

Newsletter of the Idaho Native Plant Society • Promoting Interest in Idaho's Native Flora

Searching for Galls in Idaho

Article and Photos by Charles Davis, Entomology PhD Student, Pennsylvania State University

This past summer I had the wonderful opportunity to explore Idaho in search of galls alongside Dr. Barbara Ertter. I am studying the taxonomy and evolution of gall wasps in the family Cynipidae. Galls are abnormal growths on plants caused by some outside stimuli provided by another organism. I'm currently working towards revising the gall wasp genus *Diastrophus*, which makes galls on brambles (*Rubus*), cinquefoils (*Potentilla*), woodbeauties (*Drymocallis*) and related genera in North America. I plan to assess the validity of the currently described species of *Diastrophus* and to describe new species where appropriate.

One of my initial goals was to find as many of the described *Diastrophus* species as galls in their natural habitat as possible, so that I could compare the adult wasps I reared from the galls to the type species within the collections. While combing through the original descriptions of these wasps I came across a note in Alfred C. Kinsey's description of *Diastrophus tumefactus* in 1922, where he states:

It is interesting to find another species of Diastrophus occurring on Potentilla. About half of the known species of that genus of gall-wasps are found on Potentilla, instead of being restricted primarily to plants of the genus Rubus as the first observations indicated. Thorough searching of the various species of Potentilla may disclose still other gall-wasps.

Additionally, I had received galls from various gall enthusiasts from *Potentilla* species where no galls were described and even from plants in the

genera *Drymocallis* and *Horkelia* which had never been reported before. When I used DNA barcoding to see how these undescribed gall wasps fit into a larger phylogeny with the established species, all the undescribed species were distinct and separate from the described taxa. Furthermore, when I was able to compare adults with the type series of each *Diastrophus* species, the result was the same. The ecological, morphological, and genetic data all aligned, and confirmed Kinsey's suspicion that we have barely scratched the surface of the diversity of galls associated with cinquefoils and relatives (some of which are themselves still undescribed).

Since my training is in insects, I used the internet to get in touch with botanists to try to get a better understanding of cinquefoils and how each species is related. This led me to Dr. Barbara Ertter, Idaho native and cinquefoil expert. Dr. Ertter was able to find even more species of *Diastrophus* on cinquefoils locally, which led us to plan an expedition to discover *Diastrophus* galls across Idaho.

...Continued on Page 3

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Letter from the President

A seed is a plant embryo with a covering of protective tissue and often some nutrient tissue (endosperm). They form from a fertilized ovule after pollination and can typically withstand a much broader range of environmental conditions compared to the mature plant. Under a microscope, seeds can appear like works of art. Much of the great diversity in seed size and shape relates to modes of dispersal. The seeds of some orchid species are too small to be seen with the naked eye. In contrast, some of the largest seeds, such as a coconut, can weigh well over 5 pounds. All the information to grow a sequoia, the most massive tree on earth, is contained in a seed about the same size as a tomato seed. Seeds of some species can germinate immediately upon dispersal, but many require a period of dormancy that lasts from a few weeks to several years, depending on species. Extreme cases have germinated seeds hundreds to thousands of years old associated with archeological sites. In 2012, seeds recovered from a ground squirrel cache encased in Siberian permafrost and aged to be 32,000 years old were germinated using micropropagation and tissue culture techniques. Researchers identified the germinated plants as Silene stenophylla, a small forb in the carnation family that can still be found in Idaho today.

My point is that seeds are remarkable. They capture the past and represent the future. They are just one reason plants are cool and retain that air of mystery. Despite decades of research, we still know relatively little about the genetics of seed development. Seeds seem especially relevant this time of year, with spring season upon us. Germinating seeds contribute to Idaho landscapes transitioning from brown and gray to shades of green. It all seems quite miraculous to me. INPS members all love plants and anticipate each spring season when dormant plants become green again and seeds emerge as new plants. It is our shared joy, amazement, curiosity, and love of plants that lies at the heart of the INPS. Members also understand the importance of educating ourselves and others about native plants, growing the public's appreciation for native plants, and working to conserve and protect native plants and the habitats they depend upon. To meet this mission takes the support of every INPS member. To everyone who has renewed their INPS membership this year I say thank you. If you have not renewed your membership yet, please consider doing so. New members are also always welcome. Information on renewing or joining can be found on our website at https:// idahonativeplants.org/membership/or on the final page of each Sage Notes issue.

Thank you,

Michael Mancuso
INPS President

How Much Do YOU Know About Seeds? Take the Seed Match Challenge! on Page 8.



Castilleja sp. (paintbrush)

Galls in Idaho continued from Page 1...

Using funding from the Society of Systematic Biologists Mini-ARTS award, I flew to Idaho to meet Dr. Ertter and



Charles Davis and Barbara Ertter tour Idaho in search of cinquefoils and galls.

to search for these elusive galls. During my stay, I learned more about the taxonomy of cinquefoils and the plant vouchering process. Our duo started in and around Boise, then traveled to the eastern border of Idaho, where we camped in the Beaverhead Moun-

tains with Rose Lehman, Mark Darrach, and Kristin Kaser. From here we searched for galls on the borders of Craters of the Moon, Stanley Basin, Horsethief Reservoir, and McCall.

During my time in Idaho, Dr. Ertter and I found galls across six species of cinquefoils and relatives: *Potentilla gracilis, Drymocallis convallaria, Drymocallis glandulosa, Drymocallis glabrata, Drymocallis pseudorupestris,* and *Horkelia fusca*. Preliminary data shows that the wasps associated with these plants are also undescribed species, and I'm in the process of rearing adults to prepare descriptions. While we were able to find considerable diversity during our expedition, it is likely only the tip of the iceberg in the grand scheme of this group of wasps.

