

## **Butterflies in the High Desert**

*by Ralph Berry, Newsletter Writer*



Western tiger swallowtail

The diversity of butterflies and moths in the High Desert of Central Oregon depends on the availability of suitable host plants, habitats, and favorable climate conditions. Butterflies often show strong associations with host plants and some only feed on one plant or on a few closely related plants.

Insects are the most abundant animals on earth and butterflies and moths make up about 18 percent of the insect species that have been identified. Worldwide, there are about 250,000 species. Of this total, there are 15,000 species in North America and about 2,300 species in the Pacific Northwest. About 170 species occur in Oregon



Pale swallowtail

and Washington. A good reference to the butterflies of the Pacific Northwest is *Butterflies of the Pacific Northwest* by William Neill, published by Mountain Press Publishing Company in 2007.

Several species of butterflies are common in Central Oregon. The Western tiger swallowtail and the mountain swallowtail are the most common swallowtails you will see in your yard. These butterflies are attracted to flowering plants for nectar. Caterpillars feed on willow and cottonwood. There is one brood each year with adults being most noticeable in late May, June, and July. The Oregon swallowtail is a closely related species that occurs east of the Cascade Mountains. In 1979, the Oregon Legislature adopted the Oregon swallowtail as Oregon's official insect. This butterfly occurs in the lower sagebrush canyons of the Columbia River and its tributaries. Its range extends beyond Oregon into northern California, Idaho, Washington, and southern British Columbia. Adults take nectar primarily from blossoms of various native thistles. Adult females lay their eggs on tarragon sage, which is the only plant that larvae feed on. There are two broods each year, the first from the end of April to June and the second from July to the end of September.



Oregon swallowtail  
Photo by Oregon State University

The best known butterfly in the United States is the monarch butterfly, which occurs sporadically east of the Cascade Mountains. This species is best known for its migration from South America northward through the Central regions of the United States into Canada during the summer and its return flight in the fall to overwintering sites in South America. In the Pacific Northwest,

migration occurs in western Oregon and Washington from Mexico and Southern California northward into British Columbia. The Cascade Mountains are thought to hinder migration into Central Oregon. Milkweed, which is the host for the development of the Monarchbutterfly, has a limited range east of the Cascade Mountains. There are several agencies attempting to increase the incidence of milkweed east of the Cascade Mountains to encourage a migratory population of monarch butterflies in our area, e.g., The Xerces Society, Deschutes Land Trust, and Oregon Natural Desert Association.



Milkweed plants



Monarch butterfly  
Photo by Oregon State University

## Butterflies - continued



California tortoiseshell butterfly  
Photo by Calibas



Painted lady butterfly

Other common species that you will see in Central Oregon include the California tortoiseshell butterfly, which migrates in large numbers to the High Desert from the southwestern states in the early summer. This butterfly feeds on snowbrush or tobacco brush flowers and caterpillars feed on the leaves. The painted lady butterfly also migrates to the High Desert from southwestern states. Adults feed on a wide variety of flowering plants and caterpillars feed on thistles and lupine. Several species of fritillary butterflies such as the silver-bordered fritillary occur in the High Desert. Angewings and checkerspots are commonly seen in gardens feeding on native plants such as rabbitbrush in late summer. You will see a variety of butterflies including whites, sulfurs, coppers, and blues when you are hiking in the Cascades, particularly in the meadows. See *Butterflies of the Pacific Northwest* for detailed descriptions of these and other butterflies.



Angelwing butterfly



Butterfly garden

Attracting butterflies to your garden requires that you provide a habitat that allows butterflies to survive. Adults feed on nectar from brightly colored and fragrant flowers. Caterpillars eat leaves of garden plants to complete their development to the pupa or chrysalis stage. Providing good nectar plants is critical to designing a successful butterfly garden. In addition to providing nectar producing flowers, a suitable habitat includes water, shelter from wind and rain, and open sunny areas where butterflies can feed and bask in the warm sunshine.

So the next time you see a butterfly in your garden or on a walk, think about what journey the adult is on as it searches for nectar and a suitable plant to lay its eggs on so the caterpillars will survive. Without the close association between butterflies and plants, they cannot survive.



Pandora moth  
Photo by Terry Spivey, USDA Forest Service

**News Flash!** Pandora moths are back. This moth occurs in the High Desert about every 10-12 years. In the 1990's, moths were so abundant that roads became slick with dead moths that had been hit by cars. Adults are attracted to lights at night and become a nuisance during outside summer activities. Caterpillars eat old needles of Ponderosa and lodgepole pine trees and do little permanent damage. The Pandora moth has a 2-year life cycle. Eggs are laid in the spring and caterpillars feed on the needles. Caterpillars spend the first winter in trees and resume feeding the following spring. They drop to the soil in the fall and pupate to survive the winter. Adults emerge the following year in June and July. The number of adults has been steadily increasing the past few years so the cycle could just be beginning.

