

THE PARKLAND NATURALIST



JANUARY-APRIL 2015

A PUBLICATION OF THE
EDMONTON NATURE CLUB

<http://www.edmontonnatureclub.ca>



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The Arctic Fritillary is found near Edmonton, but only in certain places, such as the Redwater Sand Hills.



Skippers are butterflies too, and this Tawny-edged Skipper is typical of the group. If you like identifying sparrows and shorebirds, you'll like skippers just as much.

Photos by John Acorn

Parkland Butterfly Watchers and the “Alberta Butterfly Roundup”

Among naturalists, the appeal of butterflies will likely never rival that of birds, but at least more of us are starting to realize that they are the perfect addition to birds and birding. For example, during mid-day, when the birds are quiet and sedentary, the butterflies are most active. Around Edmonton, you need only learn about 80 species, compared to more than 200 species of birds. Can't afford a huge telephoto “bird lens”? A macro lens for butterfly photography, or a good point and shoot camera, might be just the trick. And butterflies give you a break over the wintertime, during which you can work on rediscovering your love of birds. At least that's my approach – I get overwhelmed with the deluge of bugs and birds come springtime!

Appreciation of butterflies in the Edmonton area has grown considerably over the past few decades. My book, *Butterflies of Alberta*, and the more detailed book, *Alberta Butterflies*, by Charley Bird and his colleagues, are both now out of print. But they served their purpose, the butterfly community is strong, and other excellent field guides have appeared, such as the *Kaufman Focus Guide to Butterflies of North America*. The Bug and Spider Study Group of the ENC has helped promote butterfly studies, and its leader, Colleen Raymond, is an accomplished lepidopterist in her own right.

So how can a naturalist “get into” butterflies here in the Alberta parklands? Well, identification is now easier than ever, thanks to both books and excellent online resources. I won't list them here, since they are easy to find. You will also discover opportunities to get out with other butterfly watchers and photographers, either through the Bug and Spider Study Group or the Alberta Lepidopterists' Guild (a small society, which keeps close connections with the Edmonton Nature Club, both of which are affiliated with the Federation of Alberta Naturalists). Here and there, butterfly counts provide another great opportunity, including the Dry Island Buffalo Jump Provincial Park count in early July, and the Ellis Bird Farm Bug Jamboree count in early August.

Lately, many of us have become involved with an online citizen science project, e-Butterfly.org. eButterfly is based on eBird, and it is a wonderful way to keep track of your sightings, as well as contributing to butterfly knowledge. It is vastly smaller in scale than eBird, but to my mind this is a good thing – each record you submit to eButterfly is therefore of much greater relative significance. If you are a photographer, you can also submit unidentified photos, which will be assessed by regional experts (including possibly me). eButterfly has a channel on YouTube, and on that channel I

have put together tutorials explaining how to submit records to the site, how to document your sighting so experts can help with identifications, and how to take good butterfly photos with whatever camera you might have.

This season, the local butterfly enthusiasts have come up with a new idea, the “Alberta Butterfly Roundup” (the name might change, but the idea seems pretty well worked out). It is a collaborative plan to see how many of the 175 species of butterflies known in the province can be confirmed by either a photograph or a specimen. All records must be submitted to eButterfly, and we will provide guidelines to both the ENC and the Alberta Lepidopterists' Guild, through their respective email lists. (If you are not on the ENC Members list, please feel free to get in touch with me directly.)

Some species, of course, will be hard to miss: the Cabbage White, Clouded Sulphur, Canadian Tiger Swallowtail, Mourning Cloak, and European Skipper, to name but a few. Then, there will be species that are relatively easy to find, but you need to be in the right place at the right time. Head out to the Wagner Natural Area in June, and watch for Jutta Arctics, and Taiga Alpines. Scan the river valley's sunlit shrubbery in July for Coral and Striped Hairstreaks. Such hints will be summarized in the guidelines, and in fact I'm going back to preparing them just as soon as I get this article written.

Finally, there will be those butterflies that require pure dumb luck, or a whole lot of time out in the field to increase the odds of encountering the true rarities. For example, Monarchs might or might not reach Edmonton this summer, and this depends on weather and winds as much as anything else. Perhaps we'll see other migrants as well, such as Painted Ladies, Red Admirals, and their even less common relatives, the American and West Coast Ladies. Not to mention those species that apparently live here, but in extremely scattered populations, butterflies such as Christina Sulphurs and Old World Swallowtails.

So do consider spending some time with the butterflies this season, and spending some time with those of us who enjoy butterflies as well. Whether you contribute to the Roundup is up to you, but I hope you will at least give it a try, since every record matters, and every record is appreciated as well. Enjoy the butterflies, and perhaps we will meet out in the field this season.

John Acorn

On the cover, Photo by John Acorn

Milbert's Tortoiseshell is one of the first butterflies of spring, since the adults hibernate.

President's Report, Winter 2015



Our President, Ann Carter

Warmth and sunshine are drawing us outside, perhaps to apply what we've learned from winter presentations. Will you report a bat colony or photograph lichens? Recognize raptors more readily, stop to smell Alberta's Wild Rose, or tuck your light-coloured pants into your socks while walking in the river valley?

Our speaker program and the study groups will be taking a break over the summer and return next fall. The change in venue for Bird and Bug Studies has been well received; lots of seats are available and the large screen is much easier to view. Field trips and nature walks continue year-round and I invite you to share a favourite trail with us. As a walk leader you are not expected to identify every species of bird/plant/bug. Speak with any executive member or email janicehurlburt53@gmail.com to volunteer.

Thank you for inviting my husband John and me to present a slideshow reviewing our visit to Costa Rica. We enjoyed going through our photos and sharing our memories. We'd like to hear about your travels and passions! If you have a presentation idea, contact Alan Hingston at hingston@telusplanet.net.

Exciting News!

We are proud to announce the creation of the **Edmonton Nature Club Endowment for Land Conservation and Stewardship**. Proceeds from this fund will go to the Edmonton and Area Land Trust, whose mission is to protect land in the Edmonton area through acquisition, conservation easements, education, and stewardship. Please see the article on page 9.

On another front, two new club awards have been created to recognise our valued volunteers: the **Chickadee Award** for our un-

sung heroes and the **Great Gray Owl Outstanding Service Award** for those who have exhibited many years of dedicated service to the ENC. These are in addition to our existing categories. Congratulations to all our award winners, who are identified on page 6.

Regarding the Oleskiw Trail: After a year and a half of work by our Conservation Committee, on February 24th ENC members Patsy Cotterill and Shirley Coulson spoke at the City of Edmonton executive meeting in favour of the option 5 alignment for the trail connecting the Fort Edmonton and Terwillegar footbridges. City representatives voted unanimously to approve the West End Trail Project and, in particular, the adoption of option 5, the "Meadow Trail." Mayor Iveson thanked the ENC members for their interest in protecting Edmonton's biodiversity. Congratulations to everyone involved in this project.

Notes of Thanks

Kim Blomme and her team of volunteers engineered another successful Christmas Bird Count last December. The 489 participants counted 48 bird species and tallied 33,729 individual birds. Well done!

Toby-Anne Reimer organized our well-attended annual banquet. The Sawmill provided an excellent meal in a spacious, comfortable setting. Members enjoyed an inspirational presentation by Peter Sherrington on the possibilities and value of "backyard" discoveries.

Thanks to the volunteers who handle club communications. James Fox keeps you up-to-date by email notifications, while Pauline and Jack Dehaas take care of postal mail. Dawne Colwell produces our brochures and maps as well as the highly anticipated *Parkland Naturalist* magazine.

Hubert Taube heads our conservation committee, Raquel (Rocky) Feroe is our Edmonton and Area Land Trust representative, and Lu Carbyn is our Nature Alberta representative. Thanks to them for keeping us informed about city, area, and provincial happenings.

Coming Attractions

Back by popular demand is our August **Nature Appreciation Weekend** at Miquelon Provincial Park. Various programs will be provided, with our group campsite being home base. Members may participate as campers or day trippers. Mark your calendars for August 14–16, and watch for the announcement.

Our **Annual General Meeting** will be held in September. All members are invited to attend.

Members wishing to contact the ENC executive may use the General Inquiries link on the bottom left corner of the ENC website, edmontonnatureclub.org. We welcome your questions and suggestions!

**Respectfully submitted by Ann Carter,
President, Edmonton Nature Club**

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Membership

**Download applications from the
ENC website or contact us at our
mailing address.**

Membership Rates for 2015/16:

Household: \$40.00/year
Students: \$20.00/year

Advertising rates

Business Card	\$15/1 issue	\$40/3 issues
Quarter page	\$30/1 issue	\$80/3 issues
Half page	\$45/1 issue	\$125/3 issues
Full page	\$80/1 issue	\$225/3 issues

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Edmonton Nature Club Awards

The Chickadee Award

The first-ever recipient of the Edmonton Nature Club's new Chickadee Award, presented to honour a previously "unsung hero," is **Fred Martin**.

For many years Fred has been quietly working without recognition to assist with the Snow Goose Chase. Always willing to help out, he started by taking care of ticket sales and has continued by connecting with local sponsors of the Chase. His efforts have resulted in a wealth of donated goods for this annual event. Thank you, Fred. We appreciate your contributions!

Nomination submitted by Donna Bamber, details provided by the ENC Awards Committee



Fred Martin receives his award from ENC President Ann Carter.

The Great Gray Owl Outstanding Service Award

Created in 2015, this award is given as special recognition to an ENC member who has demonstrated years of outstanding dedication and service to the club. We're very pleased to announce **Bob Parsons** as the very first recipient of this award.

Bob joined the Edmonton Bird Club in the 1990s. He quickly became involved in the activities and executives of both the EBC and the Edmonton Natural History Club. When I joined the EBC around 2000, Bob was organizing most of the field trips for both clubs. Several birders like Steve Knight and myself learned a lot about birding and leading field trips from Bob. Things like the full panic, slam-on-the-brakes, jump-out-of-the-car, leave-all-the-doors-wide-open, what-the-bloody-hell-was-that, bird

stop. Or how to lead a convoy through traffic lights by speeding up through a yellow light and successfully stranding everyone else behind a red light! Seriously though, in those days, Bob would lead almost every trip and had one going out each weekend.

Bob is also a very keen butterflyer. He's introduced several club members to an appreciation of winged critters other than birds.

Bob is the only person to have served as president of all three clubs. He was president of the EBC for a couple of years in 1997 and 1998. He was the last president of the ENHC. And he stepped up yet again in 2008 when the ENC was having trouble finding a volunteer to be president.

