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## Dates to remember

Jan. 1, 2013: Renew your INPS membership!

March 31, 2013: ERIG proposal deadline

April 28-May 4, 2013: Native Plant Appreciation Week

March 31, 2013—August 30, 2013: Photo Contest Entries:

June 21-24, 2013: INPS & American Penstemon Society Annual Meeting, Boise



## IDAHO NATIVE PLANT SOCIETY

December 2012  
Volume 34 (4)

Articles contributed to Sage Notes reflect the views of the authors and are not an official position of the Idaho Native Plant Society.



## BOTANIZING WITH FRIENDS

### IDAHO BOTANICAL FORAY 2012: Cache/Caribou National Forest, Bear River Range

By Janet & Ed Bala & Pam Reschke

On Thursday, July 12, 2012, botanists started arriving at the Paris Springs campground located in Bear Lake County, in the far southeastern corner of Idaho to botanize, collect plants, and enjoy the company of other native plant enthusiasts. This was the 5th annual Idaho Botanical Foray, hosted by the Ray J. Davis Herbarium located at the Idaho Museum of Natural History on the Idaho State University campus.

The goal of this event was to survey and collect plants representing the communities growing in the Bear River Range of the Caribou/Cache national forests. This process included collecting plants (in triplicate) and pressing them in newspaper to use as voucher specimens in the herbarium. Information about the location, the type of soil the plant was growing in, and other plants growing in the same location was noted and will be of value to botanists in the future.

Our group of 29 enthusiastic botanists came from five universities including Idaho State University, Boise State University, College of Idaho, Utah State University, and the University of Wyoming. Members of the Idaho Native Plant Society joined us as well. Participants in this group were: Janet Bala, Ed Bala, Rick Williams, Pam Reschke, Ashelee Rasmussen, Kayla Tillotson, Dick Anderson, Alissa Salmore, Bob McCoy, Chris McCoy, Jim Smith, Steve Martin, Maggie Ooi, Carly Prior, Michael Mancuso, Don Mansfield, Josh Irwin, Nathan LeClear, Chris Davidson, Sharon Christoph, Michael Piep, Elaine Walker, Martha McClay, Emma George, Betsaida Chavez, Brendan Eckert, Brittni Brown, Alexa DiNicola, and dogs, Prospero, Nellie, Star, and Mattie.

As we gathered around the picnic tables on Friday morning to peruse the maps and decide locations for collecting trips, interest by all in seeing some of the area's sensitive, endemic, or rare plants intensified. Plants including *Musineon lineare* (narrowleaf wild parsley), *Penstemon compactus* (compact penstemon), and *Lesquerella multiceps* (manyheaded bladderpod) were high on our list to watch for. On Friday, five groups headed out for different locations, elevations, and habitats. The first group, headed for Sherman Peak (elevation 9682'), included: Don Mansfield, Bob McCoy, Brittni Brown, Chris Davidson, and Sharon Christoph. In the subalpine/Douglas-fir mixed forest on Sherman Peak, *Drymocallis* species, *Aquilegia coerulea* (Rocky Mountain columbine), and *Boechea stricta* (Drummond's rockcress) were just a few of the 119 plants collected.

Photo: The typical position of a determined botanist is shown by Nathan LeClear.

Continued on p.4

## IDAHO NATIVE PLANT SOCIETY

**Address:** P.O. Box 9451,  
Boise, ID 83707

**Email:**  
[info3@idahonativeplants.org](mailto:info3@idahonativeplants.org)

**Web site:**  
[www.idahonativeplants.org](http://www.idahonativeplants.org)

### INPS BOARD MEMBERS

**President:** LaMar Orton  
**Vice-pres.:** Stephen Love  
**Secretary:** Nancy Miller  
**Treasurer:** Elaine Walker  
**Past-president:** Janet Benoit  
**Member-at-Large:**  
Mel Nicholls  
**Chapter Presidents** are also  
members of the INPS Board

### STANDING COMMITTEES

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**chair:** Justin Fulkerson (Pahove)

**2013 Annual Meeting chair:**  
Stephen Love (Sawabi)

**Membership chair (interim):**  
Ardys Holte (Sawabi)

**ERIG chair:**  
Janet Bala (Sawabi)

**Newsletter editor:**  
Jane Rohling (Pahove)

### ADHOC COMMITTEES

**Bylaws chair:**  
Nancy Miller (White Pine)

**2013 Photo contest committee:**  
Pahove Chapter

**Nominating committee:**  
Karie Pappani (Pahove)  
Karl Holte (Sawabi)  
Jody Hull (Pahove)  
Derek Antonelli (Calypso)

**Rare Plant Conference chair:**  
Beth Corbin (Pahove)

## *Greetings from the President*

Dear Idaho Native Plant Society Members,

As 2012 draws to a close, we have many wonderful memories of the past year. We remember our annual meeting at Clark Fork and Lake Pend Oreille and the amazing beauty of the area. We remember the field trips to view wild flowers and the thrill of the discovery of a species of plant that we had not seen before. We remember the emergence of new spring growth and the subsequent flowers in our gardens. We also remember the devastating wild fires and smoke that blanketed so much of Idaho. Among our fondest memories is the association we have had with the members of INPS and how much that association has enriched our lives. We are also saddened by the passing of several of our members this year.

As winter sets in we have time to rest from all of our many activities and to anticipate the upcoming year. Many adventures lie ahead for us. In addition to our many chapter field trips and meetings, we are especially fortunate this coming year to have our annual meeting combined with the American Penstemon Society. This will provide us a unique opportunity to learn more about our native penstemons, to participate in field trips with members of the Penstemon Society and to share their enthusiasm for our amazing wild flowers. We will also have the opportunity to make new friends that share our common interests.

As we enter the new year, we should keep in mind that the field trips, programs, and annual meetings in which we have the opportunity to participate would not happen if it were not for the efforts and dedication of so many of our members. We all have talents and expertise that we can use to benefit others within INPS. Please be willing to share your time and those abilities.

May you all have a spectacular holiday season!

Don't hesitate to call me at 208-734-7959 or email me at [lorton1@msn.com](mailto:lorton1@msn.com) with any suggestions, concerns or thoughts you may have about INPS.

Best wishes to you all!

*Lamar Orton*  
INPS President

### **The Nominating Committee needs nominees!**

Election for INPS President and Secretary will be held next summer with results being announced at the Annual Meeting in Boise in June. The Nominating Committee prepares the ballot for the election. The ballot is to be published in Sage Notes or mailed separately at least 30 days prior of the Annual Meeting. Members of INPS are encouraged to contact members of the Nominating Committee with suggestions for nominees for President and Secretary.

The Nominating Committee members are:

Karie Pappani, Pahove	<a href="mailto:kariepappani@msn.com">kariepappani at msn dot com</a>	208-658-4529
Karl Holte, Sawabi	<a href="mailto:ardysholte@cableone.net">ardysholte at cableone dot net</a>	208-232-6563
Jody Hull, Pahove	<a href="mailto:katamanto@gmail.com">katamanto at gmail dot com</a>	208-323-0516
Derek Antonelli, Calypso	<a href="mailto:Antonelli8@frontier.com">Antonelli8 at frontier dot com</a>	208-762-2575

### **Have you heard? INPS is now on Facebook!**



Like our page to receive updates on chapter events and happenings from around the state. View our page at: <https://www.facebook.com/IdahoNativePlants>

# INPS State News

## A Note from Jane Rohling, Sage Notes Editor

As you may have heard I've been struggling with a painful back injury that has made it impossible for me to sit at the computer for any length of time for the past few months. This issue of Sage Notes was a casualty of my condition. I received injections to reduce inflammation Jan. 10 and I am continuing physical therapy. With luck, I won't need surgery, but it may be a little while before I know.

