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

Two Sides of the Tetons: 2015 INPS Annual Meeting

By LaMar N. Orton, INPS Past President

The 2015 annual meeting was held in the Teton Mountains July 10–13. It was a joint meeting between the Idaho and the Wyoming Native Plant Societies. Bob McCoy of the Sawabi Chapter of INPS and Amy Taylor of the WNPS were the leads for the conference, both of whom deserve special recognition for the hard work they put in to provide us with an outstanding conference. The opportunities for seeing, identifying and photographing native plants were plentiful. In addition we had the privilege of associating with old friends and making new friends.

Friday afternoon at the Reunion Flats campground we were treated to a guided plant walk with Karl Holte, Idaho State University Professor Emeritus of Botany. Karl is a delight to listen to and learn about plants. He has a way of teaching plant identification that is both enjoyable and helpful in remembering what he has taught. Of course he used his "bigger maker" (hand lens) a lot to show us the beauty of the tiniest flower, and on this day he also used his "louder maker" (portable loud speaker). That evening there was a potluck where we had the opportunity to meet new plant enthusiasts and to visit with old friends.

There were a number of field trips that a person could sign up for Saturday and Sunday. To enhance the experience and interaction with the trip leaders, emphasis was placed on limiting the number of participants on each trip. On Saturday, my wife Rosalie and I took the Darby Canyon trip. The conference was well-timed to see a splendid array of wildflowers. Our trip leaders Klara Varga and Walter Fertig were amazing in their knowledge of every plant we encountered. We found the same to be true with all the leaders on the field trips we took. Trip leaders from the INPS included Rose Lehman, Steve Love, Mike Mancuso and Klara Varga. Many thanks!

Saturday evening we were treated to a buffet at the Driggs Senior Citizen Center. After the dinner, there were a number of presentations and "thank yous" to the many individuals that made the conference possible. The evening's guest speaker was Dennis Knight, Professor Emeritus, Vegetation *Continued Page 4*

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Letter from the President

I saw a new part of Idaho this summer. Well, maybe it's not new, probably been there as long as the rest of the state, but it was my first time in this particular spot. I hiked to the top of Scotchman Peak #1, the highest point along a unique and beautiful mountain range located just east of Bonner's Ferry. The opportunity came as part of 10-day plant collection excursion into the Cabinet Mountains, Scotchman Peaks, and the northern Cascade Mountains; an experience shared by Tony Mc-Cammon, a University of Idaho county educator and fellow INPS member. The trip was funded by the University of Idaho Stillinger Herbarium and we managed to add 130 new specimens to the herbarium collection.

Of all the places we visited on the excursion, I think the Scotchman Peaks area was the most unique; one of Idaho's gems. The climate, geographic location, and alignment of the ridges in the Scotchman Peaks make for some fascinating ecosystems. A strong Pacific influence means plenty of moisture and—atypical for much of Idaho—the west-facing slopes are moister than their east-facing counterparts. Consequently, the ecology more closely mimics the northern coastal ranges than the drier Rocky Mountains. Also, the Scotchman Peaks are located where Cascade flora meets northern Rocky Mountain flora.

The trail to the top is about four miles long with an elevation gain of 3,700 feet. The trail goes up, then more up—and someone forgot the switchbacks. During the hike we traversed four distinct habitats - lower slopes dominated by dense Douglas-fir/redcedar forest, midslopes characterized by slightly more open subalpine fir forest with an understory of grass and forbs, large open meadows near tree-line completely dominated by beargrass (by the way, if you sit and slide down steep slopes of beargrass, you don't get grass stains), and flora along ridgelines near the upper peaks with alpine characteristics. It was at these high elevations that we documented a fascinating mix of plant species, including the creeping beardtongue, American rockbrake, rusty saxifrage, Sandberg's desertparsley (no desert here), Piper's woodrush, wild raspberry, ubi-quitous huckleberries, and many others.

I guess the lesson here is that we are ever so lucky to live in a state where diversity and uniqueness are the rules rather than the exceptions. I am excited to be part of the INPS, an organization that celebrates this diversity. I hope you feel the same.

Yours truly, Stephen Love, President

2016 INPS Membership Renewal

The end of 2015 is fast approaching! Please take time to renew your INPS membership now. You can renew (or join) on-line via the INPS website, or you can complete the membership form on the back of this issue of *Sage Notes*. Encourage others with an interest in Idaho's flora to join. The society is only as strong as the people who stand behind it.

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Announcements

2016 Idaho Rare Plant Conference

The 2016 Idaho Rare Plant Conference is ON. Mark your calendars for Wednesday–Thursday, February 10–11, 2016, for this full two-day event. The conference will be held in Boise at Washington Group Plaza, 800 Park Ave., less than one mile east of the downtown area. Packard's milkvetch will be our rare plant poster child this year and the topic of a rare plant conservation panel. You can expect to hear presentations on plant conservation rankings from your area, meet new botany professionals and researchers, and hear exciting presentations on current rare plant studies and overarching habitat topics. Wednesday evening will be a hosted dinner and Thursday will be a no-host evening at a local restaurant. If you have a recent project or



Packard's milkvetch pods. Photo by Idaho BLM.

study that you are proud of, please bring a poster! If your agency has produced some recent materials such as fact sheets, technical reports or research papers, please bring copies! Registration is free for current students so help us spread the word to local universities. Registration flyers will be forthcoming and more conference details will be posted on the Idaho Native Plant Society Website (https://idahonativeplants.org/), hopefully by right after Thanksgiving. Questions? Holly Beck, hbeck [at] blm.gov or (208) 384-3362.

