

Koma Kulshan Chapter WNPS Newsletter

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Find Koma Kulshan Online

Website: www.wnpskoma.org **Facebook**: WNPSKomaKulshan

Virtual Newsletter

The Koma Kulshan quarterly newsletter is now also available in electronic format. To receive the newsletter by email, send an email to jkling@gmail and indicate whether you prefer to receive the newsletter in electronically only, or if you would like to receive both the print and email versions.

Another excellent way to keep up to date virtually is by joining the WNPS-Koma email list. You'll get announcements and some discussion about native plant issues. To subscribe, send an email to: WNPSDiscussionGroup+subscribe@groups.io

You can also follow us on Facebook: https://www.facebook.com/kkchapterw nps/

2023 Calendars

Washington Native Plant Society calendars are now available. The price is \$11, tax included. You can purchase one (or more!) by contacting Mark Turner at 360-671-6851 or by email at mark@turnerphotographics.com. After you place your order they can be picked up at Mark's house at 4682 Wynn Road, Bellingham.

Winter (January, February, March) 2023

President's Corner

by Lyle Anderson

I hope your holidays were merry and bright. As I write this it is 16° outside. I shoveled the driveway earlier, and as I heaved snow on the plants lining it, I couldn't help but wonder if the Oregon Grape and Henderson's Checkermallow were saying, in a language unbeknownst to me, "Hey, we'd appreciate it if you might not pile that snow on my branches."

This thought was inspired by an episode of the podcast 'Radio Lab,' which is one of my top three favorite shows; it always has interesting and enlightening subjects and guests.

This particular episode, titled "Smarty Plants" (https://radiolab.org/episodes/smarty-plants) was based on the work of Monica Gagliano, PhD, who has done research that questions, among other things, our concepts of perception and intelligence in – you guessed it – plants.

Mimosa pudica has as one of its common names the sensitive plant due to its habit of immediately folding its leaves when touched. Dr. Gagliano performed some novel experiments with this species – three are discussed in the podcast – one of which involved dropping the plant from a height of six to eight inches onto a soft surface (as she said, no plants were harmed during this experiment). The plant defensively folded its leaves as might be expected. However, after several iterations, the leaves ceased to react, as if it had "learned" that no harm would result. And it "remembered" this after almost a month.

I'll leave you to listen in to the podcast, except to say that Dr. Gagliano has a website, monicagagliano.com, and that going forward, I will try to remember to ask forgiveness the next time I pull a weed or eat a *Rubus parviflorus* berry.

On a related note, the above reminded me of one of our chapter presentations from many years ago. The presentation was given by Elizabeth Van Volkenburgh, who completed a manuscript by Dr. Dov Koller after his death called *The Restless Plant* (Harvard Univesity Press, 2011). In the preface by Dr. Koller, he says, "...it is intended for the general, educated lay public...". Here is an excerpt from the book: "Gravitropism is positive in branch roots and negative in branch shoots, and the opposing forces are hyponastic and epinastic, respectively...". Thankfully, there is a glossary in the back of the book. I do wonder, though, who the lay people he refers to were.

Oregon Spotted Frog Restoration by Jim Kling

In October, long-time Koma Kulshan member Wayne Weber was slated to talk about birds and plants. Sadly, Wayne passed away in the spring. To fill his outsize shoes (and booming laugh), Stephen Nyman and Vikki Jackson of the Whatcom County Amphibian Monitoring Program talked about removal of reed canary grass during restoration efforts in Whatcom County aimed at boosting populations of the Oregon Spotted Frog. The Whatcom County Amphibian Monitoring Program is an umbrella project of the Wildlife Conservation Trust and is building a community database for use in conservation of a range of species.

Oregon spotted frogs have always been limited in geographic range due to their specialized habitat needs, but they have declined in recent years. In a reversal of the usual extirpation story, the frogs were actually discovered in for the first time in Whatcom County in 2011 at a 1.5 acre site owned by the Whatcom Land Trust – one of just a few locales where they can be found in Washington state. There is a related species, the Columbia spotted frog, which is found east of the Cascades. The two likely speciated as a result of geographic separation during the last glaciation. (cont'd p2)

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WNPS 2023 Study Weekend planning

by Lyle Anderson

As those of you who attended our annual holiday party (thank you Mark and Brian) are already aware, we will be hosting the WNPS annual Study Weekend July 28-30. We hosted the Study Weekends in 2007 and 2015, so it seems it's time for us to invite WNPS members from all over the state to our neck of the woods to marvel at our botanical and geological treasures. In keeping with tradition, we will be using the Mt. Baker Ski Area facilities for evening meetings and the Firs Chalet to lodge the majority of attendees. We will need help in arranging and coordinating the following:

