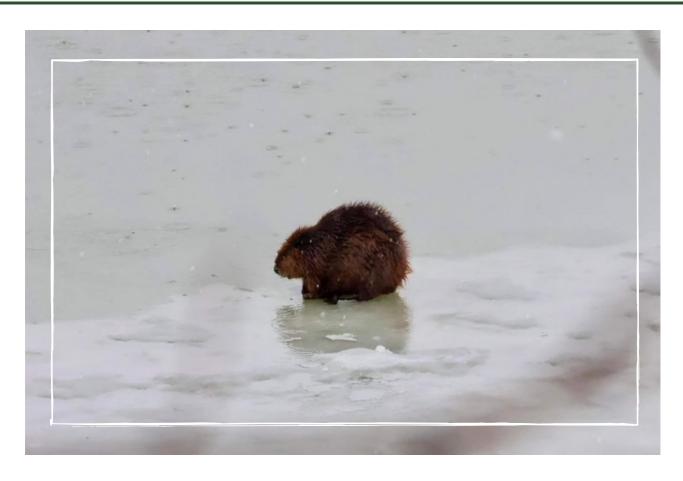


## SAGE WHISPERS

Newsletter of the Kamloops Naturalist Club Know nature and keep it worth knowing



"While these weren't the creatures we were there to count, it was exciting for everyone to pull out the binoculars and observe the waterlogged beavers"

from the Backyard Bird Count by Kurtis Huston, pg. 3



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## **CLUB INFO**

The Kamloops Naturalist Club was formed in 1971 and became a registered Society in 1981. It is a member of the Federation of British Columbia Naturalists, and Nature Canada.

Sage Whispers is published every two months, except for July and August.

Editor: Chelsea Enslow chelseaenslow@gmail.com

#### **KNC Mailing Address**

P.O.Box 625, Kamloops, BC V2C 5L7

#### Meetings

7:00 PM, the third Thursday of the month from September to June. Meet at Heritage House, 100 Lorne Street, Kamloops, BC

#### **Annual Membership**

(January 1 to December 31)
Family - \$40, Individual
-\$28, Student - \$23
Contact: Winnifred Fischer
250.376.3944

#### Find us Online!

kamloopsnaturalistclub.com or

facebook.com/kamlooopsnat uralistclub

## **PROGRAMS**

#### Kamloops Naturalist Club March Meeting - March 16 - On Zoom!

Kieran D. Cox - Unravelling Ocean Noise: fish sounds, noise pollution, and managing soundscapes. Did you know that many types of fish make noise?? Until recently, most people might have thought they were silent. Now, an international group that includes researchers from the University of Victoria, the University of Florida, Universidade de São Paulo, and the Marine Environmental Research Infrastructure for Data Integration and Application Network (MERIDIAN) has launched a website focussed on fish and their sounds: FishSounds.net . It "presents a compilation of acoustic recordings and published information on sound production across all extant fish species globally. [They] hope this information can be used to advance research into fish behavior, passive acoustic monitoring, and human impacts on underwater soundscapes as well as serve as a public resource for anyone interested in learning more about fish sounds. Join Dr. Kieran Cox, an expert in this field, who is working to integrate marine bioacoustics into the conservation of Canada's oceans.

#### Zoom link:

https://us02web.zoom.us/meeting/register/tZYldOGprTkjHNRfzwrN2t\_Pt4 \_313RE1vyJ

#### The following meetings are at Heritage House at 7 pm

April 20 - Emily Lomas Invasive Fauna of BC May 18 - Kim Naqvi - TBD

#### **KNC Nature Workshops**

The Kamloops Naturalist Club has partnered with the City of Kamloops for a series of 4 nature workshops which were advertised in the 2023 Spring/Summer Activity Guide. The prices range from \$15 to \$20 for each class. If you are interested, make sure to register for classes as soon as the guide comes out, as there is limited enrollment and they fill up quickly.

Grow Wild! An introduction to Nature-scaping - Saturday, April 29
Advanced Birdwatching - Saturday, May 13
Discover Lac Du Bois Grasslands - Saturday, June 10
Invasive Plant Walk - Saturday, June 24

#### Marsh Monitoring Workshop

April 7 & 8. "Join volunteers across British Columbia (and several other regions of Canada) to monitor marsh bird and amphibian species in this program co-led by Birds Canada and WildResearch. Many marsh species are quite cryptic, so targeted monitoring data on these species is quite valuable. The goal of this coordinated effort is part of national monitoring and conservation of marsh species."