2016 INPS Annual Meeting - From Refugia to Ridgetops



Canyon Creek. Photo by Nancy Miller.

The 2016 INPS Annual Meeting will be hosted by White Pine Chapter Friday, June 10, through Monday, June 13, 2016. (Monday's event will be optional for those who can stay longer to see more of the June floral display.) Please mark your calendar and plan to join us. The Fish Creek Group Campsite has been reserved for each night. It is a primitive camp area but does have vault toilets. It is about 8 miles south of Grangeville. The nearby Fish Creek Pavilion has also been reserved for Friday dinner and Saturday's dinner and annual membership meeting. The Pavilion is about two miles from the group camp site and is adjacent to the Fish Creek Campground which is not reservable, but is first-come, first served for those who may want a less primitive campsite. In addition, Grangeville has a variety of RV parks and motels—check the Grangeville Chamber of Commerce website: http://grangevilleidaho.com/chamber-of-commerce/

On Saturday and Sunday there will be field trips to a number of locations with diverse flora and habitats, with the opportunity to see rare plants - including coastal disjuncts and Idaho endemics - as well as ecological places of interest.

A hike up beautiful Canyon Creek, a tributary of the Lochsa River, will provide close views of vertical outcrops with rock gardens blanketed by mosses and ferns, as well as lush old-growth western redcedar on the opposite bank. For the history buffs we will begin the hike at the site of a World War II internment camp. This trip will continue west on US-12 to Smith Creek and to Mount Stewart.

Another site to explore will be Mud Springs Ridge, with a brief hike to beautiful Idaho fescue-dominated grasslands. This field trip offers spectacular views of the canyon breaks of the Salmon and Snake Rivers. A visit to the Lucile Caves Research Natural Area gives us the opportunity to view a number of canyon grassland endemics and geologic features that are described in unusual Idaho terms—'volcanic island reefs' and 'west coast of the North America'.

A longer hike along Coolwater Ridge—hopefully to the Coolwater Lookout—will provide views from high above the Selway River. This high elevation hike will provide views of florally diverse habitat atop the ridge

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2015 Annual Meeting - Continued from Page 1

Ecology, University of Wyoming. The subject of Dr. Knight's presentation was "The Ecology of Western Wyoming and Eastern Idaho: Twenty Years of Change and New Research," based on the newly released 2nd edition of his book, *Mountains and Plains: The Ecology of Wyoming Landscapes*. After the presentation, INPS held its annual business meeting, which included approving last year's meeting minutes, a financial report by our treasurer, Elaine Walker, and the election of two new officers. Dr. Stephen Love was elected the new INPS president and Janet Bala the new secretary. I was happy to turn the presidency over to Steve, as I knew the society would be in good hands.

On Sunday, Rosalie and I took the field trip that included an aerial tram ride from Jackson Hole 4,139 vertical feet up to the top of Rendezvous Mountain with an elevation of approximately 10,450 feet. Shortly after we arrived on top the wind blew and the rain started. We all fled to the fover of the restaurant to get out of the weather. After a short while the rain stopped and the weather turned quite nice, but still a bit chilly. The wildflowers were mostly in full bloom with an amazing display of alpine wonder. As I viewed the many flowers, I recalled seeing many of the same species such as Gordon's ivesia (Ivesia gordonii), silky phacelia (Phacelia sericea) and alpine sunflower (Hymenoxys grandiflora) on Railroad Ridge (similar elevation) in the White Cloud Mountains of central Idaho just a couple of weeks before the conference. The mountain top treated us not only to stunning wildflowers but to amazing views of the area, including the

Snake River. After returning to Jackson Hole via the tram, we quickly removed our jackets as the temperature change was dramatic.

That afternoon we were treated to two additional hikes along Teton Pass. Again the many species of wildflowers were spectacular. A couple of special treats included (1) finding a group of western coneflowers (*Rudbeckia occidentalis*) that included many crested (double) flower heads, and (2) finding many plants we identified as subalpine sulphur flower buckwheat (*Eriogonum unbellatum var. majus*) with bracts midway on the flower stems. That variety isn't supposed to have the mid-stem bracts.

On Monday there was a post-conference driving tour along the Ashton-Flagg Ranch Road, but unfortunately Rosalie and I could not participate due to other obligations. In the end, due to the number of participants, the trip had to be split with one group going to Mesa Falls and the other taking the Flagg Ranch Road. The botanical highlights of the Flagg Ranch Road portion included sloshing through the wetland around Loon Lake and finding great sundew (Drosera angelica) and common bladderwort (Utricularia macrorhiza), in bloom no less.

Each of us that attended the annual meeting had different experiences through the many field trips, but I am sure that all felt that their visit to the Tetons was rewarding in every way and well worth the time spent there. Each year's annual meeting provides INPS members differing opportunities to experience and enjoy our area's flora and stunning vistas. "Two Sides of the Tetons" certainly did not disappoint any of us who attended. •

2016 Annual Meeting - Continued from Page 3

that will contrast with views of adjacent areas burned in the harsh 2015 fires.

