

JUNE 1, 2023

The Central Okanagan Naturalists' Club

www.okanagannature.org



*Know Nature and Keep it
Worth Knowing*

Index

Upcoming Meetings	1
Presidents Report	1
Club Information	2
Upcoming Activities	3
• Annual Picnic	3
Outing Activities	3
Birding Report	3-4
CONC Outings Report	5
Botany Report	5-6
Weekend Explorers Report	6-8
Items of Interest	8
CONC'S Biodiversity Checklist	8-10
Canada Day Booth	10
Black Mountain Bird watching Project	11
Difficilis Flycatcher	11-12
Butterflies in My Backyard	12-13
Birdathon Report	13
Williamson's Sapsucker	14
CONC's Facebook Page	14
What is a Mushroom	15-16
A glance at the past	16
What's New in the News	17



Monthly Meetings: 2nd Tuesday of the month, Evangel Church, 3261 Gordon Dr., Kelowna

- The next meeting is the annual Potluck Picnic scheduled for Tuesday June 13, 2023, at Bertram Creek Regional Park. For further details, click [HERE](#).
- The next general meeting takes place on September 12, 2023 (first meeting after the summer break).

PRESIDENT'S MESSAGE

BY DOUGLAS GRAHAM

We welcome our new members who made the choice to join us since March 2023. We look forward to meeting you in the natural world.

As we wind down a bit for the summer, with no general meetings taking place from June to August, note that at the same time our volunteer leaders and outing coordinators are making possible a steady stream of opportunities for members throughout the summer, be it botanizing, hiking, birding, or cycling. With sincere thanks to each of them, make sure you check out our calendar for upcoming events to stay active this summer, hopefully in the morning before it gets too hot!

The annual potluck picnic is on Tuesday June 13 at Bertram's Creek Park. Come out, socialize, grab a bite, and relax with your fellow members.

Finally, note that coming up we also have several bio inventories (Okanagan Mountain, Johns Family Conservancy) and our participation in various outreach/communication events to reach new members and to promote our priorities.

Speaking of speakers, I hope you had a chance to come out and hear our last couple of speakers. Our own Michael Force gave a great talk on his pelagic adventures in April and in May Terry Nelson presented his most interesting new book *Big Trees of Inland Temperate Forests of British Columbia*. I'd recommend picking up a copy. If you'd like to give it a peek first, I have donated a copy to the CONC library, and it can be borrowed at a general meeting.

In this edition of the newsletter, our fearless editors, Lisa Rae and Vivian Manning, launch a few new features and more changes are to come to spruce up its look. I'm looking forward to what's coming!

I can never say a few words without taking the opportunity to thank my fellow members of the Executive Committee (EC), who keep this club humming. I'd like to remind you that although we generally elect the members of the EC at our AGM, our Bylaws authorize the EC at any time to fill a vacant position. So if you would like to help out and give the EC a try, please note that we are missing the fellow persons: Vice-President, Secretary, Conservation Director, and Programs Director. If interested or looking for more information, drop me a line.

Also, in this edition of the newsletter, CONC launches the RDCO Biodiversity Checklist, essentially a comprehensive list of every plant and animal that occurs in the central Okanagan or is likely to occur. This developed initially as my own anti-boredom project during the COVID lockdown; the EC adopted the Checklist as CONC's in March 2023. I hope you take a look at it — nothing quite like it exists in any other jurisdiction in BC, to my knowledge.

All the best for the summer,

Douglas Graham
President, CONC
president@okanagannature.org

Central Okanagan Naturalists' Club www.okanagannature.org P.O. Box 21128, RPO Orchard Park, Kelowna, B.C. V1Y 9N8 Email info@okanagannature.org for any general enquiry		
EXECUTIVE - 2022-23		
President	Douglas Graham	president@okanagannature.org
Vice-president	Vacant	
Secretary	Vacant	
Treasurer	Roy Sinden	treasurer@okanagannature.org
Past President	Rick Gee	pastpresident@okanagannature.org
Directors - 2022-2023		
BC Nature	Fran Fisher	bcnature@okanagannature.org
Birding	Mike Howard	birding@okanagannature.org
Botany	Peter Courtney	botany@okanagannature.org
Conservation	Vacant	
Outings	Robbie Bowers and Glenda Newman (co-directors)	outings@okanagannature.org
Membership	Karen Pedersen	membership@okanagannature.org
Outreach and Communications	Marjorie Gonzalez	outreach@okanagannature.org
Programs	Vacant	
Resource Persons		
Ecological Reserves	Don Guild	guilds@telus.net
Host Committee	Bev Thomas	cymru@telus.net
Library	Jen Matthews	jematthews@yahoo.ca
Newsletter	Lisa Rae & Vivian Manning	editor@okanagannature.org
Website: www.okanagannature.org	Rick Gee	admin@okanagannature.org
Nature Kids Kelowna	Marjorie Gonzalez	outreach@okanagannature.org

MONTHLY MEETINGS:

- 2nd Tuesday of the month, September to June, 7:00 p.m. at Evangel Church, 3261 Gordon Drive, Kelowna.
- Visitors are welcome.
- Host: Bev Thomas. Please bring your own cup.

MEMBERSHIP: Karen Pedersen membership@okanagannature.org

- **ANNUAL DUES:** Single \$35, Family \$47, Students \$14. Includes the quarterly newsletter. (Additional \$10 annual charge for newsletters sent by mail).
- **MEMBERSHIP FORM AND WAIVER:** Available on the CONC website: www.okanagannature.org. Send your name, address, telephone number, email address, waiver form and dues to: CONC Membership, Box 21128, Orchard Park P.O., Kelowna, B.C. V1Y 9N8.
- **DUES:** Dues may also be paid by e-transfer to membership@okanagannature.org. Please note your full name(s) in the field for providing additional information.
- **HONOURARY LIFE MEMBERS:** Hugh Westheuser, Pat Westheuser, Eileen Dillabough, Cec Dillabough
- **MEMORIAL MEMBERS:** Arthur Hughes-Games, Brenda Thomson, Muriel Westwood, Harry Almond

NEWSLETTER: Editors - Lisa Rae & Vivian Manning

- Next deadline date for submissions is August 15, 2023
- Send submissions to editor@okanagannature.org
- Email distribution: Karen Pedersen membership@okanagannature.org

ACTIVITIES: **All activities are seasonal. We are also launching Weekend Explorers outings on the last weekend of each month – check the Calendar for details. Non-members are very welcome to join one or two CONC outings.**

All outing details are on our calendar at our website. If in doubt, check with the activity contact, or contact any of the Executive.

