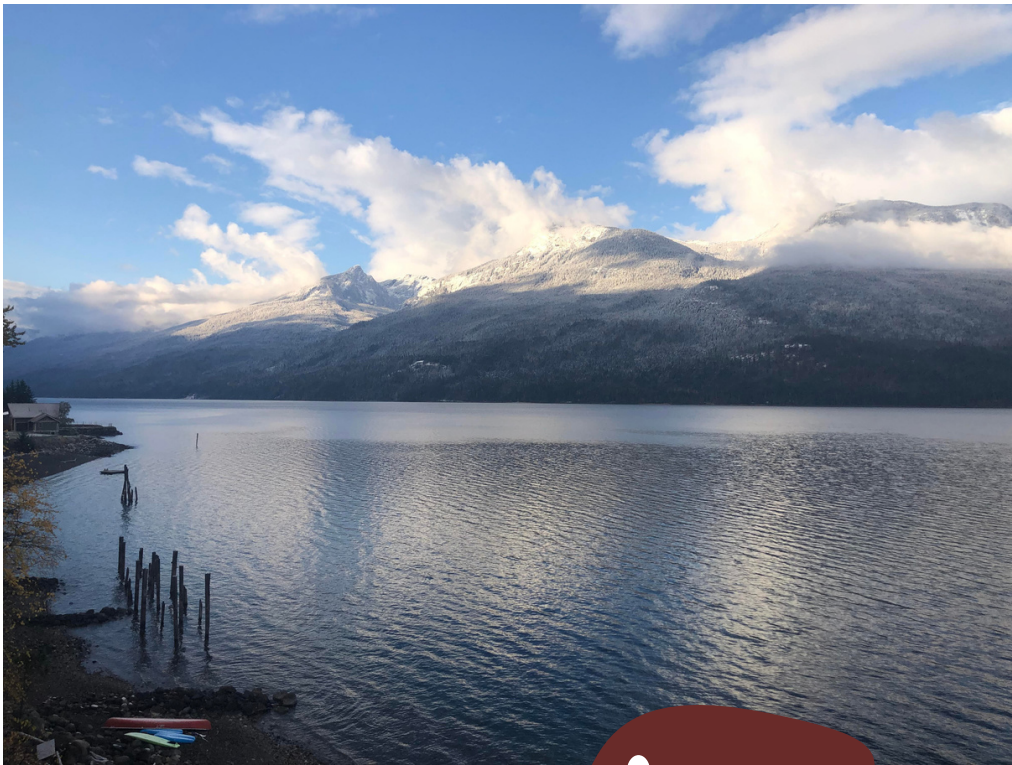


THE OSPREY

NEWSLETTER OF THE WEST KOOTENAY NATURALISTS'
ASSOCIATION



First snow in Silverton on Slokan Lake - October 27, 2023

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2023 - 2024



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DEADLINE FOR SUBMISSIONS

The deadline for the next newsletter is FEBRUARY 15, 2024. Material accepted by the Editor any time up to this date. We reserve the right to edit for space, clarity, spelling, and syntax. Major changes will be discussed with the contributor.

Looking forward to seeing your submissions!



FIELD TRIPS

1. Common courtesy and common sense dictates that you inform the contact person to confirm your attendance at an event or program, AND THAT YOU CONTACT TO CANCEL if you later find that you cannot attend. Nothing is written in stone and changes may have to be made from time to time, due to weather conditions or personal reasons. Do not wait until the last minute to contact if you are interested in any of our events as leaders may have already left, especially if camping or long distances are involved.

2. The leader of an outing is responsible for:

- Getting the appropriate waiver form signed by every person attending. There are TWO waivers - one for all attendees and one for guests (one-day membership + \$2). Print/photocopy the guest waiver beforehand and keep extra copies just in case. Forward member waiver/sign-out sheets to Diane White, and day membership forms and accompanying dollars to Paula Neilson immediately.
- Making sure that no one is left behind with car trouble at the parking area, especially in winter.
- Arranging to have the trip report forwarded to the newsletter editor. The leader may delegate this, of course. The writer also has the obligation to get the report submitted BY THE DEADLINE.

3. Make it a policy with the entire group to keep the person behind you in sight. If your follower on the trail is lagging, slow your pace to keep that person in sight. If everyone in the group continually checks to make sure they can see the person behind them, it is impossible for anyone to get into serious trouble. If you split into groups, do not allow any one person to "take off" by him/herself.

4. NO PETS allowed on any of our outings.

Do you have any suggestions for outings, speakers, projects, or improvements to the Club?
Contact a member of the Executive!



TRIP REPORT

At the end of April our group of six headed out on a short loop trail up and over the bluffs at the end of 14th Ave in Castlegar and back along the Waterline Climbing Walls.

