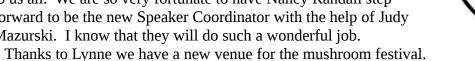
ARROWSMITH NATURALISTS NEWSLETTER

TO KNOW, ENJOY AND PRESERVE NATURE

PRESIDENT'S REPORT **By Sally Soanes**

2019 Promises to be a very busy and fun year. We started off with a very successful Seedy Saturday. The count at noon was over 2,000 but I haven't heard what the final count was. Thanks to Lynne, Dave H, Dave E, Judy M and Toni. They talked themselves hoarse.

Ronda has lined up some amazing speakers and we are so very grateful for the wonderful job she has done for us. She's been a gift to us all. We are so very fortunate to have Nancy Randall step forward to be the new Speaker Coordinator with the help of Judy Mazurski. I know that they will do such a wonderful job.



Due to our overwhelming success NIWRA can no longer host and support us. We will be using the Coombs fair grounds which will give us plenty of parking, washrooms and two buildings for the entire weekend. Lots of room for vendors and food trucks as well. It's perfect for us. NIWRA has given us all their templates for advertising, vendors, signs, posters, etc. and have been a great support. We thank them very much for allowing us to get such a great start to this very successful and popular event.

I'd like to take this opportunity to welcome new directors. Derrick Grimmer, who did a superb job as treasurer for five years will be replaced by Helen Davidson. Frank Van Manen who coordinated all our field trips with such skill and panache will be replaced by Claire Summers w

ho has already brought in some interesting trips. We also happily have a new executive secretary Mark Mazurski stepping in so Sue Wilson will just have me to keep under control. I'm very grateful the rest of the executive stayed on to help. The more experienced people at the table helps me enormously. It keeps the club on track, dynamic and me mostly out of trouble. Jen deHaan has agreed to not only do our Facebook page but she will also be our archivist. Thanks Jen!

Thanks also to Guy Monty who stepped up to fill the very large shoes of Sandra Gray. Sandy did that job so well for twenty two years and Guy seems to have filled those shoes. We're so grateful to both as they're huge jobs requiring a big commitment.

So here we are. Thanks to all those folks for putting up their hands and volunteering to make this club the very best. I'd like to ask you all to see if there's a small way that perhaps you too could contribute. Let me know if you'd like to help in any area, like a new program, speaker, event etc. Growing and learning is good for everyone. Volunteering will help you meet new people and believe me it's great fun. Thanks for letting me be your president this year. I'm learning and thanks to Sue W. trying to stay on track. Suggestions welcome. Well positive ones anyway.

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ARROWSMITH NATURALISTS CLUB/MEMBERSHIP INFORMATION

General Information: Club membership information is available on the web-site

http://www.arrowsmithnats.org; or by writing to Arrowsmith Naturalists, Box 1542, Parksville, BC

V9P 2H4.

Membership Includes: Monthly meetings (talks and/or slide shows), regular outings, BC Nature

newsletter four times a year and the club newsletter in February, June and October. Meeting Location: St Edmund Church Hall, 407 Wembley Road, Parksville, BC. Meeting Dates: 4th Thursday of January to June and September to November.

Meeting Time: Doors open at 7:00 pm and meeting starts at 7:30 pm.

Respect for Clean Air – No Smoking & Scent Free – Smoking is not permitted in or around St Edmund

Church Hall. Please refrain from wearing perfume or scented products.

ARROWSMITH NATURALISTS OFFICERS AND CONTACTS

President: Sally Soanes Newsletter Editor: Maggie Green

Vice President: Doug Elias Promotion: Maggie Little

Past President: Lynne Brookes Refreshments: Ron Wyckoff; Dave Erickson

Executive Secretary: Mark Mazurski **Speaker Program:** Nancy Randall

General Meeting Secretary: Sue Wilson Stewardship: Dave Hutchings

Treasurer: Helen Davidson Sunshine Contact: Pam Helem

Membership: Toni WyckoffArchivist: Jen deHaanBC Nature Rep: Al KirkleyFacebook: Jen deHaan

E-mail Correspondence: Elaine Lefebvre Web Site: Jen deHaan

Conservation/Environment: Gary & Ronda Murdock Field Trips: Claire Summers

Broom Bashing: Dave Hutchings When: 9:30am - 1st and 3rd Thursdays of the month: Where: Bottom of Shelley

3rd Thursdays of the month; where: Bottom of Shelley

Road, Parksville. Weather permitting.