Meanwhile, Craig Miller, Nancy's son, has offered to lay out the February 2013 issue using a template I've sent him. His help at this time is MUCH appreciated!

Between now and the May issue, I will be talking with the INPS board about some options for the future of Sage Notes. I have enjoyed being able to take Sage Notes' visual appeal to a level that reflects the professionalism of the articles in each issue. However, it is far too much work for me to continue without significant help. This could be a chance to learn new skills, build your resume, and help INPS! If you're interested in becoming part of a "Sage Notes production team," see my note on p.18. Contact me to learn more: [sage-editor@idahonativeplants.org](mailto:sage-editor@idahonativeplants.org) or call (208) 938-3529.

Jane Rohling

## 2013 INPS Photo Contest

**Shoot for your chance to showcase our amazing Idaho flora!**

The Idaho Native Plant Society is having a photo contest! The contest is open to all INPS members. This is an excellent opportunity for plant lovers to share their most remarkable photos and earn a chance to win prizes. Photos may be used for the INPS image library on the website, education and outreach documents, Sage Notes, and future calendars.

Photos must be of plants NATIVE to Idaho. This can include close-up shots of species or landscape shots of multiple plants in their native habitats. The contest rules and the entry form will be posted on the INPS website (<http://www.idahonativeplants.org>). The contest start and end dates will be March 31, 2013 and August 30, 2013.

## Landscaping with Native Plants in the Idaho Panhandle

**Review submitted by Nancy Miller, White Pine Chapter**

Kinnikinnick Native Plant Society has published a second edition of the popular *Landscaping with Native Plants in the Idaho Panhandle*. Improvements include a cover laminated on both sides, additional species described, and an enlarged landscape design section. The index and some of the text have been updated. The book has proven to be popular and useful to gardeners and landscapers, not only in northern Idaho but also in the Moscow area.

For each native species included in the book, the reader will find one or more photos and a description of the plant, and a description of suitable habitats and landscape uses. Various lists give the reader listings of plants which fill particular niches or needs, ranging from those adapted to specific habitat types (such as wetlands), to their shade/sun tolerance, deer resistance, flower color, butterfly and hummingbird attraction, etc. Unfortunately, a glitch added an extra 'd' in 'Panhandle' on the cover, but it doesn't detract from the excellent material inside!

Please check the Kinnikinnick NPS website ([www.nativeplantsociety.org](http://www.nativeplantsociety.org)) for locations in Sandpoint that carry the book. Some Moscow area booksellers were also carrying the book earlier and may still have copies. Retail price is \$19.95 plus tax.

If you are in Sandpoint check out the North Idaho Native Plant Arboretum and take your book along. If a plant is in the arboretum's collection, the book will tell you where to find it. Check the list of contributing photographers and editors—you'll find the names of many long-time friends who also belong to INPS and participate in Kinnikinnick Native Plant Society activities as well. Good reading—and happy gardening!

*Sage Notes*, the newsletter of the Idaho Native Plant Society, is published in February, May, September, and December.

**Current and recent past issues** of *Sage Notes* are posted in full color online at [www.idahonativeplants.org/news/Newsletters.aspx](http://www.idahonativeplants.org/news/Newsletters.aspx) along with a searchable index of 2006–2010 issues. We are scanning and uploading older issues as time allows.

**Submissions:** Members and non-members may submit material for publication. Relevant articles, essays, poetry, news and 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.

### **Submission guidelines**

are posted on the INPS web site: [www.idahonativeplants.org/news/Newsletters.aspx](http://www.idahonativeplants.org/news/Newsletters.aspx). Please provide a phone number and/or email address with your submission. Submission deadlines are January 8, April 1, August 1, and November 1.

**Advertising:** Advertisements help reach environmentally-minded, native-plant-loving customers and help support INPS. Prices: 1/8 page = \$5, 1/4 page = \$8, 1/2 page = \$15. Submit ads to the editor electronically (JPEG, TIFF, PSD, or PDF files).

### **Send payment to:**

Sage Notes Ads,  
P.O. Box 9451,  
Boise ID, 83707

### **Sage Notes editor:**

Jane Rohling, [sage-editor@idahonativeplants.org](mailto:sage-editor@idahonativeplants.org)  
Phone: (208) 938-3529

## 2012 Idaho Botanical Foray (continued from p.1)

The second group consisting of Michael Mancuso, Bethsaida Chavez, and Janet and Ed Bala drove west on highway 36 to Copenhagen Basin, a popular winter activity area with a large open subirrigated meadow at the base of a mixed conifer-aspen forest. Plants collected from the meadow included *Polygonum bistortoides* (American bistort), *Sagittaria latifolia* (broadleaf arrowhead), *Platanthera species* (bog-orchid), *Potentilla species*, and numerous sedges, rushes, and grasses. In the mixed conifer areas, *Pedicularis racemosa* (sickletop lousewort), *Sedum debile* (Orphine stonecrop), and *Eurybia integrifolia* (woolly aster) were found.



**Top:** There is more to the botany foray than collecting plants as shown by Kayla Tillotson who had a species of fritillary butterfly land on her finger.

**Bottom:** Paris Spring located just upstream from the Paris Spring Campground is a cool short walk to enjoy some very large monkey flowers (*Mimulus guttatus*).



Three other groups left camp and traveled on the FS-408/Paris Canyon Road dispersing at the Paris Ice Caves. The first group included Jim Smith, Emma George, Martha McClay, and Pam Reschke, who drove beyond the ice caves heading northwest to Green Basin. The Green Basin area looked dry and full of cows, but many species were found, including some *Lomatium* which Jim and Emma were particularly interested in for genetic studies. Another group, Michael Piep, Alissa Salmore, and Dick Anderson, collected at the ice caves and then followed the FS-408 road southwest finding a large meadow with a nice pond where they collected a number of aquatic plants and mosses. The third group, comprised of Rick Williams, Kayla Tillotson, Nathan LeClear, Brendan Eckert, and Ashelee Rasmussen, climbed Paris Peak.

On Saturday, a few new botanists arrived and a few left. The group decided to work on the southern side of the Bear River range, concentrating in the Bloomington Lake area where *Musineon lineare* (narrowleaf wildparsley) grows on ledges and in rock cracks and crevices of the Bloomington Lake cirque. It is restricted to calcareous rock of the Laketown Dolomite Formation. The Bloomington Lake area is the only place in Idaho this species is known to occur. Don Mansfield, Michael Mancuso and special friends of Michael's, Frank (Buddy) Smith, and Steve Ripple headed to the cliffs above Bloomington Lake to the *Musineon* site in a mixed Douglas-fir/limber pine/subalpine fir forest. Forb genera included *Valeriana*, *Castilleja*, *Poa*, and *Aquilegia*, to name a few, on limestone just above contact with white quartzite. They collected about 49 plants at this location.

Josh Irwin, Nathan LeClear, Brittini Brown, and Brenden Eckert, collected around 30 plants at an average elevation of about 8,800 feet on Bloomington Peak. A third group, Rick Williams, Kayla Tillotson, and Ashelee Rasmussen, collected at three sites along the middle fork of Bloomington Creek in aspen/spruce forests.