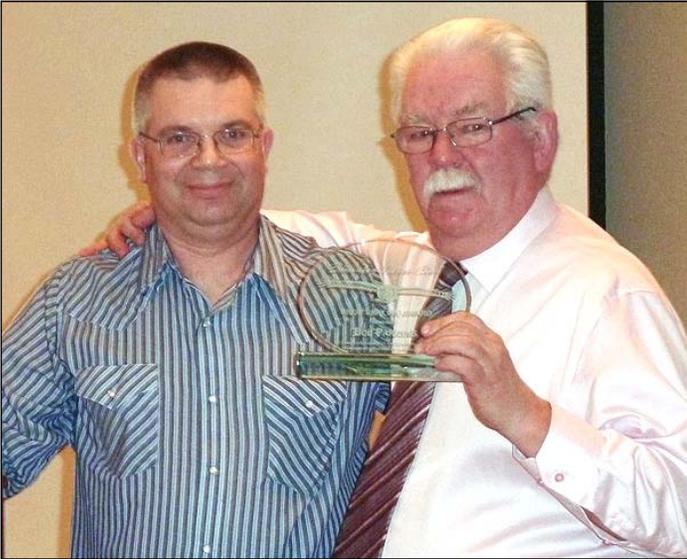
The ENC might never have come to be without Bob's drive and persistence. There had been talk on and off for years about merging the EBC and ENHC, but it took Bob's insistence that it was the right thing to do to get us all motivated and get the merger done. It was a team effort, but Bob definitely led the way.

Bob has always had a flair for putting on special events. He's run the Grassland Tour for several years. Those May Species Counts in Brooks and Milk River have given a lot of us our first exposure to grassland birding.

But if there's one thing Bob is known for, it's the Snow Goose Chase. The beginnings of The Chase go back to the '90s and Tofield's Snow Goose Festival. The Festival was a huge event celebrating spring migration. Bob started by running buses out to Tofield for folks not comfortable going out on their own. As usual, Bob worked his fund-raising magic and got several sponsors involved. One of the sponsors, Enbridge, wanted to work with Bob to get inner-city school children out to Tofield for a nature experience. Over the last 15 years this has morphed into a large event. Bob kept it going even after the Tofield festival was cancelled. He now organizes 10 or more busloads of children, recent arrivals to the country, and interested members of the public. Doing all of that involves being the general of a small army of volunteers. It's an incredible amount of work that Bob spends a huge amount of time on. Quite a bit of blood, sweat, and probably the occasional tears. I'm very sure it would not happen without Bob. One of the cutest and most fitting things ever was when one of the children addressed his thank-you letter to "Bob Chase."

For all these reasons and several more, Bob is a very deserving recipient of our new Outstanding Service Award!

Nomination submitted by Gerald Romanchuk



Gerald Romanchuk presents the Great Grey Owl Outstanding Service Award to Bob Parsons.



Peter Sherrington, Bob Parsons, Gerald Romanchuk and Steve Knight at the ENC Annual Banquet, March 28, 2015



James Fox presents The Edgar T. Jones Conservation Award to Marg Reine.

The Edgar T. Jones Conservation Award

It is with great pleasure that we announce that **Marg Reine** is the recipient of the Edgar T. Jones Conservation Award. Marg is a passionate advocate for environmental issues and has volunteered countless hours, making a significant contribution to the knowledge, appreciation, and conservation of nature in the Edmonton region over the course of many years. She also deserves recognition for always nominating someone else for this award, thus inadvertently pre-empting her own acknowledgement!

Marg held the position of president for the Edmonton Natural History Club and assisted with the amalgamation of that group with the Edmonton Birding Club to form the Edmonton Nature Club in 2004. As ENC president for the first four years after the club was formed, she led the group in its objectives to encourage awareness of and interest in the natural environment. We enjoy Marg's company at club events and appreciate her sharing knowledge in the field.

As chair of the Edmonton Area Land Trust she turned her efforts to securing long-term funding for land preservation and helped build a strategic framework for the organization. She continues to advise and promote the EALT.

Her volunteer work has extended to the provincial level through involvement with the Alberta Water Council and the Federation of Alberta Naturalists. Marg was on the Canadian Nature Federation's founding committee to establish the Clifford E. Lee Nature Sanctuary west of Edmonton. She expanded her involvement to hands-on management activities with considerable physical labour, demolishing the old boardwalk and removing invasive plant species such as purple loosestrife and the prickly Canada thistle.

Marg continues to make a difference, working with the City of Edmonton through the Master Naturalist Program and acting as steward of Hodgson's Wetland, which has been identified as one of the best examples of a permanent wetland within the city limits. Recently she teamed with other ENC members to reduce the human impact from development of Oleskiw Park by advising the city about trail options.

Thank you, Marg. You are an outstanding champion of nature!

Nomination submitted by James Fox, details provided by the ENC Awards Committee

To learn more about our awards, visit <http://edmontonnatureclub.org/awards.html>.

More photos and a report on the ENC Banquet will be in the May–August issue of *The Parkland Naturalist*.

Beaverhill Lake

What was once a shallow alkaline lake is now a huge grass-land meadow with a very small slough at its centre. The area measures about 140 km² and is located 60 km east of Edmonton, Alberta. Water levels have fluctuated widely over time, but it seems that, within recorded historical times, it has never been completely dry. We are now facing what appears to be the possibly permanent loss of a significant water body.

An overview of history pertaining to the lake is as follows:

- | | |
|-----------|--|
| 1885 | Water levels were low, but the lake was an important feature for homesteaders. |
| 1895 | Water levels were rising, and by 1902 the basin was completely filled. |
| 1902–1922 | The lake was deep enough to sustain substantial fish populations. |
| 1929–1950 | Lake levels subsided to very low levels. |
| 1974 | Water levels were high, but receded in the last quarter of the twentieth century. |
| 2015 | Levels dramatically declined in the first decade of the 21 st century, and there appears to be no increase in water levels despite above-average precipitation. |

The lake, with its surrounding wetlands, has been a major staging area for birds utilizing three migratory flyways, providing recreation for both bird watchers and hunters. From 1993 to 2002, the area was a setting for the annual Snow Goose Festival, which attracted from about 4,000 participants in the first year to a high of over 7,500 visitors in 1995. Internationally, it is still touted as an important destination for birdwatchers. Over the years the area has received a number of conservation status designations:

- | | |
|------|--|
| 1982 | Recognized as an important area of biodiversity by Nature Canada |
|------|--|

- | | |
|------|---|
| 1987 | Designated as a “Wetland of International Importance” by the Ramsar Convention |
| 1987 | Designated as a “Wetlands for Tomorrow” by the North American Waterfowl Agreement between Alberta and Ducks Unlimited |
| 1997 | Designated as an “Important Bird Area” of global significance by Birdlife International |

In 1973 Ducks Unlimited constructed a weir on the major inflow (Amisk Creek). This created and restored some wetland areas, but was controversial because, despite adequate rainfall in 2003 and 2004, it seemed to withhold water from the lake. At the same time, it appeared that all other inflow creeks were affected by agricultural activities that prevented water from reaching the lake through spring run-off and summer precipitation.

Suggested measures to restore the lake have included piping water in from the North Saskatchewan River some 60 km north. Beaverhill Lake is within the North Saskatchewan drainage basin. Another potential solution would be to divert water from the North Saskatchewan River to Cooking Lake (approximately 24 km) and from there to Beaverhill Lake (another 25 km).

Many questions remain as to the feasibility or desirability of restoring and managing this wetland area. Restoration planning for the wetlands would be necessary to determine if such a program can fit into the present social and political landscape. Prior to that happening, though, it is necessary to determine why the lake has disappeared. Baseline information also is required to evaluate whether it is biologically feasible to restore the wetlands to a stage where they could evolve along a trajectory that will re-establish Beaverhill Lake as an important staging area for migratory birds and nesting area for aquatic and marshland birds of central Alberta. We propose that a study be initiated through a graduate student program at the University of Alberta.

Lu Carbyn

Adjunct Professor, University of Alberta

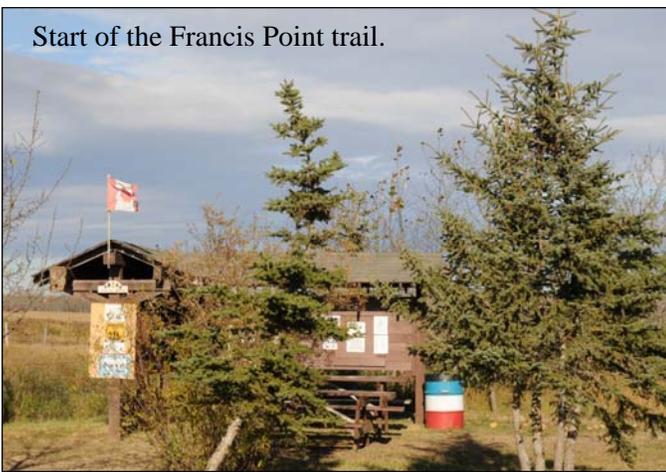


Lu Carbyn (in red jacket) leading a field trip to the Beaverhill Lake area for The Canadian Society of Environmental Biologists – National Meetings held in Edmonton, October 2014

*All Photos by
Gary Ash*



“What was once a shallow alkaline lake is now a huge grassland meadow with a very small slough at its centre.”



Start of the Francis Point trail.



ENC and EALT Act for the Future

Established in 2008, the Edmonton and Area Land Trust is a non-profit charitable organization dedicated to forever conserving significant wildlife habitats in the Edmonton area. The Edmonton Nature Club is a proud founding member of the EALT.

Working with many local and regional groups, EALT takes direct action to acquire properties or secure conservation easements and hold these lands in trust for future generations. EALT is actively engaged in the management and conservation of the habitats it has acquired. In 2013 the Edmonton and Area Land Trust received the Emerald Award for not-for-profit organizations. This prestigious award recognizes leaders in exemplary environmental stewardship.

The ENC is very pleased to announce the creation of **The Edmonton Nature Club Endowment for Land Conservation and Stewardship**. This fund will forever provide support for the EALT, helping it to conserve our precious green spaces.

What is an endowment fund? Endowment funds are not spent; they are permanently invested and their income provides ongoing support, in perpetuity. ENC members as well as the general public may contribute directly to The Edmonton Nature Club

Endowment for Land Conservation and Stewardship. Tax receipts will be issued for these charitable donations. The Edmonton Community Foundation, a well-known and respected institution, will hold and manage the ENC endowment fund. Additional information is available on the EALT website, ealt.ca, and also on our ENC website conservation page, edmontonnatureclub.org/conservation.html.