Directors: Al Kirkley; Claire Summers; Terry Taylor;

Rosemary Taylor

ARROWSMITH NATURALISTS SPEAKERS PROGRAM LIST

February 28 - Pat Herzog, Wildlife biologist and author of From the Mist: A Life Restored by Nature. The book is about him being diagnosed with leukemia and his experience of the undeniable healing powers of nature.

March 28 – Genevieve Singleton, Cowichan Valley Naturalist volunteer & Arrowsmith Naturalists life time member. Genevieve wears many hats in various aspects of nature. Subject TBA.

April 25 – Sarah Patton, Research Biologist & Coordinator Southern Vancouver Island Cetacean Research Initiative, Ocean Wise. Presentation will focus on the Whale Report Alert and the Whale Trail.

May 23 - Nicole Fredrickson, Herring & First Nations values (tentative).

ARROWSMITH NATURALISTS OUTINGS INFORMATION By Claire Summers

Many thanks to Frank Vanmanen for organizing all of the outings in the past two years. Thank you also to the Leaders who volunteered to guide us on those outings. Without you, we would not have experienced the wonders of this beautiful island. To quote Frank, "we certainly have access to a wealth of diverse and beautify environmental sites in the region." We certainly are privileged to be able to appreciate and enjoy the beautiful area that we call 'home'.

This year, it is my turn to schedule outings that are hopefully fun, interesting and maybe even new to you. Please let me know of trails that could be of interest to the members. We are always looking for new destinations and I will do my best to include them in a future schedule. My email is Clairesu@telus.net

Meeting Locations Key: Note some changes in locations:

QBCC = Qualicum Beach Civic Centre/Ravensong-south end of the parking lot (this is due to the construction of the new roundabout at QB)

C&J = Corner of Craig and Jensen streets, Parksville

N&P = Northfield and Parkway rest stop parking lot Hwy 19, Nanaimo

SB = Hwy 19A North and Sunnybeach Rd

At the meeting place, please sign-in and organize car-pooling. Ensure that you are wearing appropriate clothing for the weather and footwear.

Guests are very welcome. Guest Waiver and Day Membership forms are available on our website: www.arrowsmithnats.org/membership or at the outing meeting place. These forms must be read carefully, completed and signed with an accompanying \$1.00 fee before participating in an outing. This is for insurance purposes.

Members of other clubs sign in as 'members' on the sign-in sheet. Also for insurance purposes.

There has been an understanding over the years, that participants who share a ride contribute to the driver a sum of \$5 per person as a courtesy to help pay for fuel costs. This is voluntary and roughly based on distance travelled.

It is important that attendees inform leaders if they are leaving early or generally cutting short their participation in the outing.

We are always grateful when someone offers to 'lead' an outing. Leaders of field trips have a responsibility to have every member, who does show up, to fill in the 'Sign-in Sheet' so we can keep record of the number of people who attended. Forms and money collected are handed to Toni Wyckoff.

ARROWSMITH NATURALISTS OUTINGS SCHEDULE

Wednesday February 13-Notch Hill, Nanoose Bay Medium uphill hike. Garry oaks, flowers and spectacular views. Wear good shoes for the climb uphill-walking stick would be helpful. Meet C&J 9:30am. Bring lunch. Leaders: TBA

Saturday February 23-Cumberland Sewage Lagoon and Museum An easy walk along the old Japanese Townsite Trail past a marsh and beaver pond. Low spots so wear appropriate footwear. Will also visit the museum. Meet QBCC 9:30am or SB 10:00am Lunch in town. Leaders: TBA

Wednesday February 27-Pacific Biological Station, Nanaimo Tentative date for return station tour. Currently 8 people on the waiting list who wanted to attend November 21. Still to be confirmed.