Another field site exploration will focus on the upper watershed of Clear Creek and special habitats surrounding Lookout Butte, such as the Grand Fir Mosaic, intermediate elevation grasslands, and pockets of disjunct species that are found only in this area of Idaho and west of the Cascades. It will also include stops to see several rare species. Most of this trip will be driving with stops for short hikes.

Monday's optional field trip will include floristically interesting areas near Cabin Creek.

A full description, schedule, and registration form for the 2016 Annual Meeting will be in the March Sage Notes issue. The same information will be available online about the same time on the INPS website's Statewide Annual Meeting webpage (http://idahonativeplants.org/statewide-annual-meeting/). Registration will be available online at that time as well so that you may confirm your camping reservation if needed and field trip and dinner choices. An email notification will be sent to the INPS membership when registration is available online. Contact whitepine.chapter [at] gmail.com for more information.

Taylor Mountain Field Trip

By Michael Mancuso, Pahove Chapter

The joint Idaho Native Plant Society - Wyoming Native Plant Society 2015 annual meeting provided multiple choices of where and how to enjoy the rich botany of the spectacular Teton Mountains. During

(Castilleja linariifolia). A diverse and colorful wildflower-filled slope helped make the switchbacks up the eastern flank of Taylor Mountain well-worth the huffing and puffing. We also passed through patches

the early planning stages I was asked to consider being a field trip leader. I agreed to do so, figuring it would make a great excuse to take a few days off work and spend some time in the Tetons. I chose Taylor Mountain as the field trip destination, recall-



of whitebark pine (Pinus albicaulis) before attaining the summit ridge. An array of cushion and other lowgrowing wildflowers along the windswept rocky ridge provided more botany to enjoy. Some of the high elevation plants encountered included many-flowered

phlox (Phlox multiflora), elkweed (Frasera speciosa), mountain beardtongue (Penstemon montanus), cutleaf daisy (Erigeron compositus), mountain townsendia (Townsendia montana), sulfur buckwheat (Eriogonum umbellatum), featherleaf kittentails (Synthyris pinnatifida), spiny milkvetch

(Astragalus kentrophyta), and Schultz's milkvetch (Astragalus schultziorum). A rocky nook out of the breeze made for a comfortable lunch and rest spot in the mountain sunshine. While on top, we spent a little time looking, but failed to find sweetflowered rock jasmine (Androsace chamaejasme), a



Mountain beardtongue. Photo by Bonnie Heidel.

Forest Service sensitive plant species previously reported to occur at Taylor Mountain. Inevitably, it came time to begin our descent and the approximately four mile hike back to the trailhead. Lots of botany, seeing old friends and meeting new ones, and a grand day in the mountains makes a tough combination to beat. •

wildflower display from a hike to the top in 2007. Located roughly 4 miles northwest of Teton Pass, Taylor Mountain also promised to provide stunning views of the Tetons and surrounding landscape from its 10,000 ft. elevation summit ridge.

Over a dozen folks signed up for the July 12 field trip. However, only myself, trip co-leader Bonnie Heidel from Laramie, and five other hearty spirits



up the Coal Creek trail at around 9 am. Perhaps the drizzling rain and sullen grav clouds had something to do with the no-shows. Our

began walking

Lunch atop Taylor Mountain. Photo by Michael Mancuso.

optimism paid off however, as the rain stopped soon afterwards, and slowly, but surely the clouds began to lift. A blue sky overtook the clouds by the time we reached the base of Taylor Mountain a couple of hours later, and prevailed the rest of the day. The lower part of the hike took us through conifer forest, aspen, and subalpine meadow habitats. A few of the wildflowers along the way included sticky geranium (Geranium viscosissimum), arrowleaf balsamroot (Balsamorhiza sagittata), and Wyoming paintbrush

Darby Canyon Field Trip with Walt Fertig

By Nancy Miler, White Pine Chapter

When registering for the 2015 Annual Meeting and choosing field trips, my husband Reid and I had several criteria. We knew we would enjoy hiking to view and photograph the flora up close and also taking the driving tours to see a wide variety of habitats



Darby Canyon field trips participants. Photo by Nancy Miller.

and spectacular scenery. When we lived in Laramie our house was at 7400 ft., but that was 30 years ago. Now, high altitudes sometimes make breathing more uncomfortable. So no trams or ski lifts! But above all, how could I pass up Darby Canyon – my mother was a Darby and who knows where several generations of early California Darbys had wandered.

Our original field trip group was divided into two because of Wilderness rules limiting the size of a hiking group to 20 people. Klara Varga's group was to arrive at the starting point first and set a fast pace through the lower canyon. Her group's destination was the wind caves at the upper end of the 6 mile trail, stopping to botanize along the way. We did not see them again until they were on their way out back to the trailhead.

Walt Fertig was the leader of our group. With Walt as leader we knew we would botanize all the way and that it would be a fun learning experience. Our destination would hopefully be the limestone bluffs about two-thirds of the way up the trail. A few birds got the attention of the birders in the group along the way—several brightly colored western tanagers, a family of chipping sparrows, and waxwings. Black and white Weidemeyer's Admiral, Silverbordered Fritillary, and Melissa Blue butterflies were the butterflies which stayed long enough and close enough for a photo-op.

