

## \*President's Corner

Nov. 24/23

Well, after consulting fellow Naturalists, (the Stewardship Committee anyway) and husband Jim, (he laughed) I told Lynne I'd volunteer to be president of ANATS. So that happened last night.



Not much happening until the January meeting from what I can tell.

Dec. 23/23

Good grief! I can't believe the AGM planning committee has been working flat out for the last 2 weeks to get the registration program working!!

Note to self: Talk to BC Nature about them building a template that organizing clubs can use. That would be really helpful in the future.

Consider hiring an armed guard for Toni until after the AGM. If anything happens to her this Club will be in such trouble! She knows all, she sees all, she remembers all!

Jan. 8/24

Flourished at the Executive meeting today. Note I didn't

*\*Liz (Elizabeth) Thorne stepped forward to become the new ANats President during the November 2023 AGM.*

say survived. Everyone was so welcoming and encouraging. Derek chaired the meeting so mostly I listened. Seems we need the Constitution revamped so Elizabeth Friedberg and I volunteered to do it. Doesn't seem too horrendous. We'll get something written for next meeting.

Jan. 25/24

Flourished at the General meeting today. Note I didn't say survived. Everyone was so welcoming and encouraging. A little tricky getting everyone to stop talking and get the meeting going and restarted after the break. Sally says it's hard because people often live alone and can't get out as much in winter so they want to visit.

*Note to self:* What about a coffee and chat meeting once a month in the winter? Would people like that? Discuss with exec.

Jan. 31: Have signed up to person the booth at Seedy Saturday and a couple of other events. I don't know what they are but I figure someone will give me directions on how to get there and standing behind a table chatting and playing games with kids is my forte. Should be fun.

Cheers for now.. *Liz Thorne*

**We respectfully acknowledge that we live within the unceded traditional territories of the Snaw-naw-as people and the Qualicum First Nation, the traditional keepers of these lands.**

**Today, many First Nations and Métis peoples continue to live, work and play here as do we.**

**We intend to nurture better understanding and pursue opportunities for collaboration with our First Nations neighbours.**

### Officers and Contacts

**President:** Elizabeth Thorne    **Vice Pres:** Sally Soanes  
**Past Pres:** Lynne Brookes    **BC Nature:** Elizabeth Bredberg  
**Special Projects:** Lynne Brookes (new position Jan2024)  
**Speakers:** Committee    **Stewardship:** Dave Hutchings  
**Treasurer:** Helen Davidson    **Membership:** Bonnie Mullin  
**Exec.Secretary:** Mark Mazurski  
**Mtg.Secretary:** Elizabeth Salomon-de-Friedberg  
**Directors:** Elizabeth Bredberg, Maggie Green  
**Conservation/Enviro.** Gary & Ronda Murdock    **Promotion:** Maggie Little  
**Archivist(s):** Diane & Jim Goodwin    **Outreach Contact:** Sue Wilson  
**Email & Zoom:** Duncan Campbell    **Website:** Kerry Baker  
**Facebook:** Tom Constable    **Newsletter:** Sylvia Riessner

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### Club/Membership Information

Check our [website](#) or [Facebook page](#) or request information by writing to:

Arrowsmith Naturalists, Box 1542,  
Parksville, BC V9P 2H4

*Note:* If you know of someone who needs a few words of comfort or encouragement, please contact our Outreach person—

**Sue Wilson** 250-248-7280 susiebird@gmail.com

## Looking ahead...

<b>Fri, Feb 16-Mon, Feb 19</b>	Participate in annual Great Backyard Bird Count, Lynne Brookes*
<b>Mid-late Feb</b>	Weeding and planting "bee" at Seaside Nature Park, dates to be announced
<b>Fri, Mar 5-Apr 30</b>	(Tuesdays) Participate in annual Brant Geese Count, contact Liz Bredberg*
<b>Fri, Apr 5-Mon, Apr 8</b>	Brant Wildlife Festival
<b>Sat, Apr 27, 10am-3pm</b>	Hamilton Marsh Tour, volunteers needed, contact Lynne Brookes*
<b>Sun, May 5</b>	The River Never Sleeps, volunteers needed, contact Sally Soanes*
<b>Thu, May 9-Sun, May 12</b>	BC Nature AGM

\*contact through arrowsmithnaturalists@gmail.com

**Members ASK**

Looking for a **Social Media Coordinator**  
Contact: Elizabeth Thorne

Is anyone interested in forming a book club in which members share what books they are reading and what they enjoy about them?  
*Rosemary Taylor*

Looking for people to help identify and organize large **sea shells collection** (donated by D. Erickson & others) to be used for future information & education initiatives.  
Contact: Lynne Brookes

## AGM 2024 - May 9 to 12, 2024

Toni Wyckoff, AGM Coordinator

The AGM committee has been working very hard to bring you the best four days of entertainment, food and outings. Some of the outings are already filling up! If you haven't registered, **now is the time** as the prices go up mid-March.