Wednesday March 13-Hornby Island Herring Fishery Tentative-will depend on the herring run being active. To be coordinated with Grant Scott.

Saturday March 16–Coastal Bird Studies Workshop-10:00am. Graham Sorenson BC Projects Coordinator, Bird Studies Canada will conduct a workshop at the Beach Acres Resort, Parksville. Workshop is for current volunteers and those interested in becoming volunteers. Will cover survey methods, waterbird ID, flock estimation and the Beached Bird Survey. Register at http://birdscanada.us16.list-manage.com/track/click?u=6464b42dc16cb57106c8e7b5d&id=83aae2da11&e=8022153399

Wednesday March 27-Little Qualicum Estuary Beached Bird Survey 3 Km Learn how to do a Beached Bird Survey while enjoying the many migrating birds that feed here. Uneven, rocky, seaweed herring roe beach-wear good footwear. Meet QBCC 12:30pm -to correspond with the tides. Leaders: Toni and Ron

Sunday March 31-Brant on the Bay Events Join the naturalists on the east side of Parksville Bay at the point to view the Brant through birding scopes. Learn about this amazing goose that stops here on its migration to the Arctic to fatten up. Public are welcome at this free Brant event. Hours 11:00am-3:00pm www.brantfestival.bc.ca.

Saturday April 6-Stocking Creek Falls-Holland Park, Ladysmith Medium hike with a steady climb through a lovely mixed forest with views of the creek and a waterfall at the end of the trail. Meet C&J 9:30am or N&P 10:10am. Leaders: TBA

Sunday April 14-Hamilton Marsh Public Tour, Qualicum Beach-10:00am—3:00pm A walk through the woods to discover the emergence of spring at the Marsh. A good opportunity for all ages to see and learn about pond critters, other aquatic life and migrating birds. Our club acts as tour guides for groups of children/parents from the trailhead. The Friends of French Creek and Arrowsmith Naturalists will have display tables. By donation. Bring your friends and family. To reach the trailhead: drive south from Qualicum Beach on Hwy. 4 to Hilliers Road South and turn right, drive 1.4 km and park on the side of the road.

Wednesday April 17-St. Peter's Churchyard and Mt. Tzouhalem Easy to moderate. First to Mt. Tzouhalem to see the ecoreserve and later the easy to moderate walk to enjoy the spring flowers, including the fawn lilies in the church yard. Meet C&J 9:30am or N&P 10:10am. Bring lunch. Leaders: TBA

Wednesday April 24-Helliwell Park-Hornby Island Easy hike to view long yellow grasses, contrasting blue ocean vistas and gnarled arbutus trees. "The primary role of Helliwell Park is to protect rare and endangered terrestrial ecosystem elements, including old-growth Douglas fir and Garry oak meadows, and representative examples of marine ecosystems. The park contains sea bluffs and a rich intertidal zone. It is also an Important Bird Area that serves to identify and conserve a global network of bird habitat areas." Details to follow.

Wednesday May 8-Oyster River Pub to Pub Walk, North of Courtenay Easy 6 km loop hike along the sandy dunes and marshes. Take in the wide variety of flowers, birds and butterflies. Half way lunch at Salmon Point Pub. Bring camera. Meet C&J 9:30am or QBCC 10:00am Leaders: TBA

Wednesday May 15-Piper's Lagoon and Neck Point, Nanaimo Easy hike. Popular and beautiful with ocean vistas, interesting botany and the tidal lagoon. Low tide expected. Meet C&J 9:30am or N&P 10:10am. Bring lunch. Leaders: TBA

Saturday May 18-Beachcomber and Wall Beach-Very Low Tide Easy but may be slippery. Explore the tidal pools for their myriad forms of life. Low tide that day. Meet at C&J. Details to follow Leaders TBA

Saturday May 25-Rogers Creek, Alberni Valley Easy to moderate hike. Sturdy footwear recommended. This is a lovely walk through riverside woods near Port Alberni. Meet QBCC 9:30am. Bring lunch. Leaders: TBA

Wednesday May 29-Garden Tour-Members Only-9:30 am Mark you calendars to tour a few of our special members eco-friendly gardens that are working with nature not against it. Come, learn, be inspired, and enjoy. Bring your lunch. In addition to the natural tour, pleasant surprises await you. More details to follow.