Our journey up the trail was fairly slow. Although many forbs and shrubs were familiar, we also encountered plenty of new wildflowers to experience for the first time. Fortunately we had Walt to provide the identification details. Columbian monkshood (Aconitum columbianum) and Sierra larkspur (Delphinium glaucum) were plentiful at the lower part of the trail. Lance-leaved figwort (Scrophularia lanceolata) was a new plant for many of us. Reddish-purple musk thistle (Carduus nutans) blooms were made up of hundreds of tiny individual flowers each with the potential of using the wind to disperse thousands of seeds of this invasive European species. A few patches of western mugwort (Artemisia ludoviciana) brightened the trail edge with silver leaves.

Crossing a small stream gave many of us our first look at brook or stream saxifrage (*Saxifraga odontoloma*) with round, toothed leaves and its roots at water's edge. Unfortunately it was not blooming at this time. From here the trail got a little steeper with



Western clematis. Photo by Nancy Miller.

more limestone rocks, often with ferns growing out of the moss that was covering them. We saw small sword ferns (*Polystichum lonchitus*), brittle fern (*Cystopteris fragilis*), and green spleenwort (*Asplenium trichomanes-ramosum*). Some of the group walked to the cliff edges to survey the plants below, but there were plenty of special plants on flatter, more stable ground for those who didn't like the heights. One of these was a new plant for most of us: alumroot brookfoam (*Telesonix heucheriformis*) with shiny toothed heuchera-type leaves and pink blooms.

Some of us had never seen western sweetvetch (Hedysarum boreale) which grew along the trail. It



had pea-like leaves and pods, and here and there a few small purple flowers were still blooming. In sunny places on the way back we rested and visited among Englemann's aster (Eucephalus engelmannii), little sunflower (Helianthella uniflora), Rocky Mountain goldenrod (Solidago multiradi-

Monkshood. Photo by Nancy Miller.

ata) and sugar-bowl clematis (Clematis hirsutissima) with its feather-like seedheads.

I especially enjoyed meeting others from Laramie and getting news of friends we had in common. Walt definitely lived up to his reviews as a field trip leader and flora expert. Many thanks to him for viewing my photos in Flickr and making corrections in identifications. And the Darby Canyon trail in the Jedediah Smith Wilderness is definitely a trail to be recommended close to Driggs, Idaho. •

Idaho Mystery Plant

This photo was taken by Peggy Faith (Pahove Chapter) in the Teton Range this past summer during one of the INPS annual meeting field trips. Although taken in Wyoming a few miles east of the Idaho border, this species can also be found at high elevations in several Idaho mountain ranges. What is your guess? The answer will be revealed in the next edition of Sage Notes.

The Idaho Mystery Plant in the September 2015 issue was Jacob's ladder (Polemonium pulcherrimum) in the phlox family. It occurs from moderate to high elevations in the mountains, with a widespread distribution extending from Alaska southward to New Mexico and California. Have an Idaho Mystery Plant to share? Send it in to the editor: sage-editor [at] idahonativeplants.org. - Michael Mancuso



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The 8th Annual Idaho Botanical Foray

By Maribeth Latvis and David Tank, University of Idaho

From June 18 through the 22, 25 botanists, students, and other botanical enthusiasts from across the state descended upon the Selway River in the Nez Perce-Clearwater National Forest, marking the 8th annual Idaho Botanical Foray. Initiated in 2008



Group photo on Sunday morning with a pile of full presses. Photo by Steve Martin.

by Dr. Jim Smith (Boise State University), the Idaho Botanical Forays are a collaboration between the four largest botanical institutions in the state-Boise State University, the College of Idaho, Idaho State University, and the University of Idaho-and strive to promote a sense of community among botanists and enthusiasts throughout Idaho, while also serving an important role in scientific research. Scientific collections-and those made on the foraysform the permanent record for all ecological and evolutionary research that investigates the origin and maintenance of biological diversity. Herbarium specimens are the basis for scientific classifications, floristic treatments, plant identification, and serve as vouchers for evolutionary and ecological studies. In addition, specimens housed in herbaria are an archive of the flora through space and time that allow us to document the changes to our flora as we are faced with environmental impacts, land use changes, and a changing global climate. In short, herbarium specimens provide the foundation for biological studies in taxonomy, phylogenetics, systematics, ecology, anatomy and morphology, and conservation.

The research goals of the foray projects center on conducting general botanical surveys to document

the diversity and distribution of vascular plant species in a particular region. Specifically, we have used the forays to survey public lands because of their important diversity, relative ease of access, the public benefit created by providing public land man-

> agers with species lists for their respective areas, and the opportunity to build professional contacts with federal agency botanists. At a minimum, specimens are collected in triplicate to provide material for specimen exchange programs, and all specimens are identified, databased, and imaged. The concerted effort of the Idaho Botanical Forays program has contributed significantly to our ongoing regional projects, such as the Consortium of Pacific Northwest Herbaria

(www.pnwherbaria.org), which provides online access to collections data from all of

our herbaria, and many more throughout the region. Importantly, the Forays also provide wonderful opportunities to catch up with old friends and colleagues and meet new people, culminating in a communal potluck and bonfire on Saturday evening.

Each year, the responsibility for planning and hosting the event rotates across institutions, and this year, Dr. David Tank, Associate Professor in the Department of Biological Sciences and the Director of the University of Idaho Stillinger Herbarium, led the charge, choosing the location, coordinating collecting activities, and providing the presses, card-



Views of the subalpine meadows along Coolwater Ridge above the Selway River. Photo by Nancy Miller.



