BC BIRDING

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

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

Photographer : John Lowman

Purple Martin (male) about to enter nest-box to feed its young. Dragonflies are usually the main item on the menu.

In 2013, 66 pairs of Purple Martins nested in boxes attached to pilings in the intertidal zone adjoining The Conservation Area at Maplewood Flats (North Vancouver) that is operated by The Wild Bird Trust of British Columbia. This species has made a remarkable recovery since 1985 when only 5 nesting pairs were recorded in coastal southwestern B.C. That was the year when volunteers began installing nest-boxes for the martins. Since then, the total population has recovered to the approximately 950 pairs (2013) that nest in the colonies around the Strait of Georgia.

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

BCFO offered a smorgasbord of outstanding spring birding this past June. The eight-day run of activities included the pre-AGM, two-day field trip to Lillooet, and concluded with the three-day extension trip to Kamloops. The annual general meeting in Pemberton was, so to speak, the meat in the spring birding sandwich. Some sandwich! Some meat! Excellent birding was enjoyed everywhere. Whether members could participate in only one, or took in all three events, I am sure we were all left with great memories of fabulous birds, wonderful locations, and good birding company. Forty-five members attended the Pemberton AGM, and both the Lillooet and Kamloops trips ran at capacity.

With next year's AGM slated for the South Okanagan, May 29, 30, 31, 2015, we expect to attract even more members and have another spring of memorable birding. So, mark your calendars and look for more details about the AGM, including information on pre and post conference trips, following the Board's annual planning meeting to be held on October 6th.

Our annual planning meeting is probably the BCFO Board's most important one of the year. While shorebirds and fall migrants occupy our birding thoughts, this is also the time of year when the Board takes stock of how we're doing as an organization and initiates plans for both the short and longer-term health of our society. To do the best job we can, we will be seeking members' advice too.

Following our October 6th meeting you will receive an invitation to complete a brief survey to give us feedback and to make suggestions about the near and longer-term directions for BCFO. Among other things, we will be asking: what are the most important attractions that draw you to attend the AGM? Do we need to modify, or add to the two-day field trip offerings? Are there additions and improvements to the website needed? How can we continue to improve our publications?

It's clear, I think, that as an organization we are doing many things well, but it's not time to rest on our laurels. The Bird Records Committee, our web presence, our field trips, our publications are all things that continue to draw positive comments from both members and non-members. Together we are managing to increase the "value" of BCFO membership, and we think it's about time to extend our reach and invite more people from the BC birding and ornithological community to join us.

To support this invitation we will soon be offering the option of memberships and renewals via on-line payment through our website. We have a higher profile now in the province and we plan to use the birding listserves, our networks, and our personal contacts to extend the invitations to join BCFO.

Finally, another invitation: while thinking about BCFO's future, consider getting involved yourself. There are going to be some transitions at the leadership level in BCFO over the next couple of years, and there will be many opportunities for involvement and contributions to the organization's continued growth and success. It's a good organization in which to volunteer some time. Please give the idea some thought.

George Clulow, President

!!! LOST BINOCULAR CASE FOUND !!!
I found a binoculars case in my truck after returning from the AGM in Pemberton. I may have picked it up by mistake. I hope this note will find the owner. If I did inadvertently pick it up, I will gladly bear the cost of returning it. Gareth Pugh, Surrey Ph. 604-576-6831

EDITORS' NOTES

Well, summer has flown and, at least here on the coast, we're into some very nice sunny but cooler days with a distinct ambience of Fall. The vine maples are starting to transform to their glowing colours, acorns are falling, and the first winter birds are appearing. Just a couple of hours ago (during coffee break on the back deck) we noticed our first returning garden birds – a very smart (in new plumage) Dark-eyed Junco male, and a Song Sparrow. For some reason of which I'm unaware, the returning birds like to bathe vigorously, splashing mightily, and requiring a daily refilling of the bird bath. We also have migrants passing through, but more flycatchers than warblers: Olive-sided, Western Wood-Pewee, Pacific Slope, a single Hammond's, and a Black-headed Grosbeak. Not very exciting you might be thinking, but not bad for a residential area of Vancouver.

In this issue you'll find the usual mix of articles, with reports from the annual meeting, updates for on-going projects, and requests for help with some very worthy citizen-science activities. You'll discover that the usual Rare Bird Report from North American Birds (courtesy Chris Charlesworth) is missing from this issue – but it will return in December.

Arising from this issue, I do have one serious concern, which is that we seem to have a scarcity of members willing to write field trip reports. This is most recently apparent for the AGM excursions at Pemberton – for which *no* write-ups were forthcoming. So George Clulow stepped into the breach and put together a short account of all four trips (p.10). But I'm sure you'll agree with me that our President, who already spends a great deal of time on BCFO administration, should not, in addition, have to write up reports of our activities. (Nor should the field trip leaders have to do this unless they particularly want to do so.) Bear in mind that we need these reports for the newsmagazine in order to keep in touch with the majority of members who cannot attend the events. A field trip account is a significant means of communication; it is also important because it becomes part of the long-term archival record of our society's activities.

So please, next time you participate in a BCFO birding excursion, (or it could be you own informal trip that others could enjoy retrospectively), talk with the other participants and decide what to do about a report. This does not have to be a single person effort: two (or several) collaborators could produce a joint account: think about some innovative ways to do this. And don't forget to send some photos – birds, birders and landscapes are all welcome.

The adjacent photo shows a young 'horned' House Finch – one of the *fourth* brood (of four young) produced by our back-yard finches this summer.

Enjoy the fall birding -- and send in some write-ups to share ……

June Ryder
Editor

BCFO YOUNG BIRDER AWARDS 2015 -- CALL FOR NOMINATIONS

BCFO is seeking nominations for our next round of Young Birders' awards. (see Newsletter for March 2014, p15, and the BCFO website for last year's winners). Our first awardees are carrying on in impressive fashion, and we expect there are a few more like them out there. If you know of anyone who might qualify, please bring them to our attention.

Candidates must meet all of the following criteria:

- Age 15 years or younger, as of Jan 2015.
- Demonstrated birding skills well beyond the novice level.
- Significant contribution to activities in the birding community such as: posting to list-serves; entering data to eBird; participating in local surveys, counts, and field trips.
- Sponsored and nominated by a BCFO member who has direct knowledge of the candidate.

Send nominations to Carlo Giovanella via email cgio@telus.net, or through the BCFO website "Contact Us".

UPCOMING MEETINGS & EVENTS

Compiled by Wayne C. Weber

The following meetings and other events are those that take place in BC and immediately adjacent areas or that potentially include information on birds that occur in B.C. Information on additional meetings is listed in the bimonthly *Ornithological Newsletter* at www.birdmeetings.org and on the BIRDNET website at http://www.nmnh.si.edu/BIRDNET/ornith/birdmeet.html .

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

EVENTS IN 2014:

Sep. 5-7-- 28TH ANNUAL OREGON SHOREBIRD FESTIVAL, Oregon Institute of Marine Biology, Charleston, OR (near Coos Bay). For information and to register, check the website at http://www.fws.gov/oregoncoast/shorebirdfestival.htm , or contact Dawn Harris at (541) 867-4550.

Sep. 5-7-- PUGET SOUND BIRD FEST, Edmonds, WA. For information, check the website at http://www.pugetsoundbirdfest.org , or phone Sally Lider with the Edmonds Parks and Recreation Dept. at 425-771-0227.

Sep. 6,7,20,& 28, & Oct. 4 & 18-- WESTPORT SEABIRDS pelagic birding trips from Westport, WA. For information and to make reservations, check the Westport Seabirds website at http://www.westportseabirds.com/index.html . Please note: there are no scheduled pelagic birding trips in BC this fall, and this is the closest location that offers them.

Sep. 18-21– WESTERN BIRD-BANDING ASSOCIATION annual meeting, Arcata, California. Events will be hosted by the Humboldt Bay Bird Observatory near Arcata. For information, please contact C.J. Ralph at cjr2@humboldt.edu (phone 707-499-9707), or check the WBBA website at http://www.westernbirdbanding.org/ .

Sep. 22-28-- 132ND STATED MEETING, AMERICAN ORNITHOLOGISTS' UNION, 84TH ANNUAL MEETING, COOPER ORNITHOLOGICAL SOCIETY & 32ND ANNUAL MEETING, SOCIETY OF CANADIAN ORNITHOLOGISTS, Estes Park, Colorado. The website can be found at http://birdmeetings.org/aoucossco2014/files/aoucossco2014-poster.pdf . For further details, contact Susan Skagen (skagens@usgs.gov) or Sara Oyler-McCance (sara_oylermccance@usgs.gov) for information.

Sep. 24-28– RAPTOR RESEARCH FOUNDATION ANNUAL CONFERENCE, Emerald Beach Hotel, Corpus Christi, Texas. For information, contact Tom Langschied, local committee chair, at thomas.langschied@tamuk.edu or Kate Davis at raptors@montana.com , or check the RRF website at http://www.raptorresearchfoundation.org/conferences/current-conference .

Sep. 25-28-- BC NATURE FALL GENERAL MEETING, Salmon Arm. Contact: Betty Davison, BC Nature, Heritage Centre, 1620 Mt. Seymour Rd., North Vancouver, BC V7G 2R9; phone: (604) 985-3057; email: manager@bcnature.ca ; website: www.bcnature.ca .

Sep. 26-28-- OREGON BIRDING ASSOCIATION annual meeting, Bandon Conference Center, Bandon, OR. For further information and to register, visit the OBA conference website at http://www.orbirds.org/2014annualmeeting.html , or contact Harv Schubothe in Bandon at ninerharv2@msn.com .