What will EALT do with monies provided by this new fund? The organization runs primarily on volunteer efforts; dollars are focused on conservation. Expenditures are required for property appraisals and other legal and technical aspects of securing land and managing it over the long term. Funding also may be required for activities such as installing signs and fences.

Those wishing to learn more about endowment funds, the accomplishments of the Edmonton Area Land Trust, and opportunities for volunteers are encouraged to visit the EALT website, ealt.ca, or speak with Raquel (Rocky) Feroe, our EALT representative.

Ann Carter, ENC President

History of the Edmonton Christmas Bird Count, 1906–2013

The Christmas Bird Count has a long and storied history in Edmonton. The Edmonton CBC has been conducted 65 times from 1906 to 2013, and continuously since 1955.

The Christmas Bird Count tradition was initiated in 1900 by Frank Chapman, who was alarmed by the year-end tradition of the “side hunt,” in which any bird seen was shot, with points allotted to the shooter based on the scarcity of the kill. The first CBCs had few rules. By the 1950s the rules established a 15-mile diameter for each count, which was to be held on one calendar day during a two-week period that included Christmas Day, New Year’s Day, and three weekends. In 2013, 2,408 counts were conducted, mostly in North America, although the tradition has spread around the world. In 2013 the number of participants was 71,659 <<http://birds.audubon.org/114th-christmas-bird-count>>.

In Edmonton, Sidney S. S. Stansell, a local schoolteacher, conducted the first count in 1906, observing 11 species in 8 hours of searching (Holroyd and Palaschuk 1996a). The second count was in 1907 by J. A. Fyfe and J. M. Schreck; the third was in 1909 by S. Stansell; and three more counts were conducted in 1938, 1945, and 1946. The count was reinstated again in 1955 and has been an annual tradition ever since; 2014 was the 60th continuous year. The count circle was centred on the University farm and has been relatively constant.

The annual number of participants was under 100 until 1985 (Figure 1). When I moved to Edmonton from Banff in 1984, I was amazed how few birders participated in the Edmonton count. The Banff count had more participants and an evening pot-luck supper at which the results were tallied and we celebrated the season with birding friends. I pointed this out to Cam Finlay and Jim Butler at the January 1985 club meeting. Together with Mike Quinn, we agreed to help compiler Jim Lange to increase participation. Happily, this was just before the National Celebration of Wildlife ‘87. Cam headed a local committee that used to meet at 6:30 a.m. – no one can have a conflict at that time, Cam told us! His wife, Joy, provided coffee, tea, and muffins. Meetings were crisp and we were off to our respective jobs before 8 a.m.! In 1987 we recruited 135 bush beaters and 1,153 feeder watchers, setting a WORLD record of 1,288 participants that has never been broken (Holroyd 1991). In fact, Edmonton has had more participants in its CBC than every other count since then except for an 8-year span when

upstart North Bay exceeded our participation. But beware, participation in other counts is growing while our participation slowly declines. (Other historical notes can be found in Palaschuk and Holroyd 1994, Holroyd and Palaschuk 1996b, and Holroyd 2000.)

Now about our sightings. Over a million birds have been counted during the 65 counts. Which species has been seen most often? Bohemian Waxwings – 341,956; followed by House Sparrow – 193,296; Black-capped Chickadee – 136,726; and Rock Pigeon – 108,210 as the only other species with over 100,000 sightings.

The number of species observed on the count increased steadily after 1986 when we first exceeded 50 species until the peak of 64 species in 2001. Then the number of species began to vary, with only 46 species in 2013. Throughout these counts a total of 119 species have been observed, 25 of them single birds seen only once! Only one species has been seen on all 65 counts – Black-capped Chickadee.

Numbers of some species have changed dramatically since 1906. I have prepared summary graphs of many species, and they are posted on <www.edmontonchristmasbirdcount.ca>. Below is a discussion of some of the highlights from these graphs.

First, the technical details! For species such as some waterfowl and Bald Eagles, the actual count is shown. For the waterfowl every individual is counted on the limited open water on the North Saskatchewan River. The number of Bald Eagles is tallied for all sightings, with obvious duplicate sightings removed. For most other species the number of individuals counted depends in part on the number of hours spent by observers looking for them on count day. Prior to 1985 most observers were bush beaters, although the number of hours varied. From 1985 to the present the number of bush beaters increased dramatically, as did the number of feeder watchers. For those species that are observed at feeders and in the “bush,” I have divided the number of individual birds by the number of bush-beater hours + feeder-watcher hours. That number is multiplied by 10 to approximate a day’s birding and avoid small fractions.

The number of species of waterfowl has increased in the past 60 years. On the first 6 counts none were observed and we can assume the river was totally frozen. With the advent of sewage treatment, the city facility puts warm water into the river, maintaining open water. The University of Alberta also has a warm water outflow, which keeps another channel open upstream. Although the variety of species has increased, the number of ducks has varied dramatically, peaking at over 5,000 in 1990. These were mostly Mallards that increased in numbers after 1985 but crashed after 1991. A university study found the over-wintering Mallards were in poor shape by spring; many could not fly. By the time these ducks were healthy the breeding season was advanced and they did not breed. Any genetic tendency not to migrate was quickly selected against! Canada Geese were abundant for two years, 2002 and 2004, but the reasons for these two peaks are unknown.

Capitalizing on the waterfowl, Bald Eagles have become more regular winterers in Edmonton. Up to 8 have been recorded on our count. For waterfowl and eagles we compile an accurate count of the number present in the count circle. For other species we need to divide by the effort of birdwatchers.

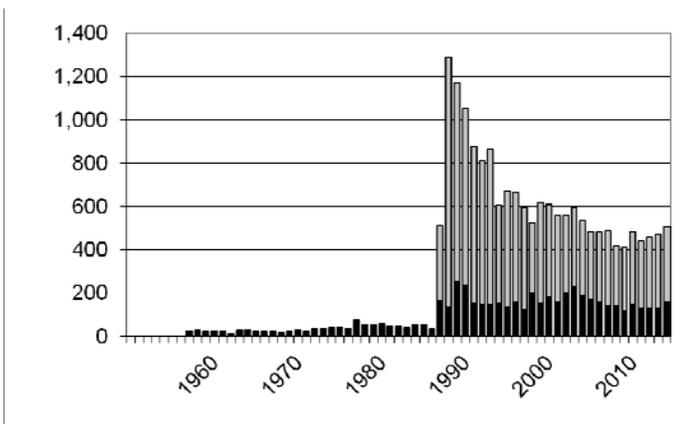


Figure 1. Number of participants on the Edmonton Christmas Bird Count from 1906 to 2013; solid bars are field party observers, light bars are feeder-watchers.

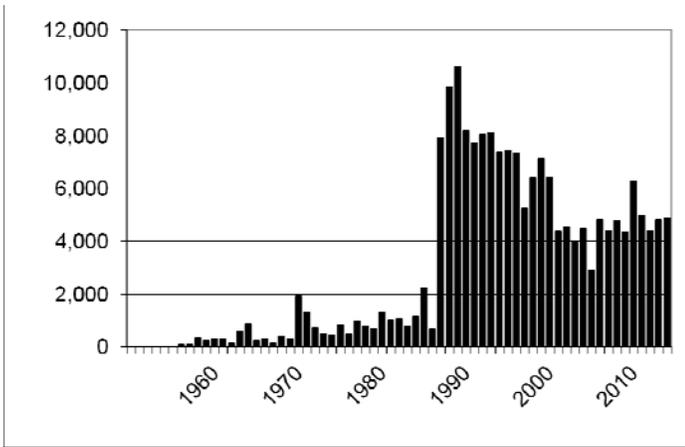


Figure 2: Number of House Sparrows reported on the Edmonton CBC from 1906 to 2013.

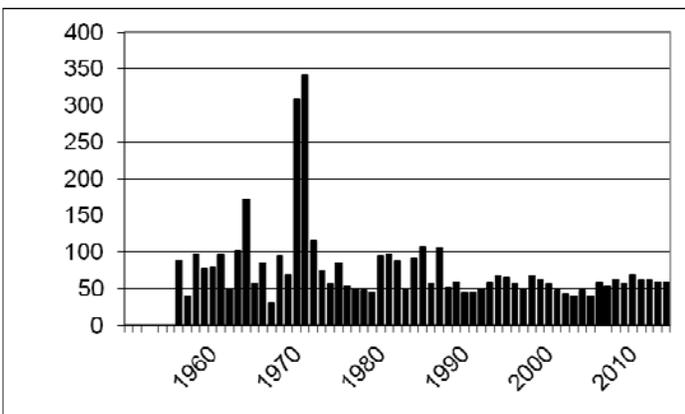


Figure 3: Index of House Sparrow abundance from 1906-2013 based on the number reported divided by (number of field party hours + feeder watcher hours) x 10.

Our counts of House Sparrows illustrate this point. The number counted skyrocketed to over 10,000 when the number of observers and observer hours increased from 1985 to 1986 (Figure 2). Clearly the number of sparrows within our count circle did not change that much. The comparison of number of House Sparrows to the observer hours shows a fairly linear relationship. The total

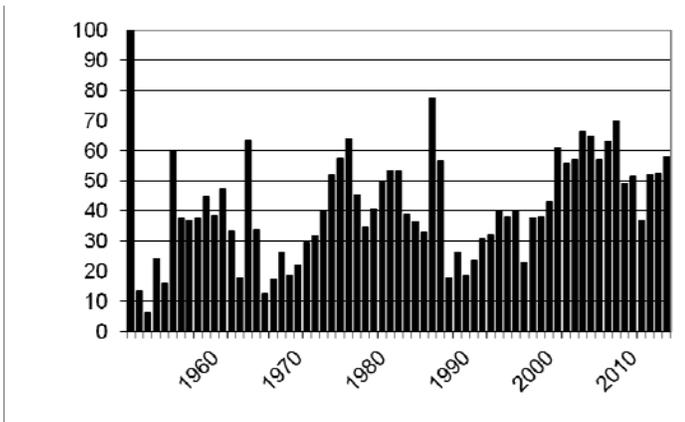


Figure 4: Index of Black-capped Chickadee abundance from 1906-2013 based on the number reported divided by (number of field party hours + feeder watcher hours) x 10.

number divided by the hours searching by field parties plus hours watching by feeder watchers provides a much different graph (Figure 3). The number observed per unit effort appears to be fairly stable at about 50 per 10 observer hours.

The counts of Black-capped Chickadees appear to vary between 20 and 60 per 10 observer hours (Figure 4). In fact, we can almost see a long-term cycle with peaks and highs every 20–25 years. Merlins are much less abundant. Their index of abundance varies from below 0.5 to almost 1.5 per 10 observer hours.