- Facilities
- Money management
- Publicity
- Registration details
- Sleeping, camping and other nearby accommodations
- Field trip locations and leaders
- · Speakers and presentations
- Food service (catering)
- Field trip report compilation
- Arrange for good weather (just kidding...sort of)

There is a lot of groundwork to be done, so there will be a Zoom meeting at 7:00PM on Thursday, January 12 at 7:00 PM. All members are encouraged to attend and see what's involved and possibly help assist in preparations. You can register for the meeting at: https://tinyurl.com/4wncyk57

The Joys of Leading a Field Trip

by Eric Worden

Arriving at the trailhead rendezvous point, butterflies flit in my stomach. Today I'm leading a WNPS field trip, but I'm no botanist: I can't tell my *Tellimas* from my *Tiarellas*! A number of eager hikers are already waiting for me, decked in perky boots and broad-rimmed hats. Their broad smiles and handshakes reassure me. Prepared with paper forms to sign, and recitation of a few bullet points of WNPS hiker business, our group is thus organized, and they follow me like a gaggle of ducklings down the trail. The textures and motions of the limbs and leaves above, the sparkling light filtering through the canopy, and the smell of spring arouses friskiness in my group. I know this trail and I stop to share a few of my favorite secrets: the verdant but hardy licorice fern on this rock is several years old, and in late summer it loses all its leaves, leaving hairy caterpillar-like roots on the rocks. What is the Latin name? I don't know, but the next hiker over is glad to tell us. Notice something on the ground here: what's up above, high in this bigleaf maple? An owl raising some chicks. Next, the trunk of a massive conifer lies recently fallen beside us. What kind? We study the bark to discover the answer, and some of our eyes know hemlock bark for the first time.

At the end of the day, back at the trailhead, my hikers appear slightly rumpled but suffused with nature love and beaming with gratitude. We say our goodbyes. When their thank yous and well wishes suddenly shower over me I feel relief and gratitude as well.

With this simple vignette I tried to capture some of the joys of leading a field trip. New leaders are always welcomed! Please contact me if you want to try it, and I'll help you with a few organizational details to get you started.

Oregon Spotted Frog Restoration

(continued from p1)

Dr. Nyman, who is a senior scientist at HDR Inc, noted that the Oregon spotted frog's egg masses have a symbiotic relationship with a species of algae that provides oxygen to the developing embryo. The frog prefers non-forested wetlands, and tadpoles require standing water for 3-4 months in order to reach maturity, which is longer than many other species. The western toad, for example, requires only a month. This requirement is threatened by reed canary grass, which grows into dense thickets that crowd out the shorter native plants that provided good habitat for egg-laying.

The restoration project began in 2015 to replace the reed canary grass with something else, but researchers were challenged by lack of historical data – they have no idea what was there before.

The biggest challenge is root masses formed by reed canary grass. These thick, floating carpets can quickly cover water surfaces. After some experimentation, restoration workers realized that the best way to remove them was to cut the root masses into chunks with pruning saws and remove them piece by piece. That exposed water to the surface, and the pools tend to remain open year after year – reed canary grass has not returned. Instead, native volunteers have become dominant within 1-3 years.

Before the restoration project, surveys found about 360 egg masses corresponding to at least 720 adults. Although newer surveys have not shown increases in population, Dr. Nyman is confident that the restoration work has prevented population declines seen in other populations.

Still, vigilance is required. Monitoring will be required since the site is surrounded by other populations of reed canary grass, and other problem species could potentially invade.

Winter (January, February, March)

Chapter Meetings

Meetings may be in-person or via Zoom, which is noted in each meeting announcement below. To register for Zoom meetings, go to the state events website (http://wnps.org/events) and scroll down to find the appropriate Koma Kulshan event among other Zoom events associated with WNPS. Meetings begin at 7:00 PM. In-person meetings begin at 7pm in the Sustainable Living Center education room at the ReStore (2309 Meridian St.). The entrance is off the back alley and the SLC is upstairs.

January 18: Floristics of the Goat Rocks Wilderness (in person)

The Goat Rocks Wilderness lies on the Cascade crest between Mt. Rainier and Mt. Adams and includes one of the most scenic portions of the Pacific Crest Trail. In August 2021 Mark and Brian Turner spent a week backpacking there, visiting Snowgrass Flats, Cispus Basin, and Goat Lake. The WNPS plant list for the area includes over 270 taxa, some common throughout the Cascades and a few that were new to Mark. He'll share floristic highlights of the area. Mark Turner is a freelance editorial photographer specializing in botanical subjects, especially Northwest wildflowers and gardens. He photographs extensively for books and magazines both in gardens and in a wide range of native plant environments. Mark is the photographer of the award-winning *Wildflowers of the Pacific Northwest* and *Bellingham Impressions*. His latest book, with co-author Ellen Kuhlmann, *Trees and Shrubs of the Pacific Northwest*, was published by Timber Press in 2014. His next book for Timber (with co-author Sami Gray), *Weeds of the Pacific Northwest*, will be published in early 2024. He's a long-time WNPS member, lives in Bellingham with his husband, and runs a portrait photography business.