Oct. 3-5-- RIDGEFIELD BIRDS & BLUEGRASS FESTIVAL, Ridgefield, WA (near Vancouver, WA). For information, check the festival website at http://ridgefieldfriends.org/birdfest , or contact the Friends of Ridgefield NWR by phone at 360-887-9495, by email at ridgefieldfriends@gmail.com , or by snail mail at PO Box 1022, Ridgefield, WA 98642.

Oct. 8-12-- WESTERN FIELD ORNITHOLOGISTS annual meeting, Marriott Courtyard Liberty Station Hotel, San Diego, CA. For further information, check the conference webpage at http://www.westernfieldornithologists.org/conference.php , or contact Ed Pandolfino at erpfromca@aol.com .

Oct. 25-30-- THE WILDLIFE SOCIETY ANNUAL CONFERENCE, David Lawrence Convention Center, Pittsburgh, PA. For further information, check the conference webpage at http://wildlifesociety.org .

Nov. 5-8-- 38TH ANNUAL MEETING, WATERBIRD SOCIETY & XIII CONGRESSO PARA EL ESTUDIO Y CONSERVACION DE LAS AVES EN MEXICO, La Paz, Baja California, Mexico. Website, http://www.waterbirds.org/waterbirds-in-the-news/annual_meeting-2013 ; for details, contact the Local Committee Chairman, Felipe Chavez-Ramirez (fchavez@gcbo.org).

Nov. 15-16-- 18TH ANNUAL FRASER VALLEY BALD EAGLE FESTIVAL, Harrison Mills, BC. For information, check the festival website at http://fraservalleybaldeaglefestival.ca , send an email to info@fraservalleybaldeaglefestival.ca , phone 604-826-7361, or write the Mission Chamber of Commerce, 34033 Lougheed Highway, Mission, BC V2V 5X8.

Dec. 14 to Jan. 5-- CHRISTMAS BIRD COUNTS. For information on dates of counts and contact information for count organizers, check the BCFO website in November and December, or check the December issue of BC BIRDING.

EVENTS IN 2015:

Jan. 1-31-- 28TH ANNUAL BRACKENDALE EAGLE FESTIVAL, BRACKENDALE, BC. For information, check the website at http://www.brackendaleartgallery.com/Calendar.html , phone 604-898-3333, or email the Brackendale Art Gallery at info@brackendaleartgallery.com .

Feb. 19-22-- 42ND ANNUAL MEETING, PACIFIC SEABIRD GROUP, San Jose Airport Garden Hotel, San Jose, CA. For further information, check the society's website at http://www.pacificseabirdgroup.org/index.php?f=index&t=Home&s=1 .

Mar. 27-29-- 18TH ANNUAL OTHELLO SANDHILL CRANE FESTIVAL, Othello, WA. For information, check the festival website at http://www.othellosandhillcranefestival.org , or contact the Grant County Conservation District at 1107 South Juniper Way, Moses Lake, WA 98837 (phone 509-765-9618).

March (dates TBA)-- WINGS OVER WATER FESTIVAL, Blaine, WA. Check the festival website at http://www.blainechamber.com/wow, or contact the Blaine Chamber of Commerce (phone 360-332-4544, email vic@cityofblaine.com) at 728 Peace Portal Drive, Blaine, WA 98230.

Apr. 10-12-- OLYMPIC BIRDFEST, Sequim, WA. For information, check the festival website at http://www.olympicbirdfest.org , send an email to info@olympicbirdfest.org, or contact the Dungeness River Audubon Center (phone, 360-681-4076; snail mail to 2151 West Hendrickson Road, Sequim, WA 98382

B.C. BIRDING NEWS BRIEFS

Compiled by Martin K. McNicholl

B.C. Golden-crowned Sparrow in Ohio

In March 2009, Tom Bartlett of Tiffin, Ohio banded the state`s first Golden-crowned Sparrow, a second-year bird of unknown gender. Analysis of feathers collected at the time indicated that it had hatched in northwestern B.C. It reappeared in the same Ohio yard annually each subsequent winter to date. More feathers collected in 2012 deteriorated too much for further analysis, but more were collected in 2013 in the hope that its hatch-site can be pin-pointed more precisely. Singing in 2013 indicates a male. –based on T. Bartlett. 2014. *North American Bird Bander* 39:38.

Bubsie Hopkinson

Several prominent Vancouver area birders joined Bubsie Hopkison to celebrate her 100th birthday on 2 February 2013. Until recently, Bubsie attended most Nature Vancouver Birders`Nights, participated in outings, and participated in Manning Park Bird Blitzes. –based on C. Crampton. 2013. *Discovery* 42:17.

Marbled Murrelet Proposed Recovery Plan

In January 2014, the Canadian Wildlife Service announced a proposed recovery plan for the Marbled Murrelet, currently classified as Threatened in Canada. A 60-day public comment period was scheduled to end in early March, with a final recovery strategy to be announced 30 days later. We look forward to reading about the final version, especially in light of apparent enthusiasm by both B.C. and Canadian governments for northern pipelines to the west coast and increased shipping of oil products south along the west coast. –based primarily on S. Hureau. 2014. *Wandering Tattler* 37(6):14.

Wild Bird Trust Celebration

Congratulations to the Wild Bird Trust of B.C. for reaching their 20th year on 4 November 2013, as celebrated at their AGM on 30 November 2013. –based on photo spread by Founding President Richard C. Bird in The Wild Bird Trust of B.C.'s *Wingspan* spring/summer 2014:12-13.

Grant for Barn Owl Study

A Barn Owl study by Cole Kinney of Clayburn Middle School in the Fraser Valley was the only avian project among 11 listed as receiving 2014 Regional Science Fair funding from B.C. Nature. The others represent a pleasingly wide array of natural history topics. –based on M. Cuthbert. 2014. *B.C. Nature* 52(2):10.

PEMBERTON CONFERENCE -- THE FIELD TRIPS

George Clulow

Pemberton Townsite and One Mile Lake

This walking field trip started from the Pemberton Community Centre and explored a number of birding locations around the Pemberton townsite, including the very birdy riparian areas, river dikes, and One Mile Lake. A relaxed morning of birding found nine species of warblers, and five species of flycatchers highlighted by both Dusky and Alder Flycatchers. The latter sighting supports the observation over recent years that Alder Flycatchers are expanding their range into the Pemberton area. Notably, they were reported on all four field trips. Capping off the morning's stroll was the weekend's only sighting of a Golden Eagle.

Shadow Lake and Soo River Valley

By gaining a little altitude above the Pemberton Valley, this trip showed how just a small change in elevation can quickly modify the species mix. Leaving the valley's abundant Veerys behind, Varied and Swainson's thrushes were soon heard singing from the forests around Shadow Lake. Accompanied by booming Sooty Grouse from the mountainsides, Evening Grosbeaks were calling from the tops of the tall conifers. Good looks were had of Nashville Warblers complemented by views of Barrow's Goldeneyes and Pied-billed Grebes on the lakes. An American Dipper was seen on the Soo River. At the small hydro lake upstream on the Soo, a Peregrine Falcon made a close flyby carrying a Tree Swallow it had just captured mid-flight. We enjoyed watching a pair of Red-breasted Sapsuckers at their nest cavity feeding their young.

Birding the Soo River valley *Photo: Jo Ann MacKenzie*

Lillooet Lake Rd, Duane Dick Farm (Lil Wat First Nation) and One Mile Creek Dike

Duane Dick's farm confirmed its reputation as a special place. Hearing Willow and Alder Flycatchers singing within a few tens of metres of each other allowed for great comparisons of their songs. Nesting Bullock's Orioles allowed close approach to their low-slung nest in a black cottonwood, and Western Kingbirds also put on good displays. Grey Catbirds perched up high in the shrubbery singing loudly, as did Lazuli Buntings with their quieter songs but striking colours. The One Mile Creek dikes were also productive for passerines, but the highlight was two recently fledged Northern Saw-whet Owls perched in a riparian thicket along the Lillooet River

Juvenile Northern Saw-whet Owls *Photo: George Clulow*

Pemberton Meadows Cottonwood Forests, Riverlands, and Shaw Creek Farm

It's probably fair to say that in the dense stands of black cottonwoods that line the Lillooet River upstream from Pemberton, singing Veerys produce a cacophony of sound that is unequaled in BC. This must be one of the most Veery-rich areas in the Province. Combine this aural spectacle with a rich diversity of songbirds, including ten species of warblers in full voice, and you've got a symphony of bird song that can at times be a challenge to sort through. Northern Waterthrushes, a rare bird in the area, were found up the valley here, and in the grassy meadows a Vesper Sparrow was also a good find. Sandhill Cranes usually migrate through the area in spring, but two young birds seem to have found the valley to their liking and look set to spend the summer. Virginia Rails were found in the sloughs, and nesting American Kestrels were also seen. Vaux's and Black Swifts were easy to spot in the open skies over the valley.

NOTE: Please see BCFO website for species lists for all field trips.

.*MARTIN K. MCNICHOLL*
STEVE CANNINGS AWARD WINNER FOR 2014

by Wayne C. Weber

The Steve Cannings Award is presented annually by the British Columbia Field Ornithologists. It honours the memory of Stephen R. Cannings (1914-2003) of Penticton, BC, who was a much-loved and admired ornithologist, naturalist, nature photographer, conservationist, and mentor to many young and beginning naturalists. The Cannings Award recognizes achievement in any or all of three areas: (1) research on bird biology or ecology, or detailed documentation of the birdlife of any part of BC; (2) conservation of birds or bird habitats in BC; and (3) public education about birds in BC.

This year's winner is Dr. Martin K. McNicholl of Burnaby, BC.