Processing plants back at camp after a long day of collecting. Photo by Johnny Winn.

board, newspaper, and collecting supplies. With relatively easy road access to a variety of habitats, including the disjunct inland portions of the Pacific Northwest rainforests, mountain parklands, old growth Pacific yew, xeric grasslands, wetlands, and

basalt scabs. The O'Hara Bar Campground on the Selway River just outside of Kooskia, Idaho provided a beautiful basecamp for our expeditions. We worked closely with Mike Hays, the botanist on the Nez Perce-Clearwater National Forest, to identify collecting localities to



The Selway River corridor boasts inland populations of the mesic forest disjunct, Cornus nuttallii (Pacific dogwood) shown here a bit past peak flowering. Photo by Nancy Miller.

maximize botanical diversity and to offer participants an adventure suited to their liking (hiking vs.



A teaching moment with Jim Smith at Musselshell Meadows. Photo by Johnny Winn.

driving, etc.). In general, experienced collectors were teamed up with new collectors into 3-4 small groups and dispatched to one of the chosen localities. All groups reunited back in camp at the end of the day to process their team's specimens, compare notes,

and share stories. It is also worth mentioning that for those with remaining energy at the end of the day, there were some great fly fishing spots within reach!

The over 500 plant collections made over the course of the foray are now at the University of Idaho awaiting identification. In keeping with tradition, the UI Stillinger Herbarium will host a series of keying workshops during the winter months of 2015-2016 to process these specimens



The mycoheterotrophic (parasite on mycorrhizal fungi) orchid, Cephalanthera austiniae, in the understory of the mesic forests along the Selway River. Photo by Nancy Miller.

process these specimens. Please contact Dr. David Tank (dtank [at] uidaho.edu) if you are interested in

participating in these events.

Botanists and enthusiasts in attendance included Janet Bala (ISU contact), Wes Bascom, Maryah Christensen, Alexa DiNicola, Barbara Ertter, Tori Hargraves, Sarah Herzog, Maribeth Latvis, Mike Hays (USFS contact), Liz Martin, Steve Martin, Bob and Chris McCoy, Reid and Nancy Miller, Jacquie Peña, Carly Prior, Marja Slifka, Jim Smith (BSU contact), Kiana



An uncommon pink form of Pedicularis contorta (coiledbeak lousewort) on Coolwater Ridge. Photo by Nancy Miller.

Spillman, David Tank (UI contact), Tori Thornton, Johnny and Trish Winn, and Lindsay Woodruff (several canine companions also joined in on the fun!). •

Aquatic Plants Workshop - Pahove Chapter

By Lisa Harloe, Pahove Chapter

In mid-October, a group of dedicated plant enthusiasts had the pleasure of a two-day workshop focused on aquatic plants taught by Dr. Barbara Ertter. The workshop was co-sponsored by the INPS Pahove Chapter and College of Idaho's Biology Department. Dr. Ertter's interest in aquatic plants began when she focused an undergraduate project on this group. The workshop started with an introduction to this often difficult to identify group of plants. Many different plant families and genera can



Dr. Barbara Ertter showing off a species of Myriophyllum. Photo by Lisa Harloe.

be found in aquatic environments, and with floral characteristics often lacking it can be difficult for even the most astute botanist to narrow down an identification. Dr. Ertter provided a broad overview and helped the students to recognize both common and rarer aquatic plant genera and some species. She pointed out the often overlooked key to Aquatic Vascular Plants beginning on page 139 of Part 1 of *Vascular Plants of the Pacific Northwest*.

Dr. Ertter came prepared with many live specimens in trays of water. Students had the opportunity to take samples back to their work station in the lab and study key characteristics under a dissecting microscope. Many of the specimens were collected locally around Boise or McCall, while others were brought back from Dr. Ertter's recent travels to California and an aquatic plants class she taught there. Interestingly, aquatic plant species are often quite widespread due to their dispersal by ducks and other aquatic birds that travel from one body of water to the next.

Not only did Dr. Ertter provide a vast number of different genera with fresh material, she also took advantage of the impressive herbarium and enlightened the students with many herbarium specimens of aquatic species. Plants were presented in nice groups of shared characteristics, not necessarily by those most closely related. The day began with tiny floating plants where students from as far as Pendleton, Oregon and southeastern Idaho studied and differentiated between Spirodela, Landoltia, Lemna, Wolffiella, Wolffia, and Azolla. Next Dr. Ertter discussed submerged plants with divided leaflets, including, but not limited to Ceratophyllum, Utricularia, Myriophyllum, and Ranunculus aquatilis, and even pointed out a look-a-like algae, Chara. The class looked at the dreaded invasive, Eurasian watermilfoil (Myriophyllum spicatum), and learned a few key characteristics to help differ-



Aquatic plant identification during the workshop's classroom session. Photo by Lisa Harloe.

entiate it from its native relative, shortspike watermilfoil (*M. sibiricum*). Eurasian watermilfoil is more branched and forms massive mats. It has fewer leaf segments per side and is more regularly arranged, compared to shortspike watermilfoil.

Next, the class discussed submersed plants with whorled or opposite leaves, such as *Hydrilla*, *Elodea*, *Najas*, *Zanichellia*, and *Callitriche*. We then moved on to submersed plants with alternate leaves, including *Ruppia* (often found in or near hot springs or alkali areas instead of freshwater), *Stuckenia*, and



Plant identification during the field trip to Marianne Williams Park, Boise. Photo by Lisa Harloe.

