

Propsocus pulchripennis (Perkins) from Oregon

While looking at oak galls last fall, I came across a number of small insects. They are in what I learned as the insect order Psocoptera many years ago. They are commonly called barklice or booklice and are now considered to be in the insect order Psocodea, which also includes the chewing and sucking lice. They feed on organic material in leaf litter, moss, bark, etc. Some species are known to live in bird and rodent nests as scavengers. The booklice eat the paste holding books together. There are generally four to six nymphal instars with the larger number associated with macroptery. Brachypterous species have a lower number of nymphal instars (Mockford 1992). I've no idea at this

Cary Kerst

point whether they were just inadvertently in the gall or are more closely associated. I brought some leaf litter in and tried using a light source over a screen to drive invertebrates out of the leaf litter but found no psocids. Dr. Mockford (pers. comm.) indicated that there are some psocids known to be associated with plant galls. These little soft-bodied insects are closely related to Hemiptera, the true bugs.

This species was identified by Dr. Edward Mockford, Professor Emeritus at Illinois State University, as *Propsocus pulchripennis* (Perkins). It is known mostly from the southern hemisphere—



Figure 1. Psocodea nymph, Eugene, Oregon. November 18, 2018. Photo by Cary Kerst.



Figure 2. Psocodea female from galls, Eugene, Oregon. November 20, 2018. Photo by Cary Kerst.

Feel free to distribute this newsletter to others. Submit content to **Ron Lyons** <pondhawk@integra.net>. To be included on the distribution list contact **Jim Johnson** <gomphus jim@google.com>.

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Australia, New Zealand, Zambia, South Africa, and Chile, but also from Hawaii and our Pacific coast. He indicates that this is the first Oregon record but that he has records from the California counties of Marin, Sacramento, and Humboldt. While the specimens that I found are brachypterous, there are also macropterous populations of the species (Mockford, pers. comm.). The body length of the adult is 2–2.7 mm.

I plan to see if I can determine whether this species is associated with the oak galls next year.

References

Mockford, E.L. 1993. North American Psocoptera (Insecta). Flora & Fauna Handbook No. 10, Sandhill Crane Press, Inc., Gainesville, Florida. 455 p.

Mockford, E.L. Personal Communication, November 11, 2018.

Figure 3 (right). *Propsocus pulchripennis* (Perkins) male, Eugene Oregon. November 21, 2018. Photo by Cary Kerst.

Galeruca rudis (Coleoptera: Chrysomelidae) Ron Lyons

The adult of *Galeruca rudis*, called the Lupine Leaf Beetle in Haggard and Haggard (2006), is a black beetle, ~10 mm in length (Figure 1). The head, thorax and elytra have a number of coarse indentations. The elytra have a series of ridges along their length. The outside edges of the elytra are trimmed by a narrow band varying in color from pale yellow to orange to red. A late stage larva is shown in Figure 2.

At Bullards Beach State Park in Coos County on Oregon's south coast, this beetle can be found along the pedestrian/horse trails in the sand dunes north of the beach parking lot.

This time of year, adults wander about, feed on lupine leaves, and



mate. Their preferred, as far as I can tell, virtually exclusive, food plant in this area is *Lupinus littoralis*, the seashore lupine.

Adult beetles walk everywhere—I have never seen them fly. Adults can often be found struggling to get out of the footprint depressions left in the sand by passing animals, particularly horses, and people. Other than the ones I help along, I do not know how many successfully get out.

Reference

Haggard, P. and J. Haggard. 2006. Insects of the Pacific Northwest. Timber Press Field Guide. 295 p.



Figure 1. This pair photographed on March 26, 2019 had already mated. The female was looking for another piece of low-lying vegetation that she could crawl under to dislodge the male, after several unsuccessful attempts. The male was attempting to mate again. Photo by Ron Lyons.



Figure 2. This late stage larva was feeding on a flower of *Lupinus littoralis* on May 23, 2018. A small section of another larva can be seen in the background. Photo by Ron Lyons.

The Pacific Northwest Bumble Bee Atlas Needs Your Help!

