsibilities
AGM Planning: Marian Porter
Archivist/ Librarian: Les Gyug
BC Birding (Newsmagazine) Editor: Clive Keen
Print Distribution: Kaitie York
British Columbia Birds (Journal) Editor: Nathan Hentze
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Young Birder Awards Committee: Carlo Giovanella (Chair), George Clulow.

Contents

Front Page Cover

Yes, it is a Sharp-shinned Hawk, photographed by Bob Steventon from a window of his Prince George home in April 2022. Bob is the current BCFO Featured Photographer, and more of his work can be seen at bcfo.ca/bob-steventon-april-2022.

Important Dates

Smithers Conference & AGM 2022

Registration

April 4
Online registration opens for Conference & AGM and post-conference trip.

Event Dates

June 22 – 24
Pre-conference extension trip to Terrace and Kitimat

June 24 – 26
Smithers Conference & AGM.

Closing Deadlines

June 7
Registration for the pre-conference extension trip.

June 10
Registration for Smithers Conference and AGM.

President's Message

Gary Davidson, Nakusp

The last two years have been a challenge! We have twice postponed our Annual Conference; we discontinued two-day field trips; applications for research grants were not coming in; and public gathering of any kind were not possible. The Board of Directors would like to thank the membership for their continued support during this awkward time. Even when all we could offer were monthly Zoom presentations, membership numbers remained strong.

However, things are slowly changing now. Two-day field trips have resumed. On May 16 and 17, a group of about ten keen birders explored the marshes, woodlands, lakes and fields in the Creston Valley. Researchers are getting back out into the field: we have approved three grants in the last few months. And finally, our Annual Conference is scheduled to go ahead in the Bulkley Valley this month.

At this year's conference, three of our directors will have completed their six-year terms and will be stepping down. Marian Porter was first elected to the Board in 1991. She then served her first six-year term during which time she was president from 1994 to 1996. She was again elected to the Board in 2016. And again, she accepted the position of president; from 2018 to 2021. Marian has been a valued member of the BCFO for many years and she will be missed on the Board. Art Martell has also served two six-year terms on our Board of Directors. His first term was 2009 to 2015 and again 2016 to 2022. In addition to his service to the organization as a Board member, Art edited our journal, *British Columbia Birds*, from 2008 to 2021. Monica Nugent is also completing a six-year term on the Board. These three pairs of shoes will be tough to fill! Three new directors will be elected at our Smithers conference in June.

Another valued member of our team will also be leaving us soon. Virginia Rasch has been proofreading our newsmagazine for five years. During that time, she also served on the Board of Directors for two years. Proofreading is a tedious and time-consuming job. She was a great help to the editor, Clive Keen, and she will be missed.

I am now coming to the end of my first year as president of the BCFO. Normally the president is responsible for the Annual Conference. But when plans for our Smithers conference were initiated, Marian Porter was the president. As you know, this conference has been twice postponed and Marian agreed to continue the organizational work even after her term as president came to an end. I want to thank Marian for her three-years' worth of work on this conference. It has not been an easy road to travel. Each time we postponed the event, conference venues had to be renegotiated, and field trip leaders had to be reorganized. Marian has stuck with it for three years and I, for one, am very grateful that she did. When you see her at the conference, give her a big thumbs up!

Photo below: One of the thousands of Trumpeters at Vanderhoof's annual spring swan-migration spectacle.

Welcome New Members

Dorthea Atwater - Summerland
Joachim Bertrands - Victoria
Alex Bodden - Penticton
Thea Beckman - Vancouver
Dannie Carsen - Brentwood Bay
Mel & Evi Coulson - Smithers
Chris Coxson - Fort St. John
Catherine Craig - Revelstoke
Joseph Doumet - Vancouver
Sara & Jim D'Andrea - Smithers
Frank Doyle - Terrace
Monica Durigon - Burnaby
Claire Ebendinger - Brentwood Bay
Curt Gesh - Telkwa
Susan Gower - Lone Butte
Lyle Grisedale - Kimberly

Hannah Hickli - Victoria
Timothy Jackson - Nelson
Nonie Jackson - New Denver
Frank McDonald - Houston
Storm Morgan - Sooke
Aiva Noringseth - Victoria
Tanna Patterson - Creston
Ray Sturney - New Hazelton
Rémi Torrenta - Vancouver
Cindy & Dennis Verbeek - Houston
Leona Wall - Courtenay
Alex Woods - Smithers
Josh Yiu - Surrey

BCFO 32nd CONFERENCE & AGM, June 24 – 26, 2022, Smithers, BC

Schedule of Events

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

Friday, June 24

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 25 & 26

Breakfast: 5:30 to 6:00 AM, prior to field trips (both days), Prestige Hudson Bay Lodge, Cascade Room.

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 - Malkow Lookout Trail
Trip 5 - Pacific Wetland Trail
Trip 6 - Suskwa River Valley (Sunday only)
(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: *Harvesting for Goshawks*; 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

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:

BC Field Ornithologists
P.O. Box 61670
RPO Brookswood
Langley, BC V3A 1K0.

Via the BCFO Website (PayPal or eTransfer)
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 Pre-conference 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 eTransfer to: BCFObirders1@gmail.comeTransfer 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 pre-AGM Extension.

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

BCFO 32nd CONFERENCE & AGM, June 24 – 26, 2022, Smithers, BC

Registration Form

Name(s) . . . . . .

Address . . . . . .

Phone . . . . . **Email** . . . . . .

Conference Registration
Maximum registrations: 80. 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 (see BCFO website for membership details)	_____@ $30.00 – single/family =	$_____
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, available at the Conference at the time of registering for field trips.

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 Brookswood, Langley, BC V3A 1K

Pre-Conference Extension Trip to Terrace & Kitimat

Date: June 22 – 24, 2022

The Guides
Walter Thorne and Diane Weismiller will be our guides. 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, and a director of the Kitimat Valley Naturalist Club. Diane has been the compiler of the Terrace Christmas Bird Count since 1973 and has conducted the local Kwinitsa Breeding Bird Survey since 1974.

Extension trip participants will be based in Terrace. Field trips will begin early on the morning of June 22, with the option of a dinner meeting on June 21.

Itinerary
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.

New Remo is a local birding hotspot on the Skeena River with waterfowl, shorebirds, a good variety of warblers and Alder and Least Flycatchers. 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, and Kasiks Wilderness Resort is five km farther 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. (Walter confirmed a first Canadian record of a Grey-tailed Tattler at Minette Bay on June 23, 2020.)

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 32nd CONFERENCE & AGM, June 24 – 26, 2022, 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
Trip selections for June 25 trips will be made during Friday registration at 5:00 PM, when you will be asked to complete your conference waiver form and review the BCFO Code of Ethics. Field trip selections for June 26 will take place after the AGM.

If possible and with demonstrated interest, a wetlands canoe trip could be arranged for Sunday morning.

Where & When to Meet
Trips depart at 6:15 AM from the Prestige Hudson Bay Lodge.

Trip Leaders
Mel and Evi Coulson conduct birding field trips for the Bulkley Valley Naturalists. *Ken White* has birded Smithers for 25 years and has conducted the local Breeding Bird Survey since 2004. *Alex Woods* was a research forest pathologist for the BC Ministry of Forests, Lands and Natural Resources, and for many years has been involved with Christmas Bird Counts.

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, Gray-crowned Rosy Finch, Horned Lark, Lapland Longspur and American Pipit may be found. Below timberline will yield Clark's Nutcracker, Spruce Grouse, Boreal and Mountain Chickadee, Pine Grosbeak, Red and White-winged Crossbill and Hermit Thrush. The boreal forest may also yield American Three-toed and Black-backed Woodpeckers, and Northern Goshawk and Golden Eagle are a possibility. Probable sightings of mammals include mountain goats and marmots. A wetland en route to the mountain will be checked for Blackpoll Warbler.

The Bluff Trails

This begins with a 500-metre boardwalk traversing a willow-thicket wetland rich in warblers such as MacGillivray's and Yellow, 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. It ends in mixed deciduous and conifer forest with birds such as Magnolia Warbler, Cassin's Vireo, Golden-crowned Kinglet and Pacific Wren. A wetland concludes the trip, adding Sora, swallows, more warblers and Red-winged Blackbird.

Telkwa High Road to Tyhee Lake Provincial Park

Calliope Hummingbird and Lazuli Bunting may be found en route to the park, which offers 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 offers warblers including Blackpoll and Tennessee, Northern Waterthrush and Yellow-breasted Chat. Sparrows include White-throated and Lincoln's, plus flycatchers including Willow, Dusky, Least, Alder and Olive-sided. The Riverfront Park has recorded Northern Shrike, American Bittern, Sora, Red-eyed Vireo and Magnolia Warbler.

Malkow Lookout Trail

This is a 3-km hike through pastureland and mature aspen forest, ending in mountain and valley views of the region. Lazuli Buntings may be seen in the fields, and Dusky Grouse can be found at the summit.

Suskwa River Valley

A special tour southeast of New Hazelton will be led by Ray Sturney on Sunday. The high-elevation valley has lakes and wetlands, forest and a four-year-old burn that will yield a diverse species list of birds. Mountain and Boreal Chickadee, Fox Sparrow, Black-backed Woodpecker, Townsend`s Solitaire and Golden-crowned Sparrow inhabit the valley and a Northern Hawk Owl is possible. Warblers such as Tennessee, Yellow, Wilson`s, Blackpoll and Orange-crowned will be found in the mixed forest and wetlands. You will be surrounded by forest at the base of the Skilokis Mountain range in an area unknown to most birders.

Stop Press

BCFO Smithers Conference Field Trips Update

Marian Porter, Salt Spring Island

The Smithers Conference has a wide variety of field trips that should accommodate the expectations and requirements of all conference attendees. The Vallee Lake Wetland Trail field trip has been added that features a boardwalk and viewing platform with a lakeside trail that has recorded 112 species of birds. The terrain is varied but not challenging, with an open approach to the wetland containing flycatchers such as Dusky and Olive-sided as well as Western Wood Peewee. The lake has an active Bald Eagle nest, and Osprey and Common Loon are often sighted. Canada Geese nest in the area and other waterfowl species such as Blue-winged Teal and Ring-necked Duck as well as beaver and muskrat may be seen from the viewing platform. The forested lakeside trail has Ruby- and Golden-crowned Kinglets with Pacific Wren in the understory. Warblers such as Northern Waterthrush and Common Yellowthroat occur near the lake, and there may be an opportunity for Blackpoll Warbler. A boardwalk crosses the wetland, allowing opportunities to see American Redstart, Yellow Warbler, Cedar Waxwing and Tree Swallow. Wilson`s Snipe, Sora and Virginia Rail may be detected on the east side of the wetland. Orange-crowned Warblers inhabit the trail opening to a boardwalk that crosses to the west side of the wetland where Varied, Swainson's and Hermit Thrush can be heard and Western Tanager may be found. Throughout the trip, Red-winged Blackbirds are constant companions, Ruffed Grouse are common and a Great Horned Owl may be encountered.

Leader Frank McDonald has extensive experience as a wilderness guide leading multi-day backpacking trips.

The best birding areas in the Smithers environs will be explored on the Pacific Wetland Trail and Riverside Park field trip. The fairgrounds will be included to look for American Pipit and Semipalmated Plover. After birding the Bluff Trails the trip continues to nearby Seymour Lake, a series of shallow lakes and wetlands several kilometres outside of Smithers.