I was pleasantly surprised by the sheer amount of biodiversity Idaho has to offer and the rich culture and history of the region. It's one thing to read about species in which you are interested in field guides or online, but to get the opportunity to actually see them for yourself outdoors is incredible. Dr. Ertter is an excellent mentor and



 ${\it Charles\ Davis\ in\ Idaho\ sagebrush\ steppe\ habitat.}$

was an awesome guide throughout my time in Idaho. She gave me invaluable knowledge about the plants my insects are found on, and a greater appreciation for botany and herbaria. I look forward to the next time I can explore the region and hope I can connect with Idaho's naturalists once again!

While I was able to sample a lot of cinquefoils during my trek out West, I was only able to see a fraction of the cinquefoil diversity the area has to offer, and additional sampling of these plants will likely lead to new wasps being discovered. If you are interested in looking for these galls to contribute to my effort or have questions regarding these wasps and their biology, feel free to contact me at ckd5444@psu.edu. •



Charles Davis accompanied by Rose Lehman, Mark Darrach, and Kristin Kaser.



Dissected P. gracilis gall with wasp larvae.



X-ray image of Potentilla gracilis stems showing cryptic galls.



Diastrophus adult from Drymocallis convallaria gall.



Drymocallis convallaria gall.

INPS Annual Meeting

2024 INPS Annual Meeting/Campout

By Derek Antonelli, Calypso Chapter President

The Calypso Chapter, based in Coeur d'Alene, is excited to host the 2024 Idaho Native Plant Society Annual Meeting and Campout. We have selected historic Farragut State Park as the venue for the event. The gathering will take place from Friday, June 14, through Monday, June 17. Mark your calendars!

Location: Farragut State Park, the largest state park in Idaho, is located on the shores of Lake Pend Oreille (https://parksandrecreation.idaho.gov/parks/farragut/). Located in the middle of the Idaho Panhandle, it has a rich and diverse flora, and a long, varied history. It was the homestead of John and Carrie Leiberg in the late 1880s. John completed extensive botanical surveys in the area and Carrie was a frontier doctor. During World War II over 300,000 sailors completed their basic training at Farragut. In the 1960s Farragut hosted the Girl Scout Senior Roundup and the Boy Scout World Jamboree attended by thousands.

Registration Fees: To help cover the cost of this event there is a \$27.50 fee for each person attending. Children under 15 years of age are free. There is an additional camping (\$30/vehicle) and meal (\$20/meal) fee, should you wish to take advantage of these options.

Idaho State Park Passport: Because it is a state park, every vehicle is required to have an Idaho State Park Passport. The Passport can be purchased for \$10 online or by mail at the time of vehicle registration renewal, or in person from any county DMV office. If you come in a vehicle that does not have a Park Pass, the park will charge you \$7 for each day you are there—more for non-Idaho residents.

Camping: We have reserved the Thimbleberry Group Campsite at Farragut State Park. This huge site will provide us with the opportunity to keep the Annual Meeting participants together in one location. The site amenities include a lighted restroom with flush toilets plus additional pit toilets, numerous picnic tables, ample spots to set up tents in wooded areas, and a large field in which to park RVs. The site has a source of potable water, but no water or electric hookups for RVs. If you need to have hookups for your RV, you can make your own reservation at one of Farragut's many nearby campgrounds.

At the Thimbleberry Group Campsite, we can have up to 200 people camping, but we can only have 80 overnight vehicles, with each trailer counting as an additional separate vehicle. To cover costs there is a \$30 camping fee for each vehicle for all three nights. Examples: If four campers come in a single vehicle there is only a single \$30 fee. Pickup campers, vans, and motorhomes count as one vehicle. Since trailers are counted in our 80-vehicle limit, they will be charged a \$30 fee in addition to the \$30 fee for the tow vehicle. Just think of it as free camping but with a parking fee.

Schedule of Events:

Friday, June 14

- 2:00 pm to 8:00 pm. Check-in at the Farragut State Park Visitor Center.
- 2:00 pm and beyond. Check-in at the Thimbleberry Group Campsite.
- 2:00 pm to 4:00 pm. Open house and tour at Cedar Mountain Perennials in Athol.
- 3:00 pm to 4:30 pm. INPS Board Meeting at location to be announced.
- 6:00 pm to 7:00 pm. Potluck at the Thimbleberry Group Campsite.
- 7:00 pm to 8:00 pm. Ice Age Floods talk by Dr. Tony Lewis.

Saturday, June 15

- 8:00 am to 4:30 pm. All day field trips.
 - BLM's Blue Creek Bay Recreation Site and Trails
 - Chilco Mountain National Recreation Trail #14
 - Rathdrum Mountain Park Cedar Forest Trail
- 8:00 am to 11:30 am. Morning half-day field trips
 - Farragut Herbalist Plant Walk
 - Ice Age Floods Driving Tour led by Tony Lewis
 - Leiberg Home Site Talk and Walk led by Jack Nisbet
- 1:00 pm to 4:30 pm. Afternoon half-day field trips.
 - Farragut Herbalist Plant Walk
 - Ice Age Floods Driving Tour led by Tony Lewis
 - Leiberg Home Site Talk and Walk led by Jack Nisbet
- 6:00 pm to 7:00 pm. Annual Meeting Banquet at Athol Community Building. (Meal described in Activities Descriptions section.)
- 7:00 pm to 7:15 pm. INPS business meeting at Athol Community Building.
- 7:15 pm to 8:15 pm. Talk by Jack Nisbet on the legacy of John Leiberg,

Sunday, June 16

- 8:00 am to 4:30 pm. All day field trips.
 - Lost Lake and Mineral Point Trails
 - Rathdrum Mountain Park Cedar Forest Trail
 - Chilco Mountain National Recreation Trail #14
- 8:00 am to 11:30 am. Morning half-day field trips.
 - Farragut Buttonhook Bay Hike
 - Farragut Herbalist Plant Walk
- 1:00 pm to 4:30 pm. Afternoon half-day field trips.
 - Farragut Buttonhook Bay Hike
 - Farragut Herbalist Plant Walk
- 5:00 pm to 7:00 pm. Informal gathering for BYO dinner and comradery at Thimbleberry Group Campsite.

Monday, June 17

 8:00 am to 1:00 pm. Clean up Thimbleberry Group Campsite. Depart.