Rich Hatfield¹

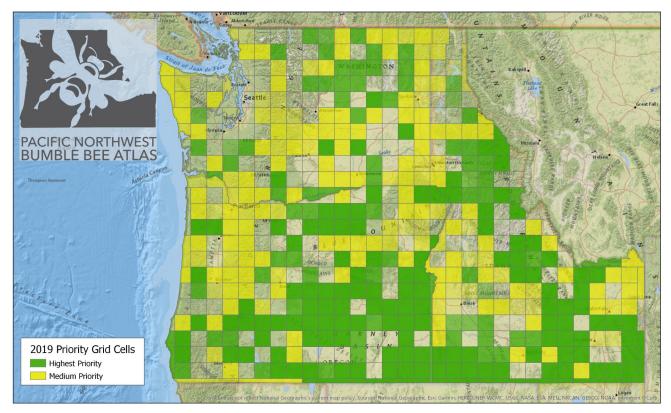
In 2018 conservation partners in Oregon, Washington, and Idaho launched a new project to harness the power of citizen scientists to help put bumble bees on the map in the Pacific Northwest. The Pacific Northwest Bumble Bee Atlas (<https:// www.pnwbumblebeeatlas.org>) is a collaborative effort to better understand our native bumble bee populations, the habitats that support them, and the plants that they prefer. Ultimately, the goal is to be able to comprehensively assess the status of these essential pollinators, and be able to provide regionspecific, evidence-based land management guidance for bumble bees to land owners and managers throughout the region.

To accomplish this task we've divided the region into equal area (approximately 2500 km²) sections, and asked volunteers to adopt a grid cell and follow our established survey protocol. Surveys take place on 1-hectare plots (of your choosing) within the section, and the minimum requirement is two surveys per section (you can read more about the project on the website). Our first year was extremely successful as we recruited hundreds of project volunteers that contributed thousands of bumble bee observations throughout the region. Despite our successes in the first year, many challenges lie ahead to cover our diverse and vast landscape and achieve our conservation goals. Significant portions of our region remain undersampled for bumble bees, and we need the help of more volunteers in 2019 and 2020. You can learn more about the project's accomplishments and goals here: <htps://

arcg.is/v4vlP>.

The map below represents our priority grid map for 2019. Green grid cells are our highest priority for 2019. In most cases, this means that we have very little recent information about bumble bees living in these areas, and no official surveys were conducted in 2018. Yellow grid cells are still high priority, but we have more recent bumble bee data, including at least one official survey in 2018. We are hoping to have volunteers search the map for places of interest and plan a bumble bee watching adventure. You can see an updated version of the map, and adopt your own grid cell at <https://www.pnwbumblebeeatlas.org/ adopt-a-grid-cell.html>. Also stay tuned to our events page for training opportunities, field trips, etc.: <https:// www.pnwbumblebeeatlas.org/events.html>. There is also an option to watch our training videos online if you are unable to attend a training in person: <https:// www.pnwbumblebeeatlas.org/trainingmodules.html> (you need to register to access the videos).

The Atlas is a collaboration between the Xerces Society, the Oregon Bee Project, the Washington Department of Fish and Wildlife, and the Idaho Department of Fish and Game. If you have questions, please don't hesitate to contact us at: <pnwbumblebeeatlas@xerces.org>.



1: Xerces Society: Senior Conservation Biologist, Endangered Species Program. Red List Authority, IUCN Bumble Bee Specialist Group (<http://www.iucn.org/bumblebees>).

Insect Classes in 2019

Classes from the Siskiyou Field Institute

The Siskiyou Field Institute (SFI) is located in Selma, in the Illinois Valley about 20 miles south of Grants Pass off Highway 199. Their catalog is available at <http://

www.thesfi.org>. Any additional summer and fall programs will be announced on their website. Most of the programs run out of the Selma facility and involve a fee.

Meet the Beetles: Carabidae and Coleoptera

Instructor: James LaBonte, M.S.

Dates: Thursday-Friday, May 2-3

Among the almost 5,000 beetle species known to live in Oregon, most fascinating behavioral, structural, and feeding adaptations are in the Carabidae (ground beetles) and other families predominantly associated with the soil and leaf litter. In this spring workshop, we'll focus on these families, but will also explore the many additional families of beetles found in the area. Field trips within the Illinois Valley, lectures, labs and optional night collecting will give us plenty of opportunities to collect and observe diverse species. (Catalog page 9.)

Native Bees Workshop

Instructor: August Jackson

Dates: Thursday–Friday, June 6–7

More than 500 bee species are native to Oregon, but we are familiar with relatively few. This two-day crash course will focus on identifying bees to genus level with the goal of increasing understanding of native bees and their conservation. Participants will leave with the knowledge and skills to identify most of Oregon's 30 bee genera and some species found in western Oregon. We will combine microscopic identification with ample field time to place the bees in context by practicing field identification. (Catalog page 21.)

Introduction to Butterflies and Moths of the Siskiyous

Instructor: Dana Ross, M.S.

Dates: Friday-Sunday pm, June 14-16

Location: SFI and the Cascade-Siskiyou National Monument We will explore the world of Lepidoptera—the butterflies and moths—in this three day course. Staring with an introduction to butterfly/moth morphology, life cycles, ecology and behavior, we'll then view images and inspect specimens of Siskiyou species. Friday and Saturday afternoons, we'll work in the field, learning how to properly and carefully net and collect and then we'll inspect netted butterflies. We'll spend the entire day Sunday in the field near the Cascade-Siskiyou National Monument. (Catalog page 22.)

