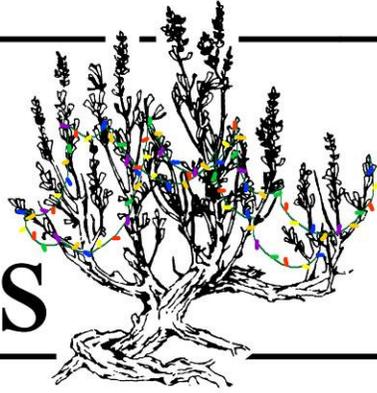


Sage Notes



... promoting interest in
Idaho's native flora.

Winter 2008 ❖ SAGE NOTES ❖ A Publication of the Idaho Native Plant Society Vol. 30 (4)

Needed: A Plant Conservation Strategy for Idaho

By Lynn Kinter

Those of us concerned with Idaho's rare plants and lichens need an easy way to access basic information on these organisms. Currently, much of this information is scattered and out-dated. For a single species, we typically go to multiple sources to get maps, photos, and data on life history, habitat, and conservation concerns. To find its conservation status, we may consult at least six lists: Idaho Native Plant Society (INPS), Idaho Natural Heritage Program in the Idaho Department of Fish and Game (IDFG), US Bureau of Land Management, US Fish and Wildlife Service, and US Forest Service Regions 1 and 4. This presents a real challenge when compiling information for multiple species.

When faced with a similar challenge for animals, the US Congress established the State Wildlife Grants program in 2001 that launched the development of comprehensive wildlife strategies for each state and territory. Scientists, land managers, industry representatives, and the public all participated in developing the strategies, while the respective state and territorial fish and wildlife agencies led the efforts. The Idaho Comprehensive Wildlife Conservation Strategy (CWCS) was completed in 2005, and since then has served as a valuable guide for conservation in the state. According to Rita Dixon, IDFG Biodiversity Program Leader and technical lead for the CWCS, plans for creating an interactive, Web-based version of the Strategy are underway.

Unfortunately for those of us who are botanically inclined, the federal strategy directives specifically excluded plants from the definition of wildlife. A handful of states included plants among the species addressed, and a few others intend to develop parallel strategies for plants. Idaho is in the latter group—we have the will, and now must find the way!

The concept for an Idaho Plant Conservation Strategy was introduced at the INPS Rare Plant Conference in 2006. As envisioned, the plant strategy will be structured much like the wildlife strategy, with a single-page account and range map for every species of conservation concern. An objective analysis will be used for determining which species should be priorities for conservation efforts. Habitats and geographic areas that support many species of conservation need would also be described.Continued on page 4

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Sage Notes is in color on the INPS website:
<http://www.idahonativeplants.org/>

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

Letter from the President

Dear INPS Members,

It seems like only yesterday that we were at the beginning of 2008. Now here we are almost at the beginning of 2009. During the past year INPS has made some notable changes. The largest change was the adoption at the annual meeting of the revised bylaws that the committee had labored on for two years. The next change that is going to affect all of you, is the revised dues structure adopted by the Board. (See the new dues amounts in this issue.) The old dues had been in effect for 6 years+. The new dues structure will once more put INPS in the black instead of using up our reserves. One of the items INPS hopes to put more funding into is ERIG. These worthwhile grant projects help to greatly advance the interests of native plants. Another action the Board took was the adoption of an "official" logo for INPS. This logo is available in digital form for putting on t-shirts, mugs, hats or whatever.

In looking ahead to the new year, INPS has some interesting activities planned. Pahove Chapter is hosting the Rare Plant Conference on February 11-12 in Boise. This is a must go to at least once during your membership. The RPC is really what INPS is all about--the preservation of native plants. (See announcement in this issue.)

Sah-Wah-Be Chapter is hosting the INPS annual meeting at Island Park on June 26-27. They have some exciting activities planned. One of the proposed extras is a float trip on Sunday after the annual meeting concludes. The annual meeting will be a great opportunity to become acquainted with members from chapters around the state. (See announcement in this issue.)

INPS has formed a calendar committee with the expectation of featuring members' photos by 2010. You will be hearing more from this committee.

INPS moves forward with the participation and cooperation of individual members from each chapter working as officers and on committees. Each member of each committee is an important cog in the machinery that keeps INPS moving. People are needed on each of the committees to help INPS develop more programs and to have INPS function

smoothly. The Nominating Committee is diligently searching for people to fill the state officer positions. Please, if you are asked to serve as a state officer or work on a state committee, give it a try.

Thanks to all of you for making this a very successful year for INPS.

Happy Holidays. See you at the RPC and the annual meeting.

Cheers!

Janet Benoit, INPS President



Who's on your list this holiday? Christ's Indian paintbrush (*Castilleja christii*), found only atop Mt. Harrison, Cassia Co., Idaho, is ranked on many conservation priority lists. See page 6 for an example of how the new Idaho Plant Conservation Strategy will help consolidate disparate lists into a helpful resource for rare plant conservation.

24th INPS Rare Plant Conference February 10-12, 2009

The 24th Idaho Native Plant Society Rare Plant Conference will be held in Boise, Idaho, February 10-12, 2009. This gathering of professional and lay botanists, native plant devotees, and wildflower enthusiasts is always a great chance to learn the latest on rare and native plants of Idaho.

Karen Colson, Pahove Chapter vice-president, recently got the ball rolling for the tremendous amount of work that goes into this event. If you'd like to help by volunteering for planning committees or conference events, contact Lynn Kinter, conference chair, at lkinter at idfg dot idaho dot gov or 208-287-2734. Details about conference registration and abstract submission will be posted on the INPS website in December.

Holding to tradition, the event begins with an informal social on Tuesday evening, Feb 10. On Wednesday, we will focus on the rare species list and rankings maintained by the Idaho Native Plant Society. Though INPS tracks over 400 species, *only a subset of these will be covered at the conference, based on abstracts submitted prior to the conference.* Using recent data and range maps, we will discuss species in need of rank changes, new species that may be added to the list, or listed species now known to be too common to warrant listing.

Throughout the meeting, attendees can display posters of their work. Attendees will also have ample time for networking and discussions—at the Tuesday evening social, Wednesday evening banquet, and meals and breaks throughout the two days of presentations. Our banquet will highlight keynote speaker, Del Wiens, who has conducted plant research in Sri Lanka, Madagascar, Honduras, and many other exotic places around the globe.

