What’s on the calendar?

**February event**
Thursday, February 7, 2019 at 7:00 p.m. White Pine Chapter meeting

Speaker: Pam Brunsfeld, retired UI Stillinger Herbarium Director and Systematic Botany instructor

Program: Pollination, Pollinators and Plants
Location: **1912 Center, Great Room, 412 East Third St., Moscow, Idaho**

Pam Brunsfeld’s presentation will include photos and discussion of many ornamental and native plant species you can plant in your garden to benefit butterflies, birds and bees. Photos from her native and ornamental garden will be shown as well as some from the wild. Her beautiful photos and enthusiastic presentation always bring a touch of spring to our winter programs. This program is jointly sponsored by the White Pine Chapter of INPS and the Palouse Audubon Society. The public is encouraged to attend. Photo by P. Brunsfeld.

**March event**
Thursday, March 21, 2019 at 7:00 p.m. White Pine Chapter meeting

Speaker: Dr. Steve Cook, University of Idaho Professor of Forest Entomology and Plant Pathology

Program: Forest Health
Location: **1912 Center, Great Room, 412 East Third St., Moscow, Idaho.**

Dr. Cook led a very interesting and informative chapter field trip in July 2018 to several forest areas including the UI arboretum and sites north of Moscow Mountain. Infestations of Douglas-fir beetles, pine beetles, spruce gall adelgid (aphid) and other insects were found and the life cycles described as well as the symptoms of their presence. Some, such as the spruce gall adelgid, live different stages of their life on different species of conifer in this region. We had requests for more information on forest health and the insects that influence it, and Dr. Cook has agreed to give this presentation to a wider audience. In this photo he shows the characteristic rust colored sawdust at the base and the small white fungus on the trunk. The public is welcome to attend. Bring your questions! Photo by N. Miller.

**April event**
Wednesday, April 24, 2019 at 7:00 p.m. White Pine Chapter meeting

Speaker: Mike Hays, Forest Botanist, Nez Perce-Clearwater National Forest

Program: *Silene spaldingii* - review of the Recovery Plan
Location: **1912 Center, Great Room, 412 East Third St., Moscow, Idaho.**

Mike Hays, Botanist with the Nez Perce-Clearwater National Forest, will present a program on his work protecting Spalding’s catchfly (*Silene spaldingii*) habitat on the “island” between the Snake River and the Salmon River. He will review the Recovery Plan for Spalding’s catchfly and describe how his work fits into this plan. Mike will report on new findings, including four new occurrences of Spalding’s catchfly populations found by his crew in Hells Canyon this past summer. The program will also include results from *Crupina vulgaris* (2nd picture) control efforts. This and other weed species are becoming the bane of recovery and restoration efforts for many native habitats. Mike will share what they are learning from their control treatments. The public is welcome to attend. Come find out about possible volunteer efforts this summer. Photos by A. Sondenaa.
Our October and November speakers each nearly packed the Great Room. Hopefully you were there! Thanks for your support of White Pine chapter presentations!

In October Tanya Cheeke of WSU Tri-Cities spoke about research on inoculating native plant seedlings with mycorrhizal fungi from native soils which could help them survive better when the plants are transplanted into restoration projects where the soil has been disturbed. To see more about her team’s research https://tricities.wsu.edu/tag/tanya-cheeke/

In November Dr. Penny Morgan of UI Department of Forest, Rangeland, and Fire Sciences presented on the ‘Palouse Prairie-Forest Edge: Then and Now’. Multiple researchers investigated historical land surveyor field notes of the Palouse prairie and adjacent mostly ponderosa pine-dominated forest. Where these two met an open pine savanna occurred which supported many native plants and animals. By comparing past fire evidence in these three regions with more recent fire experience they hope to provide information to help us plan how to live with potential future fires. She has provided notes and photos which will be included on pages 3 & 4. Photo by N Miller.

### INPS and chapter news

*Sages Notes,* which will be posted in early January, has information about the INPS state-wide Annual Meeting to be held in McCall in July 12-15, 2019. Camping reservations must be made ASAP due to McCall’s popularity as a tourist locale. Also in this issue is an article on Nez Perce tribe seed collection efforts written by Angela Sondenaa who spoke to us last fall.

Please encourage anyone with a project proposal involving native plants and habitats to check out the [ERIG program](https://idahonativeplants.org/erig-news/) on the INPS website and the White Pine Grant Program [https://www.whitepineinps.org/WPgrant.html](https://www.whitepineinps.org/WPgrant.html) on our chapter website. Applications are due in early spring and funding may be received to support projects.

**NIRPWG—The North Idaho Rare Plant Working Group** meets every several months to review the status of certain species. This is done in preparation for the next Rare Plant conference which is sponsored by INPS. The next NIRPWG meeting will be January 24 in Moscow. Details will be sent out before the meeting to members. This is a chance to get to know more about Idaho’s rare plants, their characteristics, the threats they face, the rarity of populations, etc. If you would like to participate, please email Judy Ferguson at the email address listed at the bottom of this newsletter. Derek Antonelli is the current chair.

