

Volume 2015 Number 1  
Spring 2015

# *Bulletin* of the Oregon Entomological Society

## ***Capnia kersti*: The Search Continues** Cary Kerst

I began a study of the aquatic insects at Willow Creek in Lane County, Oregon in 1995 and continued through 1996. Willow Creek is a summer-dry stream at the south edge of the city of Eugene which flows from November into June during normal rainfall years. These small summer-dry streams have always been a personal interest and are an endangered habitat type. Being summer-dry, these streams don't get the protection or interest that permanent waters receive. In addition, during the summer season when many projects such as building and road construction are in progress, these streams are dry and thought is not given to minimizing impacts to them.

During this study, I found an undescribed stonefly in the family Capniidae. This species, *Capnia kersti*, was described by Dr. Riley Nelson of Brigham Young University in 2004 (Nelson 2004). Nelson found it to be of special interest as a species in a subgroup of the *Capnia californica* complex that was found far north of all of the other species in the subgroup. Nelson proposed that *C. kersti* is one of the common ancestors of the subgroup. You can see from the photo that it looks—well—like every other *Capnia* species!

Some species in the *Capnia californica* group have been collected from summer-dry streams (Nelson 2004), and *C. kersti* is associated with a summer-dry stream. Adults emerge from February until early April. The eggs lie in the dry streambed until the stream is wetted in late fall. The larvae of the Capniidae are shredders feeding on allochthonous material.\*

I have been interested in finding additional sites where *C. kersti* occurs and, while I collect widely in Oregon, have thus far not found any other sites. The Xerces Society and the Bureau of Land Management (BLM) are interested in any additional sites where it occurs. The Pacific Northwest Regional Office of the U.S. Forest Service and Oregon/Washington State Office of the Bureau of Land Management have an interagency program for the

conservation and management of rare species. *C. kersti* is listed by the Federal Interagency Special Status/Sensitive Species Program (ISSSSP). BLM has provided me with maps of all streams with the appropriate parameters in the Siuslaw District. I have begun to



*Capnia kersti* at Willow Creek on February 21, 2015. Photo by Cary Kerst.

\* For a definition and discussion see <http://all-geo.org/highlyallochthonous/2011/06/when-a-tree-falls-in-a-stream-theres-always-something-around-to-make-use-of-it/>

sample some of these streams during the emergence period to see if I can find additional sites. Thus far, I have not found any when adults are present at Willow Creek.

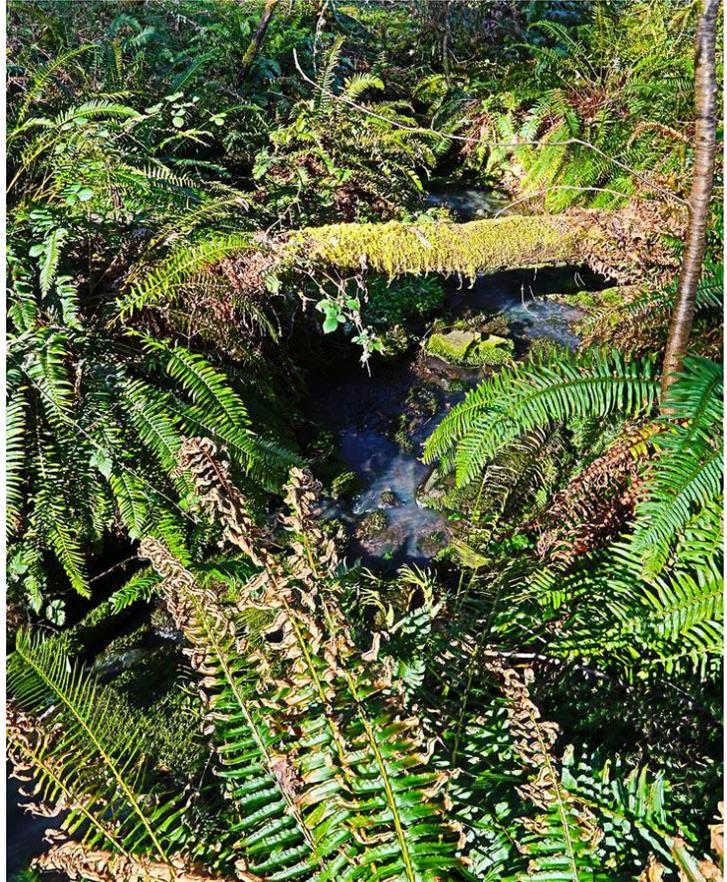
Martin Dieterich completed a study of the insect communities of summer-dry streams in and around the McDonald Dunn State Forest in 1992 for a PhD program at Oregon State University; no undescribed species of *Capnia* were found in that study (Dieterich and Anderson 2000). N. H. Anderson has been monitoring the species composition of summer-dry streams on his oak savanna property north of Corvallis for nearly 20 years. While accumulating an impressive list of species in his study including some new species, no *Capnia* species have been encountered (personal communication).