BIRDING: contact: birding@okanagannature.org

- **Monday Birding:** meet 7:45 a.m. (April-Sept.) or 8:45 a.m. (Oct-March) at the Apple Bowl*
- **Thursday Birding:** meet 7:45 a.m. (April-Sept.) or 8:45 a.m. (Oct-March) at the Apple Bowl*
- **Saturday Birding:** Day-long bird trips take place on the second Saturday of the month March to November (with an August recess). Meet at the Apple Bowl at 7:30 am (April through September) or 8:30 am (October and November)

TIMES SUBJECT TO CHANGE!

BOTANY: contact: botany@okanagannature.org

- **Friday Botany** trips meet according to emailed details sent for each outing by Botany Director Peter Courtney (Spring to Fall)

HIKES: All hikers meet at the Apple Bowl* (Bring a lunch)

- **Tuesday: Ramblers** contact Robert Lake (250) 215-3211
- **Wednesday: Sole Survivors** contact Sherrell Davidson (250) 864-4007 & Gerda Watts (250) 862-1925
- **Thursday: Ramblers Plus** contact Robert Lake (250) 215-3211

*Apple Bowl: 1555 Burtch Road - Apple Bowl parking lot, corner of Burtch and Bernard

UPCOMING ACTIVITIES:

**PLEASE JOIN US FOR OUR ANNUAL CONC PICNIC, TUESDAY, JUNE 13
BERTRAM CREEK REGIONAL PARK PICNIC SHELTER**

Agenda:

- 2:30 Meet and greet.
- 3:00 Nature walk in park or enjoy the sunshine.
- 4:00 Contest-what bird did I hear?
- 5:00 Dinner set-up
- 5:30 Let's eat!
- 6:30 Heading home

Please bring plates, cutlery, food to share, drinks and cups, chairs and coolers to keep your food safe.
See you then, Fran Fisher

OUTING ACTIVITIES REPORTS:

BIRDING REPORT

BY MIKE HOWARD

2023 Birding Activities to May 15

So far during 2023 members were able to participate in 40 CONC organised birding excursions. This included:

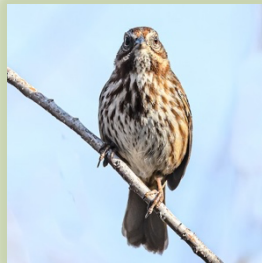
- 18 Monday outings
- 19 Thursday outings
- 3 Saturday outings including a trip to Douglas Lake (Sandhill Crane migration) and the Creston Birding Festival

During the above excursions in the Central Okanagan, we submitted 86 complete checklists to eBird and recorded sightings of 141 species. Outings to date have been possible thanks to all the birding excursion leaders who selected a location, lead the excursion, and then reported the results of the outing. Our thanks to Annette Lachaine, Archie MacDonald, Bitten Tisdale, Bruce Kennedy, Deborah White, Douglas Graham, Fran Fisher, Gwynneth Wilson, Ian Walker, Joyce Fraser, Karen Blumel, Lisa Rae, Pam Laing, Rick Gee, Simon Pethick, Steffany Walker, Mike Howard and Vivian Manning.

Several of our very talented photographers have added photographs of the birds we observed for the benefit of our members and as evidence to eBird in our role as citizen scientists. Our contributing photographers included Bruce Kennedy, Vivian Manning, Douglas Graham, Ian Walker, Karen Blumel, Lisa Rae and Pam Laing.



Cassin's Finch, credit Pam Laing



Song Sparrow, credit Bruce Kennedy



Ruffed Grouse, credit Ian Walker



Vesper Sparrow, credit Vivian Manning



Sora, Photo credit Ian Walker



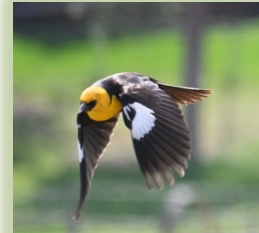
Female & male Mountain Bluebird, credit Lisa Rae



Piliated Woodpecker excavating a new home, credit Vivian Manning



Northern Rough-Winged Swallows, credit Pam Laing



Yellow-headed Blackbird, credit Lisa Rae



Black-capped Chickadee, credit Bruce Kennedy

Birding Activities Planned for the Remainder of 2023:

Provided we have sufficient Birding Excursion Leaders we plan to continue with weekly Monday, Thursday and Saturday outings, the Johns Family Nature Conservancy Park Survey on May 27, contribute to the Okanagan Mountain Regional Park Critter Count (RimRock Trail) June 5 and the Christmas Bird Counts.

In addition, we are actively working on the development of the proposed Thomson Marsh Park Viewing Platform Project which is a significant undertaking for the club.

Thomson Marsh Viewing Platform Project progress to-date:

With approval from the membership during the February Annual General Meeting the CONC Executive Committee struck a special committee to manage the Thomson Marsh Park Viewing Platform Project. The project team is made up of seven CONC members: Archie MacDonald, Bruce Kennedy, Douglas Graham, Les Gyug, Lisa Rae, Mike Howard and Roy Sinden.

The Memorandum of Understanding with the City of Kelowna "Partners in Parks" Grant Program was finalised with Cadre Simpson on March 29, 2023 confirming approval of the \$20,000 grant from the City for a two-level viewing platform to be located within the Thomson Marsh Park.

The CONC Project Team representatives has met twice monthly with the Project Review Team made up of Parks and Building Planning representatives and Wayne Wilson representing the Central Okanagan Land Trust (who hold the Conservation Covenant on Thomson Marsh).

A preliminary siting study was undertaken in March and reviewed with the Thomson Marsh land donor. Since then, formal support for the project has been received from the Thomson family and COLT.

A design package was tendered and subsequently awarded to Peter Chataway, a local architectural designer, who also designed the Swan Lake Platform in Vernon. A conceptual design was prepared showing a two-level wooden structure with the first level 6 feet above grade and accessible by a wheelchair ramp and a second level 9 feet above the first.

The proposed location of the viewing platform was flagged in front of "Teal Pond" (as it is known by some locals) and two design refinement meetings were held with the City representatives from various departments the week of May 1, 2023. Constructive comments are being incorporated into the final design prior to the Structural Engineer Joseph Sarkor (JMS Engineering Ltd) commencing his review and detailing of connections.

An Archaeological Assessment (scheduled for June 7, 2023) and Site Riparian Rehabilitation Plan are required before the Project Team complete the Environmental and Development Permit Applications.

If all goes well we may be able to enter into an installation contract later this Fall.

Rare Bird Sightings:

For members who enjoy following the rare sightings of birds in the Okanagan and Southern Interior the following link will be of interest: <https://bcbirdalert.blogspot.com/p/okanagan-southern-interior.html>



With warmer temperatures and receding snow levels, Hiking is now in full swing! Ramblers are coordinated and led by Connie McColl on Tuesdays and Robert Lake on Thursdays, while Sole Survivors are coordinated by Dave Newman with a variety of leaders.

Hikes to date include Rose Valley, Lebanon Creek, Tallis Ridge, Mt. Boucherie, Black Mountain Park, Coyote Ridge, Kalamo Park and Kal Lake Park.