There are still volunteer spots available (Yes, I know it's three months away. When time gets closer, I will be twisting arms.)

Thanks to the BC Community Bat Program; they will be giving us a presentation on May 10, 7-9:30. This is a citizen science initiative to monitor bat populations that are suffering from White Nose Syndrome, a devastating disease.

You will get a chance to go out to a known bat area in Qualicum to observe what Program members are doing. We are still working out the details of the event. Sign-up sheets will be available at the registration desk May 9 and 10.

Please read the brochure on our website and join us for four, fun-filled days in May.

## OUR NEW CHAMPIONS OF NATURE

Dave Hutchings

At our January Members' Night, three more Arrowsmith Naturalists were recognized for their outstanding contributions to the club and to the community at large.



The first CHAMPIONS FOR NATURE recognition went to **Sue Wilson**. Sue described herself as a "late-blooming" naturalist but, if that's the case, she has more than made up time. She served on the Executive as the General Meeting Secretary for most of seven years and now serves as the Outreach person. Moreover, Sue has been an enthusiastic member of our stewardship team, helping to remove invasive plant species from the Nature Trust preserve on the Englishman River Estuary.

*L-R: Lynne Brookes, **Sue Wilson**, Sally Soanes, Dave Hutchings*

Sue lives adjacent to a small pocket of parkland named after Shelly Creek, the only fish-bearing stream left within the City of Parksville. Large swathes of the park were covered in invasive lamium and other garden escapees and Sue decided to do something about it. She created the Friends of Shelly Creek Park to alert her neighbourhood to the threat to the fish in the creek, and enlisted help from neighbours, members of the BC Invasive Plant Council, and volunteers from ANats and elsewhere. Sue also volunteered with the Mid Vancouver Island Habitat Enhancement Society (MIVHES) to help protect and restore the endangered riparian areas along the creek. Not bad for a "late bloomer".

It should come as no surprise that **Lynne Brookes and Derrick Grimmer** were the other two recipients of the CHAMPIONS OF NATURE award. Shortly after arriving from the US in 2010, Lynne and Derrick joined Arrowsmith Naturalists and began to have a significant impact. Lynne has served as an almost perpetual President or Past President over the past 10 years and her efforts and drive have increased our scope of activities, and our profile and presence in the community. Aided by her background in biology and education, Lynne has strengthened our connection with BC Nature and the Nature Trust of BC, obtained grants for club projects, and worked to raise awareness of Hamilton Marsh. Her efforts have made ANats integral players in saving the French Creek Estuary Lands from development and transforming the area into a still-evolving French Creek Estuary Nature Preserve. Lynne has also been designing and coordinating insect, avian, reptile and plant inventories for the Preserve. She continues to teach bird identification courses, Tree Identification at Elder College, coordinates the Brant Wildlife Festival and has created (and continues to maintain) a widely-praised Wildlife Garden around a mini-wetland.

Derrick Grimmer has also been an invaluable member of the club, serving as a Director for five years, as a Treasurer for two+ years and as either Vice-President or Acting VP for four years. Whenever an executive position needed filling, Derrick has stepped up. He's also been a staunch supporter of all of Lynne's initiatives and many of the ANats community events. Without his organizational skills and his participation in transportation, set-up and take-down of tables, tents and displays, our community presence would be sorely diminished.

You must agree: Sue, Lynne and Derrick really are CHAMPIONS FOR NATURE.



Derrick Grimmer, Lynne Brookes

## STEWARDSHIP REPORT

Dave Hutchings

What with inclement weather, the usual busy-ness around Christmas and the January lull, our stewardship gang haven't visited the Englishman River Estuary since mid-November.

Much of our work during the fall involved an area with numerous English holly bushes/trees near the Mill Road entrance to the Estuary. The holly proved to be anything but "jolly". Not only was the foliage prickly and hard to manage, but the stems and roots of the plants demanded more strenuous effort to remove than we could comfortably manage. As a result, the plants were cut down, the stems cut into manageable lengths and the branches, with the "prickles" attached, gathered into large piles. How the stems still in the ground will be dealt with remains to be seen.

*(continued)*

*Stewardship Report (cont'd)*

Our main focus was to cut down the female plants, clip off the berries and bag them for disposal. At least the current crop of new berries would not be around to produce new seedlings. The next task will be the disposal of the piles of cuttings and, luckily, the Nature Trust crew has agreed to take on that task sometime in the near future.

Although the current Mill Road site still has daphne and ivy waiting for removal, Taylor Koel, our Nature Trust Field Operations Technician, has compiled a list of other areas of the Estuary where invasive plants will need removal. On our February 15th scheduled work day, Taylor will lead us on a walk through the ERE to point out the location of other invasive plant species which we can work to remove. Hopefully, this will give us a variety of areas in the ERE to focus upon and a greater choice of work involving differing levels of energy or strength.

