# **ARROWSMITH NATURALISTS NEWSLETTER**

TO KNOW, ENJOY AND PRESERVE NATURE

#### PRESIDENT'S REPORT By Sally Soanes

Summer is over! Fall is descending on us just like the leaves. Colourful, crunchy and wet. I hope you all had an adventure filled summer but with fall here we have so much more to look forward to. Claire has organized amazing trips for us and Nancy and Judy have lined up an array of speakers who will add to our knowledge and enjoyment. Please note that our meetings will start at 7:00 pm with the doors opening at 6:30 pm.





mushrooms on the 26th between 11-4 and return on the 27th 11-4 to find out what they are. Last year we had a very rare mushroom come in so we're hoping for a good variety coming in this year. Volunteers for this event are always most welcome. You'll enjoy our speakers which this year include Paul Moran who is this years chef of the year, 3 food trucks and lots of vendors. Thankfully parking won't be an issue this year so grab your friends and neighbours and join us.

The Christmas Bird count and our fun filled pot luck will be held at St. Edmunds on December 15th at 5:30. ALL members and their spouses/ partners are most welcome. We're looking for some volunteers who might work as a team to help organize and do the paperwork (an inside job!) for the bird count. More on this later.

Speaking of volunteers ,and I know I do that often, we need you. This amazing club runs on volunteers and if you're enjoying all we offer please consider joining in helping in some way. We have a lot of fun helping our community so you'd be joining a great group. We always need leaders for the hikes, and Vice President and a BC Nature representative . I would really like to thank Doug Elias and Al Kirkley for all their help. We've been so lucky to have them both on the executive. We'd also very much like to have someone consider starting back up the children's program. If you're interested please contact me as we've had several instances where it would be so beneficial to the community.

This club continues to amaze me with so many people contributing in so many ways. Volunteers are at the heart of so many successful organizations. My wish is we keep moving forward and contributing to our club, our communities and our beautiful island. Please consider volunteering. You'll meet such great people and learn so much.

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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: 4<sup>th</sup> Thursday of January to June and September to November.

Meeting Time: Doors open at 6:30 pm and meeting starts at 7:00 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:		
Vice President:	<b>Promotion:</b> Maggie Little		
Past President: Lynne Brookes	<b>Refreshments:</b> Ron Wyckoff; Dave Erickson		
Executive Secretary: Mark Mazurski	Speaker Program: Nancy Randall; Judy Mazurski		
General Meeting Secretary: Sue Wilson	Stewardship: Dave Hutchings		
Treasurer: Helen Davidson	Sunshine Contact: Pam Helem		
Membership: Toni Wyckoff	Archivist: Jen deHaan		
BC Nature Rep:	Facebook: Tom Constable		
E-mail Correspondence: Duncan Campbell	Web Site: Jen deHaan		
Conservation/Environment: Gary & Ronda Murdock	Field Trips:Claire Summers		
<b>Broom Bashing:</b> Dave Hutchings When: 9:30am - 1st and 3rd Thursdays of the month: Where: Bottom of Shelley Road, Parksville. Weather permitting.	<b>Directors:</b> Claire Summers; Terry Taylor; Rosemary Taylor		

#### ARROWSMITH NATURALISTS SPEAKERS PROGRAM LIST

**October 24 – Rosemary Taylor and Nancy Randall**. Importance of Mushrooms and Fungi in our Ecosystem.

**November 28 - Dr. Isobel Pearsall.** Project Coordinator for the Pacific Salmon Foundation - Salish Sea Marine Survival Research Projects.

**January 23** - Member's photography sharing event.

February 27 - Mike Yip. Vancouver Island Birds and Butterflies.

March 26 - Dr. Briony Penn. A Year on the Wild Side: A West Coast Naturalist's Almanac.

# ARROWSMITH NATURALISTS ANNUAL GENERAL MEETING - NOVEMBER

Nominations and volunteers for ALL positions are welcome! Top priority is filling the gaps indicated below. Speak to any of the people listed. Many thanks to those who have served and are stepping down: VP Doug Elias, Director and BCNature Rep. Al Kirkley, Newsletter editor Maggie Green.

Executive Positions		<u>Years of</u> <u>Service</u>
President	Sally Soanes	2
Vice-President	???	
Treasurer	Helen Davidson	1
Membership Secretary	Toni Wyckoff	5
Executive Meeting Secretary	Mark Mazurski	1
General Meeting Secretary	Sue Wilson	5
Directors-at-Large (4)	Rosemary Taylor	5
	Terry Taylor	5
	Claire Summers	2
	???	
Past President (automatic)	Lynne Brookes	

Note: Claire has taken on the role of Field Trips Coordinator. The executive decided that the holder of this important position should automatically be made a Director.