Activity Descriptions:

- Check-In Procedures. You will need to check-in at the Farragut State Park Visitor Center. Let them know you will be staying at the Thimbleberry Group Campsite if that is the case. They will issue you a sticker for your windshield. The Visitor Center does not allow campers to check-in until 2:00pm and they close their office at 8:00 pm. After 8:00 pm you can come straight to the Thimbleberry Group Campsite then check-in at the Visitor Center in the morning. If you arrive before 2:00 pm on Friday you can take in the sights and activities offered by the park if you have a Park Passport or get a daily permit. You still must return to the Visitor Center to check-in to the campsite. Once you have checked in at the Visitor Center, proceed to the Thimbleberry Group Campsite and check-in with us.
- Cedar Mountain Perennials Open House. This native plant nursery is open Friday afternoons. It is located at 7875 Hwy 54 about ½ mile east of Athol on the



The Leiberg homesite on what is now Farragut State Park. The Green Monarchs tower over Lake Pend Oreille. The home building is long since gone. Photo from Museum of North Idaho.

- north side of the road. If you are looking for something to do after setting up camp, Bob and Jill Wilson would be happy to show you their facility anytime until 4:00 pm.
- **Potluck.** We will be having our traditional potluck on Friday evening at the Thimbleberry Group Campsite. We will have hamburgers and sausages on the grill. Please bring a side dish, salad, bread, or dessert to share with the group. Bring plates and silverware and your appetites. While the campsite has plenty of picnic tables, it does not have a covered area. If you have a canopy, please bring it along for rain or sun protection.
- *Ice Age Floods:* Friday Evening Talk. Dr. Tony Lewis, president of the local chapter of the Ice Age Floods Institute, will be on hand after the potluck to describe the massive floods that occurred when the glacial dam broke at what is now Lake Pend Oreille. These floods scoured the landscape all the way to the Pacific Ocean creating new plant habitats all along the way.
- Banquet and Annual Meeting. We will have a meal for all registrants on Saturday evening at the Athol Community Building at 30355 Third St. in Athol. Guests are welcome to attend. The meal will be catered for those who choose the option on the Registration Form. Olive Garden will cater the meal with a variety of pastas, sauces, and toppings with ample green salad and breadsticks. The catered meal will cost \$20 per person. You are welcome to bring in your own meal. The Athol Community Building does not allow alcohol. Following the meal, an INPS business meeting will be held to address the administration needs of the Society.
- · Keynote Talk: John Leiberg's North Idaho. Following the INPS administrative meeting, Jack Nisbet, noted Spokane-based author, will give a keynote talk. Jack has published several collections of essays and award-winning biographies of fur trader David Thompson and naturalist David Douglas. Jack's talk will recount the legacy of John Leiberg. His book The Dreamer and the Doctor follows the unlikely journey of the Leiberg family through north Idaho and beyond. In 1885 Swedish immigrant John Leiberg, along with his companion Dr. Carrie Marvin and her infant child, homesteaded on the outer point of what is now Farragut State Park. Over the next two decades, Leiberg combed the surrounding mountains to collect flora and mosses, staked over three dozen mineral claims, surveyed what became North Idaho's National Forest parcels, and established an ecological baseline for the entire region. Jack will have copies of his many books available for purchase.
- Leiberg Home Site Walk. A talk and walk at the Leiberg home site. Join Jack Nisbet for this tour of Leiberg's favorite plants and places, which provide a ...Continued on Page 6

2024 INPS Annual Meeting/Campout continued from Page 5...

unique context for the Idaho Panhandle we experience today. This is a half-day activity at Farragut State Park.

- *Ice Age Floods Driving Tour*. Join Dr. Tony Lewis on this tour to see firsthand some of the evidence of these great floods. The expected round trip drive will be about 40 miles. Parking is limited at some of the stops so only five vehicles can be used for each session—therefore you should expect to carpool. This will be a half-day activity.
- BLM's Blue Creek Bay Recreation Site and Trails. Blue Creek Bay of Lake Coeur d'Alene is a few miles south of Coeur d'Alene. Several trails can be accessed from the trailhead parking area. The upland forest area consists of ponderosa pine, Douglas fir, grand fir, western larch, western white pine, western red cedar, and western hemlock. Numerous species of native plants are found within these diverse forest types. A large wetland/ riparian and wet meadow area extends along the head of Blue Creek Bay filled with black cottonwood, thin-leaf alder, red-osier dogwood, cattails, grasses, sedges, rushes, and bulrushes. A portion of the Mullan Road, the first overland wagon route constructed through the northern Rockies, crosses through the uplands. The hike will be led by BLM Botanist LeAnn Abell. The trails are moderately easy. The recreation site is approximately 34 miles from Farragut State Park.



A group intensely studying the plants along the Blue Bay Creek trail. Of course, we are only 30 feet out of the parking lot. Photo by David Noble.

• Farragut Trails Buttonhook Bay Hike. This hike will occur on trails within Farragut State Park that loop past Buttonhook Bay on the most southerly portion of Lake Pend Oreille. Over 200 plant species have been observed in Farragut State Park. On this trail the rare purple meadowrue, Thalictrum dasycarpum, is found on the Buttonhook Bay shoreline. The hike is a half-day activity that covers just over two miles on easy to moderate trails.