Wednesday June 5 or Saturday June 8-A New Park in Parksville. Details to follow.

Saturday June 15-Morrell Sanctuary Easy hike. A walk along some of the 11km of trails in a protected 2nd growth rain shadow forest which is important for the very large number of native plants that thrive there. Also a notable birding area. Meet at C&J 9:30am or N&P 10:10am. Lunch at Jingle Pot Pub. Leaders: TBA

Wednesday June 26-Stamp Falls, Port Alberni Easy-walking stick recommended. A beautiful walk along the river through an old growth forest in a remote corner of this park. This end of the park was never logged and has some big trees left for us to admire. Also a visit to the falls and fish ladder to see the migrating salmon. Meet C&J 9:30am or QBCC 10:00am. Bring a lunch. Leader: TBA



e-BOOK By Doug Elias

Doug Elias has finished his e-Book titled "Archaeology of the Salish Sea – A review of the literature". The book is a summary of over 500 published reports that discuss the 10,000-year human history of the Salish Sea. The book focuses on the long and changing relationship between the Indigenous peoples of the region and their environment. It also includes a lengthy bibliography complete with abstracts of all the reports cited in the main text. The book is in Adobe Acrobat format and can be read on just about any device. If you want a copy, send an e-mail to dougelias2015@gmail.com and one will be sent FREE of charge.

A Can/Bottle Return Account is available at the Qualicum Beach Recycling Centre at 141-4 Ave E, Qualicum Beach. You can donate the proceeds off your returns to the Arrowsmith Naturalists account. Please make the request to credit Arrowsmith Naturalist account before your bottles are counted by staff at the centre. Please mention this to friends & family.

ARROWSMITH NATURALISTS' NEW "CHAMPIONS FOR NATURE" AWARD By Dave Hutchings

At a 2018 meeting, the A/Nats Executive spoke about ways in which the club could recognize the extraordinary contributions of some of our most vital, long-term members. Out of this discussion, the new "CHAMPIONS FOR NATURE" award arose. Toni Wyckoff and Dave Hutchings offered to research possible forms and designs for the award and came up with the striking acrylic form which was presented at January's Members' Night.

On Members' Night, the "CHAMPIONS FOR NATURE' award was presented to Sandra Gray and-jointly-to Pamela and David Helem. In making the presentation to Sandra, Lynne Brookes outlined that, since joining the Arrowsmith Naturalists in 1993, Sandra has been a champion for local birds. She has organized 22 annual Christmas Bird Counts, Brant Goose Counts, and Wildlife Tree Inventories, recording results which are posted not only for club members but also on data bases of government and other relevant environmental agencies. She has organized Brant Festival public events, has volunteered as Club trip leader, as BC Nature liaison/contact person, as educational signage consultant, and as a promoter of the club at markets, festivals and in the local press. And these are only some of the many ways in which Sandra has worked tirelessly as a "champion" for Nature and for the Arrowsmith Naturalists.

Dave Hutchings presented the second award to Pamela and David Helem. The Helem's joined the Arrowsmith Naturalists in 1997 and, since joining, they have distinguished themselves as tireless volunteers who seem attached to any club activity. Pam served as club Secretary for executive and general meetings for several years. She worked to make Kidfest a success, introducing children and their parents to creatures found in local waters. Additionally, Pam is a keen student of native plants and co-taught an Elder College course on local flora. She serves currently as "Sunshine" person, sending thoughtful cards (made from David's photos) to members. Since joining the ANats, David has volunteered as club technician at all general meetings and other events. He created and has, until recently, maintained the "arrowsmithnats.org" website. He was the Registrar for both the BCNature/ Nature Canada general meeting in 1999, and the BCNATURE FGM in 2012, which the ANats cohosted with Nanoose Naturalists. David has lead or participated in Christmas Bird Counts for our Club and others. He maintains an area for the Coastal Bird Survey and freely passes on his considerable knowledge and mentors new members. Since the early 2000"s, David and Pam have been regular members of the crew which removes invasive species from the Englishman River Estuary. Together, they have coordinated and led the many fields trips which are vital to our club's mandate. David's knowledge of the area and the cycle of the natural world has been invaluable to Club trip planners. Pam and David are often leaders of these outings and, to this day, David mentors the field trip coordinators who have succeeded him.