Martin was surprised to learn of his award, because he has been a member of the BCFO Awards Committee since the beginning. However, Martin was in hospital for more than two months this spring, and was unable to participate in this year's selection process. The other two members of the Awards Committee, Wayne Weber and Dick Cannings, as well as the entire BCFO board, felt that this would be an appropriate occasion to recognize Martin's major contributions to ornithology and bird study in BC and elsewhere in Canada and, in particular, his contributions to BCFO.

It should be noted that the Cannings award is mainly for contributions to ornithology in BC. Many of Martin's accomplishments have taken place in other provinces, and he is well-known as an ornithologist at the national and even international level. However, as he has made his home in BC for more than 20 years, and as many of his contributions were made in BC, we consider him to be a most worthy recipient of this award, and we have cited many of his accomplishments from other provinces as well.

Martin was born in Winnipeg, Manitoba on April 16, 1946, and grew up in the Winnipeg area. He became interested in birds at a very early age, and says that his first memory of a bird, at age 3, was a Common Loon yodeling as it flew over a rowboat containing Martin, his father, and his grandfather. His interest in birds was encouraged and fostered by his aunt, Gertrude McNicholl, and a second cousin, Grace Keith, both of whom were keen birdwatchers. In addition to the immediate vicinity of Winnipeg, much of his early birding was done during the summers near Gimli, Manitoba (on Lake Winnipeg) and in the lake country near Ingolf, Ontario (west of Kenora), around property owned by his relatives.

Martin enrolled in a Zoology program at the University of Manitoba, and earned a bachelor's degree (Honours Zoology) in 1968. While an undergraduate, he met Dr. Roger Evans, who employed him one summer to do surveys of waterbirds and Sharp-tailed Grouse. He then embarked on a M.Sc. program under Dr. Evans, and completed his Master's thesis on Forster's Tern biology in 1971. For his Ph.D. work, Martin moved to Edmonton and studied Blue Grouse (now called Sooty Grouse) biology under Dr. Fred Zwickel. However, his study area, where he did research for four summers, was in the Comox Burn on Vancouver Island. Martin's Ph.D. dissertation, which he completed in 1978, was entitled *Behavioural and Social Organization in a Population of Blue Grouse on Vancouver Island*.

After completing his Ph.D., Martin worked for several environmental consulting firms between B.C. and Ontario. From 1984 to 1987, he served as General Manager and Executive Director of the Long Point Bird Observatory, now part of Bird Studies Canada. Since moving to B.C., and until recently, he has worked mainly at the Vancouver International Airport, first for LGL Environmental Research Associates and then with Airport Wildlife Management International, with the objective of managing birds on the airport and reducing bird hazards to aircraft.

Martin is widely known for his encyclopedic knowledge of the scientific literature of ornithology, and for his strong abilities as a writer and editor. He has published dozens of articles and short notes in scientific journals. He edited *Manitoba Bird Studies: a Bibliography of Manitoba Ornithology* (1975), and was senior editor of *A Bibliography of Alberta Ornithology* (1981), as well as *Ornithology in Ontario* (1994), a 400-page historical review of ornithology and ornithologists in Ontario. He also authored 45 entries in the *Canadian Encyclopedia*, mainly dealing with birds and natural history. Finally, for more than 30 years, he was in charge of the "Recent Literature" section of the *North American Bird Bander*.

Martin has served in many volunteer capacities, and has always been willing to donate his time to worthwhile projects and activities. Over the years, he has served on more than 30 boards and committees from B.C. to Ontario. For BCFO, he was the editor of our journal, *British Columbia Birds*, from 1994 to 2002, a time-consuming and exacting task. He has also been the compiler or co-compiler of the "Upcoming Meetings and Events" column in our newsletter for much of its history, and a valued member of the Awards Committee since its inception. In addition, he has served for many years on the Birding Section Committee of Nature Vancouver, and as the Program Chairman of the Langley Field Naturalists.

Given his many accomplishments and his generosity with his time, it will not surprise you that Martin has been the recipient of several previous awards. These include the Loran L. Goulden Award (1983) for contributions to the natural history of Alberta; being named an Elective Member of the American Ornithologists Union (1986); the Ernest Thompson Seton medal for contributions to Manitoba's natural history (1995); and being named an Honorary Life Member of both the Langley Field Naturalists (2001) and B.C. Field Ornithologists (2002).

In 2001, Martin faced a huge challenge -- one that almost claimed his life -- when he was stricken with meningitis and pneumonia, and spent 4 weeks in hospital, more than 2 weeks of that in a coma. Fortunately, he recovered almost completely, and was able to continue his work and volunteer activities for many more years. However, for the last two or three years, nerve damage ultimately resulting from the meningitis has severely restricted his mobility, and made it hard for him to continue many of the things he loved to do.

In this brief citation, we have had to omit many of Martin McNicholl's accomplishments, particularly those that took place outside B.C. Nevertheless, we think it should be obvious to everyone that Martin is a most deserving recipient of the Steve Cannings Award, and we take great pleasure in presenting it to him.

George Clulow starting to read the citation.
Photo: Jude Grass

LETTER TO THE EDITOR
Re. STEVE CANNINGS AWARD

While adjusting to my current neurological condition, which prevents me from walking at all, I was very pleased to be encouraged to attend this year's AGM in Pemberton this June and thankful to Kevin Young for renting a wheel-chair van to drive me there. I was also grateful to the various field trip participants who helped us load, unload and/or carry the wheel-chair during the outings. Although I was also looking forward to announcing the name of the very worthy person whom I thought was receiving the eighth Steve Cannings Award, I am, of course, profoundly delighted at President George Clulow's astounding announcement that I was receiving it instead, for the detailed presentation that he gave, and for the kind congratulations of several other members during the rest of the conference. Dick Cannings, Wayne Weber and I continue to look forward to nominees for future awards.

Martin K. McNicholl

Martin – very surprised!
Photo: Jude Grass

Sooty Grouse (female) *Glen Bartley*

Common Loon *JMR*

BCFO ANNUAL GENERAL MEETING, PEMBERTON, JUNE 14, 2014

DIRECTORS' REPORTS

PRESIDENT'S REPORT

The President's AGM report has been combined with 'President's Message'. Please see p.4

TREASURER'S REPORT

Financial Statements		
as of December 31	**2012**	**2013**
Revenue		
Membership	8,920.34	6,543.38
Conference fees	8,700.00	6,280.00
Conference extension trip	3,900.00	
Other conference income	688.00	134.25
Donations	1,039.46	660.00
Field trips	250.00	372.00
Bank interest (Coast Capital c	13.39	1.83
(GST) HST rebate	826.87	
Advertising	40.00	230.00
Newsletter hardcopy fee	463.56	445.00
Total	**24,841.62**	**14,666.46**
Expenditures		
Newsletter printing	417.17	474.03
Newsletter postage	458.66	468.67
Conference	8,644.38	7,330.85
Conference honouraria	200.00	233.50
Conference extension trip	1,704.14	
Extension honouraria	750.00	
Journal printing	2,103.85	
Journal postage	1,115.53	409.05
Misc. postage	214.04	120.86
Bank fees	20.31	128.79
Insurance	750.00	750.00
Website	749.85	14.50
Society fees	25.00	25.00
Post office box	156.80	156.80
Research grant	2,500.00	
BCFO Award	61.54	55.95
Total	**19,871.27**	**10,168.00**

Submitted by
Mike Fung, Treasurer

MEMBERSHIP REPORT

MEMBERSHIP SUMMARY FOR 2013

The BCFO membership for the year 2013 was two hundred and twenty-four (224) regular members, four (4) honourary members, and seven (7) institutional members, for a total of two hundred and thirty-five (235). There were twenty-six (26) new members for 2013. Twenty members (20) from 2012 failed to renew for 2013.

Two hundred and fifteen (215) of the two hundred and twenty-eight (228) regular, and honourary members provided an email address, 86% have opted to electronically access the newsmagazine and 27% the Journal.

Membership by region using Provincial Tourism Zones:

35% Vancouver Coast & Mountains (80)
24% Vancouver Island (52)
18% Thompson/Okanagan (40)
8% Northern BC (18)
6% BC Rockies (14)
3.1% Cariboo/Chilcotin Coast (7)
3.1% USA (7) (Washington 4, Idaho 1, New Jersey1, Arizona 1)
2.8% Alberta (5)
0.9% Ontario (2)
0.5% Saskatchewan (1)

CURRENT 2014 MEMBERSHIP STATUS

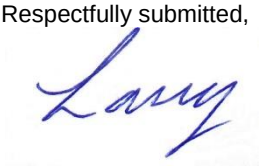
As of June 11/ 2014, BCFO membership stands at two hundred and sixteen (216) regular members, four (4) honourary members, and seven (7) institutional members for a total of two hundred and twenty-seven (227). There are sixteen (16) new members. Twenty-two (22) members from 2013 have yet to renew for 2014. Forty-five (45) members have pre-paid their dues for 2015, three (3) for 2016, and one (1) for 2017.

continues.. ⟶

Membership by region using the Provincial Tourism Zones:

39%	Vancouver Coast & Mountains (86)
23%	Vancouver Island (50)
16%	Thompson/Okanagan (36)
7%	Northern BC (16)
5%	BC Rockies (12)
4%	Cariboo/Chilcotin Coast (9)
2%	USA (4) (Washington 2, Idaho 1, New Jersey 1)
2%	Alberta (4)
0.5%	Ontario (1)
0.5%	Saskatchewan (1)
0.5%	Nova Scotia (1)

Respectfully submitted,



Larry Cowan
Membership Coordinator
604-465-1402
lawrencecowan@shaw.ca
June 11, 2014

REPORT OF THE EDITOR OF BRITISH COLUMBIA BIRDS

Volume 24 (2014) of *British Columbia Birds* was produced in April 2014. I currently have one manuscript for Volume 25, but we need a steady flow to continue to have *British Columbia Birds* published regularly. All members are encouraged to submit manuscripts and to encourage friends and colleagues to do likewise. This is your journal, and it has room for a diversity of papers on wild birds in British Columbia.