Thus, it is beginning to appear that *C. kersti* is indeed a rare species. The search continues.

### References

Dieterich, M., and N.H. Anderson. 2000. The invertebrate fauna of summer-dry streams in western Oregon. *Archive fur Hydrobiologie* 147:273–295.

Nelson, C.R. 2004. Systematics of the *Capnia californica* Species Group, including a morphological phylogeny, zoogeography, and description of *Capnia kersti*, new species (Plecoptera: Capniidae). *Annals of the Entomological Society of America* 2004:97–104.



Willow Creek February 21, 2015. Photo by Cary Kerst.

## Ouch! That Hurts.... Cary Kerst

I was surprised at the white spots on the Red-winged Blackbird I photographed at Arizona Beach State Park in Curry County, Oregon on January 30, 2015. Then, looking at the photo, I saw that they weren't spots but ticks attached around the eye. I've

never seen ticks around the eye of a bird like this but I found a number of similar photos on the internet so apparently they are not uncommon. Josh Vlach said he couldn't identify the species but the genus is probably *Ixodes* (one of the hard ticks).



Red-winged Blackbird at Arizona Beach State Park January 30, 2015. The close-up on the right has been cropped from the full frame image on the left. You can make out 7 ticks, 4 of which are very engorged. There is a bare spot above the eye which may have been the location of another tick. Photo by Cary Kerst.

## Wanted: Adults or Larvae of the Blister Beetle *Meloe franciscanus* (Family Meloidae) *Leslie Saul-Gershenz*

I am conducting research on the host range and geographic range of this nest parasite. Please contact me, Leslie Saul-Gershenz at <[lsaulgershenz@ucdavis.edu](mailto:lsaulgershenz@ucdavis.edu)>. Collect a voucher specimen if you see a sighting or possible host bee association. Thanks!

Editor's Note: For more information on this beetle in Oregon see: Pinto, J.D., and R.L Westcott. 2011. *Meloe franciscanus* Van Dyke, 1928, from the central coast of Oregon: A significant range extension (Coleoptera: Meloidae). The Pan-Pacific Entomologist 87(3):204–206. (Download the PDF from <[http://www.zin.ru/animalia/coleoptera/pdf/meloe\\_franciscanus\\_2011.pdf](http://www.zin.ru/animalia/coleoptera/pdf/meloe_franciscanus_2011.pdf)>.

There is also a short note on this paper in the Spring 2013 issue of the Bulletin (with color pictures).

The short article which follows on page 4 deals with *Habropoda miserabilis*, a potential bee host for this beetle. Kim McFarland discusses some of Saul-Gershenz's research on *Meloe* beetles about 17 minutes into the video presentation referenced in this article.

Right: *Meloe franciscanus* triungulin (larval) aggregations on the Oregon coast.

Note the low height positions of the aggregations on the grass.

Bottom: Adult female *Meloe franciscanus* in the Mojave Desert.

Photos by Leslie Saul-Gershenz.





Close-ups of the *Meloe franciscanus* larval aggregation. Aggregations can last up to 2 weeks unless contacted by a host bee. Photos by Leslie Saul-Gershenz.

## Early Activity in the Oregon Dunes National Recreation Area *Ron Lyons*

On March 12 this year, I was hiking in the Oregon Dunes National Recreation Area in the dunes just west of Bluebill Lake. This area is just west of the Horsfall Campground on the north side of North Bend in Coos County.

At one point, I came across a somewhat protected depression where a large number of bees were swarming about (you could hear the buzzing). They were flying too fast and too close to the ground to get any reasonable pictures. However, at one point I noticed a number of bees on the ground, together, in a churning mass. Eventually, the mass broke up revealing a female being tightly held by a male (males have white faces). The female resisted vigorously and the pair was harassed for much of the time I watched. From the time I started watching to the time the female flew away amounted to about 2.3 minutes. One tussle I saw on March 18 lasted over 7 minutes (I didn't watch it all). Males were still swarming and finding mates there on March 25; I found a dead female in the area—perhaps she doesn't always survive all this attention. The bee turned out to be *Habropoda miserabilis* (Hymenoptera: Anthophoridae), a coastal dune bee.