Our stewardship at the ERE has been ongoing for close to 20 years and I was told that we are the only dedicated voluntary stewardship group working on any of the Nature Trust properties on Vancouver Island. We plan to continue this valuable work in the future as it provides such immense satisfaction as we see the positive changes we have made to the ERE.

We invite you to join our happy band, whenever you can, for some fresh air, exercise and some social fun. We meet on the first and second Thursdays of most months—when the weather permits—for a 1-1/2 to 2 hour work session, followed by coffee for those wish. Drop me an email ([dhutchings40@shaw.ca](mailto:dhutchings40@shaw.ca)) and I'll include you on our list.

**NEWS FROM THE OUTINGS COMMITTEE**

Toni Wyckoff

January has been pretty low-key with snowstorms and atmospheric rivers dampening our walks. Hopefully we can fit the rest of winter outings in between rain and wind storms.

Feb 10 Thames Creek trail will be for the HARDIER walkers as it is a longer trail, probably 2 hrs.

Feb 17 [Somass River Estuary](#), Port Alberni.

We have been invited by [Port Alberni Naturalists](#) to tour and hopefully see migratory birds. We will be meeting in PA at 9:30 am. A write-up will be sent out before.

Feb 18 Courtenay River A walk to observe migrating and nesting birds.

Mar 2 Nile Creek will be for the HARDIER walkers as it is a longer trail, probably 2 hrs.

Mar 13 Buttertubs Marsh (Nanaimo) A walk to see migrating and nesting birds.

Mar 23 Colliery Dam (Nanaimo) A forest walk up beside the creek.

Write-ups are sent out 10 days before and you reply to [markmazu63@gmail.com](mailto:markmazu63@gmail.com)

Please be aware that the estimated time of a walk will vary with the number of people who attend. We suggest you always bring a snack, in case it runs into lunch or afternoon tea.

**Stocking Creek and Falls** (Jan 24, 2024)

Images: A. Wyckoff



## Name Tags for Members

Bonnie Mullin

Members have often asked that we offer name tags that could be worn when attending events or at meetings. We were pleased to find that Gary Murdoch was willing to create wooden name tags at a reasonable cost to members.

If you are a member of Arrowsmith Naturalists, and would like one, you can order through me. Please send an email indicating:

- how you want your name to appear on the tag (full name, initial and last name or?)
- whether you want a magnet or pin closure

Cost is \$15.00 Payment can be made by cash, cheque (made out to Bonnie Mullin) or etransfer directly to me at [live2hike@shaw.ca](mailto:live2hike@shaw.ca)



## The 33<sup>rd</sup> Annual Christmas Bird Count

report by Jeanne Schippers



The ocean visibility was improved by warmer and calmer weather (allowing birders to stand still longer!) which might be the reason for the unusually high count of distant Pacific loons and common murres.

Total Species Observed was **114**  
(same as last year but lower than the record high of 123 species.)

The 2023 total bird count of 30,085 is similar to the last 10 year count with the exception of 2020 with 37,893 and 2022 low count of 18,587.

The number of bird count participants was 53 in the field, down from 60.

While we had a lower number of participants this year, those who came out made up for it by finding and counting large numbers of birds and species.

There were three new species at the feeder count: barred owls, Savannah sparrows and mourning doves

There was a high count of Pacific loons, greater yellowlegs and common murres and glaucous gulls, and some species rarely seen such as canvasbacks (3), redhead (1), and yellow-billed loon (1).

While this year's count of bald eagles was 183 (a bit higher than last year's 132) it is still far from the 300 average.

We heard of some feeders not being filled or taken down; maybe due to the avian flu. The 44 feeder participants put in 77 hours of effort and counted 2179 birds.

We had our traditional Post-Count Potluck. Thank-you to Toni Wyckoff and her crew. Lots of people came that day, and there were lots of interesting, tasty dishes.

Support for the feeder count was provided by:

[Buckerfield's](#) \* [Mulberry Bush Bookstore](#) \* [Cultivate Garden & Gift](#) \* [North Island Wildlife Recovery Centre](#)

Our count results contribute to the 124<sup>rd</sup> [National Audubon Society Christmas Bird Count](#), North America's longest-running citizen science project. Each year upwards of 2,000 circle counts are held in the Western Hemisphere by volunteer groups, with British Columbia conducting more than 90 counts.

A summary of the Christmas Bird Counts held in British Columbia can be found on the [Birds Canada website](#).

The success of our 33<sup>rd</sup> annual Christmas Bird Count is the result of the hard work of Lynne Brookes, coordinating the Feeder Count, and the organizing and compiling done by Susan Knoerr.

Thank you to the Arrowsmith Naturalists members and the birding enthusiasts of our community who gave their time and experience to support our project. We also greatly appreciate the support of the private landowners who allowed us access to large tracts of farm and forest for this day, and the cooperation of whoever provided the unusually good weather for our count day.

Anyone interested in putting their name forward for future counts, please let us know!

If a gathering of crows is a murder of crows,  
what do you call a gathering of squirrels?

A SCURRY of SQUIRRELS !