- · Chilco Mountain National Recreation Trail
- #14. This trail passes through beautiful subalpine forests on the way to North Chilco Peak. Talus fields and open areas at the peak provide a distinctive mountain flora. The peak and ridges offer outstanding views of Lake Pend Oreille and the Rathdrum Prairie. The trail is quite steep and is considered challenging. The elevation gain is nearly 1500 feet in just under two miles. To be courteous to your fellow hikers, you should not attempt this hike unless you are up for the challenge. Please note that this trail is currently closed due to fires last season. We are hoping that the trail will be open prior to the Annual Meeting. If not, we will find a similar hike as an alternative. Chilco Mountain NRT #14 is located approximately 10 miles from Farragut State Park.
- Farragut Herbalist Plant Walks. Join local herbalists as they share with participants how to identify local and native plants. They will also discuss the plants' historic and current uses on the walk along the trails within Farragut State Park. Bring your notebook, take notes and do further research afterwards. No harvesting is allowed in the state park. This is a half-day activity.
- Lost Lake and Mineral Point Trails. This field trip will experience two different trails located near each other. The Lost Lake Trail #81 is a 1½-mile trail through a variety of forest types that loops past Lost Lake. A wide variety of native plants are found on the trail. The unusual rattlesnake fern (Botrypus virginianus) is easily seen along the trail. Much harder to find are the true moonworts (Botrychium spp.) which occur there as well. The Mineral Point hike follows a portion of Trail #82 along the slopes overlooking Lake Pend Oreille. The habitats along the trail vary from exposed rocky outcrops to sheltered western cedar forest basins and everything in between. Many different kinds of plants can be found. We will be going out and back on this trail so how far you go depends on your enthusiasm. The hike will be led by USFS botanist Jennifer Costich-Thompson. These trails are easy to moderate in difficulty. The Lost Lake Trailhead is about 32 miles from Farragut State Park.
- Rathdrum Mountain Park Cedar Forest
 Trails. The City of Rathdrum has established a park
 with a 10-mile system of trails on the forested base of
 Rathdrum Mountain. The trail loop we will be taking proceeds along a small mountain stream within a moist
 western cedar/western hemlock forest. The ground is
 carpeted with many species that are typically found in the
 moist forests of northern Idaho. The return leg of the
 trail loop passes through a drier forest dominated by Douglas-fir. The drier forest has an entirely different assem-

blage of native plants. One of the highlight plants that may be found along the trail is the rare phantom orchid. The complete loop is a relatively easy 2.5 miles. Rathdrum Mountain Park is approximately 21 miles from Farragut State Park.

Registration: The 2024 INPS Annual Meeting registration form is available on the INPS website (www.idahonativeplants.org). You can print the form and mail it with a check, or there will later be an online version with a PayPal payment option. To help in the planning process, please submit your registration by **May 17.** •

Announcements

The 2024 Idaho Botanical Foray—Malad Summit

By Paul Allen, Sawabi Chapter Vice President _

This year the 17th Annual Idaho Botanical Foray rotates to SE Idaho and the Idaho State University herbar-

ium. We plan to explore a botanically diverse region in SE Idaho centered near Malad Summit close to the Utah border. Potential collection sites may vary widely



in elevation, rock 2022 Idaho Botanical Foray at Yellow Pine.

strata, and proximity to water, providing the prospect of considerable diversity. The area has been only sparsely collected in the past and may harbor interesting finds.

Who: Plant enthusiasts and seasoned botanists... anyone interested in making new discoveries in the field, learning the process of making botanical collections, or just enjoying the comradery of like minded plant people around a campfire.

Where: Malad Summit Campground. Just west of I-15 between the towns of Downey and Malad City, south of Pocatello. This is a lovely campground with babbling brook and mixed forest. We have reserved several campsites and others are available first come/serve.

When: June 21, 22, 23, 2024. Campsites have been reserved for June 20-22.

What: Our hope is to send out teams of 4-5 people to different locations each day to collect plants. Most sites will be on Caribou National Forest and BLM land, although we are also hoping to obtain permission from a few private land owners. Some venues may be challeging; some may be wet; some may be off trail.

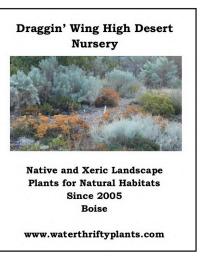
Bring all you need (food, camping gear, etc.) to **camp self-sufficiently** for the length of your stay. Water is available in the campground but there are no hook-ups. Consider bringing a food item to share for a Saturday evening potluck.

Bring **personal plant collecting gear** (plastic bags for plants, pens/pencils for notes, digging tool, hand lens) and GPS (if you have one), camera (optional), etc. Presses, paper, marking pens, field notebooks, etc. will be provided.

If you **plan to attend** or desire further information, please RSVP Paul Allen: pokyallen@hotmail.com 208 241-5265. •







