

Palouse Prairie Flyer

Newsletter of the Palouse Prairie Foundation

Photo by Matthew Dolkas

Winter Solstice 2014

Respect your roots

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Upcoming Programs

Thursday January 8, 2015, 7:00 pm, Pam Brunfeld will give a presentation entitled, "**Fun Facts about Plants.**" Pam was Manager and Curator of the University of Idaho Stillinger Herbarium's vascular collection, and teaches Systematic Botany at UI. Her January program will kick off the year with a lighthearted yet educational approach to plants. 1912 Center, Great Room, Moscow, ID. Co-sponsored by White Pine Chapter, Idaho Native Plant Society.

Thursday March 12, 2015, 7:00 pm, Pamela Pavek will give a presentation on **native pollinators**. Pamela is an agronomist with the USDA Natural Resource Conservation Service, and explained native versus invasive roses this past year. Gladish Community & Cultural Center, Gold Room, Pullman, WA. Co-sponsored by White Pine Chapter, Idaho Native Plant Society.

Annual Meeting and Party

Welcome, Bill; thanks, Dave!

Board members for 2015 are David Hall (President), Joan Folwell (Vice President), Trish Heekin (Secretary), Jo Bohna (Treasurer), and Bill French (member at large). Dave Skinner chose to not run again and we thank him for his service to PPF. He will remain active with the Palouse Prairie Foundation, and we presented an award to him at the annual meeting. Good music was performed by Under the Wire.



PPF Meeting schedule

The Palouse Prairie Foundation meets the second Thursday of each month, often alternating between business meetings and public presentations. Members and guests are welcome to attend business meetings. Check the PPF website for updates and locations.



The Palouse Prairie Foundation promotes preservation and restoration of the Palouse Prairie ecosystem.

Palouse Prairie Foundation
P.O. Box 8952
Moscow, ID 83843

U.S. Highway 95 Thorn Creek to Moscow Update

David Hall. PPF board member

In early December, the Paradise Ridge Defense Coalition launched a campaign targeting safety improvements needed on US Highway 95 south of Moscow at Reisenauer Hill – a stretch of highway that would be upgraded during construction of Idaho Transportation Department’s C3 alignment but left dangerously as is if they go with their preferred E2 alignment.

KRFP Radio's December 16, 17, and 18 Evening Reports [1][2][3] offered excellent full news stories and an interview with PRDC board member Steve Ullrich exploring regionally shared concerns about US 95 safety and re-routing impacts on native Palouse Prairie remnant habitat and wildlife.

At-the-demonstration interviews with Stephan Flint, Mary Ullrich, Helen Yost, and Tim Hatten also discuss Palouse Prairie. [4]

[Wild Idaho Rising Tide, “Report on Highway 95 Safety Petition and Demonstration, 12/25/2014]

Over the last decade, Idaho Department of Fish and Game, U.S. Environmental Protection Agency, and U.S. Fish and Wildlife Service have objected to the E2 alignment. Studies done for the Draft EIS showed that weed infestation would reach to top of Paradise Ridge with E2.

Advice varies as to whether the general public, or solely governmental agencies, will be allowed to participate in the comment period to follow issuance of the Record of Decision.

[1] KRFP, December 16, 2014. Paradise Ridge Defense Coalition Collecting Petition Signatures.... Evening Report.

RadioFreeMoscow.org/2014/12/2014/12/16 [LoFi 14:05 to 10:05].

[2] KRFP, December 17, 2014. Paradise Ridge Defense Coalition on U.S. 95 Safety South of Moscow. Evening Report.

RadioFreeMoscow.org/2014/12/2014/12/17 [19:15 to 18:53 and 16:16 to 6:44 LoFi].

[3] KRFP, December 18, 2014. Paradise Ridge Environmental Issues Related to Proposed Eastern U.S. 95 Alignment. Evening Report.

RadioFreeMoscow.org/2014/12/2014/12/18 [LoFi 15:15 to 6:15].

[4] KRFP, December 19, 2014. Voices From the Paradise Ridge Defense Coalition U.S. 95 Safety Demo. Evening Report.

RadioFreeMoscow.org/2014/12/2014/12/19 [LoFi 31:28 to 1:30].

Spokesman Review "U.S. 95 rerouting plan near Moscow triggers opposition" ([link](#))

Schedule (us95thorncreek.com/schedule)

January/February 2015 Final preparation and review of the FEIS by ITD and FHWA

February/April 2015 Final Legal Sufficiency review by FHWA

Spring 2015 Publish notice in Federal Register of 30-day review period

Summer 2015 Issue Record of Decision

Minigrants Awarded

The Palouse Prairie Foundation awarded three minigrants in 2014.

Moscow High School. Improved Xeriscaping Using Phylogenetics Test Garden. Monitor growth and water uptake and maintain the garden while raising awareness of the garden to the student body through different competitions and posters.

UI Sustainability Center. The UISC, in a collaborative project involving UI Facilities Services and UI Landscape Architecture Department, have designed a landscaping project on the UI campus showcasing native Idaho plants around the Theophilus Tower dormitory. The space will be used by many classes for native plant identification, and it will hopefully lead to a culture of native landscaping at UI. The UISC hopes to begin to create a culture on campus that recognizes the beauty of native landscaping and actively seeks ways to implement it on campus..

Moscow Charter School. Propagate select species of Palouse Prairie plants both hydroponically and traditionally, and outplanting plants into raised container gardens. Educational materials and curricula will be developed, and seed production for use in future restoration projects.