Two more groups drove further south on Hwy 30 turning off at FS-412 and heading southwest into St. Charles Canyon. Jim Smith, Carly Prior, Maggie Ooi, Bob McCoy, and Bethsaida Chaves, collected approximately 110 plants before they had to run for cover during a downpour. Michael Piep, Dick Anderson, and Alexa DiNicola also collected along the FS-412 road.

The last group traveled out of the Bear River Range and into the Preuss Range north of Montpelier looking for different *Lepidium* species, *Ericameria discoidea*, *Salicornia rubra* (red swampfire), and *Astragalus jejunus* var. *jejunus* (starveling milkvetch). The group included: Janet and Ed Bala, Alissa Salmore, Emma George, and Pam Reschke. They did not find any of the plants listed but did make it to Elk Valley where they found a beautiful spring-fed wetland meadow, and slid around many muddy corners on the trip home during a heavy thunder shower.

Michael Piep, assistant curator at Utah State University collected a number of fungi, mosses, liverworts, and lichens during the foray. At the time of this writing Michael had identified about 1/3 of the specimens collected including:

**Fungi:** *Puccinia jonesii* var. *jonesii* (rust fungus on *Lomatium*), *Cryptoporus volvatus*, *Lentinus ponderosus*, *Pycnoporus cinnabarinus*, and *Peniophora rufa* (on aspen).

**Lichens:** *Psorotichia schaeferi*, *Xanthoria polycarpa*, *Melanelia exasperatula*, *Peltigera canina*, *Cladonia fimbriata*, *Usnea subfloridana*, *Melanelia subolivacea*.

**Liverwort:** one was collected, *Marchantia polymorpha*.

**Mosses:** *Brachythecium rivulare* and *Plagiomnium ellipticum*.

Lucky for us, Mother Nature cooperated to the extent that the really big rainstorm did not start until everyone was back at camp pressing plants. Also lucky for us, Rick's Oklahoma roots came out and he and Ed cooked some great chili under cover of a rainfly. The rain stopped for a short time so that the potluck dinner—three different types of chili, salads, and desserts—could be enjoyed by all of the rain-soaked participants. That night, Rick, Don, Nathan, and Ed, played music for all to enjoy around the campfire. After most had gone to bed you could hear Alexa's beautiful voice singing and harmonizing with Nathan and the others who stayed up long enough to get caught in another rain shower.

Thanks to all 29 participants in this year's foray. With their help, approximately 780 plants were collected and will become permanent vouchers in Idaho's herbaria.

### Winter keying workshops

There will be keying workshops during the fall and winter months at the Ray J. Davis Herbarium. During the workshops, we will be identifying many of the hundreds of plants collected during the foray. If you are interested in participating, contact Janet Bala [balajane@isu.edu](mailto:balajane@isu.edu). Schedules and details will be posted on the INPS website.

The Sixth Annual Idaho Botanical Foray will be hosted by Jim Smith, Boise State University. Watch for information about where and when in upcoming issues of Sage Notes.



**Above:** In a saddle on Paris Peak, Nathan LeClear, Ashelee Rasmussen, and Kayla Tillotson found a varied patch of wildflowers including paintbrush, daisies, and sunflowers.

**Below:** On the slopes of Paris Peak, students Kayla Tillotson, Ashelee Rasmussen (Idaho State University students), Brendan Eckert (College of Idaho student), and Rick Williams (Idaho State University curator), stop for a break and a photo.



**Below:** Camas meadows are not very common in southeast Idaho, but on a pre-foray trip we discovered this one at Danish Flat.



# More Paris Canyon Foray Photos

**Right:** Investigating plants on top of the Paris Ice Caves are Bob McCoy, Janet Bala, and Pam Reschke. There were many interesting plants growing on the limestone formation including *Allium brandegei* (brandegee onion), *Petrophytum caespitosum* (mat rockspirea), *Viola nuttallii* (yellow violet), *Erysimum capitatum* (rough wallflower), and *Erythronium grandiflorum* (glacier-lily).



**Left:** Dick Anderson, Michael Piep, Alissa Salmore, Ed Bala, and Nellie and Prospero (the dogs) are enjoying camp the first day before all the hard work began.

**Below:** Don Mansfield and Michael Mancuso (foreground) were instrumental in leading collecting groups and identifying plants—and were generally the last ones done at the end of each day.





**Above:** Brendan Eckert and Josh Irwin are cinching down a press full of plants.

**Right:** Pam Reschke, Emma George, and Alissa Salmore tried to stay dry under a rain-filled tarp.



**Below:** Ashelee Rasmussen and Janet Bala are organizing plant presses full of drying plant specimens in the biology greenhouse. The entire drying process took two weeks.



# It's time to submit 2013 ERIG Proposals

By Janet Bala

## ERIG needs YOU!

Want to help INPS support more great projects?

The Education, Research, and Inventory Grant (ERIG) program relies on funding from various sources such as Rare Plant Conferences, workshops, and private donations.

If you, your business, or your employer would like to make a donation to INPS to help fund these worthwhile ERIG projects, send your tax deductible donations to:

ERIG Program, INPS  
P.O. Box 9451  
Boise, Idaho 83707

Checks should be made out to INPS. Please be sure to specify that your donation is to be used for ERIG projects.

Thank you for your help!

Janet Bala  
ERIG Committee Chair  
[balajane@isu.edu](mailto:balajane@isu.edu)

Interested in applying for an ERIG grant?

Details and an application form are available at <http://www.idahonativeplants.org/erig/Erig.aspx>. A list of past ERIG recipients is also posted.

The Idaho Native Plant Society (INPS) is soliciting proposals for its Education, Research, and Inventory Grant (ERIG) program. Grants of up to \$1,000 will be awarded in 2013 to support projects that contribute to the appreciation, conservation, or knowledge of Idaho's native flora or vegetation. The purpose of the ERIG program is to stimulate and lend support to educational, research, and conservation activities that promote an appreciation for native plants and plant communities in Idaho. The ERIG committee encourages you to submit a proposal if you have a project that may qualify. **The deadline for submitting proposals is March 31, 2013.**

Grant guidelines: The ERIG program is intended to support direct project costs. Grant proposals should not include expenses for salary and personal benefits, the purchase of personal equipment, or other expenses not essential to the project. (Complete downloadable 2013 ERIG guidelines are available on the state INPS web site in PDF format: [www.idahonativeplants.org/erig/Announcement\\_for\\_2013\\_ERIG.pdf](http://www.idahonativeplants.org/erig/Announcement_for_2013_ERIG.pdf).)

## Here are some examples of costs a grant may cover:

- **Direct costs:** travel, meals, and lodging for the project.
- **Supply and service expenses** used for the sole purpose of the project (e.g.: film, photocopying, phone, lab materials).
- **Printing costs:** for public outreach material or research publications.
- **Application procedure and requirements:** Proposals should contain the following information:
  1. **Project title**
  2. **Contact information:** name, address, phone number, organization/affiliation, and email (if available).
  3. **Project description:** outline the project objectives, methods, and final product. Explain how the project will benefit the appreciation, conservation, or knowledge of Idaho's native flora or vegetation. Describe how project success will be evaluated.
  4. **Itemized budget:** outline an overall project budget, including the amount you are requesting (up to \$1,000), as well as other funding sources.
  5. **Timeline:** please provide a timeline for completion of all major tasks associated with the project, including presentation of the results.