Photos by Ralph Berry or as labeled

**Save the Date for the Annual Volunteer Recognition event!**  
Volunteers will be recognized for hours served and valuable contributions to the Museum. Nominations will be solicited in August. Stay tuned...

The celebration will take place on September 12 at 5:30—7:30 PM.



## Central Oregon Wildflower Show

by Siobhan Sullivan, Newsletter Editor

Colorful examples of native plants drew crowds to the 29th annual *Central Oregon Wildflower Show* at Sunriver Nature Center on July 1-2. Participants could visit a room packed full with cuttings of plants, each of which were clearly labeled. Visitors could go on short staff-led wildflower hikes near the Nature Center to see some of the featured plants growing in the wild. Volunteers working at the event were ready to answer questions visitors might have.

Teams of volunteers headed out on the day before the show to collect wildflowers and other plants. They collected plant cuttings in the Cascade Mountains and near Metolious, Odell, and Crescent Lakes. They also collected specimens near Bend and eastwards into the Ochoco Mountains. Nearly 300 specimens were collected and identified for the wildflower show, the only event of this type in Central Oregon.

If you've ever wondered what a particular plant was, this was a good place to find out. "Is that what balsamroot looks like?" I heard one visitor say. She was happy to put a "face" with that name. Seeing labeled plant cuttings of certain plants that are hard to identify, such as grasses, helped visitors figure out what they may have seen in the field.



There were cuttings from grasses, wildflowers, shrubs, and trees at this show. Cuttings of the plants were neatly arranged in water-filled vases around the room. Many were in full bloom. Lavender-colored Mariposa lilies shared the room with scarlet red paintbrush, yellow Oregon sunshine, blue and purple showy penstemon, and delicate white queen's-cup. It was interesting to see so many plants in one place and think about which types you might

want to put in your own yard.

The *Wildflower Show* had a limited supply of native plants for sale that were provided by a local nursery. Planting your yard with low-water usage plants can not only help you spend less on your water bill, it can also ensure your plants grow well and attract butterflies, bees, and other wildlife.

One of the most interesting displays at this show consisted of weeds that grow in the area. Yes, the Dalmatian toadflax plant is pretty with its snapdragon-like yellow flowers and interesting leaf structure. However, it can easily get out of control and push out native species. Knowing what some of these noxious weeds look like can make it easier for you to know what to pull in your yard. Here's a link to a brochure that has pictures of some of the invasive weeds that grow locally. [Noxious Weeds: Your Responsibility.](#)



## Wildflower Show - continued



Booths representing several local groups were set up outside at this show. Local author, LeeAnn Kriegh, featured in the July 2017 *High DesertVoices* newsletter, was among them. Participants had many questions and the representatives from the different groups were very helpful in answering them.

There were several wildflower-related lectures at this show. Damian Fagan, of the High DesertMuseum, gave a lecture about locations where you might find various wildflower species. Other lectures were about getting to know some of the state's flora, native plant landscaping, and how to provide habitat for monarch butterflies.

If you are curious to learn more about native plant species, consider going to this show next year. It is small, but it's jam-packed with helpful information. Proceeds from the native plant sale and admission benefit the non-profit Sunriver Nature Center.

Photos by Abbott Schindler, Siobhan Sullivan, and John Williams,



## Whole Foods Brewfest Fund Raiser for the Museum



Photos by Todd Cary

## Kudos Korner

by Siobhan Sullivan, Newsletter Editor

Staff and volunteers were thanked for their work in July. Volunteers were thanked for their work over the summer at the Museum. Visitors have been very happy! **Ralph Berry** was thanked for pointing out issues with the Museum's website. **Heather Duchow** was recognized for her work on some recent photography used in the newsletter. Her pictures of the Museum's 35th anniversary event (especially of the kids and senior citizens) and of the *Vulture Venture* event were great! **Erica Pelley** was recognized for her work on the garden at the Miller Ranch. **Kelly Hazen** and **Harry Aston** have been getting rave reviews from visitors who participated in their Nature Walks. The **Collections Team** was thanked for their work on cleaning the baby in the cradleboard in the *By Hand Through Memories* exhibit. **Jean Bennett** worked hard on cleaning up a sticky mess found on the baby's face. The new speakers used during the outdoor raptor show are "fantastic." **Patrick Johnson** was thanked for his work on installing the cable underground for the speakers. The wood produced at the Kazinka Sawmill has been used for several projects. Thanks to the mill for providing wood for a ramp for the raven, roof supports for the weathering yard, and for a corral for the tortoise. **Dustin Cockerham** and **Laura Ferguson** were thanked for helping out in Collections until a new curator is hired. **Curt Belshaw** and **Thomas King** were thanked for fixing the well at the Miller Ranch. Kudos to all of you!

