

The Newsletter of the Palouse Prairie Foundation

P.O. Box 8952. Moscow, ID 83843

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

September 2010

The regular meeting date for the Palouse Prairie Foundation is the 1st Thursday of each month. Check the PPF website for updates and locations. We plan to have several presentations this fall and winter. If you would like to talk about some aspect of Palouse Prairie or know of someone whom you would like to hear talk about Palouse Prairie, please contact a board member.

Native Seed and Plant Sources

updated by **Trish Heekin**.

If you need native plants or seeds for a project, the following are some possible sources. You will need to contact the grower or check the website to determine whether they offer the items you need.

Benson Farms, Inc.

1145 Jefferson, Moses Lake WA 98837

<http://www.bfinativeseeds.com/>

509-765-6348

Clearwater Seed, Inc.

27 W. 1st Avenue, Ste 307, Spokane, WA 99201

<http://www.ClearwaterSeed.com>

509-343-3108

Connell Grain Growers

P.O. Box 220, Connell WA 99326

<http://www.ConnellGG.com>

509-234-2641

509-234-2642 Fax

Cricket's Garden

716 Shoshone St., Moscow, ID 83843

509-330-0574

<http://www.CricketsGarden.com/>

Derby Canyon Natives

P.O. Box 385, Peshastin WA 98847

<http://www.DerbyCanyonNatives.com>

509-548-9404

Dye Seed Ranch

203 Connell Hill, Pomeroy WA 99347

509-843-1690

Grassland West

PO Box 489, Clarkston WA 99403

<http://www.GrasslandWest.com>

509-758-9100

509-758-6601 Fax

Great Basin Seeds

1040 Russell, Mesa WA 99343

509-265-4250

Jacklin Seed Co

PO Box 181, Ritzville WA 99169

<http://www.jacklin.com>

509-659-1065

Landmark Seed

N 120 Wall St, Ste 400, Spokane WA 99201

<http://www.LandmarkNative.com>

800-268-0180

L&H Seeds

4756 W. Hwy 260, Connell WA 99326

<http://www.LHSeeds.com>

509-234-4433

McLean Seed Co.

PO Box 815, Coulee City WA 99115

509-632-8709

Mosman Seed Ranch

Rt. 2, Box 43, Craigmont ID 83523

208-937-2552

Plants of the Wild

PO Box 866, Tekoa WA 99033

<http://www.PlantsOfTheWild.com>

509-284-2848

Pleasant Hill Nursery

Anderson Rd, Troy ID 83871

pdmason@moscow.com

208-877-1434

Rainier Seeds, Inc.

PO Box 187, Davenport WA 99122

<http://www.RainierSeeds.com>

509-725-1235

509-725-7015 Fax

Rimrock Nursery

5511 S. Dorset, Spokane WA 99224

<http://www.RimrockNursery.com>

509-455-7405

Seeds Inc.

PO Box 866, Tekoa WA 99033

509-284-2848

509-284-6464 Fax

Seed Specialists
10260 N. Taryne, Hayden Lake, ID 83835
208-762-8308
208-762-9267 Fax

Sun Mountain Natives
1406 East F, Moscow ID 83843
<http://SunMountainNatives.com>
208-883-7611

Thorn Creek Native Seed Farm
1461 Thorn Creek Rd, Genesee ID 83832
<http://www.NativeSeedFarm.com>
208-596-9122

UI Pitkin Forest Nursery
PO Box 441137, Moscow ID 83843
<http://seedlings.uidaho.com>
208-885-3888
208-885-6226 Fax

For larger projects, you may want to consult the Native Seed Network, <http://www.nativeseednetwork.org>
Be sure to specify seed from either the “ID Columbia Plateau” or the “WA Columbia Plateau.”

Insects of the Palouse

This is the second of a series of notes concerning invertebrates (insects, spiders, myriapods and mollusks) of Palouse Prairie.