Project proposals must pertain to native plants of Idaho. Please limit grant requests to a maximum of \$1,000, and be aware that less may be awarded due to INPS budget constraints and the number of applications submitted. Successful applicants will be required to submit a final report to the INPS documenting project accomplishments and a summary of the project to be published in the INPS newsletter, Sage Notes. The recipients of these awards will have a timeline of two years from the date of the award to complete their projects. We encourage applicants to become INPS members if they are not already, however, membership is not a prerequisite to apply for or receive an ERIG.

Please submit proposals by email to Janet Bala at [balajane@isu.edu](mailto:balajane@isu.edu) or by post to:

Idaho Native Plant Society  
ATTN: ERIG Committee Chair  
P.O. Box 9451, Boise, ID 83707

The Idaho Native Plant Society is honored to accept gifts in honor or in memory of loved ones. These special contributions will assist the Education Research and Inventory Grant (ERIG) fund.

Recent donations include gifts from:

- Archie and Mary George in memory of Sarah Moore
- Nancy and Reid Miller in memory of Margaret Ely and Sarah Moore

The ERIG program supports projects that contribute to the appreciation, conservation, or knowledge of Idaho's native flora or vegetation. Projects throughout the state have benefited from these grants. This past year the Panhandle Animal Shelter in Ponderay was able to purchase native grasses and shrubs along with plant markers to create an inviting walkway for patrons and those passing by to walk and learn more about local native plants. As part of the Moscow's Palouse Prairie School's incorporation of studying native plants of Idaho, ERIG funds helped with purchasing native plants to grow along a walkway and reproduction of herbarium specimens to examine. With the help of the Rocky Mountain Tree Finder, a dichotomous key, students were able to learn to identify plants.

The Idaho Native Plant Society welcomes contributions to the Education Research and Inventory Grant fund. With extra donations from our members we will be able to fund higher amounts and additional grants to communities, schools, and scientists who incorporate the importance of native plants into their communities, curriculum, and research.

## Three easy ways to donate:

1. We have added a DONATE button at the top of the [ERIG NEWS Web page](#). VISA, MasterCard, American Express, Discover, or PayPal can be used to make a secure, tax deductible donation.
2. There is also a box on the 2013 member renewal form this year for ERIG donations in addition to your membership (see page 19).
3. Donations can also be sent by post to:

Idaho Native Plant Society  
ATTN: ERIG Fund  
P.O. Box 9451  
Boise, ID 83707

**Please considering helping us fund grants that support our mission to promote interest in native plants and plant communities, and to collect and share information on all phases of the botany of native plants in Idaho!**



**ERIG funds assist projects that benefit Idaho students as well as native plants as shown in these photos from past projects at the Palouse Prairie School (Moscow) and Eagle High School. Photos: top three by Stephan Flint; bottom by Jesseyln Hamilton**

## Worth the wait!

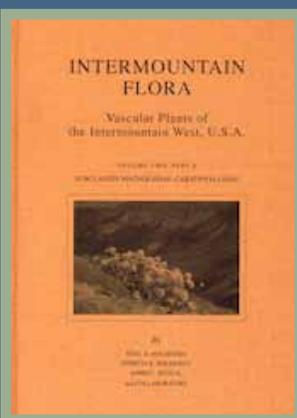
Intermountain Flora:  
Vascular Plants of  
the Intermountain  
West, U.S.A.  
Volume 2, Part A:  
Subclasses  
Magnoliidae –  
Caryophyllidae

by Noel H. Holmgren,  
Patricia K. Holmgren,  
James L. Reveal, and  
Collaborators

Aug. 2012

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731 pages

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## The Final Volume of the Intermountain Flora

### Review by Lynn Kinter, INPS Pahove Chapter & Idaho Natural Heritage Program

After some 40 years in production, the eighth and final volume of the Intermountain Flora is now in print—and well worth the wait. As with the other volumes of the set, Volume 2, Part A has thorough botanical descriptions, clear keys, and precise line drawings of every species, with close-ups of particular identification features. Also included are common names, synonyms, infraspecific taxa, locations, and notes on uses, conservation concerns, and poisonous plants.

Notable specimens are cited, many of which portray the early days of botanizing in the western US. For example, the entry for *Paronychia sessiflora* (low nailwort) cites Thomas Nuttall's collection from 1811, "On the highest hills of the Missouri, near Fort Mandan [N.D.]." The entry for *Aquilegia coerulea* (Colorado blue columbine) lists an 1833 collection by Nathaniel Wyeth "In the valleys of the Rocky Mountains, towards the southern sources of the Columbia." And the entry for *Opuntia polyacantha* (starvation pricklypear) notes an 1847 specimen from "Ft. Pierre [S.D.], Upper Missouri, brought down by fur traders."

The Intermountain Flora covers the floristic divisions of southern Idaho—Snake River Plain, Owyhee Desert, Bonneville Basin, and Wasatch Mountains—as well as southeastern Oregon, Utah, most of Nevada, and small portions of Wyoming, Arizona, and California.

This final volume represents a monumental amount of research on 31 families, 147 genera, 611 species, and 301 varieties. *Eriogonum*, with 121 species, is the largest genus in the volume, and one of the five largest in the entire series. Families with many Idaho representatives include Amaranthaceae, Caryophyllaceae, Chenopodiaceae, Polygonaceae, and Ranunculaceae. Other families that are favorites of mine include Berberidaceae, Betulaceae, Cactaceae, and Nymphaeaceae. Readers will note with interest that Montiaceae is broken out from Portulacaceae, and Sarcobataceae is broken out from Chenopodiaceae.

#### Volume 2, Part A covers several species on the INPS rare plant list, including:

*Allenrolfea occidentalis* (iodinebush), *Calandrinia ciliata* (redmaids), *Eriogonum hookeri* (Hooker's wild buckwheat), *Eriogonum palmerianum* (Palmer's wild buckwheat), *Paronychia sessiflora* (low nailwort), *Pediocactus simpsonii* (Simpson's hedgehog cactus), *Ranunculus pygmaeus* (pygmy buttercup), and *Salicornia rubra* (red glasswort).

#### Taxonomic changes are highlighted for some taxa on the INPS rare plant list:

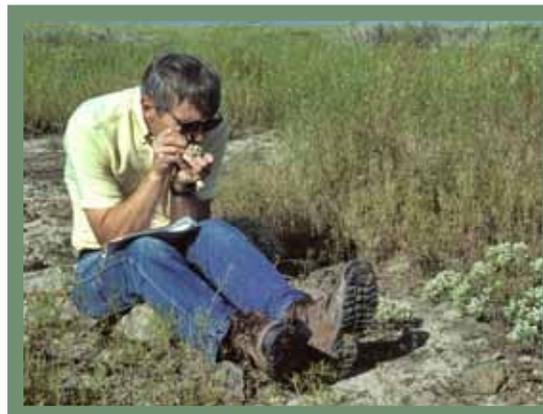
- *Coryphantha vivipara* (pincushion cactus)—formerly *Escobaria vivipara*, and not documented in Idaho. This agrees with the Flora of North America treatment, which concludes that reports of *Coryphantha* from Idaho are actually *Pediocactus*.
- *Eriogonum crosbyae* var. *mystrium* (Pueblo Mountains wild buckwheat)—formerly *E. prociduum* var. *mystrium*.
- *Eriogonum ochrocephalum* (white-woolly wild buckwheat)—neither the rare variety 'calcareum', the locally common variety 'sceptum', nor the widespread variety 'ochrocephalum' are recognized. If this treatment were to be accepted by INPS, the species *E. ochrocephalum* may be common enough in Idaho that it is no longer of conservation concern.
- *Eriogonum shockleyi* var. *shockleyi* (Shockley's wild buckwheat)—includes *E. shockleyi* var. *packardiae* (cowpie wild buckwheat). This agrees with the genetic analysis published by Jim Smith and Terry Bateman, of Boise State University, in 2002.
- War Eagle wild buckwheat—no scientific name yet; allied to *Eriogonum crosbyae* and *E. capistratum*.
- *Papaver coloradense* (Rocky Mountain poppy)—formerly *P. radicum* ssp. *kluanense* (arctic poppy).
- *Ranunculus grayi* (arctic buttercup)—formerly *R. gelidus*.