Truly, both Sandra Gray and Pam and David Helem are worthy recipients of the first Arrowsmith Naturalists' "Champions for Nature" award.

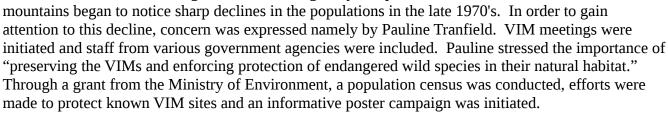




VANCOUVER ISLAND MARMOT RECOVERY-UPDATE By Maggie Little

The Vancouver Island Marmot (VIM) makes it's home in the sub alpine and mountainous areas of Vancouver Island. It colonizes in burrows and hibernates for 7 months of the year. It is herbivorous and the adults weigh approx 5kg. This endearing species is uniquely Canadian and unique to Vancouver Island. And then there is it's whistle, which has been missing for a very long time. For those of you who are new to the area and might not know the story, this is a remarkable tale of survival.

The first recorded sighting of the VIM was 1897 and they were in plentiful numbers. Our club's founding members who regularly camped out in the Island



However, in the early 1990's the VIM population plummeted. It was estimated that only 30-35 individuals remained in the wild. Factors influencing this decline were attributed to high terrain clear cut logging. This created easy access for humans and predators such as wolves, cougars and golden eagles. The VIMs were also mistaking these high terrain clear cut areas as meadows but the food supply was not sufficient to sustain them.

Between 1997–2004 a successful local, Canadian and International funding campaign provided sufficient funds for the launch of the Captive Breeding Program. Fifty-six VIMs were taken into captivity and sent to four Canadian sites for breeding purposes. These were the Calgary and Toronto Zoos, the Mountain View Langley facility and the newly and specifically designed Tony Barrett Marmot Recovery Centre(TBMRC) at Mt Washington. In 2004 the VIM was designated as critically endangered by SARA. Dr Malcolm McAdie, TBMRC Captive Breeding Coordinator and Project Veterinarian is responsible for the management and release of VIMs, including acclimatization, disease control, most optimum time for release. The VIMs are surgically implanted and helicoptered to their intended release areas. The reintroduced populations are beginning to adapt and increase.

From 2012–2017 the captive program was told to downsize because of costs, which meant that the overwintering of VIMs at TBMRC would cease. Funding has always been an issue and reliance on public funding is the key. During this period it was shown that there were declines in the populations. So once again the overwintering and breeding program continues at TBMRC and recognizes the need for the captive breeding program. The Recovery Team with the Ministry of Environment guide the annual recovery objectives. The goal is to establish self-sustaining populations of 400–600 VIMs living in 3 meta populations in 9 historic distributions. In 2015 The Population and Habitat Viability Assessment confirmed that "recovery to self sustaining levels in the wild is viable." In the latest 2018 newsletter it said that Mount Arrowsmith has once again been recolonized by 27 VIMs after a 30 year absence. There are 200 living wild and 50 in the breeding program. It encourages us to applaud the efforts of all involved in this remarkable come back. What a treat it would be to hear that "whistle" again. Their website is www.marmots.org

"FRENCH CREEK" By Larry Williams

I love to hear the Varied Thrush Whir the morning mist away, Then drop down from a copper bush, And fuss about, as if to say, "Where's the beef?" "Patience", I say to him. "The morning waits for the soft tap "Of the Sapsucker on the fire-pit rim, "And then I have to take a crap." But I won't forget the honour you give This bumbling human, pretending, as you do, That I am involved with how you live And some part of my life is important to you. It works both ways I want you to know. We are strangers, ves, but neighbours by choice: "I'd be sad, but still sing, if you were to go." Is what I'd say to you if I had your voice.

