

Palouse Prairie Flyer

Newsletter of the Palouse Prairie Foundation

Photo by Matthew Dolkas

Fall Equinox 2016

Respect your roots

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Upcoming Events

The **Alternative Giving Market of the Palouse**, our second time attending, will be held 4 to 8 pm December 1 in the 1912 Center Great Room. More than 30 non-profit organizations with a presence in Latah County will be represented. Come visit any or all, and select non-physical gifts to fill out your gift list for the season. PPF will offer five gifts, from helping protect giant Palouse earthworm habitat to supporting our mini-grants, to maintenance at Whelan Cemetery.

Help PPF celebrate its 15th anniversary with our **annual meeting and party** Thursday December 8 at the 1912 Center. We'll have a short update and look forward, present election results, and provide information on PPF's John Crock memorial project. Finger-food potluck, and music by the always delightful *Under the Wire*.

Order your **PPF T-shirts** by October 31 for pick-up at the Annual Meeting: palouseprairie.org/t-shirts



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

Palouse Prairie Foundation
P.O. Box 8952
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Field Identification of the Giant Palouse Earthworm (*Driloleirus americanus*)

Only known species native to Palouse prairie
Described in 1897
Almost nothing known about it
Earthworms are ecosystem engineers
They are anecic: inhabiting permanent, vertical burrows

Key features of *Driloleirus americanus*

- No pigmentation
- Clitellum on segments 13-18
- Setae in eight regular rows
- Tail is bulbous

Recent specimen, collected by Cass Davis, clitellum starts on segment 13

Note location (GPS coordinates are the best)

Take high-quality photographs including location of clitellum

Source:

Baughner, Chris. October 17, 2013. "Stalking the Giant Palouse Earthworm." Presentation to the Palouse Prairie Foundation.



September 2016

Evidence for *Bombus occidentalis* (Hymenoptera: Apidae) Populations in the Olympic Peninsula, the Palouse Prairie, and Forests of Northern Idaho.

Rhoades, P.R.; Koch, J.B.; Waits, L.P.; Strange, J.P.; Eigenbrode, S.D. *Journal of Insect Science* (Tucson), 2016, 16

Abstract: Since the mid-1990s, *Bombus occidentalis* (Green) has declined from being one of the most common to one of the rarest bumble bee species in the Pacific Northwest of the United States. Although its conservation status is unresolved, a petition to list this species as endangered or threatened was recently submitted to the U.S. Fish and Wildlife Service. To shed light on the conservation situation and inform the U.S. Fish and Wildlife Service decision, we report on the

detection and abundance of *B. occidentalis* following bumble bee collection between 2012 and 2014 across the Pacific Northwest. Collection occurred from the San Juan Islands and Olympic peninsula east to northern Idaho and northeastern Oregon, excluding the arid region in central Washington. *B. occidentalis* was observed at 23 collection sites out of a total of 234. With the exception of three sites on the Olympic peninsula, all of these were in the southeastern portion of the collection range.

Bumble bee fauna of Palouse Prairie: Survey of native bee pollinators in a fragmented ecosystem

Hatten, TD; Looney, C; Strange, JP; Bosque-Perez, NA. *Journal of Insect Science*, 2013, 13

Abstract: Bumble bees, *Bombus Latreille* (Hymenoptera: Apidae:), are dominant pollinators in the northern hemisphere, providing important pollination services for commercial crops and innumerable wild plants. Nationwide declines in several bumble bee species and habitat losses in multiple ecosystems have raised concerns about conservation of this important group.

In many regions, such as the Palouse Prairie, relatively little is known about bumble bee communities, despite their critical ecosystem functions. Pitfall trap surveys for ground beetles in Palouse prairie remnants conducted in 2002-2003 contained considerable by-catch of bumble bees. The effects of landscape context, remnant features, year, and season on bumble bee community composition were examined.

Additionally, bees captured in 2002-2003 were compared with historic records for the region to assess changes in the presence of individual species. Ten species of bumble bee were captured, representing the majority of the species historically known from the region. Few detectable differences in bumble bee abundances were found among remnants. Community composition differed appreciably, however, based on season, landscape context, and elevation, resulting in different bee assemblages between western, low-lying remnants and eastern, higher-elevation remnants. The results suggest that conservation of the still species-rich bumble bee fauna should take into account variability among prairie remnants, and further work is required to adequately explain bumble bee habitat associations on the Palouse.

Full text available from DigiTop.

Selected PPF minigrant recipients

2010 Moscow High School Environmental Club: native plant walk/trail and signage at Phillips Farm Park

Russell Elementary School: Installation of a native plant garden for use as a learning tool

Two restoration projects on private properties in the Viola area

A restoration project on private property on Paradise Ridge

2014 Moscow High School, purchasing native seeds and plant starts

2014 Moscow Charter School, low-water use native plants and research on hydroponics. Students from future classes will collect data on flowering and pollination.

2014 UI Sustainability Center, native plant demonstration project to increase landscape diversity, promote water conservation, and provide habitat for pollinators.

2014 UI Sustainability Center, Theophilus Tower, plant native shrubs and forbs around the grounds.

2016 UI Ph.D. student, lab costs for positive eDNA identification of giant Palouse earthworm

Further research on camas

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 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.



New in 2010!

Native Plant Trail

The Palouse Prairie Foundation awarded a grant to members of the Moscow High School Environmental Club to construct a native plant trail and informational kiosk at the Phillips Farm. The kiosk is complete, with a poster that describes the Palouse Prairie. The trail, and an accompanying poster and brochure, will be finished by late October.

The Environmental Club would like to thank David Skinner, David Hall, Nancy Holmes, Tom Gorman and Jerry Grzebielski for their assistance with this project. Moscow High School students Hannah Young and Erin Saladin are the project leaders.

Miscellanea

Notecards

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 us. We generally bring them to meetings and presentations.

Book

"**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.

Newsletters

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

Renew your PPF membership



Palouse Prairie Foundation memberships are for the calendar year.

Please make your check payable to *Palouse Prairie Foundation*.

* Our primary means of communication about meetings, field trips, etc., is by e-mail.

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

Low-income \$10 Regular \$20 Family \$35 Sustaining \$50 Patron \$100 Donation \$ _____

Name _____

Address _____

City, State, Zip _____

E-mail * _____

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