

The Newsletter of the Palouse Prairie Foundation

P.O. Box 8952. Moscow, ID 83843

Vol. V No. 1

<http://www.palouseprairie.org/>

Summer 2012

The regular meeting date for the Palouse Prairie Foundation is the second Thursday of each month. Check the PPF website for updates and locations.

New Publications:

Pavek, P.L.S., and D.M. Skinner 2012. **Plant Guide for Taper-leaved Penstemon (*Penstemon attenuatus*)**. USDA Natural Resources Conservation Service, Pullman Plant Materials Center. Pullman, WA. Available at http://plants.usda.gov/plantguide/pdf/pg_peat3.pdf

Looney, Chris, and Sanford Eigenbrode. 2012. **Characteristics and Distribution of Palouse Prairie Remnants: Implications for Conservation Planning**. Natural Areas Journal 32:75-85.

Abstract: The Palouse Prairie of eastern Washington State and adjacent northern Idaho is an endangered ecosystem. Like other arable North American grasslands, the prairie was mostly converted to agriculture in the late 1800s, and native habitat is today highly fragmented within a matrix of production agriculture. Government and conservation groups are beginning conservation action in the region, but lack information regarding the number and nature of the prairie remnants. We used high-resolution aerial photography to identify potential prairie remnants in the southern half of the Palouse and describe their physical characteristics. We found that although there are many potential remnants, they tend to be small (most less than 2 ha) and have high perimeter-area ratios. Potential remnants are disproportionately found on rocky and shallow soils in the region, with only a few located on the deepest, most agriculturally valuable soil types. The remnants occur predominantly in a few large clusters near rivers and rocky buttes, and over half are within 150 m of the next nearest remnant. Almost all remnants are privately owned. The high number and clustered distribution of the remnants suggest a conservation strategy for the Palouse may be based on developing a network of small reserves. This may be best implemented at the county level through outreach efforts and partnerships with private landowners.

Chris has given PPF permission to distribute electronic copies for personal use. If you would like a copy, please contact Dave Skinner at the address below.

Finding the Palouse Prairie: Images of a Vanishing Grassland.

Matt Dolkas has created this book containing his photographs and writings about the Palouse Prairie. In "Finding the Palouse Prairie", Matthew Dolkas tells the story of the Palouse Prairie. His purpose in telling this story is to advocate for the restoration and protection of the remaining prairie. "Finding the Palouse Prairie: Images of a Vanishing Grassland" can be purchased online at www.dolkas.com or <http://www.blurb.com/bookstore/detail/2768591>

PPF also has a few copies for sale. Contact a board member.

The UI Argonaut published an article on the book but they have not provided access in their archives.

Matt is currently working for the Sitka Conservation society in Sitka, Alaska.

<http://sitkawild.org/about-us/scs/staff/staff-matt-dolkas/>

Featured Plant:

Helianthella uniflora (false sunflower, little sunflower, Rocky Mountain helianthella, oneflower helianthella, Douglas' helianthella) is native to shrub-steppe grasslands, and open forests of western North

America from southern British Columbia to Oregon, Nevada, New Mexico and north to Montana. The Palouse phase, var. *douglasii*, has a more limited range in similar habitats of southern British Columbia, Washington, Oregon, and Idaho. On the Palouse it is found in prairie grasslands, shrub thickets, and open forest.



Helianthella uniflora is a perennial forb in the family Asteraceae. It is similar to two other common yellow flowered Asteraceae on the Palouse featured in earlier editions of this newsletter, *Balsamorhiza sagittata* (see Vol. 3 no. 2) and *Wyethia amplexicaulis* (see Vol. 2 no. 2). It differs from the other species in being harshly puberulent to hirsute overall, with the lower and middle cauline leaves opposite, and the leaves having 2 prominent veins arising near the lower part of the midvein. It is not as long lived as the other two but it flowers in its second or third year while the others require 5 or more years to sexual maturity. All three species are taprooted.

Helianthella uniflora flowers in late May until mid-June sometimes extending into July in cooler areas, making it the latest of the three to flower. The disc flowers are perfect, and the ray flowers are neutral, and n=15. The Paiute and Shoshoni people of northern Nevada and Utah used the roots medicinally.