Space does not allow me to discuss the details of every species that we see regularly on our CBC, so I have grouped the species into three broad categories: the decreaseers, the increaseers, and those without a distinct trend.

First the decreaseers. As the city has grown since 1906, open farmland and wooded areas have declined. Farmland in the count circle has almost disappeared. The impact on bird populations is the decline of most open-country species and the disappearance of some within our count circle. Members of the grouse family have almost disappeared. Sharp-tailed Grouse were seen irregularly from 1945 to 2001, peaking at 15 in 1971, but none have been seen on our count since 2001. Ring-necked Pheasant and Gray Partridge are both introduced species that were first observed in 1945 and 1946, respectively. The pheasant has not been seen on the count since 2006 and the introductions in the Edmonton area ended sometime before that. Gray Partridge are still seen in the count circle, mostly in the northwest industrial area, but less commonly than before; compare the peak of 586 in 1989 to 41 in 2013.

Snowy Owl is another open-country decliner, seen only 3 years in the last 10 counts compared to 24 observed in 1993. Thirty Short-eared Owls were seen in 1988, but they were seen in only 3 years in the past decade. Although these owls have not been seen regularly in the count, there is now little habitat left in which to search for them. Snow Buntings are likewise in decline locally. The highest count was 631 in 1961, but only 5 were seen in 2013 and none in 2012.

Other decliners are forest birds. The causes of their lower numbers in Edmonton are less clear for some of these species. White-winged and Red Crossbills have both declined. White-winged were first seen in 1938, with a record count of 1,374 in 1991, but none were counted in 2013. Likewise, Red Crossbills were more abundant in the 1970s but have been rare since 2000. Grosbeaks show a similar decline. Pine Grosbeaks were seen at far higher numbers per party hour from 1938 to the mid-1980s but much less often in the past three decades. The state of Evening Grosbeaks is even worse. Their abundance peaked between the mid-1970s and mid-1980s at almost 1,000, but the counts in the past two decades are less than 100. These species breed predominantly in the Boreal Forest north and west of Edmonton. What have we done to cause these declines? Have we overharvested the mature forests, created climate change, used pest control against insects, or some other action? I don't know, but the decline of these species is of great concern.

Another set comprises species that have oscillated in abundance but have not shown a distinctive increase or decrease despite the dramatic changes in the city and the natural habitats. Remember that these trends are in the species indices of abundance, i.e., the number per 10 party hours. This list includes Great Horned Owl, Downy and Hairy Woodpecker, Black-billed Magpie, Blue Jay, Red-breasted Nuthatch, White-breasted Nuthatch, and House Sparrow.

The discussion of the increasers is more hopeful and positive! Warmer winters and increasing numbers of bird feeders might explain increases in Northern Flicker, American Crow, Cedar Waxwing, Dark-eyed Junco, American Robin, and Pine Siskin. Increases in the abundance of Pileated Woodpecker might be related to the maturing of our urban forests. Over 100 years ago, Edmontonians burned wood and coal to stay warm in the winter. Some of the wood came from the river valleys. These forests have not been harvested for many decades. More and larger trees would provide nest and roost sites for this large woodpecker. Another increaser is Rock Pigeon. Have we left more waste seed for this introduced species, or are is it attracted by more numerous buildings and structures in our growing city?

The recent arrivals of two species are very dramatic. One Common Raven was recorded by Sidney Stansell on his first count but not seen again on the Edmonton CBC until 1984. By 1990 they were well re-established. In the past three years, 2011–2013, their abundance has doubled to over 1,000! At the 2014 Birds of Christmas ENC meeting we learned that a very large roost is in the conifer trees near Quesnell Bridge. Some of these ravens stream down the Whitemud Creek Valley in the mornings and evenings, presumably to feed south of the city. Other ravens head northwest to visit the landfill next to the Yellowhead Highway. Ravens have expanded their range south from the boreal forest across the prairies and east from the Rockies onto the Great Plains. Interestingly, ravens used to be common on the Great Plains, part of the food chain of buffalo, plains grizzly bears, and wolves. This range expansion appears to have occurred naturally over a broad geographic area at nearly the same time. “Why” remains a mystery.

The other recent arrival is the House Finch. Previously restricted to the southwest US and northwest Mexico, this species has expanded its range north as far as BC. House Finches were introduced to New York in 1941, when they were sold as “Hollywood finches.” Escapees from these illegal sales became established in eastern North America and expanded west. The origin of the Edmonton population, from the east or west, is unknown, but they arrived about 2003. Their numbers increased rapidly, although their abundance index seems to have stabilized at about 12 per 10 party hours during the past 3 years. The Purple Finch looks very similar. Its occurrence on the Christmas Bird Count was irregular

and never very common. None have been recorded in the past 4 years, but we should not dismiss possible sightings out-of-hand. With today’s digital photography, observers should be encouraged to document sightings of this species. Otherwise we might conclude that House Finch displaced Purple Finch, while in reality we simply stopped looking for Purple Finch in winter.

I must acknowledge all the participants in these past CBCs. The count compilers in particular deserve special recognition; in the past 30 years they have been Jim Lange, Mike Quinn, Gerry Lunn, Dave Ealey, and Kim Blomme. Cam Finley, the chair, and other members of the 1980s CBC committee that put Edmonton on the participation map also deserve credit. Congratulations to all the zone captains and bird counters who contributed their efforts to tallying over one million birds! And thank you to Alan Hingston, who provided valuable corrections to an earlier draft of this article.

What does the future hold for species in Edmonton in winter? My easy answer is more of the same. However, one new species is on the cusp of occurring on the Edmonton count – Eurasian Collared Dove. This new arrival to North America has been seen around Edmonton in the summer and at least one is in the Fort Saskatchewan count this winter.

Geoff Holroyd

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Editorial

Spring is here and the birds are slowly returning! Soon we will have green leaves and early flowers. Remember those?

The ENC Banquet was a great success. Peter Sherrington gave a very informative presentation, “*Being Aware of What is Around You.*” The new venue for the banquet at the Sawmill Banquet & Catering Centre was very nice and the food was quite tasty. Thanks to Toby-Anne Reimer, who organized our banquet, and to Alan Hingston, who arranged for Peter Sherrington to speak to the members. Toby-Anne will submit an article on the banquet for the next issue of *The Parkland Naturalist*.

Congratulations to Marg Reine, winner of the Edward T. Jones Conservation Award, and to Bob Parsons, winner of the new ENC Great Grey Owl Outstanding Service Award. Congratulations also to Fred Martin, who earlier in the year was presented with the new Chickadee Award for many years volunteering with the Snow Goose Chase.

Geoff Holroyd and Ann Carter submitted articles on their topics from the Indoor Speaker presentations. Butterflies have already been seen this year. Learn how to report your sightings in John Acorn’s article on page 2.

Thank you to the authors and photographers for the many interesting articles and photos and for their continued support.

The deadline for submissions for the next issue of *The Parkland Naturalist* is July 31, 2015.

Dragons of Summer – 20 Years Past

I was lucky to sit down for an interview with Natasha Page, a volunteer who presented “Dragonflies of Alberta” for the Edmonton Nature Club Bug and Spider Study Group at The King’s University College on April 1, 2015.

Thank you for joining me, Natasha! I’d like to start with some background questions about your experience with dragonflies. I understand that in 1995 you were a summer student at the Wagner Natural Area where you studied odonates as part of your duties. That sounds fascinating!

Yes, that is correct. It was one of the best summer jobs I ever had. I got paid to run around with a butterfly net and get pictures of dragonflies.

I watched your appearance as special guest on a Dragonfly episode of The Nature Nut television series! Did that happen the same summer?

That also is correct. There was a ninja* sneaking around Wagner the day of the filming.

You found and reported Alberta’s first record of the Plains Forktail Damselfly, a.k.a. Ischnura damula! How did you feel about making the first report of a new dragonfly species for the province?

It felt fantastic! John Acorn taught me about identifying dragonflies. We talked about how great it would be to find a new species and he had a hunch that the *Ischnura* could be in Alberta. I told him that I would find it. Days turned into weeks as I searched in vain. I was losing hope. Then, the day he was coming with his crew to film *The Nature Nut* at Wagner, an *Ischnura damula* was perched on a clump of grass by the path and I caught it. I had the biggest grin on my face when he showed up and I told him the news.

When we brought the *Ischnura* out for filming, John and I took turns standing guard with a net if it tried to escape. It escaped on my watch. I think you can see the swish of the net on the show.

During your “Dragonfly Walk” through the Wagner Natural Area last June, you mentioned your previous role as Bug and Spider Group Coordinator for the Edmonton Nature Club. I know you acquired excellent nets, and field equipment that’s available for the club’s use today! How long did you hold that position, and which years?

The club was great about embracing bug hunts. Getting proper equipment enhances the bug hunting experience. No one wants to be triumphantly

catching a dragonfly and then have it escape from a poorly made net! I think I was the coordinator from 1996 to 1998 or something like that.

After all your work with odonates, do you have a favourite species?

Dragonflies and damselflies are so varied and beautiful it’s hard to pick a favorite. Of course, the *Ischnura* holds a special place in my heart. There also is a group of dragonflies called Emeralds that are common in our boreal forest. They are a fantastic metallic green.



Emerald Dragonfly, Photo by Natasha Page

Thanks, Natasha! One last question before we wrap up. Sometimes our lives take interesting turns: 2015 marks 20 years since your summer job at Wagner and your television appearance there. Would you like to share anything more about your journey?

At one point, I thought I might end up being an entomologist because I had such a delightful time chasing after insects at Wagner. I ended up on a different career path and now work as a waste policy writer for the Government of Alberta. I still have a passion for running around in the woods and taking pictures. I haven’t seen any ninjas recently at Wagner. Those can be tricky to photograph.

Colleen Raymond

**The Nature Nut episode that was filmed at Wagner when Natasha was a special guest shows a ninja (John Acorn) sneaking around behind her when she believes she’s alone.*

Parkland Plant Notes – Weeds, Part 4

Weeds, Part 4. Invasion, Restoration, and the Question of Complexity!

What was I thinking when I embarked on a series of public musings about weeds? Was it because having lived in urban and semi-rural settings for most of my life and spent many hours in parks and natural areas they are so familiar to me? Or was it that I wanted to explore my own and others' ambivalent attitude towards them? Was it fear of a trend towards the moral condemnation of weeds on the part of the public and land managers, a sort of blanket racism that obstructs an understanding of their individual qualities and behaviour? British writer and naturalist Richard Mabey observes about weeds that "They are at one and the same time more successful and more brutally attacked than at any time in history." He laments that "the more we seem able effortlessly – but temporarily – to eradicate weeds the less we bother to understand them." (By "effortlessly" he is referring to the use of herbicides, which produce only temporary respite until the weeds evolve resistance to them.) While in many ways I am a weedophile like Mabey, I love native plant communities more, and mourn their increasing loss. So I reject unequivocally the ideology of those newly sprung-up groups and movements that push back against the removal of non-native species and subsequent restoration of native communities.