February 15: Some Like It Hot: Plants of Yellowstone's Geothermal Environments (in person)

When he retired in 2008, Dr. Richard Stout was an Associate Professor in the Department of Plant Sciences and Plant Pathology at Montana State University, Bozeman. While at MSU, he investigated plants growing in geothermal environments in North America - primarily Yellowstone National Park - for more than 10 years. His research on the cellular mechanisms of heat tolerance in "hot springs panic grass" (*D. lanuginosum*) has been published in several peer-reviewed scientific journals (see http://www.howplantswork.com/hotplants/). He has also collaborated with scientists studying fungi that form symbiotic relationships with this plant, as well as with ecologists investigating plants adapted to naturally high-CO2 environments (of volcanic origin) in Yellowstone.

March 15: Native by Design: Gardening to Restore and Nurture Biodiversity (Zoom)

In the face of rapidly disappearing biodiversity, gardeners can play a crucial role in sustaining healthy ecosystems. By reestablishing native plants — that are the basis of healthy food webs — we can welcome and support wildlife, create connections, sequester carbon, manage water, end the need for chemicals, and work less. In this presentation by Eileen Stark, learn how to garden with an ecological focus by utilizing native gardening design principles, reducing lawn, choosing and arranging regional plants in their natural associations and according to site conditions, and using humane practices. Envision your yard — whatever its size — as a conservation tool that lets indigenous flora lead the way to a vibrant, functional garden. Eileen Stark is a Portland-based ecological landscape designer, consultant, author and photographer. Her academic background includes studies in biology, wildlife ecology and landscape design. A deeply committed conservationist, she strives to create awareness of the myriad creatures with which we share this fragile planet. Her book, *Real Gardens Grow Natives: Design, Plant, and Enjoy a Healthy Northwest Garden*, is a passionate guide to gardening for both biodiversity and beauty using animal-friendly methods. Prior to writing her book, she worked in the animal protection field. You can visit her website at https://realgardensgrownatives.com/

Field Trips/Work Parties

COVID Policy

While attending WNPS events, please observe these policies, in effect since March. Please do not attend an event if either of the following are true:

- * You currently have any symptoms of COVID-19 as outlined by the CDC, or have had symptoms in the past 14 days.
- * According to the CDC, you have any reason you should quarantine.

WNPS event hosts will not facilitate carpooling. If you test positive for COVID within 14 days of the event please contact the WNPS office at (206) 527 3210 or the WNPS Business Manager at wnps@wnps.org. Read the full policies online at www.wnps.org/home/covid-19resources

February 25, Saturday, 9:00 AM to 12:00 PM: Restoration work in Maritime Heritage Park

Join NSEA and Bellingham Parks volunteers to continue restoration of native plant habitat in this historic area. The WNPS team will be adding plants and spreading mulch in bare areas and removing invasive plants, all on the southeast bank of Whatcom Creek near the Native Plant Trail. Gloves and tools provided at the check in area, probably near the BTC fish hatchery on the northwest bank of the creek at the end of C Street off West Holly. Contact Allan Richardson at 360-305-5270 or asrichardson5@gmail.com if you have any questions.

March 11, Saturday 9:00 AM to 4:00 PM: Cryptogam Ramble

Join Fred Rhoades for a late winter Cryptogam Ramble to Sharpe Park (south of Anacortes and west of Deception Pass Park). Leave the Bellingham south end Park & Ride at 9 a.m. or meet at the trailhead at 10 a.m. We'll take one of the meandering trails down hill (perhaps Porpoise Point trail - see map in link), if it's pleasant enough, have lunch along the trail and hope to finish between 3 and 4. Bring a hand lens. Let Fred (fmrhoades@comcast.net) know you are coming in case the trip has to be changed due to weather. Here's the link to the park description and map: https://www.skagitcounty.net/Departments/ParksAndRecreation/parks/sharpe.htm

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If you would like to join WNPS

Please return the membership application form to: Washington Native Plant Society 6310 NE 74th St., Suite 215E Seattle, WA 98115

Please make checks payable to WNPS (outside US add \$5 to dues)

or join online at https://www.wnps.org

Name:
Address:
City, State, Postal Code:
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Koma Kulshan Chapter Total Enclosed:____

Mebership Category:

\$20 Budget (Senior/Student) \$40 Individual

\$55 Family

\$75 Club/Institution

The Koma Kulshan chapter of WNPS is dedicated to the preservation and study of native plants and vegetation of Washington State and the education of the public to the values of native flora and its habitat.