The Amazing World of Dragonflies

Presented by Jim Johnson Date: Friday, June 28, 6:30 pm (Catalog page 27 – this program is free)

Dragonflies Workshop

Instructor: Jim Johnson

Dates: Saturday–Sunday, June 29–30, 2019

From flight dynamics and courtship to structural coloration and anatomy, the order of Odonata is full of fascinating facts. This field course will combine a beginning guide to the dragonflies and damselflies that inhabit Siskiyou ponds and lakes, their larval stages underwater, nymphal emergence, food sources, habitats, species and gender identification, then build on it with an intermediate day exploring further identification and species behaviors in the field. We'll visit both low- and high-elevation sites with nets in hand. Species we'll likely see include Emerald, Skimmer, Meadowhawk and Saddlebags dragonflies and Forktail and Dancer damselflies. (Catalog page 22–23.)

Butterflies of the High Desert

Instructor: Dana Ross, M.S. Dates: Friday–Sunday, July 12–14 Location: Malheur Field Station, Harney County, Oregon Harney County, Oregon is known as a butterfly hotspot as well as a migratory bird stop along the Pacific Flyway. We will base our butterfly and moth studies at Malheur Field Station, where we'll learn both typical and rare species historically seen in southeast Oregon in a classroom session and studying collected specimens. Then we'll foray to alkaline lakes and hot springs, landscaped areas, bogs and high-elevation sites including Steens Mountain in search of summer butterflies including checkerspots, swallowtails, fritillaries, metalmarks, blues and whites.(Catalog page 14.)

Workshop from the Malheur Field Station

Entomology in the High Desert

Instructor: Matt Medeiros Dates: Tuesday–Friday, September 10–13 Learn more about the insects of sagebrush country and their importance to the ecosystem. This course will consist of a field trip to observe insects in the field, insect collecting demonstrations, and learning about insect anatomy and ecology in the classroom.

For more information and registration details please visit <https://malheurfieldstation.com/programs>.

Washington Butterfly Association Class

John Baumann is holding a butterfly class at Spokane Falls Community College on Thursday, May 23.

For the latest details, please visit <https://wabutterfly assoc.org/field-trips/356-2/>.

Lepidoptera Activities in 2019

Northern California

Joseph Smith organizes 3 butterfly counts in Northern California—North Warner Mountains, Lava Beds National Monument and Lassen Volcanic National Park. If you want further information or would like to participate, please contact Joseph Smith at <foxglovel9850yahoo.com>.

North Warner Mountains

Dates: Thursday June 20–Saturday June 22 Location: based at Goose Lake Recreational Campground The 15 mile count circle touches almost to Hwy 395 in the west, the Nevada state line in the east, the Oregon state line in the north and Fandango Pass in the south (center at latitude 41.8948, longitude -120.16). Habitats include:

- High elevation wet meadow and fen, northeast of Mt. Bidwell
- Rocky high elevation low-growing sage-scrub flower gardens.
- High elevation alpine peaks and ridges.
- west side: forested slopes and streams and wet meadows.
- east side: slopes, ponds, wildflower fields and juniper woodlands, riparian canyons rising up to creek-source springs.
- Great Basin habitats east of the Warners in Surprise Valley: sage steppe, agricultural fields, hot gravel pits, alkali sand dunes, open valley lakes and seep areas.

On Friday June 21 there is a pre-count field trip outside the count circle.

Lava Beds National Monument

Date: Monday June 24

This count takes place entirely within the confines of Lava Beds National Monument, with sage-steppe, juniper woodlands, native bunch-grass, and ponderosa pine forest ecologies. In 2018, 59 species and 5,988 individuals were recorded.

Lassen Volcanic National Park

Date: Saturday July 20 8 am-6 pm

The 2018 count recorded 82 species and 3,256 individuals. The count spans many of the trails and roads in the park and some southern transects just outside the park boundary. This count is an excellent opportunity to see Northern California montane species.

Oregon

North American Butterfly Association (NABA) Eugene-Springfield Chapter

The field trip and meeting schedule for the Eugene-Springfield Chapter including the results from some of their past outings can be found on their website at <http://www.naba.org/ chapters/nabaes/>. The following butterfly counts are scheduled: Saturday, July 6 – Eugene Fourth of July Count Saturday, July 20 – Cascades count (Browder Ridge)

The following field trips are also currently scheduled: Saturday, June 8 – West Eugene Wetlands late July/early August (TBA) – Bohemia Mountain/Fairview Peak (southeast of Cottage Grove)

Changes or updates will be posted on the Chapter's website.

Other Oregon Butterfly Counts

The following non-NABA butterfly counts led by Sue Anderson are also scheduled:

Saturday, June 29 – Ochocos Friday, July 12 – Metolius

Event details as well as any changes or updates will be posted on the website of the Eugene-Springfield Chapter.at <http://www.naba.org/chapters/nabaes/>.