The second day of the 2009 conference will feature presentations and workshops related to the conference theme. Past themes have included invasive species, pollinators, natural communities, and Palouse Prairie. For 2009, our theme is “Success Stories”—so join us to learn from others who have had special successes in native and rare plant conservation!

Conference schedule

Tues, Feb 10: Evening social

Wed, Feb 11: Daytime rare plant list discussions, posters, evening banquet and keynote address

Thu, Feb 12: Daytime speakers & workshops, posters
Evening *Eriogonum* workshop at Boise State University

Lodging Alert!!

If you're coming to the Rare Plant Conference from out-of-town, *make lodging arrangements ASAP.* The conference is scheduled on the same dates as the Special Olympics in Boise, so most hotel rooms are already booked. We have reserved a block of single rooms at the Doubletree Club (475 W. Parkcenter Boulevard; 208-345-2002) for \$85/night, but you must make your reservation there by **January 10.** The Doubletree Club (not to be confused with the Doubletree Riverside) is 2 miles from the Idaho Power Building where the conference will be held. Doubletree has a free shuttle for conference attendees.

We are also hoping to offer lodging in INPS members' homes. If you would like to try this option, please contact Lynn Kinter, conference chair, or 208-287-2734.



The keynote speaker at the 2009 Idaho Rare Plant Conference will be transcontinental biologist Del Wiens! On assignment, Del studies plants along Willow Creek (unfortunately species and locale specifics are unknown).

Scientists, managers, and others will have input into the development of the document—it will truly be a statewide effort. The final product will be available online in a format that is searchable by county, habitat, and other criteria. The strategy would be valuable to a wide audience—from lay botanists using it as a rare plant guide, to land managers relying on it for conservation planning.

INPS involvement is critical to developing the plant strategy because the group is already working to promote interest in, and share information about, Idaho's native plants. The organization could help raise awareness of the need for such a project. Individual INPS members could write single-page accounts of species for which they have specific knowledge, and contribute information and be involved in the overall process of developing the document. A future Idaho Rare Plant Conference might provide a forum for discussion of some species or issues that need particular attention in the process of writing the document.

We can gauge the scale of the task before us by using the INPS Rare Plant List as a guide for how many species might be included. The final document would likely cover about twice as many species as the CWCS:

	Animals	Plants & Lichens
Native species in Idaho	~1100	~3200
Species in strategy	229	430?

Right now, the most pressing need is to secure funding for what is envisioned as a 3-year process. IDFG has begun by matching a grant from the US Fish and Wildlife Service. Progress to date includes:

- Developing a working outline of the strategy
- Building a template for individual species accounts
- Compiling a list of potential partners to involve
- Drafting a framework of steps for developing the strategy
- Calculating a budget and timeline
- Writing funding proposals for some of the initial work
- Talking with groups and individuals about the strategy

The largest tasks before us include:

- Objectively determining the species of greatest conservation need
- Preparing species accounts
- Prioritizing areas for conservation actions
- Peer review of materials
- Meeting with partners and others throughout the process

In developing the Idaho Plant Conservation Strategy, INPS will be a key partner. I would be happy to discuss opportunities for involvement with any members who have particular interests or ideas related to the project.

About the author

Lynn Kinter is the IDFG Botany Program Leader, where her work focuses on rare plants. She is also a member of the Pahove Chapter of INPS, and a new homeowner interested in converting her water-thirsty lawn to native species. Lynn is also the 2009 Rare Plant Conference Chair (208.287.2734; lkinter at idfg dot idaho dot gov).

Sample species account for the Idaho Plant Conservation Strategy

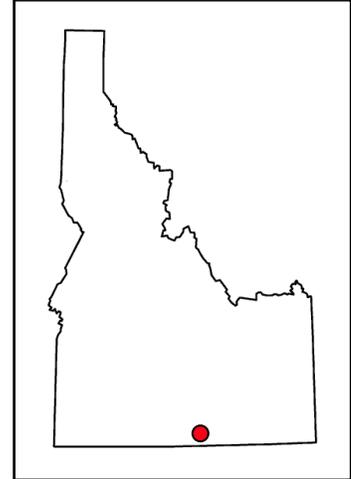
**Christ's Indian paintbrush - *Castilleja christii* N.H. Holmgren
Figwort family – Scrophulariaceae**

Conservation Status:

IPCS: G1, S1 [critically imperiled globally and in Idaho]
INPS: G1 [critically imperiled globally]
BLM: No status [not known from BLM lands]
FS Reg 1: No status [not known from Region 1]
FS Reg 4: Sensitive
FWS: Candidate—proposed as Endangered in 1976 (FR 41(117):
24567), and as a Candidate in 1980 (FR 40(127):27855).

Taxonomy: First collected by John Christ in 1950; recognized as a new species and published by Noel Holmgren in 1973 (Holmgren 1973).

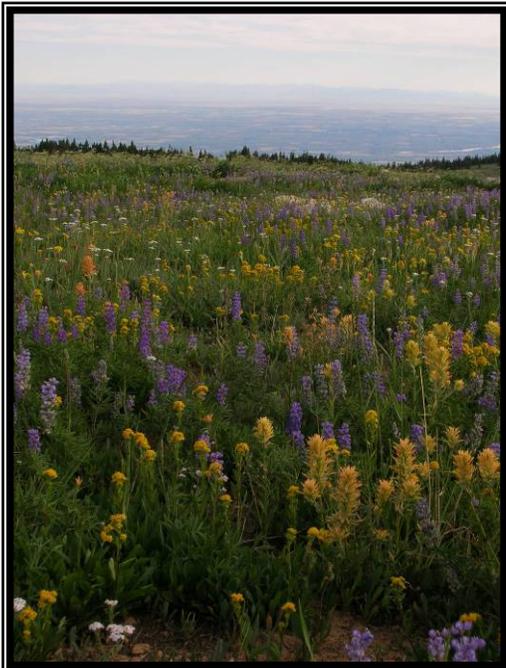
Biology: Perennial forb; hemi-parasite; reproduces by seed; flowers July to mid-September.