#### **Non-voting Appointments**

Stewardship	Dave Hutchings
Website and Archives	Jen deHaan
Technical Support	David Helem and Derrick Grimmer
Email Coordinator	Duncan Campbell
Newsletter Editor	???
BCNature Representative	???
Coffee Coordinators	Ron Wyckoff and Dave Erickson
Promotions	Maggie Little
Sunshine Messenger	Pam Helem
Facebook Administrator	Tom Constable
Field Trips Coordinator	Claire Summers
Speakers Coordinators	Nancy Randall and Judy Mazurski

#### ARROWSMITH NATURALISTS OUTINGS SCHEDULE By Claire Summers

Many thanks go to the Leaders that make these outings possible. Please keep in mind that this is an ever changing schedule. Changes occur due to; weather, lack of a leader, new information about trail conditions, timing of flowers blooming or lack of etc. I will keep you informed with changes as soon as I possibly can. The date will remain the same but the location may change. Also to be scheduled in as information arrives, are trips to; a Maple Syrup farm, Swan Festival in Comox and Local Tidal Pools.

#### OCTOBER 2019 to JUNE 2020

**Thursday, October 10** - Francis Barkley boat outing to Bamfield. All-day event. Leave port at 8:00am. Bring lunch and snacks, or purchase on board at the Galley. Reserve your seat by going to the Lady Rose Marine Service website, pay \$40 each upon arrival on Thursday. Please send me a quick email indicating that you are participating. Wear weather appropriate clothing and non-slip shoes for the boat. Bring a camera, you will be glad to have it. Leader: Claire Summers Meet at Raven Song parking lot in Qualicum Beach for 6:30am departure to Port Alberni.

Saturday October 12-Big Qualicum Fish Hatchery/Mushroom Walk Leader: Terry Taylor Wednesday October16-Nymph Falls/Puntledge Fish Hatchery Leader: Maggie Little Sunday October 27-Mushroom Festival Saturday November 9-Spider Lake/Illusion Lake Wednesday November 13-Christie Falls/Canyon Bush Creek Wednesday November 20-Living Forest Trail, Port. Alberni area Wednesday December 4-Cameron Lake/Cathedral Grove December 15 – Christmas Bird Count and Potluck Dinner. Wednesday December 18-Oyster River UBC Research Wednesday January 8-The Raptors, Duncan Saturday January 18-The Abyss Wednesday January 29-Deep Bay/Tour Station Saturday February 1-Outing To Be Announced Wednesday February12-Royal BC Museum, Victoria Wednesday February 26-Fanny Bay Oyster Tour Wednesday March 11-Gabriola Saturday March 21-Somass Estuary/Kitsukis Dyke Wednesday March 25 -Harewood Plains Wednesday April 1-Biggs and Jack Point Saturday April 18-TBA Wednesday April 22-Cottle Lake Loop/Blueback Beach Stairs/Legacy Marsh Saturday May2-Somenos Marsh Wednesday May13-Paradise Meadows/Battleship Lake Wednesday May 20-Newcastle Wednesday June 3-Dr. Sun Yet-Sen, Vancouver Wednesday June 24-McLean Mill/Train Ride, Port Alberni

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.

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

www.theguardian.com/environment/2019/jun/17/environment-reporter-facing-harassement-murder-study?

www.theguardian.com/environment/2019/jun/20/twitters-storm-noise-pollution-create-havoc-for-birds-study-shows?

www.theguardian.com/environment/2019/jun/20/song-rare-whale-first-time-north-pacific-right-whale?

www.cbc.ca/radio/checkup/sunday-on-checkup-are-we-doing-enough-to-protect-canada-s-wildlife-1.5240848

www.nytimes.com/2019/09/19/opinion/crisis-birds-north-america.html

To protect what is wild is to protect what is gentle. Perhaps the wilderness we fear is the pause between our own heartbeats, the silent space that says we live only by grace. Wilderness lives by this same grace. Wild mercy is in our hands. Terry Tempest Williams

## PALM OIL By Roger Simms

Correct me if I am wrong. It seems to me that the world is intent on wiping out Orangutan and various Birds of Paradise in order to have palm oil in our chocolate, various edible goods and cosmetics etc.

Countries such as Indonesia and Malaysia are clearing the jungle in order to plant and grow palm trees from which to extract their oil. Where-ever the crop goes, for the various processing methods it none-the-less is changing the lives of those left behind, i.e. animals and birds. Some will say what can I do as an individual? Well do as I try to do if the listing of ingredients is large enough to read, I read what is included in my favourite chocolate. It used to contain palm oil so I reluctantly slowed down my purchase. However, I have noticed lately that palm oil has been dropped from that chocolate. A famous chocolate spread we used to buy still contains palm oil, fortunately I have found an alternative which I can use without feeling guilty.

**I** hope and wish I have given us all something to think about. Yes those countries which have cleared jungles for palm oil plantations, not leaving any other canopy for any other use, they are far from us but even from here we can affect change by changing our buying habits.

#### **Conservancy Hornby Island – HerringFest 2020**

Conservancy Hornby Island will be holding the fourth annual HerringFest on March 5-8, 2020. There will be three speakers: Dr. Daniel Pauly, author of the recently published book, Vanishing Fish; SeaDoc Society's Dr Joe Gaydos, a whale veterinarian; and Vanessa Minke-Martin, a marine biologist with Pacific Wild.