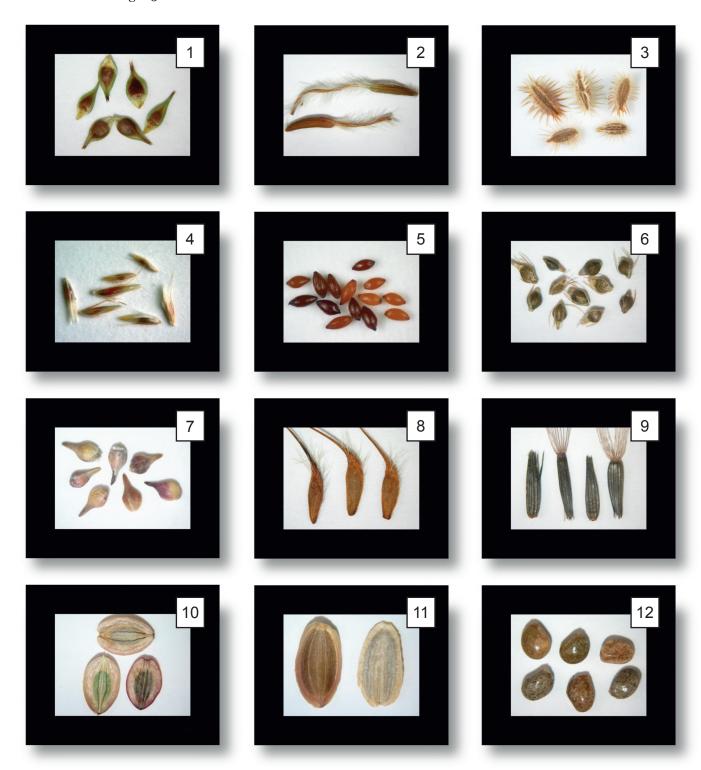
Plant Identification

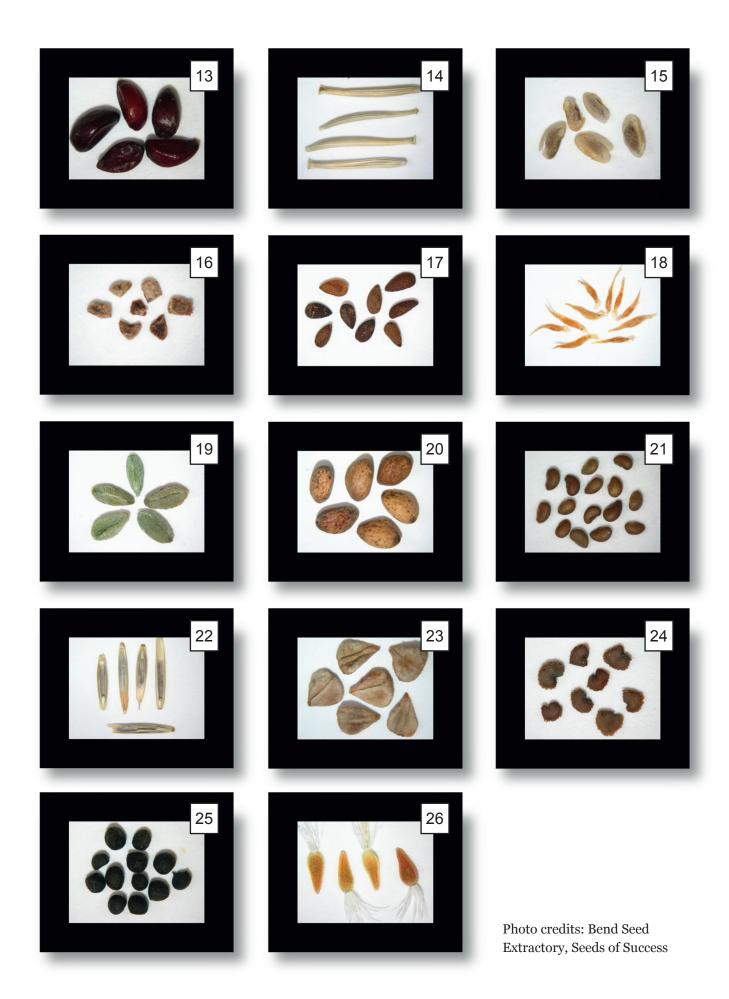
Seed Match Challenge!

By Karie Pappani, Pahove Chapter

Seeds showcase a fascinating array of color, texture, shape, and size. All this marvel of design also houses every vital resource necessary for new plant life. *Castilleja* seeds, like the one on pg. 2, look like tiny honeycomb structures. They are among my favorites! Take a close look at the seeds on these two pages and try to guess what they are.

Answers are on Page 15.





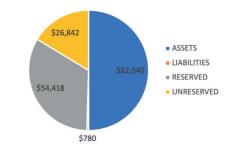
INPS Financial Report

Idaho Native Plant Society Summary Financial Statements For the year ended December 31, 2023

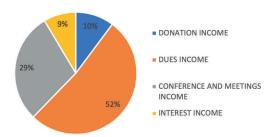
<u>Assets</u>		
Checking, Savings, CDs	\$	82,040
<u>Liabilities</u>		
Payables	\$	780
Equity		
Temporary Restricted Assets		
Reserves	\$	54,418
Unrestricted Assets	\$	26,842
<u>Liabillities and Equity</u>	\$	82,040
Income		
Donations	\$	2,400
Membership Dues	\$	12,249
Conference and Meetings	\$	6,874
Interest on Savings	\$ \$ \$	2,010
<u>Total Income</u>	\$	23,532
Expenses		
Scholarship Awards	\$	4,000
Education Research Inventory Grants	\$	5,396
Dues to Chapters	\$	3,039
Sage Notes Editing and Printing	\$	6,262
Conference and Meeting	\$	2,241
Website, PayPal, Postal, Supplies	\$ \$ \$ \$	1,131
<u>Total Expense</u>	\$	22,067
Net Income	\$	1,465

The financial stability of the Idaho Native Plant Society is due to membership dues, donations and volunteers. It launched its college scholarship program in 2023 and continues its grant and conference programs and produces the quarterly *Sage Notes* Newsletter.

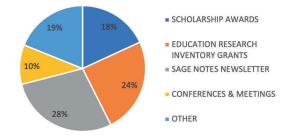
INPS ASSETS, LIABILITIES AND EQUITY 2023



INPS INCOME 2023



INPS EXPENSES 2023



INPS Membership Report

INPS President Michael Mancuso sent out a letter in early February to remind current members to renew their membership for 2024. More than 100 members responded! There is still time to renew. If you have any questions about your membership, please contact your chapter or Vicki Henderson by email: membership@idahonativeplants.org

Chapter	Feb. 2021	May 2021	Apr. 2022	Oct. 2022	Apr. 2023	Nov. 2023	Expire 12/23	Renew 1/24
Calypso	33	42	29	40	27	33	26	10
Loasa	21	21	13	15	10	13	6	8
Pahove	177	194	154	257	137	214	203	72
Sawabi	35	48	53	62	53	64	42	26
White Pine	106	119	93	122	114	170	69	105
Wood River	29	52	77	65	59	72	44	39
At Large	11	11	13	16	8	9	0	0
Totals	412	48 7	432	5 77	408	575	390	260