The fruit (seed) is an achene. It reproduces strictly by seed. There are 41,087 seeds/lb.

Some seed will germinate without pretreatment but cold, moist stratification increases germination. The length of stratification needed seems to depend on the ecotype. Seed will germinate at low temperatures. There are 3 protocols in the Native Plant Network.

<http://nativeplants.for.uidaho.edu/Network/ViewProtocols.aspx?ProtocolID=3379>

<http://nativeplants.for.uidaho.edu/Network/ViewProtocols.aspx?ProtocolID=3211>

<http://nativeplants.for.uidaho.edu/Network/ViewProtocols.aspx?ProtocolID=3483>

For more information on *Helianthella uniflora* 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/java/profile?symbol=HEUND>

Species page from the University of Washington Herbarium (WTU)

<http://biology.burke.washington.edu/herbarium/imagecollection.php?Genus=Helianthella&Species=uniflora&Trinomial=douglasii>

Species information from the Palouse Plant Database

<http://dev.palouseprairie.org/plants/plantdb/PPFplants.php?USDA=HEUND>

There is some information on *H. uniflora* on the PPF website at

http://public.wsu.edu/~pmc_nrcs/Docs/Forbs_for_Landscaping.pdf and

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

Miscellanea:

We recently posted a beta version of the Palouse Plant Database on the PPF website at

<http://dev.palouseprairie.org/plants/plantdb/PPFplants.php> This is a temporary page and it will change in the future. You can always access the database from the main page of the Palouse Prairie Foundation website <http://www.palouseprairie.org/> Please take a look at it. If you have suggestions or corrections for the database, please notify us using the contact information on the database pages.

If you would like to have the Palouse Prairie display at a gathering or meeting, please contact us. The display consists of a free standing 4 panel poster explaining Palouse Prairie, and a myriad of printed information regarding the prairie. A smaller version of the poster is also available for more limited spaces. You can view the poster on the PPF website at <http://www.palouseprairie.org/display/>

If you would like to give a presentation about some aspect of Palouse Prairie or know of someone whom you would like to hear talk about Palouse Prairie, or you have an idea for a field trip, please contact a board member.

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

If you have ideas, suggestions, or contributions for the newsletter, please send them to Dave Skinner 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. Look for the next newsletter in fall 2012.

The following pollinator information was compiled by Pamela Pavek, Conservation Agronomist, USDA-NRCS Plant Materials Center, Pullman, WA. If you are viewing an electronic copy of this document, please scroll down to the next page.

Native Pollinator Plants for the Palouse

All of the plants on this list have low water requirements. Plants adapted to part shade tolerate moderate amounts of water. During the first year of establishment, all native plants should be watered three or four times.

ANNUAL FORBS		Bloom Color and Time			Soils			Sun		Insect Activity**	
Scientific Name	Common Name	spring	summer	fall	fine	medium	coarse	☀ = full sun ☪ = part shade	Mature Height* (inches)	Pollinators	Butterfly Host Plant
<i>Clarkia pulchella</i>	elkhorns clarkia	☐	🌸	☐		X	X	☀	20	bees	
<i>Collomia grandiflora</i>	grand collomia	🌸	🌸	☐		X	X	☀	36	bees, butterflies	

PERENNIAL FORBS		Bloom Color and Time			Soils			Sun		Insect Activity**	
Scientific Name	Common Name	spring	summer	fall	fine	medium	coarse	☀ = full sun ☪ = part shade	Mature Height* (inches)	Pollinators	Butterfly Host Plant
<i>Achillea millefolium</i>	western yarrow	🌸	🌸	☐		X	X	☀	24	butterflies, beetles, bees	painted lady
<i>Agastache urticifolia</i>	nettleleaf giant hyssop	☐	🌸	☐	X	X	X	☀	60	bees	
<i>Asclepias speciosa</i>	showy milkweed	☐	🌸	☐	X	X	X	☀	60	bees, butterflies	white, sulphur, monarch
<i>Astragalus canadensis</i>	Canada milkvetch	☐	🌸	☐		X		☀	36	bees, butterflies	orange sulphur, clouded sulfur, white sulphur, western tailed blue, silvery blue, arrowhead blue