Non-Native versus Native Ideology

One group of such detractors, based out of California, calls itself "Death of a Million Trees." It was formed to protest a restoration project of the California Native Plant Society and the state government that involves cutting down an established population of eucalyptus trees in the San Francisco Bay area and replacing it with the components of a native oak-savanna community, now a rare ecosystem. The Million Trees people have now extended their scope to oppose the cutting down of all trees and indeed all efforts to set the clock back to former ecosystems (that is, they spurn restoration, the process of repairing human-damaged ecosystems). Not surprisingly, they endorse the increasingly common "novel ecosystems" that result from such damage, a term coined by environmental philosopher Eric Higgs of the University of Victoria for hybrid ecosystems of native and non-native elements. (Most of the City of Edmonton's "naturalization" projects would qualify as novel ecosystems.) Unnecessarily, they deride the efforts of native plant advocates whom they label "nativists" and have even likened to Nazis for their advocacy of "pure" native plant communities! They cherry-pick the scientific literature that fits their ideology, and judging by their blogs get supportive

responses from respondents unschooled in ecology and historical landscapes. Since people are passionate about their home turf and like their landscapes the way they find them, with no knowledge or sense of loss of the diversity that once existed, we can probably expect more push-backs of this kind.

It is not that the tenets of Million Trees and their ilk are all without truth and, indeed, restoration ecologists are the first to admit the shortcomings and challenges of their field. Anti-native proponents point out that natural communities change naturally over time, especially geologic time (for example, Alberta has been at times covered by tropical seas, and more recently by glaciations) and argue that because Man is part of nature, anthropogenic changes to nature are likewise a natural phenomenon. The Anthropocene, the present geologic age in which the planet is being hugely altered by human presence, is the logical progression of evolution! They further argue that since change is continuous, any effort to restore a community to the way it was at a particular time is arbitrary, if indeed its condition at that time is knowable. Current environmental conditions may preclude the establishment of the original community, even with human intervention. And how far back does one go to determine the native status of a plant? Is a plant that moved across the Bering land bridge from Asia to North America 20,000 years ago native? (See also my previous article about the difficulty of distinguishing native varieties from alien ones.) Restoration scientists admit that some ecosystems will be impossible to restore to their original condition (usually determined as before the influence of European colonization). So, is this desire to return vegetation communities to a former natural state just the nostalgia of scientists and naturalists with a better knowledge of past nature than most?

The answer is no: ecological theory holds that diverse communities of native components that have evolved together function well, with more efficient exploitation of the resources of soil, space, and light. They are resilient, and important for the planet's sustainability. But, counter the anti-native groups, weeds (non-natives) contribute to diversity and also to ecosystem function. Kevin Van Tighem, writing in his "This Land" column in *Alberta Views* magazine, suggests that "The most useful distinction might not be between natural and unnatural but between complex and simple." He notes that "long-established plant and animal communities are complex, with many interdependent relationships among many species. Disturbance, such as an ice age or perhaps just a bulldozer, replaces complex communities with a simple assemblage of weed species.... Industrial-scale change...

make(s) Alberta less complex, interesting, and resilient.” The problem of the undesirable effects of removing ecologically valuable alien species during landscape management for conservation is, however, a valid one, which I will refer to in a future article.

The Case of Garlic Mustard

Another argument put forward by the anti-restoration movement for maintaining the status quo of human-altered or “hybrid” ecosystems is that native plants can learn to co-exist with invading aliens, an idea they have seized on eagerly from science. Certainly there is experimental evidence for this. Take the case of the much-studied garlic mustard (*Alliaria petiolata*), a rapid and rampant invader from Europe of the lush, moist woodlands of eastern North America, and a significant threat to native woodland communities and species there. A biennial member of the mustard family, much of its invasive success has been attributed to allelopathy, an ability to secrete chemicals into the soil that inhibit the growth of surrounding plants. Two European scientists publishing in the *American Journal of Botany* tested the effect of garlic mustard root exudates on the germination of two members of the rose family, *Geum urbanum*, which is not native to North America but which has become naturalized in the east, and native *Geum laciniatum*. The garlic mustard they used came from two sources: directly from Europe, and from North American locations. (Two provenances were tested because a difference in allelopathy was suspected; native species that are invasive in other countries are often not so in their native communities.) Not surprisingly, the native *Geum laciniatum*, which had had no prior experience of growing with garlic mustard, proved sensitive to the toxic effect of garlic mustard from both origins. The naturalized *Geum urbanum*, however, found the North American garlic mustard “less nasty,” showing reduced germination only after exposure to the European garlic mustard.



Geum urbanum, Photo by Patsy Correrill

More recent research by University of Georgia scientist Richard Lankau, using garlic mustard and a native plant in the nettle family, dwarf clearweed (*Pilea pumila*) that often grows with it, further supports the idea that natives can develop competitive tolerance to invaders and may co-evolve to achieve a stable coexistence. The allelopathic chemical compound from garlic mustard, sinigrin, acts to kill the fungi in the soil that help native plants extract nutrients from it, and Landau hypothesizes that natives may effectively combat the allelopathic effect in invaded sites by choosing alternative fungal partners, even if, in non-invaded environments, these are not optimal for growth.



**Garlic Mustard Stand (Mill Creek),
Photo by Daniel Laubhann**

A few years ago garlic mustard appeared in Edmonton, probably as an escape from garden refuse that had come from eastern Canada. It found the moist, shady ravines of Mill Creek entirely to its liking. The lack of a dense herbaceous understory (due to shade) permitted it to spread rapidly by seed. Currently the City of Edmonton’s objective is to eradicate the population before it spreads further; volunteers are recruited each spring to pull out the second-year flowering plants and grub out the seedlings from the previous year. This approach seems reasonable, although whether eradication will be successful remains to be seen. If it is not, will garlic mustard become prevalent throughout the river valley? Periodically flooded creeks in shady ravines could provide ideal habitat. What then if our own native Geums, *G. aleppicum* and *G. macrophyllum* (yellow avens), which occupy habitats similar to those of garlic mustard, were to develop the same kind of tolerance as *Geum urbanum*? Would garlic mustard monocultures eventually give way to a more complex understory even if it were “novel”? These are all unknowns, and the City is probably wise to try to get rid of garlic mustard while there is still a chance. But does the latest science provide any insights into how the City of Edmonton should deal with its garlic mustard invasion?

Lankau's research points to one potentially helpful intervention in restoration: planting natives that have already developed resistance to garlic mustard (rather than naïve ones) in sites from which garlic mustard has been removed should result in better survival. Whether this would work in the herb-poor shrubby slopes of Mill Creek Ravine is another question.

Other Alberta Invasions

Speaking of invasions in the City of Edmonton, last year a new and very rare weed was "discovered" in the river valley in West Edmonton (Oleskiw). This was burnet-saxifrage, *Pimpinella saxifraga*, a plant of calcareous grasslands in its native Europe. It is a member of the carrot family and resembles the more familiar grassland weed, caraway (*Carum carvi*). It is present in large numbers in an old hayfield in the floodplain and along trails in the adjacent riparian forest, so it was obviously introduced a good many years ago, presumably as a result of agricultural activity. Its spread, which is mostly by seed, has likely been contained by the dense growth of smooth brome grass in that field. However, when the trail connecting the Fort Edmonton footbridge to the new Terwillegar footbridge is built this year, the accompanying disturbance, as well as increased human presence, may provide it with further opportunities to spread. Any efforts to control it or not will depend upon some careful monitoring and plans for future land use in the area.

In the next and final article I'll describe some of the problems that arise in managing landscapes for conservation along the lines of: "Oh what a complicated web we weave when first we practice to interfere!" For now, I'll give the last word to Kevin Van Tighem who, in reference to ecosystems and Alberta's nature, says simply, "It's complicated. It should be."

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Patsy Cotterill



**Burnet Saxifrage (Oleskiw),
Photo by Shirley Coulson**

April is Prairie Crocus month. Photos (page 17) by Patsy Cotterill

You can find Prairie Crocus in the sandhill areas north of Edmonton (Opal, Redwater, northwest of Bruderheim Natural Areas), Gibbons Badlands Prairie, Fort Saskatchewan Prairie, and Nisku Prairie, as well as many locations on well-drained soils further south.



The parabolic flowers of Prairie Crocus (*Anemone patens*) concentrate the sun, making them a few degrees warmer than the ambient temperature and a great place for pollinating insects. The fuzzy hairs help insulate the plant against desiccation by cold spring winds.



Later in the season the divided leaves appear and the flower stalks elongate, bearing aloft the seed-heads with their feathery awns to be caught and dispersed by the wind.

Chasing Birds

Gone with the Wind

Most birders wouldn't include a staple gun on their equipment list. But when the wind is gusting to 60 km/h you need something to keep your hat in place!

Those days with strong winds aren't always the most attractive for bird photography. Depending on the season, a lot of birds will lay low and be hard to find on blustery days. In the winter, going out on a windy day can be a complete write-off. But once spring hits and the waterfowl start moving through, some wind can be a good thing.

It all comes down to some basics of bird behaviour. Birds will almost always face into the wind. Large birds that need a running start to take flight, like swans and diving ducks, will do so into the wind. Even dabbling ducks that can take off by just jumping up will do that facing into the wind. So...smart photographers see the advantage of approaching a bird with the wind at their backs. The bird will for the most part face you. And if it's really nervous, like a lot of migrating ducks are, it'll likely take flight towards you and your camera.

The limiting factor is that most bird shooters want the sun at their backs, too. Now some of you may have more control over things than I do, but I usually have to wait for the light and the wind directions to line up. If it's over-

cast, you can just work with the wind. Depending on the background, though, the photos may not be as attractive as when you have some sunlight.

Recently I was out on one of those windy-as-heck days. It was a strong west wind, so the morning was pretty brutal for shooting anything. So, the smart thing to do is to take an early lunch break and maybe even sneak in a little nap and wait for the right conditions. Especially if you know Bob Parsons won't be anywhere around, so you won't be disturbed!

It clouded over for a while in the early afternoon, so all I had to do was find some ducks and approach them with the wind at my back. That's all right, but it looked like the clouds might clear off in the early evening, so I went out to some spots where I thought there might be some large flocks of geese. My timing was good and I ran into a flock of White-fronted Geese just as the light was getting nice. I ended getting closer to a few of them than I ever have before. I find White-fronts to be pretty skittish as a rule. It seemed like most of them were reluctant to take off. The situation led to some decent shots of them down on the field. Others that were more nervous did take off. And they did what I hoped for, jumped towards me into the wind. As soon as they got some altitude they'd bank off away from me, but a person who was ready could get some decent pics.