Potamogeton. The class ventured out of the deeper water into pond and stream edges and mud flat species including tiny grass-like plants of *Eleocharis*, *Isoetes*, *Sagittaria*, *Subularia*, *Myosurus*, and *Triglochin*. Larger grass-like plants included Juncus, *Sparganium*, *Typha*, *Cyperus*, *Scirpus*, and on to broad-leaved monocots and many other mud flat and wetland plants.

Armed with the full day of hands-on classroom time, the group met for a beautiful day at Marianne Williams Park in east Boise. During this field trip, participants identified plants and solidified their new knowledge. The group encountered several small wet depressions in the middle of the mowed lawn of the park, adjacent to a new apartment development within the floodplain of the Boise River. Several interesting species occurred in the depressions, including flowering *Bacopa rotundifolia* and



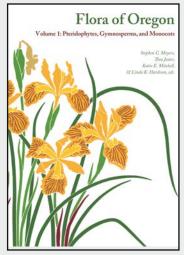
Trays of aquatic plants for the workshop's classroom session. Photo by Lisa Harloe.

Notes The Oregon Flora Project

The Oregon Flora Project (http://oregonflora.org) is pleased to announce that the illustrated Volume 1 of the *Flora of Oregon* is now available! Volume 1 of the 3-volume set covers the ferns and fern allies, gymnosperms, and monocots--ca. 23% of all native and naturalized vascular plants of Oregon. Dichotomous keys allow identification to species, sub-

species, or variety, and each taxon description is accompanied by a distribution dot map. There are pen and ink illustrations of 521 taxa, including 86 new works by artist John Myers.

The "Ecology of Oregon" chapter describes the state's 11 ecoregions and predominant habitats. A



complementary chapter describes 50 sites—organized by eco-region—to explore; these are accompanied by 73 beautiful color photographs. Additional chapters address Oregon's botanical history, and appendices emphasize plant taxa of interest to conservationists.

Specifications: 7.5" x 10.5" hardback, 608 pp., 520+ b/w illustrations, 1000+ distribution maps, 73 natural landscape color photos. \$75. Order online at http://shop.brit.org. — *Linda Hardison*

Cyperus bipartida. The latter species is on the Idaho rare plant species list. The occurrence of these species in the park "lawn" near the Boise River indicates the area likely supported more wetland habitat prior to development.

Dr. Ertter demonstrated how to press aquatic plants, including helpful tips such as drying plants with a towel and use of waxed paper on one side of the specimen to prevent sticking to newspaper. The 2-day workshop was a wonderful learning experience and fun way to spend time with fellow botanical friends and colleagues, both new and old. The group looks forward to the next workshop, and even discussed a few potential taxa for consideration. •

2015 ERIG Report

Bruneau Elementary Wilderness Garden

by Holly Beck, BLM Botanist

Bruneau Elementary extends a big "Thank You" to the Idaho Native Plant Society for their Education, Research, and Inventory Grant (ERIG) program contribution to the Wilderness Garden. This small, rural, community elementary school went big with their plans for an outdoor classroom. The school partnered with the Bureau of Land Management (BLM), Idaho Power, and the U.S. Fish and Wildlife Service (USFWS) to create a spacious learning and exploring space that features a classroom amphitheater area, shade shelter, pollinator gardens and native plant themed alphabet garden. The students voted to name it their Wilderness Garden, coinciding with the celebration of the 50th anniversary of the Wilderness Act. Money awarded by ERIG for the project was used to purchase native plant material and planting tools.

The outdoor space has become a venue for citizen science activities such as the Great Backyard Bird Count and learning events such as an Earth Day Celebration, International Bird Day Festival, and a Pollinator Party. Students' favorites have included making native wildflower seed bombs and learning about watersheds with the US Forest Service Hydrology Interactive Table. The BLM and Idaho Power staff frequently partner to host these events.

The project is part of the BLM's Hands on the Land site (Perjue Canyon HOL) and the USFWS's Schoolyard Habitat Program. These programs focus on creating schoolyard learning about the natural world, hands-on science projects, and data collection. Elementary students learn natural history basics in the garden and then are able to participate in data collection and more adventurous activities in the field when they are in Rimrock High School. High school students contribute to the garden as well by helping host educational events at the elementary and by creating metal sculptures and signs for the garden.

For more information contact Holly Beck, Botanist, BLM, hbeck [at] blm.gov •



Bruneau schoolyard before planting. Photo by Holly Beck.



Weeding day in the wilderness garden.



Basin wildrye, sundance daisy, and penstemons flank the amphitheater. Overshot gate with custom metal work in background. Photo by Holly Beck.

Memorium

Remembering Jon Trail 1943-2015

by Mary Trail and Lynda Smithman, Pahove Chapter

As a Pahove Chapter Charter Member, Jon Trail has been featured in many of the early Pahove Chapter field trips published in *Sage Notes* earlier this year. Jon was born May 25, 1943, in Payette, Idaho, to Edward Garfield (Jack) and Christine Jewell (Cox) Trail. He attended Payette schools, graduated from the University of Idaho in 1965 with a major in Political Science, and attained a Master's degree in Diplomacy from Tufts University. In the fall of 1967, he embarked on a round-the-world trip starting in San Francisco and heading west. After returning, he purchased a 1969 red 911 T Porsche which remained his one car throughout his life time.