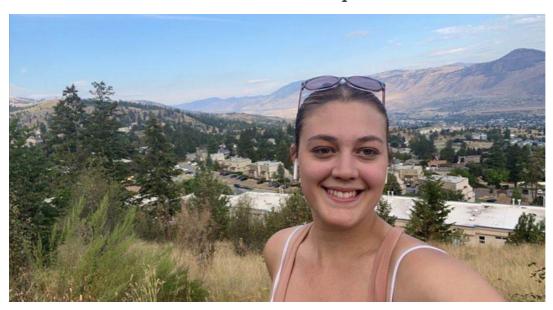
## FAREWELL FROM KNC INTERN KIM PARNO

By Kim Parno

Intern Kim Parno departed Kamloops to return to Trent University at the end of February

My time with the Kamloops Naturalist Club and Thompson Nicola Conservation Collaborative has been an extremely rewarding experience that aided me in navigating my future career. Through the Kamloops Naturalist Club I gained new connections with community members of Kamloops, learned the ins and outs of outreach events, and made impacts at the social and environmental level.

#### Thanks Kamloops!



Goodbye and best of luck as you continue on your career Kim!

## THE GREAT BACKYARD BIRD COUNT

By Kurtis Huston

On a cold Sunday morning, three inches of fresh slush on the ground, and down pouring rain, it was hard to know what to expect for our community field trip for the 2023 GBBC. Despite the conditions we had a group of one dozen people hoping to have a fun day of birding.

On a slushy rainy day, it was difficult to predict whether bird activity would be high or low given that birds tend to hunker down on the

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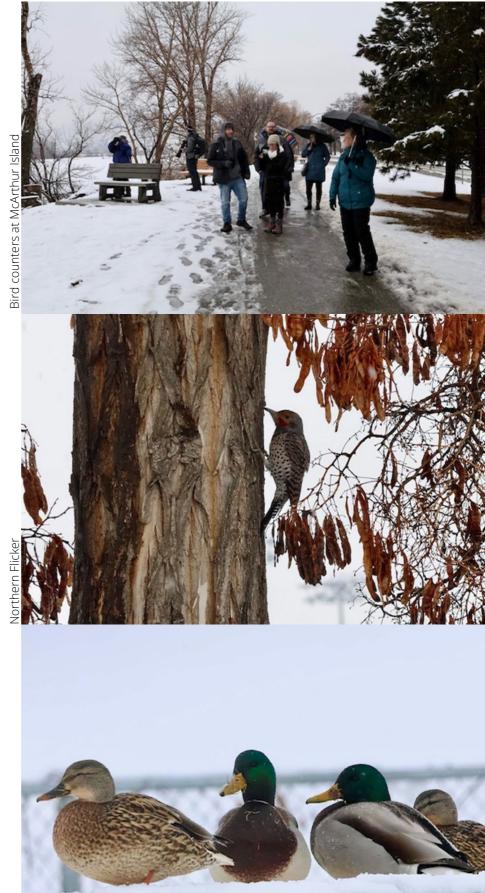
wetter days. Our first portion of the bird walk was rather uneventful. Starting out through the nature path behind the golf course at McArthur Island we we initially observed only the most faithful disc golfers. However as we made way through the path we did finally see our first birds; a small flock of European Starlings flying above.

As we made way through the trail we did come across a family of Mule Deer, six total. As we came to the exit of the nature trail, feeling like we were not going to have any luck, some small birds flew in and out of the bushy willow trees, this was the first true excitement of the morning. A small flock of Black-capped Chickadees fluttered under the cover of the trees searching the nearby bushes for food.

As we made our way towards the arena the walk became more eventful. Starting with some bundles of brown out on the ice of the river; a group of four beavers. While these weren't the creatures we were there to count, it was exciting for everyone to pull out binoculars and observe waterlogged beavers. Of course as we were all distracted bird activity began to spike. In a period of about 20 minutes we observed fantastic activity from Northern Flickers. American Crows, Black-billed Magpies, Canada Geese, Mallards, Bald Eagles and a beautiful pair of Male Common Mergansers floating down the river.

As we made our way back to our vehicles, soaked from the rain the wildlife spotting died off, minus a few more mallards in the slough. It was sure nice to spend the later part of the morning chatting amongst our peers.

Despite the nasty weather, and rather quiet bird count, it was fantastic getting out on a February day and doing something in nature, and sharing that with some like-minded folks.



Photos by Kurtis Huston

I thank all the participants for their efforts. Hopefully they will take part again next year in better weather conditions. Thank you as well to Ken and Marina Lipinski for hosting the potluck tally at their house.

