

THROUGH THE LEPIDOPTERAN LENS

Seeking a new host plant: Chalcedona checkerspot revisited

BY LINDA KAPPEN



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The depths of this story are quite scientific and complicated so I will try to keep it simple for others interested, myself included.

The spring of 2022 brought a long-lasting bloom of *Pedicularis densiflora*—warrior’s plume—to southern Oregon. Many photos circulated on social media and the internet, where a comment was made that warrior’s plume was host plant to three checkerspot butterflies.

I felt that this wasn’t true locally and started to investigate by sending photos to five experts in the Pacific Northwest. I was informed there were no records of this host plant usage in the northwest until now. The source of information had come from Calflora, a native plant database for California.

The three species of *Euphydryas* checkerspot were subspecies that do not occur in our immediate area. Two were species of Edith’s checkerspot and the Anicia checkerspot, all in the genus *Euphydryas*. Early research dating from the 1970s to the present, in California locations near the San Francisco area, about 500 miles from here, had been studied, resulting in some findings that the three butterfly species used pedicularis species post diapause in locations where the regular host plant had become senesced or lessened by wildfire or logging practices. The areas studied are quite a distance from southern Oregon, showing that the use of



Clockwise from top photo: *Chalcedona* checkerspot, a chrysalis on fir tree base, and caterpillars on warrior’s plume.

this plant in Applegate is a newly recorded use as a larval host plant by a checkerspot in the northwest.

The *Chalcedona* checkerspot (*Euphydryas chalcedona*) larvae enter

diapause in early larval stages until spring, when they emerge and begin feeding on available host plants. If their host plant is not present, the choice then is to use a favorable plant nearby.

I began to check daily on the warrior’s plume at our home in Applegate. To my surprise I found caterpillars on the plant and believed them to be the *Chalcedona* checkerspot. I gathered some and reared about ten checkerspot larvae to adults using the warrior’s plume for feeding. I offered snowberry, too, which the snowberry Checkerspot uses as a host plant, but these larvae refused to use it.

The local timing and location of the butterflies led me to believe this was *Chalcedona*. The adults I reared are prepared and awaiting further

observation for entomologists at Oregon State University Arthropod Collection (OSAC) for positive identification when we meet this fall.

A final note about *Pedicularis densiflora*. It is in the plant family Orobanchaceae. It is a hemiparasite on members of the heath family of plants. If you are in some of our lower elevations and have madrone and manzanita growing in your forest, you may have warrior’s plume. It has a disjunct population throughout southern Oregon. It holds medicinal properties as well and is a beauty to observe in the spring. Please do not disturb this plant’s growth by digging it.

For more information on the *Chalcedona* checkerspot butterfly, see the fall 2020 *Applegater* or get your hands on the book *Butterflies of the Pacific Northwest*, by Robert Michael Pyle and Caitlin C. La Bar.

Update. During Earth Day weekend, 2023, the warrior’s plume at my home was finally up, and the process begins again to find post diapause caterpillars on the warrior’s plume. A second run at this is a good scientific experiment!

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All photos by Linda Kappen.



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