LINKS TO ARTICLES OF INTEREST and WORD OF THE DAY By Teri Hitch

Dr. Cindy Russell, of the Santa Clara Medical Association, compares our present day wireless concerns with pesticides concerns brought to light by Rachel Carson. Wireless Silent Spring http://www.sccma-mcmms.org/Portals/19/SilentSpringArticle_color_pr2.pdf

Here's an excellent article from the NYT Review of Books. "The Insect Apocalypse is Here: What does it mean for the rest of life on Earth."

 $https://www.nytimes.com/2018/11/27/magazine/insect-apocalypse.html?action=click%26module=Top %20Stories%26pgtype=Homepage&utm_source=EHN&utm_campaign=33de38cd2d-RSS_ATF_LargePrint&utm_medium=email&utm_term=0_8573f35474-33de38cd2d-99010857$

Nature does not hurry, yet everything is accomplished. Lao Tzu

The earth is a living thing. Mountains speak, trees sing, lakes can think, pebbles have a soul, rocks have power. Henry Crow Dog

SUNSHINE – If you know of an Arrowsmith Naturalist who is ill, in hospital or recently bereaved, please contact: Pam Helem at arrowsmithnats@gmail.com.



SMALL THINGS-BIG TROUBLE! By Rosemary Taylor

Good things come in small packages, so they say—or do they? Having just enjoyed the Christmas season, where the exchange of gifts is often front and centre, the contents of the smallest box can result in the biggest surprise and the biggest smile. But having had some welcome unstructured time, there's been lots of opportunity to catch up on my reading, and that has included a history of the Irish potato famine (1845-1849). I have never really given much thought to what was behind the havoc wreaked by this disaster. It was a small thing, a very small thing, a tiny micro-organism, invisible to the naked eye. It certainly brought a big surprise, but there were absolutely no big smiles. It's the same blight that might affect your tomato crop, and you're not going to starve to death if that fails. But when the potato crop, on which the poorest of the poor in Ireland depended for their only food source, failed completely, year after year, for several years in a row, millions died because they were too poor to afford any of the maize imported as survival rations and sold at high prices. It is a long, sad story involving the death of millions from starvation, but some of those who survived long enough, and could afford to leave the country, came by what were known as Famine Ships to North America. Some of those boats arrived at Grosse Île, Quebec, an island in the St. Lawrence river, where immigrants were guarantined, the dead were buried, and the ill were cared for till they could continue their journey. Maybe some of your ancestors were among them?

Nature can be very cruel at times, especially when little was known about the cause of such uncontrollable blights. Impoverished small farmers had no understanding, as we do now, of how to protect their vital food crops from such damage. The fungus-like mold that hit at that time was tiny; the havoc it caused was enormous, far reaching, and unbelievably harsh on those who suffered and died as a result. In Galway, on Ireland's west coast, there is a memorial to the potato famine in the form of a Famine Ship—and every time I drive to Nanaimo and pass the sign at the Departure Bay exit from the #19 highway, I can't help thinking the poles at the city boundary are so like those of the Famine Ship masts.





THE ARROWSMITH NATURALISTS' NEST BOX PROJECT By Dave Hutchings & Lynne Brookes

Development and logging continue apace in the Oceanside area and nature is the loser in all of this. One of the more significant impacts of this trend is the loss of habitat for many animal species, particularly for our bird species. The depleted avian habitat means not only the loss of food sources but also a loss of nesting sites, especially for the cavity nesters. Birds such as Violet-green Swallows, chickadees, nuthatches, wrens, Western Screech Owls depend largely on the abandoned cavities made by woodpeckers in old or dead trees in which to build their nests.