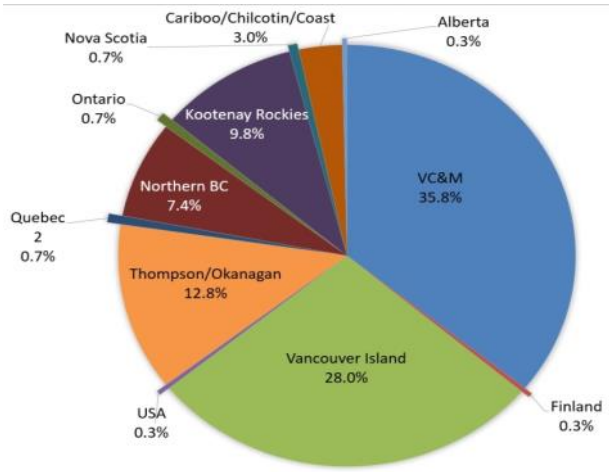
The Telkwa High Road to Tyhee Lake Provincial Park field trip will finish at Round Lake with a kilometre-long nature trail. Hudson Bay Mountain will feature subalpine and alpine meadows accessible from a trail that is steep for a short distance from the ski hill parking lot before opening to rolling terrain leading towards Crater Lake. A special tour of the Suskwa River Valley is in the planning stages for Sunday morning pending the results of a reconnaissance to determine road conditions.

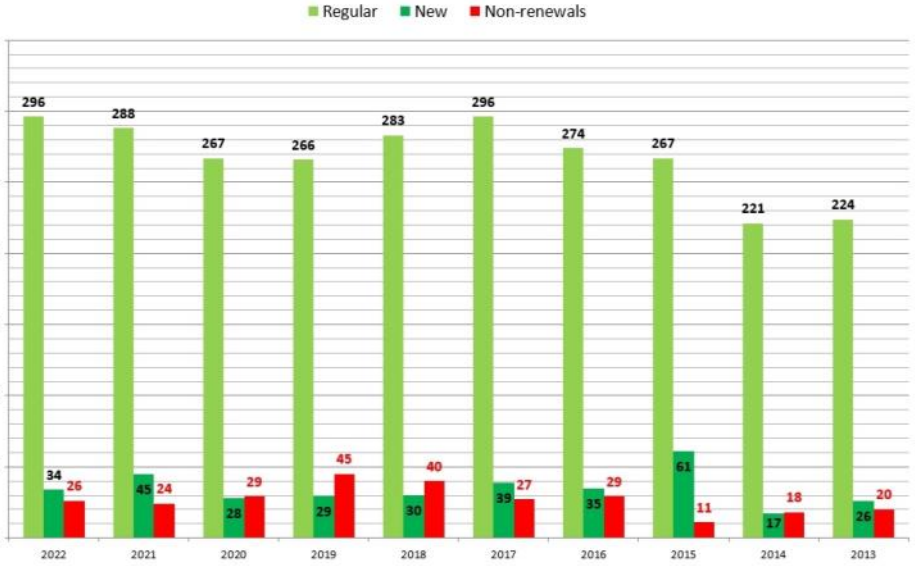
There is still an opportunity to join the pre-conference extension trip to Terrace and Kitimat. Please check page six and the BCFO website for details.

BCFO Record Membership

The *Welcome New Members* graphic on page 4 gives more than a hint that BCFO is on course for a record membership: for the first time, it was hard to fit in all the names. At the time of writing, BCFO regular membership was 296, equaling the record 2017 figure, but Membership Secretary Larry Cowan noted that additional applications were in the works. It is remarkable that numbers not just held steady, but increased, during a difficult time for the organization.

2022		2021
328	Total	316
296	Regular	288
3	Honourary	3
15	Jr. award winners	16
6	Institutional	6
9	Complimentary	3
34	New	45
33	<2022 renewed from 2021>	45
68	eTransfer	23.0%
198	PayPal/CC	66.9%
30	Cheque	10.1%
112	Paid BC Birding	96
2	No email	2
120	BC Birds, website	111
64%	Member Activity	65%





Notes

Find The Birds!

Readers with subscriptions to *Birdwatching* magazine will have been delighted to see a two-page article by BCFO Young Birder Adam Dhalla in the June 2022 edition. It began:

"Eleven years ago, when I was six, my dad and I were taking a winter walk along Boundary Bay in Southern British Columbia when we encountered a group of adults. My curious eyes followed the direction of the numerous binoculars and giant telephoto lenses. The object of their collective gaze? Several large birds, perched on the logs strewn along the coastline. Their pristine white feathers glistened in the sunlight. It was an irruption of Snowy Owls, which had flown south from the Arctic tundra in search of food. Since that fateful day, I spend much of free time birding in my native Canada …."

Adam goes on to explain how this eventually led to his creation of the *Find the Birds* game, which has featured often in *BC Birding*. Adam has also sent us the following update:

Find the Birds (www.findthebirds.com) now has players in 47 countries on six continents. It's been nominated for several awards to be announced later this year, including Best Educational Game at the upcoming *Games for Change* festival. New locations continue to be added to the game. Following the Japanese launch, including a Japanese translation version in that country, an Illinois location will be presented in partnership with The Nature Conservancy (Illinois chapter), Illinois Audubon Society, Sun Foundation and the Wetlands Initiative.

A new companion game is also in production: *Find the Birds – Big Year*. In this game, the usual player characters will try to find as many birds as they can by traveling quickly to lots of locations.

Since the game is free, but costly to produce, Adam continues to seek sponsors. If you have ideas for corporate sponsorship, contact the Thought Generation Society at:

thoughtgensoc@gmail.com

Bon Voyage Virginia Rasch

The stalwart proofreader of this magazine (above) for the previous 20 editions has regrettably (from the Editor's point of view) upped sticks and moved to faraway Southern Quebec. Her eagle eye and expertise – she is a professional copyeditor – will be sorely missed.

Avian Flu

The following advice is offered by Birds Canada:

Birds Canada volunteers and supporters can help respond to the ongoing outbreak by following these guidelines:

- Do not feed birds by hand.
- Do not touch sick or dead birds.
- Report sick or dead birds you find (in British Columbia, to the Forest, Lands, Natural Resources Operations and Rural Development at (250) 751-3234.)

Is it safe to use a birdfeeder? According to Environment and Climate Change Canada, the use of bird feeders is still safe on properties without domestic poultry. Avian Influenza does not affect all bird species in the same way; while it can cause severe illness and death in domestic poultry flocks, it is currently not considered a disease threat to feeder birds.

To help keep feeder birds healthy, clean feeders every two weeks. Scrub and soak feeders with 10% chlorine bleach solution (use one part bleach to nine parts water). Rinse feeders thoroughly and allow to completely dry before refilling.

As we learn more about the spread of Avian Influenza, provincial and territorial governments may issue additional guidance on bird feeding. Watch for information from your provincial/territorial government.

More detailed advice on bird feeder heath can be found at

www.birdscanada.org/you-can-help/keeping-feeder-birds-healthy/

Other Advice

The BC SPCA had advised the general public to take down their feeders as a

result of Avian Flu, and this was reported by a number of media outlets. Some wondered if the advice may have been due to the SPCA's policy of opposition to bird feeders – which is not shared by many bird studies organizations – rather than known facts about Avian Flu.

Birding Magazine

The April edition of *Birding*, the magazine of the American Birding Association, includes a guide by Ann Nightingale to Vancouver and Vancouver Island birding. Thirteen pages long, and with nineteen of Ann's photographs, it will no doubt tempt many ABA members to head to this part of the world.

BC's Skylarks

Might 2022 be the last year that Skylarks are heard pouring their profuse strains of unpremeditated art over Vancouver Island? Introduced from England in 1903 and 1911, the bird prospered moderately, with numbers at their height approaching 1,000 (1965). Last summer it seemed that fewer than 20 still remained, and the 2021–22 winter cold snap won't have helped. A Skylark Project has been underway between the Victoria Airport and Victoria Natural History Society aimed at improving habitat, but whether this will be too little, too late, is moot. Introduced species, even with glorious songs, have too few friends.

The Prince George Curlews

By the publication date of this magazine, at least six of the Curlews tagged locally in 2020 had returned to Prince George: Schalin (tag AE), Allyssa (LA), Graham (CA), Raven (AV), Jay (LE) and Lane (LN) were all present and correct. Amie (AT) was a possible, but there were no signs as yet of Ivan (KY), Martha (AM) and Konrad (KN). Peter (FP), the only Curlew with a still-functioning transmitter, does not seem to have budged from a spot in California since February, so is probably transmitting from his final resting place.

Surprisingly for such a large bird, Long-billed Curlews seem not to have a long lifespan. The oldest Curlew recorded by the USGS Bird Banding Laboratory was just 5 years, 8 months old. Considering that the oldest known Short-billed Dowitcher was 13 years 11 months, and a Semipalmated Sandpiper 14 years 2 months, that figure for Curlews might be misleading. With any luck information from "our" Curlews will in future years improve on it.

Note that information on the longevity of most North American birds can be found at:

www.pwrc.usgs.gov/BBL/longevity/Longevity_main.cfm

Rare Birds Alert

Since the deadline for the March edition of this magazine, the BC Rare Birds Alert (bcbirdalert.blogspot.com) has reported the following sightings:

- SNOWY PLOVER, Richmond, May 13–14
- MANX SHEARWATER, Ucluelet, May 13
- Three SNOWY PLOVERS, Tofino, April 29–May 13
- KING EIDER in Comox, April 23–24

Advertisers' Licence

The illustration below is a real, untouched, advertisement on the Amazon website for a window-mounted bird feeder. Incredibly, it has been on the site for at least three years, and apparently nobody has disabused the sellers about the illustrations used. You can see the ad at:

www.amazon.ca/Window-Feeder-Through-Removable-Suction/dp/B072N66TWC

Click on some of the other images on that webpage, and you'll find that you can attract terns as well as puffins to your window feeder, as they have also, apparently, given up fish and become seed eaters. We suggest holding off purchase until PetnsN'all™ come up with a larger version, so you will be able to watch albatrosses, too, tuck into your sunflower seeds.

- PARAKEET AUKLETS and MANX SHEARWATER off Tofino, April 10
- PARAKEET AUKLETS off Tofino, April 2
- SHORT-TAILED ALBATROSS and PARAKEET AUKLET off Tofino, March 27
- FERRUGINOUS HAWK near Spider Lake, Vancouver Island, March 26
- WHOOPER SWAN in Vancouver and Richmond, March 17–18

Okanagan Big Day Challenge

This year's Challenge takes place on May 23. It has been an annual event in the Okanagan Valley since 1986, as part of the Meadowlark Nature Festival. Starting at midnight and continuing for 24 hours, teams go birding fossil-free, walking, biking, or just sitting. Bicycle birding teams usually see about 130 species, with a record of 146 to aim at.

Funds raised through pledges go towards bird conservation and research projects, including the Vaseux Lake Bird Observatory. See:

meadowlarkfestival.ca/tickets/okanagan-big-day-challenge/

Vaux's Swift Spectacle

The annual Vaux's Swift spectacle – thousands descending the Courtenay Museum chimney – once again started to attract crowds from the first of May. This is the only known large roost of Vaux's Swifts in BC. Krista Kaptein (Courtenay) reports that 4,586 Swifts – a record – were recorded entering the chimney between 6:00 to 8:20 PM on May 13 in small groups, allowing accurate counts. Volunteer counters will be on site until at least May 26.

It is the sixth year of monitoring, after the roosting first received attention in 2017. The Courtenay Museum has now set up a livestream video at the following address:

www.youtube.com/watch?v=Zj6oXTOgXeY

TIME TO STEP UP !