## High Desert Museum Area Updates from August 2017

by Siobhan Sullivan, Newsletter Editor

**Silver Sage Trading Center** – *The Nature of Bend* book by local author, LeeAnn Kriegh, is available in the store. This field guide covers some of the most common plants and animals in Central Oregon. If you are expecting visitors for the eclipse, this would be a great resource for them.

**Living History** - There have been record crowds visiting the Miller Ranch this year. They have been more engaged in the activities at the ranch. Visitors have enjoyed being able to pet the free-range chickens and participate in games. The new woodshop building will not be constructed until the fall. When the woodshop is completed, it will include more opportunities for patrons to be involved in interactive activities. When Living History Curator, Linda Evans, has been questioned about women doing some of the ranch jobs in the early 1900's, she replies, "If a man can't make his job, a woman fills his boots." The garden at the Miller Ranch is doing "phenomenally well." The café makes use of some of the onions grown there and the rhubarb is being used by Programs.

**By Hand Through Memory** - Challenges related to interpreting the history of native peoples from different perspectives were discussed. Interpretations by volunteers may have to be tailored to individual visitors.

**Gallery Attendants** - Their group will be getting together next month to discuss how things are going with the team.

**Naturalists** – The new display table is currently being constructed. The metal and wood cart will be solidly made and will be on casters so it can be moved when necessary. Team Lead, Thad Grudzien, said of the table, "it's going to be fantastic!" Bill Tweed, of Sequoia National Park, is visiting in the area. The team plan on inviting him to a BBQ while he is here.

**Ranger Station** - They have "a good strong team" and they are enjoying the visitors who stop at the "on the main road, off the beaten path" ranger station. Attendance has been higher than last year.

**Collections** – They have been busy cleaning and preserving artifacts behind the scenes.

Orange & Black Eclipse Festival  
at Culver High School on August 20-21



### High DesertVoices

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High Desert  
Museum, Inc.  
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2017



2017

August	September - Save the Date!
<p>11 <b>Museum Field Trip: Evening Bat Walk.</b> 7:30 - 9:00 pm. Members \$5, Non-members \$10. Registration and pre-payment required.</p>	<p>9 <b>Thorn Hollow String Band.</b> 11:00 am - 2:00 pm.</p>
<p>12 <b>Thorn Hollow String Band.</b> 11:00 am - 2:00 pm.</p>	<p>12 <b>Volunteer Recognition Event.</b> 5:30—7:30 pm.</p>
<p>12 <b>Museum Workshop: Fish Printing Workshop: Kids ages 6-12.</b> 11:00 am - 12:00 pm. Members \$25, Non-members \$30. Registration and pre-payment required.</p>	<p>19 <b>VAC meeting.</b> 2:00 pm in the Board Room. All volunteers are welcome!</p>
<p>12 <b>Museum Workshop: Fish Printing Workshop: Teens and adults.</b> 1:00 - 4:00 pm. Members \$60, Non-members \$65. Registration and pre-payment required.</p>	
<p>15 <b>VAC meeting.</b> 2:00 pm in the Board Room. All volunteers are welcome!</p>	
<p>16 <b>Off-site Event: Why we Need Darkness.</b> 7:00 pm (doors open at 6:30 pm). Bend Senior High School Auditorium. 230 NE 6th St., Bend, OR 97701. Ticket info at <a href="http://highdesertmuseum.org">highdesertmuseum.org</a>.</p>	
<p>20-21 <b>Off-site Event: Orange and Black Eclipse Festival</b> at Culver High School. Culver High School, 710 5th Ave., Culver, OR 97734. For more information, and to reserve a campsite, go to <a href="http://OSUcascades.edu/eclipse">OSUcascades.edu/eclipse</a>.</p>	<p><b>To RSVP:</b> <a href="http://www.highdesertmuseum.org/rsvp">www.highdesertmuseum.org/rsvp</a> or 541-382-4754</p>
<p>25 <b>Museum Event: High Desert Rendezvous.</b> 5:00 - 9:30 pm. To purchase tickets and tables go to <a href="http://highdesertmuseum.org/HDR">highdesertmuseum.org/HDR</a>.</p>	<p><b>To pre-register:</b> <a href="http://www.highdesertmuseum.org/program">www.highdesertmuseum.org/program</a></p>