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

# THE MUSHROOM UNDERGROUND By Terry Taylor

Mushrooms are not organisms in themselves. They are essentially the flowers of a few groups of fungi. Flowers only appear when a plant is reproducing. Mushrooms only appear when those fungi are reproducing. In the autumn when the rains come, suddenly mushrooms appear. When you walk through the forest at other times of the year, the fungi are still there, beneath the ground. They just are not in flower.

The fungi that produce the mushrooms are growing through the soil, out of sight, and beyond our level of awareness, even if we turn over the soil. They consist of microscopic threads, called hyphae, that grow through the soil. Sometimes, if they clump together we are able to see them, but in most cases they are beyond our level of awareness. Most biological processes are below our level of awareness. Turn over some leaf litter in the fall, and you may find molds growing through the litter. These are aggregations of hyphae, and when massed together like this are known as mycelium.

Most fungi do not produce fruiting bodies large enough to be recognized as mushrooms. Some fungi that produce mushrooms do so only rarely, and others produce mushrooms every year. When you study the mushrooms of a particular site, you are only seeing a small percentage of the fungi that actually live there.

Oluna Ceska, a professional mycologist in Victoria, has been surveying and recording the mushroom flora of Observatory Hill, a small area of woodland in Saanich, for about 15 years, and has documented over one thousand species of mushrooms there. This is the most detailed mushroom research study ever done in the province, and shows just how many fungi surround us.

Fungi form an invisible web upon which terrestrial ecosystems depend. They follow three basic lifestyles. Since fungi, unlike plants, cannot produce their own food, like animals they are dependent on plants for survival. Those three lifestyles are saprobes, mycorrhizae, and parasites.

Saprobes are the recyclers, the decomposers that return organic matter back into the soil so that it can become future generations of plants. Most of the little mushrooms are saprobes. They rot down needles, leaf litter and wood, turning it into compost.

Many of the big mushrooms are produced by mycorrhizal fungi. These fungi are attached to tree roots. They are the builders. They supply water and nutrients, such as phosphorus, to tree roots, and in return the tree supplies them with sugars produced by its leaves. Except in extremely nutrient rich moist conditions, a tree cannot live without some sort of mycorrhizal partners. Some of our best known edible species such as boletes, chanterelles, and pine mushrooms, are from mycorrhizal fungi.

The third life strategy is parasitism. Very few mushroom producing fungi are parasites, but many microscopic fungi are. Rusts and smuts are some well known parasites. One of the few parasites that produces mushrooms is the one that gives rise to honey mushrooms (*Armillaria*). They are quite common in our area, producing great big clumps on alder trees.

Next time you are out in the woods, take a look at the mushrooms, and remember that this is all about an underground operation.



Mycena haematopus, the bleeding fairy helmet. One of the recyclers.

## 15 YEARS OF STEWARDSHIP By Dave Hutchings

15 years?? Yes, it has been 15 years since the Arrowsmith Naturalists made a commitment to the Nature Trust of BC, to work toward the removal and control of invasive plants on the Englishman River estuary. This commitment would support the Nature Trust's objective of returning the estuary to its natural state: a major salt marsh habitat and a sanctuary for native plants and animals.

In addition to tackling the problem of invasive plants, such as Scotch Broom and Spotted Knapweed, the Arrowsmith Naturalists undertook a monthly bird inventory, lasting 4 years, which would establish baseline data to monitor the numbers and species of birds which use the estuary during migration or as year-round habitat.

From time to time also, when they became available, evergreens were planted in strategic locations, with mixed results.

Although others have joined us from time to time, none of this stewardship program would have been possible without the persistence and dedication of a loyal, core group of ANats stewards: David and Pam Helem, Maggie Little, Roger Simms, Pat Bourgeois, Marilynn Futer, Duncan Campbell, Toni and Ron Wyckoff, Rob and Jeanne Schippers and Chris and Dave Hutchings. More recently, we have been joined by Helen Davidson, Mary Krebda, Frank and Brenda Vanmanen and Sue Wilson. For 10 months each year, and twice each month, these folks have met at the end of Shelly Road and marched out onto the estuary, tools in hand, to support our stewardship role.

An extra challenge was taken on this year with the planting of hundreds of native trees and shrubs. With this Nature Trust program and the threatened summer drought, it meant that if the young plants were to survive, they would have to be watered weekly. In addition to our core group, Mark Mazurski, Gary and Ronda Murdock and, most recently, Dianne and Brian Anderson, worked once a week to carry water to thirsty plants. And, on our usual twice-monthly work days, this task was followed by a session of pulling Spotted Knapweed or Scotch Broom.

Our stewardship work at the Englishman River estuary is a source of pride, not only for the noticeable changes we have helped to bring about but also for the enduring partnership with the Nature Trust. With the support of a steady influx of willing volunteers, long may they both continue.

If you would like to join us, even occasionally, we meet in the Shelly Road parking area at 9:30 am. on the first and third Thursdays each month. For more information contact <u>dhutchings40@shaw.ca</u>.



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 January 31,2020 for the February 2020 edition. Some editing may be required for length or held off for another edition as per available space.