The Smithers Conference and AGM are fast approaching, and this year three Board members will have completed their maximum allowed six consecutive years. Directors are required to stand down for at least one year after serving six consecutive years on the Board.

It is time for you to step up and add your input and guidance for the future direction of the BCFO.

Members may nominate others or put forward their own name. If putting forward their own name, endorsement from an existing BCFO member is required. Nominations must be received by the Board at least 30 days prior to the scheduled AGM, and so need to be received by 25 May. This has been well publicized by email and on the website.

If no nominations are received, the Board will seek to find suitable candidates from the membership.

The time commitment is not great – typically four meetings per year conducted via Zoom. It is our hope that with new members will come new ideas. Please give some thought to assisting your organization.

Daily Migration Count

The Cornell Lab has a remarkable website giving radar-based measurements of nocturnal bird migration, showing their numbers, direction, speed and altitude. As an example, on the morning of May 11, 2022, you could have found that during the previous night, 78,800 migrating birds had crossed Madison County, Montana, while 3,737,390 birds in total had crossed the state, and since spring migration started, the state had seen a total of 23,857,000 migrants. Charts show such things as nightly average numbers, direction and average altitude. Remarkable indeed.

The live data feed runs from March 1 to June 15, and August 1 to November 15. At present, only US states and counties are included; here's hoping that at some point the system will be extended to Canada.

To find out more, and play with the dashboard, head to

dashboard.birdcast.info

WebShorts

- If you like Wordle and know your birding alpha codes, you just might want to spend some time with BRDL:

  brdl.alex.gd

- A very useful guide to North American owls and their calls:

  www.youtube.com/watch?v=Jzbmj6vuMw8

- For those still clinging to hope about the Ivory-bills:

  www.ecowatch.com/ivory-billed-woodpecker-sightings-extinction.html

- The "fancy ducks" of BC have merited a short film:

  www.cbc.ca/news/canada/british-columbia/fancy-ducks-film-1.6412401

- A pleasing tale of how a Vaux's Swift's chimney was saved:

  www.astonisher.com/archives/ast_swifts.html

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.

NOTE: Because of the ongoing Covid-19 epidemic, many scheduled meetings and events for the next few months have been cancelled, gone virtual, or been postponed. Events which have not yet been cancelled could still be cancelled at a later date. Please be sure to check event websites before you plan to attend or register for any events..

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

For a detailed listing of birding festivals all over North America, please check the Cornell "All About Birds" website at this URL: https://www.allaboutbirds.org/birding-festivals .

At least one event, the Olympic Bird Festival, has apparently been cancelled for 2022.

Events

May 28: BC NATURE annual general meeting, UBC Okanagan campus, Kelowna, BC. For information, see bcnature.org/bc-nature-agm-2022-may-28-2022 .

June 1-July7: 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 CWService website at www.canada.ca/en/environment-climate-change/services/bird-surveys/landbird/north-american-breeding/overview.html.

June 5: First WESTPORT SEABIRDS pelagic birding trip of the summer from Westport, WA. Westport Seabirds will be operating 22 trips in 2022 from June through October. For the trip schedule and other information, see westportseabirds.com. Trip cost is $180 US or $190 by PayPal.

June 9-12: Annual conference of WASHINGTON ORNITHOLOGICAL SOCIETY, Spokane Valley, WA. For information and to register, please visit the WOS website at https://wos.org/annual-conference/current-year .

June 24–26: BC FIELD ORNITHOLOGISTS ANNUAL GENERAL MEETING in Smithers, BC. For details, see pages 5–7 or bcfo.ca/annual-conference-smithers-june-24-26.

June 27-July 2: 140th annual meeting of the AMERICAN ORNITHOLOGICAL SOCIETY in San Juan, Puerto Rico, in conjunction with Birds Caribbean. For details, check americanornithology.org/meetings/annual-meeting .

July 17-20: 103rd annual meeting of the WILSON ORNITHOLOGICAL SOCIETY at Santa Fe, New Mexico. Check the society website at https://wos2022.org.

Sept. 7-11: 46th annual WESTERN FIELD ORNITHOLOGISTS conference, to be held at the Whitney Peak Hotel, Reno, Nevada. For information, visit the WFO website at westernfieldornithologists.org/conference .

Sept. 10-11: PUGET SOUND BIRD FESTIVAL, Edmonds, WA. For information and to register (starting Aug. 1), see www.pugetsoundbirdfest.com or contact Jennifer Leach at the City of Edmonds Parks Dept. (phone 425-771-0227), or email jennifer.leach@edmondswa.gov.

Sept 14-17—Annual meeting of the WESTERN BIRD BANDING ASSOCIATION at the Putah Creek Lodge on the campus of the University of California campus at Davis, CA. For information and to register, please visit the WBBA website at https://www.westernbirdbanding.org .

Oct. 1: BIRDS AND BLUEGRASS FESTIVAL, Ridgefield NWR, Ridgefield, WA (near Vancouver, WA). For information, visit the Friends of Ridgefield website at ridgefield-friends.org/birdfest-bluegrass. A more complete list of events and registration info will be posted sometime this summer.

Oct. 4-9: RAPTOR RESEARCH FOUNDATION annual meeting (jointly with Florida Ornithological Society), Fort Lauderdale, FL, USA. For details see raptorresearchfoundation.org/events/current-conference.

Oct. 10-13: Annual meeting, ASSOCIATION OF FIELD ORNITHOLOGISTS, Plymouth, Massachusetts. For details, visit the AFO website at afonet.org/events .

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

Oct. 24-27: TRUMPETER SWAN SOCIETY, 26th conference, along with 7th International Swan Symposium, Snow King Resort, Jackson, WY, USA. For details see www.trumpeterswansociety.org/what-we-do/symposium-conference

Oct. 31-Nov. 4: 46rd ANNUAL MEETING OF THE WATERBIRD SOCIETY, at the Omni Corpus Christi Hotel, Corpus Christi, Texas. For details, check the society website at https://waterbirds.org/annual-meeting .

Nov. 6-10: Annual conference of THE WILDLIFE SOCIETY, the professional society for wildlife biologists, to be held in Spokane, WA. See wildlife.org/2021-conference

Dec. 14 to Jan. 5 (2023): CHRISTMAS BIRD COUNTS. For information on dates of counts and contact information for count organizers, please check the BCFO website in November and December.

Avian Encounter 1

A Special Loon

Rand Rudland (Halfmoon Bay) posted a particularly interesting note and series of photographs on the sunshinecoast-birding listserv:

"Once in a while you have an interaction in nature that will stick with you for a long time. Today was one of those days.

"John Field had posted photos by Jim Cameron of a Yellow-billed Loon in Pender Harbour. I had attempted to photograph this species – maybe the same bird but I think not – a month or so ago, but unsuccessfully.

"Today I put my kayak just past the bridge to Frances Peninsula and paddled as far as the PODS site, seeing many other loons, grebes, guillemots, etc – but no YBLO. As I was returning and entered Gerrans Bay I noticed a very light large bird in the distance. Approaching this bird it soon became obvious that this was "the bird"! Loons normally are quite skittish, and tend to keep their safe distance from boats, but I noticed that this one was unperturbed by passing motorized boats.

"As I positioned myself upwind, and allowed myself to drift towards the bird it continued to preen, often closing its eyes and apparently resting after a day's foraging. We were in close proximity—under 20m—for much of the time. Eventually I paddled off, leaving the loon to its end-of-day routine.

"The non-breeding plumage is shown well here. Scalloped brownish patterning on the back, small appearing eye, a pale face, and a heavy yellowish bill with a straight culmen (the upper edge of the upper mandible).

"What is unusual about this particular individual is the appearance of the tip of the bill. If you look at this photo (below) you can see that there is a fracture of the right margin of the upper mandible. It may be that this is part of the normal moulting process wherein the bill changes shape during the transition to breeding status, or it may be a traumatic injury, or even a genetic anomaly. Looking over the 290 YBLO observations on iNaturalist it would seem that breeding birds do not have this degree of over-bite? So option #1 may be accurate? Any ideas out there?

"Looking at the left side of the mandible there appears to be the beginning of a similar chip fracture, not nearly as well developed. Regardless, this encounter went on for about an hour, one I will not soon forget."

Avian Encounter 2

Feeder Station to the Rescue

Clive Keen, Prince George

The first big round of northern migration was in full swing on April 19, but then a sudden snow squall dumped six inches of snow in and around Prince George. I was not too surprised to see 72 Dark-eyed Juncos squabbling around my feeder station – Juncos use it often for a snack break, if not in such numbers – but I was delighted to see Gray-crowned Rosy-finches join in for the first time in five years, and startled to see birds that I've never had before on the feeder queuing up to use it.

Robins have in the past been completely disdainful of the feeder, though they've given it a glance, but Hermit and Varied Thrushes have never even given it a sideways look. All three remained regular feeder birds for two days until the snow disappeared. Any port (or cafeteria) in a storm.

Birders receive criticism from some for maintaining bird feeders, but in this instance it was clear that they can serve a life-giving function. The Thrushes must have been desperate for them to do something that is normally so far against their nature.

Photos and back cover by author.

Avian Encounter 3

A Mallard Mystery

Briar Sexton, Vancouver

Photos by Pierre Augereau.

Friends of ours, Pierre and Nonie, live in a home with a big yard in the Shaughnessy neighbourhood of Vancouver, BC. Nonie has lived there for most of her 83 years. She reports that it is very rare that they have mallards in the yard and that usually they just stop overnight. I was excited to see photos of a lone female Mallard on March 23. It looked to our friends like she was nesting.

Watching her over the next few days it became clear that it was classic Mallard nesting behaviour. She nested on dry land by forming a shallow depression in a corner of their garden. She was observed pulling up vegetation. The only thing that made no sense was the lack of nearby water as a food source for Mama Mallard.

On March 26 Pierre sent photos of the eggs in the nest once the bird had left for the night. To our collective chagrin, mama duck did not return until April 4. My theory was that she had laid the eggs too far from any known water source and had abandoned them. But then she turned back up. After that she would arrive each morning and sit on the eggs until about 8:00 PM. During that time she covered the nest with feathers and vegetation. We couldn't really see the eggs even when she wasn't there.

We were all worried that the eggs wouldn't have survived eight days alone followed by the cold, lonely nights. Once it warmed up she cut back even further, nesting from dawn until around 6:00 pm.

I was surprised by this behaviour as my understanding was that most waterfowl sit on their eggs for most of the day. Ducks Unlimited reports female Mallards leave the nest for 1–3 hours per day in short intervals. I couldn't find any reports of mallards leaving their nests overnight. Another really strange behaviour from our duck.

After a few weeks had passed I got curious about the incubation period for Mallards. Once again, I consulted the experts. Ducks Unlimited says it is 28 days on average. Cornell Lab of Ornithology cites 23–30 days. On May 2, I checked in with Pierre. Mama Mallard was still coming and going. I felt sorry for her. Thirty-eight days of effort that I was sure would be wasted.

Imagine my surprise on May 3 when I heard there were at least three ducklings. On May 4, true to form, she started to lead the ducklings towards water. There were eight of them! Pierre and Nonie were afraid to follow them but I am really puzzled about where they were off to. Even a search of Google Earth doesn't readily show as much as a backyard pond. There are lots of swimming pools but I can't imagine any of them are open yet. And they certainly wouldn't have a food source.

My theory is that the duckling embryos developed more slowly because of the long periods of inattention when they would have been at colder temperatures than expected. Somehow, they survived, and they must be eight of the toughest ducklings hatched this year.

Was she a first-time mom? Will she be back next year? And where on earth did she take her babies? Mama Mallard left behind more questions than answers. If anyone reading this has eight ducklings in their backyard pond, that would be the perfect epilogue to the story!