**White Pine Chapter Plant Sale news.** The Sale will be held May 17-18 at the 1912 Center. Setup will be on Friday afternoon, and a brief members-only Sale will be held Friday evening immediately after setup. Please plan to volunteer! **We need you!** The sale open to the public will be on Saturday 9 am—1 pm. Hopefully by having two sale times we will reduce the congestion at the public sale. Pleasant Hill Farms will again supply many of the high quality plants we have come to expect. We will also purchase plants from Plants of the Wild. We hope each year to increase the number of plants grown by our members and friends. Since we don’t pay for these, they represent pure profit. Please contact Charlotte Omoto ([omoto@pullman.com](mailto:omoto@pullman.com)) if there is a plant native to this region that you are interested in obtaining and we will try to find a source.

### DUES are due now for 2019!

Since reminders to members and announcements to non-member contacts were sent in December we’ve had excellent response. Please note the personal information included on your email. If it needs to be changed, let us know! Membership dues are paid on a calendar year basis so 2018 year memberships expired December 31, 2018. You may pay your dues several ways. 1. Use the form online at [https://idahonativeplants.org/membership/](https://idahonativeplants.org/membership/) (pay either with Paypal or after submitting the form, send a check to the INPS Membership Chair (PO Box 9451, Boise ID 83707). Or 2. Give a check to the chapter membership chair or treasurer (be sure you’ve let us know of any changes to your information). Or 3. Print the membership form on the chapter website or the back page of *Sage Notes* and send with your check to White Pine Chapter, PO Box 8481, Moscow, ID 83843. Either online renewal or payment to the chapter ensures that the chapter knows that you have paid. Posting of forms/checks sent directly by the individual to the state are sometimes delayed and the chapter doesn’t get the word until late.
Thanks to Dr. Penny Morgan for this summarization of her November 29 presentation.

**Palouse Prairie-Forest Edge: Then and Now**

Penny Morgan, James Riser, Eva Strand, Steve Bunting, John Abatzoglou & Mara Johnson (Univ. of Idaho), Emily Heyerdahl (US Forest Service RMRS) and Max Nielsen-Pincus (Portland State University)

**Presented November 29, 2018**

Although wildfires are rare now, we learned from dating fires on old stumps that fires happened every 5 to 8 years in the forests on the edge of the Palouse prairie 1650-1900. From field notes land surveyors made in the late 1870s, we know the adjacent prairie was extensive. Today, agriculture has replaced both prairie and pine savanna, while forest patches once had more ponderosa pine than they do now. What are the conservation implications? Today we have some lightning but few wildfires. What will the future hold?

Prairie-forest ecotones are ecologically important, shaped by fire, and greatly changed by land use. Here, two endangered ecosystems, the Palouse prairie and open ponderosa pine-dominated forests, meet, there was once also pine savanna. These open forests were home to many native animals and plants.

We used field notes written between 1869 and 1893 as part of the General Land Office Survey to quantify the historical extent of prairie, pine savanna, and pine-dominated forest based upon the bearing tree species or lack of them at each section corner. At each corner, we compared historical to current vegetation to calculate long-term transitions and compared these to the land use changes documented and predicted by others for recent decades. We reconstructed historical fire occurrence (1650-1900) from fire-scarred trees at the eastern edge of the Palouse bioregion, and contrasted those with modern fire (1992-2015) and lightning (1992-2015) records.

Although fires were historically frequent at the Palouse prairie-forest ecotone, there have been few modern fires despite a long dry season with abundant fuels. Once extensive prairie and open ponderosa pine forests are now mostly replaced by agriculture, other vegetation, and residential development. In years such as 2015, many fires start, but effective fire suppression is aided by roads that serve as barriers to fire spread. In the future, lightning and people may ignite fires that spread readily if changing agricultural practices, residential development, conservation and restoration and other land use changes result in more continuous vegetation fuel for fires. Understanding the past and potential future of fire in the Palouse bioregion may help us live with fire while conserving ecological values here and in similar prairie-forest landscapes.
Co-Presidents: Judy Ferguson/Susan Rounds; Vice President: Pam Brunsfeld; Secretary: Charlotte Omoto; Treasurer: Steve Bunting; Publicity: Emily Poor. Find contact information at https://www.whitepineinps.org/WPcontact.html

Left: Harold Osborne helped us locate many of our sample sites and to collect fire history data from old, fire-scarred ponderosa pine stumps. Right: The rolling hills of the Palouse Prairie are now dominated by intensive agriculture with fields of wheat and legumes separated by roads. Adjacent forests are dense mixed conifer forests. There are few remnants of once extensive Palouse prairie and pine savanna. Left: Max Nielsen-Pincus. Right: James Riser.

Photos below: Past and present landscape cover. Looking north toward Moscow Mountain from Joel, Idaho 1927 and today. Left photo from Latah County Historical Society. Right photo by Stephen Bunting.

Tomer Butte 5 miles east of Moscow, ID in 1913 and today. Left photo courtesy of Patrick Curran. Right photo by Stephen Bunting, 2018.

Looking north along Main Street in Deary, Idaho in 1910 and today. Left photo from Latah County Historical Society. Right photo by Stephen Bunting.