Many enthusiastic hikers are enjoying the camaraderie, amazing views, and spring wildflowers. A highlight was the Bear Creek Falls hike and annual wiener roast at the Burke Trailhead and campground in late April.



BOTANY REPORT

BY PETER COURTNEY

This year CONC's regular Friday botany outings began in May, focusing as always on flowering plants (wildflowers). This regular Friday schedule will continue from May 5 to July 21. This is the period of peak flowering when there's lots to see. The schedule, including outing locations and short lists of species we expect to see, can be found on CONC's webpage at <https://okanagannature.org/our-activities/botany/>

At the time this article was submitted 3 botany outings had been completed - 2 were regular Friday sessions and 1 was a special outing to see Steer's Head blooming. Some of the photos seen during these outings are included herein.

The first outing on May 5 to Beaver Lake Road was attended by 11 people. During a few stops along the lower part of the road the group saw 35 species in bloom (or near bloom) including 3 species of Desert-Parsley, 3 species of Violets, multitudes of Arrowleaf Balsamroot, and popular favorites like Chocolate Lily, Skunk Cabbage, Lemonweed, and Ballhead Waterleaf. As always, a checklist and field guide was used to assist identification in the field and the final list of what was seen was sent to the participants after the outing.

The second outing was to Jackpine Meadows near the Telemark Nordic ski area. With some snow still in the trees at this higher elevation site this excursion specifically targeted the first flowering of Steer's Head *Dicentra uniflora*. This tiny member of the Poppy family is not rare but is seldom seen because of its inconspicuous nature, early flowering, and very short aboveground life of 2-3 weeks. Ten of us saw many Steer's Head blooming as well as 12 other flowering species including a large flush of Western Spring Beauty and Yellow Bell interspersed with Long-Flowered Bluebells.

The third outing to Knox Mountain Park took place on a very warm May 12. Four of us saw 47 species including 8 Grass, 7 Aster, 4 Borage, and 5 Mustard species amongst others in bloom. We saw plants relatively unique to this site including Freckled Milk-Vetch, Western Blue Flax, Linear-Leaved Daisy, and Plains Mustard. And, there were lots of Bitterroot in glorious bloom!

To see what's flowering in our area check out iNaturalist projects such as the Mission Creek Greenway Biodiversity Project at <https://www.inaturalist.org/projects/mission-creek-greenway-biodiversity-project> and the Okanagan Biodiversity project at <https://www.inaturalist.org/projects/okanagan-biodiversity>.

As mentioned in the previous newsletter there are some major annual botany events in BC and Washington state. Registration is still open for these events and details can be found at:

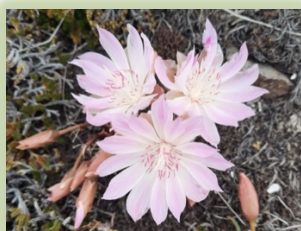
- Botany BC (June 22-25) <https://eastons.ca/botanybc/> at Well's Gray Park,
- Botany Washington (June 2-4) <https://www.wnps.org/wnps-annual-events/botany-wa>
- Washington Study Weekend (July 28-30) <https://www.wnps.org/wnps-annual-events/study-weekend>

Regarding botany field guides and helpful references, I recommend *Plants of the Southern Interior of British Columbia*, Lone Pine Press. The best online resource for BC plants is *eFlora* <https://ibis.geog.ubc.ca/biodiversity/eflora/>. A very good alternative, especially when the *eFlora* webpage is down, is the Burke Herbarium site at <https://burkeherbarium.org/imagecollection/>. An excellent FREE cellphone/tablet app is *British Columbia Wildflowers* available for both Android and iPhone/iPad. iNaturalist is a very popular on-line resource for identifying plants from photos at <https://inaturalist.ca/>. If you want a simplified approach to learning plants, *Botany in a Day, The Patterns Method of Plant Identification* is a good place to start.

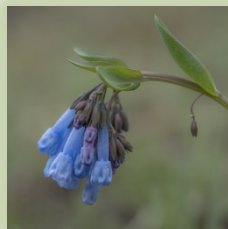
We don't get up as early as the birders and we don't walk as much as the hikers but we do enjoy great scenery, fresh air and good company. Details of when and where to meet are provided on CONC's webpage and by email to interested members. If you have questions or suggestions regarding this upcoming season, please forward them to botany@okanaganaturalist.com.



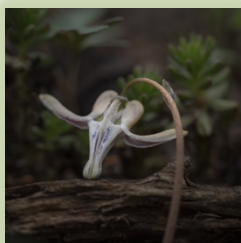
Yellow Bells, credit Vivian Manning



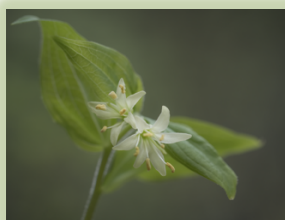
Bitterroot, credit Peter Courtney



Long-flowered Bluebells, credit Vivian Manning



Steer's Head, credit Vivian Manning



Rough-fruited Fairybells, credit Vivian Manning



Pale Commanda, credit Peter Courtney

WEEKEND EXPLORERS

BY IAN WALKER



Dawn Redwood fossil

The Weekend Explorers is a new CONC activity for 2023, and so far, has hosted three events:

1. a West Kelowna geology tour (Sat., Feb 25)
2. a Knox Mountain natural history hike (Sun., Mar. 26), and
3. a hike into Cosens Bay in Kalamalka Lake Provincial Park (Sat., Apr. 29)

These events are scheduled on weekends, especially to facilitate participation of working age adults, students, and families. At this point they occur monthly, alternating between Saturdays and Sundays. If interest is sufficient, the club could decide to make these events more frequent.

1) Westside Geology Tour

This excursion co-lead by Ian Walker and geologist John Greenough visited several sites in West Kelowna. These sites included three clustered around the perimeter of Goats Peak featuring 45-million-year-old fossils and evidence of an ancient volcano. Forty-five million years ago, this volcano would have dominated the Central Okanagan landscape. As molten rock (magma) fed the volcano, it was being forced upwards from deep in the Earth and then, as it slowly cooled, crystals started to form in the magma. Initially the crystals formed slowly and grew to be relatively large (perhaps 2 or 3 mm), but as the magma approached the Earth surface, it cooled more rapidly, forming much smaller (microscopic) crystals. Ultimately the magma completely hardened, forming rocks composed of the larger (macroscopic) crystals, embedded in a fine matrix of the tiny (microscopic) crystals.

These volcanic rocks, having two distinct sizes of crystals, are referred to as porphyries and compose much of Goats Peak.

The sides of the volcano were unstable, and at times, large mudflows from the volcano buried adjacent forests, thus preserving wood, leaves, needles, and roots. An especially common tree in the volcano's time was the Dawn Redwood (*Metasequoia* sp.), a tree that today is only native to China. Fossils of these trees are common along the highway near Gorman's Mill.