PERENNIAL FORBS		Bloom Color and Time			Soils			Sun	Mature Height*	Insect Activity**	
Scientific Name	Common Name	spring	summer	fall	fine	medium	coarse	☀ = full sun ☺ = part shade	(inches)	Pollinators	Butterfly Host Plant
<i>Balsamorhiza sagittata</i>	arrowleaf balsamroot	☀	☐	☐	X	X		☀	24	bees	
<i>Chamerion angustifolium</i>	fireweed	☐	☀	☀	X	X	X	☀	48	bees	
<i>Erigeron filifolius</i>	threadleaf fleabane	☀	☀	☐		X	X	☀	20	bees, butterflies	
<i>Erigeron pumilus</i>	shaggy daisy	☀	☀	☐		X	X	☀	20	bees, butterflies	
<i>Erigeron speciosus</i>	showy daisy	☐	☀	☐		X	X	☀	30	bees, butterflies	
<i>Eriophyllum lanatum</i>	Oregon sunshine	☀	☀	☐	X	X	X	☀	24	bees	
<i>Gaillardia aristata</i>	blanketflower	☐	☀	☀		X	X	☀	30	bees, beetles, butterflies	
<i>Galium boreale</i>	nothern lights	☐	☀	☐		X	X	☀☺	24	bees, butterflies	
<i>Geranium viscosissimum</i>	sticky purple geranium	☐	☀	☐		X		☀	36	bees, butterflies	
<i>Helianthella uniflora</i>	little sunflower	☐	☀	☐	X	X	X	☀	42	bees, wasps, butterflies	
<i>Hieracium scouleri</i> ssp <i>albertinum</i>	hairy Albert	☐	☀	☐				☀	36	bees	
<i>Linum lewisii</i>	Lewis flax	☀	☀	☐		X	X	☀	24	bees	
<i>Lomatium dissectum</i>	fernleaf biscuitroot	☀	☐	☐	X	X	X	☀	36	bees, flies, beetles, butterflies	anise swallowtail, indra swallowtail
<i>Lomatium triternatum</i>	nineleaf biscuitroot	☀	☐	☐		X	X	☀	36	bees, flies, beetles, butterflies	anise swallowtail, indra swallowtail

PERENNIAL FORBS		Bloom Color and Time			Soils			Sun	Insect Activity**		
Scientific Name	Common Name	spring	summer	fall	fine	medium	coarse	☀ = full sun ☾ = part shade	Mature Height* (inches)	Pollinators	Butterfly Host Plant
<i>Lupinus</i> spp	lupine	☐	☀	☐		X	X	☀	36	bees	persius duskywing, clouded sulphur, orange sulphur, gray hairstreak, silvery blue, Melissa's blue, Boisducal's blue, acmon blue, painted lady
<i>Penstemon attenuatus</i>	taperleaf penstemon	☐	☀	☐	X	X		☀	36	bees, butterflies	chalcedona checkerspot, Edith's checkerspot, common buckeye
<i>Penstemon confertus</i>	yellow pentstemon	☐	☀	☐	X	X	X	☀	24	bees, butterflies	chalcedona checkerspot
<i>Penstemon deustus</i>	hot-rock penstemon	☐	☀	☐		X	X	☀	24	bees, butterflies	chalcedona checkerspot
<i>Potentilla arguta</i>	tall cinquefoil	☐	☀	☐		X		☀	36	bees, butterflies	
<i>Potentilla gracilis</i>	slender cinquefoil	☐	☀	☐		X	X	☀☾	24	bees, butterflies	
<i>Sidalcea oregana</i>	Oregon checkermallow	☐	☀	☐		X		☀	36	bees, butterflies	
<i>Solidago canadensis</i>	Canada goldenrod	☐	☀	☀		X	X	☀	60	bees, butterflies	
<i>Solidago missouriensis</i>	Missouri goldenrod	☐	☀	☀		X	X	☀	36	bees, butterflies	
<i>Symphyotrichum spathulatum</i>	western mountain aster	☐	☀	☀	X	X		☀	36	bees, beetles, butterflies	pearl crescent, northern checkerspot