- *Silene hitchguirei* (mountain campion)—formerly *Silene uralensis* ssp. *montana* (petalless campion), though Intermountain Flora does not report it from Idaho—only from neighboring states to the east.
- *Silene nuda* (sticky catchfly)—formerly *Silene scaposa* var. *lobata*.
- *Thalictrum dasycarpum* (purple meadow-rue)—This volume corrects an old clerical error by the Idaho Conservation Data Center of *T. dasycarpum* in southern Idaho. Specimens are actually *Salicornia rubra*.

In using the Intermountain Flora through the years, the only additions I can recommend are a single index for the entire set and a comprehensive key to the families. Fortunately, a supplement is in the works that will include these two items, as well a brief history of the project and photos of those who have been involved.

The lead authors, Noel and Patricia Holmgren, of the New York Botanical Garden, and James Reveal, of Cornell University and the University of Maryland, are friends and colleagues of many Idaho botanists. For assistance with this volume, they thank several INPS members, including Pam Brunsfeld, Beth Corbin, Ann DeBolt, Barbara Ertter, Karl Holte, Lynn Kinter, Michael Mancuso, Don Mansfield, Roger Rosentreter, and Jim Smith.

For this volume and other exceptional contributions to science, the Holmgrens were recognized with the 2012 Asa Gray Award for outstanding lifetime achievement from the American Society of Plant Taxonomists. Collectively, the volumes of the Intermountain Flora represent an incredible amount of work. Yet after some 40 years of research, the Holmgrens and their co-authors close with a simple photo of botanist Marcus E. Jones in his mule-drawn buckboard in 1894, and a note that “more adventures lie ahead.”



Photos (clockwise from top left): Pat Holmgren in Utah 1997; illustrator Bobbi Angell; four-o'clock illustrations from IMF2A, p.585; Jim Reveal; and Noel Holmgren, in Idaho. Photos courtesy Pat Holmgren, New York Botanical Garden.

# Introducing the *Astragalus*

By Michael Mancuso

If you have spent any time looking at wildflowers in the Idaho mountains, deserts, or canyons, you have seen an *Astragalus*, commonly referred to as “milkvetch” or “locoweed”. Some are showy and hard to miss, while others need your attention to be found. Some *Astragalus* species are quite widespread and common, while others rank among the rarest members of the Idaho flora. Like other wildflowers, once you learn to recognize *Astragalus*, stumbling across one in the hills is like encountering a friend. And it’s nice to know something about your friends.

*Astragalus* is the largest genus of flowering plants in the world, containing approximately 2,500 species. With a worldwide tally of roughly 280,000 named plant species, this equates to a bit less than 1% of all plant diversity on earth. *Astragalus* is distributed mainly across the Northern Hemisphere, being most highly diversified in arid continental, desert, and Mediterranean climates. Areas of exceptional diversity include southwest Asia, especially the Iranian Highlands and Turkey, with approximately 1,000-1,500 species; the Sino-Himalayan region, with approximately 500 species; and the Mediterranean Basin and western North America, each with approximately 450 species. Another 100 or so species occur along the axis of the Andes Mountains in South America. With a few exceptions, Old World *Astragalus* have chromosomes in sets of 8 ( $n = 8$ ). In contrast, species endemic to North America form an aneuploid series with chromosome sets ranging from 10 – 15 ( $n = 10 - 15$ ). This suggests the Eurasian and North American groups have long, independent histories.

The recorded history of *Astragalus* dates back nearly 2,000 years, the name being a classical Greek word meaning “ankle-bone.” Carl Linnaeus applied the name to milkvetches with a bilocular or two-chambered pod. A few species that occur in Idaho, such as *Astragalus alpinus* (alpine milkvetch) and *Astragalus agrestis* (field milkvetch) also occur in Eurasia, and were known to and originally named by Linnaeus. *Astragalus* also has a long ethnobotany history. *Astragalus membranaceus* (Chinese milkvetch) has been an important traditional Chinese medicine for over 2,000 years, used to treat fatigue, weakness, diarrhea, and other ailments. Some Native American tribes used *Astragalus* species for medicinal purposes as diverse as coughs to poison ivy. It is still a popular modern alternative herbal remedy for treating fatigue, boosting the immune system, helping digestion, and other conditions. Current medical research is interested in *Astragalus* for the fight against cancer. Some species of *Astragalus* and many species in the related genus, *Oxytropis* (locoweed spp.), produce an alkaloid called Swainsonine that causes locoism in livestock. This alkaloid is currently being researched for its anti-tumor and anti-cancer properties, and also its ability to block the toxicity of certain cancer drugs.

Most species of *Astragalus* are perennial and reproduce from seed. The pollination biology of only a small percentage of *Astragalus* species has been studied—however, some are known to be self-compatible; others are self-compatible, but benefit from outcrossing; and others are obligate outcrossers. Bees are common visitors to *Astragalus* flowers and known or assumed to pollinate many species. Hybridization is apparently uncommon within the genus.

In terms of ecology, most species of *Astragalus* are adapted to xeric conditions. Most are poorly adapted to low light, understory, fully vegetated habitats, or sites with high levels of resource competition. The majority occur in marginal, relatively sparsely- vegetated habitats unsuitable for many other species. Many species of *Astragalus* are narrow endemics, these often confined to specific, edaphically-controlled habitats such as sand dunes, clay knolls, ash outcrops, and gypsum outcrops. However, physiological and ecological adaptations contributing to the success of *Astragalus* in these marginal habitats has received relatively little study.



Above: *Astragalus anserinus* (Goose Creek milkvetch).  
Photo: Mike Mancuso



Above: *Astragalus* illustration from “How to Know the Wildflowers” by Mrs. William Starr Dana, published in 1899 by Charles Scribner’s Sons, New York.

As of 2012, a total of 21 *Astragalus* taxa are listed as Endangered or Threatened under the Endangered Species Act. Nine of these are endemic to California. Most others occur in the western United States, although one species is found in Tennessee and another in New England. The rare plant lists of all western states include a preponderance of *Astragalus* species. Idaho is no exception, with 26 *Astragalus* taxa on the INPS rare plant list. That's a pretty high proportion of the approximately 74 different *Astragalus* species one can encounter here in Idaho. All but two of these species are native to the state. In addition, approximately 15 more intraspecific taxa reside in Idaho. Populations occur throughout the state, but relatively few species include northern Idaho within their range. Many more species are found southward from Idaho County. In terms of limited geographic distribution, *Astragalus* accounts for 11 (18%) of the approximately 63 plant species found in Idaho and nowhere else in the world.