Similar species: Many *Castilleja* species may appear superficially similar, though the yellow-orange bract color of *C. christii* is uncommon. *C. angustifolia*, *C. linariifolia*, and *C. miniata* grow in the same vicinity as *C. christii*.

Habitat: Moist subalpine meadows dominated by *Artemisia tridentata* ssp. *vaseyana*, *Festuca idahoensis*, or forbs, including *Solidago multiradiata* and *Aster foliaceus*. 2600-2800 m (8600-9200 ft).

Cultural and commercial values: *Castilleja* species have a wide range of medicinal uses among Native American tribes (Moerman 1986).



Landownership/management: Sawtooth National Forest

Distribution: Single population over 89 ha (220 ac) on top of Mount Harrison, Cassia Co., ID.

Abundance: Estimates vary from >10,000 to > 3,000,000 individuals.

Population trend: From 1995 to 2005, plant density has declined from 4.42 to 3.49 plants/sq m and reproductive output has declined from 5.04 to 1.72 stems/plant (Motychak & Pierson 2005).

Conservation concerns: Past road development and power line burial; invasive species, particularly *Bromus inermis* planted on roadsides; off-road vehicles and other recreational use; trespass livestock; climate change; hybridization with other *Castilleja* species.

Recommended actions: [To be determined]

Juncus Identification Workshop

By Karen Colson

The Pahove Chapter of the Idaho Native Plant Society and the College of Idaho in Caldwell teamed up this summer to host a *Juncus* identification workshop, held August 14-15, 2008. More than 20 people gathered for two days at the College for the workshop, which focused on using keys and field characteristics to identify plants in this complex genus.

We were extremely fortunate to have Peter Zika, author of *Juncus* for the new Jepson Manual of the California Flora, instructing the workshop. Peter created a fun and comfortable atmosphere that contributed to the knowledge and confidence of our local botanists in identifying Idaho *Juncus* species. All of the feedback we received from participants was extremely complimentary and everyone went away feeling very excited and encouraged. "The *Juncus* workshop was fantastic! I came into the workshop calling most *Juncus* species "*Juncus* sp." on a field form. I left the workshop feeling confident at breaking it down to which group it is in. I now search *Juncus* species out while in the field and look forward to working with the great key that Peter Zika created. Thank you and I am looking forward to the next workshop!" commented Lisa Hahn from the Idaho Conservation Data Center.



The first morning was filled with engaging presentations on the family Juncaceae (the rush family), basic morphology and ecology, and special topics in *Juncus* identification, such as how to recognize the sections and groups, difficult complexes, and coping with variation. The group then spent the afternoon, with the help of Peter and his expert assistant Barbara Ertter, practicing indentifying fresh specimens of common and not so common rush species. Peter provided valuable handouts which included easy to read identification keys, comparative illustrations of species complexes, distribution maps, and notes on most Idaho taxa.



The second day was spent in the field visiting known *Juncus* populations, which helped reinforce both the plant characteristics as well as the habitat requirements.

As most of you will remember, last year the Idaho Native Plant Society decided to host the Idaho Rare Plant conference every other year instead of annually with the intention of holding plant identification workshops in the off-years. However, since this workshop was such a huge success, the Pahove Chapter is hoping to hold summer identification workshops annually. The next workshop will be announced in Sage Notes so stay tuned for more details. If you would like to be included on our mailing list, please send your contact information to Karen Colson at trilliumkc@msn.com.

I'd like to give a special thanks to Don Mansfield, Susan Fink, and the College of Idaho for making this workshop possible by providing valuable assistance organizing the workshop and providing the location and equipment. I'd also like to sincerely

thank Peter Zika for taking the time to travel to Idaho and share his extensive knowledge with us. Thanks also goes to all of those that helped with the workshop: Cyndi Coulter, Jody Hull, Michael Mancuso, and Barbara Ertter, as well as all of the participants for making the workshop such a success. We hope to see all of you and many new faces as well at the next plant identification workshop!

Notes on Idaho *Juncus*, the rushes

By Peter Zika

Thanks to the joint efforts of the Idaho Native Plant Society and the College of Idaho, a special seminar on *Juncus* identification was held in Caldwell 14-15 August 2008, featuring a guest appearance by one of North America's most distinguished rush scholars, Barbara Ertter.

Preparing a list of the known *Juncus* in Idaho was an interesting exercise. Here is the list used in the class, including 35 Idaho rushes.

* = non-native species

<i>Juncus articulatus</i> subsp. <i>articulatus</i>	jointed rush
<i>Juncus balticus</i> Willd. subsp. <i>ater</i>	Baltic rush
<i>Juncus bolanderi</i> Engelm.....	Bolander's rush
<i>Juncus brachyphyllus</i> Wieg.....	shortleaf rush
<i>Juncus brevicaudatus</i> (Engelm.) Fernald	short-tailed or narrow rush
<i>Juncus bryoides</i> F. J. Herm.....	moss rush
<i>Juncus bufonius</i> L. var. <i>bufonius</i>	toad rush
<i>Juncus confusus</i> Coville	Colorado rush
<i>Juncus covillei</i> Piper	Coville's rush
<i>Juncus drummondii</i> E. Mey.	Drummond's rush
<i>Juncus dudleyi</i> Engelm.	Dudley's rush
* <i>Juncus effusus</i> L. subsp. <i>effusus</i>	soft or lamp or common rush
* <i>Juncus effusus</i> subsp. <i>solutus</i> (Fernald & Wiegand) Hämet-Ahti	eastern soft rush
<i>Juncus ensifolius</i> Wikstr.	dagger or swordleaf rush
<i>Juncus filiformis</i> L.	thread rush
<i>Juncus hallii</i> Engelm.	Hall's rush
<i>Juncus hemiendytus</i> F. J. Herm. var. <i>abjectus</i> (F. J. Herm.) Ertter	Center Basin rush
<i>Juncus hemiendytus</i> var. <i>hemiendytus</i>	Hermann's dwarf rush
<i>Juncus howellii</i> F. J. Herm.	Howell's rush
<i>Juncus interior</i> Wiegand	interior rush
<i>Juncus longistylis</i> Torr.	long-styled rush
<i>Juncus mertensianus</i> Bong.	Merten's rush
<i>Juncus nevadensis</i> S. Watson var. <i>nevadensis</i>	Nevada or Sierran rush
<i>Juncus nodosus</i> L.	knotted rush
<i>Juncus occidentalis</i> (Coville) Wiegand	western rush
<i>Juncus orthophyllus</i> Coville	straightleaf rush
<i>Juncus parryi</i> Engelm.	Parry's rush
* <i>Juncus pylaei</i> Laharpe	Pylaie's rush
<i>Juncus regelii</i> Buchenau	Regel's rush
<i>Juncus saximontanus</i> A. Nelson	Rocky Mountain rush
<i>Juncus tenuis</i> Willd.	poverty or slender or path rush
<i>Juncus tiehmii</i> Ertter	Tiehm's rush
<i>Juncus torreyi</i> Coville	Torrey's rush
<i>Juncus triglumis</i> L. subsp. <i>albescens</i> (Lange) Hultén	northern white rush
<i>Juncus vaseyi</i> Engelm.	Vasey's rush