White-fronted Goose



A little later I ran into a huge flock of Snow Geese with some Tundra Swans and Pintails mixed in. The geese were moving around a bit and some from further away were flying in to join others already down in the stubble. Just as birds will take off into the wind, they'll land into the wind as well. Makes for a good photo op when they glide in with the landing gear down.

Some of the swans decided to leave after a while. Another bit of bird behaviour to be up on is that swans and other waterfowl often seem to make a group decision to take off. The lead bird will start bobbing its head. When

the others start doing the same thing, you can be sure they're about to go. That's the cue to be ready for the running take-off a swan will make. Get your finger on the shutter and make sure your exposure is right!

Bottom line is that some unpleasant weather can make for good photo opportunities. If your head isn't as hard as mine and you don't want to use staples, you could probably tie down your hat with some string. But get out there and shoot!

Gerald Romanchuk

See next page for more photos.

Tundra Swan



Tundra Swan





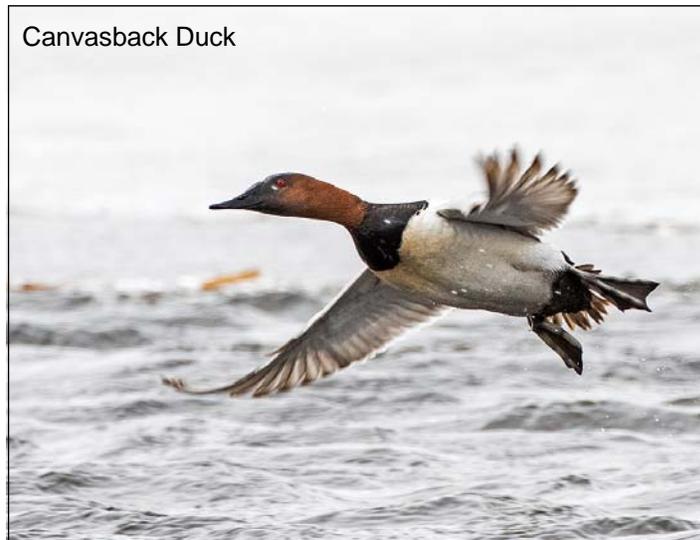
Female and Male Pintail Ducks



Snow Geese



White-fronted Goose



Canvasback Duck

Lost Mother Goose

Late one evening last November, Joan and I were taking our walk around the RV park where we camped near Phoenix, Arizona. It was just after 9:00 p.m., a week before the U.S. Thanksgiving holiday. Much to our surprise, we came upon a large goose similar in colouring to a Greater White-fronted. It became obvious that it was a domestic goose when it ran away nervously but was unable to fly. We both knelt down and repeated several times, “You’re okay, you’re okay.”

After several minutes, we walked away slowly and the goose cautiously followed. Before long she waddled right next to our legs like a pet dog. We assumed that she got into the park through a hole in the fence somewhere, so proceeded to circle the park looking for her entrance. All gates were locked for the night at 8:00 p.m. with the exception of one with a guard four blocks away.

We tried calling the animal control phone line without success, as we got only a recorded message. Several people passed by, some offering humorous comments, such as, “Is that for Thanksgiving dinner or Christmas?” and “Will you be walking your goose again tomorrow night?” Calling the guard at the gate for assistance did not work either, as the trigger-happy watchman told us he would be right over to kill it! That wasn’t going to happen.

After discovering no holes in the perimeter, we concluded that the goose had wandered from one of the nearby farms

and simply walked through an open gate before the attendant closed it for the night. We continued around the park to the residence of a known birder. With him, his wife, and a retired Edmonton Eskimo football player we managed to corner the goose. I was able to throw a large towel over its head and hold it comfortably for transport.

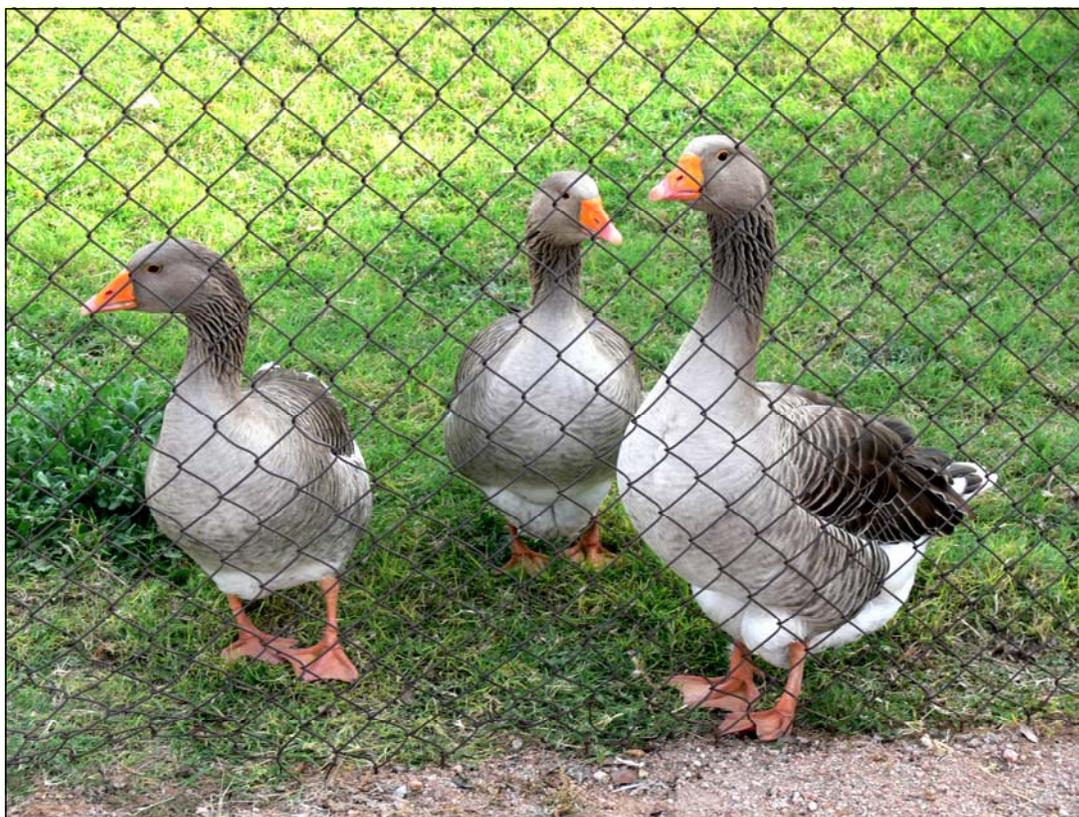
A couple new to the park, with tattoos head to toe, happened by and offered to assist in helping find the owner of the goose. A helpful couple indeed, as they were willing to take a chance with the leather seats in their new pick-up truck. The goose remained calm with repeated “You’re okays” as we passed the guard and his six-shooter at the gate.

Our second farm stop was successful. We were met in the yard by an older gentleman, dressed completely in cowboy garb, named Rex. He directed us to a cage where two large goslings came running towards the gate. The cackles of joy from the mother and offspring as we released her were heartrending indeed. Another rewarding birding experience!

We later learned that the threesome were named Miss Lucy, Hugo, and Buttercup. I returned to the farm the following morning to take the photograph shown here.

Del Huget

Photo by Del Huget



2 x 3 = 6 – Toes, that is, on the Black-backed Woodpecker

It has been a real good winter to observe Black-backed Woodpeckers at several places in the Edmonton and St. Albert area. This particular species has my attention for a variety of reasons. One of them is the interesting fact that they have only three toes on each foot, rather than the usual four like other birds. How did this ever evolve?

Before I continue, let me set a couple of things straight. We have two species of “three-toed” woodpeckers in the North American Boreal forest region: the Black-backed or Arctic Woodpecker, as it was formerly called, and the Three-toed Woodpecker, previously called the Northern Three-toed Woodpecker, which also occurs in Eurasia.

Of the two species, the Black-backed is by far less common, but every now and then it is seen more often in a particular year. In our area, we usually see Black-backed Woodpeckers during the winter months. This year the Grey Nuns White Spruce Park in St. Albert has been occupied by three of them. Evidence of their presence is quite noticeable, especially when there is snow on the ground.



The Black-backed forages by flaking bark off dead coniferous trees. It does so in a sideways motion until it gets to the cambium layer, which is lighter in colour. There, it chisels directly into the wood. When it is on target, the woodpecker sticks its barbed tongue into the tunnel where a wood-boring beetle larva is hiding, spears it, pulls it out, and eats it.

This very labour-intensive way of making a living results in the flakes of bark you will find on the snow at the base of trees.

Another way of trying to find a Black-backed Woodpecker is to stop frequently and listen for a faint tapping sound. Actually, it can be quite audible. With luck you'll see one high up on the trunk of the tree.

For a guy like me who likes photographing birds, this does not make a good photograph. Another problem for photographers is that as a rule the spruce forest is quite dark. Often the body of the bird is sharp but the head is a blur because it is moving so quickly (thank heaven for the delete button). When it is sunny, the bird usually sits on the darker side of the tree. That does not help either.

However, these woodpeckers are not very shy. If you go out to look for them many times, eventually you can luck into finding one at a much lower level and take advantage of that opportunity. Persistence pays off, and if you are lucky you can get a nice male with his golden yellow crown.

Since the beginning of November Black-backed Woodpeckers have been working on the dead white spruces in the park. In February, when this article is being written, the worked-over trees are very noticeable in the forest. Lighter coloured trunks stand out amidst the darker ones of living trees.

Although they are very tolerant about people watching them with binoculars or camera, the presence of a Hairy Woodpecker, similar in size, scares the heck out of them. The Hairy chases the Black-backed away. It looks like the Hairy considers them to be intruders, and in a way they are.

On some days the White Spruce Park is very quiet, on other days it is full of life. Pileated, Hairy, and Downy Woodpeckers can be heard and seen. These three species all have four toes on their feet, two pointed forward and two backward. This is called a zygodactyl arrangement, which means “paired toes.”

What evolutionary process made the three-toed woodpecker species lose that small inner toe? Perhaps they never had one. Emus have three toes, and Ostriches have two. What about the dinosaurs from which birds evolved? Will we ever know?

Ludo Bogaert

Photos by Ludo Bogaert



The male with his golden yellow crown. The female lacks this.