Avian Encounter 4

Capture Captured

Many of us will have seen snowprints from raptor attacks, but rarely one as clear as in this shot, taken by Charles Helm while skiing at Flatbed Creek near Tumbler Ridge.

The scale at the bottom right is ten centimetres, so the wingspan was just under 90 centimetres, indicating that it would have been a Great Horned or Great Gray Owl. There were no tracks of small animals, so the prey item was presumably active beneath the snow.

Briefing 1

Magnetic Attraction

Summary by M. Church, Vancouver

Many migratory songbirds exhibit "philopatry" – they return to the immediate vicinity of their own birth in order to nest and raise their own families. How do they manage this feat of navigation, which may come at the end of a journey of thousands of kilometres? Ornithologists have long suspected that Earth's magnetic field must be involved, but how the birds sense it and how they use the knowledge gained remain somewhat mysterious. A group studying the migration trajectories of Eurasian Reed Warblers has narrowed the focus of the problem by comparing the birds' actual return migration end points with predictions based on aspects of the magnetic field.

These birds nest in Europe and around the Mediterranean, north to southern Scandinavia. They migrate to tropical Africa for the winter. The researchers used records of 17,799 birds ringed between 1940 and 2018 – the identifying ring enabling the birds' movements and sequential nest sites to be inferred from repeated recaptures. They reasoned that the birds could use information of magnetic inclination, declination and/or intensity. Inclination (the dip angle between the magnetic field lines and Earth's surface) yields information about latitude while declination (the angle between the orientation of local magnetic north and true north) can give information about longitude. Independent information of compass flight direction might also be incorporated into estimated flight trajectory. Absolute estimates of a bird's arrival position for nesting can be based on the four indicators taken two at a time, yielding six estimates.

Earth's magnetic field shifts slightly from year to year so, if birds are using magnetic field information with good precision, they ought to return to a site removed by just a kilometre or so from their natal position. The researchers, using records of actual nesting sites as a source from which to draw combinations of position indicators, compiled the difference between the actual and expected nest displacement year on year. One realisation of the latter was derived from the known trajectory of the magnetic field and a test comparison from random draws from the actual nesting records. The least difference, on average, should indicate the information actually being used by the birds.

It turns out that only the combination magnetic inclination and compass bearing brings the birds close to their natal site; the mean difference between the actual return position and the expected one (based on displacement of the magnetic field) is about 6 km. In comparison the actual displacement of the magnetic field in one year is about 1.55 km. All other combinations of magnetic and bearing information yielded results no better than if the birds had chosen their arrival site at random. In fact, they preferred the inclination/bearing result even over the true natal site 6 km away. It appears that the birds select a flight bearing by some means and then use the natal value of the inclination of the magnetic field as a stopping point indicator for arrival in their natal region, if not the exact site. This represents good, if not definitive, evidence for the birds' use of magnetic field information. But the most critical decision must be the flight bearing since any bearing other than the absolutely correct one will not permit the inclination to end the migration near the natal habitat.

Reference

Wynn, J. + 5 others. 2022. Magnetic stop signs signal a European songbird's arrival at the breeding site after migration. *Science* 375: 446-449.

They Too Had Wings and Flew. . .

Looking For Evidence of BC's Pterosaurs

Charles Helm, Tumbler Ridge

During the Mesozoic Era (252–65 million years ago) dinosaurs were the archosaurs of the land, crocodiles were the archosaurs of the lakes and rivers, and pterosaurs were the archosaurs of the skies. At the end of the Era some dinosaurs went extinct (we watch the descendants of the survivors at our feeders and in our forests with binoculars) and so did all the pterosaurs. Crocs, fortunately, survived and are still with us in a recognizably similar form.

There are reasons why pterosaurs have not kept up with dinosaurs (including birds) in terms of being found in our province. First is that their body fossils are relatively rare globally, which is probably related to their bones being light and hollow (to help enable flight) and thus not fossilising and preserving well. Second is that until relatively recently we did not fully understand what their tracks and traces looked like: the first pterosaur trackway was identified by William Lee Stokes in 1957, but until the 1990s controversy raged as an alternative viewpoint incorrectly postulated a crocodile trackmaker.

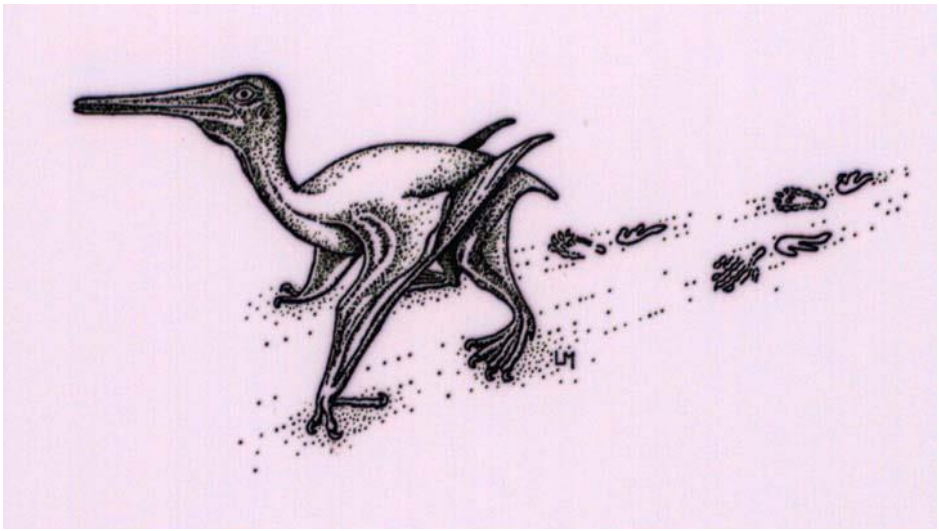
I appreciate that this is BC Birding, *not* BC Pterosauring, *but our editor has graciously allowed me to write about the quest for BC's pterosaurs, on the basis that they too had wings and flew* – Charles Helm

Third is that we have had a couple of false starts in BC. What seemed to be a very promising pterosaur jaw with loads of teeth from Hornby Island turned out to be that of a fish (although nearby finds indeed feature the bones of small pterosaurs, including a humerus, dorsal vertebrae, and other fragments) . And an early claim to have found the first pterosaur tracks in BC (in the southeast) is less than compelling and may have been premature.

In contrast, our neighbours to the east, north and south have been racking up evidence of pterosaurs. To the east, in Alberta, among all the dinosaur discoveries there have nonetheless been a few sparse finds of pterosaur bones, and two papers published in recent years have reported the tracks of large pterosaurs from the Late Cretaceous in the province's northwest (not too far from the BC border). To the north, in Alaska, a moderately large pterosaur track was reported from the Late Cretaceous in 2009. And to the south, well, yes, it is a much larger area, but the USA lays claim to many pterosaur body fossils, tracks and traces. We in BC can therefore be forgiven for feeling squeezed out, perhaps even a touch embarrassed.

Above: Digits I, II and II are annotated in this right "hand" track; a much fainter right "foot" track is visible ahead of it.

Below: Artist's reconstruction of the quadrupedal pterosaur gait, showing deeply impressed "hand" impressions.



How, then can we address this deficiency and restore our province's good name? First, we need to be looking in sedimentary deposits of the right age (the first pterosaurs in North America seem to appear towards the end of the Jurassic, and persist through the Cretaceous), and we can concentrate our search in areas that are known to have yielded body fossils and tracks. For body fossils, let us hope that the palaeontologists engaged in studying the material on Hornby Island deliver a "pterosaur special."

For tracks and traces, we can cast the net wider and look for evidence in

our province's southeast and northeast. In these areas there are extensive exposures of sedimentary Mesozoic rocks, and they have provided abundant evidence of the creatures that walked across these surfaces when they were unconsolidated, and left evidence of the passage.

First, however, we need to know what we are looking for. This is where things become rather counter-intuitive, because our starting point may be our biased viewpoint that results from our familiarity with birds.

It turns out that pterosaur tracks and traces mostly come in two distinct flavours. When walking they were quadrupedal (not bipedal as in birds) and tended to put more weight on their strong forelimbs than their rather puny hindlimbs (Figure 1). 'Hand' tracks were therefore more deeply impressed than 'foot' tracks, and consequently many tracksites have been described that only exhibit pterosaur 'hand' tracks. Typically these take the form of three-digit tracks in which the third digit impression is substantially longer than the second, which is longer than the first (Figure 2). This characteristic pattern is quite different from that of other trackmakers such as dinosaurs, turtles or crocodiles. And when pterosaurs entered shallow bodies of water and swam, if the water depth approximated the length of their hindlimbs the tips of their feet would scrape against the bottom, creating 'swim traces'. Typically these are very long and parallel, in sets of four, in which the middle two traces (made by the second and third digits) are a bit longer than those made by the first and fourth digits (Figure 3).

Armed with this knowledge, we simply need to go out into the field and keep our eyes open. Angled sunlight is optimal, and grey days are unlikely to be productive, unless a bright light is used to illuminate surfaces from an angle.

Pterosaurs are supremely cool. They were the earliest and largest flying vertebrates. It has recently been established that they not only sported feathers, but that they could change the colours of these feathers. They also had a remarkable size range: some had a wingspan of as much as 11 metres, whereas the tracks of others were less than 3 cm in length.

We can maybe dream of the day when enough examples and species of pterosaurs have been found in BC to justify holding a referendum to appoint our provincial pterosaur. A subsequent article will cover details of the search, and what has been discovered so far.

Above: Typical pterosaur swim traces; scale bar is in cm.
All images are reproduced with permission from Dr Martin Lockley, University of Colorado.

Briefing 2

Local Migrants

Summary and additional material by M. Church, Vancouver

Dark-eyed Juncos are commonly considered to be seasonal migrants that spend their summers in Canada and their winters in the U.S.A. – "snowbirds," so to speak. Populations in the Appalachians and the mountain west, however, do not undertake such a long-distance change of scenery. They are short-range "habitat migrants," moving from the mountain slopes in summer to nearby valleys in winter – or mostly so.

About 40 years ago, observers in San Diego, California, noticed that Juncos at the University of California campus were staying year-round, and breeding there. Over time this has prompted modifications in both the birds' appearance and habits. Plumage has become more subdued with less intensely black heads and lesser white tail flashes. They have also become less mutually aggressive and more often monogamous. Juncos are normally ground nesters, but the stay-at-homes have moved nest sites to better protected places in trees and on buildings. Males have raised the pitch of their song, probably in an effort to overcome urban noise. While the country breeders raise one clutch per year, or perhaps two, the urban immigrants are apt to have as many as four clutches. Consequently, the urban population might grow more quickly, but mortality is also higher amongst urban birds (in general) and urban populations appear to reach an equilibrium size fairly quickly.

The phenomenon is not restricted to San Diego. In Bloomington, Indiana, part of the wintering "Canadian" population appears to have decided not to renew its Canadian passports and has become sedentary. In both these cases researchers have detected genetic changes in the non-migrants that promote less aggressive behaviour and modified plumage and song.

We can add a further case to this history. In Vancouver, Juncos typically winter in city gardens and then, in summer, move into the Coast Mountains to nest and raise their families. Except that some of them now stay, instead, in the more leafy parts of the city and raise their young. At UBC, some simply displace themselves from the university campus into the adjacent Pacific Spirit Park. Around the campus, males are heard giving their distinctive trill starting in late winter. Whether climate change has anything to do with this adaptation, amongst a subset of Juncos, from migrant to resident species remains to be seen.