INPS ERIG Project Report

Winter 2024. Summary of ERIG Projects - 2021 through 2023

Year	Recipient	Title	Status
2023	Burgess, Emily; Utah State University	Long term monitoring of a wildflower community in the Bear Lake region	Request for reimbursement received; 2023 was a successful field season
2023	City of Hailey, Emily Williams and Linda Ries	Idaho Native Plants and Pollinators - Go Hand in Hand!	In progress
2023	Weiser Architectural Preservation Committee / Weiser Garden Club, Cheri Clausen	Demonstrating the Importance of Idaho Native Plants through Weiser Depot's Landscape Design	Project update received; 2023 was successful
2023	Dixit, Mahima; California Botanic Garden	Phylogeny and Taxonomy of the Eriogonum deflexum Complex (<i>Polygonaceae</i>)	Request for reimbursement received; 2023 was a successful field season
2023	Happyville Farm; Claudia Pine, Director	Idaho Falls Area Native Plant Demonstration and Education Gardens	Update needed
2022	City of Hailey, Heather Dawson	Hailey Native Plant Arboretum, Interpretation and Education Enhancement	Article published Dec-23, complete
2022	Boise State University, Clara Buchholtz	Astragalus mulfordiae pollination in the context of anthropogenic disturbance	Article published Dec-23, complete
2022	Idaho Department of Fish and Game, Brad Lowe, Regional Habitat Manager	Native Plant, Habitat, and Pollinator Demonstration Garden	Project near completion; need Sage Notes article
2022	Natural Connections Academy Inc., Tammi Masters, Executive Director and Outdoor Educator	Native Plant Gardens: Bird / Pond	withdrawn
2022	Northwest Center for Alternatives to Pesticides (NCAP), Christina Stucker-Gassi, Program Manager	Fort Hall Native Plant Project	Article published Dec-23, complete
2021	Blaine County Recreation District, Morgan Buckert	Native Plant Arboretum signage	Article published Dec-21, complete
2021	BYU Idaho (Pittsburg State University), Micheal Daines,	An Updated Floristic Summary of the Caribou-Targhee NF and Curlew NG	Article published Sep-23, need decision regarding project changes
2021	Washington State University, Molly Carney	Rooting for Idaho: Establishing Archaeological Identification Criteria for Edible Roots within Native American Cuisines	Article published Sep-23, complete
2021	Monticello Montessori Public Charter School, Ammon, ID, Sally Mills	The Native Plant Information Station	Update needed, out of contact
2021	Orton Botanical Garden, LaMar and Rosalie Orton	Idaho Native Plant Brochures for Orton Botanical Garden	Article published Jun-22, complete
2021	University of Idaho Extension-Twin Falls County, Andy West	Native Plant Demonstration Garden Signage Project	Article published Sep-23, complete

IDAHO

NATIVE PLANT

MONTH INITIATIVE

Idaho Native Plant Society Education, Research, and Inventory Grant Committee January 31, 2024

Native Plant Appreciation Month

The National Plant Month Initiative Comes to Idaho!

By Juliet Romano, The Garden Club of America

In 2022, the Garden Club of America set out to amplify the importance of native plants and biodiversity by establishing a Native Plant Month in all fifty states. Last year, Idaho joined 47 other states in proclaiming April as Native Plant Month. Idaho members of the Garden Club of America, in

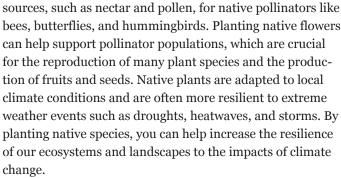
collaboration with the Idaho Native Plant Society, submitted a proclamation requesting Governor Little to once again proclaim April as "Idaho Native Plant Month" for 2024. To learn more, visit https://www.gcamerica.org.

Idaho boasts a rich diversity of native plant species reflecting its varied ecosystems, including forests, grasslands, wetlands, and desert regions. Native animals and plants often have co-evolved over time, developing

specialized symbiotic relationships such as pollination and seed dispersal. These relationships are often disrupted when non-native plants are introduced. Many native animals depend on specific native plants for their dietary needs in the form of nectar, pollen, seeds, fruits, and leaves. Native plants create habitats for native animals, offering shelter, nesting sites, and protection from predators. Native plants also contribute to biodiversity by sustaining diverse communities of insects, birds, mammals, and other organisms. This diversity is vital for ecosystem stability and resilience.

The benefits of native plants to Idahoans are many. Native plants are well-adapted to local climate conditions and soil types, often requiring less water once established compared to non-native species. This can help conserve water resources, particularly in regions prone to drought or water

scarcity. Native plants are typically well-suited to local environmental conditions which means they often require less maintenance, such as watering, fertilizing, and pest control, compared to non-native species. This can save time, money, and effort in landscaping and gardening. Native plants have deep root systems that help improve soil structure, reduce erosion, and increase soil fertility. Many native plants provide essential food



...Continued on Page 12

Book Recommendations

Nature's Best Hope

By Douglas W. Tallamy

Dr. Tallamy gave an inspirational presentation as part of the Idea of Nature Lecture Series at Boise State University on February 9, 2024. He also toured Boise River restoration projects that afternoon.

"Tallamy lays out all you need to know to participate in one of the great conservation projects of our time. Read it and get started!" ~ Elizabeth Kolbert, Pulitzer Prize-winning author of The Sixth Extinction



Douglas W. Tallamy's first book, *Bringing Nature Home*, awakened thousands of readers

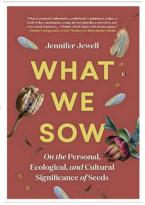
to an urgent situation: wildlife populations are in decline because the native plants they depend on are fast disappearing. His solution? Plant more natives. In this new book, Tallamy takes the next step and outlines his vision for a grassroots approach to conservation. *Nature's Best Hope* shows how homeowners everywhere can turn their yards into conservation corridors that provide wildlife habitats. Because this approach relies on the initiatives of private individuals, it is immune from the whims of government policy. Even more important, it's practical, effective, and easy—you will walk away with specific suggestions you can incorporate into your own yard. ~ Amazon •

What We Sow

By Jennifer Jewell

Jennifer Jewell was touted as a brave speaker during the National Native Seed Conference February 7-8, 2024, for her personal and timely exploration into the wonderful world of seeds.

In What We Sow, Jennifer Jewell brings readers on an insightful, year-long journey exploring the outsize impact of one of nature's smallest manifestations—the simple seed. She examines our skewed notions where "organic" seeds are grown and sourced, reveals how giant multinational agribusiness has refined and patented the genomes of



seeds we rely on for staples like corn and soy, and highlights the efforts of activists working to regain legal access to heirloom seeds that were stolen from Indigenous peoples and people of color. Throughout, readers are invited to share Jewell's personal observations as she marvels at the glory of nature in her Northern California hometown. She admires the wild seeds she encounters on her short daily walks and is amazed at the range of seed forms, from cups and saucers to vases, candelabras, ocean-going vessels, and airliners. ~ Amazon •

National Plant Month Initiative continued from Page 11...