**The following brief descriptions and associated photographs highlight five of my favorite *Astragalus* species in Idaho.**

***Astragalus aquilonius* (Lemhi milkvetch):** This species has trailing, reddish stems, greenish-gray herbage due to dense pubescence, greenish-white flowers, and beautiful, large, inflated, membranous fruit pods that hang close to the ground. Its worldwide distribution is restricted to Custer, Butte, and Lemhi counties in east-central Idaho. The majority of populations occur along lower slopes of the Salmon River canyon from Clayton, downstream to near Ellis, and up the East Fork Salmon River valley. It inhabits dry, gentle to steep, unstable slopes, talus, washes, and alluvial debris.

***Astragalus camptopus* (Bruneau milkvetch):** This is a low-growing, rhizomatous species that tends to form colonies. It has zigzag stems, large purplish flowers, and strongly coiled, stipitate fruit pods. It is an Idaho endemic known only from northern Owyhee County. Its habitat includes dunes, gullies, and loose slopes within desert shrub communities. Some years Bruneau milkvetch produces a prolific, wonderful wildflower display. Other years, like 2012, only a small percentage of plants produce flowers and the plants seem less flamboyant.

***Astragalus gilviflorus* (Plains milkvetch):** This species represents one of the most unique-looking milkvetches in our flora. It is recognized by its stemless, densely tufted habit, tri-foliolate leaves having a steel gray-blue color, and yellowish to whitish flowers tucked within or barely exceeding the leaves. Plains milkvetch is widespread on the high plains from southern Alberta, south to Oklahoma. Populations in east-central Idaho and northeastern Utah form the species' western extent.

Below: *Astragalus aquilonius*  
Photo: Matt Lavin



Below: *Astragalus camptopus*  
Photo: Idaho Natural Heritage Program



Below: *Astragalus gilviflorus*  
Photo: Matt Lavin





Above: *Astragalus platytropis*  
Photo: Matt Lavin

***Astragalus platytropis* (Broad-keeled milkvetch):** This diminutive, tufted species has silvery-gray foliage and whitish to lavender flowers. The swollen, reddish to mottled or speckled pods that lie on the ground are striking. Broad-keeled milkvetch occupies dry, rocky ridges and slopes, scree, and other rock outcrop habitats, most commonly on calcareous substrates. Populations in east-central Idaho and southwestern Montana are disjunct northward from the main swath of the species' ranges that includes parts of east-central California, Nevada, southeastern Oregon, and Utah. A high elevation mountain species across most of its range, broad-keeled milkvetch descends to the valley bottoms in east-central Idaho. You are usually enjoying a pretty view when you encounter this species in Idaho!



Above: *Astragalus yoder-williamsii*  
Photo: Idaho Natural Heritage Program

***Astragalus yoder-williamsii* (Mud Flat milkvetch):** This is a dwarf, densely tufted species with stiff, persistent leaf stalks, tiny leaflets, and small white flowers generally immersed in the foliage. Most populations occur in the Owyhee Uplands in west-central Owyhee County. However, at least one disjunct population occurs in the Osgood Mountains in northern Nevada—which also happens to be where this species was first discovered in 1979. The small stature and relatively remote distribution of this species enabled it to escape detection in Idaho for many years. Mud Flat milkvetch occurs mainly in flat to gently sloping swales within *Artemisia tridentata* ssp. *vaseyana* (mountain big sagebrush) communities. Less commonly, one can find it on cindery or gravelly, rocky sites supporting sparse vegetation.

*Astragalus* can be an intimidating group to folks getting started in learning Idaho's wildflowers. Even though it may be difficult to identify some *Astragalus* species, it is not hard to appreciate the group's amazing diversity in Idaho, or marvel at their beauty and contribution to local landscapes. Come next spring, *Astragalus* will enliven many an open slope across Idaho. Enjoy them all!



Right: *Astragalus anserinus* (Goose Creek milkvetch)  
Photo: Mike Mancuso

## Astragalus in the Spotlight

### An identification workshop to learn about this fascinating genus

By Julie McWhorter

*Astragalus* identification can be tricky because of its numerous species, specialized terminology, and the inconsistent presence of flowers and fruits on collected material. Even with all the necessary specimen parts, it is sometimes difficult to determine characteristics in the keys. The June 2012 *Astragalus* Workshop taught by Michael Mancuso and Don Mansfield at the College of Idaho was an opportunity to gain skills to overcome these identification difficulties. The two-day workshop was cooperatively sponsored by the Idaho Native Plant Society and the College of Idaho. Although I was a first-time attendee of one of these workshops, I felt extremely comfortable with the terms and identification process by the end of the second day.

The workshop started with an overview of the genus, including an introduction to some of the over 70 *Astragalus* species in Idaho. The presentation used colorful images to introduce and review the history, uses, and ecology of *Astragalus*, and the important morphological characteristics used to identify its many species.

The lab portion of the workshop was an informative chance to look at *Astragalus* specimens provided by the instructors or brought by participants. The number of dissecting microscopes and other available equipment allowed participants to work on identifying *Astragalus* specimens either alone or with a partner. The combination of guided and independent practice allowed learners to work at their own pace, skill level and interest category.

The second day of the workshop was a field trip with several stops near Highway 95 south of Marsing, Idaho, eventually crossing the border into Oregon at Leslie Gulch, an area renowned for its rich, endemic flora that dwells in volcanic soils amidst stunning rock formations. As a bonus, we looked at other plants, birds and geology during the field trip. The repetition of keying *Astragalus* in the field began to click. I went from never having keyed one to keying out ten *Astragalus* species by the end of the field trip.

Workshop participants represented a range of affiliations, including federal land management agencies, universities, private sector companies and others interested in Idaho's flora. The roughly 30 participants came with varying levels of previous experience with *Astragalus*, including at least one self-admitted "Closet Botanist" in the group. The workshop provided opportunities to meet and talk with other plant enthusiasts in both classroom and field settings.

One of the "aha moments" of the workshop for me was eavesdropping on a conversation about *Astragalus purshii* (woollypod milkvetch). In a discussion about the several varieties of *A. purshii* in Idaho it was mentioned that just because woolly pods are present, it does not automatically key out to *A. purshii*. In the field, *A. purshii* is the most common *Astragalus* I notice during my work in southwestern Idaho, but now it seemed important to know additional characteristics to be certain of my identification. It also occurred to me that perhaps I could identify *A. purshii* and make important observations about the distribution of the varieties.

Here are some of the things I appreciated about the workshop:

- The availability of mounted and labeled specimens to help understand the diversity of *Astragalus* in Idaho and to practice keying
- Individual attention from experts and college students assisting them
- A list of terms and definitions needed to key *Astragalus* specimens
- Your own tools for keying and the flexibility to work with others
- Contacts with other professionals
- Having fun!



Above: *Astragalus* illustration from *The Craftsman's Plant Book*, by Richard G. Hatton, published in 1909 by Chapman and Hall Ltd.