Reference (for San Diego case)

Vance, E. 2020. Dark-eyed juncos in San Diego ditch migration. *Living Bird* 39(1): 24-5.

Welcome to BC

Josh Yiu, Surrey

(Note: Josh Yiu is an 11th grade student who recently joined BCFO as a junior member. He has been a birder since he was five.)

When my family and I moved to Canada from halfway across the globe, I was prepared for unfamiliarity of all sorts. The people were different, the food was different, and even the trees were nothing like the dark, vine-laced trees of the tropics that I was so accustomed to while living in South East Asia. Instead of the hot, humid summers I was so used to, there was rain, rain, and more rain. I soon came to realize that the birds were just as unfamiliar.

Familiarizing myself with the locals was an arduous and uncomfortable (but eventually rewarding) process. In place of mynas and bulbuls were robins and finches. In place of Black Kites were eagles and Red-tailed Hawks. Over time, I began to feel a greater sense of belonging among the now-recognizable residents of BC. I soon came to realize, however, that the faces I saw as a child were still the most familiar to me.

While I seldom paid much attention to the ever-present ducks I saw on a daily basis, a particular group caught my eye one December evening. It was at the start of a relaxing winter break when my family and I stopped by the beach on our way home. In the distance I saw a group of what appeared to be wigeons before I took a closer look. Among the local American Wigeons were Eurasian ones and, upon further inspection, was a possible hybrid. I felt a sudden sense of familiarity, having seen a duck I had seen all my life in a place still unknown and uncomfortable. I recall being quite surprised at what I saw but also recall feeling a sense of relief. It was nice to see them fit in so naturally with the other wigeons, as if they did not even notice their differences. In them I saw myself, and hoped to feel that level of interconnection and comfort in the place I was beginning to call home. It also didn't hurt that the sun was just beginning to set, making for ideal lighting conditions for the kind of photos I like to take.

I think that the results came out quite nicely and the photos still give me a sense of peace and comfort. I had not even noticed the possible hybrid until I looked over the photos later that week and was very surprised when I saw it. The entire experience reminded me of how connected the world is (especially for birds) and reminded me to appreciate the local wildlife while I am able to. As I become more and more familiar with the residents of BC, I hope to be able to know and care for them as much as I did for the birds back home.

Wigeon photos by Josh Yiu.

Briefing 4

Summary and commentary by M. Church, Vancouver

More on the "Colourfulness" of Birds

. . . and the geographic distribution of avian colourfulness. We have tackled this problem before (see "Those little green and yellow jobs", *BC Birding* 26(1): 32-33 (March, 2016), in which we thought about the colours of our warblers). Why the colours of birds' plumage is the way it is, and why patterns of colour and colourfulness vary geographically is a classic problem in ornithology. The problem attracted the attention of Humboldt, Darwin and Wallace – the 19th century founders of modern biogeography (and much else). The history of study provides an example of how science makes progress. It has largely depended on improvements in the definition of colourfulness and the means to measure it.

In our 2016 discussion, colourfulness in Part 1 was defined as dichromatism (made up of two principal colours) and it was "measured" subjectively by having observers examine bird colours in illustrated guide books. The assessment (strong → weak) was highly consistent amongst observers but nonetheless subjective. In Part 2 of that discussion colourfulness was measured using an optical test instrument to measure the colour intensity on a red-green-blue scale at three points on the crown and neck and three points on the throat and breast where plumage patches tend to be distinct. The 5,983 passerines were studied, again from illustrations. A new study has measured colourfulness on the RGB scale in visible and UV light (birds see ultraviolet wavelengths) by scanning dorsal, lateral and ventral photos of museum examples of 4,527 passerines. 500 points were sampled from each view, for 1,500 measurements of colour variation for each bird. A total of 24,000 preserved carcasses were sampled, yielding over 36 million measurements. The measurements, summarizing the total variation of bird colour, were reduced to two comparative measures: the volume enclosed by the colour samples in a tetrahedral (RBGU) sample space and the number of distinct colours sampled per species. These measures, then, defined colourfulness, which essentially is now the range of colours and their hues exhibited by a bird.

Successive studies have, then, focused progressively more closely on faithful representations of bird pelage colours and have employed increasingly objective and detailed measurements of bird colour. But the descriptive outcomes have not changed. The most colourful birds are found in the tropics; indeed, there is a recognizably regular decline in colour variation in birds as one moves toward the poles. And long-distance migrants (our original "little green and yellow jobs" – fall warblers) tend to be strongly dimorphic between male and female. The reasons for these striking variations are still argued over.

The present study is notable for its demonstration of an almost strict latitudinal variation in colourfulness of birds, for demonstrating a rough but clear covariation in male and female colour variation within species, and for noting that benign tropical environments promote elevated colourfulness due to lesser evolutionary constraints on plumage colouration than those imposed by the harsh environmental conditions that occur poleward and in deserts. The researchers determined that male and female colourfulness scores are consistently and positively associated with precipitation and net primary productivity; species are, on average, more colourful in wetter, more productive areas (read tropical rainforests). Finally, species that occupy closed forest habitats and those that forage on food resources that require robust defense and/or lead to carotenoid intake (i.e., frugivores and nectarivores) generally are more colourful. It is a bit of a surprise, then, that the most colourful of all passerines, the Paradise Tanager and the least colourful, Crested Black Tyrant, are both tropical to sub-tropical birds found in Brazil and its borderlands, and both are listed as threatened (least concern) by IUCN.

Reference

Cooney, C.R. + 8 others. 2022. Latitudinal gradients in avian colourfulness. *Nature ecology and evolution*. https://doi.org/10.1038/s41559-022-01714-1.

Iona Treat for a Young Birder

Evan Harlos

On April 18 when I went to Iona, a rare treat (photograph below) was waiting. On our way home from a walk on the Iona spit, in a tree close to the airport, a Rough-legged Hawk was watching us. Soon we saw it – a light morph. At first we did not know what it was, but its light colouring, small beak and rounded wings gave it away. It watched us for about ten minutes then flew off. We had seen the hawk just off the mudflats. Knowing it was a hawk of open country we thought of it right away. Being nine years old I was very excited!

BC Coast Birdwatch

The latest *British Columbia Coast Bird-Watch* newsletter can now be seen and downloaded at:

www.birdscanada.org/bccws_newsletters

This annual publication is chock full of information about the BC coastal projects of Birds Canada. Articles include summaries of their waterbird and beached bird surveys, and updates on projects such as Dunlin tracking in the Fraser Estuary, and on the habitat of Surf Scoters off West Vancouver. Larophiles might also rejoice in the nicely illustrated four-page article on identifying BC's hybrid and juvenile gulls. Even larophobes can look on and admire the tenacity of those reporting their numbers.

An example of one of the reports is given below, in abbreviated form.

Coastal Waterbird Survey 2020-21

The 2020-2021 season marked 22 years of the Coastal Waterbird Survey. In the 2020-2021 season, 162 surveyors (and their assistants) did more than 1,500 surveys at 210 sites across BC. 110 target species (waterbirds, raptors, and corvids) were detected between September and April. Some highlights (uncommon birds or rarities) from the season include: Brown Pelican, Sandhill Crane, Great Egret, Tundra Swan, Tufted Duck, Ruddy Duck, Redhead, Yellow-billed Loon, Clark's Grebe, Franklin's Gull, Glaucous Gull, Red Phalarope, American Golden-Plover, Pacific Golden-Plover, Ruddy Turnstone, Willet, Red Knot, Pectoral Sandpiper, Rock Sandpiper, Spotted Redshank, and Golden Eagle. Note that an unusual irruption of shearwaters (Sooty and Short-tailed) has been observed in coastal waters, starting mid-summer in 2021; this rare phenomenon is already being reflected in the 2021-2022 data.

The results of our 20-year trend analysis can be found at:

www.birdscanada.org/bird-science/british-columbia-coastal-waterbird-survey/coastal_results/

Additional research is needed to fully understand how various pressures can affect waterbird abundance and distribution, including dredging, pollutants, fishing, shipping activity and climate change.

Here are some interesting new results. In collaboration with Birds Canada, the Canadian Wildlife Service (CWS) conducted an analysis to determine whether habitat-based conservation actions implemented along the BC coast have affected occupancy of over-wintering bird species. Considering 65 species that include target waterfowl, as well as shorebirds, alcids and raptors, CWS analyzed changes in the probability of occupancy in response to conservation actions implemented by the Pacific Birds Habitat Joint Ventures – BC partners and funded by Environment and Climate Change Canada (ECCC). Dynamic (multi-year) occupancy models were fitted using our Coastal Waterbird Survey dataset, consisting of 240 routes distributed within the Salish Sea, west Vancouver Island and North Coast regions.

Preliminary analysis shows that in response to habitat conservation actions, 13 species exhibited improved site colonization rates and an additional 10 species had reduced site extinction rates. Colonization rate refers to the arrival of individuals to areas of suitable habitat that are currently uninhabited, whereas extinction rate refers to the opposite (departure of individuals). Species exhibiting greater colonization rates included mostly dabbling ducks or goose species, but also shorebirds (e.g., Sanderling, Greater Yellowlegs), gulls (e.g., Ring-billed Gull) and raptors. Declining extinction rates were largely observed in non-target species, such as Great Blue Heron, Black Turnstone and Dunlin. Ten species with improved colonization rates and seven species with reduced extinction rates in response to habitat conservation actions are also experiencing a decrease in the proportion of sites occupied across the entire study area. These results suggest that conservation sites with ECCC investment are potentially acting as a refuge and/or a buffer against declining occupancy rates within the larger metapopulation.

If you, or someone you know, may be interested in helping monitor BC's coastal birds, please email Rémi Torrenta at bcvolunteer@birdscanada.org.

Anyone regularly walking along BC's beaches might also be interested in taking part in the beached bird survey: one of the best methods for detecting marine species die-offs, oilings, and other environmental issues along the coast.

BRITISH COLUMBIA Beached Bird Survey

Where Have All the Goshawks Gone?

Frank Doyle and Amanita Coosemans, Goshawk Researchers and Ecologists in NW BC.

Back in 1996 I was invited to BC to work on the Northern Goshawk, a bird that breeds and hunts on a wide range of prey (mid-sized forest birds and mammals) within our mature and old growth forests, from coast to treeline. This bird was of focal interest, as it was a common hawk regularly encountered in our forest, and as a year-round resident it was seen as excellent indicator species of forest ecosystem health: that is, if we can maintain a healthy population of goshawks, then we can be sure that we are maintaining biodiversity and intact forest ecosystems.

The impetus for the work I was invited to do was the presence of two active nests in the Kispiox and Cranberry Watersheds east and north of Hazelton in NW BC: concerned loggers had discovered their nests during harvest, and wanted to know how much forest the birds needed, and when could they start harvest again, such that they did not cause the nests to fail.

Over the next 26 years, I and several colleagues have worked diligently on this species across BC, including nest monitoring, identification of home range area, timing of breeding, and, focally, how much can we harvest and still maintain the birds in the landscape. Core to this knowledge is that, throughout intact natural forested landscapes, pairs of goshawks are regularly spaced every ~ 4–6km. They nest away from the forest edge in mature old growth stands, where their large stick nest is typically located against the truck and hidden beneath the canopy. Here they will nest in the same location (100 – 200ha area) for generations of goshawks, until that breeding area is lost to natural disturbance, or is logged. To sustain breeding they need a very large territory—about 4–6 thousand hectares in area that is primarily dominated by mature or old forest (>80 years of age interior forests and >40–50 years coastal forests).

One of the toughest challenges was for us to understand at the territory scale (home range foraging area) just how much intact mature/old growth forest did the birds need? Only with time and monitoring did we start to realize that the bird's fidelity to its own territory was such that, after harvest of too much suitable forest, it may be 5-6 years before a pair would abandon (or die), and the territory would no longer support breeding goshawks. Unfortunately, as our forests across much of central and northern BC have been harvested, what we have observed is a dramatic decline in the number of known occupied territories across the region, with a near 95% decline in the past 20 years. As our "canary" in the forest, the goshawk has shown that the area and rate of harvest — in particular clear-cut harvest — is too much, too fast: it does not allow us to maintain a healthy population of this "Phantom of the Forest," and, by connection, the wide range of species on which they rely, or which share their habitat. In harsh facts, even clear-cut harvesting just 20% of a goshawk's territory within <60-year period, has, in BC's interior, resulted in the majority of territories being abandoned. Regenerated clear-cut harvested stands ("tree farms") do not provide the hunting perches the hawks require, and the dense crop of young trees does not allow the hawks to see and access prey.

As a result, across large tracts of Beautiful BC where there were once thousands of pairs of goshawks, now we are looking at just hundreds or less. We are now working collectively to try to find ways to ensure that the birds are not lost entirely from large areas of our landscape. Unfortunately, it will take far more than just protecting the nest and the small 100–200 ha breeding area (a quick flap and a glide for a travelling goshawk). IF we are to go down this path, then we need to manage that large goshawk territory – its foraging habitat. Within the territory areas, we need to reduce the area and rate of harvest and/or we need to change how we harvest, as we know that partial harvest systems that retain forest structure can retain both ecosystem function and goshawks. These partial harvest systems were common some 25 years ago; maybe they should become common in some areas again? We must make those choices now, for goshawks and the biodiversity on which they depend.

This knowledge is shared with you as our legacy to BC. Currently there is no legislation that will protect a goshawk's territorial needs. If you want to help to make a difference and knowing that all forests were once home to goshawks, then you need to ask the hard questions of landscape managers in your world. Now we have answered the loggers' question: what are your plans for goshawks? What areas are you managing such that they will support a pair of goshawks and the diversity of prey they require? AND, please report nests to the government, local land managers and the First Nations of that area: If you don't report the presence of the hawks, they and their landscape can't be managed to ensure the birds still have a home.

Below: an adult female Goshawk, photographed by Cameron Eckert.

Bird Photographers' Corner

Easy Exposure Compensation

Clive Keen, Prince George

The basic exposure-metering system of today's cameras works beautifully much of the time, but it can cause problems in bird photography. A bird against a bright grey sky, for instance, will be substantially underexposed if you leave things to the camera. Similarly, close-ups of corvids will be overexposed, and egrets underexposed, because basic metering tries to balance things to the equivalent of mid grey. You might be able to undo some of the damage in post-processing if you shoot RAW (which you should do *always*), but you will lose some dynamic range and detail, and perhaps pick up some unpleasant noise. Colours, too, may shift: see the Black (!) Guan to the right.

Tweaking exposure is therefore one of the most-needed techniques in bird photography. Usually, though, it requires pressing the +/- button and at the same time turning a dial – and inevitably taking your eye from the viewfinder to get it right. If you have plenty of time to compose the shot, all will be well. If you have to act quickly, though, all will not be at all well.

This is where the "easy exposure compensation" option in many cameras steps in, allowing you to dial in exposure compensation with your thumb alone, without having to touch the +/- button or take your eye from the viewfinder. On Nikons, this has been an option for at least a decade, showing up on menus at B2, B3 or B4. All that is needed is to "enable" the function. It is particularly valuable with electronic viewfinders, as it allows both instant exposure correction and visual confirmation that you have the exposure right, all without taking your eye from the viewfinder. When you're dealing with a flighty bird, it can make all the difference between a winner and a memory of what might have been.

A classic case of potential underexposure: bird against bright grey sky.

Above: The matrix-metering in my Nikon Z7 ii, as with all cameras using similar settings, would have delivered a seriously underexposed image. Fortunately, the WYSIWYG electronic viewfinder gave clear warning of the underexposure, allowing me to add two full stops of exposure compensation and get the best out of this Great Gray Owl encounter. The photo would easily blow up to 13 × 19 inches and beyond.

An equally classic case of potential overexposure: close-up of dark bird.

Above: Taken this time with a Nikon D7100, the DSLR viewfinder could give no warning that the frame-filling Black Guan would be seriously overexposed, so I shot away regardless. The image has been partially rescued in post-processing, but since it was at least two stops overexposed, remains a candidate for the delete button. At a small size it might not seem too bad, but at larger sizes the defects of the shot would be only too obvious.

Great Gray Owl and Black Guan photos by author.

Featured Species No.17

Varied Thrush (*Ixoreus naevius*)

Adrian Dorst, Tofino

Status: Common in spring, fall, and winter. Uncommon in summer. Breeds.

This handsome thrush superficially resembles an American Robin but is smaller and has a band across the breast, and males have a slate-blue back. The wings are barred. It is restricted to the forests and mountains of the west. Its breeding range extends from western Alberta to the Pacific Ocean and up to the Yukon, western Northwest Territories, and most of Alaska. In the United States, it is found from western Montana and Idaho to Washington, western Oregon, and the northwestern part of California. In British Columbia, the species nests throughout most of the province, with the exception of the northeast and possibly the north-central region. It is most abundant during the breeding season in the southern one-third of the province, including Vancouver Island and on Haida Gwaii.

On Vancouver Island's west coast, Varied Thrushes are a common wintering bird on roadsides, in backyards, and in places where red alders grow. They spend much time at these locations turning over fallen leaves with their bills to expose food underneath. In fall, there is very little migratory movement evident even in October. Among 200 records in my files, I found only two October dates. By November, birds are being seen much more frequently, and they continue to be seen throughout the winter until late April or early May, when they depart for their nesting territories. On Brooks Peninsula, small numbers can be seen foraging along upper beaches near forest edges and in mixed forests in all months except December.

On occasion, Varied Thrushes may be seen in considerable numbers, and nowhere more so than on Stubbs Island, near Tofino, where these birds feed on the berries of California wax-myrtle (*Myrica californica*). On 18 December 1983, an estimated 125 birds were present, and on 22 November 1996, 105 birds. In recent years, numbers were lower, but 41 birds were recorded on 3 January 2010.

For a brief period in spring, numbers in our region swell; perhaps local birds are joined by others from further south. At the Long Beach Golf Course, where a winter walk might produce 7 Varied Thrushes, an April walk is likely to produce twice that number. An influx of birds was witnessed on 14 April 2011, when a walk at both the airport and the golf course produced a combined total 93 birds. Many of those were seen in flight, arriving from the south. On 17 March 2012, 22 birds were counted at the golf course.

In summer, this thrush is often hard to find. However, singing males have been heard during the breeding season at a number of locations, including islands very near Tofino. On 5 July 1999, a male was heard singing on the south side of Vargas Island, and on 29 June 2000 and July 2015, at Sydney Inlet. Most notably, on 21 June 2008, Varied Thrushes were heard singing at four locations near Tofino: Morpheus Island, Neilson Island, and two locations on Meares Island. A week earlier, one had been heard singing on Vargas Island as well. It is interesting to note that birds are not heard at these locations every year.

A nest containing three young was found at the Long Beach campground on 5 June 1969. In that same account, David Hatler recounts finding three old nests in the Bedwell River valley in 1970, and seeing an adult feeding three fledged young on Vargas Island in 1968. Nesting has also been recorded near Bamfield, Zeballos, and Port Alice (BCNRS).

Note

This is an extract from Adrian Dorst's *The Birds of Vancouver Island's West Coast*, UBC Press, which covers 360 species in its 550 pages. The book can be ordered at ubcpress.ca. Photo by author.

Below: A Varied Thrush enjoys the winter sun on Lismer Beach. Photo by author

Briefing 4

Heavy Problem

Summary and comments by M. Church, Vancouver

Lead – the most common non-essential heavy metal in Earth's crust, and in firearm ammunition. It also escapes from a variety of industrial processes. Altogether, lead is a common, human-released environmental poison. It is well known that lead shot and bullet fragments poison wildlife that take up the expended metal from the abandoned remains of animal kills, from contaminated kills made by the victim, or directly from the environment. Documented effects of exposure to lead in birds include neurological dysfunction, immune suppression, reproductive impairment and death. But how important is it today? Does it impose distinct trends on animal survival? Two new American studies of the effects on eagles and a comparison with some Canadian data reveal some aspects of the problem.

In a compilation of data from 38 American states Slabe et al. (2022) reported statistics of lead exposure in Bald and Golden Eagles – the two North American eagles. Data were gathered from pathology reports for dead birds (343 Bald; 270 Golden) and tissue/blood samples from live birds (237B; 383G) for the period 2010 – 2018. Both species suffered from DDT and other poisonings in the 20th century but have now substantially recovered following the banning of that product in the 1970s. The year 2,010 also comfortably postdates the general abolition of the use of lead in paint products, plumbing (!) and gasoline (by 1996). So the contemporary sources of lead in the environment are now ammunition fired by hunters and lead sinkers used by fishers.

Of 448 dead birds, virtually half (47% Bald/46% Golden) had bone concentrations of lead >10 micrograms/gram, indicative of "clinical poisoning." Adult birds typically had higher lead concentrations than juveniles (year 1) or sub-adults (years 2–5). Dividing the sample according to the four great continental flyways (Atlantic; Mississippi; Prairie (Central); and Pacific), the western two flyways on average exhibited toxic levels, the eastern two, sub-toxic levels, but only in Bald Eagles. Lead concentrations were higher, on average, in both species in autumn and winter, the hunting seasons and, for the birds, the time when they survive mainly by scavenging dead carcasses. Using liver lead assays, veterinary pathologists determined that fatal lead poisoning occurred in 5% of dead Golden Eagles and 26% of Bald Eagles. These levels of presumably premature death are sufficient to depress population growth rate in Bald Eagles by 2.5 – 5.4% (the range arises from the statistical nature of the estimated effect), and by 0.7 – 0.9% in Golden Eagles.

These results point to some underlying reasons for the pattern of poisoning. The differential rate of poisoning of Bald Eagles in the western (mainly Prairie) flyways suggests that Bald Eagles scavenge more than Golden Eagles. It may also indicate that hunting is more concentrated near water (for waterfowl), the preferred habitat of Bald Eagles, while Golden Eagles prefer the less intensively hunted uplands. The overall increase of lead in bird bone and tissue with age indicates continual exposure to lead. That effect appears to be continent-wide and ascribable virtually entirely to lead in the environment derived from field sports (hunting; secondarily, fishing).

A more locally focused study (Hanley et al., 2022) examined instances of lead poisoning in Bald Eagles in the New England states (including also New York and New Jersey but not Rhode Island) over the years 1990–2018 (i.e., the period postdating the banning of the most dangerous industrial sources of environmental lead). The recorded number of breeding pairs of eagles in the region rose over the period from 147 to 1497 (i.e., by 10×). But at least 1,232 dead or dying eagles were recovered in the period; 30.6% of these eagles carried detectable levels of lead; 11.3% exceeded the lead toxicity threshold. Statistical comparisons showed that differences in long-term growth rates exist between eagle cohorts. Lead-toxicity deaths were associated with a reduction in the median long-term growth rate in numbers of female eagles by 4.2%, while for male eagles 6.3%. Further, there were differences in annual survival between cohorts: lead was associated with a decrease in the median annual survival for female and male hatchlings and a decrease in median annual survival for female and male breeders, but an increase for female and male non-breeders (mainly juveniles).

In comparison, a hypothetical population of eagles that lives in a lead-free environment can maintain population numbers despite an annual survival probability as low as 75% (or mortality up to 25%) of female hatchlings, as low as 80% (or mortality up to 20%) for female non-breeders, or a probability as low as 83% (or mortality up to 17%) for female breeders. The New England Bald Eagle population appears to be safely expanding despite the lead but the effect has been to suppress the rate of population expansion.

In contrast to the growing American populations, a 10-year old study of Bald Eagle population on the southern British Columbia coast (Elliott et al., 2011) reported apparently stable populations in the first decade of this century, with a breeding population of about 12,000 birds and a winter population as high as 30,000. Significant sources of toxicity in the environment (DDT; PCBs; industrial lead) were banned in Canada in the later 20th century. Lead is also banned from use to hunt migratory game birds (including waterfowl) in Canada and the U.S., though not other upland quarry (and, arguably, not eagles). Nonetheless, mortality was largely associated with late winter food scarcity – that is, after the salmon runs have ended (December). Hence the stability of the population was ascribed to late winter food limitation; hunting-related pressure was considered to be, comparatively, relatively minor.

Contrasts in these studies suggest further possible population effects. Upland dwelling Golden Eagles appear to be less stressed by environmental toxins than water-oriented Bald Eagles. Higher rates of toxicity in the west probably reflect more intense hunting activity in the less densely settled portion of the continent. And the contrast in population status between Canada and America possibly reflects a difference in the intensity of gun-related field sports between the two countries. These are hypotheses that might benefit from further study.

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Gone Fishing

Little-Known Warbler of the Northeast

Chris Siddle

Ten years ago the 200th anniversary of the scientific discovery of the Connecticut Warbler passed, as far as I know, uncelebrated, even unmarked by anyone in the birding community. During the autumn of 1812 one of the fathers of American ornithology, Alexander Wilson, the immigrant sometime-school teacher from Scotland, determined to describe all of the birds of his new homeland, the United States, collected a specimen of a large, furtive warbler, and named it for the state he had shot it in. Since that day, remarkably little knowledge has been uncovered about the Connecticut Warbler's biology. In spite of an army of birders carrying an array of technically advanced optics and communications devices, despite eBird, *Handbook of Birds of the World*, and BNA Online, *Oporonis agilis*, the "agile autumn bird" (Gruson 1972), remains an obscure, little-known forest species.

We *have* learned that the Connecticut has a loud, rollicking song, sung in a voice somewhat reminiscent of the voice of an Ovenbird or a waterthrush. The authors of the *The Warbler Guide* present sonograms of three song variations and summarise the species' song as "1 section of 3- or 4-element phrases repeated 3 or 4 times (only shared with Common Yellowthroat); irregular, jerky, percussive rhythm… [with a] staccato, emphatic quality." I like to transcribe the typical song as a fast, loud ringing "chippy chuppy, chippy chuppy, chippy chuppy" which is unlike the song of any other North American warbler.

We have also determined that the Connecticut Warbler is a long-distance migrant that crosses the Gulf of Mexico via the West Indies on its way to and from its wintering grounds somewhere in South America. Exactly where its wintering range occurs is poorly known. There's an odd 2,000 km gap between known wintering sites in northern South America and wintering sites in Amazonian Brazil. It could be that the birds collected in the northern part of the southern continent were mostly late autumn migrants, and the Connecticut Warbler spends the winter in a region of Amazonia where oddly enough it is the only North American migrant in the neighbourhood. All of the other birds are resident tropical species.

The Connecticut Warbler has revealed to us only the most basic information about its breeding biology. Over 70 years passed between the collecting of the first specimen known to science and the discovery of the first nest. In 1883 Ernest Thompson Seton, later to gain fame as a popular writer of animal stories and one of the founders of the America Boy Scouts movement, happened to see a small brown bird flush from a mossy mound in a tamarack swamp near Carberry, Manitoba. Like several other New World Warblers the Connecticut nests on the ground, often in a hummock. Seton's discovery, though pleasing to Seton, did not open the flood gates of scientific enquiry concerning the Connecticut Warbler. Safe from spying ornithologists in its mosquito-loud northern forests, the Connecticut Warbler remained obscure. Forty years later in the 1920s, two or three more nests were found, this time near Belvedere, Alberta, but the discoveries didn't clarify a thing. From the discovery of a few more nests over the years to the present, even the most basic information remains to be discovered about this warbler. A single 1961 study conducted by Lawrence Walkinshaw and William Dyer, based on a single nest in Michigan, has remained the source of most information regarding the bird's reproduction but it makes for pretty thin reading. *The Birds of North America Online* account, which sums up most of what science knows about the species is still full of words like "unknown," and phrases such as "further study is required."

Is it little wonder that American birders often "need" Connecticut Warbler on their life lists? The bird migrates very late in spring, often well after almost all other warblers have already started nesting. As Pete Dunne writes in *Pete Dunne's Essential Field Guide Companion* (2006) "Running from one to two weeks behind the flood of most warblers, Connecticut Warblers arrive in Florida from early to late May and reach breeding grounds in late May to mid-June." This inconvenient schedule means birders at places like Point Pelee and other migration spots are too early to find Connecticuts. Many Americans see or hear their first Connecticut Warblers on special June excursions to northern Minnesota, Michigan or Wisconsin, the only states where the bird breeds within the contiguous United States. With the remaining 90% of its breeding range sprawling in an arc from southwest Quebec northwestwards

Connecticut Warbler – Wikipedia photograph.

across Ontario, through the central parts of the prairie provinces and northeastern BC, the Connecticut Warbler still requires birders living across southern Canada to make special excursions into the southern boreal forest to find it. In BC, the majority of birders live around Vancouver and Victoria. For them to add the Connecticut Warbler to their provincial lists, they must travel to terra incognita, the Peace River area.

The Peace River country was the first and last area of the province to be colonialized by white people. The area was so poorly known biologically that the first detailed survey of its birdlife didn't take place until 1938, decades after the basic avifauna of southwestern BC was known. And it was in the forests of The Peace, of course, that the Connecticut Warbler had been living since at least the last ice age, a fact that wasn't even hinted at until almost mid century.

In May 1938 the BC Provincial Museum sent young biologist Ian McTaggert Cowan and an assistant, Patrick W. Martin, by truck from Victoria to Tupper Creek at the south end of Swan Lake south of Dawson Creek. Their purpose was to survey the vertebrate fauna of the Peace River Block, as it was then known. Cowan and Martin set up camp on the west side of Swan Lake on May 5, 1938. They collected and made observations from this camp until June 8 when they moved about 100 kms northwards to the south end of Charlie Lake near Fort St. John. On June 19 they returned to Tupper Creek where they remained until June 30 when they left for Victoria.

Cowan and Martin's surveys of the Peace River area, published in the provincial museum's first occasional paper (1939), added several species of birds previously unrecorded to the British Columbian list including Franklin's Gull, Philadelphia Vireo, Black-and-white Warbler, Bay-breasted Warbler, Cape May Warbler, Ovenbird, Rose-breasted Grosbeak, Common Grackle, Le Conte's Sparrow, and Nelson's Sparrow, all now known to occur regularly in the Peace River area. They were also the first biologists to discover the Connecticut Warbler within the political boundaries of the province.

On June 22, 1938 Cowan and Martin shot the first Connecticut Warbler ever recorded in British Columbia. The bird was a male singing every 50–55 seconds in a grove of young aspens "below an open stand of large poplars, aspens and white spruce." (p.50) On June 24 about half a mile away another male was singing in climax aspens. A gunshot, presumably from a shotgun discharged by either Cowan or Martin, caused an additional four other Connecticuts to sing. The collectors bagged two of the five birds.

For many years this episode was almost all that was known about the Connecticut Warbler within British Columbia. Sight records slowly accumulated from other locations in the northeastern including Fort Nelson. During my fourteen years investigating the birds of the Fort St. John area I saw or heard the species only a few times. It wasn't until Mark Phinney began systematic forest surveys around Dawson Creek that the Connecticut Warbler was found to be a local summer resident in aspen forests in the South Peace. Finding a nest, however, was another matter altogether.

To give my readers an idea how hard it can be to find a nest, cunningly hidden on the forest floor, I refer them to a fascinating yet poorly known book written by the American bird photographer William Burt. From 1984 to 2000 Burt pursued little-known birds for his book, *Rare and Elusive Birds of North America*. The book contains entertaining narratives of his searches as well as sharply focused photographs of birds within their nesting habitats taken with a large-format camera. In search of a Connecticut Warbler's nest, Burt searched a Tamarack bog near Waskish in north-central Minnesota for two summers. The habitat was open park-like woods "full of mounded moss and ferns and scanty grass and horsetails." At least six males were singing from an area about sixty to eighty acres in size.

In spite of the relative abundance of singing males, Burt found no nests that first year. In fact, other than the robust singing of the males, he saw no evidence that the birds were reproducing. Only twice in weeks of watching did he see warblers carrying food, only to almost immediately lose track of them.

His second summer began on June 10 with the same woodland "ringing with the songs of males," but this time he decided that a more systematic search was needed so he laid out ropes on the moss to mark grids. He painstakingly searched the resulting corridors mossy mound by mound. Still he was unsuccessful. Finally he began concentrating on birds calling a sharp peet or whik, alarm notes. One morning, brushing away spider webs, ducking under fallen timber, braving the loud clouds of mosquitoes, as he was moving toward another calling bird, a small bird burst from the mossy mound near his feet. He looked down, parted a few fronds of fern and saw a "grass-lined cup with three brown-specked whitish eggs." He had his nest.

Two days later there was a full clutch of five eggs. Not wanting to risk disturbing the female, he made only short daily checks to ascertain the nest's progress. He was waiting for the chicks to be four days old before moving a blind near the nest. On July 4, four of the five eggs had hatched. On July 7 there were five chicks. On July 9 he brought his photographic equipment with him only to find that the nest was empty. Something – a weasel, a jay, a predator – had taken the young. Reflecting upon his efforts to find a nest, William Burt states, "I don't think there's any bird in North America, including the black rail, whose nest I'd less want to ever have to find again."

On June 19, 2,000 Mark Phinney of Dawson Creek found the first Connecticut Warbler nests in British Columbia. That day the nest contained five eggs. On July 8 it held five well-feathered chicks which left the nest by July 10. The nest, like most of Phinney's sightings of the warblers, was southwest of Dawson Creek in pole-aged aspen (25-40 years old) with a general southerly aspect. This habitat is obviously quite different than the Tamarack swamps described by Seton and Burt and other observers in Manitoba and Wisconsin. Nor does it particularly match the older mixed forest of aspen and White Spruce where I had found the birds in the Fort St. John area. Clearly the Connecticut Warbler occurs in more than one type of forest; however, that doesn't mean that the bird is particularly adaptable. It isn't. Across its breeding range the species seems to be fussy in its habitat choice and in general avoids areas where the forest is grazed by cattle or broken up by clearings, seismic lines, transmission corridors and other human developments.

The Reflective Birder

Clive Keen, Prince George

Should Mrs Moreau Keep Her Warbler?

The delightful book *Mrs Moreau's Warbler* by Steven Moss is a cornucopia of information about bird names, starting with explanations of why many of them were so labelled. Chaffinch? It's a finch that feeds in chaff. I was probably not alone in smacking my forehead and saying "Duh" on reading that. But it's much less obvious why the (Eurasian) Blackbird should be so named – weren't there lots of other black birds equally deserving of the name? No: it was the only candidate. Crows, Ravens, Jackdaws and Rooks weren't birds at all, but fowls. "Bird" was the name given in days of yore just to small avians; the big ones were all fowls of the air. So "Blackbird" uniquely identified *Turdus turdus*. Whodathunk.

You can have great fun learning such things, including why Mrs Moreau got a warbler named after her, but the chapter I most looked forward to concerned renamings. It's a timely topic, with proposals to replace eponyms with descriptive titles (Barrow's Goldeneye being replaced by Crescent-cheeked Goldeneye, for instance). Moss rightly asserts that attempts at mass renaming will meet fierce resistance. He tells the tale of Ian Wallace, whose words at a conference "suggested an imminent apocalypse of Biblical proportions. Hands waving, voice rising in volume and pitch with every sentence, he railed against a new proposal that wholesale changes should be made to the names of the birds of the western palearctic."

Voices are already rising to stentorian levels while the AOS ponders proposals to consign Brewer, Cooper, McGillivray, Baird, Ross, Clark, and the others to history. Not everyone, though, is joining in the outrage or even seeing why people are getting so bothered. After all, aren't names just arbitrary labels?

Above: The Paltry Flycatcher. Just another of those dull LBJs.

Let's lay that to rest. Names do indeed matter. When I was running a PR consultancy, renaming was one of our major businesses, particularly after I cornered the market for renaming educational institutions. I'd written an article on the issue, pointing out amongst other things that institutions named after rivers had 20% lower market share of applicants than institutions named after towns. When I convinced Trent Polytechnic to change its name to Nottingham Polytechnic, and its market share duly went up by 20%, so did our consultancy fees. The most consequential of our renamings was for Central London Polytechnic. Having gained university status, it needed a new name, and its board of governors proposed renaming it after the founder, Quintin Hogg. Fortunately, the President called me in, and rather than fading into oblivion as Quintin Hogg University – who would want to study at, or work for, a university apparently named after a breed of pig – the institution marched ever onward and upward in confidence as The University of Westminster. I should have charged treble.

But does it matter with bird names? Here's a thought experiment. A small bird is found to be in serious decline, and activists try to get its habitat preserved. A campaign is started to Save The Paltry Flycatcher. I suggest that rather few purse strings would be loosened. But a campaign to Save The Mistletoe Tyrannulet? We'd give money to that, surely!

So, take the AOS seriously as it gets to grips with the renaming issue, but spare it a great deal of sympathy. My experience indicates that coming up with better names – indeed *much* better names – is the easy part of the process. The really tough part involves making progress without everything devolving into bad-tempered grandstanding. That's really what I got the big bucks for as a consultant. My proposal to the AOS, for free this time, is that it does not in fact try to decree new names, but rather puts forward approved alternate names for people to use if so inclined. We could be told that, for instance, Crescent-cheeked Goldeneye is an *approved alternative* to Barrow's Goldeneye; time would then be allowed to tell which of the names comes to predominate. We can surely all live with that.

Below: The Mistletoe Tyrannulet. Quite a handsome bird, isn't it?

Names frame the way we see and think about things, whether we know it or not. Photo by author.

Listers' Addendum

ARDAT Listing Totals for 2021

Wayne C. Weber, Delta

Last year, for the first time, we published a list of ARDAT list totals for BC. (All Regional Districts Added Together). For each birder on the list, the ARDAT list is the sum of his/her lists for each of the 28 Regional Districts in BC. These data were not directly submitted to BCFO; they are presented in eBird, as part of the personal profile of each birder who decided to make his/her profile public. Thus, this is public information, although it reflects only those birders who use eBird, and who decided to make their profile public. However, this is the only place you can see all this data in one place. I hope our readers find these data as intriguing as I do.

A high ARDAT list can be achieved only by birding for a long time over a large part of BC. Birders who have moved to BC recently, or who bird mostly in their local area, will not have a high ARDAT list.

This list includes a total of 34 birders – everyone who has an ARDAT list of 2,000 or more.

For each birder, the data presented are the ARDAT list as of December 2021, the percentage of the maximum possible total of 8,465 (the total of species recorded by ALL observers in the 28 RDs), and the change from the total one year ago (which ranged from 0 species to 607).

Last year, we included this listing in the March 2021 Listers' Corner, and included only those who were BCFO members (16 out of 31 who had a score of 2,000 or more). This year, we have removed it from the Listers' Corner, and we are including everyone, whether or not they are a BCFO member. We propose to continue doing this in future.

In future, we would also be happy to include birders who do not use eBird, if they can compile their own data and send it to us. However, it's much easier to use eBird, because eBird automatically compiles and totals the data for you!

Noteworthy totals

Yours truly maintains the highest list of 4,240, although I only added 61 to the list in 2021. Basically, this is because I'm an old coot who has travelled widely around the province. Number 2, not far behind, is Russell Cannings, who moved to New Zealand in 2015, and (so far as I know) is not planning to move back to BC. Three other birders have totals of 3,500 or more. I would like to issue a challenge to other birders to equal or top my ARDAT list. It wouldn't be hard to do, because I am getting older and slowing down, and I would make an easy target.

Three birders are new on the list: Joshua Brown, Alan Burger, and Doug Martin. I may have accidentally omitted Alan Burger last year, so his increase may be less than the 338+ shown in the table.

Omitting Alan Burger, for the reason I explained, the biggest jump on the list was recorded by Joshua Brown, an enthusiastic young birder from North Vancouver. Joshua added 607 to his ARDAT list! He made an extensive trip through Northern BC with Liron Gertsman (who added a pile of species to his ARDAT total in 2020, but only 110 species in 2021). Congratulations

#	2021	Name	%	CHANGE
1	4240	Wayne Weber	50.1	61
2	4078	Russell Cannings	48.2	0
3	3829	Dick Cannings	45.2	0
4	3750	Michael Shepard	44.3	0
5	3539	Guy Monty	41.8	117
6	3348	Chris Charlesworth	39.6	26
7	3311	Chris Siddle	39.1	49
8	3300	Dan Tyson	39.0	0
9	3296	Ken Wright	38.9	219
10	3045	Ilya Povalyaev	36.0	97
11	3006	Liron Gertsman	35.5	110
12	2998	Keith Riding	35.4	197
13	2952	Neil Simpson	34.9	279
14	2838	Brian Self	33.5	26
15	2734	Christopher Di Corrado	32.3	234
16	2661	John Reynolds	31.4	0
17	2634	Daniele Mitchell	31.1	0
18	2532	Ian Cruickshank	29.9	12
19	2507	Dave Fraser	29.6	79
20	2469	Joshua Brown	29.2	607
21	2433	Logan Lalonde	28.7	7
22	2389	Michael Klotz	28.2	235
23	2381	Nathan Hentze	28.1	81
24	2346	Blair Dudek	27.7	19
25	2339	Max Gotz	27.6	0
26	2338	Alan Burger	27.6	338+
27	2265	Doug Kragh	26.8	12
28	2234	David Bell	26.4	200
29	2221	Joachim Bertrands	26.2	0
30	2136	Syd Cannings	25.2	14
31	2125	Doug Martin	25.1	125+
32	2100	Mike Preston	24.8	94
33	2090	Krista Kaptein	24.7	0
34	2050	Peter Candido	24.2	21

Joshua!

The third new entry on the list is Doug Martin of Port Moody, who added at least 125 species to his ARDAT list.

Of those birders who were already on the Top 31 list last year, the biggest movers were Neil Simpson, who added 279 species, Michael Klotz (235), Christopher Di Corrado (234), Ken Wright (219), and David Bell (200). Congratulations to all these birders!

There are at least eight other birders with ARDAT lists of between 1,800 and 2,000. The highest of these is Mike McGrenere with 1,997! It would take relatively little effort for those folks to move into the list of birders with 2,000 or more. Best of luck to all of you.

As I like to say in my email messages, good luck and good birding to everyone.

A TRIBUTE TO LARRY COWAN

Larry Cowan of Pitt Meadows has been the compiler and editor for 11 years of the Listers' Corner column appearing in every March edition of *BC Birding*. This column allows those of us who keep lists (probably most of us) to report our bird lists for various areas, including the world, Canada, BC, adjacent states and provinces, and many local areas. It is always interesting to compare your own lists with those of other birders, to find out where other birders have spent their time, and figure out who the real experts are for any particular area.

Analyzing the listing stats every year, and preparing the report, is a finicky job which takes several days' work. Larry has passed on this task after a marathon stint, but remains on the BCFO board, and is continuing as BCFO's Membership Secretary. The amount of time that Larry has devoted to BCFO over the last 10 or 15 years is astounding, and probably exceeded only by very few. It is the efforts of volunteers like Larry Cowan that help keep BCFO going over the years.

We at BCFO would like to sincerely thank Larry Cowan for his many contributions to the organization, and to recognize and honour him for his efforts. Congratulations and thank you, Larry!

Briefing 5

All the Birds in the World

Summary by M. Church, Vancouver

Scientists are intensely interested in the capacity of animals to adapt to and exploit their environment. This entails understanding the ecology of individual species and assemblages of species within an ecosystem, and aspects of the evolutionary biology of species. But, most basically, it requires comprehensive knowledge of each of the world's creatures (and similarly for plants and microbes). While many pioneering studies have been completed since the early 19th century observations of Humboldt, comprehensive knowledge of any organism has been lacking. That is now changing with modern methods of data acquisition, storage and manipulation.

A group of the world's leading ornithologists led by Professor Joseph Tobias at Imperial College, London, has released the database AVONET 1.0, containing morphological information of 11,009 extant bird species (hopefully, the lot). Eleven morphological traits are given for 90,020 individuals, along with information on range and six ecological variables. The morphological traits are based on precise measurement (by traditional manual means, despite the remark above) of live birds and preserved skins housed in the world's natural history museums (principally the Natural History Museum, London, and the American Museum of Natural History, New York). Each species is represented by at least four specimens (two male; two female), but the average sample size is eight or nine individuals. Entries are arranged in various formats in order to be interoperable with other compilations of avian information, including "Bird Life", "Bird Tree" and "eBird". The database can also be matched with the IUCN red list.

The morphological trait measurements focus on aspects of bird morphology that most strongly influence the birds' adaptation to their environment. Accordingly, four measures of beak morphology are given, as beak character strongly influences feeding behaviour. Three measures of wing structure plus tail length are recorded as indices of the bird's flight capacity, and leg length is measured as an index of the bird's ground environment preference and mobility. Body mass (from live specimens or prior records) and Hand-Wing index, a measure of flight capacity (for definition, Google the term) complete the current basic data set. There are plans to expand the data in future releases, both in terms of numbers of individuals measured and additional ecological information.

Remarkably, the idea for the project arose from an ambitious PhD project to measure the shape of all the world's passerines (about 6,000 species). That being duly accomplished under Professor Tobias's supervision, the group realised that they were in fact a good deal along the way to the more ambitious goal to characterise all the world's birds. An important prospective use of the data will be to study potential adaptations of bird life to environmental change, both of climate and of human land use. AVONET is introduced in a special edition of the journal *Ecology Letters* that includes additional papers on bird ecology and evolution.

References

Stokstad, E. 2022. Catalog of bird shapes yields ecological "gold mine." *Science* 375: 1215. (Short news article announcing the database.)

Tobias, J. 2022. A bird in the hand: Global-scale morphological trait datasets open new frontiers of ecology, evolution and ecosystem science. *Ecological Letters* 25: 573-580. (Extended editorial to introduce the database.)

Tobias, J. + 116 others. 2022. AVONET: morphological, ecological and geographical data for all birds. *Ecological Letters* 25: 581–597. (Introduction to the database; includes url for the database.)