Furthermore, native plants support Idaho's economy. Idaho's natural beauty, including its native plant landscapes, attracts tourists and outdoor enthusiasts. Native plants provide valuable ecosystem services, such as water filtration, soil stabilization, and habitat provision. These services contribute to environmental health and resilience, indirectly supporting industries such as agriculture, water management, and outdoor recreation that rely on healthy ecosystems. Idaho is known for its diverse wildlife, much of which depends on native plants for habitat and food. Supporting native plant populations can attract wildlife, making Idaho a more appealing destination for wildlife-related tourism activities like birdwatching, hunting, fishing, and wildlife photography.

What can you do to help promote awareness of the importance of native plants to our state?

- Ask local nurseries to bolster their native plant selection and to include signage explaining the benefits of planting native plants.
- Use native plants in your landscaping to reduce water consumption and maintenance while giving a boost to native pollinators. Non-native plants can be toxic to some native animals. In Blaine County, many elk and deer die each year after eating the leaves of ornamental non-native yew trees and shrubs.
- Send an email to state and local politicians educating them about the importance of encouraging Idahoans to plant native plants to improve soil health, conserve water, support wildlife, preserve cultural heritage, contribute to the local economy by supporting tourism and agriculture, while making Idaho more resilient to the effects of climate change.

Conference Announcements









Chapter News

CALYPSO CHAPTER

The public is invited to all chapter activities. All chapter activities are subject to change—watch chapter emails for updates. Contact Derek to be added to email list.

When: Chapter meetings are held on the first Wednesday evenings of March, April, May, and October.

Where: Meetings will be held in the Idaho Fish and Game (IDFG) Hunter Education Building, 2885 W Kathleen Ave, Coeur d'Alene.

Contact: For more information about Calypso Chapter activities, contact Derek Antonelli: ds.ca.antonelli@gmail.com, (208) 691-1070.

Upcoming Events

April 3: Calypso Chapter meeting, 7:00 pm. The presentation topic for this meeting has not been determined yet. Please submit topic suggestions.

April 27: Farragut State Park Hike. Meeting point and time to be determined.

May 1: Calypso Chapter meeting, 7:00 pm. The presentation topic for this meeting has not been determined yet. Please submit topic suggestions.

May 17: Lost Lake Hike, Sagle. Meeting point and time TBD.

May 31: Rathdrum Mountain Park Hike. Meeting time TBD.

June 14–17: INPS Annual Campout and Meeting,

Farragut State Park. Calypso Chapter is hosting this year.

Summer Plant Hikes: We will plan one or more summer hikes. Hike locations, dates, and times to be determined. Please submit suggestions.

LOASA CHAPTER

When: Regular meetings are held on the third Thursday of each month.

Where: College of Southern Idaho, Student Union Building (Taylor building), Room 248.

Contact: For more information about Loasa Chapter activities please contact Samuel DeGrey: sdegrey@uidaho.edu, (208) 320-0005

PAHOVE CHAPTER

When: Meetings are held the second Tuesday of each month from October–April starting at 7:00 pm. Times, dates, and topics are tentative. Current information will be sent to members via email. Announcements are also posted on the Pahove Chapter page of the INPS website:

https://idahonativeplants.org/pahove/

Where: Chapter presentations currently offer hybrid viewing formats: in-person at the MK Nature Center, 600 S. Walnut St. in Boise, and a Zoom link for in-home enjoyment.

Contact: For more information about Pahove Chapter activities visit the website: www.idahonativeplants.org or email Karie Pappani at pahove.chapter.president@gmail.com.

Past Events

On **February 25**, a group of around 25 individuals attended an early spring plant walk led by Barbara Ertter and co-led by Michael Mancuso. Geologist Spencer

Wood was amenable to telling us about the rhyolite that was one of the significant features of the hike, dating back to when the Yellowstone Hot Spot was under this corner of Idaho.



Spring Plant Walk by Barbara Ertter. Photos by Linda Mazzu.

There was only a small patch of buttercups (on the other side of the creek) and Siberian elm in bloom, but there was no shortage of things to talk about! Including the sex life of mosses, rock "billboards" dating to the heyday of the

Boise Basin mines, winter shrub identification (especially poison-ivy), and control methods for myrtle spurge.

March 12: Barbara Ertter spoke on *Boise's Vanishing Flora*. Presentation video is available on the INPS YouTube channel, @idahonativeplantsociety3927.

Upcoming Events

April 20: Presentation by Cleve Davis, Shoshone and Bannock Seasons and How They Relate to Plant Phenology.
April 26-27: Annual Pahove Chapter Native Plant Sale
April 26-29: City Nature Challenge

SAWABI CHAPTER

We welcome the public to our chapter's informative sprint programs and warm weather plant walks.

When: All plant walks and spring programs are no longer prescheduled but will be announced via email.

Where: Spring programs are presented in Pond Student Union Building classrooms, ISU Campus, Pocatello. Contact: For more information contact Paul Allen

208-241-5265 or pokyallen@hotmail.com

UPPER SNAKE CHAPTER (INACTIVE)

Contact: Kristin Kaser, kaser.kristin@gmail.com

WHITE PINE CHAPTER

When: Meetings are typically held the third Thursday of the month, September through April. Current information is posted on our chapter webpage:

https://www.whitepineinps.org/WPschedule.html

Where: Meetings are held in-person in the 1912 Center Lecompte Auditorium (2nd floor) in Moscow. Video recordings of meetings will be made available on our YouTube Channel a few days after each meeting.

Contact: For more information about White Pine Chapter activities, contact us at INPS, White Pine Chapter, PO Box 8481, Moscow, ID 83843 or whitepine.chapter@gmail.com. Visit the chapter website (https://www.whitepineinps.org/) for upcoming event information and visit our chapter YouTube channel (@whitepinechapterinps9555) for video recordings of past talks.