The quality of all of the papers is enhanced by our Editorial Board: Neil Bourne, Andy Buhler, Rob Butler, Mark Phinney and Mary Taitt. Thanks go to them as well as to the external reviewers of the papers, all of whom have given willingly of their time and thought. Neil Dawe again has done a splendid job of producing the journal and of placing the papers on the website.

Art Martell
Editor, *British Columbia Birds*.

REPORT OF THE EDITOR OF BC BIRDING

This was another good year for *BC Birding.* Volume 23 of the newsletter consisted of the usual four quarterly issues, all sent out in the first week of the appropriate month (March, June, September and December). Each issue contained between 28 and 40 pages, altogether totaling of 132 pages of news and articles. Contents included a considerably variety of materials, ranging from regular news items and volunteered articles to short reports on sightings and unusual bird behaviour. Also included were reports for BCFO field trips, and a variety of advertisements for birding activities and requests for help with research projects.

I would like to thank the regular contributors to BC Birding: Martin McNicholl and Wayne Weber for Birding News Briefs and Upcoming Meetings; Clive Keen for the ongoing “Reflective Birder” series; Jenny Hards for her lively cartoons; Chris Charlesworth for Rare Bird Reports; Michael Church for his summaries of recent ornithological research and, of course, George Clulow for his thoughtful President’s Reports. Also, a big thank you to the authors of all the volunteered articles, to Jude Grass for proofreading and contributing many news items, and to John Sprague for proofreading. I very much appreciate the help of all the photographers who responded to requests for the images that now enhance the last, first, and some inside pages of each issue, and to Mark Habdas for improving the quality of many of our illustrations.

Many thanks to everyone who has contributed to BC Birding.

We hope for similarly interesting contents for *BC Birding* in 2014 but this cannot be done without help from our members. This is *your* newsmagazine. So please share your birding experiences, send in items long or short, text or photos, and persuade your fellow birders to do likewise.

J.M.Ryder
Editor, *BC Birding*

BIRDING AT LILLOOET: BCFO TWO-DAY FIELD TRIP JUNE 12-13, 2014

Adrian Leather

The Lillooet trip was a huge success, in large part due to the knowledge and enthusiasm of local guides Ian Routley, Vivian Birch-Jones, and Ken Wright. It was a nature education rather than simply birdwatching. Ken Wright expressed that he felt the success of the Lillooet trip was also due to the enthusiasm and congeniality of the BCFO members.

Lillooet lends itself to a trip as pretty much everything required is based on Main St, including the Reynold's Hotel, which provides a great choice of delicious monster breakfasts, Dina's Greek Restaurant, and the Lillooet Inn, which puts-out some decent sushi. Lillooet has a population of around 2.300, and when the surrounding communities are included, it reaches 5.000. It's perhaps a place that has seen more prosperous days. Two mill closures hit the community very hard, and many 'locals' now work in northern Alberta and northern BC. But it's a welcoming, functioning place that successfully punches above its weight. Radio Lillooet had informed the community about the BCFO trip. The work of Ian, Vivian, Ken, and other members of the Lillooet Naturalist Society is making it a destination for birders and naturalists. We enjoyed very pleasant temperatures of 14 to 26^{o}C, rather than the steaming hot days normally associated with this area. Recent rains had left the area surprisingly green.

There are good opportunities to enjoy viewing Lewis's Woodpecker and Long-billed Curlew, and you might spot some California bighorn sheep while you are birding. We watched four sheep and four lambs that had dropped on to a lower bench for increased protection.

There are a few nice spots near town where you can enjoy amazingly close looks at Harlequin Duck. I must have seen at least six adults, including three stunning drakes, and 13 ducklings. Black-throated Grey Warbler is quite common. Veery is very common in riparian zones, and Grey Catbird adds some extra vocals. It was noted how lively any riparian strip was compared to the dry mountainsides. Typical species encountered included Lazuli Bunting, Bullock's Oriole, Willow Flycatcher, and Spotted Towhee. Eastern and Western Kingbirds were in the drier zones. A Golden Eagle put-in a brief appearance. At Ian and Vivian's place, which enjoys breathtaking views of four large mountains, we enjoyed watching Cassin's Finches at the feeders. Pygmy Nuthatches nest there. An unusual record for the Lillooet area, secured during the trip, was of a Least Flycatcher at Keatley Creek.

June Ryder added to the Lillooet experience with her insights into the geomorphological aspects of the Fraser River Canyon.

On the first evening, our treat was listening to a pair of Western Screech-Owls. On the second evening, Ian and Ken offered a trip into the mountains for possible Common Poorwill and Flammulated Owl -- but first, Ian treated us to a selection of his excellent photos at the rec. centre, an event also attended by local naturalists.

Later, the weather looked distinctly poor for nocturnal birding as we gathered in the Reynold's Hotel parking lot to the sight of swaying trees. Apart from being windy, it then began to rain as we drove out. It was quite cool. It really didn't look good, but as light was almost gone, a Common Poorwill began calling, and two flew over a rise by the

vehicles. I watched one divert away from us and drop to the ground between two low trees, never to be seen again. We tried a walk along the road and back to the vehicles; by now we were listening to four Common Poorwills, though none were visible on the gravel road. Ken suggested we drive slowly along the road and look for the eyeshine of poorwills in the headlights. The lead vehicle spotted a poorwill now and again, but each time the bird would fly for nearby cover, and stay put. Ian was quite surprised and frustrated, commenting that “Normally, we drive along here with our windows down, and we hear poorwills all the way, but we are hearing absolutely nothing". Wind, cool, intermittent rain. It started to feel a bit hopeless. We even wondered if we should have simply stayed at the very first stop, as we had four poorwills there. Finally, we had distant looks at the telltale eyeshine of a poorwill on the road, but it was a long way ahead, and didn't stick around for a photo.

Summing-up the general feeling, Nancy Krueger's voice broke the radio silence with, "I suppose there's about as much chance of us seeing a Sasquatch as there is a Flammulated Owl"? A rather resigned Ken replied, "It would seem that way". But, Ian and Ken were willing to try. We stopped the vehicles, then all stood on the road, and after a short time, a Flammulated Owl could be heard. All of a sudden there was a buzz of adrenaline ripping through the birders. We agreed on a direction, possibly the tallest tree in front of us. The 'flam' continued to hoot, but how close was the owl? Ken wanted to try and put the light on the owl, but Ian was very wary as he felt the owl would close down on vocals if we 'missed'. A bit of a debate ensued, all quite amicable, then after a while, Ian agreed it was worth a try with the light. Everybody raised their bins as Ian put the light on the tree. Nothing! But Ian instantly shifted the light beam to the right, and there it was, a Flammulated Owl! This was so exciting! An unobstructed view of a flam, near the trunk of a large tree. When I saw the bird, I think I said out loud (in disbelief), "Oh shit, it's there!", without even thinking. Most got on to the bird quickly, but there were some nervous moments when one person couldn't initially see the bird. "Now I've got it" she said. A definite champagne moment in our birding lives! But it was about to get even better, as another Flammulated Owl came in and more or less pounced on the one we were watching, and took its place on the tree! The owl that had been forcibly relocated then continued to hoot nearby as we enjoyed watching the new flam on the block. What an amazing piece of avian action! Everyone just wanted to go and celebrate but it was too late to go back to the pub.

Lillooet 2014 - one to remember!

Photo Credits
Cassin’s Finch: Mike Fung;
The group in Fountain Valley: George Clulow;
Flammulated Owl: Ian Routley (A remarkable image, with owl illuminated by hand-held flashlight.)

NOTE: For a complete species list, please see the BCFO website

FROM SPRUCE TO SAGE:
THE 2014 BCFO AGM EXTENSION FIELD TRIP TO KAMLOOPS

Rick Howie

The BCFO post conference field trip took place June 16-18 in the Kamloops area. It was led by myself and Cindy McCallum. In a nutshell, Day 1 covered a loop from Kamloops over Greenstone Mountain to Logan Lake and then north past Tunkwa Lake to Savona and back to Kamloops. Day 2 travelled up the Paul Creek drainage past Pinantan Lake to Hyas Lake, and Day 3 visited Tranquille and private ranch grasslands in the Knutsford-Beresford area south of town. Evening junkets included Lac du Bois and McQueen Lake area, as well as the Dewdrop Flats west of Tranquille.

While the objective was not to accumulate large lists, we did see 136 species. Day 1 was the biggest day afield with 102 species, and the other days averaged in the mid-60s. Typical days began in the field around 5:30-5:45 am by the time we got away from the 5:00 am muster at a local Tim's. We finished by 4:30-5:00 pm in time for a "brief" respite before dinner and then headed out for owls and poorwills about 8:30 and returned around midnight each day.

Highlights will depend upon each person's expectations and delights, but special birds for the Kamloops area included Alder Flycatcher, Least Flycatcher (local in small numbers), Peregrine Falcon, Bonaparte's Gull (unusual at this time of year), White-crowned Sparrow (probably a more common breeder than previously thought), and of course, the Ferruginous Hawk. This specialty bird was the last new species at the end of the last day. What a finale! We were watching some of the numerous Swainson's Hawks encountered that day in the Beresford area south of Kamloops. We were on private ranch land when someone called "Ferruginous Hawk." Several scope views were had by a variety of people and everyone had binocular views of this bird in flight. I did not get a scope view, but my binocular views showed a brown back and tail with big white windows on the dorsal surface of the primaries and blackish primary tips on both dorsal and underwing. It was a big bird with long wings and slow wing beat. Others with scope views had better sense of the banded tail and underside details. This time window corresponds to about five other records in June for the Kamloops-Merritt area that I am aware of. We have records at other times of year; this early summer period is not unprecedented, but it is certainly a most rare bird.