This bee is discussed in a short

article by Terry Morse at <http://home.teleport.com/~tmorse/Articles/beewatch.html>.

This bee is also the subject of research by Kim McFarland, a graduate student at Humboldt State University, who spoke about her research at a biodiversity conference in 2013. The interesting video of her presentation can be found at <http://www2.humboldt.edu/biodiversity/archive/videos/2013/kim-mcfarland/>.

This bee is a potential host for the blister beetle *Meloe strigosus*, which is known to occur in this area.



*Habropoda miserabilis* mating activity. The lone female involved is hidden in the mating ball on the left side of the picture. Photo by Ron Lyons.

## Upcoming Events and Classes in 2015



### Cascade Siskiyou National Monument 2015 BioBlitz Saturday, June 6

Mark Saturday June 6 on your calendar for an opportunity to join and interact with butterfly experts who will be leading quick surveys to observe and catalog butterflies in the Cascade Siskiyou National Monument, home to one of the most diverse communities of butterflies in North America.

The Friends of the Cascade Siskiyou National Monument invite you to register for this event by visiting <http://www.cascadesiskiyou.org>. Thank you.

### Butterfly Count Dates for Northern California

Lava Beds National Monument – Wednesday, June 24  
Warner Mountains (centered on Fort Bidwell) – Saturday, June 27  
Lassen Volcanic National Park – Saturday, July 18

If you are interested in participating in any of these counts, please contact Joe Smith [foxglove1985@yahoo.com](mailto:foxglove1985@yahoo.com) for more information. Thank you.

### Butterfly Count Dates for Oregon

Sue Anderson has an Ochocos count on June 27 and a Metolius count on July 10. The NABA Eugene-Springfield Chapter has a Eugene count on July 5 and a Browder Ridge/Iron Mountain count on July 25. Sign up to participate for any of these counts by email at [NABA-ES-trips@gmail.com](mailto:NABA-ES-trips@gmail.com). Thanks.

### 37th Northwest Lepidopterists' Workshop

The Northwest Lepidopterists' Workshop will be held at Oregon State University in Corvallis on the weekend of October 17–18.

The groups of emphasis will be:

- ▶ Butterflies: *Callophrys sensu lato* (Green Hairstreaks, Elfins, Cedar and Mistletoe Hairstreaks), *Limenitis* (Admirals)
- ▶ Moths: *Catocala*, Saturniidae, overview of micromoths

### Siskiyou and Malheur Insect Classes

The Siskiyou Field Institute is offering the following insect classes:

- Soil and Leaf Litter Insects – April 25
- Native Bees of the Siskiyou – May 15–17
- Butterflies of the Siskiyou Region – June 20–21
- Dragonflies of Siskiyou County – July 18–19.

For more information on the organization or to download their course catalog, please visit <http://www.thesfi.org>.

The Malheur Field Station is offering Butterflies of Malheur & Beyond!... on July 3–5 and Blooms, Butterflies and Birds of Malheur and Great Basin Country on June 24–30 (in connection with Elderhostel Inc.). For information on their programs and opportunities, please visit <http://www.malheurfieldstation.com/>.

### Just Published: The Brown Recluse Spider

The Brown Recluse Spider written by arachnologist Rick Vetter is now available. While the target audience is the general public, the book contains enough scientific information that it should be a useful and citable resource for arachnologists and entomologists. It should serve as a valuable reference to easily pull off the shelf to educate folks who come in with dead, non-toxic spiders. It should also be a useful resource for members of the medical community.

The book has 50 images (some with two pictures to an image), almost all in color (the few graphs are in gray and black) including a series of photos of mating behavior and a sequence of a Brown Recluse molting.

Over the years, Vetter has spent a lot of time and effort educating the general public and the the medical community about this particular spider. As well as chapters on identification and misidentification he has devoted chapters to medical aspects including medical misdiagnoses. It is important to recognize what is and is not a Brown Recluse bite, so that the proper diagnosis is made and the correct treatment initiated.

The list price for the paperback edition is \$24.95. For more information please visit the Cornell University Press website at <http://www.cornellpress.cornell.edu/book/?G0I=80140100492210>.