In 2018, the Arrowsmith Naturalists, concerned about habitat loss and impact on many bird species, applied for and received a generous grant from BCNature to build and distribute nesting boxes in our area. Some fine custom rough cut but very wet cedar was sourced and Doug Elias (with the help and tolerance of his partner, Pam Vipond) properly dried, cut the boards and assembled forty songbird boxes. However, by this time the nesting season was well under way and it was decided to distribute them in February 2019. During the winter Doug made an additional 9 large boxes for Western Screech Owls & Kestrels and a team consisting of Toni & Ron Wyckoff, Dave Hutchings, Sally Soanes, Dave Erickson, Lynne Brookes, and Derrick Grimmer added the finishing touches at Derrick's and Lynne's place where the boxes were stored.

The 2019 nesting season is soon to begin! We are offering-free of charge-to our members and others who are willing to properly install and maintain a songbird nest box designed for cavity nesting birds. Each box comes fully assembled, with a detailed set of instructions which explains how to site, mount and maintain your box. These instructions are vital to ensure that birds will be attracted to your box, that the nesting cycle will be successful and that the young will survive.

Songbird nest boxes will be available at our February meeting for those who wish to take home, install on your property and to delight you with the fledging of a new generation of our feathered friends.

(Note: if you would like a copy of these instructions ahead of the meeting to help you decide if a nest box is right for you, please email: rppsolar@yahoo.com with NESTBOX in the subject line.)





GRAFTED STUMPS By Terry Taylor

As you walk through the woods have you ever noticed that some stumps are rounded and are covered in bark, and others have a rim of bark around the edge? These are Douglas-fir stumps, but are not usual Douglas-fir stumps. They are the result of root grafting. When the roots of two Douglas-firs come in contact, they sometimes grow together, forming a graft. Most Douglas-fir stumps are the usual stump type stumps, with bare wood that eventually goes rotten, but occasionally the roots of adjacent trees will grow together. If you look for them, you will find them. The best examples I have found locally are in Rathtrevor Park. They are at the western end of the park, beside the seashore trail. There is a cluster of about six of them. True firs are also reported to root graft, but I have never encountered any grand firs doing this, only Douglas-fir.

When one of the trees is cut down, nutrients travel through the roots from the living tree to the stump, keeping the cambium of the stump alive. It continues to produce bark, and if the stump lasts long enough, that bark will grow over the top of the stump. The photo shows such a stump. It is located at Yellowpoint Lodge. Conifer trees do not have any buds on the lower part of the trunk, and so no new branches can arise. The cambium cells continue to divide, but there are no instructions to produce new branches or needles. So the stump stays as a stump, but a living stump. Redwood trees are an exception to this rule. They can re-generate branches, and become a tree again.

Deciduous trees are a different story. Many deciduous stumps can re-grow, since they have clusters of living cells along the trunk which can become buds and develop into new branches. The best example of this in our area is the broad leaf maple. If a tree is cut down it usually develops a cluster of branches from the stump. When you see a big maple with many trunks it is usually that the tree was cut many years ago, and some of the branches have become new trunks. Why several trunks when a maple tree usually has only one trunk? Because of a compound called auxin. The leader, the growing tip of a tree produces this substance, which retards the branches lower down. For a tree to survive it must get enough sunlight. If several trunks develop, this will result in a tree lower than its neighbors, which could overtop it. When the maple is cut, there is no leader to retard lower branches, and several branches can become trunks. Willows are another example of a similar situation. They used to be coppiced in Europe, and the new branches used for furniture making.

There is a problem, however, for grafting of Douglas-fir roots, because fungi can invade the cut stump. Since the stump is grafted, the wood decay fungi can then enter the still living adjacent tree, resulting in root rot of the previously healthy one.

As you hike the local trails look for some living stumps. They are not that uncommon. There is always something new to see even if you have been along the same trail many times.



THE BRANT WILDLIFE FESTIVAL 2019 THEME: BEACHES, MARSHES AND ESTUARIES By Lynne Brookes

This annual festival celebrates nature, particularly Brant geese as they rest and feed on the shores of Parksville and Qualicum Beach on Vancouver Island. This year there are 26 different events and multiple offerings for many of them. For a list and description of events please visit: https://brantfestival.bc.ca/events/

The Arrowsmith Naturalists have long played an important role in this festival celebrating local nature. This year we are involved through providing, sponsoring and/or supporting Call of the Forest: the Forgotten Wisdom of Trees; Brant in the Bay; Coastal Bird Viewing and ID; the Englishman River Estuary Tour; and the Hamilton Marsh Tour. Individual members are further involved leading or supporting another nine of the events. When it comes to celebrating nature-we're out in front!