One true spectacle was a minimum of 250/260 Common Nighthawk feeding on emerging chironomids over Tunkwa Lake. This was, I believe, the largest single concentration of birds that I have seen in our area, exceeding some of the late summer migrant groups of yesteryear when nighthawks were more abundant. It was truly a moving experience (literally and emotionally) to see this many birds coursing over the lake and exceeding swallows in numbers.

Other notes from the trip included a search for Sharp-tailed Grouse away from leks; a Sharp-tailed feather was the closest we came. Our Flammulated Owls were distant and faint. Of the numerous Poorwills heard, one was particularly cooperative in my flashlight about 12 metres away. A Great Gray Owl seen almost daily for the last six months by local residents was not found, but a nice fluffy Horned Owl fledgling was substituted along with a brood of Ruffed Grouse chicks.

The best unidentified bird of the trip was a "beak in a hole" which undoubtedly was one of the 3-toed woodpeckers. It was more patient than all of us and did not emerge and was not fed by its mate. We were

nonetheless, serenaded by Northern Waterthrushes and many Townsend's Warblers in the same area.

Many thanks to the Frolek Ranch who permitted travel on portions of their extensive grassland holdings. Thanks also to Shirley Bodman and her daughter Jennifer Cunningham who allowed access to their ranch and provided some history of sheep farming in the area and sadly, why it is becoming increasingly difficult for consumers to obtain local, Canadian sheep.

Photo credits
Common Nighthawk over Tunkwa Lake: Mike Fung
Group scoping at Tunkwa Lake: George Clulow
Common Loons with chick at Tunkwa Lake: Mike Fung

NOTE: For a complete species list, please see the BCFO website.

UPDATE: B.C. BREEDING BIRD ATLAS

Birders in British Columbia must be wondering what is happing with all the data collected for the B.C. Breeding Bird Atlas between 2008-2012. While it took a little bit longer than expected, fear not; we are now well into the publication phase of the project. We have been working on reviewing and analyzing data, and preparing new innovative maps and materials for species account authors who are busy assembling all the information.

You may have heard by now that the Atlas of the Breeding Birds of British Columbia will be published online and freely accessible. When the project was being developed back in 2007, we assumed that we would have a printed book, like most atlases before us. There were many factors considered to reach the conclusion to publish online. Even though many still like to curl up with a nice book, the demand for printed books has changed over the recent years, as has interest from publishers to take on such a large project. The production of a printed book is also very costly and time consuming and when we conducted a broad survey for interest in a printed book, there was insufficient interest to make the production viable. We have also been unsuccessful at finding any funders interested in backing a book; rather, they want the resources available as soon and as freely as possible to garner the most use from naturalists, resource managers, industry and scientists. While we will continue to explore options to fund a book, including print-on-demand, we are confident that this will be one of the most comprehensive online atlases that we are aware of anywhere in the world. It will contain features that could not be published in a book, in an attractive, high quality, free and publicly available web form.

We are presently redesigning the Atlas webpage also to support online viewing. We anticipate that we will include approximately 315 breeding species in the province and each species will be fully covered by an account, information on status within the province, distribution, any changes in range, conservation concerns, and maps showing the distribution of every species and probability of observation maps for the majority as well.

Some of the information is already freely available online. On the atlas website (www.birdatlas.bc.ca) you can see the breeding range distribution maps and summary information. Data are already being used by managers, environmental consultants, analysts and students to name a few from our data warehouse (www.naturecounts.ca).

Christopher Di Corrado
BC Breeding Bird Atlas Coordinator
Bird Studies Canada – Études d'Oiseaux Canada
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The Reflective Birder #7

Birding Harmless Fun?

Clive Keen

We live in such a democratic, egalitarian-minded age that it is socially risky to suggest that some interests and pursuits might be more worthy than others. *As long as it turns you on* is the prevailing mantra, and a lot could be said in its favour. Some day in the future, though, our culture will draw back a little from this, and start to accept that some pursuits do in fact merit more esteem than others. It will be readily acknowledged, for example, that reading fine literature leads to more personal growth than Archie comics, and that there is nourishment for the spirit in great music that is mostly absent from Muzak. All very reactionary, I know. But it has the merit of being true, so it can't be dismissed for ever.

Let's accept, then, that at some point in the future some pursuits will be acknowledged as intrinsically worthier than others. Would birding be in that category, or be placed in the category of Harmless Fun, alongside baseball card collecting, train-spotting and pinball? Those hobbies no doubt have their merits, but it will seem to many of us that more can be said about birding.

In making our case, we could point out that birding is, for all but twitchers, an inexpensive hobby, and it is open to almost anyone of any age, in any reasonable state of health. That scores it some points, but not really all that many, because the same could be said for marbles or tiddlywinks. The fact that birding can be carried out wherever one travels might not sound any better – after all, a book can be enjoyed wherever one goes, as can games on a smartphone – but in fact there is a useful clue in this. When one travels, one's eyes get opened to the differences in the fauna and their habitat. Travel far, and the fauna, flora, and habitat can be seen as very different. This is a fine antidote to provincialism, and develops the sense of wonder and brings a greater understanding of the world's richness.

The birder also learns to *see* in a way that nature-deprived children and adults never do. Not just the birds, but the weather that brings them; the tracks in the snow; the different environments that nurture them; the struggles to prosper and bring another generation into being. The changing seasons are seen not simply as reasons to change one's clothing and adjust the thermostat, but as a dramatic transformation in the world, with wholesale changes in environment, species and behaviours. And yes, we become aware of the life-and-death struggles of the world of nature, which are a bracing reminder of life's fragility.

Above all, the birder will be aware of how precious and yet fragile is the world of nature, removing all doubt about our responsibilities as its steward. It becomes utterly clear that the natural world needs not our indifference, and certainly not our encumbrances, but our deep concern. This alone elevates birding above the category of Harmless Fun. We must tell our children and grandchildren so.

This is one of 55 articles in the newly published second edition of the eBook *Birding: a Flock of Irreverent Essays,* available from Amazon, at http://www.amazon.com/dp/B00K09F1JQ, and can be read on a Kindle or on any computer by downloading a free app from Amazon

BIRD STUDIES CANADA
ÉTUDES D'OISEAUX CANADA

BC COASTAL WATERBIRD SURVEY

CALL FOR COASTAL BIRD MONITORS IN BC

Bird Studies Canada (www.birdscanada.org) is looking for volunteers to participate in two coastal monitoring programs. If you enjoy observing waterbirds or walking your local beaches and are looking to gain new skills or participate in bird conservation, this is the perfect opportunity.

BC Coastal Waterbird Survey:

This program involves conducting bird counts at fixed sites at high tide on the second Sunday of each month. The observations are used to assess long-term trends in waterbird distribution and abundance (ducks, loons, grebes, cormorants, shorebirds, gulls and other seabirds). Volunteers should have good bird identification skills and own or have access to binoculars or a spotting scope. Numerous sites around Metro Vancouver and Victoria/Sidney are currently open, as are several sites near Nanaimo, Qualicum Beach, Comox, Tofino, Sunshine Coast, Gulf Islands and Haida Gwaii.

BC Beached Bird Survey:

This program involves walking a specific beach during the last week of each month, looking for carcasses that have washed up on shore. It may sound grim, but this information is key to understanding causes of seabird mortality and identifying which species are most vulnerable to events such as oils spills and fisheries by-catch. Birds are not always found, however, "zero data" provides important baseline information. No special skills are required to participate and it's suitable for all ages. All the survey equipment and data forms are provided. Numerous popular beaches around Greater Vancouver and Greater Victoria are currently open, as are sites near Nanaimo, Tofino, Sunshine Coast, Port Hardy, Gulf Islands and Haida Gwaii.

For more information, please visit www.birdscanada.org. If you are interested to sign up for either of these programs or have any questions, please contact bcprograms@birdscanada.org or 1-877-349-2473.

TAKING THE PULSE OF WESTERN SANDPIPERS IN B.C.

Karen Barry and David Hope

Census results have led many to fear that numerous once-abundant shorebird species may be declining. A hemispheric effort is underway to explore possible explanations. Factors that are hypothesized to potentially cause shorebird population declines include habitat loss in breeding, wintering or stopover areas; decline in habitat quality; recovering predator populations; climate change; or a combination of these factors. Alternatively, changes in shorebirds' migratory behaviour could influence census counts.

In 2013, a new collaborative project was launched by Bird Studies Canada and Simon Fraser University to study Western Sandpiper abundance and behavior with help from Citizen Scientists. The goal of the project is to understand characteristics important for birds in site selection during southward migration, and how changing conditions, such as increased predator presence or human disturbance, affect these decisions. This information can then be used to understand the effect of behaviour on census counts. David Hope, a Ph.D. student at SFU supported by NSERC in partnership with Bird Studies Canada, is conducting the research. Volunteer surveyors have been enlisted to carry out simultaneous counts from many sites around the Salish Sea and Vancouver Island, and to document the presence of falcons.

The first field season in 2013 was a great success with over 40 volunteers conducting surveys on two weekends in July and August. Surveys took place at over 30 sites in BC and Washington – Puget Sound. At Sidney Island, a banded Western Sandpiper was found on August 17, 2013. Researchers from Kansas State University and SFU had banded it as a chick on June 28 in Nome, Alaska. In just 50 days, it grew to full size and made the journey of over 3000 km south to Sidney Island!

The 2014 field season has just wrapped up. Over 60 volunteers conducted surveys on July 19-20 and August 16-17. Data were recorded from 36 sites and once again a banded sandpiper was observed on Sidney Island, this time during July. Records indicate that this Western Sandpiper was banded on 9 October, 2013 (as a 2012 hatch year bird or earlier) on the Mississippi River delta at Elmer's Island Wildlife Refuge, Louisiana.