For the students of Idaho botany, a couple species included above (*Juncus howellii*, *J. occidentalis*) are probably errors, but they are reported by so many authors I'd like to look in a few more herbaria before erasing them from the flora. Both are unlikely so far east and north as Idaho. For similar reasons I'd like to see the voucher for Idaho's station of *Juncus bolanderi*, a species unfortunately now believed to be extirpated.

Perhaps equally interesting are the species not on this list. Some are sunken into synonymy, like *Juncus tweedyi* submerged into *J. brevicaudatus*. Others are cases of mistaken identity. In this category are native *J. effusus* subsp. *pacificus*, a coastal plant which makes a rare approach to Idaho in the Blue Mountains of southeastern Washington. However, all Idaho specimens are misidentified subspecies, weeds here and native to Europe or eastern North America. Reports of *J. dubius* are difficult to interpret; I have not seen specimens so labeled. However, the species known range is restricted to California and a small portion of adjacent Nevada, so it is likely the Idaho plants are misnamed. Similarly, *J. phaeocephalus* is usually thought of as endemic to California, so reports of it from Idaho are presumably incorrect. If any readers locate Idaho specimens or populations of these plants, I'd be pleased to hear about it, and maybe some lingering questions can be put to rest.



Inflorescences of *Juncus balticus* subsp. *ater* (syn. = *J. arcticus* var. *balticus*).
One of Idaho's common rushes from meadows and shorelines.

Brazilian Elodea (*Egeria Densa*) in the University of Idaho Arboretum Upper Pond

By Paul Warnick

Brazilian Elodea (*Egeria densa*) was added to the Idaho noxious weed list in 2007. It is an aquatic plant that was widely sold for home aquariums as an oxygenator. It has been found to survive and thrive outside, and has become a significant problem in the state of Washington, especially in lakes on the west side of the state. Since it has been identified as a noxious weed, sales have been banned in most areas. However, there are probably still large numbers of plants in many home aquariums. Although no existing populations had been identified in Idaho, it was added to the noxious weed list in 2007 in hopes of keeping it from becoming a problem.

Brazilian Elodea (*Egeria densa*) was positively identified in the upper pond in the University of Idaho Arboretum in late summer 2007. It was probably present in smaller quantities for at least 2-3 years, and possibly much longer. The Arboretum ponds have a history of being used as release sites for pet goldfish and turtles, and no doubt the Elodea came along with one of those releases. The weather conditions in 2007 were probably ideal for the Elodea, with an unusually long stretch of warm weather in mid summer. By the end of the summer, the Elodea had covered a large percentage of the surface of the pond and was distributed throughout the entire pond.



Brazilian Elodea, *Egeria densa* pulled out of the upper Arboretum pond, September 27, 2007.

After speaking with Tim Prather, Associate Professor of Weed Science, at the University of Idaho and the Idaho Department of Agriculture, we decided to apply the herbicide fluridone (Sonar®). We used the Sonar PR® (precision release) formulation, containing 5% of the active ingredient fluridone. The outlet to the pond was sealed off on September 25, and the herbicide was applied as a granule on September 27. The pond is very close to one acre in size, with an average depth of 5-6feet, so we applied 20pounds of herbicide. The herbicide is a dry pellet, about the same size and shape as rabbit food pellets.



Upper Arboretum Pond, September 27, 2007, taken just after herbicide application, white spots on the water surface are the Elodea flowers.

In addition to the chemical control, there are two other control methods employed in the pond. In the spring of 2007 we installed an aeration system in the ponds in hopes of controlling the algae growth. This system consists of two submerged aerators emitting bubbles from the bottom of the pond. This system is designed to directly add oxygen to the water and also to circulate the water in the ponds to reduce the temperature stratification. The system was operating throughout the winter of 2007/2008 which should have resulted in much colder water temperatures at the bottom of the pond where any Elodea would be likely to survive. Also, in the summer of 2004 we stocked the pond with sterile grass carp. They have thrived in the pond, and they reportedly prefer Elodea to other aquatic plants, so if any Elodea survived the

chemical treatment and cold temperatures, they would likely be eaten by the carp.

The pond was left sealed up until the ice melted in mid March of 2008. The pond has been monitored regularly from shore throughout the summer, and in late August we did an extensive search, dragging the bottom in multiple locations, both from shore and also from a raft out in the pond. The water was clear enough to see to the bottom in most locations. We did not find any Elodea then and we have not seen any sign of Elodea throughout the summer. We will continue to monitor the pond for any signs of Elodea and we are prepared to apply more herbicide if we find any plants.



Upper Arboretum Pond, August 8, 2008, with no Elodea, and limited aquatic vegetation.

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Native Plants News

Learn it! Plant Identification Workshops

Dr. Jim Smith of the Department of Biological Sciences at Boise State University is sponsoring plant identification classes based on material collected on the first Idaho Botanical Foray to Mt. Harrison on August 7-10, 2008.

The Department would like to invite the public to workshops oriented toward identifying the material that was collected during the foray. Each workshop will start with a brief introduction on terminology and characteristics of the family/ies to be identified in each workshop. The remaining time will be spent keying the plants. Keys, microscopes and necessary dissecting materials will be provided. These workshops will be an opportunity to learn and practice keying as well as a chance for those that missed the foray to see what occurs on Mt. Harrison. The tentative schedule is listed below. We will be meeting in room 248, second floor of the Science & Nursing building on the BSU campus (between the Morrison Center and the tallest building on campus). Workshops will be from 7:00-9:00 pm.