One way you can support this festival is by attending lots of the enjoyable events. Another way is to *volunteer to help* as the following four events sponsored by our club will need you. Your help will be greatly appreciated and will contribute to the success of each of these events:

Call Of The Forest - March 24th Hosts needed at our club's display table and help with set up and break down-please contact Lynne Brookes or Sally Soanes to help.

Brant in the Bay - March 31st Hosts needed at our club's display at the Community Park, help with set up and break down, and bird knowledgeable members with spotting scopes-please contact Sandra Gray to help.

Englishman River Estuary Tour – April 7th Join Dave Hutchings, others of the ER Estuary stewardship group, other ANats members, and a representative of the Nature Trust of BC which owns and manages this area for conservation purposes. We will be guiding community members on a tour down through the forest to the estuary. Nature along the walk and estuary restoration will be featured. Meet for the tour by 1:00pm at the end of Shelly Road-Dave Hutchings is the contact.

The Hamilton Marsh Tour - April 14th Hosts needed at our club's display table; members familiar with native plants to guide visitors through the forest down to the marsh; 2 bird spotters with scopes at the dock; help with set up and break down; and other things-please contact Ceri Peacey or Lynne Brookes to help.



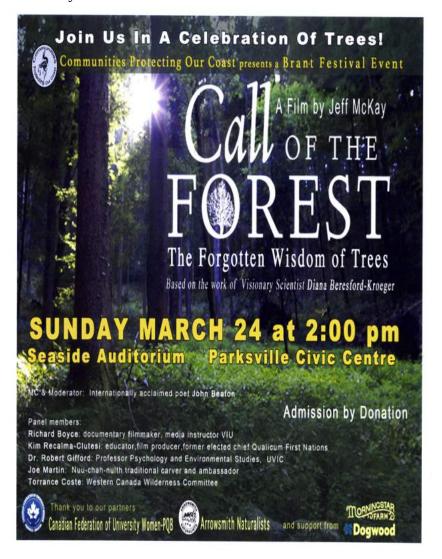


Brant in the Bay

Hamilton Marsh



Englishman River Estuary



A HOP, SKIP AND A JUMP By Rosemary Taylor

Looking out across the water from Craig Bay one warm, sunny winter's afternoon, the water was slightly ruffled, although there didn't seem to be a breath of wind anywhere. However, there was a straight line of oval patches of complete calm across the bay, extending all the way from Rathtrevor to the far side of Craig Bay, which is quite a distance. These looked every bit like some giant had left his footprints as he walked across the water. That being unlikely, my next thought was that they appeared the same distance apart as the marks some skipping stone might make as it skidded across calm water when thrown from the beach. This thought almost immediately morphed into one of those 'ah-ha' moments. We often see pictures of devastation, where hurricanes or high winds have damaged groups of trees or houses, and left other adjacent areas untouched. It occurred to me, seeing those calm patches equally spaced along a straight line, they were illustrating exactly that, how winds touch down, take off, and touch down again as they hop, skip and jump across land or water. It couldn't have been better illustrated than by what I saw on Craig Bay that day. Since I am no meteorologist, this is just my personal interpretation of the pattern I observed on the water – let me know what you think!

PHOTOS





Keeping a light bulb going under the hummingbird feeder during these cold days kept the syrup from freezing.





Metallic Buprestid Likes moisture and burrowing in wood.

The Arrowsmith Naturalist Newsletter is published three times a year in February, June and October. Articles on birding, travel, botany and environmental matters are welcome. The next deadline for submissions is May 31, 2019 for the June 2019 edition. Please email articles and photos to: greena@shaw.ca. Some editing may be required for length or held off for another edition as per available space.