Preliminary maps from 2013 surveys show that Western Sandpipers were seen at several sites in August 2013, with the greatest number observed at Boundary Bay. A few falcons were also observed at these same sites. These maps can be viewed at http://www.sfu.ca/~dhope/maps.html

Work is continuing to analyze the 2014 data and to develop a model to generate predications and test hypotheses about shorebird site use. Through this project, we hope to inform conservation management and planning by discovering whether changes in abundance at a particular site can be attributed to changes in the population size or to other factors, such as redistribution among sites.

Funding for this work has been provided by the Natural Sciences and Engineering Research Council of Canada, Simon Fraser University, Environment Canada, and Bird Studies Canada. Our sincere thanks to the many volunteers who have contributed to this project. To learn more, please visit www.sfu.ca/~dhope/. We are already looking for volunteers for 2015! To participate, please email dhope@sfu.ca or BCprograms@birdscanada.org.

FOLLOW-UPS

Here are some interesting sequels to topics that have appeared in this column in past issues.

Readers will recognize the fascination of this column with birds' navigation abilities and particularly with their apparent ability to sense Earth's magnetic field as a guide (see, most recently "Precision Touchdown", December 2013 p.25). Well here's an absolutely astonishing sequel. It turns out that Monarch butterflies (*Danaus plexippus*) use magnetic navigation too. Monarch migration from the milkweed fields of eastern Canada and the United States to wintering habitat in oak-pine woods of the Mariposa Monarca Biosphere Reserve in Mexico is famous. The reserve is located in the mountains on the México-Michoacán state border. (Less well-known is that a western population winters mainly in southern California.) The butterflies are known to use sun navigation by visual observation and calibration against their internal circadian clock. It now transpires that they can sense the inclination of Earth's magnetic field (the angle between the magnetic force lines and Earth's surface) via photoreceptors in their antennae. This provides them with a backup system when the sun is obscured. The sensing mechanism uses cryptochrome, a protein that is photosensitive in the ultraviolet-A and blue light portions of the electro-magnetic spectrum (that is, between 380 and 420 nm). The mechanism is very similar to what is now suspected to underlie bird's apparent ability to sense magnetic inclination via their eyes. Birds and Monarch's are far too remotely related for this to be a single evolutionary development. Nature does indeed more than once arrive at the same solution to a problem. But in a diminutive insect, the fact is remarkable.

Guerra, P.A., Gegear, R.J. and Reppert, S.M. 2014. A magnetic compass aids monarch butterfly migration. Nature Communications 5: 5164. doi: 10.1038/ncomms5164.

Monarch butterfly (female) in May Wikipedia

This column has regretted the mortal danger posed to seabirds by the ingestion of plastic debris (see "Plastic Food", December 2012 p.28). When thinking about such material most of us think of drinks bottles, kapok and plastic rope lost from fishing vessels. It now transpires that the most abundant material may be 'microplastic' – bits of debris smaller than 5 mm in diameter and continuing down to 20 microns (a micron is 1/1000 of a millimeter: stuff much smaller than this is considered to be colloidal, and no longer a solid). It arises from the breakdown of larger particles, so there's inevitably going to be more and more of it. Wastewater directly contributes such fine material in the form of fibres and beads of material. The problem with this is that even the smallest marine organisms may ingest it, whence the particles (indigestible) move up the food chain to the predators, including all seabirds. Worse, these small particles are effective at adsorbing and concentrating such nasties as DDT and PCBs, as well as carrying such manufactured chemicals as flame retardants and plasticizers. Removal of such microdebris is impractical: it needs to be controlled at source, a forbidding task considering the range of processes and manufactures in which plastic now appears. Perhaps the best hope is to emphasize that plastic waste itself can be a useful resource.

Lavender Law, K. and Thompson, R.C. 2014. Microplastics in the seas. Science 345: 144-145.

We reported on neonicotinoid pesticides (see "Beware neonicotinoids": September 2013 p.30) and their possible effect on birds. New evidence emerges from a study of insectivorous birds in agricultural fields in Holland. The birds are declining. By far the best correlate of this decline is the increasing use of neonicotinoid pesticides on crops. The researchers tested other possible causes, such as land use change, but none exhibited a strong correlation. This is the first study to establish a direct correlation between these pesticides and bird population trends. It is unlikely that the birds are being directly poisoned, but the insects certainly are (as intended). The effect, then, probably works through the loss of the birds' food supply – they (or, at least, their nestlings) are being starved. While the pesticide is applied specifically to crop plants, most of it goes into the soil and water, whence it spreads widely. So even non-crop plants may take up the pesticide and so all manner of insect prey may be strongly affected, not just crop pests. The study establishes correlation but, as scientists well know, that does not prove causation. A controlled trial to prove causation would be logistically difficult and ethically fraught. So the industry can continue to claim 'case not proved'. They would say that, wouldn't they. Seems like Rachel Carson all over again.

Hallmann, C.A. and 4 others. 2014. Declines in insectivorous birds are associated with high neonicotinoid concentrations. Nature 511: 341-343. doi: 10.1038/nature13531.
Commentary by Goulson, D. 2014. Pesticides linked to bird declines. Nature 511: 295-296.

Summaries by M.Church

RECENT ESTIMATES OF AVIAN ROADKILL POINT TO THIS FACTOR AS ONE OF THE TOP FIVE NON-NATURAL CAUSES OF DEATH OF BIRDS IN CANADA

Christine A. Bishop

Although birds are to be found on or near roads daily, and are often seen dead on roadsides, there are less than 10 Canadian studies in existence that report roadkill of birds. Among this small sample, 80 species of birds and 2,834 specimens have been found dead on roads in Canada representing species from 14 orders (Bishop and Brogan 2013). A 2013 study in Avian Ecology and Conservation reports that, adjusted for a scavenging rate of approximately 60%, it is estimated that 13,810,906 birds (3,462 dead birds/100km) are killed annually by vehicle collisions on Canadian one and two-lane paved roads outside of major urban centers (Bishop and Brogan 2013). The number of Canadian bird mortalities per year may be conservative because it was calculated only for a four month period (122 days; April -July) which is the approximate breeding and fledging season for most birds in Canada. This places roadkill in the top five factors killing birds outside of natural mortality in Canada (Calvert et al. 2013).

Mountain Bluebird fatality *MH*

Similarly, in the USA, bird-vehicle collisions rank nationally as one of the major non-natural causes of bird deaths. For this estimate, Loss *et al*. (2014) reviewed the literature and used 20 mortality rates extracted from 13 studies to systematically quantify data-driven estimates of annual mortality. They generated four separate estimates along with uncertainty using different subsets of data deemed to be rigorous enough to contribute relatively little bias to the results. When averaging across model iterations, they estimated that between 89 and 340 million birds die annually from vehicle collisions on U.S. roads. They also found that Barn Owls were particularly susceptible to road mortality. They noted the need for more information to quantify regional, seasonal, and taxonomic patterns of vehicle collision risk, and that substantial uncertainty remains about whether collisions contribute to large-scale impacts on bird populations (Loss *et al*. 2014). Again, this was similar to conclusions in the Canadian study (Bishop and Brogan 2013). More research is also needed into methods of prevention and mitigation for avian roadkill.

References

Bishop CA, Brogan J. 2013. Estimates of avian mortality attributed to vehicle collisions in Canada. Avian Conservation and Ecology 8(2): 2 http://dx.doi.org/10.5751/ACE-00604-080202

Calvert AM, Bishop CA, Elliot RD, Krebs EA, Kydd TM, Machtans C, Robertson GJ. 2013. A synthesis of human-related avian mortality in Canada. Avian Conservation and Ecology 8(2): 11. http://dx.doi.org/10.5751/ACE-00581-080211

Loss, S. R., Will, T., Marra, P.P. 2014. Estimation of bird-vehicle collision mortality on U.S. roads. Journal of Wildlife Management 78 (5): 763–771

ESTIMATES OF ANNUAL BIRD MORTALITY FROM HUMAN-RELATED ACTIVITIES

(Editor's Note)

Scientists with Environment Canada have conducted a series of studies to estimate the impact on birds of human-related activities. They found that in Canada, roughly 269 million birds and two million birds' nests are destroyed each year. Results (in a set of 11 articles) were published in 2013 in *Avian Conservation and Ecology*, an open-access, electronic, scientific journal. The top five causes of bird mortality, (as summarized in the final article of the set http://dx.doi.org/10.5751/ACE-00581-080211), are listed below. This summary article also gives results for a total of 28 causes of bird mortality, including a range of agricultural, forestry, power-related, mining, and other industrial activities.

Mortality estimates for the top five causes (given as the range of a series of estimates followed by the median or mean of estimates for each one, all in millions (m) of bird deaths, are :

(1) Feral cats: 49m to-232m; 116m (median)

(2) Domestic cats: 27m to 186m; 80m (median).

(3) Transmission lines: 10m to 41m; 26 m (mean)

(4) Houses (windows) 15.8m to 30.5m; 22.4m (mean)

(5) Roads (vehicles):8.9m to 18.7m; 13.8m (mean) (see previous article)

THE FLICKER'S LONG TONGUE!

During the preparation of my book **"***Attracting Backyard Wildlife***"** in the later 1980's, I undertook a rather sophisticated study to determine the food preferences of our winter bird species. Six feeders, each with two compartments were used to 'test' twelve commercially available seed types. Half way through the trial the arrangements of the seed types was repositioned. This produced interesting results --- until the local Band-tailed Pigeon flock discovered this banquet! I counted as many as 35 pigeons feeding at one time, mostly six to a feeder. Changes to this experiment were required and a hood of 2"x2" lathing wire was installed over each feeder. The pigeons and the Steller's Jays were soon eliminated, but the Red-shafted flickers stuck around. The smaller birds were unaffected by the change.