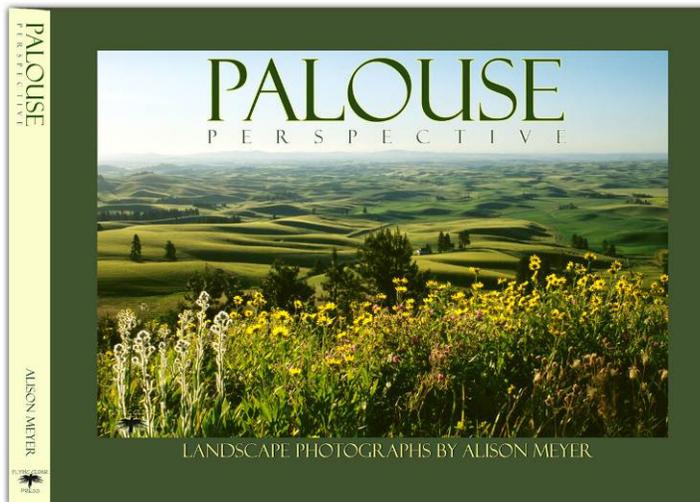
Classes Remaining on the Calendar

December 11, 2008: shrubs and trees (Pinaceae, Rosaceae, Grossulariaceae, Caprifoliaceae)

January 8, 2009: paintbrushes and penstemons (Orobanchaceae/Plantaginaceae)

February 12, 2009: buckwheats (Polygonaceae)

March 12, 2009: miscellaneous families



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For store listings, see the “Shops & Contact” page on www.AlisonMeyerPhotography.com

INPS 2009 Annual Meeting Reminder

The **2009 Annual State Meeting**, sponsored by Sah-Wah-Be Chapter, will be held 30 miles southwest of Yellowstone in Island Park at the Buffalo Campground on June 26-28. For more information, call 208.233.0714.

A group site has been reserved in Loop E in the Buffalo Campground (5 minutes from Pond's Lodge in Island Park), for Friday and Saturday, June 26 and 27. Reservations can also be made there individually by anyone who wants to stay longer before and/or after as well. Some of the field trip locations we are considering for this state meeting are Harriman State Park; Upper/Lower Mesa Falls; the Nature Conservancy's Flat Ranch; Sawtell Peak; and Big Springs river float to Mack's Inn. Why not make this into a longer trip to enjoy the area? A visit to Yellowstone Park is always awesome. Float a river, fish in the famous Henry's Fork, or visit the town of West Yellowstone. All locations mentioned are very close to our campground site, about a 30-minute drive or less.

Book Review

By Nancy Miller

Palouse Perspective is a new book of landscape photographs by Alison Meyer. Alison is well known on the Palouse where her cards, prints, and calendars are frequently sought out by locals for gifts and home decorations and by tourists as just that perfect remembrance of the Palouse. Her booth at the Moscow Outdoor Market is always one of the most popular as people search through the collection of her prints. Now she has a new book to add to her credits and it is a treasure worth having.

Most of us who move to the Palouse and who are photographers, whether amateurs or professional, have been used to photographing scenery of mountains, lakes, buildings, trees, etc where the subject is easily captured as the central theme of the photograph. At first the Palouse seems impressive to view, but impossible to capture in a photograph. But Alison, who came from the Northeast, has learned to photograph the different elements of the Palouse with an extraordinary talent and teaches us all new ways to look at the scenery unfolding around us.

The selection of photographs includes many scenic panoramas - undulating hills in various seasons and colors, patterns formed by agricultural plantings, misty mornings and impressive sunsets. Historic barns and abandoned farmhouses, old cars and farm machinery, as well as local attractions such as Palouse Falls and the Snake River all are featured. Many of the photographs are aerial views which give us a view of the Palouse we only rarely glimpse allowing us a more compressed view of a larger view. In addition to the photographs which capture the areas under cultivation, there are some which feature the native wildflowers and shrubs which thrive in uncultivated areas - hills too steep to farm, tops of buttes and ridges, parks and roadside edges. Perhaps the next book will feature these remnant areas and the native forbs which we seek to protect.

Alison's book is available from local bookstores and from her website www.alisonmeyerphotography.com

Southwest Rare Plant Conference

The Utah Native Plant Society is now accepting abstracts for the next Southwest Rare Plant Conference. The event, entitled "Changing Landscapes in the Southwest" will be held on the University of Utah campus in Salt Lake City March 16-20, 2009. Topics include rare plant biology and biogeography, plant community and ecological restoration, climate change issues and others. Format will include posters, oral presentations and special topic break out sessions. Dr. Noel Holmgren of the New York Botanical Garden and co-author of the *Intermountain Flora* will be the conference keynote speaker. To submit an abstract, register or learn more about the conference, go to the UNPS home page (www.UNPS.org) and click the link to the SW Rare Plant Conference. Please consider attending the conference, submitting an abstract or passing word along to friends, students and colleagues.

Mores Creek Summit and Rabbit Creek Interpretive Kiosks Project Idaho City Ranger District, Boise National Forest

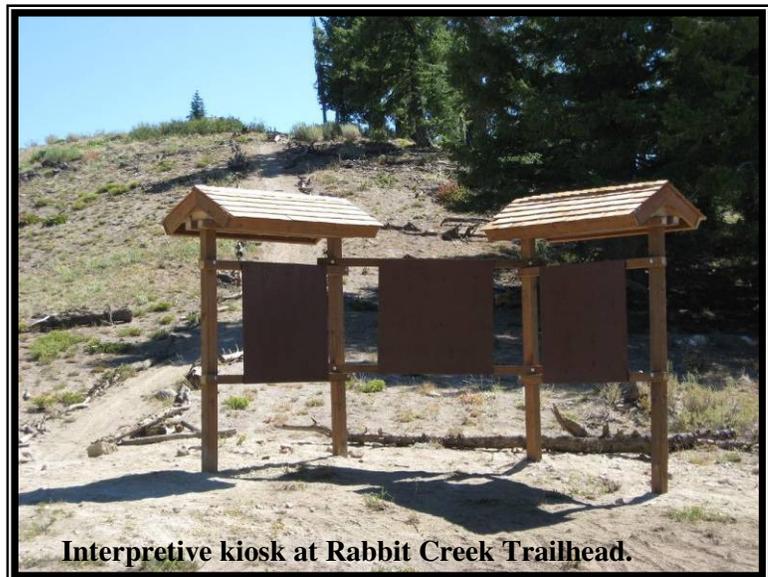
Education, Research, and Inventory Grant Report