Jon began his career as a farmer with his parents doing business as Trails, Inc., they raised registered Hereford cattle, hay, grain, apples, cantaloupes, watermelons, sweet corn and some pumpkins. His love for the farmland was demonstrated by good agricultural practices and professional involvement. At the time of his 60th birthday, the Cox Century Farm (established by his grandparents in 1901) was recognized and celebrated by the Idaho Historical Society.

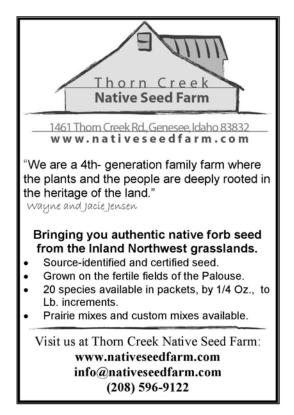
As a thirty-year-member of the Washington County Planning and Zoning Commission, Jon saw the need for conserving fragile and beautiful places. Consequently, along with his sister Mary, they placed one-third of their acreage into conservation easements. The Land Trust of the Treasure Valley is the steward for the Trail Sandhill, located south of Weiser, and home for populations of two rare plant species-Mulford's milkvetch (Astragalus mulfordiae) and Cronquist's stickseed (Hackelia cronquistii). Jon and his sister also designated part of their acreage for the Jewel Wetland developed under the **USDA Resource Conservation Wetland Restoration** program. Conservation actions taken by Jon and Mary Trail represent the kind of outcomes we all hoped for when the Idaho Native Plant Society was originally formed.

For a dozen years or more, Jon enthusiastically participated in Pahove field trips as well as serving as liaison to the Idaho Noxious Weed committee. With his love for photography and fine cameras, he was often seen using his bellows for macro photo-



Jon Trail. Photo courtesy of Jay Smithman.

graphs of native plants. Always generous, he often shared his dissolve projectors for Pahove slide presentations. Jon passed away peacefully in his sleep on the morning of October 6, 2015. A celebration of his life was held November 21 in the historic and recently restored Portia Club in Payette. A more detailed account of Jon's life can be found on the website for Shaffer-Jensen Memory Chapel. •



INPS Chapter News

CALYPSO CHAPTER

Anyone interested in participating in the North Idaho Rare Plant Working Group, contact Derek Antonelli. <u>Where:</u> Chapter meetings are held at 7:00 pm at the Idaho Fish and Game Office at 2885 W. Kathleen Avenue, Coeur d'Alene.

<u>Contact:</u> Derek Antonelli, antonelli8 [at] frontier.com <u>Upcoming events:</u>

March 2: Derek Antonelli will give a presentation on rare plant conservation in north Idaho.

April 6: TBA

May 4: TBA

LOASA CHAPTER

All members and the public are welcome to attend chapter events.

<u>When:</u> Meetings are held the third Thursday of each month.

<u>Where:</u> Taylor Building, Room 258, College of Southern Idaho, Twin Falls. <u>Contact:</u> Kelvin Jones, (208) 886-7051

PAHOVE CHAPTER

The 2015/2016 season continues through April 2016. Your continued support and involvement throughout this season is greatly appreciated. <u>When:</u> We generally meet on the second Tuesday of each month at 7:00 pm from September–April. Dates and times are occasionally subject to change. <u>Where:</u> The MK Nature Center, 600 S. Walnut Street, Boise.

<u>Contact:</u> For more information about Pahove Chapter activities please visit the INPS website or contact our chapter president, Karie Pappani at pahove.chapter.president [at] gmail.com.

<u>Previous events:</u> On September 18, Pahove joined with the Idaho Botanical Garden for a well-attended and enjoyable early evening autumn plant walk in the Boise Foothills. This was the first autumn walk conducted by either group. As one would expect, the floral display was less colorful than during the annual spring season walks, but many plants still received enthusiastic comment. Invasive weeds were sadly too evident. The group was split into three and the leaders, which included many new faces, were Alan Crockett, Alice Crocket, Ann DeBolt, Jackie Lucero, Karie Pappani, and Roger Rosentreter. <u>Upcoming events:</u> Dates and topics are tentative. Updated information will be sent to members via postcard and email. Events are also posted under the Pahove Chapter page of the Idaho Native Plant Society website.

December 10: Movie Night - TBD

January 12: Anne Halford will present on the National Seed Strategy and implications for public land restoration.

February (Exact date TBD): Karen Colson and Holly Beck will give a presentation about schoolyard habitats and outdoor classrooms.

March 8: Barbara Ertter will discuss endangered, rare, and lesser known plants of the Boise Foothills.

SAWABI CHAPER

The public is always invited to Sawabi events. <u>Contact:</u> Ardys/Karl Holte, ardysholte [at] cableone.net (208) 232-6563, or Grant Thomas at thomasgm60 [at] outlook.com, (208) 237-5317

UPPER SNAKE CHAPTER

The Upper Snake Chapter is currently inactive. <u>Contact:</u> Rose Lehman, jojorose [at] cableone.net If anyone is interested in reviving the chapter, they are welcome to contact Rose.