Below: *Astragalus jejunus* (Starveling milkvetch), Whiskey Flat. Photo: Mike Mancuso



# INPS Chapter News

## INPS CHAPTERS

### CALYPSO CHAPTER

821 W. Mustang Ave.  
Hayden, ID 83835

President: Derek Antonelli  
Vice President: Vacant  
Secretary: Karen Williams  
Treasurer: Janet Benoit  
Newsletter: Vacant

### LOASA CHAPTER

340 E 520 N.  
Shoshone, ID 83352

President: Kelvin Jones  
Vice President: LaMar Orton  
Secretary/Treasurer:  
Lois Rohay

### PAHOVE CHAPTER

P.O. Box 9451  
Boise, ID 83707  
[Pahove.chapter@gmail.com](mailto:Pahove.chapter@gmail.com)

President: Karie Pappani  
Vice Pres.: Elaine Walker  
Secretary: Danielle Clay  
Treasurer: Caroline Morris  
Venue Coord.: Susan Ziebarth  
Conservation: Justin Fulkerson  
Members at Large:  
Cyndi Coulter, Karen Colson, &  
Jody Hull

### SAWABI CHAPTER

146 South 17th Ave.  
Pocatello, ID 83201

President: Bob McCoy  
Vice Pres.: Dick Anderson &  
LaRue Gregersen  
Secretary: Barbara Nicholls  
Treasurer: Cathy Frischmann  
News to members: Linda Johnson  
Chapter News: Ardys Holte  
Web site: Catalina Steckbauer  
Hospitality chair: Pauline Havens  
Conservation/Education  
chair: Janet Bala  
Members-at-large: Janet Bala,  
Pauline Havens, Ardys & Karl  
Holte, Linda Johnson, Chris  
McCoy, Mel Nicholls, & Shirley  
Rodgers.

## CALYPSO CHAPTER

**When:** Meetings are the first Wednesdays of March, April, May and October at 7:00 p.m. Field trips are during the spring and fall and we do not meet from November to February.

**Where:** Conference room of Idaho Department Fish and Game, 2885 W. Kathleen Ave., Coeur d'Alene, ID 83815

**Contact:** Derek Antonelli, [antonelli8 at frontier dot com](mailto:antonelli8@frontier.com).

## UPCOMING EVENTS

**March 6, 2013: Business:** Determine field trips for the upcoming season.

**Presentation:** Hager Lake Vegetation Study.

**April 3, 2013: Business:** TBD.

**Presentation:** Tentatively on the characteristics of the Lily Family.

**May 1, 2013: Business:** TBD.

**Presentation:** Possibly on the characteristics of the Rose Family.

## LOASA CHAPTER

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

**When:** Meetings are held the third Thursday of each month

**Where:** Taylor Building, Room 258, College of Southern Idaho, Twin Falls

**Contact:** Kelvin Jones, (208) 886-7051

## PAHOVE CHAPTER

**When:** Meetings are held on the 2nd Thursday of each month from September–April, 6:30 p.m. Dates and topics below are tentative. More current information will be sent to members via postcard & email & posted the INPS website: <http://www.idahonativeplants.org/inps/chapter.aspx?ChapterId=4>.

We are well on our way into another great season filled with interesting presentations and excellent opportunities for camaraderie. Please join us!

**Where:** Meetings are usually held at the MK Nature Center Auditorium.

**Contact:** For more information about Pahove Chapter activities visit the website: [www.idahonativeplants.org](http://www.idahonativeplants.org) or

email Karie Pappani at [pahove.chapter.president at gmail dot com](mailto:pahove.chapter.president@gmail.com).

Chapter Elections were held in September. We welcome Danielle Clay as our newest board member. Danielle will be our secretary until she moves to Washington in March.

## UPCOMING EVENTS

### January 24, 2012: Movie Night

Movie night for the Pahove Chapter means great food and drinks while watching an informative movie (TBA).

**February 7, 2012:** Presentations by our Board Members We are privileged to have board members who love to travel abroad and at home to discover the wonders of plants. In this double presentation, Caroline Morris will show us wildflowers of Turkey and Croatia AND Justin Fulkerson will teach us more about a local species, Packard's milkvetch.

## SAWABI CHAPTER

**Meetings:** We welcome the public to our chapter's informative programs.

**When:** First Monday of each month, October through March, 7:00 p.m.

**Where:** Pond Student Union Building, Room 308, ISU Campus, Pocatello.

**Contact:** 208-241-5851, email [desertflwrs@gmail.com](mailto:desertflwrs@gmail.com).

## UPPER SNAKE CHAPTER

**When:** Meetings are usually held the 3rd Wednesday of the month at 7:00 p.m. Field Trips are scheduled in the spring and summer.

**Where:** Idaho Fish & Game office, Idaho Falls

**Contact:** Sue Braastad, [braastads at yahoo dot com](mailto:braastads@yahoo.com).

## WHITE PINE CHAPTER

**Meetings:** During the spring and fall, meetings are held once a month. Field trips occur regularly whenever the weather allows. Please check the chapter website for events which may be scheduled or finalized after this issue is printed: [www.whitepineinps.org](http://www.whitepineinps.org) or email the chapter officers at [whitepine.chapter@gmail.com](mailto:whitepine.chapter@gmail.com).

**Contact:** Pat Fuerst at [epfuerst at frontier dot com](mailto:epfuerst@frontier.com) or White Pine Chapter, PO Box 8481, Moscow, ID 83843.

White Pine chapter met October 26th over pizza, with a potluck of salads and memorable desserts, at Moscow's beautiful 1912 Center. After the eats, a nice mix of long-time members and newer folks pulled chairs into a circle, to put forth ideas for activities and people who have the expertise and interest to present programs and lead trips.

A sampling of ideas for this winter and early spring:

- Jacie Jensen, Thorncreek Native Seed Farm—speak on sustainable weed management in the Palouse
- Penny Morgan, UI College of Natural Resources—program on fire ecology
- Derek Antonelli, Calypso Chapter president—talk on Hager Pond, hopefully with follow-up trip there in spring
- Pam Brunsfeld, UI Stillinger Herbarium Manager & Curator—herbarium workshop
- Michael Mancuso, Mancuso Botanical Services—talk on Idaho endemics
- Don Childress, Sandpoint Master Gardener—speak on landscaping with woodland natives

A new chapter board was approved: Sonja Lewis, president; Susan Rounds, vice president; Pat Fuerst, secretary; Elisabeth Brackney, treasurer; and Pamela Scheinost Pavek, board member-at-large. Additionally, Nancy Miller continues her work as webmaster and Internet and email adviser.

Members Thad Davis and Trish Heekin were to be honored for their contributions to the 2012 spring native plant sale, but unfortunately they were not able to attend.

Nancy Miller, INPS secretary, told the chapter about the state meeting June 21-23 in Boise area, which will be a joint meeting with the American Penstemon Society—an exciting joint event!

## WOOD RIVER CHAPTER

**Contact:** Carol Blackburn at [blackburncrl at yahoo dot com](mailto:blackburncrl@yahoo.com) for information on activities and gatherings.

## INPS CHAPTERS

### UPPER SNAKE CHAPTER

President: Allen Perkins  
Vice President: Sue Braastad  
Secretary: Alan Crockett  
Treasurer: Dave Godfrey  
Members-at-large: Mark & Donna Whitman

### WHITE PINE CHAPTER

[whitepine.chapter@gmail.com](mailto:whitepine.chapter@gmail.com)

President: Sonja Lewis  
Vice President: Susan Rounds  
Secretary: Pat Fuerst  
Treasurer: Elisabeth Brackney  
Member-at-large: Pamela Scheinost Pavek  
Past President: James Riser  
Landscaping & Restoration  
Plants: Juanita Lichthardt  
Publicity Chair: VACANT  
Web: Nancy Miller, Patricia Hine  
[www.whitepineinps.org](http://www.whitepineinps.org)

### WOOD RIVER CHAPTER

P.O. Box 3093  
Hailey, ID 83333  
President: Carol Blackburn  
Vice President: VACANT  
Secretary: VACANT  
Treasurer: VACANT



Nancy Miller captured these beautiful images of winter in northern Idaho. The white-throated sparrow (above) is an unusual visitor at this time of year! Photos: Nancy Miller

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Email: [lorton1@msn.com](mailto:lorton1@msn.com)

## Help Wanted

Producing Sage Notes is a BIG job and I really cannot continue as editor without help.