## Restoring Biodiversity in the Nature Preserve

Lynne Brookes

The French Creek Estuary Nature Preserve is a richly biodiverse ecosystem that encompasses many habitats that support diverse native plant and animal species. Approximately 62% of the Nature Preserve is globally endangered Coastal Douglas-fir Forest, one of BC's five zones that support the most at-risk species and ecosystems. 20 Species at Risk have been identified in the Nature Preserve!

Human disturbance has caused significant degradation to areas of the Nature Preserve, which threatens its biodiversity. While plans for habitat restoration are being developed, baseline studies are needed to establish current levels of biodiversity so we can compare the situation before, and after restoration to measure its success. Three biodiversity studies were conducted in the Nature Preserve in 2023: a tree and understory vegetation study; an insect survey; and an avian aerial insectivore survey.

### Tree Study

A permanent Forest Plot Project was implemented in the winter of 2022-23 with a grant from the BC Parks Foundation (led by the Mount Arrowsmith Biosphere Region Research Institute and managed by the Arrowsmith Naturalists.) Four permanent plots, with three vegetation sub-plots within each, were established. All trees and vegetation within these plots were identified and all trees were marked, identified, and measured.

### Insect Surveys

Led by Dr. Scott Gilmore, Biologist, Pacific Biological Station, and Dr. Joel Gibson, Curator of Entomology, Royal BC Museum.

**Butterfly Survey:** Conducted by 21 trained volunteers between May 7 and August 20, 2023

**General Insect Survey:** Conducted by Dr. Gilmore between May and September. Dr. Gibson was able to add some uncommon species to the new French Creek Estuary Preserve insect collection at the RBC museum.



Melitta Crescent, Z. Gilmore

#### What did we find?

- 502 individual butterflies and 16 different species were counted. Most common species were western tiger swallowtail and pale swallowtail (251) and cabbage white (157), which is an introduced species.
- A pleasant surprise was spotting a dun skipper, a federally threatened species and a BC Species at Risk.
- 140 insect species were counted which is a *low* number compared to surveys conducted in similar habitat.
- No blue dasher dragonflies were spotted, despite special efforts to find one. This is a blue-listed species reported to inhabit the Nature Preserve.

The number of pollinator species is extremely low (a common and unfortunate condition).

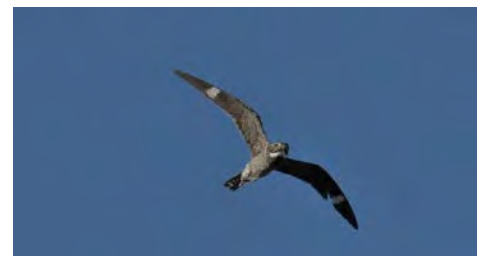
### Avian Aerial Insectivore Study

Conducted by: Alysia Boudreau, Vancouver Island University Researcher, with assistance from Heidi van Vliet MSc, Biologist in Training, Vancouver Island University

Weekly surveys in June and July: All bird species were identified and counted with a focus on avian aerial insectivores.

Blue-listed aerial insectivores expected in the survey: barn swallows, black swifts, purple martins, common nighthawks.

Other aerial insectivores expected in the survey: Vaux swifts, violet green swallows, tree swallows, northern rough-winged swallows.



Common nighthawk,  
iNaturalist, Guy L. Monty, CC-BY-NC

#### What were the results?

- 498 individual birds and 41 species were identified. Overall, avian diversity is high.
- Aerial insectivore diversity is low. Only 4 of the 8 expected species were counted of which only 2 of the 4 blue-listed species were counted
- Purple martin, a blue-listed species, was both the most abundant bird species onsite and the most abundant aerial insectivore species. This was probably due to the high number of nesting boxes installed at the French Creek Marina through the BC Purple Martin Stewardship and Recovery Program.
- Common nighthawk is the other blue-listed aerial insectivore present. Tree swallows and violet green swallows were also seen while barn swallows, northern rough-winged swallows, black swifts, and Vaux swifts were absent.

*Restoring Biodiversity in the Nature Preserve (cont'd)***What does this mean?**

Insect and avian aerial insectivore biodiversity is low in the Nature Preserve and probably has many causes including:

- influences beyond the Nature Preserve such as pesticides, climate change, and loss of habitat on migration routes; and,
- site-specific influences include habitat loss, degradation, and disturbance within the Nature Preserve.

Restoration of this degraded habitat should increase biodiversity and ecosystem resilience. Results from future replication of the baseline studies will help to measure restoration success and inform continuing restoration efforts.

Restoration commenced in November 2023 when 385 native plants were installed by community volunteers.

If you are interested in helping with habitat restoration, contact:  
saveestuaryland@gmail.com or arrowsmithnaturalists@gmail.com

## French Creek Estuary Nature Preserve Activities 2023–24

Denise Foster, Lynne Brookes, Jenica Ng-Cornish, and Barb Riordan

The French Creek Estuary Nature Preserve (FCENP) Stewardship Team provided its annual report to the BC Parks Foundation on the activities, research, and projects that took place during 2023. The “Team” represents these Stewardship organizations: Arrowsmith Naturalists, Save Estuary Land Society, Mount Arrowsmith Biosphere Region Research Institute and Mid-Vancouver Island Habitat Enhancement Society. The following information was selected from this report.