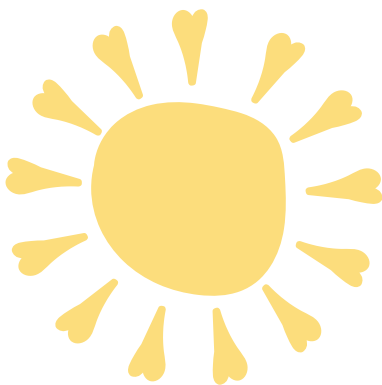
We took a leisurely pace and enjoyed one of the first warm and sunny days of spring.

Glacier Lilies were the undisputed star of the show, erupting and rioting all along the trail and across the forest floor. Solomon's Seal shoots were just starting to emerge.

Flycatchers, warblers and vireos were heard but not seen.

We removed the little garbage we spotted along the way, including some pieces of broken glass. We marveled at the tall trees growing out of the cliffs in some spots and at the old semi truck flatbed trailer that has several mature trees growing through it, anchoring it in place.

-Tarah Reesor



OLD GROWTH CEDARS

BY JAMIE BASTEDO

I was stopped in my tracks when I beheld this remarkable pair of old-growth Western Redcedars (*Thuja plicata*) growing on the Tall Trees Trail just outside of Prince Rupert.

Among the many stories these two giants tell, is their evident germination - likely 800 or more years ago - on a fallen "nurse log", or possibly a stump, that has long since rotted away.

Hence the hollow space below the trees, now an attractive denning habitat for bears or other sheltering mammals, plus the extensive, far-reaching root system that once wrapped around the dead but life-giving wood.

For more information on the Tall Trees Trail visit:

<https://www.alltrails.com/trail/canada/british-columbia/tall-trees-trail>



ALLIGATOR LIZARDS

BY TARAH REESOR

On a Naturalists' outing to the Mel Deanna Trail in mid-May we spotted this pair of Northern Alligator Lizards in a bite hold, motionless on a sun-warmed rock beside the trail. The male holds his mate, guarding her from other males for as long as two or three days.

I uploaded a photo to iNaturalist. The app is great at identifying species of plants and animals, but also connects researchers around the world. Thirty minutes later, I received a message through the app from Greg Pauly, the Curator of Herpetology at the Natural History Museum of Los Angeles County. He's been studying Alligator Lizard mating behavior for more than eight years. He said he was excited to see the post - he sees only one incident of Northern Alligator Lizard mating behaviour posted for every 10 or so of the 'very urban' Southern Alligator Lizards.

If you have current or historical photos or video of Alligator Lizards in the bite hold, mating or wrestling, Greg would love to see them. Upload your images to iNaturalist, or send them to him directly at gpauly@nhm.org.

For more on his work, check out the project web page and video linked here:

<https://nhm.org/stories/look-out-amorous-alligator-lizards>

<https://www.youtube.com/watch?v=gtUFZMEt1Fw&fbclid=>



Northern Alligator Lizards in a bite hold



I N M E M O R I A M

BY BETH TRUANT

Dorothy Beetstra (1925-2023)

Dorothy Beetstra was an exceptional person: she was, among many other things, a nurse and also a “naturalist” in all senses of the word. The outdoors was a place she loved. Planning and organizing large events was also where she excelled. She (seemingly effortlessly) motivated others. To know her was a true gift.

Dorothy was an avid birder and hiker with the West Kootenay Naturalists’ Association. At her home, she had a beautiful garden, and had a wealth of knowledge about plants. She was the president of the association in the early 1990’s and even her husband Jan also took a turn to be president. The love of nature was in her blood, and it was appreciated by her whole family!

Beth remembers Dorothy as a role model who encouraged her to join this club where Beth learned more about birds, plants, and flowers. Together they participated in many wilderness hikes and snowshoe outings in the Greater Trail areas. Dorothy exhibited exceptional organizational skills. This skill played a key role in organizing catered banquets and inviting guest speakers to present on their travels. She wanted all to discover more about nature themselves—especially from other parts of the world!

As a public health nurse, Dorothy encouraged Beth to upgrade her formal education to pursue a career in this field. Beth was appreciative of Dorothy’s leadership and

knowledge in both the out of doors and academic pursuits. Dorothy and Beth eventually enjoyed working together in the same health unit for many years.

She will be missed by so many, and she will not be forgotten.

To read more about Dorothy’s life, see her online obituary at:

[memorials.clarksfuneral.ca](https://www.clarksfuneral.ca/memorials)



“BY-THE-WIND SAILOR”

VELELLA VELELLA

INTRODUCTION AND PHOTOS BY PAULA NEILSON
 SCIENTIFIC ARTICLE BY PETER WOOD

In April of this year (2023) I flew overseas to visit my son and daughter-in-law in St. Julian's, Malta. A short walk from their place brings me to the Mediterranean Sea. Here a person can walk a long distance on pathways at several levels above the water.