What makes the three-toed Black-backed Woodpecker even more intriguing is that it can rotate its outer toe almost 90 degrees, from a forward to nearly backward position.



Field Trip Reports

Southern Alberta, April 3–5, 2015

The ENC took a trip to Southern Alberta over three days on the Easter weekend. Fourteen keen participants in five cars covered 1,850 km while visiting approximately 16 locations centred around Medicine Hat and Manyberries. Thanks go out to James Fox for a super organizing job up front and a masterful eBirding listing approach that totalled 75+ species.

Our first big stop was for 9,000 Snow Geese well south of Camrose. We also saw several Ross's Geese, Blue Geese, White-fronts, Cackling Geese, Tundra Swans, and numbers of waterfowl between Camrose and Big Knife Provincial Park (PP).



At the latter we also had Sandhill Cranes, Golden-crowned Kinglet, Brown Creeper, Ring-necked Duck, Canvasback, and a cooperative porcupine. Gerry Fox suggested a back road that circled Oakland Lake. This was a real adventure involving a stream crossing and about 15 Snowy Owls which for some reason were clumped in groups of two or three and were particularly tame. Nice to see our first Tree Sparrow and Meadowlarks on a trip that was low overall on passerines. Near Dowling Lake we had our only Prairie Falcon. Around Carolside our first Ferruginous Hawks started to appear. They were a delight throughout the rest of the trip, with two chocolate/white pairings of particular interest. Red-tails were not back in huge numbers but they were present; Swainsons were not encountered. Rough-legs and Harriers were present throughout, as were the occasional Merlins and Bald Eagles, with Golden absent for the first time in memory on a trip to these parts (perhaps due to a later date than in other years). At the nightly planning sessions Gerald Romanchuk treated us to some education about aging Bald Eagles that I was able to apply the next day, and that was fun.

On Day 2 we got up at 4:30 a.m. and headed south from our base in Medicine Hat to Manyberries. This year our timing was better than last, and we saw 8 Sage Grouse. They were found by, you guessed it, Gerald Romanchuk after some really determined scoping (when I had already told him to give up and push on to a new location). We stayed a respectful distance away, about 750 yards. There is nothing like standing on the prairies, watching the sun rise, while below in a coulee you can watch Sage Grouse doing their time immemorial spring dance. We were also treated to a near-full eclipse of the moon on the drive down that morning, which capped things off nicely. With that big effort completed we spent more time in the area and located a Sharp-tailed Grouse lek before pushing on to Pakowki Lake. Water was very high, almost over the road. Birds were present but in low numbers, with no shorebirds other than Killdeer. Here we also had a Northern Shrike, American Pipit, and Lapland Longspurs.



After lunch and shuffleboard at the Southern Ranchmen's Inn in Manyberries we did the Wildhorse loop and after determined scoping by Gerald we had the first Eurasian Wigeon of the trip. We carried on to Elkwater, where Connor Charchuk spotted an obliging Great-horned Owl, Vince Cotterill led us to the very branch where an Eastern Bluebird once stood, and we dipped on Turkeys.

The final morning we headed off for Tide Lake. It was mostly too early for prairie passerines, but we did have first-of-season (FOS) Lesser Yellowlegs. At Tilleybrook PP we saw a Purple Finch. One of our last stops was Wyndham-Carseland PP, where some of the group glimpsed a Wood Duck east of the Highway along the irrigation canal. After that we pushed on to Weed Lake, where we had Greater Scaup in good number and FOS Franklin's Gull and Red-breasted Merganser. We also saw Common and Hooded Mergansers on the trip.

Photos by Steve Knight

We had a good number of lifers among the group and the number of FOS birds was of course very high! We also had a nice group of Mule Deer, many pronghorns, and a few coyotes along the way. It was a pleasure visiting these rolling prairies with a group of such hard-working and keen birders! One of the group tallied up 8 hours of sleep in total for the trip!

Steve Knight

As Steve mentioned, the mixed-colour pairings of Ferruginous Hawk were pretty interesting.



Photos below by Gerald Romanchuk

Thanks for the report and photos, Steve!
One of our members apparently just came off the high seas and had his own way of scoping for birds.

If you can't see Steve in this photo, it's because he wears so much camo.



Gerald Romanchuk



Seeing all those Snowies was fun.



Horned Lark

Photo above by Janice Hurlburt

Field Trip Reports

Tofield Area and Owling, March 14, 2015

Our group started from Ardrossan with 19 people for an afternoon around Beaverhill and Tofield. The weather was pleasantly warm. We came down the east side of Beaverhill to meet up with Gerald, who was scouting, then across to Amisk Creek and Francis Point before heading back to Ardrossan to meet for the evening's owling.

We had a number of spring arrivals – Cackling Geese, Redhead, Pintails, American Wigeon, and a lone Horned Lark. What was initially thought to be a Kestrel turned out to be a Merlin. Redpoll flocks are still about.

At Francis Point, Dave Collyer was at work maintaining the area – nice to meet him, and thanks to him for all his efforts. A walk out to the old blind did not yield any raptors in the grasslands of the old lake bed. On the way up the west side of Beaverhill from Tofield a Bald Eagle was spotted near Highway 16.

At Ardrossan a few people headed off and after dinner the group swelled to 39 for the owling portion. Ray Cromie headed over to the east side of the park while the main group started up the west side. Our first stop just after sunset didn't get anything, but as we continued we found our first of 5 Great Horned Owls perched near the road. A few more stops did not yield anything so we headed over to the east side where Ray reported a Northern Saw-whet Owl. Along the way we had 4 more Great Horned Owls, a couple of which were near the road, giving us nice views in the flashlights. At the Saw-whet location, we could hear a male some distance back, but it declined to come over for a visit.

We decided to call it a night around 10:40, which was a good choice as the wind picked up and some minor showers blew through on the way back to Ardrossan.

We saw 19 species in all, including the 2 owl species in the evening. Thanks to Ray and Gerald for scouting and navigating.

Brian Stephens



Hermitage Park, March 7, 2014

Twelve of us met at Hermitage Park this morning. The weather was great, but the footing was sometimes treacherous. Fortunately, there were no pratfalls.

A highlight was the Golden-crowned Kinglet that flew low through the group along the trail to the train bridge. We were able to add four birds to the March list: Common Merganser, Townsend's Solitaire, American Robin, and Golden-crowned Kinglet. We saw 19 species in all – thanks to Brian Stephens for compiling our list.

Don Delaney

At the Grain Terminal we also saw Merlin, Feral Pigeon, and Gyrfalcon.

Brian Stephens



Gold-crowned Kinglet, Photo by Henry Sanders



Mallards, Photo by Dawne Colwell

Great Horned Owl (left), Photo by Janice Hurlburt

Snowy Owl Prowl, February 14, 2015

After heavy overnight snow, 25 of us ventured out on roads less travelled in search of Snowy Owls. Under blue skies, fields of white glistening in the sun made an attractive scene. Unfortunately, the Arctic visitors seem to be less numerous each passing year and it is necessary to venture further afield than north and west of St. Albert to find these birds. A single male Snowy Owl was successfully located northeast of Morinville on the ground in a large open area, in a setting reminiscent of the Arctic tundra.

Some of the party saw a single male Snow Bunting that called and flew by at the same location. On the way back into Morinville, 7 Gray Partridges were somewhat inconspicuously caught out in the open. Earlier one of the trip party had seen a Bald Eagle while passing the Roseridge Landfill, while a large Redpoll flock included several Hoary Redpolls.

The trip concluded at the Dehaas's acreage in Fairhaven. Here birds were much more numerous and we had good views of common feeder birds while enjoying tea or coffee and a selection of goodies. Vince was not to be denied his opportunity to add American Goldfinch to his year list, while Brian determined a small streaky finch to be a Pine Siskin. Thanks to Jack and Pauline for hosting.

We saw a total of 20 species during the day.

Alan Hingston



Gray Partridge, Photo by Dawne Colwell



Snowy Owl, Photo by Gerald Romanchuk

Pad-up-the-Year Trip to Wabamun, January 31, 2015

Fourteen ENCers cruised out west today looking for some birds to pad up the old year list. Some of the main targets were ducks and waterfowl on the cooling ponds at Genesee and Keephills.

Starting out at Genesee, the birding was amazing! Believe it or not, we saw Mallards **and** Common Goldeneye. That's right, you read it here first. We did have a lot of trouble with fog on the water reducing visibility. There likely were other birds there but we couldn't see 'em. We did pick up the first 2 of 4 Shrikes for the day, and the first of 3 Bald Eagles.

Over at Keephills, visibility was a touch better, but not great. Did get a few more ducks, including Gadwall, Redhead, Ring-necked, and Greater Scaup.

The feeders at Sundance Meadows were pretty busy. Lots of chickadees, woodpeckers, a few Pine Grosbeaks and Redpolls, but no Steller's Jay. We tried waiting it out. It was interesting watching the group get cold and restless. It's always a tough part of leading a trip – deciding when to move on – balancing boredom and discomfort with seeing a good bird. I was real close to making the call to leave when we heard some harsh calls, then the dramatic entrance of a dark jay. Everybody warmed up quickly when the Steller's finally made its appearance. Before we left, a group of Evening Grosbeaks flew in.

We went through Seba and stopped for a visit at the Greeney's. The feeders there were busy too, and we added Gray Jay and Boreal Chickadee. While we watched, the chickadees got all upset and we noticed a couple of downies totally freeze on their perches. Soon a few of the group saw a shrike chasing chickadees. We never did see if it caught anything.

We started to head back east, but took some roads north of 16. A few of us got a quick look at a Goshawk before it flew off. We saw a Great Gray Owl hunting in a farmyard, and a second one was seen on the other side of the road.

Most of the group headed for home after that, but six of us went into Spruce Grove for dinner. Then we went over to Curtis and Michelle Manley's place. They were putting on a big fireworks show as a bit of a farewell before they move to BC. The show was incredible! And it went on forever! Big thanks to Curtis and Michelle for their generous hospitality. We're really gonna miss you two!!

We saw or heard 26 species at five locations.

Gerald Romanchuk

Field Trip Reports

Whitemud, January 24, 2015

Melting made the trails icy, but 29 of us ventured from Fox Drive to Snow Valley in pleasant weather conditions. The activity level was quite low but we hit some nice pockets of birds, getting life birds for several participants. The highlights were Sharp-shinned Hawk and Townsend's Solitaire. The former landed some distance away and initially we were discussing ID, but several people took photos that settled the discussion! The solitaire was a bit shy, so it took a while for everyone to get a look. We also found a little group of Boreal Chickadees for those who had never seen one before.

We saw 14 species.