### Development of the FCENP Management Plan

The FCENP Working Group, comprised of the Stewardship Team and Elaine McCulloch, RDN Senior Parks Planner, has met biweekly since January 2023 to develop a draft Management Plan to direct the goals, recommendations and actions for the protection, restoration, and appropriate community enjoyment of the Nature Preserve. The plan is informed by science, public engagement and provides for adaptive management.

### Habitat Restoration of Former Bike Jump Area (conducted by RDN Parks and the FCENP Stewardship Team)

In November a dedicated and hardworking team of 25 volunteers restored a greatly impacted former bike jump area in the FCENP. Over five workdays invasive species were removed (primarily English ivy and Himalayan blackberry), 385 planting holes dug and amended with compost, bone meal, planted with 385 native trees and shrubs and a thick layer of bark mulch applied. Native plant species included grand fir, western red cedar, big leaf maple, dull Oregon grape, sword fern, thimbleberry, oceanspray, snowberry and red elderberry. The final step was pounding in T-bar stakes and constructing six foot exclusion fencing to protect those plants vulnerable to deer browse. Many local residents came by and commented how pleased they were to see the area being restored.



Image by Deb Freeman

Funding by: Parksville Qualicum Community Foundation \$4000.00 grant to the Save Estuary Land Society, \$1,411.00 from the Society's BC Gaming raffle, and funds from RDN Parks.

### Projected FCENP Activities and Projects 2024

- **Research** - Two onsite surveys planned: bats and amphibians/reptiles
- **Invasive plant removal** - ongoing
- **Habitat Conservation Trust Foundation Grant Application** - The 2023 grant application seeks financial support for the first 3 years of long-term multi-year restoration efforts required to improve ecosystem functions for native fish and wildlife at the FCENP. (Prepared by Jenica Ng-Cornish, Assistant Manager, Projects, Mount Arrowsmith Biosphere Region Research Institute with input from Lynne Brookes, Denise Foster and Barb Riordan.)
- **Brant Wildlife Festival 2024** – Tour of the FCENP (registration limited).

## Bald Eagle & Great Blue Heron Nest Identification & Monitoring Report

Sandra Gray and Denise Foster



Photo by Wayne Duke



Photo by Deborah Freeman

CONGRATULATIONS EVERYONE for your contributions to this database of information, a critical step in preventing the loss of nest trees and habitat threatened during land development.

We are pleased to report that the final Jan–Aug 2023 data, submitted to the Provincial Ministry of Water, Land & Resource Stewardship, was recently uploaded to the Wildlife Tree Stewardship Atlas (WiTS). Data mapping was done by Community Mapping Network (CMN) Directors who are volunteers.

### Summary of Final Nest Statistics

- |  |   |
|--|---|
| <p>1. Areas Covered</p> <ul style="list-style-type: none"> <li>Deep Bay – 6 sites</li> <li>Big Qualicum River - 2 sites</li> <li>Little Qualicum River to Madrona Pt (Parksville Qualicum Beach Wildlife Management Area shoreline &amp; inland) – 56 sites</li> <li>Nanoose –22 sites</li> </ul> <p>3. Bald Eagle Nest Sites</p> <ul style="list-style-type: none"> <li>Active – 51                      Not active – 20</li> <li>Failures – 9                      Inconclusive results – 9</li> <li>Chicks observed April - August – 100 (various ages)</li> <li>Chicks observed 10–12 weeks old – 64 (many likely fledged)</li> <li>Chicks reported perished – 4. (Gaetjen (2), Blower Rd (1), Craig Bay (1))</li> </ul> | <p>2. Total Nest Sites Reported</p> <p>86 sites – info summarized, conclusions determined and submitted from 1355 reports</p> <p>4. Great Blue Heron Nest Sites</p> <ul style="list-style-type: none"> <li>Active – 3 (French Crk, Qualicum Beach, Deep Bay)</li> <li>Not active – 8</li> <li>Chicks known to fledge – 10</li> <li>Chicks reported perished – 2</li> <li>Deep Bay rookery – about 30 nests &amp; at least 30 herons, unknown number of fledged chicks by July 25th, likely some predated by eagles</li> </ul> |
|--|---|

Factors affecting the above counts: a failure may count as an active site; active early season nests may have inconclusive results; chicks seen early may perish unknowingly, many sites are difficult to view. Many previously used or alternate nest sites were checked for activity and most still used as perches for guarding, feeding or mating.

In our survey area we monitored 43 sites with new or older nest trees previously unreported to the Province or local governments which will be assigned a nest ID# by the Province.