On April 22nd, walking along the bottom level directly beside the sea, I witnessed an unusual phenomenon. Filling up a good portion of a little bay, floating motionless on the water's surface, were small blue and white organisms. I wondered if they were indeed lifeless.

A small crowd of people gathered along the edge of the rocky beach and walkway. A fellow picked one up that was

stranded on the shore, therefore likely dead, and set it down for all to see. On closer inspection, it appeared to be an oval-shaped blue shell etched with white concentric lines and bearing a diagonal transparent stiff sail. The underside was hollowed, the edges revealing small brownish tentacles. I took photos.

A woman came along and said they were called “by-the-wind-sailors” Back at the apartment, I conferred with Google, found their scientific name and some fascinating information about them. I sent the photos with a brief summary to one of our local naturalists, my friend and mentor, Peter Wood.

Peter decided to investigate further and wrote the article that follows. The next day these little sailors were gone. The wind had moved them on.



Velella velella, “By-the-Wind-Sailor”.

(Other species of *Velella* have been recognized off California) Some notes on its biology and taxonomy.

When I received the photos from Paula, I recognized the animals from marine biology studies I did when I was a student at the University College of North Wales in Bangor back in 1961. So, I



reviewed my UK biology memories and old textbooks, planning to provide extra feedback to Paula. Below is a shortened summary of what I prepared.

These “jelly fish” are commonly called “By-the-Wind-Sailor”. They are reportedly common in warm seas, living on the surface of the water. Very occasionally they are found on beaches in Britain. Shoals containing millions of them have been found out at sea. One “swarm” reported by a sailing expedition, was estimated to be 260 km long. They are occasionally cast, by winds, onto beaches, piling up in mounds 50 cm high.

Each Velella is about 5 cm long and about 3 cm wide forming a dome-shaped oval float 2 cm thick. It is an opalescent sky blue colour with a vertical sail, projecting upward and angled diagonally across the float. The sail allows the animal to take advantage of any wind to drive it over the sea. Specimens are found with their sail angled either to the left or to the right of the long axis, but not usually both types in the same shoreline deposit.

The prevailing winds soon sort the flotilla into two groups going in different directions. This is good for the security and dispersal of the species. Below the float, dangling down into the sea water, are a fringe of many slender, feeding tentacles with stinging cells. These are arranged around an array of sturdier reproductive ‘danglers’ which in turn encircle a central unit containing a mouth cavity from which radiate tubular gastrodermal canals into the



body of this colonial organism. These distribute the digestive products of the food, tiny fish and invertebrates, chiefly plankton, captured from the sea by the tentacles and their stinging cells. Each Velella is, in fact, a colony of interconnected, polyp-like organisms, each with specialized functions and all working together for the good of the colony.

This is not unlike the specialization that occurs in colonial insects such as honeybees, where there are workers

(sterile females), drones (males) and a queen (the egg-laying female of the colony). Even as the workers age, they go through a series of specialized roles for the colony, e.g. cleaners, nurses, guard bees and field bees to mention some.

In these insects the individuals live together in their ‘nest’ but roam freely to do their work. In the case of Velella and others in the taxonomic Suborder Siphonophorida, Order Hydrozoa, Class Hydrozoa, the colonial individuals are



rconnected for life, (as are the polyps of Corals, but in that case, without the specialization of life-supporting tasks).

The Velellas illustrate yet another way in which Nature is so varied and fascinating. They are classified in the large taxonomic Phylum Coelenterata / Cnidaria. An example of this group, the Class Hydrozoa, that one may remember from high school days, is Hydra, the tiny fresh-water cnidarian that some of us examined, alive, under dissecting microscopes, when we were students in Biology 11 or 12.

The way the body of this colonial organism is organized was outlined above. More specifically, beneath the oval float is one large feeding polyp. This is surrounded by a ring of reproductive polyps. From time to time these bud off short-lived, free-swimming medusae.

Surrounding the reproductive polyps is the outer ring of many tentacles, each tipped with cnidoblasts, the stinging cells that immobilize the tiny food items, which are then conveyed to the central mouth polyp by the tentacles.

The free-swimming medusae produce gonads (male and female sex organs) which release gametes (sperm and eggs) into the sea. On fertilization of an egg by a sperm the resulting diploid cell (the zygote) develops, by cell multiplication and differentiation, into a new, smaller Velella which feeds and grows to maturity, at which point its reproductive polyps start budding off medusae.

That's probably enough academic biology for one article. Any good textbook on Invertebrate Biology can provide more details about Velella and about its more notorious, close cousin the "Portuguese man o' war", (of Agatha Christie fame).