Submitted by **Timothy D. Hatten**¹

The PPF sponsored field trip to Smoot Hill on June 5th, 2010 was a great day. Eight of us headed out to the WSU owned Smoot Hill Biological Reserve. Arriving there, we set off on foot past the front office, tool sheds and eventually past the barn to begin a slow climb up a rounded ridge with Palouse Prairie. The ridge was bright with plants in flower including cinquefoil, lilies, arrowleaf balsamroot, lomatium species, orchids, prairie smoke, etc., and insects and pollinators were astir and a-buzz.

It was a red-spotted crab spider (*Misumena vatia*) that first caught our eye. Crab spiders (Arachnida:



Araneidae) belong to the family Thomisidae and are so named because their front two pair of legs are thicker and longer than their hind pairs and face forward in a manner reminiscent of a crab. Like our red-spotted crab, these spiders are often found on flowers as they wait to ambush unsuspecting pollinators like bees. Indeed, *Misumena* species can change color to match their substrate, camouflaging themselves to aid in prey capture. Our red-spotted crab, for example, was predominantly golden-green matching the green leaves it rested on. Once I was fortunate enough to witness a crab spider capture a bee, and I was amazed by its method: Rather than a fast rattlesnake-type strike it exhibited a slow, Béla Lugosi-

like vampire move, waiting for the bee to get dangerously self absorbed in pollen collection before extending its forelegs ever so slowly to enclose the bee and pull it in. Creepy and cool.

Higher on the ridge we observed small, dull metallic-green sweat bees (Hymenoptera: Apidae) of the family Halictidae and genera *Halictus* or *Lasioglossum* busily visiting nine-leaf lomatium. Bees of this family are smaller and generally less conspicuous than the larger bumblebees, or honeybees, but they are very abundant. Many halictid bees are solitary. A single queen excavates a nest in soil and then lays eggs in individual nest cells that are sealed after first provisioning them with nectar and pollen. Each nest cell requires multiple floral visits in order to gather enough food to provision it, and a queen will excavate dozens of next cells and lay an equal number of eggs increasing the chances that surrounding flowers will be pollinated!

After leaving the shoulder remnant we observed something very peculiar while walking the upper ridge to the summit and the remnant on the “backside” (northwest side) of Smoot. Down in a broken up area of soil we noticed a spider that at first glance appeared to be carrying an egg sac on the ventral side of her abdomen. This is the way that wolf spiders (Araneidae: Lycosidae) carry eggs, and upon hatching they then switch to carry their first instar spiderlings on the back of the abdomen. However, closer inspection suggested that she was carrying the sac in her mouth. Curious to know, I reached down and the spider

dropped the object and ran for cover. Upon picking up the “egg sac” I knew immediately what it was: an earthworm cocoon. I have not as yet had a chance to peruse the literature for similar observations, but I imagine this to be a rare sighting, and we can only speculate as to whether the spider was going to feed on it.



The birds-eye view from the summit of Smoot Hill is always inspiring, causing one to imagine what the Palouse looked like 200 years ago, with prairie and associated habitats stretching as far as the eye could see. On this day cumulus clouds floated across the horizon putting an exclamation point on its size, and phlox, lupine, and larkspur colored the surrounding grassland. Descent from the summit into the northwest remnant is always quite abrupt, as it is situated only a few hundred feet from the summit, creating a sharp transition from the surrounding Conservation Reserve Program (CRP) grassland. Moreover, this remnant is woodier and rockier than the shoulder remnant, lending it a different landscape texture. Douglas hawthorn and

chokecherry polka-dot this prairie and wild rose grows in large patches. In the rose we watched large bumblebees hover and then maneuver into the corolla of these flowers, buzzing so loudly that wing vibration alone could have aided in pollination. I cannot be sure but these bumblebees appeared to be the golden bumblebee (*Bombus fervidus*), a species that is covered in dense golden pile and has rather dark, iridescent wings. A recent study of bumblebees of Palouse Prairie (Hatten et al., unpublished) indicates that this is a common inhabitant of the prairie. The large size of these rose pollinators, combined with the early season, suggest that they were queens collecting food for their offspring. We saw other wonderful sightings in this remnant and on our way back to the cars, but discussion of such observations await another day!