### Here are some ways you could contribute:

- Write or solicit articles about botanical work, research, natural history, plant conservation, or any other topic of interest to INPS members.
- Compile all the articles, ads, chapter notes and other submissions into a single MS Word document (no fancy formatting required).
- Review content for accuracy, spelling, correct common and scientific names, contact authors to clear up questions.
- Solicit advertisements or sponsors.
- I'm willing to work with someone who would like to learn to work in Adobe InDesign to help with the layout.

Interested? Contact Jane Rohling,  
[sage-editor@idahonativeplants.org](mailto:sage-editor@idahonativeplants.org)

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# INPS Annual Dues & Membership Renewal Form

It's that time of year again—time to renew your INPS membership! If you have not already done so, please send this form, along with your check, to **your chapter treasurer**. You may also print this form from our website: [www.idahonativeplants.org/inps.printable\\_form.htm](http://www.idahonativeplants.org/inps.printable_form.htm)

## 2012 Annual Membership Categories & Dues

Check one	Category	Annual dues
<input type="checkbox"/>	<b>Patron*</b>	<b>\$100+</b>
<input type="checkbox"/>	<b>Sustaining*</b>	<b>\$35+</b>
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<input type="checkbox"/>	<b>Student</b>	<b>\$10</b>
<input type="checkbox"/>	<b>ERIG donation**</b>	<b>\$ _____</b>

\* Memberships in these categories are allocated two votes when they represent a household.

\*\* We hope you'll consider making a donation to help support our Education Research and Inventory Grant (ERIG) fund. See pages 8-9 of this issue for more information on ERIG.

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## Chapter affiliation? (check one)

- Calypso (Coeur d'Alene)**
- Loasa (Twin Falls)**
- Pahove (Boise)**
- Sawabi (Pocatello)**
- Upper Snake (Idaho Falls)**
- White Pine (Moscow)**
- Wood River (Ketchum-Sun Valley)**
- None.\*\*\*\***

\*\*\*\*Those who do not live near a chapter are encouraged to join. We can put you in touch with other members in your area, and can coordinate with you on any state level activities you may wish to be involved in.

**Comments?** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

The Idaho Native Plant Society (INPS), incorporated since 1977, under the laws of the State of Idaho, is dedicated to promoting interest in native plants and plant communities and to collecting and sharing information on all phases of the botany of native plants in Idaho, including educating the public to the values of the native flora and its habitats.

In keeping with our mission, it is the intent of the INPS to educate its membership and the public about current conservation issues that affect Idaho's native flora and habitats. More information about INPS is available on our web site: [www.idahonativeplants.org](http://www.idahonativeplants.org)

Membership is open to anyone interested in our native flora. Dues are payable annually in December for the coming year. New or renewing members can submit dues to your chapter treasurer.

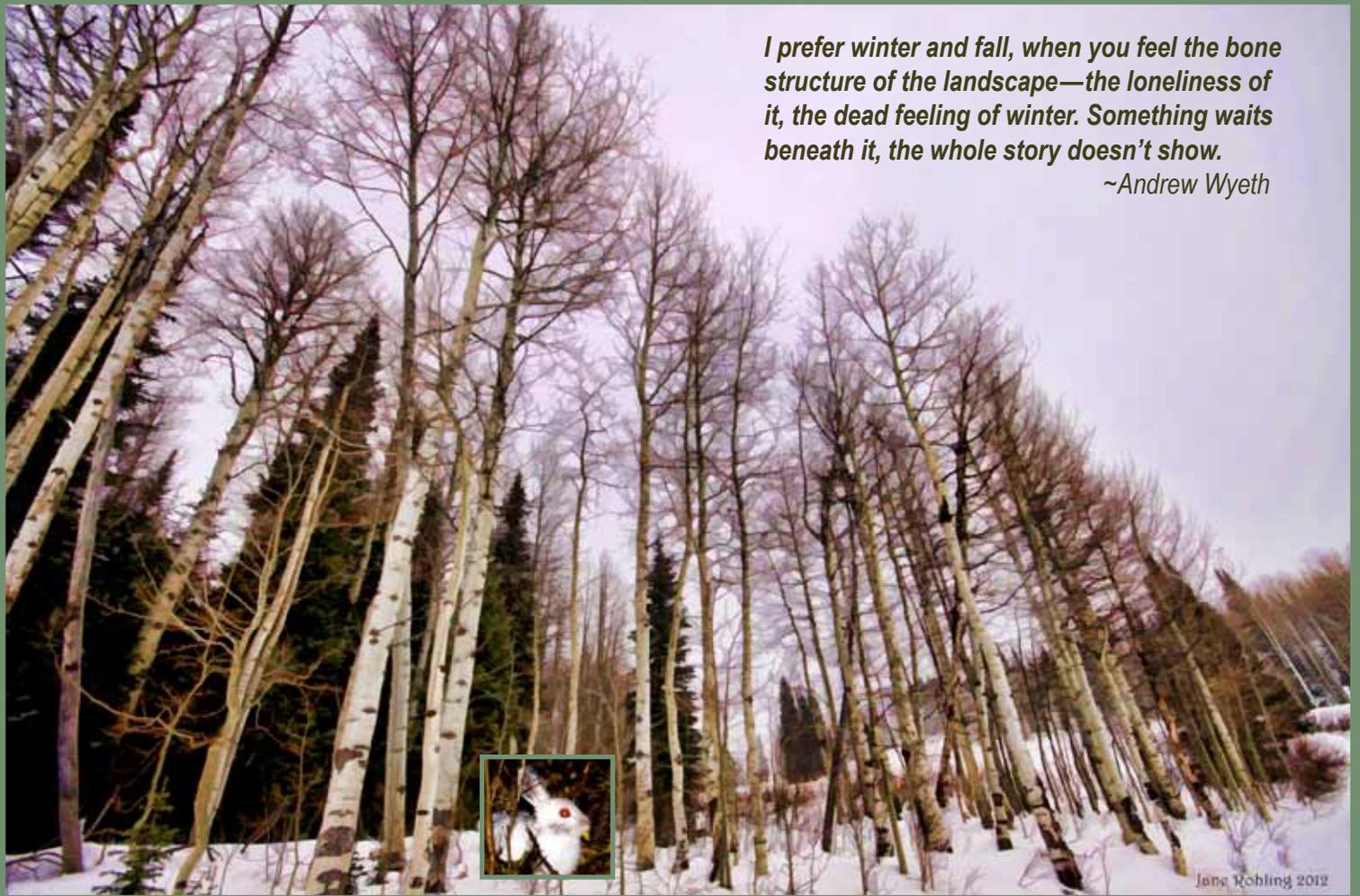


# Sage Notes

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*I prefer winter and fall, when you feel the bone structure of the landscape—the loneliness of it, the dead feeling of winter. Something waits beneath it, the whole story doesn't show.*

*~Andrew Wyeth*

Jane Robling 2012