After we concluded our excursion into Goats Peak's ancient past, we added two more stops to examine much younger deposits. These younger sediments date to the end of the last glaciation (about 12,000 years ago). Near the south end of Rose Valley, we examined some massive gravel beds. When deposited, the bottom of the Okanagan Valley was still plugged by ice. Meltwater raging down the upper part of Bear (= Lambly) Creek was carrying this gravel, and was diverted south through Rose Valley to the area on Bartley Road where the gravel now lies. We also examined fine silts that were deposited into glacial Lake Penticton at Gellatly Bay. Lake Penticton was a huge lake that eventually inundated the valley all the way from Okanagan Falls north to the Enderby/Armstrong area. Skaha, Okanagan, Wood, and Kalamalka Lakes are small remnants of this earlier, larger reservoir.

Feb. 25 was a rather cold, snowy blustery day, but 17 enthusiastic members participated and made the tour a pleasure to lead.

2) Knox Mountain Hike



The south-facing slopes of Knox Mountain are quick to warm each spring and are a favourite place to search for our earliest spring wildflowers. About a dozen CONC members met at the east end of Royal View Drive, and meandered about the south side of the park, eventually reaching the peak, before our return to Royal View. Given our slow spring, scarcely any blooms had been evident earlier in the month, but on March 26 we had Sagebrush Buttercups, Geyer's Lomatium, Common Whitlowgrass, and Bulbous Woodland Stars in bloom. Although not yet in bloom, we could also see the fresh spring leaves of Bitterroot, Arrow-leaved Balsamroot, Small-flowered Blue-eyed Mary, Pussytoes and Silky Phacelia, heralding more blooms to come. A Yellow-pine Chipmunk was scurrying about near the upper gazebo, and Mule Deer were still lingering on the grassy slopes just southeast of there.

The most interesting wildflower of the day was not actually a wildflower, but rather a "pseudoflower". Dangling Suncrest, a common Okanagan plant, is often infected by a rust fungus (Mustard Flower Rust). The rust forces the plant to produce bright, lemon-yellow, flower-like structures (pseudoflowers) each spring. (Refer to photo on right.)

These structures look like flowers, and produce nectar; thus, they attract pollinating insects. Instead of getting pollen, however, the insects pick up sexual fungal spores (spermatia) from the pseudoflowers and transfer those spores to adjacent pseudoflowers. In doing this, they fertilize the rust fungus in nearby plants. The full life cycle is exceedingly complex. You can be thankful that there is no exam to follow. (For more information, see: <https://www.inaturalist.org/taxa/464167-Puccinia-monoica>)

3) Cosens Bay Hike



Northern Pacific Rattlesnake

Someone prematurely turned on the Okanagan's furnace in advance of our April 29 hike – so the temperature soared to about 30°C. This was an abrupt change from the laggard weather prevailing earlier in the month. Both White-tailed and Mule Deer were waiting as ten CONC members arrived at the Juniper Bay parking lot. Wildflowers and songbirds were abundant. The blooms of Spring Beauty, Sagebrush Buttercups, Bulbous Woodland Star, Cusick's Serviceberry, Wild Strawberry, Arrow-leaved Balsamroot, Dangling Suncrest, Common Whitlowgrass, Meadow Death-camas, Upland Larkspur, Ballhead Waterleaf, Geyer's Lomatium, and Few-flowers Shooting Stars lined our path. My list of birds is far from complete, but three weeks later I can recall Yellow-rumped Warblers, Ruby-crowned Kinglets, Spotted Towhees, and Ring-necked Pheasants.

The highlight of our hike was a local resident, a Northern Pacific Rattlesnake, who politely advised us of the natural hazard lurking nearby. He posed for photographs, while serenading us with his pleasant rattle

While the day was unseasonably warm, none of us took to the water. Those temperatures didn't deter all park visitors. We watched a young mother, nearly completely submersed, trying to coach her daughter into the Bay.

Future Events

The plan is to continue these hikes through the summer. I have led the first three, but won't be available to lead them all. So – please – we are looking for volunteers to lead future events. Essentially anything that fits within the BC Nature's motto, to "*Know nature, and keep it worth knowing*", would be fully appropriate. To volunteer, please contact Douglas Graham, CONC President.

ITEMS OF INTEREST

CONC'S BIODIVERSITY CHECKLIST FOR THE CENTRAL OKANAGAN BY DOUGLAS J. GRAHAM

"*Know nature and keep it worth knowing*" is the motto of the Central Okanagan Naturalists' Club. To "know nature" means something different for each of us, as birders, photographers, naturalists, or hikers. One aspect is to know the names of the different species that make up the amazing biodiversity that surrounds us. This is a vital step to conserving them and keeping them worth knowing.

CONC is launching a **Checklist of the Biodiversity of the Regional District Central Okanagan (RDCO)**. The Checklist is a list of the approximately 6700 species of flora and fauna that have so far been documented in the Central Okanagan or considered likely to occur. Only about half of those species have been reliably confirmed with specimens or photographs. A further 1700 species are listed as "To Be Determined" – possible they are here, but more information is needed.

Quick Quiz on the Central Okanagan's biodiversity (answers at the end)

1. How many species of fish swim our waters? About 10, 30, or 45?
2. How many butterfly and moth species are in the Checklist? About 400, 900, or 1400?
3. Of the following groups, which likely has the most species in the Central Okanagan? Mosses, mosquitos, or Microsporidia?
4. What percentage of our flora is introduced? About 2%, 10%, or 30%?
5. And what about introduced birds? 3%, 10%, or 15%?

Sources of information

The two primary sources of distribution information in BC are 1) the E-Fauna BC/E-Flora BC site maintained by UBC and 2) iNaturalist. Both these fantastic sites have rich datasets along with photos and species distribution maps. CONC's Checklist incorporates their distribution records and provides species-specific hyperlinks back to them. The Checklist also considers records from a great many other sources such as specialized databases and websites, taxonomic papers, and research publications.

How to use the Checklist

The Checklist is linked at CONC's website, <https://okanagannature.org> and can be accessed directly at [RDCOChecklist.info](https://rdcochecklist.info). Although most easily consulted from a computer, the site is nicely accessible from a smartphone.