SHRUBS	Scientific Name	Common Name	Bloom Color and Time			Soils			Sun	Mature Height* (feet)	Insect Activity**	
			spring	summer	fall	fine	medium	coarse	☀ = full sun ☺ = part shade		Pollinators	Butterfly Host Plant
	<i>Amelanchier alnifolia</i>	serviceberry	☀	☐	☐	X	X	X	☀	15	bees, butterflies	pale swallowtail
	<i>Ceanothus sanguineus</i>	red-stem ceanothus	☀	☐	☐	X	X	X	☀☺	6	bees, butterflies	pale swallowtail, spring azure, western elfin, California tortoiseshell, hairstreak, blue
	<i>Crataegus douglasii</i>	black hawthorn	☀	☐	☐	X	X	X	☀	3	bees, butterflies, moths	Lorquin's admiral
	<i>Dasiphora fruticosa</i>	shrubby cinquefoil	☐	☀	☐		X		☀	4	bees, butterflies, moths, flies, beetles	
	<i>Eriogonum heracleoides</i>	Wyeth's buckwheat		☀			X	X	☀	3	bees, butterflies, moths, beetles	square-spotted blue, acmon blue, Sheridan's green hairstreak, copper
	<i>Eriogonum umbellatum</i>	sulphur buckwheat		☀			X	X	☀	2	bees, butterflies, moths	square-spotted blue, acmon blue, Sheridan's green hairstreak
	<i>Holodiscus discolor</i>	oceanspray	☐	☀	☐	X	X	X	☀	9	bees, butterflies	pale swallowtail, spring azure, western elfin, blue
	<i>Mahonia aquifolium</i>	upright Oregon grape	☀	☐	☐		X	X	☀☺	5	bees	
	<i>Mahonia repens</i>	creeping Oregon grape	☀	☐	☐		X	X	☀☺	2	bees	
	<i>Philadelphus lewisii</i>	Lewis' mock orange	☀	☐	☐		X	X	☀	8	bees, butterflies	
	<i>Physocarpus malvaceus</i>	ninebark	☀	☀	☐	X	X	X	☀☺	6	bees, butterflies, flies	

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SHRUBS	Scientific Name	Common Name	Bloom Color and Time			Soils			Sun	Mature Height* (feet)	Pollinators	Insect Activity**	Butterfly Host Plant
			spring	summer	fall	fine	medium	coarse	☀ = full sun ☉ = part shade				
	<i>Prunus virginiana</i>	chokecherry	☀	☐	☐	X	X	X	☀	20	bees, butterflies	pale swallowtail, two-tailed swallowtail, western swallowtail, coral hairstreak, Lorquin's admiral	
	<i>Rhus glabra</i>	smooth sumac	☀	☐	☐		X	X	☀☉	9	bees		
	<i>Ribes aureum</i>	golden currant	☀	☐	☐		X		☀	6	bees	green comma, anglewing	
	<i>Ribes cereum</i>	wax currant	☐	☀	☐		X	X	☀	4	bees	green comma, anglewing	
	<i>Rosa nutkana</i>	Nootka rose	☀	☀			X	X	☀	6	bees, butterflies, beetles		
	<i>Rosa woodsii</i>	Woods' rose	☀	☀	☐		X	X	☀	6	bees, butterflies, beetles		
	<i>Sambucus nigra ssp cerulea</i>	blue elderberry	☀	☐	☐		X	X	☀☉	15	bees, nesting bees, butterflies, beetles, flies		
	<i>Spiraea douglasii</i>	Douglas' spirea	☐	☀	☐		X	X	☀☉	4	bees	spring azure	
	<i>Symphoricarpos albus</i>	snowberry	☐	☀	☐	X	X	X	☀☉	4	bees, butterflies, hummingbirds	chalcedona checkerspot, snowberry checkerspot	

* This is the maximum height the plant will attain. The actual height will depend on environmental conditions.

** Insect Activity information is from: Amy Poscewicz (former graduate student at University of Idaho), David James (Washington State University) and James Cane (USDA-ARS). Their references include:

Guppy, C.S. and J.H. Shepard. 2001. Butterflies of British Columbia. University of British Columbia Press.

James, D.G. and Nunnallee, D. 2011. The Life Histories of Cascadia Butterflies. Oregon State University Press.

Pyle, R.M. 2002. The Butterflies of Cascadia: A Field Guide to the Species of Washington, Oregon, and Surrounding Territories. Seattle Audubon Society.

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