Upcoming Events

March 21: Presentation by Aram Eramian, *Breeding and Raising White Pine Blister Rust-Resistant Seedlings*. 7:00 pm, 1912 Center.

April 18: Presentation by Tom Besser, *Restoring Prairie* from an Actively Growing Wheatfield. 7:00 pm, 1912 Center. **May 16-18:** Annual White Pine Chapter Native Plant Sale. Sale includes shrub reserve opportunity, online sale with inperson pickup, followed by an in-person sale. Held at the Latah County Fairgrounds Depot Building.

June 10: Yard tours to view native plants in landscaping. **Field Trips:** We are planning multiple field trips and conservation work projects for spring, summer and fall. Please check our calendar for details.

WOOD RIVER CHAPTER

When: Typically we have talks in the cold months and walks in the warm ones. Non-members are welcome. Please see our website or email newsletter for information on all programs. Where: Field trip and talk locations and details will be included with the description, posted online and emailed to members and other interested parties.

Contact: For more information about Wood River Chapter activities: email: woodriverinps@gmail.com; website: https://woodriverinps.wixsite.com/wrinps; phone: Mary (559) 696-9953. To subscribe to our newsletter, email the above address.

Upcoming Events

March 21: Presentation by Bob Moseley on the flora of the most floristically diverse temperate ecosystem on Earth, the alpine region of Tibet. 5:30–7:00 pm at Town Center West (Hailey, Croy and River Street). Bob says "(there are) 200+ species of *Pedicularis*, 180 rhododendron species, 100 primroses etc." In addition to lots of images of flowers and their habitats, Bob will explore the cultural uses and traditions of ethnic groups of the region in his talk. Bob is the author of

Khawa Karpo: Tibetan Traditional Knowledge and Biodiversity Conservation. In partnership with Hailey Public Library's Wanderlust series, the talk will be available for live streaming at https://haileypubliclibrary.org/programs/.

Late April/Early May TBD: Early spring walk out Murdock Creek Trail in the Sawtooth National Recreation Area. Join us to investigate the first stirrings of spring in this beautiful canyon. We'll look at plants' adaptations for getting a jump on spring and all the lichens, trees and fungi are fair game too. We'll go when there's just enough snow left to walk without snowshoes. Rated Medium for squishy ground. May 25: Spring Opening at Silver Creek Preserve. This is a fun meeting of all the local conservation and nature groups to celebrate the opening of fishing season at Silver Creek. Our group will offer a wildflower walk. We'll also have interesting plant structure specimens set up under the microscopes in the classroom and knowledgeable people to explain them. The free BBQ put on by Trout Unlimited is a plus. Afternoon, time TBA. May 24–26: Members Only Campout. We'll be camping (TBA) and exploring the area around Craters of the Moon National Monument and Preserve.

June 14–17: The annual State meeting/campout at Farragut State Park. Members of our group plan to go up beforehand and camp in the Peregrine loop of Waldron Campground starting June 10. We'll be hiking and looking at plants. Join us!

Late June Date TBD: Members Only Tour of Silver Creek Preserve. We'll see some special plants. The bloom cycle will determine the date, so keep an eye on our email newsletter.

July 17: Wander Up Wanderer Walk. This is a flower-filled hillside walk with views over Ketchum. Scheduled for midweek, and perfect for visitors to the area. Meet us in Hailey to leave by 5:30 pm at the Hailey Park and Ride Lot (River and Bullion Street) or in Ketchum at the Park and Ride Lot by the YMCA, to leave at 6:00 pm.

August 3: Summit Creek Hike. This trail at the crest of Trail Creek summit is always a treat. Wide open meadows and great views make this a local favorite. Rated medium difficulty for altitude and a possible log crossing. Bring poles. Meet at the Hailey Park and Ride Lot (River and Bullion Street) to leave at 9:00 am or at the Hemingway Memorial Parking Lot outside Sun Valley to leave at 9:30 am. •

Answers to Seed Match Challenge on Page 8–9.

	1.	Carex hoodii	14.	Nothocalais troximoides
	2.	Cercocarpus ledifolius	15.	Pedicularis groenlandica
^	3.	Daucus pusillus	16.	Penstemon deustus
	4.	Deschampsia caespitosa	17.	Phacelia hastata
	5.	Downingia yina	18.	Philadelphus lewisii
1	6.	Eleocharis rostellata	19.	Phlox longifolia
:	<i>7</i> .	Eriogonum microthecum	20.	Pinus ponderosa
í	8.	Geum macrophyllum	21.	Potentilla gracilis
	9.	Liatris punctata	22.	Pseudoroegneria spicata
	10.	Lomatium canbyi	23.	Rhamnus alnifolia
	11.	Lomatium dissectum	24.	Silene douglasii
5	12.	Lupinus argenteus	25.	Sisyrinchium sp.
	13.	Mahonia repens	26.	Townsendia florifera

IDAHO NATIVE PLANT SOCIETY

PO Box 9451, Boise, ID 83707 www.idahonativeplants.org ADDRESS SERVICE REQUESTED





Idaho Native Plant Societ	ty Membership Form
Name	
Address	
City/State	
Phone E-Mail	
Chapter Affiliation:	Membership Level:
□ Calypso (Coeur d'Alene)	□ Student \$10
□ Loasa (Twin Falls)	□ Senior \$15
□ Pahove (Boise)	□ Individual \$20
□ Sawabi (Pocatello)	□ Household \$25
□ Upper Snake (Idaho Falls) - Inactive	□ Household-Senior \$25
☐ White Pine (Moscow)	□ Sustaining \$40
□ Wood River (Ketchum/Sun Valley)	□ Patron \$100+
□ No Chapter	
Please indicate if your membership is: New York New Yor	
Send completed form and full remittance to Idaho Native Plant Society, P.O. Box 945	
Memberships run calendar year. New memberships run calendar year. New memberships year Renew or join online: ht	_

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