For any plant or animal species or group that you are curious about, enter the English or scientific name into the search field of the Checklist. Each search returns a list of matches as in the following screen shot:

Search				
Search results for: tiger beetle				
Matching results: 14				
Scientific name	English name	Class	Family	RDCO Status
<i>Cicindela parowana wallisi</i>	Dark Saltflat Tiger Beetle, Wallis' Dark Saltflat Tiger Beetle	Insecta	Carabidae	E
<i>Blethisa</i> sp.	American diminutive tiger beetle	Insecta	Carabidae	P
<i>Cicindela decemnotata meriwetheri</i>	Badlands Tiger Beetle	Insecta	Carabidae	P
<i>Cicindela depressula depressula</i>	Dispirited Tiger Beetle	Insecta	Carabidae	TBD
<i>Cicindela duodecimguttata</i>	Twelve-spotted Tiger Beetle	Insecta	Carabidae	TBD
<i>Cicindela hirticollis couleensis</i>	Hairy-necked Tiger Beetle	Insecta	Carabidae	P
<i>Cicindela longilabris</i>	Boreal Long-lipped Tiger Beetle	Insecta	Carabidae	C
<i>Cicindela nebrascana nebrascana</i>	Prairie Long-lipped Tiger Beetle	Insecta	Carabidae	P

Click anywhere on the line of a species of interest and a detailed page of information will appear, as shown in the screen shot below.

Variable Tiger Beetle

Taxonomy

Phylum: Arthropoda

Class: Insecta

Order: Coleoptera

Family: Carabidae

Genus: Parvindela

Species: terricola

Infraspecies: imperfecta

RDCO Status

Probable

Naturalization

Native

Useful Links

[iNaturalist](#)

[E-Fauna BC](#)

RDCO Distribution

As of June 2022, E-Fauna BC has multiple records of *Cicindela terricola imperfecta* from Penticton southward in the Okanagan Valley, and from elsewhere in BC (the same records also appear on the map for *Cylindera terricola imperfecta*). iNaturalist has several RG records from s BC of *Parvindela terricola imperfecta*, including from the n and s Okanagan. Peterson (2018) notes it as region-wide east of the Cascades. The species is considered probable in the RDCO.

ID & Taxonomy

In 2020 iNaturalist replaced *Cicindela terricola* and *Cylindera terricola* with *Parvindela terricola*.

[Submit a Correction](#)

Central Okanagan Naturalists' Club (2023). All rights reserved.

Each of the 8400 entries in the Checklist has a RDCO Status code. The most common are:

- **C – Confirmed**, when there is a reliably identified specimen or photograph
- **P – Probable**, when it likely occurs here but we don't currently have a reliable record
- **TBD – To Be Determined**, when there simply isn't enough information to know if it occurs or doesn't occur.

If you believe you have found a plant or critter that is not coded C, your contribution may very well be the first confirmed record for the RDCO. Document it well, put it on iNaturalist to seek the input of experts, and send us a note.

What next?

Major enhancements are being implemented which will be communicated in a future regular newsletter column and/or blog. For the programming, we are grateful for the assistance of Dakota Flath, a computer sciences student from Okanagan College.

Answers to the Checklist Quick Quiz

1. In the Central Okanagan we have 24 confirmed species of fish and another 4 which might occur here.
2. The Checklist names about 1400 butterfly and moth species of which only about 600 are confirmed.
3. We all know mosquitos are abundant but there are also a lot of species here – perhaps about 40. The Checklist lists about 240 species of mosses, even though we could be excused to think they all look the same. The winner though are the Microsporidia of which we may well have many hundreds of species. These are spore-forming unicellular parasites which may be fungi, or not, and which occur in all animals (especially insects), including humans. The Checklist names 0 species because they are so little known but worldwide there are estimated to be about a million species – lots of opportunities for you budding Microsporidian taxonomists...
4. About 28% of our flora species are introduced, a surprisingly high number!
5. About 3% of our birds are introduced, a surprisingly low number.

Please contact the Checklist team with any questions and contributions by clicking on “Submit a correction” from any page or by directly writing to RDCOChecklist.info@gmail.com

We welcome your interest and will be glad to hear from you!

CANADA DAY BOOTH

BY MARJORIE GONZALEZ



CONC will have a booth up at Kelowna's Canada Day Celebrations at Waterfront Park on July 1st. This is a great opportunity to meet with the public, show some of the nature displays we have available and talk about the activities that we organize for our members. These events are usually quite fun and we are looking for a few volunteers to help us for the following activities:

- Setup booth between 9-11am
- Participate in the booth anytime between 11am-4pm
- Take down the booth between 4pm-5pm

If you are available and would like to volunteer for any of those activities, please contact Marjorie at outreach@okanagannature.org. And if you will be going to the event, come by and say hi!"



Gopher Creek trail is well-known to many CONC birders. Part of it runs behind Black Mountain Elementary School, and this part is becoming well-known to the students at the school as well. For the sixth year the Grade Three classes and I have been exploring together the birds of this area. The habitat is varied which gives us chances to see birds of marsh and pond, birds of a bushy riparian area, and even some that prefer conifers, as there are firs and Ponderosas on the slope above the trail.

Over these six years the project has taken different forms, and it now involves a Zoom presentation first, followed by an hour-long walk with each of the classes and their teachers. I introduce them in photos and sounds to eleven species we can expect to see or hear as well as four more we might see if we're lucky. (Two are birds

here all year, two are migrants, giving us a chance to talk about migration.) In addition, the teachers prepare the children with lessons about habitat and conservation, 'thinking like a scientist', and how to use the School Board set of small binoculars.

We have a great time, and the children love the experience. Questions fly thick and fast. I am always amazed at how much many of them notice, not only birds but also nests and interesting behaviour. As well as the common species such as Red-winged Blackbird or California Quail, we have been lucky to spot some returning migrants or a more unusual bird we hadn't expected. We usually see or hear an average of 20 species in our walk and each year one of the classes sees a species the other two don't. This year, for example, two of the classes walking on the same morning were treated to a pair of Cinnamon Teal on the pond while the third class, walking the next day, saw a pair of Blue-winged Teal instead.



Another class enjoyed close looks at a Brown-headed Cowbird, which was a wonderful 'teachable moment' to talk about nest parasitism in simple terms. Probably the favourite bird of many is the Rufous Hummingbird male we always try to spot, but this year one boy insisted his favourite bird is the American Goldfinch! Several of the children decide they want to be birdwatchers when they grow up. But I always suggest they start now. They are at a perfect age to explore, to question, to enjoy and to absorb. And who knows, some of them might indeed become the Dick Cannings or Chris Charlesworths of tomorrow!



A DIFFICILIS FLYCATCHER IN THE OKANAGAN

BY DOUGLAS J. GRAHAM



The accompanying photo was one of Ian Walker's in CONC's photo quiz earlier this year. Were you able to name it as a Pacific-slope Flycatcher? It can be identified easily as an *Empidonax* flycatcher; we have 6 species of them in our area and they all have a distinct eye ring (except for Willow Flycatcher). One feature which stands out nicely in the photographed bird is the backward pointing teardrop-shaped eye ring – distinctive here for Pacific-slope Flycatchers. To reliably identify them, you also need to look at other plumage features, hear them call, and check their habitat – in the Okanagan they tend to occur in shady areas along streams.