Brian Stephens

Evansburg, Easyford, and Drayton Valley Area, January 17, 2015

We ran a short-notice trip out to the west and southwest today. Eighteen of us drove out west to Evansburg, headed south across Bigoray Creek, down past Easyford, back east to Drayton Valley, then towards Alder Flats, over to Buck Lake, up to Buck Mountain, past Onion Creek, and eventually back to Westmount by 6:40.

There were at least three themes for the day: owls, jinxes, and some awesome spotting!

Things started well. As we were getting close to Evansburg, we got a call from Ray Cromie. He and his crew were out a few minutes earlier than the rest of the group and they had a Great Gray just south of the Yellowhead. One of the very few poor decisions the leader made was to go ahead with a pit stop in Evansburg with an owl waiting. By the time we got there the owl had flown off and wasn't seen again. Then Ray tried to jinx us even worse. As we talked with him, he just recklessly threw out the name Pygmy Owl. We'd all been so careful all morning not to mention the name. So, it was almost shocking when we got to Elk Herd Corner and Martin spotted a Pygmy. The bird flew off, but Jack pulled off a great bit of spotting and refound it perched on a short spruce. Eventually the owl was trapped for banding and we all got to watch Ray process the tiny little thing. In the hand, it's hard to believe something so small is actually an owl.

Going on towards Easyford, we went to check out a report of some owls hanging around an unharvested grain field. We found the field and saw a flock of Snow Bun-

tings, but no obvious owls. Then Jack did it again and spotted a Great Gray waaaaaaaaaaaaay out past the field. The bird had to be at least a kilometre away. While scoping for that bird, a second one was seen. Shortly after, Janice spotted our only shrike of the day.

We went through Drayton Valley and turned south on the other side of the river. After seeing a few Great Gray plunge holes in the snow, we stopped to take a closer look. Comments were made that the owl was probably sitting there watching us. Emily took it to heart and started looking around. Sure enough, somehow she spotted it tucked into a big spruce, right beside the trunk!

We got to Alder Flats and separated from Ray's crew. He went south and we went towards Buck Lake, where a Hawk Owl had been seen. Emily was sure I'd jinxed it by saying the name repeatedly through the day, but Tricia assured us we were crazy for being so superstitious. She says there's no such thing as a jinx. I'm not so sure – we didn't find the Hawk Owl.

So, our illustrious leader started picking random roads to head back north and we started seeing Great Grays again, giving us a total of 7 for the day. Gerry finished off our birding day by finding a Ruffed Grouse just before we hit the highway for home.

Great big thanks to Ray for his patience and banding demonstration, and to James for doing all the organizing for the trip.

We saw 15 species.

Gerald Romanchuk



Pygmy Owl, Photo by Janice Hurlburt



Photos by Gerald Romanchuk

Hawrelak Park, January 11, 2015

Eleven of us met at the picnic shelter in -25°C temperature, with lots of sun and no wind. We worked our way through the feeder area and on to the trail to Keillor, keeping warm with bursts of speed from time to time. We weren't seeing an abundance of birds until Gerald picked up some soft tapping – a Black-backed Woodpecker working the backside of a dead leaning white spruce. We ended up with just 8 species.

Since it had warmed up to -8°C , we headed off for lunch and then the Grain Terminals. When we arrived around 1 p.m. the Gyrfalcon was perched on the vertical pipes above where the pigeons roost. Its partly enlarged crop suggested that it may have had something to eat, but we were hoping for some action. Several ravens were about, which often means the falcons have to defend anything they catch. Two were seen nearby working on pigeon parts.

While we were waiting, a prairie falcon flew from behind the terminal, over us and off to the south. Don Delaney had seen it earlier so perhaps it had decided to try somewhere with less competition. A pair of Mallards also flew by. Finally the Gyr plunged down into the pigeons and promptly carried one off, followed by ravens. Before long she was back on her perch; evidently the ravens got the better of her. It wasn't too long before she made another run and brought a pigeon to the roof of the warehouse just in front of us. Ravens moved in and we got a lot of aerial action as the Gyr decided to go after the ravens. Camera shutters were blazing!

Brian Stephens



Gyrfalcon

Colours of Costa Rica

An international trip dedicated to birding was on my life list, and I'd fixed Costa Rica as the destination due to its amazing biological diversity. This small country is filled with brilliant, almost unbelievable colour. My husband John provided a field guide one Christmas and after a year of studying that book we escaped the frigid temperatures of Alberta, flying to San Jose in February 2013.

A great benefit of having the bird guide for a year was that I had time to get familiar with the bird families and learn what species were likely in what areas and was therefore able to do the majority of identifications myself. (It helps that many birds are big with bright patterns!) Also, it led us to make all our own arrangements. This added to the fun, as we had some surprises along the way. We had lots of time to observe the wild-life and didn't worry about having a long checklist.

With Costa Rica making a major move to ecotourism there are many lodges that provide accommodation near the numerous conservation areas. We booked excellent local English-

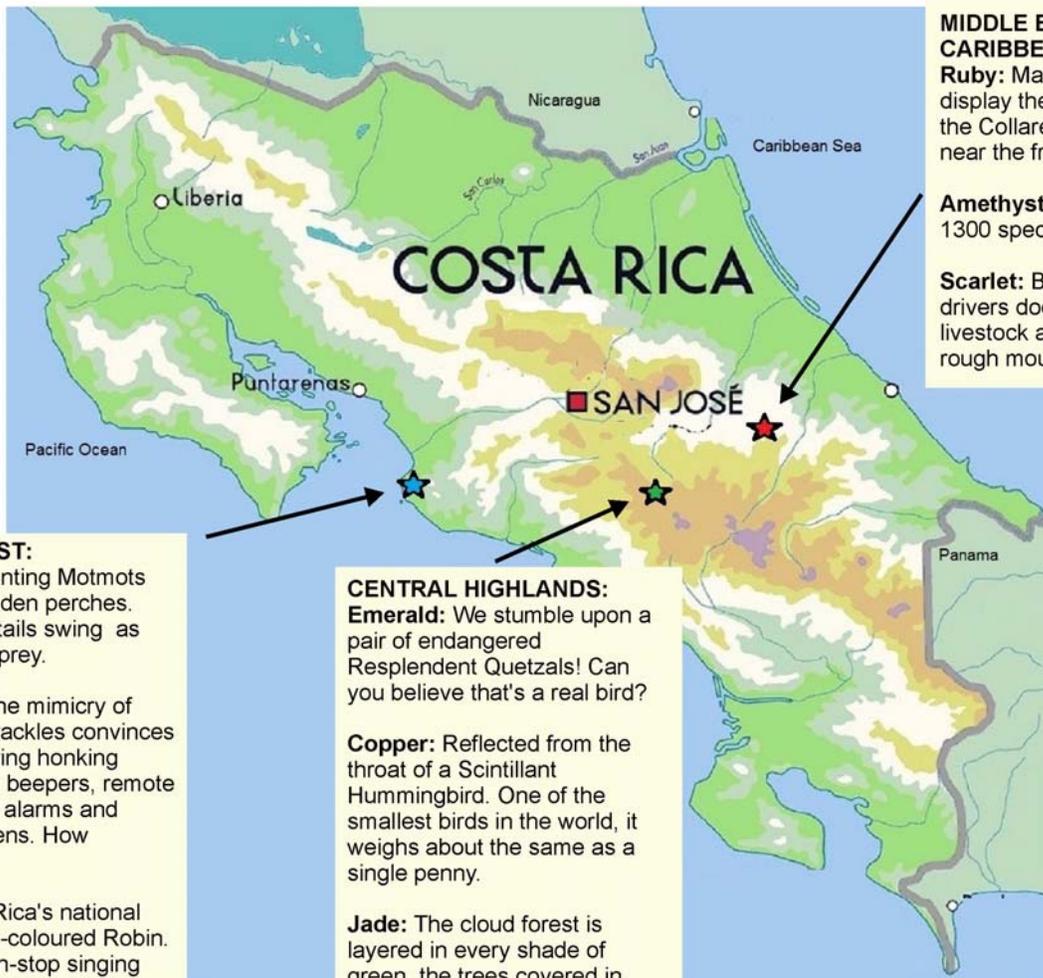
speaking guides through the various lodges. Due to road conditions, traffic, and navigation issues in Costa Rica, we also hired local drivers when needed.

We visited three regions, each being a very different experience with its own bird specialties. In the central highlands we hiked the multi-layered cloud forest and higher elevations in cool temperatures. On the middle-elevation Caribbean slopes, where there was more agriculture, we walked forest edges and orchards to find trogons, toucans, and tanagers. Along the Pacific coast giant trees provided homes for an astonishing number of big birds, reptiles, and mammals. A day trip immersed us in the cacophony and steamy heat of a tropical jungle.

We viewed over 250 bird species in 3 weeks, along with many mammals, reptiles, unusual insects, and beautiful plants. The birds included representatives of all but two of the species families in Costa Rica. Potoo and Puffbird eluded us. John says that's reason enough to return!

Ann Carter

It's all about the colours!



PACIFIC COAST:

Turquoise: Hunting Motmots lurk on low, hidden perches. Oddly shaped tails swing as they watch for prey.

Blush Pink: The mimicry of Great-tailed Grackles convinces us we are hearing honking horns, back-up beepers, remote door locks, car alarms and emergency sirens. How embarrassing!

Beige: Costa Rica's national bird is the Clay-coloured Robin. Its melodic, non-stop singing emanates from every garden during breeding season.

CENTRAL HIGHLANDS:

Emerald: We stumble upon a pair of endangered Resplendent Quetzals! Can you believe that's a real bird?

Copper: Reflected from the throat of a Scintillant Hummingbird. One of the smallest birds in the world, it weighs about the same as a single penny.

Jade: The cloud forest is layered in every shade of green, the trees covered in streamers of vines and patches of moss.

MIDDLE ELEVATION, CARIBBEAN SLOPE:

Ruby: Many flora and fauna display the colour red, including the Collared Aracari which lurks near the fruit feeder.

Amethyst: Costa Rica has over 1300 species of orchids.

Scarlet: Brake lights flash as drivers dodge truck traffic, livestock and pedestrians on rough mountain roads.



Resplendent Quetzal
Photo by Phil Sorrentino aka Dr. Jones



Scintillant Hummingbird
Photo by Ann Carter



Orchid
Photo by Ann Carter



Turquoise-browed Motmot
Photo by Ann Carter



Collared Aracari
Photo by Ann Carter



Clay-coloured Robin
Photo by Ann Carter

Members' Photos



Willow ptarmigan (Yellowknife) showing cryptic colouration, Photo by Jim Brohman



Three-toed Woodpecker (Cross Lake), Photo by Karen Lindsay