There are approximately 40 additional known eagle territories between Deep Bay and Lantzville not monitored in our project. Some were inventoried for the Regional District of Nanaimo in 2017 (Area H - Deep Bay to the Little Qualicum River) and in 2018 (Area F – Errington & Coombs). Many of these are on the WiTS Atlas.

The following link opens the WiTS Atlas map. Our 2023 eagle & heron nest sites and those reported by other volunteers or Provincial staff are shown as red dots. The remaining sites are older known nest trees. Ours was the only organized group monitor project in 2023. For privacy reasons names and contact info were not included in summary reports. Save Estuary Land Society volunteers are credited; S. Gray listed as contact.

Here is the link to this map titled: Wildlife Tree Stewardship - Survey123 Data Management

<https://cmnet.maps.arcgis.com/apps/webappviewer/index.html?id=e329917f64eb433a8b5b63a7ca567a17>



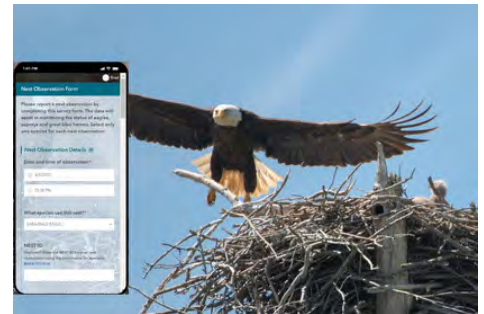
## Monitoring Eagle and Heron Nests

*Submitted by – Patrick Robinson, Ministry of Water, Land and Resource Stewardship*

Many of you have heard of the Community Mapping Network (CMN), created to support conservation, inform development decisions, and increase public awareness of wildlife issues. The [Wildlife Tree Stewardship Atlas \(WITS\)](#) and the [Great Blue Heron Atlas](#) each contain historical locations of nest trees and nesting data of bald eagles, osprey and great blue heron, (provincially important) bird species. Grassroots groups like the Arrowsmith Naturalists and the public have contributed significantly to the data collected and now that process is more efficient and convenient.

In 2023, a new data collection app called the WiTS Mobile App was piloted to streamline the collection of nest and colony locations and the associated ecological observations. Anyone can download the app for FREE and immediately begin contributing to the conservation of bald eagles, osprey and great blue herons anywhere in the province.

Follow these links to download the [WiTS Mobile App](#) and [Instructions](#) on how to use it or download from the [CMN's website](#). If you have questions about the app, please email [Patrick\\_a\\_robinson@gov.bc.ca](mailto:Patrick_a_robinson@gov.bc.ca)



Thank you Arrowsmith Naturalists for all you do!

*Patrick Robinson, Ecosystems Biologist, West Coast Region, BC Ministry of Water, Land and Resource Stewardship*

## Seaside Nature Park Update

Pat Jacobson

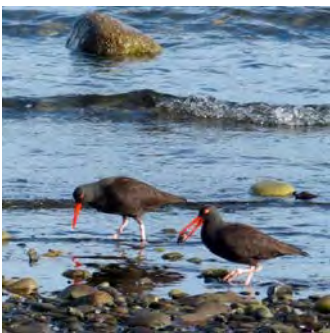
It was on BC Rivers Day in September 2018 that we celebrated the dedication of the Faye Smith Pavilion. The project team of Qualicum Beach Streamkeepers, Arrowsmith Naturalists and the Town of Qualicum Beach had completed the construction of the roofed Pavilion, installed extensive interpretive signage around the site, and established planted areas that reflected the natural coastal ecosystem.

In 2021, a collection of carvings made by Jesse Recalma of the Qualicum First Nation was added to the Pavilion as an essential element in the history of the natural world surrounding us.

Here we are now in 2024, with Covid mostly behind us, and finding that we need to do some “refreshing” and “replanting” of the planted areas and some of the signage.



Panorama Signs – many landmarks are identified with English and indigenous names.



Oystercatchers – This pair love where they live and are seen regularly.

On January 15th, Lynne Brookes, Tom Whitfield and myself met with Lynette Twigge, Jeaninne Oakes and Jason Gray of the Town Staff. We collaborated on a plan for a “work bee” with tentative dates set for **February 21st or 28th** to get together at the site. Watch for a call out for volunteers to help with weeding and replanting.

Our park gets lots of visitors and we are looking forward to having the participants in the BC Nature AGM join us in May to experience the panorama of the Salish Sea with the islands and mountains beyond, and to learn more about our special place in the Mount Arrowsmith Biosphere Region.