For the flickers, their love of peanut hearts, the 'nib' of the peanut, was a mighty motivator, and soon they had a solution. By clinging to the post that held the feeder above the ground they could extend their heads through the screen and then snake their long tongue around the base of the hopper (photo) and pull the peanut hearts into their mouth. Peanut halves in the compartment alongside were more difficult, but not impossible to harvest.

To accomplish this feat I believe the tip of the flicker's tongue must be quite moist or sticky. Quite possibly this is covered with mucus or 'snot' as has been described for sandpipers (Elner, et al., 2005, Dekker, 2005).

Getting the picture to illustrate this article was not very easy. But through the use of Photoshop and thanks to the skills of John Burrage, I now have an image suitable to illustrate this educational observation.

Dekker, D., 2005: Sandpiper Researchers Reveal New Use for Snot: Discovery, 34 (2) 20-23. Vancouver Natural History Society.

Elner, R.B., P,J, Beninger, D.L. Jackson and T.M Potter. 2005: Evidence of a new feeding mode in Western Sandpipers (Calidris mauri) and Dunlin (Calidris alpina) based on bill and tongue morphology and ultrastructure. Marine Biology 146:1223- 1234.

Bill Merilees, August 2014

With the slowly increasing number of resident Sandhill Cranes in the Lower Mainland, the time might arrive when they replace starlings as the main scavengers in the blueberry fields.

Jenny Hards

(Reports indicate that Sandhill Cranes at the Reifel Migratory Bird Sanctuary in Delta, B.C. have recently taken a liking to blueberries…….)

DECEPTIVE DECEPTION

When birds perceive an approaching danger, such as a predator, they utter distinctive alarm calls to warn their cousins and bolt for cover. Different species optimize their chances of survival by eavesdropping on the alarm calls of other species as well, and responding. Now drongos (family *Dicruridae*; old world insectivorous tropical passerines) are clever birds (some of them even look like crows!). They have noticed this behavior and learned to turn it to advantage.

Researchers studied the Fork-tailed Drongo (*Dicrurus adsimilis*), a bird that mimics alarm calls of other birds to frighten them off food resources, in the Kalahari desert. These birds spend about a quarter of their time following other species (including meerkats!) and obtain about a quarter of their food supply by alarm mimicry and robbery.

The Kalahari Fork-tailed Drongos particularly target the Southern Pied Babbler (*Turdoides bicolor*) for food theft. To spook the target bird, the drongo may emit its own alarm call or mimic the alarm call of the babbler, or the alarm call of a third, non-target species [notably the Cape Glossy Starling (*Lamprotornis nitens*)]. But the target birds are not stupid, either (this column has several times urged that 'bird brain' may not be quite the insult it is perceived to be). They may respond to an initial drongo alarm call, but they rapidly learn that repeated drongo alarms are a ruse and, accordingly, ignore them. So the drongos switch to mimicry. That doubles the response time (time spent in hiding) of the babblers. But that effect, repeated, wears off too. It appears we have on our hands a battle of wits or, at least, of dueling perceptions. The drongos respond to this development by varying their alarm calls.

The researchers confirmed these behaviours by recording the antics of 64 drongos (habituated to human watchers and individually banded) through 688 food theft attempts. They studied the babblers' responses by watching the reaction of 20 individuals to recorded drongo alarm calls. They found that the babblers did not respond to a drongo territorial call (non-alarm call); they did, however, respond to drongo alarm calls and to mimicked starling and babbler calls. However, the babblers' response was observed to decline when the same call was repeated at 20-minute intervals, but to increase again when the call changed on the next 'attempt'. Furthermore, they found that the drongos were more likely to change their alarm call when the previous call failed (to obtain food), but that they changed successive calls more than half the time anyway. And, finally, they observed that the likelihood for the drongo to obtain food was only about 1 in 10 attempts when the call was not varied, but rose to better then 1 in 2 attempts when the call was varied. There's motivation for you.

Reference
*Flower, T.P., Gribble, M. and Ridley, A.R. 2014. Deception by flexible alarm mimicry in an African bird. Science **344**: 513-516.*

Summary by M.Church

Photo credits
Left: Fork-tailed Drongo (juvenile), Chris and Megan Perkins. Right: Southern Pied Babbler, Georges Olioso. Both from The Internet Bird Collection.

CURIOUS RELATIONSHIPS

Ratites are mostly large, mainly flightless birds of the Southern Hemisphere. They include the Ostrich (*Struthio camelus*) of Africa, the Emu (*Dromaius novaehollandiae*) of Australia, Cassowaries (*Casuarius* spp.) of New Guinea and northeastern Australia, the Kiwis (*Apteryx* spp.) of New Zealand, and the Rheas(*Rhea* spp.) and Tinamous (Family *Tinamidae*) of South America. Ratites also include the extinct Moas (Order *Dinornithiformes*) of New Zealand and the Elephant Birds (Family *Aepyornithidae*) of Madagascar – the latter the largest bird that ever lived. Both fell victim to human hunters. Together, the ratites represent one of the most ancient lineages of birds. And they present a host of curiosities. For example, they are generally flightless, but Tinamous can fly; they do not venture north of the equator, except the Tinamous, which is found as far north as Mexico (probably not unrelated to their ability to fly); and they present some very unexpected relationships.

Size comparison: Elephant Bird, modern Ostrich, man, hen.
www.chinesebirds.net

The basal lineage for the ratites existed more than 70 million years ago – that is, before the Cretaceous-Tertiary boundary and the extinction of the dinosaurs. This was also the time (50 to 100 million years ago) when the ancient supercontinent of Gondwanaland was breaking up. It has long been thought that the various ratites (or their ancestors) became isolated from each other as the modern Southern Hemisphere continents broke away from the old supercontinent, i.e., that the various modern species developed after they floated apart on the detached pieces. Hence it was decided on grounds of geographical proximity – and seemingly supported by morphological evidence – that Elephant Birds were most closely related to Ostriches; that the Kiwis were the proximate relatives of the Moas (a Mutt and Jeff scenario if ever there was one); and the Rheas and Tinamous were most closely related to each other. Differentiation amongst these groupings was supposed to have occurred after their isolation from each other by continental drift (a case of what biologists call 'vicariant' speciation, meaning speciation as the result of isolation of one population from another).

Enter evidence from DNA analysis. It turns out that closest relative of the extinct Moas (New Zealand) are the Tinamous (South America), while the diminutive Kiwi (New Zealand) is most closely related to the extinct Elephant Bird (!! of Madagascar). In turn, these two are tolerably closely related to the Emus and Cassowaries of Australasia. The Ostrich (Africa) and the Rhea (South America) diverged from their cousins a long way back. So there is no general correlation between geographical proximity and genealogical propinquity in these birds.

How can this be? They are (mostly) flightless. In fact, ratites are generally recognized to have no keel on their sternum (breastbone), a necessary anchor point for muscles that facilitate flight. But most of the early speciation of these birds occurred 50 to 60 million years ago – shortly after the end-Cretaceous extinction of the dinosaurs (but after most of the Gondwana breakup). So it is proposed that ancestral ratites were indeed capable of flight (as the Tinamous still are, though somewhat reluctantly). It is also proposed then, that their radiation was in fact aided by flight, which provides a reason why less closely related birds might have ended up in the same place while more closely related birds became greatly separated. It is further recognized that, in the first millions of years following the disappearance of the dinosaurs, there were no large predators amongst the succeeding mammals. Hence, adaptation to a flightless mode of life, followed by the possibility to grow much larger than aerial birds, seems entirely plausible. Size and speedy legs eventually became important for survival if you were an earthbound bird.

Solitary Tinamou, Tomasz Doron, The Internet Bird Collection

And those Tinamous? Well, they appeared rather recently (about 40 million years ago); probably by then it was best to remain airborne (and hence relatively small) for protection. A possibly consequential fact is that there are today 47 species of them, compared with no more than 9 species in any other group of ratites. Tinamous are also more widespread than any other. It seems very likely that flight is what has enabled them to range so far and ultimately to speciate to a much greater extent than their cousins.

Mitchell, K.J. + 7 co-authors. 2014. Ancient DNA reveals elephant birds and kiwi are sister taxa and clarifies ratite bird evolution. Science 344: 898-900.

Summary by M Church

BIRDS OF HAIDA GWAII – THE MURAL

Off Collision Avenue in Masset this eye-catching mural, “Birds of Haida Gwaii”, adds a considerable spark of brightness. Conceived by local artist Thomas Arnatt, its intention is to represent a connected vision of Haida Gwaii. From the roof top down, a Haida Gwaii rainbow, the medicine wheel, the Haida clan symbols Eagle (left) and Raven (right), crown a quintet of prominent local bird species. These should be well known to all BCFO members.

Since 1982, when Chemainus, “the little town that found a new life by putting on a new face”. embarked on its now world famous mural program, many communities have followed. While most subject matter has been cultural or historical, Arnatt’s creation for Masset is fresh, appropriate and very commendable.

Bill Merilees (text and images)

BIRD NAMES - A CASE OF CAPITAL CONFUSION!

Carlo Giovanella (text and photos)

Anyone with a serious interest in plants will be well aware of the confusion over the common names in use. A given species often has several, and sometimes many, common names applied to it, so use of the binomial Latin names is almost essential to avoid confusion. Fortunately, the birding world has found a way to avoid the problem, but unfortunately not everyone buys into the solution.

The AOU (American Ornithologists' Union) and similar world-wide organizations have formalized the common names for each species, so each has only one officially recognized name. Because the names are formal, they should be capitalized like all proper names. The unfortunate part is that the convention is not universally accepted. Often this is because not everyone is aware of the protocol, and others simple choose to ignore the convention. For some inexplicable reason most editors of books, magazines, and newspapers (NOT including our editor!) obstinately refuse to follow along.