(Each ERIG grant recipient must submit a final report. Below is the first report from 2008. Look for more reports in the next issue of Sage Notes)

The Idaho City Ranger District of the Boise National Forest received ERIG grant money from the INPS for construction and installation of informational kiosks at Mores Creek Summit parking area and Rabbit Creek Trailhead. These kiosks form the cornerstone of an effort to educate and inform the public about high elevation ecology, recreation opportunities and to encourage responsible use of the area's motorized trails.

The Mores Creek Summit parking area on Idaho State Highway 21, north of Idaho City, is a four-season, high traffic wayside and jumping off point for recreationists. The wayside provides access to Sunset Mountain and Pilot's Peak areas, and many popular trails, including the Rabbit Creek Motorcycle Trail.

This trail has suffered resource damage resulting from off-trail riding and a poorly defined trailhead. During the botanical survey to access potential impacts from proposed trail improvements, a new population of the Forest Watch plant, Sacajawea's bitterroot (*Lewisia sacajaweanana*) was discovered. This small, white-flowered plant is known only from the mountains of central Idaho. The area also supports a varied and colorful array of other native wildflowers, including Indian paintbrush, penstemons, sandwort, buckwheats, gilia, linanthus, dwarf onions, hawkweed, lupines and many others, all overlooking spectacular views of the Boise Mountains.



Interpretive kiosk at Rabbit Creek Trailhead.



It was determined that more public education was needed to increase awareness of recreation impacts in this area and strengthen appreciation for local wildflowers, wildlife and other resources. As a result, with the help of INPS funding, and the work of the Idaho City Ranger District Trail Crew and the Youth Conservation Corp, educational kiosks have been constructed and installed at the Mores Creek Summit parking area and the Rabbit Creek Trailhead. Improvements

have been made to define traffic flow, and decrease erosion and vegetation damage on the trail and at the trailhead. Interpretive materials on high elevation ecology, area wildflowers and wildlife are being prepared for the panels.



Wildflowers on the Rabbit Creek Trail.

Other materials will include Tread Lightly and Leave No Trace information, encouraging appropriate OHV riding behavior to reduce resource damage.

Contact Person: Kay Beall, Boise National Forest, Idaho City District, PO Box 129, Idaho City, Idaho, 83631. (208-392-6681). Email: kbeall@fs.fed.us

Announcement for 2009 Education, Research, and Inventory Grant Proposals

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 2009 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 15, 2009.

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. Here are some examples of costs the grant may cover:

- Direct costs of 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:

- Project title.
- Contact information - name, address, phone number, organization/affiliation, and email (if available).
- 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.
- Itemized budget – outline an overall project budget, including the amount you are requesting (up to \$1,000), as well as other funding sources.
- Time line – please provide a time line for completion of all major tasks associated with the project, including presentation of the results.

Project proposals must pertain to native plants of Idaho. The total amount of money available for the ERIG program in 2009 still needs to be determined. Please limit grant requests to a maximum of \$1,000, and be aware that less may be rewarded due to INPS budget constraints. 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*. We encourage applicants to become an INPS member if they are not already so, however, membership is not a prerequisite to apply for, or receive an ERIG.

Please submit proposals by email to Michael Mancuso at mmancuso@cableone.net or by post to: Idaho Native Plant Society, ERIG Committee Chair, P.O. Box 9451, Boise, ID 83707.

INPS Calendar Committee Contest Lurks

We know we've got some outstanding photographers who are members of INPS. We anticipate holding a photo contest in early spring of 2009 for photographs of Idaho wildflowers, native plant habitats, and scenery which extols the beauty of our Idaho natives. Information about the contest and entry forms will be posted on the INPS web site when it is available, but we wanted to alert all INPS photographers so that they could take that special picture or comb their photo archives for possible entries. Winning photographs would be used in INPS publications designed to acquaint others with our native forbs and with INPS activities.

Quebec, Blue Flag (*Iris versicolor* Linné)
Saskatchewan, Western Red Lily (*Lilium philadelphicum*)
Nanavut Territory, Purple Saxifraga (*Saxifraga oppositifolia*)
Northwest Territory, Mountain Avens (*Dryas integrifolia*)
Nova Scotia, Mayflower (*Epigaea repens*)
Yukon Territory, Fireweed (*Epilobium angustifolium*)
Canada, Maple Leaf (*Acer rubrum*) (*Not officially adopted*).

Gloria gave a short quiz about our knowledge of Canada following her presentation. Members found it very interesting to find out how much we do not know about our neighbor to the north.

Gloria Wurm has consented to be our new Chapter Secretary. Thanks!

CHAPTER NEWS

Calypso Chapter

PREVIOUS EVENTS

A group of Calypso members and visitors hiked to Crystal Lake. This is a beautiful, high altitude lake located south of Cataldo, Idaho. Access is by a number of miles of gravel road, then an approximately two mile hike along a well-maintained forest service trail. A good time was had by all with a number of plants identified. Some of the highlights were seeing: gentian, columbine, monkshood, and elephant head.

The October Calypso meeting featured a presentation by Gloria Wurm about Canadian provincial trees and wildflowers. For instant floral fame rattle these off as you hobnob about the punch bowl this holiday season:

Alberta, Wild Rose (*Rosa acicularis*)
British Columbia, Pacific Dogwood (*Cornus nuttallii*)
Manitoba, Prairie Crocus (*Anemone patens*)
New Brunswick, Purple Violet (*Viola cucullata*)
Newfoundland and Labrador, Pitcher Plant (*Sarracenia purpurea*)
Ontario, White Trillium (*Trillium grandiflorum*)
Prince Edward Island, Lady's Slipper (*Cypripedium acaule*)

PROGRAM SCHEDULE

Planned field trips for 2009:

Saturday, April 18, 2009 - Tubbs Hill

Saturday, May 2, 2009 - Liberty Lake

Saturday, June 13, 2009 - Blossom Mountain

Kinnikinnick Chapter

The Kinnikinnick Chapter continues to serve our region through the North Idaho Native Plant Arboretum, landscaping public areas with native plants, consulting with citizens on using native plants, fighting invasive weeds through efforts of our conservation committee and participation in the Bonner County Aquatic Invasive Species Task Force, collaboration with the Bonner County Planning Department to include native plants in the revised Land Codes, and bringing frequent field trips and monthly educational programs to the public and our membership.