Featured Plant: *Erythronium grandiflorum*

submitted by David M. Skinner, PPF board member

D.M. Skinner



D.M. Skinner

Erythronium grandiflorum is an early flowering member of the Liliaceae (Lily) family common in the Palouse Prairie and adjacent forest land. The yellow flowered Palouse phase is ssp. *grandiflorum*. The white flowered ssp. *candidum* occurs north of our area and it would not be surprising to find it extending onto at least the northern portion of the Palouse. Common names include avalanche lily, glacier lily, snow lily, adder's-tongue, lamb's tongue, and dog-tooth violet. The species is native to mesic areas in full sun to partial shade from the shrub-steppe to the mountain forests of British Columbia south to northern California and east to Colorado, western Montana and southern Alberta. Flowering usually occurs in April and May on the Palouse.

Glacier lily is a long-lived perennial forb from a deep-seated corm, usually 6-12 inches tall with a pair of narrow basal leaves and a scapose flowering stem. Flowers are perfect and often single or double but plants with 3-5 flowers are occasionally observed. The 6 petals (actually tepals) are strongly reflexed and surround the dangling, usually dark red, anthers. Some plants may have anthers colored white, yellow, or pink. Fruit is a capsule containing many brown, papery seeds. Reproduction is almost entirely sexual by seed. Asexual reproduction from corm offsets is uncommon. There are about 86,000 seeds per pound. $2n=24$.

It is considered to be a very fire resistant species as the plant is dormant during fire season and the corm is protected underground.

Erythronium grandiflorum is generally considered to be obligately out-crossed. However, flowers are only weakly protogynous and may self pollinate, although there are mechanisms which favor outcrossing. Flowers are pollinated by *Bombus bifarius*, *Bombus occidentalis*, *Apis mellifera*, and *Andrena nigrihirta*. *B. occidentalis* is thought to be a more effective pollinator than *B. bifarius*. Seed usually ripens in June and is dispersed by wind up to 1 meter from the parent plant. Ants and rodents are not important in seed dispersal. No important seed predatory insects have been noted.

Bears and rodents will eat the corms. Deer, elk, and bighorn sheep eat the green capsules. Cooked corms are edible, as are raw leaves. Corms were an important food for Native Americans.

Seed requires lengthy cold moist stratification of 100 to 120 days and needs cool temperatures (1-5° C) to germinate. Seedlings will not survive in warm greenhouses. It may take up to 5 years for the plants to produce flowers from seed. Seed is best sown in pots outdoors or in the ground and left outside. Corms are available from some mail-order specialty nurseries, but are unlikely to be of local origin.

There are 2 protocols in the Native Plant Network:

University of Kentucky

Glacier National Park, MT

For more information on *Erythronium grandiflorum*

see:

Specimen data and digital resources from The Consortium of Pacific Northwest Herbaria <http://www.pnwherbaria.org>

Plant Profile from the USDA NRCS PLANTS Database

<http://plants.usda.gov/core/profile?symbol=ERGR9>

Species page from the University of Washington Herbarium (WTU)

<http://biology.burke.washington.edu/herbarium/imagecollection.php>

Species information from the Palouse Plant Database

<http://dev.palouseprairie.org/plants/plantdb/PPFplants.php?USA=ERGR9>

There is some information on landscape uses of *E. grandiflorum* online at

http://www.nrcs.usda.gov/Internet/FSE_PLANTMATERIALS/publications/wapmcar6343.pdf and

http://www.palouseprairie.org/plants/forb_species.html

Recent publications and web pages

STRIPS

The STRIPS (*Science-based Trials of Rowcrops Integrated with Prairie Strips*) project is composed of a team of scientists, educators, farmers, and extension specialists working on the prairie strips agricultural conservation practice.

<http://www.nrem.iastate.edu/research/STRIPS>

Cheatgrass (*Bromus tectorum*) bio-control

A century-long losing battle has been waged in the West against an invasive weed that is responsible for massive wildfires and threatens native species and rangeland.

<http://gazette.com/possible-hope-in-western-battle-against-cheatgrass/article/feed/185610>

Weeds of North America

"Weeds of North America" is a recent publication of the University of Chicago Press.

<http://www.press.uchicago.edu/ucp/books/book/chicago/W/bo17312322.html>

Native Plant Network

If you have seeds of native plants you wish to grow, now is a good time to plant them. Many of our native species need a cold, moist period before they will germinate. Check out the Native Plant Network. Click on the "propagation protocol database" tab on the top right of the page to search for the species you are interested in.

<http://nativeplants.for.uidaho.edu>

Miscellanea

PPF has created a series of note cards depicting flowers and landscapes of the Palouse. These would make great gifts, or get them for yourself! They are available in packets of 5 cards and 5 envelopes for \$5. All funds directly benefit the Palouse Prairie Foundation. If you are interested in purchasing cards, please contact Dave Skinner by email at abbie48 [at] roadrunner [dot] com (you will need to replace "at" and "dot" with the appropriate symbols) or call him at 208-874-3205. We will also bring them to meetings and presentations.

"**Finding the Palouse Prairie: Images of a Vanishing Grassland**" by Matthew Dolkas can be purchased online at www.dolkas.com or www.blurb.com/bookstore/detail/2768591. All proceeds from the sale of this book benefit the Palouse Prairie Foundation.

Copies of past issues of the Newsletter of the Palouse Prairie Foundation are available online on the PPF website at www.palouseprairie.org/pppubs.html

Membership in PPF

PPF membership dues for the calendar year are:

Student membership —	\$10.00
Regular membership —	\$20.00
Family membership —	\$35.00
Sustaining membership —	\$50.00
Patron membership —	\$100.00
Lifetime membership —	\$250.00
Other, or additional donation —	\$_____

Name _____
Street/P.O. Box _____
City, State, ZIP _____
E-mail _____

The Palouse Prairie Foundation is a 501(c)3 non-profit organization.