WHITE PINE CHAPTER

When: Meetings are held once a month except during the summer. Field trips occur most any month. For events which may be scheduled or finalized after Sage Notes is printed, check the chapter website at www.whitepineinps.org; or email the chapter officers at whitepine.chapter [at] gmail.com. Where: 1912 Center, 412 East Third St., Moscow (between Adams and Van Buren) Contact: INPS, White Pine Chapter, PO Box 8481, Moscow, ID 83843, whitepine.chapter[at]gmail.com Previous events: Fall landscapes and a tour of Palouse-Clearwater Environmental Institute (PCEI) drew members old and new (two from central Idaho) to the White Pine Chapter's Annual Meeting October 18, 2015. We enjoyed a lot of laughs, good food, and the many creative projects at PCEI. In addition to seeing the John Crock Learning (native plant)



White Pine Chapter meeting PCEI tour. Photo by Nancy Miller.

Nursery, we were delighted by the blazing star (*Mentzelia laevicaulis*) that grew from a load of sand

brought in. A broad stand of Wood's rose (*Rosa woodsii*) lined the entry, giving reassurance that invasive exotics haven't completely taken over the Palouse! The trip was not complete without a visit to the restroom—featuring composting, solar lighting, and rainwater hand-washing.



The restroom at PCEI. Photo by Nancy Miller.

Upcoming events:

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January 19: 7:00 pm. Bracken Fern: The Species and Much More. Dennis Ferguson, Research Forester (retired), will present a program about bracken fern. The presentation will include the biology of bracken fern, as well as a historical perspective of the species and its uses. Part of the story of this fascinating species will be information on consumption of bracken fern by humans and animals, as well as allelopathy. Research on bracken fern in northern Idaho and the important role it plays in the Grand Fir Mosaic will also be discussed.

February 9: 7:00 pm. A Botany Lesson: The Rose Family—Its Subfamilies and Corresponding Fruits. Pam Brunsfeld, former Curator of UI Stillinger Herbarium and Systematic Botany Instructor for the University of Idaho, will present a program on the Rose Family. This program will include tips on identifying all of the Rosaceae subfamilies. If you have heard Pam speak before, you will know it will be an interesting, informative, lively, and fun program. We may even have the opportunity to taste some of those rose fruits.

WOOD RIVER CHAPTER

The Wood River Chapter is reestablished and botanizing after a hiatus of ten years. There are fifteen members and a complete slate of field trips, presentations and gatherings scheduled for 2016. <u>When:</u> Meetings will be held various weekday evenings at 7:00 pm, most dates TBD.

<u>Where:</u> Meetings will be held at the Sawtooth Botanical Garden, located three miles south of Ketchum, on Highway 75 and Gimlet Road. <u>Contact:</u> Cynthia Langlois at

cplangloisACRP [at] msn.com for information about field trips and presentations. Also, check the Sawtooth Botanical Garden website: sbgarden.org for updates on presentations.

Past events: In February, a small group of native plant enthusiasts gathered at The Community Library in Sun Valley to determine if there was interest in reviving the Chapter. With a resounding yes, we scheduled an April meeting at the Sawtooth Botanical Garden where we elected four officers: Cynthia Langlois - President, Lisa Horton - Vice-President, Jeanne Cassell - Secretary, and Carol Blackburn -Treasurer. John Shelley was later elected to the Board as a Member-at-Large. We also worked at the Sawtooth Botanical Garden in "Carol's Native Garden" a native garden honoring longtime and our much esteemed horticulturalist in the Wood River Valley, Carol Blackburn. Chapter activities in 2015 included a field trip to Fish Creek with the Loasa Chapter; a field trip to the Centennial Marsh, near Fairfield, Idaho; and a day-long workshop entitled "Gilled Mushrooms" led by local expert, Kathy Redmond.

Upcoming events:

December 5: Chapter potluck.

January 7: Deb Taylor, Forest Service botanist will give a presentation on whitebark pine.

February TBD: Robert Garcia, Forest Service Range Manager will give a presentation on range management.

March TBD: Wood River Watershed.

March 17: Kristin Fletcher and Carol Blackburn will lead a field trip to Sheep's Bridge. We will look for Anderson's buttercup *(Ranunculus andersonii)* blooming amongst the melting snow.

April TBD: Growing native plants indoors.



Name ______Address ______ City/State ______Zip _____ Phone ______E-Mail ______

Idaho Native Plant Society Membership Form

Chapter Affiliation:

Calypso (Coeur d'Alene) Loasa (Twin Falls) Pahove (Boise) Sawabi (Pocatello) Upper Snake (Idaho Falls) White Pine (Moscow) Wood River (Ketchum/Sun Valley) No Chapter

I would prefer to receive Sage Notes: Print

Electronic Both

Membership Level:

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Sustaining \$35+

Patron \$100+

Renewal

New

Send completed form and full remittance to: Idaho Native Plant Society P.O. Box 9451 Boise, ID 83707

Memberships run calendar year. New memberships enrolled after June 1 include the following year. *Renew or join online:* http://idahonativeplants.org/join-inps/

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Submissions: Members and non-members may submit material for publication. Relevant articles, essays, poetry, news, announcements, photographs and artwork are welcome. Authors, artists and photographers retain copyright to their work and are credited in *Sage Notes*. Send all submissions electronically to the editor at the link below. Please provide a phone number and/or email address with your submission. Submission deadlines are January 8, April 1, August 1 and November 1.

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Editor: Michael Mancuso, sage-editor [at] idahonativeplants.org