Washington

Washington Butterfly Association (WBA)

Information on WBA activities can be found on their website, <http://wabutterflyassoc.org/>.

The annual study weekend will be in Colville on June 28–30.

A number of field trips have been scheduled:

Saturday April 6 – Schnebley Coulee, Vantage

Saturday April 13 – Hog Lake and Folsom Farm, southwest of Spokane

Saturday April 27 (tentative) – Yakima Training Center

Saturday May 11 – Rutter Canyon, Little Spokane Natural Area

Saturday May 18 – Spiva Butte Preserve

Friday May 24 – Reecer Canyon near Ellensburg

Saturday May 25 – Douglas Canyon, Douglas County

Saturday July 13 – Salmon La Sac area

- Tuesday July 23 Stevens Creek and Stevens Lakes, Shoshone County, Idaho
- Saturday July 27 Bethel Ridge, Yakima County
- Friday August 2 Mt. Townsend, Olympic National Forest (Rain will cancel)
- Saturday August 3 Deer Park and Blue Mountain, Olympic National Park (no nets)

For the latest details, including participation limits, and registration information, please visit <https://

wabutterflyassoc.org/field-trips/356-2/>.

Eugene–Springfield Chapter of the North American Butterfly Association Meeting

The meeting will take place Monday, April 8 at the Eugene Garden Club, 1645 High St., Eugene. Doors open at 7:00 pm; the presentation begins at 7:30 pm. There is no charge.

Jonathan Pelham, lepidopterist from the University of Washington Burke Museum, will speak on "Dispersal – Isolation – Differentiation – Refugia...and more: explaining Northwest (especially Oregon) butterfly biodiversity." The focus is on butterflies' response to glacial advance and retreat as well as how corridors and barriers affect their dispersal.

For the latest information, please visit their website at <https://www.naba.org/chapters/nabaes/>.

Rare, Threatened, and Endangered Species of Oregon Being Updated

The Oregon Biodiversity Information Center (ORBIC, formerly Oregon Natural Heritage Information Center) is preparing to update its publication *Rare, Threatened, and Endangered Species of Oregon* (<https://inr. oregonstate.edu/orbic/rare-species/ rare-species-oregon-publications>) for 2019. Among other things, the rankings in this document are used by the United States Forest Service and the Bureau of Land Management to help develop their sensitive and strategic species lists, and by ORBIC to prioritize effort. The revised list, showing proposed changes, is ready for review before it is finalized.

Eleanor Gaines at ORBIC has the responsibility to rank the status of taxa in Oregon. She would welcome observation/ occurrence data for any of the taxa. While she can accept input at any time, she would like to get comments by late-April to allow time to make adjustments prior to publication.

If you would like to be involved, please contact Eleanor at <egaines@pdx.edu> and request a copy of the revised, but not finalized, material. She would greatly appreciate help with this effort!

Note: This request is for the invertebrate list and includes the taxa Oligochaeta, Turbellaria, Arachnida, Bivalvia, Branchiopoda, Gastropoda, Malacostraca as well as Insecta.

 – edited and copied (in part) from an email message Ron Lyons received March 26, 2019 from Eleanor Gaines

41st Northwest Lepidopterists' Workshop

The 2019 Northwest Lepidopterists' Workshop will be held at Oregon State University in Corvallis on the weekend of October 19–20, 2019. The program will appear in the Fall Bulletin.

The groups of emphasis this year will be:

- ► Butterflies: *Euphydryas* (checkerspots), *Oeneis* (arctics) and *Erebia* (alpines)
- ► Moths: Geometridae

Training for the Bumble Bee Atlas Project

Training events are currently scheduled for:
Idaho Falls, Idaho on April 27, 2019
Burns, Oregon on May 11, 2019 and
Spokane, Washington on May 18, 2019.
For more information, please visit https://www.pnwbumblebeeatlas.org/events.html.

Xerces Society Information

Please check their website, <http://www. xerces.org/event/>, for events being held locally.

Check out their blog (<https://xerces.org/ blog/>) and links to various videos (<https:// xerces.org/videos/>) for other materials of interest. Executive Director, Scott Black, discusses issues surrounding Oregon's native bees on a video from Oregon Public Broadcasting's Oregon Field Guide series.

If you want to help in a science project, please visit the citizen science page <http://www.xerces.org/ citizen-science/>. Note: there is a link to the *Vanessa* Migration Project at the bottom of the page.

Nature Photographers of the Pacific Northwest

The spring meeting will be Saturday, April 6, 2019 at Oregon State University in Milam Hall (Corvallis, OR). The doors will open at 8:30 am, and the program will begin at 10 am. The invited speaker is Brenda Tharp. Visit <http:// www.nppnw.org/> for complete details.