## Nature Notes

*from Tom's ANats Facebook page*

- Parksville Counselor Amit Gaur proposed that the City's Official Community Plan include an amendment to only allow low-density development along sensitive areas of Englishman River. (*Maybe neighbouring municipalities will be inspired to do the same! SR*)
- Lots of bird walking opportunities upcoming! While you're waiting for the start of the amazing [Brant Wildlife Festival \(April 5-8\)](#), why not try the Backyard Bird Walks available in Parksville/Qualicum Beach every Tuesday morning (or Nanaimo every Sunday morning). Check the website first [www.thebirdstore.blogspot.com](http://www.thebirdstore.blogspot.com)

## Karmutsen Lava Flows – the Core of Vancouver Island

Terry Taylor

Most of Vancouver Island is composed of volcanic rocks, and most of these belong to the Karmutsen Formation. They were submarine lava flows that erupted onto the floor of the Pacific Ocean 230 million years ago during the Triassic Period. These lava flows were extremely active and poured basalt onto the ocean floor for five million years. During the same time, the dinosaurs were just starting their evolution.

Mount Arrowsmith is made of Karmutsen volcanic rocks. They were extruded onto even older rocks, and together they probably formed an island chain similar to Hawaii. This island group has been named Wrangellia, after Wrangell, Alaska, where these rocks are also found. These islands reached the coast of North America via plate tectonics about 90 million years ago and can be found along the coast of northern British Columbia and Alaska. But their arrival was preceded by a number of other such island arcs. In fact, most of British Columbia was not originally part of North America. You have to go to the Rockies before you reach the real North America. The Rockies are sedimentary deposits from the continental seafloor bulldozed up by all those islands ramming into North America.

There are only two rocks that predate the Karmutsen eruptions in our immediate area. The Horne Lake Caves were formed in limestone laid down in a tropical sea about 300 million years ago. Nanoose Hill is made of clay deposits from around the same time period that were melted together by heat and pressure.

The low-lying east coast of Vancouver Island is different from the central mountainous part of the island, although it originated from it. When Wrangellia docked with British Columbia, streams eroded the rocks and carried gravel, sand, and silt into the strait between the island group and the mainland. The sediments collected on beaches and in underwater deltas. Every few centuries an earthquake caused the gravel to slide into a deep submarine canyon. The finer sediments collected along the shoreline. Around 40 million years ago two other small island groups collided with Vancouver Island, forcing it to move eastward buckling the sea floor and raising some of it above sea level. These events produced the lowlands on which we now live.

Little Mountain is composed of conglomerate, the gravels deposited in the deep canyon about 80 million years ago. Some of the finer sediments containing fossils of sea life are exposed on Hornby Island. The old coal mines at Nanaimo utilized the remains of vegetation that flourished in marshy areas just above sea level.

Streams and also the glaciers of the Ice Ages have deposited many different kinds of stones along our beaches, including some nice examples of the Karmutsen lavas. One of the most noticeable examples is a stone that contains a mixture of lava and quartz. It has been called *Dallasite*, after an exposure of this rock at Dallas Road in Victoria.

*West Coast Fossils* by Rolf Ludvigsen and Graham Beard gives an excellent overview of the geology and paleontology of Vancouver Island. *Physical Geology* by Steven Earle, [an online textbook](#), contains detailed information on the geology and formation of British Columbia and Vancouver Island. The above information is, to a great extent, gleaned from these two publications.



Dallasite stone, R. Taylor

### Bats in BC – Conservation

There are increasing concerns about the impacts of climate change, human development and white nose syndrome on the bats that live in BC. There are 15 species of bats protected under the Wildlife Act and many are already listed as species-at-risk or endangered in the province.

If you are attending the BC Nature AGM, check out the May 10 presentation by the BC Community Bat Program.

- Bat Basics, Community Bat Programs of BC <https://bcbats.ca/bat-basics/>
- Take a look at the HAT Bat Guide - <https://hat.bc.ca/bats>
- Check out Nanaimo's Bat Conservation Project - <https://nalt.bc.ca/bat-conservation/>
- Be aware of efforts to protect bats - <https://hornelake.com/protecting-bc-bats-from-wns/>
- Learn more about building bat boxes <https://wcsbats.ca/Our-work-to-save-bats/Batbox-Project>

## Silent Fliers: Owls in Our Forests

Claire Summers

During a recent Arrowsmith Naturalists' Members Night, Claire Summers shared images and anecdotes of the owls she has photographed in local forests and cared for when she volunteers at the North Island Wildlife Rescue Centre. She spoke fondly of the [long-time owl residents](#) at NIWRA who sustained injuries that prevent their release back to the wild; describing the penetrating gaze of Farley the great gray owl, the striking plumage and bright white faces of Jelly, Joey and Cinnamon, the barn owls; and, the enigmatic stares of Elsa the snowy owl.

Part of Claire's volunteer duties is to prepare food for the owls, raptors and corvids. When she began volunteering she was initially surprised at the unique tastes some of the birds had. "Barn owls like their quail cut up but the peregrine falcon like his meat skinless," she said. "And the ravens' favourite is the yolk of hard boiled eggs."



Release of barred owl

Ravens are known to be smart and Claire enjoys observing them as she cleans their enclosure. The two ravens, Loki and Thor, live in the two-part enclosure, so she has to exit one side before she can clean the rest. One day, as she entered the outdoor side, she realized she'd dropped the scrub brush on the floor of Loki's cage. By the time she returned, Loki had spotted the brush, picked it up and dropped it at her feet as she entered.

