UNIVERSITY of WASHINGTON

College of the Environment



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## **NOTES FROM THE FIELD**

The cool, wet spring of 2022 set the stage for a productive field season and some excellent botanizing! The additional rainfall in many parts of the state meant that conditions were ripe for finding elusive rare annuals. The lower temperatures and higher moisture levels delayed bloom times for many species compared to recent years and also extended flowering, creating longer windows of opportunity to find the plants.

In late May, Regina Wandler and Sarah Shipley found common blue cup (Githopsis specularioides). This annual, just 30 cm high, had eluded all previous searchers at a site in southwestern Washington since it was first found in 2004. Regina and Sarah were so relieved to find three plants with their stems of single, dark purple flowers in full bloom. This is a perfect example of why we keep looking even after a volunteer comes back emptyhanded the first few tries. The seed bank for many of these annuals can wait for years for the right conditions.

Not only did Rare Care volunteers locate some annuals on what was set to be the third and final attempt, but they also found many potentially new populations. During the annual monitoring weekend out of Trout Lake in the Gifford Pinchot National Forest, volunteers discovered seven new populations. