BC BIRDING

Newsletter of the British Columbia Field Ornithologists

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British Columbia Field Ornithologists (BCFO)

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A subscription to this quarterly is a benefit of membership in the society. Members will also receive a copy of the annual journal, *British Columbia Birds*. 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.
Since November, 2003, BCFO has maintained an official partnership with the Changhwa Wild Bird Society, Changhwa, Taiwan.

Membership Dues

Please send membership requests or requests for further information to:

Membership, PO Box 45507, Westside RPO,
Vancouver, B.C., V6S 2N5

Annual Membership Dues:

General membership (Canada)	$30.
Junior membership (Canada)	$20.
U.S. and International Membership	$35.

Newsletter Submissions

Send material to the Editor at jmryder@telus.net (MS Word format preferred but not essential) or mail to BCFO at above address. Submissions may include articles about birding experiences, casual observations of bird behaviour, site guides, photos, and other topics of interest to birders, preferably but not necessarily in British Columbia.

Deadline for receipt of material for publication is the 15th of the month preceding the March, June, September and December issues.

Advertising Rates

Full page: $125 per issue or $112.50 each for 4 or more issues
Half page: $75 per issue or $67.50 each for 4 or more issues
Quarter page: $40 per issue or $36 each for 4 or more issues.

BCFO Website: http://bcfo.ca/

IN THIS ISSUE

COVER STORY: RUFOUS HUMMINGBIRD

Photo: Devin Manky, June 2013

Reifel Migratory Bird Sanctuary, Delta, BC

Devin writes: This shot captures an adult female Rufous Hummingbird in mid-flight as she banks toward the camera. Hummingbirds can be tricky to capture in flight due to their small size and extreme speed. This bird will beat its wings 50 times per second on average. In this picture the wings can be seen extending back from the body. This is due to the unique way hummingbirds flap their wings. Rather than the normal up and down motion, they use a figure-8 style motion that has evolved to provide lift both upward and downward. This allows for precision flying and gives them their ability to hover and even fly backward. The Rufous Hummingbird has the longest migration of any hummingbird, ranging from central Mexico to Alaska. If you consider the ratio of body size to distance travelled, then this tiny bird has one of the longest migrations of any bird species!

BRITISH COLUMBIA BIRDS

Needs submissions

.....of original manuscripts on wild birds in British Columbia. This is the journal of record for reporting rarities or range expansions, the general status of species, avian ecology and behaviour. We publish new observations on birds, or even a single bird. Suitable topics include distribution, abundance, extralimital occurrence or range expansion, reviews of status, banding, identification, plumage variation, moult, behaviour, feeding, breeding, habitat, ecological relationships, reviews, or history and biography of ornithology. Information for authors is available on the BCFO website at:

www.bcfo.ca/journal-author-invitation.php

BCFO RESEARCH GRANTS

BCFO encourages submission of proposals for financial assistance for bird surveys and other ornithological research. It also wishes to foster greater connections between applicants and the society. Potential applicants are reminded that:

1. Requests for funding must be for planned, rather than completed, projects.

2. Under normal circumstances applicants should be, or be willing to become, members of BCFO.

3. Projects and their results are to be reported in BCFO's journal ***British Columbia Birds.***

4. In order for BCFO Directors to give a timely response to project proposals, deadlines for submission are January 1 and July 1.

5. All reasonable requests up to a $1000 limit and within the financial strength of the organization will be considered, with any larger requests requiring approval at the AGM.

6. Applicants should obtain a copy of the grant policy and the application guidelines from a member of the executive before making a submission.

PRESIDENT'S MESSAGE

FALL REFLECTIONS

While it's only September, my thoughts and those of your Board, are turning to what's up for BCFO in 2014. Our annual directors' planning meeting, where we do most of our planning for the year ahead, takes place at the end of this month. We've already received some interesting input from members. We'd love to hear more. If you have suggestions for things we should be discussing, or doing as an organization, please let us know. You'll find our contact information on the inside front page (p.2) of *BC Birding*. Please get in touch; we value hearing from you.

On the topic of next year, planning continues for the Pemberton AGM. Our target dates are: June 13 – 15, 2014. Please pencil-in the dates in your calendars. Once all the facilities arrangements are nailed down, we will confirm the weekend and extend the invitation to firm-up your plans.

Our program of two-day field trips continues its successful run, but we're not always accurate in our assessment of member interests. So please let us know the locations you would like to see included in the two-day trip offerings. For example, our Fraser Valley trip this spring was undersubscribed. In contrast, the number of participants on the Chilcotin trip had to be capped, and our November trip to the Sunshine Coast is growing rapidly in numbers. All suggestions for locations and, of course, volunteers to lead a trip to your local areas, will be gratefully received.

Those among you who carefully scrutinize the BCFO website may have already noticed one intriguing, minor change. The addition of a BRC tab to the top menu bar is an indication of one of our efforts currently underway. The BCFO Bird Records Committee is using this password protected area to store all the bird record information they are currently using as they take on the task of reviewing the first set of 10 "firsts for BC" records. The species currently under review are: Red-flanked Bluetail, Citrine Wagtail, Cave Swallow, Eurasian Crane, Summer Tanager, Great Shearwater, Black-capped Vireo, Eastern Bluebird, Brown Booby, and Red-shouldered Hawk. Yes, they're starting "easy", but there's a lot of additional work to be done as well as simply making decisions. As the committee proceeds to work through the records, it will be developing criteria for acceptance. Issues such as single-person observations, and how a consensus model will operate in practice, will need to be resolved. We plan to have this initial set of reviews published in October this year, along with a report about the committee, how it is conducting its business, and its work plan for the future.

While it is the end of summer, (I'm writing this at the end of August) and birding can be somewhat in the doldrums, there's always something better to do than sitting and typing at a computer. Birdsong may have stopped weeks earlier, and the excitement of the breeding season may have passed, but at least here on the Lower Mainland, many juvenile birds are still giving those confusing begging calls which need to be sorted out, and in common with many parts of the Province, the excitement of fall shorebirds can certainly get the birding juices flowing again. Fortunately for us, there isn't a season of the year that lacks excuses to go birding….

….I'm off!

George Clulow
President

George and the Mosquitoes (Chilcotin Expedition) *Photo :Mark Habdas*

EDITORS' NOTES

So here we are in September already! Another summer has flown by and the quiet period (for most birds except the more recent fledglings) has almost passed; now we are looking for fall migrants and returning winter residents.

I've just returned from my final loon (Common Loon) survey of the year (a contribution to the Canadian Lakes Loon Survey program of Bird Studies Canada). Conducting these surveys (three times each summer) is a very good excuse to get out of the city for a few days and look for birds in 'more or less' wild areas – and do something useful at the same time. I know that several BCFO members already take part in this program, but more monitors are needed in BC for lakes with nesting loons. (See BSC website for information). Common Loons are at the top of the food chain, so keeping records of their numbers by determining productivity (i.e., counting their chicks) is a very effective way to monitor the health of our lakes.

In this issue you will find several items by guest authors and photographers. (By "guest", I mean someone who is not (not yet?) a member of BCFO):

- Devin Manky provided the excellent images on the front and back covers. Devin has been the Wildlife Manager for the Grouse Mountain Refuge for Endangered Wildlife since 2007. He is an avid birder, licensed Master Bander and wildlife photographer. His keen interest in photography led him enroll to the two- year photography program at Langara College, where he is currently completing his certificate.
- Dr. Kathy Martin conducts research on the ecology and conservation of birds in alpine habitats and in both natural and managed forests. She has trained many graduate students in projects based on avian field studies and co-authored numerous publications.
- Derek Matthews is the founder and director of the Vancouver Avian Research Centre, including the bird-banding station at Colony Farm, Coquitlam.
- Colin Clasen and Derek Killby are members of the Wild Bird Trust of BC, and contribute to monthly bird surveys and Purple Martin monitoring at The Conservation Area at Maplewood Flats in North Vancouver.

Many thanks to these contributors, and a big thank you also to our members who sent in items for this issue.

Other notes and reminders:

- Another Bird Studies Canada citizen science project that needs volunteers is the Coastal Waterbird Survey. See p. 22 of this issue for more information.
- BCFO's November field trip to the Sunshine (!) Coast is filling up quickly: see p.23 for details.
- The species list for The Chilcotin Expedition (p.10) will appear on the BCFO website as an appendix to this issue.

Finally, as always, please send in items for BCFO's – i.e., *your* – newsletter. Even very short items, such as Dave Boyd's note on p.19, are welcome. (See p.31 for suggestions.)

Enjoy the Fall birding

June Ryder

Editor

NB:

CHRISTMAS BIRD COUNTS 2013-2014

For information, see CBC section of BCFO's website at <http://wp.me/P1W1bo-i> At present, the results of the 2012-2013 CBCs are displayed here, but these will very shortly be replaced with information about *the upcoming counts:* locations, dates, and contact persons will be added as they become available. Then, during the count period, results will be once again be compiled on our website as they come in.

BC NATURE: 2014 AGM: May 1-4, Victoria. See… www.bcnature.ca/

Young American Robins in a nest that was placed on a ledge by humans after the the birds' original home, on a light cover, slid off and fell to the ground. Photo MH

UPCOMING MEETINGS & EVENTS

Compiled by Martin K. McNicholl and Wayne C. Weber

The following meetings and other events are those that take place in B.C. and immediately adjacent areas, or those that potentially include information on birds that occur in B.C. Information on additional meetings is listed in the bimonthly *Ornithological Newsletter* and, for readers with internet access, on BIRDNET at www.nmnh.si.edu/BIRDNET/ornithol/birdmeet.html.

EVENTS IN 2013:

Oct. 21–24 - 2013 -- RAPTOR RESEARCH FOUNDATION ANNUAL CONFERENCE WITH 3RD NEOTROPICAL RAPTOR NETWORK CONFERENCE & 7TH INTERNATIONAL CONFERENCE WORLD WORKING GROUP ON BIRDS OF PREY AND OWLS, Bariloche, Argentina. Contact: Miguel D. Saggese, College of Western Medicine – Western Univ. of Health Sci., Calif.; no phone number indicated; e-mail: msaggese@westernu.edu OR barilocheraptors2013@gmail.com and http://www.raptorresearchfoundation.org/conferences/current-conference.

EVENTS IN 2014:

July 31--Aug. 5 -- INTERNATIONAL SOCIETY FOR BEHAVIORAL ECOLOGY, New York, NY. Contact [no person, address or phone number yet indicated]; e-mail: ISBE2014@gmail.com; web-site: http://cabi.hunter.cuny.edu/.

Aug.18-24 -- 26th INTERNATIONAL ORNITHOLOGICAL CONGRESS, Tokyo, Japan. Contact: Erik Matthysen [addresses and phone numbers not yet announced] e-mail: erik.matthysen@ua.ac.be OR Keisuke Ueda e-mail: keisuke@rikkyo.ac.jp .

Sept. 24-27 -- ANNUAL MEETINGS, AMERICAN ORNITHOLOGISTS' UNION, COOPER ORNITHOLOGICAL SOCIETY & SOCIETY OF CANADIAN ORNITHOLOGISTS, Estes Park, Colorado. Contact details not yet announced.

SYDNEY CHARLES JOHN WATTS 1927 - 2013

Syd Watts, long time Vancouver Island mountain climber, keen birder, naturalist extraordinaire and lifelong champion of natural places passed away Saturday May 25 at Cowichan District Hospital. Born near Olds, Alberta in1927, he moved to the Duncan area in 1937. Syd worked as a mechanic but spent most of his energy for wild places …….a. lifetime of hiking and experiencing the outdoors. …….Syd and his wife Emily were instrumental in saving Mt. Tzuhalem Ecological Reserve where Syd became Reserve Warden. In 2007 he was honored with the Volunteer of the Year Award from BC Parks. Syd and Emily were long time members of the Cowichan Valley Naturalists where he continued to lead walks and share his wide naturalist knowledge until recently. In 2008 a board walk at Somenos Marsh was named Watts Walk to commemorate their work preserving this area……. You could always find Syd out on the trails with his binoculars, observing and enjoying the wonders of nature.

Extracted from obituary in the Cowichan Valley Citizen

Ed's Note: Syd was a member of the BC Field Ornithologists from 1993 to 2012.

FRED C. ZWICKEL: RECIPIENT OF SEVENTH STEVE CANNINGS AWARD

Martin K. McNicholl

My nomination of Fred C. Zwickel for the seventh Steve Cannings Award was published in the last newsletter (McNicholl 2013). To my delight, it was approved by both the awards committee and the B.C.F.O. board. We are especially happy that Fred and his wife, Ruth, were able attend the 11 May 2013 B.C.F.O. banquet and receive the award plaque in person.

Fred, born in Washington in 1926 (Campbell *et al.* 1990), worked for a government game department there and completed a M.Sc. thesis at Washington State University. After a brief period of government work in Oregon, he moved to B.C., where he started his long-range research, primarily near Courtenay from 1961 through 1978, but also on Hardwicke Island from 1979 through 1984, on population dynamics of the Sooty Grouse (long classified as a race of Blue Grouse, but currently recognized as a separate species). He began this research as a Ph.D. thesis under James F. Bendell, then continued to work with Bendell, their numerous graduate students and several other collaborators. Although individual researchers studied various aspects of anatomy, behaviour, diet, disease, dispersal, ecology, growth, habitat, history, hunting effects, moult, nesting, parasites, plumage, population dynamics, predation, weather and other aspects of the life history of this species, the studies collectively emphasized the importance of long-term, multifaceted approaches to understanding the ecological dynamics underlying the trends of bird populations – unlike the short-term approaches that dominated most earlier research. Details of these studies and publication details were summarized in a book that received the 2005 Wildlife Society Wildlife Publication Award Outstanding Monograph (Zwickel and Bendell 2004). Their research was also important in pioneering the use of pointing dogs and noosing poles in ornithological research and included projects that pioneered early versions of radio-telemetry.

After retiring to Cortes Island, Fred focused primarily on completing the grouse monograph, but also continued to serve the scientific community as a member of the editorial board of *Northwestern Naturalist* and he also donated time and his boat to act as one of the wardens of Mittlenatch Island. He and Ruth undertook a detailed survey of the tidal life of the lovely bay in front of their Manson's Landing home and he collaborated on a checklist of birds identified on the island. In addition to his own legacy of research on grouse, several of his students have generated plenty of their own research, as well as serving on boards and committees of numerous local, provincial, national and international conservation, naturalist and scientific organizations.

LITERATURE CITED:

Campbell, R. W., N. K. Dawe, I. McTaggart-Cowan, J. M. Cooper, G. W. Kaiser and M. C. E. McNall. 1990. The birds of British Columbia. Volume 1: Nonpasserines [:] Introduction and loons through waterfowl. Royal British Columbia Museum, Victoria.

McNicholl, M. K. 2013. Fred C. Zwickel wins the Steve Cannings Award. B.C. Birding (2):7.

Zwickel, F. C. and J. F. Bendell. 2004. Blue Grouse [:] their biology and natural history. NRC Press, Ottawa.

Ed's Note: This account includes more information than the original citation which appeared in the June issue of *BC Birding.*

B.C. BIRDING NEWS BRIEFS

Compiled by Martin K. McNicholl

Joan Kelly Awarded

Organizing Princeton's Meadowlark Festival, checking bluebird boxes, and participating in Christmas bird counts and owl surveys were among the birdier aspects of the many contributions to the activities of the Vermillion Forks Field Naturalists that led them to award a life membership to Joan Kelly in 2012. –based on Anonymous. 2012. *The Harlequin* 60:6.

Does Your B.C. List Include Scripp's Murrelet Or *Haemorhous* Finches?

Most changes resulting from the latest deliberations of the American Ornithologists' Union's check-list committee affect what you label species seen in B.C. or the order in which you list them, rather than the number of species on your list. For example, if you were among the relatively few observers who had Xantus's Murrelet on your B.C. list, you now have Scripp's Murrelet on that list, and possibly also Guadalupe Murrelet on your North American list if your "Xantus's" observations were from farther south as "Xantus's" has been split into two species. On the other hand, virtually all B.C. birdwatchers will now have *Haemorhous* finches on their list, as our three common, formerly *Carpodacus,* finches (House, Purple and Cassin's) have been transferred into *Haemorhous*.

The order Falconiformes (caracaras and falcons) is now considered more closely related to parrots and passerines than to hawks, and has thus been moved with the parrots to just before the passerines. Whip-poor-will has been transferred from *Caprimulgus* to *Antrostomus.*

The genus *Stellula* has been merged into *Selasphorus,* meaning that Calliope Hummingbird is now congeneric with Broad-tailed and Rufous hummingbirds. The hummingbird genera have been shuffled, with B.C. species remaining in the same order as previously except that Xantus's is now the last on the list, rather than the first.

The genera of wrens have been shuffled so that B.C. species are in the order: Rock, Canyon, House, Winter, Pacific, Sedge, Marsh and Bewick's. Sage Sparrow has been transferred out of *Amphispiza* into *Artemisiospiza.* A list of proposed changes not yet adopted included splitting of Savannah Sparrow into several species: stay tuned! –based on R. T. Chesser *et al.* 2012. *Auk* 129:573-588.

Dynamics of Great Blue Heron Colonies

Recent declines and increases in coastal colonies of Great Blue Herons have been attributed at least partly to increased predation pressure by Bald Eagles and to various disturbances from human activities. This has been exemplified recently by declines, then increases at the Stanley Park heronry in Vancouver, and the establishment and subsequent disappearance of a colony at Terra Nova in Richmond. A colony that has been monitored at Colony Farm Regional Park by the Burke Mountain Naturalists declined from about 130 nests 20 years ago to possibly 110 in 2012, and was then totally abandoned in March of this year. Disturbance (noise and vibrations) from construction activities at the new Port Mann Bridge has been suggested as the most likely cause. The whereabouts of the approximately 200 missing birds remains a mystery. Rumors of new nesting sites in Burnaby and Pitt Meadows remain unsubstantiated, although B.C.F.O. President George Clulow reported about 66 heron nests at Deer Lake (Burnaby) in 2012 and 126 in 2013. –based primarily on 1 April 2013 e-mail by Elaine Golds to various "lower mainland" naturalist clubs, forwarded by Annabel M. Griffiths, E. Golds. 2013. *Wandering Tattler* 36(8):15 and W. Chow. 2013. *Burnaby News Leader* 19 July 2013:A1 & A2., and updates in an e-mail from Elaine Golds 31Aug 2013.

Avian Endangerment

A report on the status of the World's Birds (the "red" list) released during this year's Birdlife World Conference in Ottawa lists 1313 species (about 12%) officially at risk of global extinction. –based on G. Finney. 2013. *BirdWatch Canada* 64:2.

Contributions of Birch-Jones Recognized

Although obtaining funding for a Western Screech-Owl project and helping to host the 2005 B.C.F.O. meeting are the only specific mentions of birds in the contributions of Lillooet Naturalist Society's Founding President, Vivian Birch-Jones, that resulted in her receiving a B.C. Nature Regional Award in 2013, most of her many contributions to conservation, nature education and the study of nature in the Lillooet area do include birds and their habitats. –based on Lillooet Naturalists. 2013. *B.C. Nature* 51(2):17.

Rene Savenye Scholarship

A study of Lewis's Woodpecker habitat along the Fraser River contributed to the selection of Robin Strong of the Lillooet Naturalist Society as the 2013 recipient of a Rene Savenye Scholarship. –based on Lillooet Naturalists. 2013. *B.C. Nature* 51(2):19.

New Vancouver Area Checklist

A new seasonal checklist of the birds of the Greater Vancouver area was published during the spring of 2013. The list was compiled in booklet format by Wayne Weber, Brian Self, Larry Cowan and Jude Grass, and is divided into 267 species of regular occurrence, 139 casual and accidental species, four extirpated species, and 13 species reported on previous checklists but without adequate documentation. –based on Anonymous. 2013, *Vancouver Nat.* 15(2):8, J. Grass. 2013. *Wandering Tattler* 36(8):1 and the checklist itself.

Nature Vancouver 2013 Awards

As usual, virtually all of the awards presented during the 2013 annual general meeting relate in some way to birds, their conservation and/or education about them. Birds feature more specifically in the Davidson Award presented to Joe and Doreen Sadowski for Joe's 40 years of service to the Burnaby Lake Park Association (including as a founding member), and their provision, maintenance and monitoring of numerous nest boxes at Burnaby Lake, North Green Lake and 70 Mile House in the Cariboo area; and in the Kay Beamish Award for Nature Education presented to Cynthia Crampton for her 11 years of coordinating Nature Vancouver field trips and her recent work on updating the society's history index to items published in *Discovery*. –based on Anonymous. 2013. *Vancouver Nat.* 15(2):14-15.

Important Bird Area Caretakers

Mountain Equipment Co-op came to the aid of Nature Canada, Bird Studies Canada and B.C. Nature in May 2012 by providing a grant to assist volunteers in coordinating caretaking of Important Bird Areas in B.C. –based on K. Englund. 2013. *B.C. Nature* 51(2):27.

Oldest Known Breeding Bird Continues to Raise Young

"Wisdom," a Laysan Albatross banded as an incubating bird by Chandler S. Robbins on Midway Atoll in 1965, continues to break the record for the oldest documented breeding bird in the wild, having raised another chick, her 30-35th at the age of at least 62. That age may be an under estimate, as it assumes she was five years old (the species' minimum breeding age) in 1965, whereas eight or nine years are more typical ages of first nesting. She is now wearing her fifth band, and Chan continues to band and edit a regional banding column in his 90s. –based on a report by M. Peterjohn in *Ornithological Newsletter* 213:1, 2013.

Sandhill Crane Hunt?

The Alberta Fish and Wildlife Federation has recently revived a long-time proposal to open a Sandhill Crane hunt in Alberta, a proposal that has been rejected more than once, and is opposed by naturalist groups, especially given the hazard that such a hunt would pose to slightly off-course Whooping Crane migrants and the imprecisely known status and distribution of the Canada Sandhill Crane (*Grus canadensis rowani)* vs. the more common Lesser Sandhill Crane (*G.c.canadensis)*. –based on notes by T. S. Sadler. *Nature Alberta* 42(4):4, 2012 & D. Baresco. *Nature Alberta* 42(4):5, 2012.

2013 Baillie Fund Grants to B.C. Projects

Two of six 2013 "regular" grants went to B.C. projects: the Western Bluebird Reintroduction to the Garry Oak Ecosystem Recovery Team Society, and a project by the Laskeek Bay Conservation Society to "engage the community" in Ancient Murrelet conservation on Haida Gwaii. –based primarily on Anonymous. 2013. *BirdWatch Canada* 63:17.

Tofino Wah-nah-jus Hilth-hoo-Is Mudflats

This new Western Hemisphere Shorebird Reserve, near Pacific Rim National Park, is the first such shorebird reserve to involve a First Nation. The reserve, designated in April 2013, hosts the largest gatherings of Whimbrels in B.C. and large flocks of Dunlin and Western Sandpipers, among over 40 species of shorebirds. –based on Anonymous. 2013. *Bird Studies Canada Latest News* 19 April 2013:3.

New Victoria area Checklist

A highlight of this spring's B.C.F.O. annual general meeting was the inclusion of a new Victoria area bird checklist, published by the Victoria Natural History Society. The list indicates the status, seasonal occurrence, breeding status and population trends of 378 bird species reported from portions of Vancouver Island and some of the Gulf Islands south of Ladysmith and west to Otter Point. –based on checklist by D. Allinson, B. Begg, D. Copley, D. Fraser, B. Gates, D. Marven, A. Nightingale, R. Schortinghuis, J. Tatum and B. Whittington. 2013. Victoria Natural History Society, Victoria.

New Bird Guide to BC

BIRDFINDING IN BRITISH COLUMBIA is an all-encompassing guide on bird finding throughout the province, written by a highly experienced naturalist team, Richard Cannings and Russell Cannings. The Cannings' knowledge of natural history, ecosystems, and the diverse landscapes of BC provides colour to the book, while 34 maps make this a highly accessible guide for novices and experts alike.

(from Greystone Books, Publisher)

BCFO TWO-DAY FIELD TRIP REPORT: THE CHILCOTIN EXPEDITION -- JUNE 21- 23, 2013

Adrian Leather

The BC Breeding Bird Atlas (BCBBA) certainly turned-up some avian surprises. Among them, in 2010, were records of breeding Least Sandpiper, Lesser Yellowlegs, Grey-cheeked Thrush, and Yellow Rail in the beautiful part of BC where the West Chilcotin plateau meets the Central Coast Mountains between Anahim Lake and Heckman Pass.

From the Chilcotin Plateau to the Coast Mountains Mark Habdas

BCFO has enjoyed great success in recent years with the implementation of two-day field trips, uniting birders from widespread locations in their quest to enjoy exciting birding opportunities throughout BC and beyond. President George Clulow, no doubt responding to a pang of nostalgia from some Atlas work in the West Chilcotin in 2010, and a desire to offer the opportunity of exploring this sublimely scenic area to BCFO members, nominated June 21-23 as the weekend of "The Chilcotin Expedition". A comment at the recent AGM in Sidney-by-the-Sea, that birders tend to be more intrigued by more remote areas, obviously rang true in this case, as George received a steady stream of e-mails seeking inclusion on this expedition, to the point where he felt compelled to cap the number of birders at seventeen.

Chilcotin marshlands Bruce Whittington

From Ladysmith, Victoria and the Lower Mainland, from Saltspring Island, Prince George and Quesnel, birders enjoyed the magnificent approach drive along Hwy 20 from Williams Lake to Anahim Lake. On arrival at Anahim Lake Resort, I hung-up a hummingbird feeder on the cabin deck, just in case. George convened a meeting in the big cabin and outlined plans for the two days of birding. It sounded exciting, but could we really see/hear the four breeding-species specialties mentioned?

A reasonable first night's sleep, bar a few mosquitoes, saw us all rise at 5 am. Setting off along Hwy 20 toward Heckman Pass, Nancy Krueger announced over the walkie-talkies, "A grizzly sow with two cubs". The bears bounded quickly across the road and into cover. Exploring a trail through a burn got things off to a rather slow start, somewhat compensated for by the breathtaking snow-capped mountains. Highlights included Clark's Nutcracker, Black Swift, Golden-crowned Sparrow, and a good number of Blackpoll Warblers. The parking area was known for a previous record of several singing Grey-cheeked Thrushes, but it wasn't looking positive for 2013 when, even after a return visit, there seemed to be no Grey-cheeked Thrushes present. You could feel a sense of resignation setting-in among the magnificent seven(teen). Undaunted we continued birding along Hwy 20 without a vehicle in-sight. A MacGillivray's Warbler was added to the list, and then a distant lump in a burn turned-out to be a Northern Hawk Owl, which allowed fine views. We stopped at a wet meadow and began a careful walk around the edge, and then out toward a pond. Several Greater Yellowlegs were vocal here, and then suddenly a Least Sandpiper was in-the-air putting on quite a show, performing its display flight with gusto.

Lunch was at a perfect tranquil spot along Green River. George suggested a trail that produced some marvellous surprises. After adding some new species to the list including our first Least Flycatcher, we were alerted to a loud squeaking noise which sounded like a woodpecker, though there was speculation that it could simply be a squirrel making one of their many

American Three-toed Woodpecker Mark Habdas

odd sounds designed to fool birders. The next moment we were feasting our eyes on a young Three-toed Woodpecker begging for food from an adult, which duly obliged.

A little further along the trail we heard a loud single note that was repeated many times. We sensed that this might be something unusual as nobody could identify the call note. Then, just as some of us spotted the bird in a tree, it dropped out of sight. Suddenly it re-emerged moving from tree to tree, but never too far away, providing us with some nice views. Through a process of elimination, it dawned on us that we were looking at, and listening to, a Grey-cheeked Thrush! It eventually sang, confirming our identification. As if that wasn't enough, a Northern Hawk Owl flew-in and landed nearby! Adrenaline was flowing. Everybody was on a natural high.

Gray-cheeked Thrush Bruce Whittington

We took a long afternoon rest, though some of us made their own mini-excursions near the Anahim Lake Resort. In the evening, Kevin Neill announced he had been listening to an American Bittern, which was audible from the lakeshore by the cabins. The lake also held up to six American White Pelicans.

Despite some heavy overnight rain, and a mosquito invasion of nightmare proportions that resulted in very little sleep, we were ready for action on Sunday morning. The heavy rain had cancelled any attempt to reach a spot for Yellow Rail the previous evening, but the morning brought a new opportunity -- or did it? -- since we soon realized that this vast field was holding a lot of water! Anita at Anahim Lake Resort had mentioned there had been a "month of rain"! We had been advised to bring along a hiking pole, but even so, the uneven ground and tussocks had birders tumbling into the water, some for a second or third time. It was tough going and some people made the decision to return to the comfort of their vehicles and enjoy some birding along the road -- which included a Lesser Yellowlegs for some. George Clulow, Val George and I took a fairly direct route to a marker point, which even 'walking' a straight line must have been at least 400 metres from the road. Bryan Gates and Marian Porter took a right-wing approach, eventually looping around to join us. So only five of seventeen birders survived the aqua-hike and were now stationed in the area that had held Yellow Rails in 2010. We listened in two known areas with no result then, suddenly, just as things were feeling hopeless, I heard the gentle ticking of a Yellow Rail. We stood still and listened carefully, each confirming that they had heard the ticking call. Bryan Gates had a few coins in his pocket, and turned instant magician when his rhythmic coin-ticking appeared to flush a Yellow Rail! The bird flew fifty feet or so, providing a nice clear view of its plumage, the white wing patches really standing-out. This was one of those very special moments in birding which nobody involved will forget! The beaming smiles, high-fives, and joyful exclamations made for a wonderful amiable atmosphere. It was a mix of shock and ecstasy. We had actually SEEN a Yellow Rail!

The crew returned to base to dry-out. Then we enjoyed some fine afternoon birding around Anahim Lake, which included Black Terns and Solitary Sandpiper, while on land some birders were trying to track an American Redstart, and others were watching a Northern Flicker visit its nesting chamber to feed a young bird. A nearby pond added an exquisite Wilson's Phalarope to the list, a bird that seemed determined to offer a number of excellent photo opportunities.

Ruddy Duck showed well, and a Horned Grebe with the most stunning pristine plumage drew approval. A roadside marsh/willow flat provided singing Dusky Flycatcher and Marsh Wren. Onward to Poison Lake and Medicine Lake, one lake providing a pair of Common Loons with a young loon staying close behind its parents, the other producing a Bonaparte's Gull, and distant views of a pair of Golden Eagles enjoying a courtship flight. The weather forecast of isolated showers with a high of 16^{o}C seemed laughable as we continued birding in the baking heat. We relished magnificent views of the Ilgatchuz Range. A Killdeer was alerting the lead vehicle noisily, trying to protect its four young fluffballs. A Three-toed Woodpecker was spotted working very low on a tree, with another subtly tapping in the background.

Wilson's Phalarope Bruce Whittington

Mosquitoes continued to dominate conversation. I don't think anyone could contemplate another night of relentless attacks and chronic sleep deprivation. But Anita was kind enough to supply some very effective spray units which eliminated all the mosquitoes in the cabins. We were extremely happy about this! Kevin had earlier gone stir-crazy and been observed lying on his bed, clapping his hands constantly, and claiming to have killed at least one-hundred mosquitoes.

The potluck supper on Saturday night had been fantastic with a very tasty array of treats including tortellini, chili, shrimp, and cheese. Bryan took great care over preparing a fine Greek Salad. The generous amounts of food meant we could continue to enjoy our cabin cuisine on the Sunday evening.

It's never too late to add a few extra species to a trip list. Nancy Krueger heard a Northern Pygmy Owl around midnight. On Saturday night, Nancy had spotted a male Rufous Hummingbird at the cabin feeder. A wonderful weekend of birding was drawing to a close, but a quick stop at Eagle Lake, en-route to Williams Lake, was mentioned, and became affectionately known as "The Extension Trip". We set-off to Eagle Lake, which duly provided an Arctic Tern, and three Semi-palmated Plovers. Some birders had other plans, such as a short trip to Bella Coola, or a bird tour taking-in the Okanagan.

Another great BCFO two-day trip was complete. The Chilcotin Expedition 2013 combined top quality birding and breathtaking scenery, with fun and friendship.

Participants: Adrian Leather, ,Agnes Lynn, Dave Lynn, Bruce Whittington, Wanda Whittington, Bryan Gates, Daryl Johnson, Kevin Neill, Marian Porter, Mark Habdas, Mary Robichaud, Mike Fung, Nancy Kruger, Val George, and George Clulow (Leader).

Participants in The Chilcotin Expedition

Photos this page: Mark Habdas

The Reflective Birder #5

It's Not Just About the Plumage

Clive Keen

I've been having second thoughts about the "holistic" approach to bird identification. In the past I've tended to be rather dismissive of it. You know how it goes: "Learn to identify birds like the experts: through general impression of shape, size and behaviour." The problem with this is that if you can identify a bird by general impression, you're way beyond the point of needing help with it. The approach can put the cart firmly before the horse. Before people can get to identify a bird by jizz, they have to go through a process of identifying through clear specifics. It's only when they're confident that they know the species that the subtleties of jizz start to be absorbed.

Imagine that you know a particular species of bird – species x – extremely well, and you name it while on a trip. If someone says "How did you know it was an x?" you are likely to be temporarily lost for an answer because you know it so well that you haven't needed to think. You are almost inclined to say "Well, that's what they look like," which is of course no use at all, so instead you struggle to explain. You're likely to come up with half a dozen points including habitat, posture, motion and shape, none of which is diagnostic, but put together make your identification 100% certain. And it will be worthless to the beginner, who can't be expected to juggle half a dozen features, none of which clinches the identification. What they need is something specific that they can see and remember, and that works.

Is the holistic approach useless, then? Far from it, but we have to mine it to find the nugget it contains: *it's not just about the plumage*. This is the crucial point. When we first start to identify birds, it's plumage that we focus on almost exclusively. The double breast bands of the Killdeer; the bandit mask of the Common Yellowthroat; the cinnamon undertail coverts of the Bohemian rather than Cedar Waxwing, and so on for scores of other species. Perhaps we focus on the plumage not just because it usually gives great clues, but because much of the glory of a bird lies in the colours and patterns of the feathers. When there aren't easy plumage clues, though, problems arise.

At that stage, intermediate birders tend to stay in the look-at-the-plumage rut and hit the field guides to learn the more subtle elements of plumage: the broad eye-ring of the Pacific-slope Flycatcher, the whiter breast of the Warbling Vireo, and so forth. This can lead to frustration. Learning such subtleties, too often, just doesn't get the job done. Faced with a half-familiar sparrow, for example, they might think "Let's see: Song Sparrows have greyish eyebrows and a dark crown stripe, while Savannah Sparrows have yellow eyebrows and a pale crown stripe." But the bird they are looking at has whitish eyebrows, an indeterminate crown stripe, a spot on its chest, yet just doesn't look quite right for a Song Sparrow. So they shrug their shoulders, and give up. And perhaps continue giving up for years, because the plumage of both species varies greatly. If someone should just whisper "*It is not just about the plumage"* they could be close to resolution of the problem. Add the fact that Song Sparrows have long rounded tails, while Savannah Sparrows have short notched tails, and what seems a permanent problem is promptly solved.

The great thing about remembering the nugget in the heart of holistic birding is that it is very often possible to give a simple and definitive ID through just one or two non-plumage features. This caught me by surprise when I was writing a short guide to shorebirds. I covered 22 waders, and said virtually nothing about plumage, and never needed to go into complex detail. Least Sandpiper? Feeds with its chest close to the ground. Phalarope? Swims in strange jerky circles. Stilt Sandpiper? Looks as if it's doing a handstand when it feeds. And so on. Combined with pointers about size and shape, such simple descriptions take most of the mystery out of shorebird identification.

Once it is recognized that *it is not just about the plumage*, a new level of birding expertise can be obtained with remarkable ease. We can stop squinting at empids in a vain attempt to find obscure plumage identifiers, and simply listen. We can watch for the easily-seen crook of the wings of the Osprey rather than the crest that stands out clearly only in the drawings. At long last, we can remember to look carefully at bills, and thereby see immediately that a female Red-winged Blackbird is not a large sparrow, and that an Orchard Oriole is not a Black-headed Grosbeak.

The odd thing is that identification through one or two non-plumage items really is simple and very often conclusive, and yet the fact is missed by so many. We seem almost hard-wired to believe that only plumage matters. Unlearning this tendency is key to developing as a birder. "It's not just about the plumage" should be emblazoned prominently on every field guide.

NOTE: This and another 39 of these essays are now available from Amazon in the eBook *Birding: A Flock of Irreverent Essays*. See http//trayonbooks.com for details.

HIGH MOUNTAIN LIFESTYLES: THE SECRETS OF ALPINE SONGBIRDS

Kathy Martin

In mountain habitats, temperatures approach freezing almost nightly and it can snow or hail on any summer day. In such conditions, humans need a winter-rated sleeping bag for a comfortable rest, but small 20- to 40-gram songbirds are able to survive and maintain their eggs at almost 40^{o}C (their body temperature) sitting on their ground nests above the permafrost for about 19 hours/day. At low elevations in coastal BC, birds start breeding in March and produce three to four broods of young annually. However, the same species in alpine habitats, faced with the constraints of cold temperatures and prolonged snow pack, may not start nesting until June and thus only have time to produce one brood per year. Little is known about how songbirds achieve their high elevation lifestyles, yet over 90 bird species in the Pacific Northwest, and many mammals, amphibians and reptiles live and breed successfully in the often inhospitable mountain habitats.

Male Horned lark erects his 'feather' horns to defend his alpine territory on Hudson Bay Mountain, BC
Photo: Meagan Grabowski

With my students in the department of Forest and Conservation Sciences at UBC, I conduct research aimed at understanding avian alpine ecology and conservation. I began this research by asking whether mountain birds were inferior individuals unable to compete for a more benign territory at lower elevation, or whether these birds live life differently in mountains to compensate for the rigorous conditions. Research on common songbirds in western Canada such as Horned Larks, Dark-eyed Juncos and Savannah Sparrows, has revealed some of the secrets of alpine living. Alpine summer is very short: birds in the alpine have 55% less time to breed compared to the same species at lower elevations. High elevation songbirds are larger and heavier and have up to 20% higher annual survival rates than their low elevation counterparts. I have found that most birds living in alpine habitats are not inferior individuals; rather, mountain birds adopt a slower lifestyle where they produce fewer offspring each year compared to birds at low elevations, but live longer and thus have more years to breed and replace themselves. Some songbirds thrive in the alpine. Alaine Camfield and Michaela Martin (UBC Forestry) found that Hudson Bay Mountain near Smithers supports stable populations of Horned Larks and Savannah Sparrows, while at low elevations in North America, their populations are declining due to habitat loss and degradation.

Hungry Horned Lark nestlings in their alpine ground nest have mouths with brightly coloured interiors and black dots to indicate where their parents should place food. During their first week of life, young songbirds double their weight each day, so that at 10 to 12 days of age they weight the same as their parents. Lark nestlings have a high survival rate and a strong tendency to return to their birth sites.
Photo: Kathy Martin

Behavioural adaptations of birds enable them to live successfully in the alpine. Incubating Horned Larks adjust their time on the nest to keep their eggs warm with a pattern of sitting on their eggs for about 25 minutes and then taking a 10 minute recess off the nest to feed during the daylight hours. Overnight when temperatures are usually close to freezing, they spend 90-95% of their time incubating. Beth MacDonald (UBC Forestry) found that during particularly cold or stormy conditions, larks may leave the nest for periods of one hour or longer (up to six hours). These long breaks from incubation probably are important to maintain the parents' body condition during difficult times, but may come with a survival cost to their offspring: 10% fewer eggs hatched during a year when colder daytime temperatures resulted in the parents taking more long recesses. We need a better understanding of the thermal tolerance of developing embryos to appreciate the consequences for songbirds when conditions worsen due to climate change. However, it is clear that avian embryos are more cold-tolerant than previously thought.

It is not only cold but dangerous to nest on the

ground. Predators such as foxes, coyotes, weasels and ravens readily prey on eggs and young any time during incubation or the nestling period, so alpine birds must try to evade detection for several weeks. However, if predators do find and eat their young, songbirds must act quickly to squeeze in a replacement nest in a compressed breeding season in order to produce any offspring in that summer. To reduce the possibility of predators getting too successful at finding their nests, songbirds diversify their nesting ecology to co-exist. Despite the structurally simple alpine habitats, sparrows, larks and pipits choose nest sites with varying amounts and types of ground cover. They also initiate breeding at different times, with the larks starting nearly two weeks earlier than the other two species. Horned larks are amazingly hardy songbirds; they can start building nests when 95% of the ground is still snow-covered. This early start sometimes means they have to incubate through one or more snowstorms, but an early start may enable them to produce two broods in some seasons.

An alpine summer can be beautiful, cold, stormy, sometimes very buggy, as Alana Clason demonstrates while working as a field assistant on Hudson Bay Mountain near Smithers, BC. Photo: Matthew J. Tomlinson

You might wonder why birds choose to live in such rigorous conditions when they appear to have options at lower elevations. We do not know the full answer, but alpine habitats supply plenty of food for breeding, enough to compensate for the low temperatures. In coastal mountains, mosquitoes and other hardy insects provide an abundant feast for songbirds. Nest predation rates, although variable, are generally lower in the mountains.

Many secrets about how birds adopt their slow lifestyle to adjust to life at high elevation have yet to be revealed. For most species breeding across a range of elevations, we do not know whether the alpine supports stable populations. Do birds breeding in the mountains differ genetically from their low elevation counterparts, or simply switch to a slow lifestyle if they find themselves at high elevation? We know some birds can adjust their physiology or biochemistry to avoid severe stress responses to low oxygen levels or to extreme weather events that result in certain failure for birds breeding at low elevation. Jennifer Greenwood (UBC Forestry) is currently investigating physiological coping mechanisms, such as oxidative stress, for mountain songbirds breeding near Revelstoke, BC.

My research has application to the conservation and management of birds. Some alpine populations may differ genetically, and thus may represent new subspecies or new species. Mountains may represent critical refuge habitats for some open country species, such as Horned Larks, that are showing rapid population declines at low elevations across North America. Since alpine habitats are experiencing globally significant warming, it is critical to determine the vulnerability of alpine birds to climate change. With a slow lifestyle, birds breeding in mountains may be reasonably well buffered against extreme weather events that cause breeding failure every few years, but the impacts could be catastrophic if climate change reduces their survival.

Dr. Kathy Martin is a professor in UBC's Department of Forest and Conservation Sciences and a senior research scientist with Environment Canada. She can be reached at KathyMartin@ubc.ca or at kathy.martin@ec.gc.ca . Information on alpine birds is available at the Centre for Alpine Studies website: http://alpine.forestry.ubc.ca/ .

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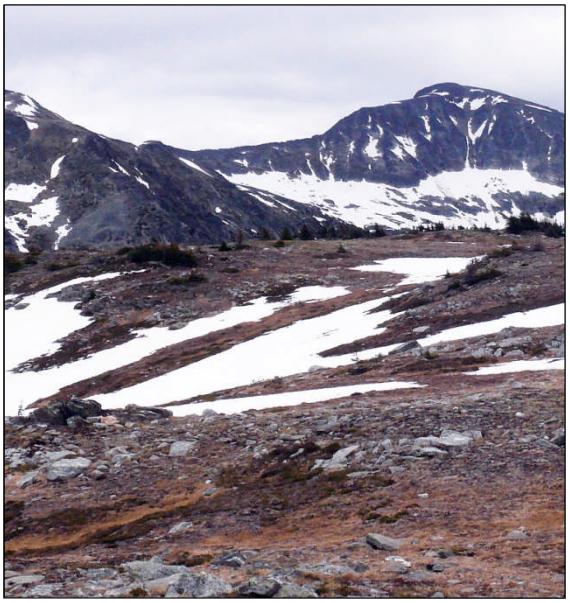


Wells Gray Provincial Park: alpine meadows, spring JMR

CHICKEN POWER
OR
HOW I BECAME A HAWK WATCHER AT THE AGE OF TWELVE

David Stirling

Our free range chickens were hunkered down, heads aslant, one eye focused up. I searched the sky, squinting into the ultra-bright light. (I didn't have binoculars.) Yes, there was a large raptor, all black with just a bit of white under the tail and a white dot on each wing. A Golden Eagle, the size of a silver dollar, almost invisible in the bright sky, was gliding north! It changed course. It was now diving straight down. The hens crouching lower uttered soft purring calls. The great raptor was approaching fast but it made contact with the ground nearly a quarter mile away close to a Sharp-tailed Grouse lek in an abandoned field. I ran in a low crouch to a copse of leafless aspens about half way to the lek in order to see this magnificent bird and identify it. It was a Golden Eagle! It had no prey. Its eagle-eyes had focused on a grouse but its intended lunch must have dodged at the last minute.

I was a twelve year old living on my parent's frontier farm at the edge of the boreal forest one hundred miles north of Edmonton, Alberta, on the north side in the big bend of the Athabasca River.

April brought the first crows, robins, Killdeers and Mountain Bluebirds. Wood frogs and chorus frogs were croaking and singing in the snow water ponds "down the hay meadow." V's of Sandhill Cranes and geese were cleaving the warming sky on their way to the Yukon River marshes. Hawks and eagles were coming north too, but they travelled as singles or pairs, seldom more than four or five in a group, spread out across the sky. There was often a long interval between birds and they were silent not like the cranes and geese that announced their coming by continuous far-carrying "garoos," honks and cackles. The quiet raptors almost always appeared gliding over at a great height on sunny warm days. I was already in that "identify and count mode" and I was fascinated by their intricate patterns of black and white as the sun shone through their wings, but to save my eyes I would watch the fowls until their sharp-eyes indicated a high-flying predator. And so the chickens were enlisted to seek out the raptors, and they were supreme. I resented wasting week days at school when the migration was on. Saturday and Sunday saw me out with the chickens. (I had sorted out the pecking order of our bunch long before it became a scientific study.) I could do my farm chores with one eye on the hens until I saw them stiffen, crouch and slant one eye skyward. Was it a Bald Eagle, Red-tailed Hawk, Harlan's Hawk, Rough-legged Hawk or Golden Eagle? Within each species there was a remarkable variety of patterns. Against the sun and the deep blue sky these birds were a fabulous sight.

I owe a debt of gratitude to our chickens for those exciting long ago days when I enjoyed the spectacle of magnificent migrating raptors crisp against the blue sky of spring.

Whether in Kentucky Fried or Hawk Spotting, chickens rule!

Photos: MH

LOONS CHOOSING LAKES

How does one decide where to live? How does a bird choose its home territory? Ecologists have supposed for a long time that animals select a territory according to the quality of essential resources and the density of others of its species. This is supposed to lead to equal opportunity and equal fitness for all since areas with sparser resources will be less densely occupied (those who study these things will recognise the 'ideal free choice' model for habitat selection). An alternative model supposes that some individuals hold superior territories by excluding others, so that opportunities and fitness are not equally distributed (the 'ideal despotic model'). It seems no one has thought much about whether the birds (or other animals) might apply specific criteria in selecting home (breeding) territories.

Loons are good subjects for study of habitat choice because their habitat (a complete lake or essentially fixed area of a larger water body) is easily defined, its characteristics are relatively easily quantified, and natal dispersal occurs over relatively short distances (typically of order 10 kilometres). A group of researchers studied a sample of 102 common loons (*Gavia immer*) that breed on small lakes and sheltered bays in northern Wisconsin. The loons, including chicks, were banded so that they were unequivocally identifiable. Over 20 subsequent years of observation, the investigators discovered that 92% of loons with established breeding territories survived to the following year, and 89% returned to reclaim their territory. In 453 instances of loons assuming new breeding territories, 27% were replacements of a lost member of an established pair; in 39% of cases territory was usurped from a prior 'owner'; and in 34% of cases a vacant lake was occupied (at any one time, about 10-12% of the lakes in the region were vacant). More interestingly, young loons establishing a breeding territory for the first time tended to select a lake with characteristics similar to their natal lake – they did not seek the optimum occupiable territory. Two quantitative characteristics of lakes upon which the finding of natal preference was based are lake size and water pH. Other things being equal, the birds tended to prefer larger lakes and ones that were near neutral to mildly alkaline. (Birds are supposed not to be able to detect acidity, so this characteristic likely is a proxy for some other characteristic such as food character or quality. In any case, of the two criteria, lake size was decidedly the stronger one.) But other things evidently are not equal in the birds' minds.

The researchers were able to discount relative fitness among the birds as an explanation for the observed choice of lakes. These findings overthrow the free choice and despotic models for habitat selection. The authors advocate, instead, 'natal habitat preference induction' (NHPI; you can count on scientists to find a long, obscure description for a straightforward idea – it sounds profound). The researchers speculate that young loons seek habitat similar to their natal habitat because their experience as maturing chicks has taught them (hence 'induction') how best to survive – to find food and avoid hazards – in that particular environment. But they never return to their actual natal lake. Might their behaviour be inherited rather than inductively learned? Probably not. In many cases these loons made a move after a few years to a second breeding territory when, having gained breeding experience, the preference for a natal-like lake was apparently lost. Further support for the idea of learned behaviour is evidence that young adult (non-breeding) loons use observations of chicks on territories as a cue to target that territory for possible takeover (known as 'inadvertent social information' or ISI): they seek to optimise likely breeding success within the constraint of natal-like preference. In some cases this lands the loons on habitats of indifferent quality that constrain reproductive success, a phenomenon described as 'maladaptive habitat selection'.

So the loons apparently do apply specific criteria, learned as chicks and juveniles, and later as breeding birds, to their choice of territory. Their early habitat choice is quite astonishing because 4 – 11 years elapse between a loon's experience as a chick and the time when it first assumes a breeding territory!

Reference: Piper, W.H., Palmer, M.W., Banfield, N. and Meyer, M.W. 2013. Can settlement in natal-like habitat explain maladaptive habitat selection? Proceedings of the Royal Society B, vol. 280: paper 20130979. *Summary by M.Church*

JMR

"WHERE ARE THE SWALLOWS?"

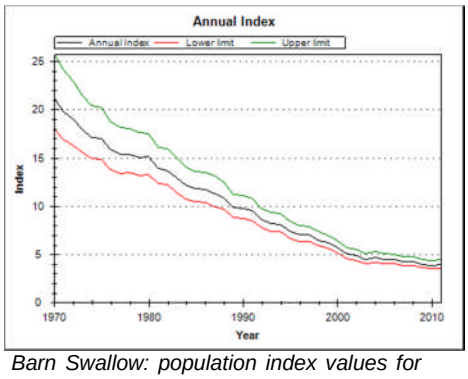
Derek J. Matthews
Vancouver Avian Research Centre

The Barn Swallow is the most widely distributed swallow in the world, breeding across the entire Northern Hemisphere and resident on all continents except Australia and Antarctica. Originally nesting primarily in caves, this swallow has almost completely converted to breeding under the eaves of buildings and barns or inside artificial structures such as bridges and culverts. Barn Swallows have been closely associated with humans and their structures for more than 2000 years in Europe, and at one time it was considered good luck to have them nesting on one's property – in fact, there were superstitious beliefs that cows would go dry if anything happened to Barn Swallows nesting on a farm!

Swallows must be amongst the most popular birds. Their arrival each spring in the Northern Hemisphere presages the onset of summer, and their close association with humans and human habitations means that they are well known to the public and highly visible harbingers of spring. So when populations fall even non-birders start asking "where are the swallows?"

Times have changed for these birds and, like all aerial insectivores, swallows have suffered precipitous declines. Research shows that in the past four decades the population of Barn Swallow in Canada has fallen by over 80% (87% here in BC), Bank Swallow by as much as 98%, and Cliff Swallow, Northern Rough-winged Swallow and Purple Martin by more than 50%.

Along with nighthawks, swifts, martins and flycatchers, swallows also belong to the guild of aerial insectivores - birds that specialize in feeding on flying insects. Populations of all these species have fallen steadily and consistently since 1970.



Barn Swallow: population index values for Canada 1970 – 2010. The index is a relative measure of population based on a statistical model. From: Environment Canada, 2013. North American Breeding Bird Survey.

Although the causes of these dramatic declines are still unclear they are likely influenced by multiple causes. Loss of artificial nesting sites, like old wooden barns and stables, have been linked to the decline of Barn Swallows; habitat loss and degradation and continuing urbanization must also play a role. There are currently no large-scale programs in place to monitor population levels of aerial insects, and very little is known about their population dynamics or trends, but there is growing concern among entomologists that aerial insects are themselves in decline. Concern is also being expressed about the status of bat populations, which also specialize in feeding on flying insects.

A variety of effects could be acting to diminish populations of flying insects. For example, nocturnal species are sensitive to light pollution and although Barn Swallows feed throughout p.19

the day, many nocturnal insects are active at dawn and dusk when Barn Swallows are foraging. Insects are also sensitive to climatic variation, especially the temperature and precipitation extremes which are becoming increasingly common throughout the world. The most obvious detrimental effect is the exceptionally widespread and continuing use, across the modern agricultural landscape, of pesticides that are specifically designed to control insect populations.

Without a complete understanding of the causes that are driving population changes, it is difficult to imagine how the current decline of aerial insectivores can be arrested, let alone reversed, and time is running out. Population levels of most aerial insectivores are still sufficiently large to allow for meaningful scientific study but trajectories of population numbers point to sample sizes being rapidly reduced over the next decade or two. We need to come up with answers and we need to do it soon if we are to save many of these species of aerial insectivores from the inevitable. What is needed is a massive and immediate national research effort to find the causes behind these dramatic and precipitous declines because if aerial insects are indeed declining to the extent suspected, this could have massive social and economic repercussions for humans too!

All photos: Barn Swallow
Vancouver Avian Research Centre
www.birdvancouver.com

SKYDANCE

I made this drawing as a memory of the walks across parks when the swallows would swoop around me and catch the insects as they were kicked up out of the grass. A friend told me she thought the swallows flew around her dog on purpose, snapping their bills in front, so that the dog chased the swallows and thus disturbed the insects.

Jenny Hards

A NOTE FROM DAVE BOYD ABOUT SWALLOWS: On June 11 (2013), we crossed the Mackenzie River on the Dempster Highway. The ferry's pilot house is mounted on a structure spanning the vehicle deck. We observed five pairs of Cliff Swallows building nests under the pilot house while the ferry was in motion. This ferry serves three ramps, and so runs a triangular route about a kilometre in length. On our return three days later the nests appeared to be complete and the swallows were very active, flying to the nests continuously while the ferry was underway.

SURPRISE DISCOVERY OF AMERICAN REDSTART NEST – LOWER SEYMOUR CONSERVATION RESERVE - JULY 13, 2013

Colin Clasen and Derek Killby

After going on Al Grass's informative saltmarsh walk at the Maplewood Conservation Area in North Vancouver on Saturday July 13, 2013, we decided to go to the nearby Lower Seymour Conservation Reserve to look for MacGillivray's Warblers -- seen a week earlier. Derek had birded there before, but Colin had not. Unfortunately, we didn't find our target bird, but fortunately we got a great surprise - a nesting American Redstart!

From the parking lot, it's about one kilometre down the heavily-forested, sometimes-steep Homestead Trail to where it joins the Fisherman's Trail, which parallels the Seymour River. From the intersection, we scanned south along Fisherman's Trail with our binoculars and noticed a small bird exhibiting some unusual fly-catching behaviour that neither of us had ever witnessed before. It would land on the trail, flutter straight up a foot or so, go back down to the trail, then up two or three feet (0.7 – 0.9 m) and back down to the trail, over and over again. At about 50 metres away on the heavily shaded trail, it was impossible to identify the bird, even with our spotting scopes. But by the time we got to within about 10 metres, we could clearly see large yellow patches on the tail and shoulders, and yellow wing bars. We then knew we had an adult female American Redstart!

We stood still in one spot and the bird seemed oblivious to us, coming as close as four or five metres, where we could easily identify it just with our eyes. We were being constantly pestered by many small black flies and it became apparent this is what the bird was catching. One photo we got of this adult bird shows it standing on the trail with a black fly in its beak.

Over a period of almost an hour, we watched the bird exhibit this non-stop, frantic fly-catching behaviour dozens of times. After each catch, it would disappear into the same small area of adjacent bushes on the east side of the trail. We realized this was probably far too much fly-catching for the adult to be feeding itself and therefore a high probability it was feeding chicks in a nearby nest. So from the trail, we carefully scanned the nearby bushes for a nest, but on that first day, we couldn't find one.

So while watching the bird, we phoned a few birding friends and arranged to get a message on vanbcbirds. We needed more sets of eyes to verify this unusual sighting and see if anyone else could find a nest. It worked!

Later that evening, Quentin Brown located the bird and confirmed the identification of the adult female. The next morning, Sunday, July 14th, Rob Lyske and his two young sons, Joe and Matthew, went there. They spotted the fly-catching adult female on the trail and followed her (with their eyes, from the trail) to the nest and watched her feeding four or five chicks!! That amazing news meant we had the only confirmed nest of an AMRE in the North/West Vancouver area (the second in BB Atlas Region 15). Rob phoned Colin with the good news and Colin got there a few hours later and witnessed the female feeding the chicks at the nest.

Then on Monday, July 15th, Derek went back and saw the nest for the first time. His timing was absolutely perfect, because within minutes of spotting the nest, he was very lucky to witness four chicks leave the nest and disperse into the surrounding vegetation. The next sighting was on the morning of Tuesday, July 16th, when Quentin Brown returned and found the female AMRE and one fledgling still in the area. The final reported sighting was by Danny Tyson on August 4th, when he saw the adult female feeding two large fledged young.

The busy location of the nest made this discovery more interesting. Fisherman's Trail in the Lower Seymour Conservation Reserve is one of the most heavily used trails on the North Shore. It's the main access for mountain bikers to the well-known mountain trails, and busy with runners, hikers and dog walkers (with leashed and unleashed dogs). On Monday, July 15th (the day of fledging), there was a steady stream of Metro Vancouver Parks trucks and service vehicles within less than two metres from one of the fledglings. The mother and fledglings appeared unfazed by the constant activity. This was obviously a good nest site because of the thick shrubbery and abundant food supply, but could this busy location also serve to deter predators?

In looking back at this sequence of events, we are amazed it was only 44 hours from the time the adult female AMRE was first spotted, to the time the chicks were seen leaving the nest. This was a great combination of coincidence and luck. Coincidence, because we went there hoping to see a different species and because it's a place where birding reports rarely originate. Luck, because we happened to be in exactly the right place at exactly the right time for the adult female to come into view.

Now we are wondering how many similar instances there may be where uncommon birds nest in previously unknown areas and go completely undetected by birders. This is a good reminder for all of us to try areas that are less-convenient and less-frequented. You just never know what surprise you might find!

Left: female redstart with black fly (Colin Clasen)

Below left: female approaching nest. (Rob Lyske)

Below right: chick about to fly (Derek Killby)

TOBACCO AND BIRDS

David Stirling

Further to Even Smokers Have Their Uses, BC Birding, Vol 23 #1, March 2013.

Way back in the early 1930s when I was getting excited about natural history, from frogs to birds and moonworts to balms-of Gilead, there were few if any field guides. I didn't have any. Tobacco came to my rescue. My father was a smoker (smoking was universal and was considered to be much more civilized and cleaner than chewing tobacco or snoose, popular bad habits on the frontier.) He purchased Imperial Tobacco Fine Cut in one pound cans for "rollyerowns". In each can there were several bird cards from a series of one hundred from the illustrations in **Birds of Canada** by Alan Brooks and F C Hennessy. (See examples below.) I eagerly awaited a new can, hoping for no duplicate cards. These cards were well used and a real boon until sometime later I was rich enough ($2.00) to send for **Birds of Canada** by P A Taverner.

REQUEST FOR NOMINATIONS: THE STEVE CANNINGS AWARD FOR B.C. ORNITHOLOGY

In 2007, B.C.F.O. presented its first award for contributions to B.C. ornithology, now named the Steve Cannings Award for B.C. Ornithology, to Dr. Ian McTaggart-Cowan. Subsequent awards have been presented to David Stirling (2008), Madelon Schouten (2010), Dr. Jeremy Tatum (2010), Ralph Ritcey (2011), Glenn Ryder 2012, and Fred Zwickle 2013. The award recognizes contributions over a long period of time to ornithology in British Columbia in one or more of the following three categories: (1) research on bird biology and/or ecology, or detailed documentation of the avifauna of a portion of B.C; (2) conservation of birds and/or bird habitats in B.C; (3) public education about birds in B.C. The award is to be announced and, if possible, presented to the recipient annually during the banquet at the B.C.F.O. annual meeting.

We request nominations from any B.C.F.O. member for candidates for future Steve Cannings Awards. Nominations should include at least a brief statement as to why the nominator(s) believe that the nominee is deserving of the award. Nominations should be sent in writing to Dr. Wayne C. Weber, Chair of the Steve Cannings Award Committee, either by mail to 51-6712 Baker Rd., Delta, B.C. V4E 2V3, or by e-mail to contopus@telus.net.

The recipient of a given year's award is recommended by a three-person Awards Committee (Richard J. Cannings, Martin K. McNicholl and Wayne C. Weber) and approved by the B.C.F.O. board. All nominees not chosen in a given year will be considered automatically in future years without requiring another nomination, but updates or expansions to previous nominations are welcome. All nominations for the award will be gratefully received.

Call for BC Coastal Waterbird Survey Volunteers

The British Columbia Coastal Waterbird Survey, a volunteer-based monitoring program started in 1999, tracks abundance and distribution of BC's wintering waterbirds: loons, grebes, cormorants, swans, geese, herons, ducks, shorebirds, gulls, and alcids. More than 600 volunteers have contributed to this program over the years. The 15th survey season begins on September 8. We are seeking volunteers to conduct waterbird counts on the second Sunday of each month, at several sites in Vancouver, Victoria, Nanaimo-Qualicum Beach, Campbell River, Tofino-Ucluelet, and on the central and north coast.

Barrow's Goldeneye

Long-tailed Duck

Visit Bird Studies Canada's **BC Coastal Waterbird Survey webpage** for more information, detailed instructions, and a downloadable data form. On our "Volunteer Resources" page, check out the new Training Guide for an overview of how to do the survey, along with a quiz you may want to try! To learn more or sign up, please contact Karen Barry at bcprograms@birdscanada.org or 1-877-349-2473. We wish all of our surveyors a good birding season, and look forward to welcoming new volunteers to the team. We hope you enjoy the surveys! From BSC Latest News July 27, 2013

UPCOMING!!

BCFO TWO-DAY FIELD TRIP

SUNSHINE COAST - November 23-24, 2013

As a place to see rocky coastline shorebirds on the southern Mainland Coast, the Sunshine Coast is the destination of choice. Combining Black Oystercatchers, Black Turnstones, Surfbirds and Rock Sandpipers on the shores with possibly 5 species of alcids, including Ancient and Marbled Murrelets, offshore, this trip promises a feast of wintering water-birds that can be tough to find elsewhere.

Leader: Tony Greenfield 604 885-5539
tony@whiskeyjacknaturetours.com

How the Trips Work: BCFO two-day field trips are member-led, but participants make their own arrangements for accommodation, food and travel. *Carpooling* is encouraged; for the birding trips, carpooling will be arranged on the morning of Day 1.

Schedule: Day 1: All-day birding. Evening get-together (see below); Day 2: am birding; pm *optional* birding.

Register in Advance: **Important:** *Register at least two weeks in advance*. E-mail or phone the trip leader with names and numbers of participants. The leader will give you specific details of when and where to meet. If needed, additional leaders may be recruited to keep group sizes small.

Cost per Two-day Event: Members $10/person; Non-members- $40/ person (includes BCFO membership).

The Social Side: At the end of Day1, where possible, leaders will make arrangements for participants to meet for dinner to recap the day, tally species, and .confirm arrangements for the following day.

JOIN WITH FELLOW MEMBERS – GREAT BIRDING IN GREAT LOCATIONS

BIRDS DRIVE RAPID EVOLUTION OF TREES (AND THE FOREST)!

Birds are well-known dispersers of seeds, to the benefit of the plants. But a sensitive factor in ecosystem dynamics is which birds disperse which seeds. A spectacular case arises in the Atlantic forest of southeastern coastal Brazil where frugiferous (fruit-eating) birds disperse the seeds of *Euterpe edulis* (the juçara or palmiteiro, a fruit-bearing palm principally valued for its 'heart of palm', a vegetable derived from the inner core and growing bud of the tree). Fruit stones – the seeds – vary in size from 7 to 15 mm and were formerly dispersed principally by toucans, toucanets, and large cotingas – large-gape frugifores who can swallow the largest seeds. However, these birds have now become relatively rare in the forest as the result both of hunting and of forest fragmentation. They require extensive tracts of forest, yet the Atlantic forest has been extensively cleared for agriculture since the 19th century.

The consequence is that, today, birds with smaller gape, such as thrushes and bellbirds dominate the remnant forest and selectively consume and disperse the smaller seeds. This has led to the proliferation of juçara palms that produce small seed – an evolutionary adaptation. With smaller energy reserves in the seed, the tree reproduces less successfully and that, in turn, has affected its relative abundance in the remaining forest.

Galetti *et al.* elaborated this story by comparing seed size distributions in 15 intact tracts of the Atlantic forest with seven fragmented tracts. (More specifically, in the latter, they chose 'defaunated tracts'; ones in which the large-gape birds have become relatively rare in comparison with their presence in intact forest). Toucans and large cotingas dominated seed dispersal in the intact forest while thrushes dominated in the defaunated tracts. In the intact forest, frujifores with gape smaller than 12 mm accounted for only 33% of the consumed seeds, whereas in the defaunated forests, they accounted for up to 98% of consumption. In these tracts, modal seed size fell in the range 9-11 mm and seeds larger than 12 mm were very rare whereas, in the intact forests, modal seed size fell in the range 10-12 mm and sizes to 15 mm were generally found. By statistical analysis, the investigators confirmed that the defaunation (rather than attributes of the forest itself or of the forest landscape) was the best correlate of the observed difference in seed size.

Extending their study to a modelling exercise, they showed, in light of tree generation period, that it would require on the order of a century for an evolutionary change in seed size to occur in consequence of selection pressure imposed by the birds. This result fits neatly the time scale of human clearance and fragmentation of the forest, which is the root cause of the consequent changes. The case illustrates well the subtle and often indirect ways in which human activities in the landscape exert evolutionary pressures that precipitate significant changes beyond those that are deliberately intended. It also provides a contrast with the evolutionary adaptation of bill (or gape) to seed size observed in Darwin's finches on the Galapagos Islands.

Galetti, M. and 14 others. 2013. Functional extinction of birds drives rapid evolutionary changes in seed size. *Science* 340 (31 May): 1086-1089. *Summary by M.Church*

SEX IN THE CITY – BLACKBIRD STYLE

Artificial light is a pervasive phenomenon with many untoward effects. City lights have certainly altered human activity patterns with some problematic consequences for human health. Hundreds of millions of animals and birds also live in cities and are subject to varying levels of nocturnal light. What might be the effect on them? In particular, what may be the effect on temperate and boreal birds for which daily photoperiod prompts seasonal activities? Some German researchers set out to determine the consequences for reproductive behaviour in European (Common) Blackbirds (*Turdus merula*), a close relative of our American Robin (*Turdus migratorius*). First, they caught a number of urban and forest birds (15 each) and attached tiny light microloggers (3 grams weight) to each bird. After a week they recaptured as many of the birds as possible and analyzed the records. For forest birds night light was at the lowest limit of logger resolution (0.00004 lux). City birds experienced night light averaging 0.2 lux and ranging up to 1.3 lux (an average streetlight in the urban test area emits 6.0 lux).

The researchers then captured 20 city and 20 forest birds (all males) and set them up in an aviary so that half of each population was subjected to rural dark nights, whilst half was subject to 0.3 lux illumination. Birds redevelop reproductive organs in each breeding season, after which regression of these organs occurs, presumably an adaptation to increase year-round metabolic efficiency. The researchers therefore studied gonad development (which involved repeated minor surgery from which the birds apparently recovered unscathed), onset of testosterone production and of pre-breeding moult, and singing habits. They found that the experimental (nocturnally illuminated) birds developed functional testes 26 days before the control (dark) birds. There were differences associated with the birds' origin too: city birds became reproductively active 13 days before their country cousins and city experimental birds experienced testicular regression 14 days earlier (dark birds didn't differ). In sum, the experimental birds experienced a reproductive season 9 (forest) to 12 (city) days longer than their dark cousins, mainly as the result of earlier onset. Experimental birds began to moult on average 22 days before control birds, began to increase testosterone production earlier and commenced their dawn chorus earlier than control birds. The investigators report that the birds exhibited no observable deterioration of physical condition over the course of the experiment. Not controlled in the experiment, because unknown, was the age of the birds, but it seems unlikely that the birds would have been divided into the experimental groups in such a manner that age could reveal itself as a systematic effect.

It has long been known that elevated nocturnal light influences reproductive physiology and behaviour of birds. Nocturnal light is extensively used in the poultry industry to stimulate egg-laying, but the light levels used are far above those experienced around city streets. The remarkable aspect of the present results is the magnitude of effect induced by only a minor light stimulus (on average, some 3 percent of street lamp intensity). It is also known that city birds do breed earlier than rural ones. Warmer microclimate, increased food resources and greater social interaction have been posited as reasons. The simple effect of light has not previously been studied in isolation. The present study shows that male Blackbirds' readiness to breed is advanced by city light by as much as a month, but it does not ascertain female response. Nor does it assess any fitness advantage or disadvantage that may accrue. The earlier and longer breeding period enjoyed by city males might confer a fitness advantage in terms of time for young to develop, or it may be a disadvantage if weather or food availability are not optimal at the time of breeding.

Artificial light will only further increase, and it more and more evidently affects the behaviour pattern of all creatures, including us. Its effects demand far more investigation. (For insight on the effect of nocturnal light on shorebird feeding behaviour see *BC Birding, June 2013.)*

Dominoni, D., Quetting, M., and Partecke, J. 2013. Artificial light at night advances avian reproductive physiology. Proceedings of the Royal Society B ***280****: 20123017*. doi: 10.1098/rspb .20123017*
**This is a paper number. It replaces pagination referencing.*
Summary by M.Church

Photo credits: Male Blackbird: Paul Cools; Female (with rowan berry): Anne Cotton; both images from The Internet Bird Collection

Rare Bird Report
Fall , 2012
(1 Aug – 30 Nov)
From North American Birds

British Columbia

by Chris Charlesworth

After a hot and dry July, the Region experienced more variable weather through August and September with upper troughs breaking down the North Pacific Ridge on a weekly basis, spawning showers and thunderstorms. The ridge reached maximum amplitude at the beginning of October creating unseasonably hot and dry conditions everywhere. But by the third week, the transition to more active autumn weather was complete. The first snowfalls arrived earlier than normal across the northern quarter of the Region in October and pushed south to cover the northern half by the end of the period. Many interior locations had a snowy Halloween, but then all except those areas east of the Rockies experienced a milder and drier November – Jack Bowling.

WATERFOWL THROUGH ALCIDS

Rare in August, an eclipse male Eurasian Wigeon was a nice find at Salmon Arm, 27 Aug (DC). A basic male Long-tailed Duck delighted many birders at O'Keefe's Pond in Vernon, 13 Oct to 21 (AG, m.ob).


Long-tailed Duck, O'Keefe's Pond.
Photo: Dean O'Dea.

At the Penticton Yacht Club, a female type Long-tailed Duck was present 22 Oct (CC,KF). Pacific Loons are rare but annual visitors to the Okanagan Valley. One was present at Tucelnuit Lk, in Oliver, 4 to 10 Nov (CC,KF, m.ob). Another Pacific Loon, this time an immature, was at the south end of Wood Lk in Lake Country, 17 to 26 Nov (KF, m.ob). Rare in the Fraser Valley, a Red-throated Loon at Island 22 near Chilliwack on 30 Oct, was unexpected (GG). Two reports of Yellow-billed Loons came in from the province with one at the west end of Eaglet Lk in Prince George, 5 Nov (Nancy Krueger), and another north of Port McNeill at the tip of Vancouver Island, 12 Sep (Jared Towers). Rare in coastal BC, single Clark's Grebes appeared at the White Rock Pier, 11 Oct (Carlo Giovanella), and at McMicking Point in Victoria, 12 to 17 Nov (JC, m.ob). Brown Pelicans appeared along shores of southern Vancouver Island in large numbers this fall. They began to appear as singles, with one at Beechey Head, 10 Nov (IC), and another off Cordova Bay in Victoria, 12 Nov (MM). Eleven Brown Pelicans were counted from the Coho Ferry near Ogden Point in Victoria, 18 Nov (MR), and nearly a dozen inhabited the breakwater at Ogden Point for several days after. In Howe Sound, where Brown Pelicans are much rarer, one was at the Squamish Yacht Club, 20 Oct (Chris Dale), and an immature was at Porteau Cove 28 Oct (Ken Wright). These two sightings could well be of the same individual. A Great Egret was at the Vanderhoof Bird Sanctuary 9 Sep (CA, CCo). While an annual rarity in southern BC, Great Egret is still very rare in the northern half of the province. In Abbotsford, an imm. Black-crowned Night-Heron was at Hougen Park, 21 Oct (RT). Sabine's Gull reports were few and far between in the interior of the province this fall. One juv. was at Nulki Lk near Vanderhoof, 9 Sep (CA, CCo). A basic adult was on the mudflats at Salmon Arm 18 Oct (TH). A Little Gull was at the Ogden Point Breakwater in Victoria, 3 Nov (LH). Another immature Little Gull was in the Fraser Valley at Harrison Lake, 15 Sep (RT). A high count of 326 Bonaparte's Gulls at Harrison Lk in the Fraser Valley, 28 Oct, was of note (Chris McDonald). Also at Fraser Lake, a first year Franklin's Gull was present 27 Sep to 3 Oct (Kevin Jones, et al). Up to 5 juv. Franklin's Gulls were at Nulki Lk near Vanderhoof between 17 Aug and 9 Sep (CA, m.ob). A juv. Franklin's Gull was at Ken Forde Park in Campbell River, 30 Aug (Wesley Greentree). On Vancouver Island, a juv. Franklin's Gull was at Oyster Bay near Courtenay, 2 to 6 Aug (Art Martell). At Salmon Arm, a juv. Franklin's Gull was seen 27 Aug (DC), and at Kelowna another juv. was at the landfill, 1 Aug (CC). In the Kootenays, 5 juv. Franklin's Gulls were counted along Channel Rd in Creston, 4 Aug (Oskar

Nilsson). An adult Lesser Black-backed Gull at the Kelowna Landfill, 1 Aug, provided a first record of the species in the province during the summer months (CC). An exceptional find was an **Elegant Tern** at Cattle Point in Victoria, 1 to 3 Nov (SR, m.ob). An Arctic Tern at Harrison Lake near Chilliwack, 15 Sep was of note (RT). In the Okanagan, an Arctic Tern appeared along Okanagan Lake in Penticton 15 Aug (LN). Parasitic Jaegers are always an exciting find anywhere in BC away from the immediate ocean. Up to 8 were present at Harrison Lake in Fraser Valley 15 Sep (RT). An imm. Parasitic Jaeger was at Nulki Lk near Vanderhoof 9 Sep (NK), and an adult was at Salmon Arm 10 Sep (DC). A juv. Long-tailed Jaeger, was noted at Island View Beach in Victoria, 8 Aug (MM, BM). Very rare in the fall period, a Black-necked Stilt was present at Cowichan Bay in Duncan 18 Sep (fide Jeremy Kimm). With the long staying Tsawwassen Willet now gone, it has become harder to find this species in BC. Therefore a Willet at the White Rock Pier, 23 to 25 Oct attracted numbers of birders (DT, m.ob). Perhaps only the second record for the southern interior of BC, a juv Wandering Tattler was along the Fraser River in Lillooet 26 Aug (JF). In Salmon Arm, an Upland Sandpiper was seen several times at Peter Jannink Nature Park between 30 Aug & 2 Sep (DC, m.ob). Near Vernon, an imm. Hudsonian Godwit was a nice find at Otter Lake 21 & 22 Aug (CS, m.ob). Another juv. Hudsonian Godwit delighted birders at the pier in Salmon Arm 31 Aug to 2 Sep (TH, m.ob). A juv. Ruddy Turnstone was at the Salmon Arm Mudflats 30 Aug (DC). Also in Salmon Arm, at least one juv. Sanderling was present between 27 Aug and 27 Sep (DC). The usual smattering of Sharp-tailed Sandpiper records from coastal regions came in this fall. Two juv. were at Robert's Bank, S. of Vancouver 17 Oct (Mike Tabak). Another juv. was at the McIntyre Reservoir near Victoria 3 & 4 Sep (MM, BM, m.ob). An unprecedented 15 juv. Sharp-tailed Sandpipers were counted at Pantage Lake near Quesnel, 5 Sep (Rod Sargent, Adrian Leather). Up to 4 remained until 23 Sep.

Sharp-tailed Sandpipers at Pantage Lake. Photo: Rod Sargent.

A Reeve was photographed at Boundary Bay, near Vancouver, 7 Sep (Mike Tabak).

In the Okanagan, 2 juv. Stilt Sandpipers were at Robert Lake in Kelowna 9 to 30 Aug (CC, m.ob). Two Stilt Sandpipers were in flooded fields at the N. end of Osoyoos Lake 20 to 30 Aug (DB). At the Tofino Sewage Ponds

Reeve, Boundary Bay. Photo: Mike Tabak

a juv. Stilt sandpiper was seen 18 Aug (AD). Rare in the interior, a

Phalerope at SS Sicamous, Okanagan Lake
Photo: Laure Neish

juv. Short-billed Dowitcher was at Robert Lk in Kelowna, 9 to 22 Sep (CC, et al). An imm. Red Phalarope was a fantastic find at the SS Sicamous on Okanagan Lake in Penticton, 31 Oct to 2 Nov (DCa, m.ob).

Rare but annual migrants over southern Vancouver Island, two Broad-winged Hawks were noted at Pedder Bay near Victoria 8 Sep (RS). Two more Broad-winged Hawks were circling over Beechey Head with a kettle of Red-tailed Hawks in East Sooke, 15 Sep (Robin Robinson), and an immature Broad-winged Hawk was over Mount Tolmie in Victoria, 21 Sep (JG). An immature Gyrfalcon frequented areas around rural Chilliwack 27 to 30 Oct (RT).

DOVES TO BUNTINGS

A Northern Hawk-Owl reported at East Sooke Park on southern Vancouver Island, 6 Oct was a great find (Aziza Cooper). Unfortunately the bird did not stick around. The season ramped up to be another invasion year for Snowy Owls. The first reports came in from the Fraser Valley with one in East Chilliwack, 4 Nov (Dave Beeke). Another was at the Hope Airport, 4 Nov (RT). Numbers then began to grow, and 15 were tallied at Sandspit on Haida Gwaii, 5 Nov (Peter Hamel). In Victoria, several Snowy Owls spent the season on Trail Island, and others appeared in

Nanaimo and on nearby Hornby Island. What made this season's invasion special is it included the interior of the province, while in most years the coast attracts most of the Snowy Owl records. In the Central Interior of the province, up to 24 Snowy Owls were known, with the first appearing at the University of Northern BC in Prince George 5 Nov (Bonnie Hooge). By the end of November, at least 5 Snowy Owls had died in the Prince George area and been turned in to local conservation officials. In the Thompson Okanagan and Kootenay areas, Snowy Owls also appeared in unprecedented numbers. Unfortunately many of them were hit by vehicles, or found dead of starvation. A Boreal Owl found at a private residence in Chilliwack, 3 Oct provides a rare valley bottom record of this high elevation species (RT, et al). A Common Poorwill was found injured at Burnaby Lake near Vancouver, 6 Nov (Roy Teo). The bird was taken into wildlife rehab and released later that evening. Not only is this an ultra rare sighting around Vancouver, but it is also months later than most previous provincial Common Poorwill sightings. Rare in the W. Kootenay, a male Anna's Hummingbird visited a feeder in Faquier, 6 Nov (GD, et al). Black Phoebe sightings continue to increase, with one at Deas Island in Delta, 9 Nov (DT). Several Tropical Kingbird sightings came in from the BC coast this fall with one photographed at Blackie Spit in White Rock 20 Oct (Al Grass, Derek Killby, et al). Perhaps the same bird was found at Boundary Bay 25 Oct and remained there to 3 Nov (Wes Aslin m.ob). On Vancouver Island, a Tropical Kingbird visited Cattle Point,

Tropical Kingbird, Boundary Bay. Photo Wes Aslin.,

1 Nov (IC). Another was at Panama Flats, Victoria 10 Nov (RS, et al). Regular in BC, but still worthy of mention, the usual sprinkling of Blue Jay reports came in from various regions of the province. A Blue Jay was at the Vaseux Lake Bird Observatory in the Okanagan 8 Oct (DB, et al). Another was photographed at a feeder in Kamloops 25 Oct (fide Rick Howie). In Summerland, a Blue Jay spent the fall and the entire winter season, first appearing 23 Oct (Laurie Rockwell, m.ob). Also a regular rarity nowadays on the Lower Mainland, a Western Scrub-Jay frequented a neighbourhood near Grimston Park in New Westminster 13 Sep to 12 Oct (Ryan Mackay, m.ob). One of the best sightings of the season came from Iona Island in Richmond where BC's first **Cave Swallow** appeared 11 Nov and remained until 18 Nov (JF,JK,PL, m.ob).

BC's first Cave Swallow, Iona Island, Richmond. Photo David Tang.

A very rare visitor to the lower Fraser Valley, a White-breasted Nuthatch was a good find at the Hope Airport 6 Oct (RT). In Victoria, a Blue-gray Gnat-catcher appeared 1 Oct at Swan Lake and remained through the end of the period (SR, m.ob). Canada's first **Citrine Wagtail**, a first winter bird, was found in farm fields near Comox, BC on Vancouver Island 14 Nov (Dave & Adele Routledge). The bird was seen by hundreds, if not over a thousand birders, during its stay which lasted well into the spring of 2013. The Comox bird represents only the second North American record of Citrine Wagtail, with the other record coming from Starkville, Mississippi in Feb/Mar 1992.

Canada's first Citrine Wagtail in fields near near Comox, 21 Nov. Photo: Bill Pednault.

Smith's Longspur is a rare species anywhere in BC, except perhaps in its small breeding range in Haines Triangle of NW. BC. Three Smith's Longspurs seen in stubble fields near Fort St. John 26 Aug, provided a nice local record of this scarce migrant (RC). Tennessee Warbler is a rare fall migrant in the Okanagan Valley. Two reports came in this fall, with an immature at Mill Ck in North Kelowna 9 Sep (CC), and another imm. at the Winfield Creek Habitat Preserve in Lake Country 21 Sep (CC,MF, et al). An Orange-crowned Warbler spent the winter at Penticton Esplanade. It was first found 22 Oct with a small group of chickadees and juncos (CC,KF). Ultra rare in the Okanagan, a first fall female Magnolia Warbler was

photographed at Mahoney Lk near OK Falls, 11 Oct (LN). A very late Yellow Warbler, a first year bird, was photographed in New Denver in the W. Kootenay 16 Nov (Linda Norman). At the Vaseux Lake Bird Observatory, a female type Chestnut-sided Warbler was banded 15 Sep (DB, et al).

Magnolia Warbler at Mahoney Lake near OK Falls. Photo: Laure Neish.

Rare in the Hope area, a Nashville Warbler was seen 14 Oct at the airport (RT). In Chilliwack, a Nashville Warbler was along McLeod Rd, 11 Oct (RT), and in Princeton a very late Nashville Warbler was photographed 25 Nov (Amanda Lahaie). The string of rarities at the Hope Airport continued, with a male Black-throated Blue Warbler sighted 1 Nov (RT). Another male Black-throated Blue Warbler report came in from Goat Lake near Powell River 7 Oct (PG). A Wilson's Warbler along Britton Ave in Chilliwack 6 Nov was a local late record (RT). Banded at the Tatlayoko Lk Bird Observatory was a hatch year male Black-and-white Warbler 21 Aug (AB, et al). Northern Waterthrush is a rare but annual migrant in the Vancouver area. One was seen by many at the Reifel Refuge in Ladner 1 to 14 Oct (Brian Self, m.ob). The Okanagan's latest MacGillivray's Warbler was along Mill Ck in N. Kelowna 28 Oct (CC,KF). A female American Redstart at Uplands Park in Victoria 24 Oct was a nice find (JG). Several reports of Clay-colored Sparrow came in from coastal locations where the species is a rare migrant. A Clay-colored Sparrow was along Fulton Ave in West Vancouver 5 Nov (Alexis Harrington). Another Clay-colored Sparrow was at the Hope Airport, 1 Oct (RT), with another at Jordan River on the southern tip of Vancouver Island, 16 Sep (LH). In Victoria, a Clay-colored Sparrow was reported 30 Sep (MM, BM). A Vesper Sparrow found at Colony Farm in Coquitlam 15 Oct was of interest. A Lark Sparrow on Bailey Rd on the Vernon Commonage 25 Nov was a very late record (TS, AG, et al).

Okanagan's latest Lark Sparrow at the Vernon Commonage. Photo Don Cecile.

In the Fraser Valley, a Le Conte's Sparrow, a species normally found in BC only in the Peace River area, was found 31 Oct (RT). After the lack of Harris's Sparrow reports in BC in the fall and winter of 2011/12, it was nice to receive several reports of them this period. An imm. Harris's Sparrow was found in a hedgerow near Tsawwassen on the Lower Mainland, 28 & 29 Oct (Rob Lyske). An imm. Harris's Sparrow appeared at the Hope Airport, 24 Oct (RT). Another immature was photographed at a private residence in Chilliwack, 23 Oct (fide RT), and on Vancouver Island, a Harris's Sparrow turned up at Panama Flats 20 Oct and remained until at least 26 Nov (Jeremy Kimm, m,.ob). In the interior, an imm. Harris's Sparrow was seen by many in weedy fields near Munson Pond in Kelowna 18 to 29 Oct (CC, m.ob) and another was at a feeder in Fauquier in the W. Kootenay 9 Nov (GD, et al). A great find was a first winter **Rustic Bunting**, BC's eighth, at the Massett Golf Course on Haida Gwaii, 19 Oct (MH, et al). A Black-headed Grosbeak at Hope

Rustic Bunting, Masset. Photo: Ray Woods.

Airport, 19 Oct is a late date for this species (RT). Also at the Hope Airport, a female type Cassin's Finch was seen 28 Oct (RT). Another report of Cassin's Finch came from the Fraser Valley, this time in Chilliwack 21 Oct (Joanne & Bruce Clayton). Cassin's Finches are normally associated with more dry interior forests. A female Purple Finch was noted along the Okanagan River Channel in Penticton, 30 Oct (DCa). Also in the Okanagan, two female Purple Finches visited a feeder in Summerland 21 to 26 Nov (David Lane, et al). Two Bramblings were photographed near Sandspit Airport on Haida Gwaii, 20 Oct (Brian Elder, et al).

Bramblings on Haida Gwaii
Photo: Brian Elder

OBSERVERS:

CA – Cathy Antoniazzi; AB - .Avery Bartels; DB – Doug Brown; DCa – Dick Cannings; RC – Russell Cannings; JC – Jon Carter; DC – Don Cecile; CC – Chris Charlesworth; CCo – Christopher Coxson; IC – Ian Cruickshank; GD – Gary Davidson; AD – Adrian Dorst; JF – Jamie Fenneman; JF – Jess Findlay; KF – Kyle Fitzpatrick; MF – Michael Force; JG – Jeremy Gatten; GG – Gord Gadsden; AG – Ann Gibson; PG – Pierre Geoffray; LH – Louis Haviland; TH – Ted Hillary; JK – Jeremiah Kennedy; NK – Nancy Krueger; PL – Paul Levesque; BM – Barb McGrenere; MM – Mike McGrenere; LN – Laure Neish; SR – Steve Roais; MR – Mary Robichaud; TS – Tanya Seebacher; RS – Rick Schortinghuis; CS – Chris Siddle; RT – Rick Toochin; DT – Danny Tyson.

Chris Charlesworth,
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DARWIN'S PIGEONS

Charles Darwin was a pigeon fancier. He bred them; he belonged to two of the London pigeon clubs of the day; he corresponded with the leading authorities in the Middle East and south Asia, where pigeons and many of their breeds originated. He regarded pigeons as powerful evidence for his thesis that phenotypic variation of individuals might lead to speciation and animal evolution. He wrote:

> *"Altogether at least a score of pigeons might be chosen, which if shown to an ornithologist, would certainly, I think, be ranked by him [apparently, lady-ornithologists did not exist, at least not visibly, in the nineteenth century] as well-defined species. Moreover, I do not believe that any ornithologist would place the English carrier, the short-faced tumbler, the runt, the barb, pouter, and fantail in the same genus; more especially as in each of these breeds several truly-inherited sub-breeds, or species as he might have called them, could be shown him.*
>
> *Great as the differences are between the breeds of pigeons, I am fully convinced that the common opinion of naturalists is correct, namely, that all have descended from the rock pigeon (Columba livia)". . .* (from *The Origin of Species*)

There are, in fact, more than 350 breeds of *Columba livia*, many of which differ so markedly from the common Rock Pigeon that, as Darwin surmised, they suggest macroevolutionary changes more than variations within a single species. Darwin was convinced that he was observing phenotypic changes that might eventually lead to (or be identified as) speciation, but critically – and this fact rendered his entire theory of the origin of species simply a grand hypothesis in his day – he did not know about genetic variation and so he did not know the biological basis for phenotypic variation or speciation. Modern genetics has, of course, closed the argument.

A particular characteristic of some breeds is the presence of a head crest that varies from the peak crest of the Indian fantail (which sort of resembles a pigeon with a 'duck-tail' haircut) to the enveloping hood of the aptly named Jacobin. Presence of a hood is a recessive trait and researchers have now pinpointed its expression to variation in a single gene that determines the growth direction of neck feathers. In crested pigeons feather buds on the back of the neck, appearing during the embryo stage, are genetically programmed to grow feathers upward rather than down. The researchers have further determined that the genetic mutation that leads to this result occurred only once, and has subsequently spread as various breeds have developed, either by happenstance or through selection by traditional breeding methods. Presumably other genetic variations are responsible for the many characteristics that vary among pigeon breeds.
Darwin would be highly pleased with this finding.

*Shapiro, M.D. and 17 other authors. 2013. Genomic diversity and evolution of the head crest in the Rock Pigeon. Science **339**: 1063-1067.*
(The article is highly technical) *Summary by M.Church*

Jacobin Pigeon Pat Tenison

BEWARE NEONICOTINOIDS

Beware neo-what? “Neo-nico-tinoids” are a class of organic compounds chemically related to nicotine, which is a neuro-active substance. Neonicotinoids were introduced as agricultural pesticides in the 1990s to replace older compounds, including organophosphates such as diazinon and carbamates such as carbofuran, which were highly toxic to non-target species such as beneficial insects, birds and mammals, and against which some target species had developed some immunity. The specific neonicotinoid imidacloprid is today the most widely used pesticide in the world, and there are now more than 300 neonicotinoid products. The trouble with them all is that, despite lower acute toxicity, they are persistent (the time for concentrations in the soil to decline by 50% is typically one to two years), highly soluble (hence easily pollute water and are spread in both surface and groundwater), and their effects on living organisms are cumulative and irreversible, making them chronically dangerous.

There has been widespread attention paid to the supposed role of neonicotinoids in the decline of bees, with consequences for the pollination of agriculturally important plants. Much less attention has been given to their effects on birds and small mammals. Yet a single corn kernel coated with a neonicotinoid (e.g., a treated seed grain) might kill a meadowlark-sized (100 grams) songbird. One-tenth of that dose per day during egg-laying can affect reproduction. Neonicotinoids are frequently used as seed treatments and so are particularly dangerous to ground-nesting seed eaters. Their indirect effects are important, too: they are highly effective pesticides and so, with their widespread use, the insects upon which many birds feed have become more scarce in the countryside, both in the fields and in and over water bodies.

Concerned scientists have charged that regulatory agencies in North America and Europe have paid too little attention to the collateral effects of neonicotinoids. Welcomed as a replacement for the earlier pesticides, their persistent and cumulative effects have not been rigorously assessed. The usual test for substance toxicity in small organisms is the ‘LD50’ dose – the quantity of substance that will kill 50 percent of a test population of organisms, measured as milligrams per kilogram of the test organism’s weight. For birds, the usual test animals in U.S. EPA trials have been the Northern Bobwhite (*Colinus virginianus*), a small quail of typical weight 170 g, found in Canada only in extreme southwestern Ontario, and the ubiquitous Mallard (*Anas platyrhynchos*), weight 1100 g. Such tests do not inform on chronic effects of sublethal exposure that may nevertheless compromise reproduction, nor do they extrapolate to gauge effects on the multitude of small passerines with body weights in the range 15 g (many sparrows) to 100 g (meadowlarks). Nor do they consider food chain effects.

There have been calls to severely regulate the application of neonicotinoids, particularly in view of their persistent properties, and to ban altogether their use as seed treatments. On 29 April, this year, the European Union placed a two-year moratorium on their use pending further studies of their effect on bees. European scientists have claimed, further, that the decline of a number of field bird species is related to the use of neonicotinoids but, given the wide variety of threats to bird populations, including habitat loss, migration stresses, food availability and disease, it has proven extremely difficult to confirm a causal connection. Clearly, however, these compounds require far more rigorous examination for ecological effects than has been conducted so far, effects to which birds are particularly strongly exposed.

Mineau, P. and Palmer, C. 2013. The impact of the nation’s most widely used insecticides on birds. American Bird Conservancy. www.abcbirds.org/abcprograms/policy/toxins/Neonic_FINAL.pdf. (98pp). *Summary by M.Church*

Dr. Pierre Mineau is senior scientist emeritus at Environment Canada and one of the world’s leading experts on toxicological effects on birds. Cynthia Palmer is an American environmental policy analyst and administrator. The report is oriented toward U.S. policy and regulations but also contains information on Canadian and European experience.

Stretching Bald Eagle

BC BIRDING NEEDS <u>YOUR</u> SUBMISSIONS

BCFO's newsletter can accommodate a variety of materials – something for everyone. Items range from very short notes to articles of several pages. Here are some examples of the kinds of items you can contribute:

- short note (e.g. 1 – 2 paragraphs) about an interesting sighting, unexpected encounter, observed bird behaviour, early morning walk, or other birding experience;
- a single photograph with a short or longer (paragraph) caption;
- photo story (several related photos with a short text);
- if you have recently discovered an interesting book (preferably about birds) that you would like to bring to the attention of other birders, send in a paragraph saying why you like it.
- description of a special day's birding or account of a birding event (Christmas Bird Count, Big Day, Big Backyard Bird Watch; Bio-Blitz);
- a short birding guide to one of your favourite areas, or to a local nature reserve, or a city park;
- information about a conservation issue in your home area;
- summary of an article from another birding magazine or a scientific publication (but don't copy it word for word);
- sketches, drawings, cartoons;
- letter to editor;
- description of a BCFO field trip (conference and/or "two-day field trips"). We like to include a report from every BCFO field trip. This can be done by a participant or by the leader.

NOTE: We need material from *you* to keep our newsletter interesting, to keep in touch, and to report on what is happening around the province. Whether a life-long birder or new to birding, we will be happy to hear from you.

COVER STORY: NORTHERN PYGMY OWL

Photographed by Devin Manky, March 2013

Grouse Mountain, North Vancouver, BC

The Northern Pygmy Owl featured in this shot was found on top of Grouse Mountain in North Vancouver in the late winter. Northern Pygmy Owls are diurnal but are most active at dawn and dusk when they hunt for small prey items including small mammals, birds and even reptiles and insects. When it comes to diet, they are more of a generalist than other owl species. They are prolific hunters though, and have been known to carry prey items that are twice their own body weight. Like most owls they are sit-and-wait predators - often perched high up in conifer trees. The loud and clear whistle call of the Pygmy Owl travels quite far and as such, this bird is more often heard than spotted.