# HABITAT FRAGMENTATION: UNCOVERING THE TRUTH ABOUT ITS BENEFICIAL EFFECTS ON NATIVE BEES

By Elaine Sedgman

reprinted from the Native Bee Society's "Quarterly Buzz" newsletter. For the full article, visit: https://www.bcnativebees.org/post/the-quarterly-buzz-4#viewer-3od9r

As a Master Gardener passionate about native bees, I have been pushing gardeners for years to get rid of their lawns, rewild their yards and create more pollinator habitat. In autumn 2022, I corresponded with Dr. Lenore Fahrig, who affirmed that indeed, every little bit counts. I wanted to share my experiences with this community, as it is relevant to anyone wishing to support native bees and their populations.

**Dr. Lenore Fahrig** is a landscape ecologist and conservation biologist of distinction, and a Professor at Carlton University since 1991. She and her students study the effects of landscape structure on various forms of biodiversity, and on the abundance, distribution and persistence of wildlife populations. The amount and kinds of land cover, as well as its spatial arrangement, are important components of her studies.

"My research on habitat fragmentation demonstrates the cumulative conservation value of small habitat patches, and empowers small-scale conservation efforts by individuals and communities." The Fahrig Lab.

Fahrig has won many honours and awards, including Guggenheim Fellow and, more recently, Canada's most prestigious scientific award, the Herzberg Prize Canada Gold Medal for Science and Engineering.

In November 2022, a news article and interview about the Herzberg Prize made me sit up and take notice. In fact, I danced around the kitchen when I read some of Dr. Fahrig's statements. One excerpt, from the *Globe & Mail*: "...if you have a whole bunch of little patches (of landscape), it can be as valuable or even more valuable than having one large area of the same total size" (Semeniuk, 2022). In a similar <u>interview on CBC Radio</u> she said, "Every bit of natural habitat is important in some way for biodiversity... it does add up to a big impact in terms of protecting species."

But then I stopped and asked, "How can this be? Everything I have read on habitat fragmentation and bee diversity has been negative!" Thus began our correspondence.

I reached out and asked Dr. Fahrig about Beverly Rathcke's paper, in which the latter asserts that "habitat fragmentation can clearly disrupt plant-pollinator interactions and threaten the local persistence of plants and pollinators" (Rathcke, 1993).

Fahrig's response (via email, October 26, 2022):

• The paper that you attached is really about the effects of habitat loss, not habitat fragmentation itself (even though they use the word fragmentation). We do see lower bee diversity when we have less bee habitat. However, to ask about the effect of habitat fragmentation itself, we need to compare bee diversity across different landscapes that have the same amount of habitat, but vary in how fragmented that amount of habitat is, i.e. is the habitat in a few large patches or many small ones? As far as I am aware, no-one has directly tested this for bees. However, if bees are like most other groups of species, I would predict that their diversity is higher across a large group of small habitat patches than across a small group of large habitat patches.

• Although this hasn't been directly tested, we have done some related work. We studied the effect on bee diversity of average crop field size, across different 1x1-km areas ("landscapes"). For the same amount of cropped land, we find higher diversity of wild bees when the fields are smaller. This is indirect evidence for a positive effect of fragmentation, because in landscapes with small fields, the natural habitat also tends to be in small patches. (See Fahrig, 2015)

It turns out that Fahrig has been researching habitat fragmentation for 40 years. Her early work led to her 2003 paper, *Effects of Habitat Fragmentation on Biodiversity*, which is the most cited paper on habitat fragmentation in the world. In this paper she addressed the difference between the terms habitat loss and habitat fragmentation:

• "I suggest that the term "fragmentation" should be limited to the breaking apart of habitat. Habitat loss should be called habitat loss; it has important effects on biodiversity that are independent of any habitat fragmentation per se. Habitat fragmentation should be reserved for changes in habitat configuration that result from breaking apart of habitat, independent of habitat loss." (Fahrig, 2003)

Her 2017 update of this paper reaffirmed her findings. She stated in her conclusions:

• "...most authors still assume that the effects of habitat fragmentation independent of the effects of habitat loss are generally negative... The results of this review indicate that such statements are in fact false. Although habitat loss is, without doubt, one of the most significant causes of biodiversity decline, the significant responses to habitat fragmentation independent of habitat amount are rare and mostly positive." (Fahrig, 2017a).

Unfortunately, as Fahrig asserts, the idea that habitat fragmentation is inherently bad still lives on as a "zombie idea" (Fahrig, 2017a). Indeed, this false view is promoted by popular writers such as Douglas Tallamy. In his recent book, Nature's Best Hope: A New Approach to Conservation That Starts in Your Back Yard, (Timber Press, 2019) Tallamy quotes D. Saunders, stating that "...nearly every species that has been studied shows negative effects from carving their habitat into pieces, even when those pieces are large" (Saunders et al.1991). Via email (Nov.10, 2022), however, Dr. Fahrig affirmed that "[the Saunders] paper is really about the effects of habitat loss, rather than the effects of habitat fragmentation." With his book, Tallamy envisions a practical, grassroot approach to conservation and describes how we can turn our yards into wildlife habitats. Unfortunately, his anathema to fragmentation does not serve that vision nor does it align with the science.