Members of the conservation committee rest on a recent Kinnikinnick chapter sponsored hike.

PREVIOUS EVENTS

Chris Schnepf's September program on 'Backyard Forests' was packed with information for those with woodland acres with five acres and less. He spoke of how the forest ecology was affected by climate, soils, water, genetics, and disturbances. Forest succession was explained as more stable communities replace temporary plant communities, unless disturbance interrupts. Root disease was explained as the number one killer of trees in North Idaho. A major theme of the talk was on the value of proper thinning to protect the health of a forest.

UPCOMING EVENTS

In March Kathy Hutton, manager of Plants of the Wild, will present on the propagation of native plants.

Contact Donald Childress at [dwc1rsc at televar dot com](http://dwc1rsc@televar.com) for program information.

Loasa Chapter

All INPS members and the public are welcome to attend Loasa's events. If interested or for further details, contact Kelvin Jones at (208) 886-7051.

Pahove Chapter

The growing and planting season is behind us now. It is time for the plants and people to take a rest so we will be ready to hit the ground running in the spring.

December 2008

PREVIOUS EVENTS

On September 18 the season kick-off pizza party was held at the Idaho Botanical Gardens (IBG) for Pahove chapter members to get reacquainted after the summer months. New chapter officers were elected and the meeting was followed by a tour of the IBG Lewis and Clark Garden. The careful plant selection and installation paid off because most of the plants "leapt" this year, adding to the interest and beauty of this valuable, historic and educational native plant display. Ann Debolt, the IBG Natural Communities Specialist has been instrumental in developing and enhancing the Lewis and Clark Garden. Ann was not available to guide us that evening, Rod Burke, the IBG Head of Horticulture, showed off all of the hard work that has been done by Ann, IBG employees and volunteers from the community.

The new Pahove chapter officers are as follows:

President - Susan Ziebarth. Susan is a Wildlife Educator at the MK Nature Center in Boise and an INPS member since 2001.

Vice President - Karen Colson. Karen moved from President to Vice President

Treasurer - Jody Hull. Jody will remain the chapter Treasurer. She is also the INPS State Treasurer.

Secretary - Karie Pappani. Karie joins us as Secretary.

UPCOMING EVENTS

Ever though winter is knocking at our back door right now, we are already planning for the arrival of spring and another successful Earth Day native plant sale in April of 2009.

The Pahove Chapter hosts monthly presentations from September through April on the 3rd Thursdays at the MK Nature Center Auditorium (with few exceptions), 601 South Walnut in Boise. For more information please visit the website, [http://www.idahonativeplants.org/](http://www.idahonativeplants.org) or contact Susan Ziebarth [sziebarth at idfg dot idaho dot gov](mailto:sziebarth@idfg.idaho.gov).

December 4, 2008 - Annual Pahove Chapter Christmas Party at the MK Nature Center. Times and details are on the November postcard.

January 15, 2009 - Invasive aquatic species presentation: speaker to be announced

March 19, 2009 - TBA

April 16, 2009 - Dr. Jim Smith's plant identification workshop. Dr. Jim Smith at BSU is hosting monthly, evening plant identification workshops from October through March. Please visit: <http://www.boisestate.edu/biology/idahobotforaypost.shtml>.

Sah-Wah-Be Chapter

From May through September our chapter hosts at least one Monday evening field trip and one Saturday/weekend field trip a month for our members and the general public.

PROGRAM SCHEDULE

All meetings are held at 7:00 pm in the classroom of the Idaho Museum of Natural History, ISU, unless otherwise specified. Public invited. For more information, call 208-233-0714.

December 7, 2008 - Annual Holiday Potluck Party at Holtes' home. No program: just great socializing and scrumptious dinner with about 40 friends! Bring your checkbook to renew your membership.

January 12, 2009 - "What are They Good For?" Marijana Dolsen will discuss herbal uses of native plants, recipes, and tasty tidbits.

February 2, 2009 - "Global Warming and Migration of Plant Communities," a timely topic to be discussed by Dr. Matt Germino of ISU's Biological Sciences department.

March 2, 2009 - Reprise of "The Life and Botanical Contributions of Ray J. Davis," for whom the ISU herbarium is named, by his sons. A visit to the herbarium will be led by newly appointed curator Rick Williams and volunteer interim curator Karl Holte.

March. 21-29, 2009 - Possible spring-break camping trip to the Southwest. Anza-Borego State Park? Saguaro National Monument? Salton Sea? Organ Pipe National Monument? Tucson area? Death Valley again? Ideas are fomenting....

April. 6, 2009 - SWB Annual meeting, location TBA. Dinner, election of officers, planning for field trips and events.

May 4, 2009 - Sharing of photos and memories from past trips to whet your appetite for the 2009 season.

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White Pine Chapter

PREVIOUS EVENTS

On Saturday, August 23, 2008 the chapter held a field trip to the Emerald Creek area to visit the Fossil Beds with Dr. Bill Rember. The site is approximately 10 miles west of Clarkia, Idaho, about an hour's drive east of Moscow. Bill described the paleohistory of the area, showed the dig sites of his and others' current research, and helped members explore for fossils and identify those which they found. Most of the fossils in this area are from an era when the region was warmer and wetter, with a climate and ecology similar to that of the current southeastern U.S. It was very exciting to find the fossils of many leaves, buds, pollen, galls, pine needles, etc of many different species. The group then traveled to Hobo Cedar Grove for an easy walk through the cedars and the ferns.





On September 20, 2008 the chapter held its annual meeting and potluck at the picnic area of the Giant White Pine Campground about 45 minutes from Moscow on the White Pine Scenic Drive. This drive is one of Idaho's Scenic Routes and takes visitors through a six-mile corridor of majestic white pines. One of the nation's largest white pine trees is located at the Great White Pine Campground.