This write-up was adapted from an email received from the author from whom I took a number of enjoyable spider classes at UC Riverside a number of years ago. – Ron Lyons

## Wanted: Observation of Fireflies with Luminous Adults from Oregon or Washington (Coleoptera: Lampyridae) *Ron Lyons*

In the Pacific Northwest, 6 species of fireflies with luminous adults have been reported. Cannings et al. (2010) documented 2 eastern species, *Photinus obscurellus* and *Photuris pennsylvanica*, in British Columbia. Fender (1961) listed *Photinus pyralis* from southern Idaho, but Lloyd (1997) regarded this as unreliable. Green (1959) listed an Oregon record for *Microphotus angustus* from Klamath County. Although he indicated this record “may be dubious,” it is not unreasonable. (There is a nice image of this species at <http://bugguide.net/node/view/660283/bgimage>.) Green (1957) reported *Pyractomena dispersa* from Bliss Idaho (recent work reported by Pacheco et al. [2014] suggests this may be an undescribed species). Fender (1961) added eastern Washington to its Pacific Northwest distribution. (There are images of this species in Pacheco et al. [2014] and a nice image at [http://entomology.museums.ualberta.ca/searching\\_species\\_details.php?s=5430](http://entomology.museums.ualberta.ca/searching_species_details.php?s=5430).) The larviform adult females of *Pterotus obscuripennis* are luminous; the males are not luminous. Four species of *Phausis* have been found in Oregon but I haven't come across any information on the females, presumably larviform, so I don't know whether or not they are luminous.

The larvae of some species (some in other families) are also luminous.

I would be glad to receive reports about any of the fireflies in Oregon or Washington but, at the moment, I am particularly interested in reports of species with luminous adults. Please email me at [pondhawk@uci.net](mailto:pondhawk@uci.net). Thank you.

## Something for Everyone *Ron Lyons*

There are many areas in entomology and related fields where there is a lack of information (in Oregon and elsewhere)—basic stuff, like what is around us and when, life history information—areas where anyone with an observant eye and some knowledge and interest can make a contribution. The popular term now is “citizen scientist” but amateur entomologists with various skill levels have been around since people first looked at bugs and a lot of what we know comes from their efforts. After all, there are a lot of different bugs and not a lot of professional entomologists. The field is wide open if some bug or aspect of some bug tweaks your interest.

In every issue of the Bulletin (including this one), researchers have issued explicit requests for information or indicated that more information would be valuable on some specific species. The fact that these requests have not been reiterated in subsequent issues does not mean that the projects have been completed or the

## References

- Cannings, R.A., M.A. Branham, and R.H. McVickar. 2010. The fireflies (Coleoptera: Lampyridae) of British Columbia, with special emphasis on the light-flashing species and their distribution, status and biology. *Journal of the Entomological Society of British Columbia* 107: 33–41. (Download PDF from <http://journal.entsocbc.ca/index.php/journal/article/viewFile/10/9>.)
- Fender, K.M. 1961. Family Lampyridae. Pp 35–43. In Hatch, M.H. *The Beetles of the Pacific Northwest. Part III.* University of Washington, *Publications in Biology* 16(3): 1–503.
- Green, J.W. 1957. Revision of the Nearctic Species of *Pyractomena* (Coleoptera: Lampyridae). *Wasman Journal of Biology* 15(2): 237–284. (Download PDF from <http://digitalcollections.usfca.edu/cdm/compoundobject/collection/pl5129coll1111/id/263/rec/21>.)
- Green, J.W. 1959. Revision of the species of *Microphotus* with an emendation of the Lampyrini (Lampyridae). *The Coleopterists' Bulletin* 13(?): 80–96.
- Lloyd, J.E. (alias fd = firefly doc). 1997. Letters from Fireflyers (answer to a query on pg 44). *Firefly Companion and Letter* 1(3): 33–52. (Download PDF from <http://entnem.dept.ufl.edu/lloyd/firefly/>.)
- Pacheco, Y., G.J. Martin, M.A. Branham, M.F. Whiting, S.M. Bybee. 2014. *Pyractomena*: A Phylogenetic comparison of Western and Eastern Populations. *International Firefly Symposium in Gainesville Florida August 11-15, 2014.* Speaker Presentation August 12. (Download PDF from <http://www.conference.ifas.ufl.edu/firefly/>.)

interests of the various investigators satiated. Most if not all of these requests are open ended and the projects involved or interests expressed are ongoing.

So, whether you stay at home, venture out casually to see what you can find, or go on “official” field trips, there are websites, research projects and events that would welcome your participation and/or contribution. I invite you to look back at the previous issues for an insect or a group of insects or other arthropods that you find interesting and see if you can't help expand our knowledge of Pacific Northwest bugs.

I'm sure some of you have your own projects that maybe could use a few more interested eyes, after all Oregon is a big place, and even with one small project it is hard to be everywhere at the critical times. Feel free to submit your information requests.