For myself, I will return to my happy dancing, because I know that we gardeners <u>can</u> make a difference. As Dr. Fahrig notes via email "The essential point is that every bit counts. A single homeowner switching out their lawn for natural habitat will not save all the bees, but it will contribute. If many homeowners do the same thing, then the total can add up to a big benefit for bee populations."

For those interested in native bees specifically, and population ecology generally, I encourage us all to be vigilant when we encounter discussion of habitat fragmentation. Ask the question: Is this paper about habitat loss or habitat fragmentation? If we encounter writers promoting "zombie ideas" that should have been laid to rest many years ago, let's challenge the lack of scientific rigour if that feels good! No matter what, let's make sure we're making a positive difference in our landscapes, by providing a diversity of habitat types!

To conclude this article, I'd like to share some images from Gardengate, an organic horticulture project in Kamloops that represents the ideas Fahrig was referencing in her 2015 paper. The 2.8 acres of Gardengate feature small, fragmented patches of natural habitat that, as shown below, support a wide diversity of wildlife. I've been observing this site for 10 years and I am continually astounded by the remarkable diversity of bees that these small patches can support. Gardengate promotes healthy eating and active living for persons with mental health issues.



Aerial view of the Gardengate fields. Fruit trees and native shrubs along the edges create habitat for wildlife. Courtesy: Google Earth (experimental version), Gardengate, 915 Southhill Street, Kamloops, BC



Master Gardeners grew an experimental plot of common annuals to assess pollinator abundance and preference.

## RICK HOWIE OBITUARY

With heavy hearts we said goodbye to Rick Howie after a seventeen year journey with rectal cancer. He is survived by his loving wife, Carol; daughter, Christina; son-in-law, Michael Head; precious grandson, Hudson; sister, Joanne Holmes; as well as extended family and friends. For those that knew Rick, he was an individual who was passionate about the outdoors and educating others about the wonders and beauty of the natural world.

After graduating from UBC in 1970 he began his career working for Parks Canada in Prince Edward Island National Park as the Chief Park Naturalist. His work with Parks Canada took him to Kejimkujik National Park in Nova Scotia, regional office in Cornwall, Ontario, and Yoho National Park. Later he moved to Kamloops to begin the next phase of his career as the Regional Naturalist for BC Parks. He



ended his career working for the Ministry of Environment. However, Rick never did retire. After leaving the Ministry of Environment, he worked as an environmental consultant until his death.

Perhaps Rick was best known for his keen interest in bird watching. Shortly after moving to Kamloops, he discovered the rare flammulated owl to be residing in the Kamloops area, and he encouraged the university to have students do further research on the owl. He organized the annual Kamloops Christmas Bird Count for over 40 years; he published the first Kamloops bird checklist; and he started the first BC interior swan and eagle count. He provided expert information regarding birds and wildlife for the media who regularly consulted him. Rick gave numerous talks to naturalist clubs around BC, and he led bird watching trips for the Kamloops Naturalist Club. In recognition of his numerous ornithological accomplishments, Rick received the Steve Cannings Award in 2018 from the BC Field Ornithologists.

Rick's passion for education did not just extend to bird watching. He ran a wine tasting course for several years, he judged photography competitions and exhibits; he gave wildlife presentations and talks in schools; and he posted his photos on Facebook along with commentary and information. Rick was always keen to share his knowledge and expertise with others.

Rick was a Renaissance man with endless curiosity about many subjects and a lifelong learner. His family and friends were always astounded by the numerous and new interests that Rick was always pursuing - cycling, fishing, kayaking, canoeing, insect collecting, sand collecting, stamp collecting, weightlifting, cross country skiing, wine making, cooking, hiking, photography, and home renovating. His last pursuit was recording and photographing the train engines that passed through Kamloops.



Family was an important part of Rick's life. When Rick married Carol, he gained a large, extended family. At first, he was shy around his new family, but with time he learned to be as loud and boisterous as the rest of them. He was always grateful for being embraced by Carol's family.

He was very proud of the accomplishments and musical ability of his daughter, Christina. When his grandson, Hudson, was born, Rick was excited for the opportunity to pass on his love of the outdoors to a younger generation.

A special thank you to Marjorie Willoughby Snowden Hospice for their kind compassionate care during Rick's final days. We encourage donations in Rick's name to this wonderful place.

A Celebration of Life will be held later in the year when the birds return to Kamloops.