I present two illustrations to demonstrate why we all should always use capitals for bird names.

Example #1

The corvid family includes a number of jays that are basically blue in colour, seven species of which occur in North America, and three that can be seen in BC (plus is a single record of a fourth - Pinyon Jay).

Most-common is the **Steller's Jay** (right)

Western Scrub Jay is a rare and fairly recent intruder to the southwest corner of the Province.

And a **Blue Jay,** common only in the far eastern parts of the province.

Note that all three birds in the above photos are 'blue jays' (or blue-coloured jays), but only the last one is properly a **Blue Jay**. Use of capitals for the bird's name removes any ambiguity about its identity!

Example #2

The bird in the photo to the right could correctly be labeled as a ***'White Rock pigeon'*****,** or as a ***'white Rock Pigeon'***. The first indicates where the photo was taken (in this case on the pier at White Rock Village) and the general kind of bird, but not the actual species. The second label identifies the exact species and the colour of the individual, but does not provide location.

This one could also be correctly labelled as a *'**White Rock pigeon**'* because it is a pigeon and it was located in White Rock. However, you can see it is not white, and it is in fact a **Band-tailed Pigeon**, not a **Rock Pigeon**.

Got it? Perhaps you are more confused than ever. But PLEASE capitalize your Bird Names!

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. Recent recipients are Glenn Ryder (2012), Fred C.Zwickel (2013), and Martin K. McNicholl (2014).

The award recognizes long-term contributions to ornithology in B.C. 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 annually and, if possible, presented to the recipient during the banquet at the BCFO annual meeting.

We request nominations from any BCFO 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.

Each year, the award recipient is recommended by a three-person Awards Committee (currently Richard J. Cannings, Martin K. McNicholl and Wayne C. Weber) and approved by the BCFO 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.

BIRD COMPASS . . . YET AGAIN

This column is well-known to be consumed by the question 'how do birds navigate long distances?' (see Bird Compass: June 2012 p.10; Bird Compass, part 2: Sept. 2012 p.11; Pigeon Navigation, part 3: March 2013 p.20). Earth's magnetic field is known to act as one guide for many migratory species. Well there are new findings about that. Investigators in Germany have discovered that European Robins (*Erithacus rubecula*) lose their ability to sense the magnetic field in the presence of electromagnetic noise in the range 20kHz to about 5 MHz and at intensities comparable with background noise around human settlements. This range and intensity describe AM band radio signals very well! (So those who despair of AM rock stations will feel vindicated, especially if you are a European Robin. It's perhaps fortunate that cell phones do not operate in this frequency range.)

There is a considerable history of equivocal and spurious results in this field, going all the way back to the 18th century, so the researchers were especially careful. They isolated birds in unscreened wooden huts during the spring and autumn migration seasons and observed their confusion as to flight direction when exposed to an electromagnetic field as described above, and contrasted this with the birds' appropriate orientation when housed in a hut screened with aluminum sheeting (creating, in effect, a Faraday cage). They repeated the experiments for several years with different birds and operators; they devised experiments to confirm that it was indeed the electromagnetic field and not the field-generating equipment that disoriented the birds; and they confirmed the broad band effectiveness of the field (that is, no narrow band of frequencies within the range prompted the effect).

These results raise a number of intriguing questions. Most obviously, *how* do radio signals affect the birds' ability to sense Earth's magnetic field? That is now the problem for bird physiologists. Also, how do the birds cope with human-generated electromagnetic noise? There are answers to that one on a couple of levels. Some may not; they may become fatally confused. However, it seems that birds use multiple navigation cues, including Sun position and star positions. In the presence of electromagnetic noise, they may be able to use a different guiding sense. Sun and stars are not much help, though, if you are a nocturnal migrant on a cloudy night. But it seems that disabling levels of noise normally occur only relatively near the source; predominantly within about 10 km of the major city centres where most of it originates (though heaven only knows what the military might be up to). So if the birds can get past major cities on dead reckoning, they can happily pick up their magnetic clues in the countryside. Finally, though, these observed effects in birds are detected at levels of electromagnetic field intensity far, far lower than the thresholds proposed for human safety. But if birds are affected at such low levels of ambient electromagnetic noise, might humans be affected in some way too? Certainly, the rock music affects most of us – one way or another.

Engels, S. + 8 others. 2014. Anthropogenic electromagnetic noise disrupts magnetic compass orientation in a migratory bird. Nature 509: 353-356. Commentary by J.L.Kirschvink, ibid. 296-297. Summary by M. Church

CHICKENFEED

The United Kingdom government is investing £1.94 million (that's $C3.55 million – rather more than chickenfeed!) in a study to determine how modern chickens evolved from wild junglefowl. Domestic chickens are thought mainly to descend from the Red Junglefowl (*Gallus gallus*) of southeast Asia, with some hybridization with the Grey Junglefowl (*Gallus sonneratii*). The latter is widespread in India and readily crossbreeds even with free-ranging domestic fowl. The purpose of the study is to learn how traits in modern chickens evolved and perhaps to learn how to control further evolution of the species for useful purposes. Red Junglefowl themselves seem to evolve readily and within India, Burma, Indochina and Indonesia there are a number of local subspecies.

Chickens are the most abundant domestic livestock species on Earth and the principal source of protein for billions of people. They were domesticated at least 5000 years ago. This long association with humans and their relatively short life cycle mean that chickens have been moulded by humans more extensively than any other species. It appears, too, that chickens may be rapid evolvers. For example, a genetic variation underlies the distinctive ability of domestic chickens to lay eggs all year round. One might suppose that such a capability, of obvious value to humans, would have been developed by selective breeding long ago. But it turns out that DNA analysis performed on remains recovered from archaeological sites and middens in Europe shows that, as recently as 200 years ago, this ability – universal in today's domestic chickens – was scarce. Evidently, we have much to learn.

Being a government project, it must, of course, have an unmanageable name: "The Cultural and Scientific Perception of Human-Chicken Interactions". No wonder the pols are skeptical of scientists. Anyway, stay tuned for results.

Callaway, E. 2014. Chicken project gets off the ground. Nature 509: 546. Summary by M. Church

Chickens Google Images

PAINT YER NEST

Male bower birds are well-known for the construction and decoration of elaborate bowers in order to attract females. Satin Bowerbirds (*Ptilonorhyncus violaceus*) even 'paint' their bower. They chew up dried hoop pine needles and apply the product in a band around the bower by depositing it on the bower sticks. Females arrive and sample the 'paint' by nibbling and swallowing a bit. What's going on?

Researchers set out to find out by 'rigging' 29 bowers in one year and 30 in the following year. They wanted to know whether aspects of 'paint' quality and paint quantity in a bower affect male and female mating behaviour. (Male bower birds, of course, employ other enticements, including symmetrical bower construction, stick size and density in the bower, decoration – with blue feathers and snail shells in this species – and the performance of courtship dances.) If paint quality is an important reflection of the fitness of the painter, then the painter should recognise and respond to foreign paint in his bower, especially if it derived from a competitor of inferior fitness. Since females ingest some 'paint', the substance may also contain some chemical indication of male quality which would affect female pairing behaviour. If paint quantity reflects fitness, then females may be expected to show greater interest in bowers with more 'paint'. To assess the paint quality hypothesis, the researchers in one year surreptitiously switched painted sticks amongst nests in order to examine male response. In another year they washed the paint away from the walls of 'treatment' bowers, whilst leaving the 'paint' in 'control' bowers to gauge female reaction.

It turns out that the length of the 'painted' band and the thickness of the applied 'paint' (assessed visually on a scale of 1 to 3 by trained observers) correlate highly with the other measures of bower construction and decoration, so 'paint' application is presumably in some way related to male determination to mate. Curiously, however, it bore no correlation to mating success. Nor did males respond in any way to the presence of foreign 'paint' in their bower. They did not remove the foreign 'painted' sticks nor overpaint more vigorously, and there was no correlation between male condition and the length of the 'painted' band. Females did, however, return more frequently to control bowers than to washed bowers, and ultimately more frequently selected the denizens of the control bowers for mating. One concludes that the 'paint' is significantly involved in the mate-selection process, but just how it works remains uncertain in the presence of other 'come-ons', and in the absence of male reaction to foreign 'paint' or a correlation between male condition and painting effort.

These sorts of experiments, which seek to ascertain the determinants of bird choices are notoriously difficult. In the field there may always be uncontrolled intervening factors, including the intervention of experimenters itself, while in the lab there is always the question of the effect, if any, of the inevitably foreign environment on the birds' behaviour.

Reference
Hicks, R.E., Larned, A. and Borgia, G. 2013. Bower paint removal leads to reduced female visits, suggesting bower paint functions as a chemical signal. Animal Behaviour 85: 1209-1215. doi: 10.1016/j.anbehav.2013.03.007.

Summary by M. Church

Photo Credits:
Male Satin Bowerbird at "nest": Google
Female Satin Bowerbird: Wikipedia

NEW: Bird Songs of Canada by John Neville

A 4 CD set covering 435 bird species for $44.44. which includes shipping and taxes. This is currently the most comprehensive guide to bird vocalizations produced in Canada. It will be posted on iTunes about August. For more details go to www.nevillerecording.com
…. a remarkable reference work bringing together many hundreds of high-quality recordings….a valuable tool to anyone seeking to identify birds by their songs and calls. Andrew P.Coughlan, Bird Studies Canada.

COVER STORY

Cedar Waxwing
Photographer Mike Fung

…… taken at Steelhead Provincial Park on the Thompson River near Savona on the way to Kamloops for the Post-Conference Extension Tour after the AGM in Pemberton.