Photo courtesy Ian Walker

The photo got me thinking about the quizzical history of this species. All the CONC old-timers used to have "Western Flycatcher", *Empidonax difficilis*, on their Okanagan lists. But in 1989, the ornithological powers-to-be split it into two different species, one confusingly with the same scientific name, Pacific-slope Flycatcher, *E. difficilis*, and the Cordilleran Flycatcher, *E. occidentalis*. The former is basically the species of the coastal forests of the

US and Canada, and the latter is the form that occurs in the drier interior east of the Cascades. The justification was based on minor differences. The two species are to all intents and purposes indistinguishable in the field (and often even

in the hand) but differ slightly in vocalizations, in particular the dawn song and the male's position note call. The position call of Cordillerans sounds two-part while Pacific-slope males give what sounds to a human like a single note, but which on a spectrogram is still two-part but with a connecting "kink". The two species were said to occur sympatrically without interbreeding in a small area in northern California, thus supporting their separation into two different species.

The ornithologist who did this work was N. K. Johnson; in a 1980 paper he noted that the birds of the Okanagan were the coastal form and that those in southeastern BC were the interior Cordilleran Flycatcher. Since then, Cordilleran Flycatchers have fallen out of fashion in BC – in eBird there are only a tiny number of records in extreme southeastern BC and zero in the Okanagan. The 2018 British Columbia Field Ornithologists (BCFO) Checklist of Birds of BC does not even include Cordilleran Flycatcher as a BC species, listing only Pacific-slope Flycatcher.

Could though Cordilleran Flycatcher be a species that occurs in the Central Okanagan? Although it does not appear in CONC's biodiversity checklist of the RDCO, a check of a few sources would seem to suggest that this is possible. The Sibley field guide (2nd edition) shows the BC breeding range of Cordilleran Flycatcher mostly in southeast BC but includes a little disjunct patch in southcentral BC that includes our area. In the 2018 *Birds of BC and the Pacific Northwest* (Cannings, Aversa, and Opperman), the breeding area does not include BC but the yellow "migration area" on their map covers a good part of southeastern BC, including at least the eastern part of the RDCO. Finally, consulting the authoritative on-line Birds of the World, the map for Cordilleran Flycatcher surprisingly shows this species as occurring throughout southcentral and southeastern BC, in marked contrast to the eBird map of the species.

I don't know on what basis these different sources place Cordilleran Flycatchers in our area. What however we know for sure is that "Western Flycatcher Complex" birds in southeastern BC are intergrades between *difficilis* (in the narrow sense) and *occidentalis*, as shown by genetic analysis, and that it is difficult to say they are one species or the other. This was shown by a 2009 study by A. C. Rush, R. J. Cannings, and D. E. Irwin. Could Pacific-slope Flycatchers in the Okanagan also be intergrades with Cordilleran Flycatchers?

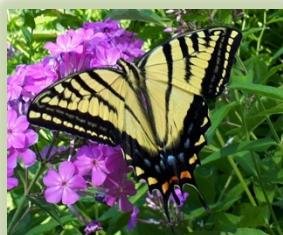
This query begs the bigger question of whether or not these two forms deserve to be separate species? In Cannings, et al. (2018), the authors conclude: "Many ornithologists believe further field work may prove "Western" flycatcher split untenable". It is also noteworthy that the Birds of British Columbia (Vol. 3) has an entry for "Western Flycatcher Complex", mentioning the split, but choosing not to present separate species entries.

A recent detailed analysis was published last year in North American Birds (Vol. 73, No. 2) by Alec Hopping: "Unraveling Western Flycatchers: a case against the split". The author looks at the original evidence behind the split and more recent research. A careful review of vocalizations across its range apparently does not support a separation into two species. He concludes quite firmly that the two species should be reunited under one name. At the same time, he notes that there are forms of the species in Mexico that may more deservedly be split out, but that further research is needed (interestingly, Birds of BC also mentions that the birds in the Haida Gwai Islands are distinctive and need further study).

What strikes me in this case, is that there is room here for amateur birders to make a real contribution. Whether the two forms are separate species, subspecies, or simply a single species varying clinally across its range, will depend in part on a careful analysis of their vocalizations. In particular, the male's position note is one of the principal ways that has traditionally been cited to distinguish them. To eventually resolve this *difficilis* conundrum, experts will take a close listen and look at audio recordings in eBird. I checked for the Regional District Central Okanagan, and eBird has only one audio recording of the species, a dawn song uploaded by David Bell in July 2021, and no recordings of a male's position note call. It would be a useful contribution to input into eBird audio recordings of this species from the RDCO and from other areas of BC. My best guess is that this will eventually help restore Western Flycatchers to their rightful place on the Central Okanagan list.

BUTTERFLIES IN MY BACKYARD

BY JEN MATTHEWS



Two-tailed Swallowtail

The *Butterflies in My Back Yard* project (BIMBY) of the David Suzuki Foundation, is a fun way to learn, share and contribute to citizen science in British Columbia. I started volunteering last summer and spent months keeping half an eye out for butterflies everywhere I went.

The BIMBY project has an official transect in each area in BC; in Kelowna it is in Sutherland Hills Park. In addition, you can have your own transect that you walk regularly to see what butterflies presented themselves. You then add any butterfly photos you take in BC to the project in iNaturalist, so that experienced butterfly experts can identify (or confirm) the observation and collate results.



Silvery Blue

As a group, we received training through monthly Zoom information/question sessions. I enjoyed connecting with other butterfly seekers throughout this province, which has the highest diversity of butterflies in Canada. Most, like me, were new to all this and learned skills as we went along. And as volunteers, you contribute only what you feel you can.

We ended up with 345 seekers who made 8400 BC observations and recorded 118 species (including 6 red-listed). BIMBY seekers for 2024 have already started, but you can still join the *Butterflies in My Backyard* project on iNaturalist and contact Winnie Hwo



Zephyr Butterfly

(winnie (at) davidsuzuki.org) to sign up and get recordings of any already completed training sessions. A couple of reference links are provided below:

- <https://davidsuzuki.org/story/the-bimby-story-is-about-human-empowerment-through-connecting-nature-with-science-and-policy/>
- <https://inaturalist.ca/projects/butterflies-in-my-backyard-bimby-project>

REPORT ON THE 2023 BIRDATHON

BY PAM LAING

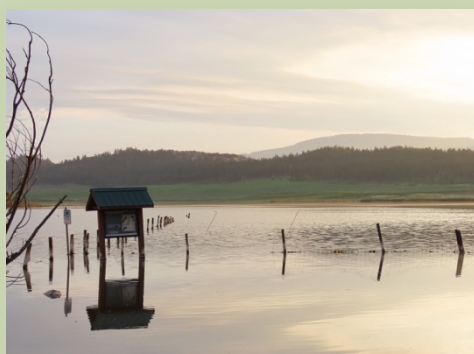


Well, it didn't snow, and there was little wind – but apart from that the weather gods threw just about everything at us as we attempted the 2023 Birdathon! Warm sunshine, thunder and lightning, heavy rain, light showers, a cool 13C and a pleasant 23C – we had it all, and it was a challenge just to keep ahead of the game by changing clothes and cranking up the windshield wipers, or the car heater/air-conditioning. So we feel quite proud that in spite of the conditions we were nonetheless able to tally a respectable 89 species.