This four hundred year old tree was six feet in diameter and 188 feet in height. It was cut down in the summer of 1999 due to disease, but the tree still

lies as a reminder of the majesty of the white pine forest. After enjoying the great food, some of the group followed the trail along Mannering Creek, then over the hill through varied habitats. Some mushrooms were in evidence; only a few plants were still blooming. Probably of more interest were our attempts to identify some of those plants which were past the bloom stage and had unique seed structures. Two pictures are included here to test your identification skills.



UPCOMING EVENTS

In **February** Dr. Tim Hatten of University of Idaho will speak on the subject of pollinators of native forbs. The program is in collaboration with the Palouse Prairie Foundation. The time and place will be announced later. Dr. Hatten is a researcher on insect species and their interactions with Palouse Prairie forbs in particular. He is a member of both White Pine chapter and Palouse Prairie Foundation.

Also in **January**, Dr. Fred Rabe, another White Pine chapter member, will give a slideshow presentation on the Lochsa River drainage. The date and time of this presentation has not been finalized.

The chapter schedule for early 2009 will be posted on our website www.whitepineinps.org as it becomes available.

Wood River Chapter

PREVIOUS EVENTS

Using Native Fruits: Chokecherry Jelly Workshop by Madeline Scheintaub

To take advantage of the abundance of wild chokecherries (*Prunus virginiana*) this fall, Tess O'Sullivan and Madeline Scheintaub held a workshop to teach how to prepare jelly from these fruits. The workshop was held on September 6 at the Sawtooth Botanical Garden in Ketchum, Idaho and everyone went home with at least one jar of tasty chokecherry jelly. Workshop participants gathered chokecherries by the bagful at the botanical garden and workshop leaders brought in cherries picked from throughout the Wood River Valley and Pioneer Mountain foothills. The jelly-makers cleaned the fruit, making sure to remove all the stems, boiled it, strained the juice, then added sugar, pectin and lemon juice. The mixture was boiled again and poured into jars. In a day or so the jelly had set into a firm, delicious, lustrous deep purple jelly.

Chokecherries are a native wild cherry with a wide range in North America. The fruits are quite tart and not that enjoyable to eat straight from the tree, but can be used to make flavorful jelly, syrup, wine and cordial. All parts of the plant except the fruit (exocarp + mesocarp) contain a compound that will produce cyanide, so pits and stems need to be removed before cooking or eating the fruit. Chokecherries provide food and habitat structure for many species of wildlife.

Making chokecherry jelly is a fun and tasty way to use and enjoy Idaho's native plants.

Chokecherry Jelly Recipe

- 3 ½ - 4 cups chokecherry juice
- 4 ½ cups sugar

- ¼ cup lemon juice
- 1 box powdered pectin

Wash and rinse jars and screw bands. Pour boiling water over flat lids in saucepan off the heat. Let stand in hot water until ready to use. Put jars in the oven at 250° until just before jelly is ready.

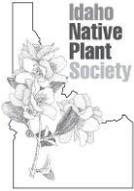
To extract the juice, wash all fruits thoroughly before cooking. Add enough water to cover the washed fruit and cook 15 minutes or until fruit is soft. Do not crush or grind the seeds which contain a cyanide-forming compound that can be toxic. When fruit is tender, press lightly through a colander or crush gently with a spoon against the side of the pot. Then, let juice drip through a double layer of cheesecloth or a jelly bag. Excessive pressing or squeezing of cooked fruit will cause cloudy jelly. One pound of fruit should yield at least 1 cup of clear juice.

Measure chokecherry juice into a large pot. Add lemon juice. Stir pectin into juice. Bring mixture to a full rolling boil over high heat, stirring constantly. Quickly add sugar to juice mixture. Bring to a full rolling boil and boil 1-2 minutes, stirring constantly. Remove from heat. Skim off any foam.

Pour into hot, sterilized half-pint jars leaving ¼-inch headspace. A one cup glass measuring cup can be good for this. Wipe jar rims and threads. Cover with two-piece lids. Screw rings tightly. Invert jars for 3-5 minutes. Turn upright and let the jelly sit undisturbed on a cooling rack until set (at least overnight).

Approximate yield: 5 to 6 cups

Recipe distilled out of several available on the Internet, but primarily from the North Dakota State University Extension.



Idaho Native Plant Society
 P.O. Box 9451
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Sage Notes is published four times a year in February, May, September, and December by the Idaho Native Plant Society, incorporated since 1977, under the laws of the State of Idaho. Editor, Dylan Levy-Boyd. **Newsletter ads:** personal ads \$2; commercial ads \$5 for 1/8 page, \$8 for 1/4 page, \$15 for 1/2 page, and \$25 for full page. Ads should be sent with payment. **Submissions:** members and others are invited to submit material for publication. Articles in any form, even hand-written, are welcome, as is art work. Please provide a phone number in case there are questions. Material will not be returned. Send submissions directly to the editor, Dylan Levy-Boyd, 506 Center St. West, Kimberly, ID 83341, or <dylan at csr-inc dot com>. Submission deadlines are January 8, April 1, August 1, and November 1.

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The Idaho Native Plant Society (INPS) 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. **Membership** is open to anyone interested in our native flora. Send dues to Jody Hull, INPS Treasurer, Box 9451, Boise, ID 83707. Website address: IdahoNativePlants.org.

Category	2009 Annual Dues
<input type="checkbox"/> Patron	\$100+
<input type="checkbox"/> Sustaining	\$35+
<input type="checkbox"/> Individual	\$17
<input type="checkbox"/> Household *	\$22
<input type="checkbox"/> Student	\$10
<input type="checkbox"/> Senior Citizen	\$10

Name _____
 Address _____
 City/State _____
 Zip _____ Telephone _____
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Chapter affiliation? (check one)

- Calypso (Coeur d'Alene; please include \$6 newsletter dues)
- Kinnikinnick (Sandpoint; please include \$10 for Kinnikinnick Journal)
- Pahove (Boise) Sah-Wah-Be (SE Idaho)
- White Pine (Moscow) Loasa (Twin Falls)
- 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.

* Household memberships are allocated two votes