photo 1. © David Hall. Red-spotted crab spider (*Misumena vatia*)

photo 2. © Tim Hatten. (L-R) Helen Stroebel, David Pierce, Dave Skinner, Pat Fuerst, and Ron Hatley on the ridge leading to the summit of Smoot Hill. Kamiak Butte can be seen in the background.

¹ PPF Board of Directors, CEO of Invertebrate Ecology Inc. (www.invertebrateecology.com)

Featured Plant

Aster jessicae. Submitted by **David M. Skinner**

photo © Dave Skinner



Aster jessicae (Jessica’s aster) is a rare species endemic only to the Palouse and Clearwater River drainages of southeastern Washington and adjacent Idaho where it prefers open mesic grasslands, benches along stream courses, and edges of ponderosa pine forest. It is a rare species ranked S1S2 (critically imperiled to imperiled) by the Washington Natural Heritage Program, S2 (imperiled) by the Idaho Conservation Data Center, and a "species of concern" federally under the Endangered Species Act.

Recent cytogenetic research has shown that the North American aster species should not be included in the genus *Aster*. *Symphyotrichum jessicae* (Piper) Nesom is the currently accepted name for Jessica’s aster.

S. jessicae is a decaploid ($2n=80$) which blooms in late July and often continues into October. It requires sufficient soil moisture to support

this late season activity. It reproduces sexually by seed (achenes) and vegetatively by rhizomes. The achenes are wind dispersed. Vegetative spread can be quite aggressive and thus it may not be a suitable species for a small garden.

The ray flowers are pistillate and the disc flowers are perfect. Pollinators include many species of butterflies, wasps, bees, and possibly rove beetles. Because it is one of the few native plants that blooms late in the season, Jessica's aster is an important food source for pollinators. *Aster* species in general are also hosts for the larva of the pearl crescent (*Phyciodes tharos* ssp. *pascoensis*) and the northern checkerspot (*Charidryas palla*) butterflies.

Plants may be propagated from seed or from rhizome division. The seed does not require pretreatment. Rhizomes should be dug in the spring. There are 542,584 seeds/lb. There is one propagation protocol in the Native Plant Network:

<http://nativeplants.for.uidaho.edu/Network/ViewProtocols.aspx?ProtocolID=2154>

You should grow this plant only if you can get it from another gardener. It is a rare species and natural populations should be left alone and enjoyed where they are.

For more information on *Symphyotrichum jessicae* see:
Plant Profile from the USDA NRCS PLANTS Database

<http://plants.usda.gov/java/profile?symbol=SYJE>

Species page from the University of Washington Herbarium (WTU)

<http://biology.burke.washington.edu/herbarium/imagecollection.php?Genus=Symphyotrichum&Species=jessicae>

Species description from Flora of North America

http://www.efloras.org/florataxon.aspx?flora_id=1&taxon_id=250067655

Fact sheet from the Washington Natural Heritage Program

<http://www1.dnr.wa.gov/nhp/refdesk/fguide/pdf/asje.pdf>

There is some information on *A. jessicae* in "More Palouse Forbs for Landscaping" at

http://www.wsu.edu/~pmc_nrcs/Docs/More_Forbs_for_Landscaping.pdf

Palouse Prairie Foundation Display

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/>

Upcoming Event

Friday, October 1, 2010 at the Moscow **1912 Center** Great Room – Come one and all to a fun evening with music by local bands and a no-host bar to help raise funds for the **Palouse Prairie Foundation** and **Palouse Group Sierra Club**.

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 December 2010.