We began at 5:30am at Robert Lake where many waterfowl and some shorebirds gave us a good start, and we finished on the grasslands of upper McCulloch Road at 2:15pm with Vesper Sparrow, Lazuli Bunting and Mountain Chickadee. (We allowed ourselves a 'rain delay' time-out, but otherwise kept to our 8-hour limit). In between we covered riparian, marsh, foreshore, park, conifer and deciduous habitats, as well as checking some well-known feeders. Highlights were a single Black-necked Stilt and two American Avocets, Black-headed Grosbeak, Least Flycatcher, Virginia Rail, the season's first Northern Waterthrush, and a male Blue-winged Teal. Best of all we all had great fun and enjoyed the search and each other's company.

Your team this year consisted of Gwynneth Wilson, our stalwart leader and route-planner, Don Wilson, Joyce Fraser, Annette Lachaine, and myself. Sadly Carol Sharplin had to withdraw due to an eye infection.

A huge thank you to all of you who have so generously supported us with donations either on-line, at the meeting or by e-transfer or cheque. We are delighted to report that collectively you raised \$608 for Birds Canada. As well on-line donations totalled \$1,160 so our total raised is \$1,768, some of which will be returned to us to support the Vaseux Lake Banding Station. The rest is used for conservation and education projects Canada-wide.



It is not too late to donate. You can donate on-line through the Birds Canada website and Canada Helps. Go to birdscanada.org and follow the links to Give to the Birdathon 2023, or if you prefer send me a personal e-transfer to pamlaing2309@gmail.com I will be sending one cheque for all the money I have received. You can also mail a cheque directly to Birds Canada at 115 Front Rd., Port Rowan, ON N0E 1M0 Mark your envelope Birdathon 2023, attention Kris Dobney. Be sure to include your email address and your full mailing address so that your tax receipt can be emailed or mailed to you when ready. Thank you all again, it is very much appreciated.



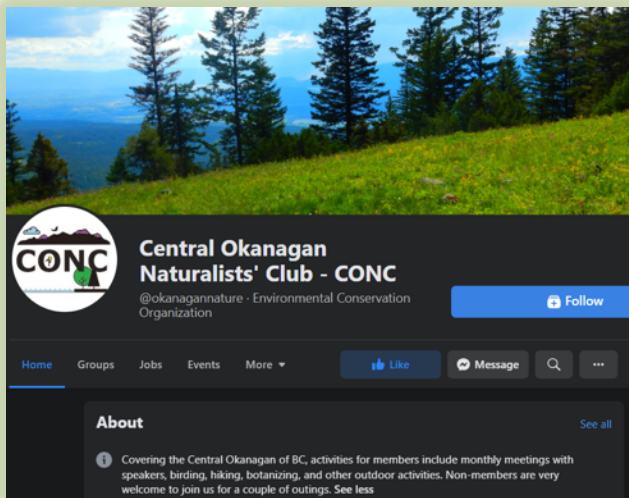
Williamson's Sapsucker (Male and Female),
credit Les Gyug

Many of the members will recall the interesting talk on 10 December 2019 that our member Les Gyug gave to CONC on his research on Williamson's Sapsuckers.

For an update on the challenging conservation issues facing this species in BC, and to read about the very important role Les has played and continues to play, check out this great article from the [Narwhal Online magazine](#).

CONC LAUNCHES ITS OWN FACEBOOK PAGE

BY MARJORIE GONZALEZ



The Club has launched its own Facebook page: www.facebook.com/okanagannature. The page will be used to reach out to members and non-members (AKA potential new members!). Initially the page will focus on providing information on Club activities, but we could expand its scope down the road. Information on our activities will continue to be available on our website (www.okanagannature.org), on its calendar, and announced to members in accordance with their activity preferences.

To find the Facebook page, click on the above link or type it in your web browser. You will be able to see the page at any time even if you don't have a Facebook account, but you will not be able to interact with it without an account.

If you have a Facebook account, you can also find the page by searching for "CONC" or "Central Okanagan Naturalists" in the search box in the upper left corner. Once you find the page,

you can click on the "Follow" button and you will get updates from the page on your personal Facebook feed. If you also want others on Facebook to see that you support our page, you can also click on the "Like" button.

Once you start seeing our posts in your personal Facebook feed, please promote the posts by sharing them or by liking or commenting on the posts.

We hope that this Facebook page will help us reach new audiences and allow us to communicate in a new way with member and non-members.

Please let me know (at outreach@okanagannature.org) if you have any questions, suggestions or if you have any issues accessing the Facebook page.

A question that periodically comes up when I'm out with a group of people on a mushroom identification field trip is this; "Aren't you killing the plant when you pluck it out of the ground?" Well, first, no, we're not killing anything. And second, a mushroom is not a plant, not in the same sense as a flower or a tree.

What we're looking at when we see a mushroom emerging from the ground or from a rotting log is the fruiting body of the fungus. The mushroom is the 'fruit', comparable to an apple on a tree. The main body of the fungus is mostly hidden underground, consisting of a vast network of mycelium, the rootlike fibres that make up the main vegetative body. This mycelium, made up of thousands of 'rootlets' called hyphae, spreads throughout the soil, rotting vegetation, and in some instances living plants and organisms.

By plucking the mushroom, we're doing no more harm to the main body of the fungus than we do when picking an apple off the tree, which can be stripped bare year after year with no harm to the tree. Having said this, there's a caveat. Just as when picking an apple from the tree you'll take care to not break or strip off branches, so too with fungi. If the mushroom is plucked in such a way as to not disturb the main body of the fungus, all will be well. There are reports of some commercial mushroom pickers damaging the fungi, as with those harvesting the sought after 'Pine mushroom', *Tricholoma murrillianum*. Some of these harvesters use hard rakes to expose the mushrooms lurking beneath the duff and leaf litter, and in the process disturb the fungi and the complex community of organisms in the soil.

The living world around us is divided into several kingdoms. Most people are familiar with the two main kingdoms, plants, and animals. There are also other kingdoms, and the fungi kingdom is one of these. Historically fungi were grouped into the plant kingdom, but in 1969 they were recognized as being in a separate kingdom of their own, distinct from plants. In fact, believe it or not, in some regards, fungi are genetically closer in their characteristics to animals than to plants. In evolutionary history, plants separated from animals before fungi diverged from animals. Thus, fungi retained their commonality with animals for millions of years longer than plants did.