Claire has also had the pleasure of helping to release injured birds that had been nursed back to health at NIWRA. She recounted the different experiences, recalling a barred owl that was so eager to get out of the crate and then only flew as far as a nearby tree branch where it spent time testing scents in the air and swiveling its head around to capture sounds that would help it understand its new place. A different experience entirely was the release of a tiny pygmy owl that needed coaxing to step outside of the protective shelter of the carrier.

I spoke with Claire after the meeting, curious to know more about her knowledge of owls. She remembers always being interested in birds, from her younger days as she spent time in the bush, exploring the forest lands of northern Ontario with her friends. "I've always had an awareness of birds and could spot them quickly and often recognize what they were doing," she said. "I always wanted to learn about them." Owls were a long-time favourite and an important part of her Algonquin background. "Some people are a little afraid of owls or think they bring negative omens. But we know them as night messengers."

When Claire moved to Vancouver Island, it took a little time to find owls but soon she was seeing and photographing them during her walks and hikes around the Oceanside area. She explained how owls fly silently due to the structure of their feathers and are efficient hunters because of their acute hearing. The somewhat disconcerting habit that owls have of turning their heads 270 degrees is another characteristic that aids hearing, as is the positioning of their ears (offset on opposite sides of their head).



Northern saw-whet owl

And, a final piece of advice she shared, to prevent more owls from disastrous encounters with cars, "Don't throw apple peels, cores or any food out the window of your car!" Many of the injured owls brought to NIWRA are found along local roads and highways.

## Crossing the Dateline: A Visit to Australia

Roger Simms

On September 15th 2023 my Maggie and I started our next adventure, flying across the Dateline to arrive in Sydney, NSW, Australia on Sept 17<sup>th</sup>.



Masked Lapwing

I was picked up by a friend, Barry Lancaster, for a day's birding along coastal areas, ponds and lakes. Despite the fact that it was the hottest Sept day on record, we saw some good birds including my first Australian Gannet and a day's total of 58 species, plus one humpback whale, two water dragons and one turtle.

On Sept 20 we flew to Darwin in the Northern Territory. It was another hot day but I found seven different birds including a Masked Lapwing, which came down on the street looking to feed.

(continued)

*Crossing the Dateline (cont'd)*

The next day we visited the George Brown Botanic Gardens and got a very close-up look at an Orange-footed Scrub fowl. That evening we ate our first (and last) kangaroo steak.

We traveled by train (the Ghan Expedition) from Darwin to Adelaide Sept 23<sup>rd</sup> to 26<sup>th</sup>.

We stopped at Alice Springs and visited an aviary with dark tinted glass that allowed us to see desert birds in their environment. Continuing on, we visited Coober Pedy where most people and local museums are built underground.

We arrived in Adelaide on Sept 26. While Maggie flew to Perth to spend some time visiting our daughter, I spent five days birding with our friends in Willunga, about 40 minutes south of Adelaide. Ann and Les are more fanatical birders than I am and they found 78 species of birds for me and I attended a Birds South Australia meeting.

I flew to Perth and spent most of my time helping to tidy Melanie's garden. I did have one more birding outing with Frank whom I had met in 2018. We went to Dryandra Woodland National Park and found 59 species plus one unusual mammal whose name I forgot. We also met a couple who took Maggie and I to Herdsman Park for more birding.

Our last three days were spent in Sydney. We left Sydney at noon on Oct 18<sup>th</sup> and arrived home at 11.00am the same day. We had a most enjoyable trip with 37 "lifers" out of 237 birds seen, although some were repeats seen in other States this trip and now a total **Australian Bird List of 374 species**, spread over three trips.

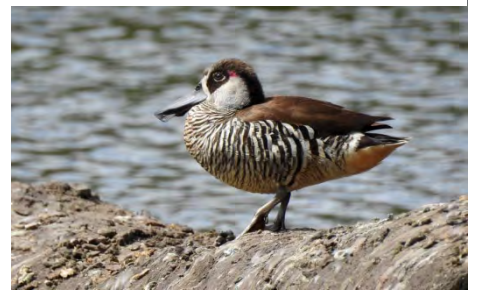
Nankeen Night Heron



Rainbow Lorikeets



Pink-eared Duck



Trees poem, found on Facebook

Sally Soanes



Trees

Trees are the kindest thing I know  
They do no harm, they simply grow,  
And spread a shade for sleepy cows,  
And gather birds among their boughs.

They give us fruit in leaves above,  
And wood to make our houses of,  
And leaves to burn on Halloween,  
And in the spring new buds of green.

They are the first when day's begun,  
To touch the beams of morning sun,  
They are the last to hold the light,  
When evening changes into night.

And when the moon floats on the sky  
They hum a drowsy lullaby,  
Of sleepy children long ago..  
Trees are the kindest thing I know.

[Harry Behn](#)

Sept 1898 to Sept 1973