Like animals, the fungi kingdom, which includes yeasts and moulds, are not able to generate their own food through photosynthesis as plants can. They need to seek their food from the environment around them. To do this, fungi use several strategies.

Many are saprobes, breaking down dead and dying plants and animals. They secrete digestive enzymes into their environment and then absorb the released nutrients. Visualize mushrooms sprouting from a fallen tree or emerging from a dung pile. Their mycelia are busily secreting enzymes and absorbing their food.

Some are parasitic, attacking living plants and animals, and gathering their nutrients from their hosts. The Honey mushroom, *Armillaria ostoyae* is a common parasitic mushroom, valued as an edible by many, and disliked by foresters for the damage it does to harvestable timber, creating a white rot. This species also has the distinction of containing one of the largest living organisms on the planet, with one specimen in Oregon recorded as covering 2,200 acres and being 2,400 years old.

Others are carnivorous. The tasty Oyster mushroom, *Pleurotus ostreatus*, found both in the woods and on the grocery shelf, can devour tiny insects such as nematodes. The mushrooms will use several methods to achieve this, from injecting their spores into the insect, having the insect ingest the spores which in turn perforates the internal organs, and even snaring the hapless nematode.



Hericium coralloides-one of the many unusual shapes a mushroom can take. Photo credit M. Milgram

Many of the mushroom-forming fungi that we see around us develop a symbiotic (mycorrhizal) relationship with living plants, from grasses to trees. In this mutualistic relationship the fungi gather water and minerals through their fine hyphae for their partner plant and in return are fed carbon and sugars that they are not able to generate themselves.

Fungi are like animals too in that they have chitin in their cell walls. Chitin, which is a long chain polymer, doesn't occur in plants. But you will find it in some animals, such as anthropoids, crustaceans, and insects.



Helvella crispa with its beautiful, fluted stem. Photo credit Michael Beug

Fungi propagate by releasing microscopically sized spores, comparable to a plant's seeds, and the mushroom is the vehicle to do this. And to do this, the mushrooms have assumed many novel, and at times bizarre, shapes and strategies.

One of the foremost propagation strategies is the astronomical number of spores produced. The common bracket fungi, *Ganoderma applanatum*, the artist's conk, can produce 350,000 spores per second, adding up to 30 billion per day and 4500 billion per season.

Most mushrooms rely on wind currents for spore dispersal, though most spores fall close to the mushroom, and often drape and colour the surrounding area in their multitudes. Aroma is another method for dispersal, such as the aromatic underground truffles that attract hungry animals, which in turn spread the spores through their droppings. In others, particularly among the Ascomycete mushrooms, the spores are shot out of the sausage shaped tubes, asci, in which the spores are produced. Occasionally, when picking up a cup mushroom or a morel, the gentle disturbance will trigger the release of tens of thousands of spores which appear in a drifting cloud.

To do all this, mushrooms have assumed various shapes. The standard shaped mushroom that we usually visualize, with its central stem, gills, and domed cap is very ingenious. The cap protects the spores until maturity. The gills, that support the cantilevered cap in the same way that floor joists support a house, contain the spore bearing structures (called basidia), and the stem elevates them all to aid in capturing the wind currents.



An earthstar mushroom *Geastrum saccatum*, photo credit Michael Beug

In addition to the standard shaped mushroom, fungi have developed every imaginable shape, from cup shapes to clubs, from wrinkly morels and false morels to exquisitely branching coral shapes. The Earth Stars are interesting as they emerge as a dome, then split into star shaped rays. They'll then develop further. As the rays bend earthward, contacting the ground, they'll elevate the spore-bearing nucleus of the mushroom to catch the wind currents and rain droplets which help propel the spore's dispersal.



Helvella crispa with its beautiful, fluted stem. Photo credit Michael Beug

When I'm out for a hike in the forest looking for mushrooms, particularly in the hot dry days of July and August when mushrooms are often scarce, I occasionally stop and consider the ground I'm standing on. I know the fungi are there, that their hyphae, their mycelial networks, are crisscrossing the soil beneath my feet, that they're creeping up and through the stumps and fallen trees all around. And I know that when the fall rains come, the fungi will fruit, sending up a fascinating display of mushrooms.

A GLANCE AT THE PAST

BY LISA RAE



Mission Creek, circa early 1960's. Photo courtesy of Kelowna Centennial Museum

The concept of a Mission Creek Greenway was initiated in 1988 at an informal meeting of CONC Executive members. Brenda Thomson (Secretary at the time, and later President) proposed the development of Mission Creek as a linking public greenway. The project gained momentum and generated a whole community effort that has continued to date. Friends of the Mission Creek (Society) was a driving force, working in partnerships with the City of Kelowna, RDCO, First Nations, MOE, and the Central Okanagan Parks and Wildlife Trust. The development work also included extensive support from many community clubs, schools, foundations, private businesses and landowners, and volunteer groups. The greenway was officially opened in 1997. Along its length it now offers an educational centre and playground, many public access points, and when complete, will provide 26 kilometres

of walking and biking trails from the shore of Okanagan Lake to Mission Creek Falls. This park continues to benefit from ongoing preservation, conservation and restoration initiatives through the stewardship and projects of the Central Okanagan Land Trust, Friends of Mission Creek, the City of Kelowna, and the Regional District of Central Okanagan.

WHAT'S NEW IN THE NEWS

- Nature knows best...[how woodpeckers guide a post-fire management strategy](#).
- And finally, [the decision on an expanded Robert's Bank terminal](#)...
- From Rick – [a timely reminder about ticks](#)
- A Patagonian cypress in [Chili – 5,000 years old and going strong](#)
- If you like star gazing..... [In November 2019 an application for a Nocturnal Sky designation in Johns Family Nature Conservancy was submitted](#)...
- And fast forward to 2023 – approved! The launch occurred May 3rd at the park, with guided viewing and tours hosted by the Royal Astronomical Society of Canada and the RDCO. [Dark Sky locations can be found in Canada](#):
- And on a related note... [light pollution and a community Dark Sky Committee](#)...
- How the [sense of smell of North Atlantic Right Whales may be a tool used to protect this endangered species](#) (there are fewer than 340 animals left...)
- Jen's article reminds us that [some plants are not welcome here](#) ...
- Ancestors of today's plants, [mosses are pretty amazing](#) ...
- We care about our grasslands....this has been set up to promote [the conservation of the Commonage, an important area of grasslands in the North Okanagan](#).
- Details on our [threatened and at-risk species in our region, as well as goals for habitat preservation in the Okanagan](#)



Have you read an interesting online article related to nature and/or conservation that you would like to share with other CONC members? You are invited to send it along to editor@okanagannature.org

And, many thanks to the various contributors for this issue's list of new news....

If you truly love nature, you will find beauty everywhere
~Vincent Van Gogh



UBCO trails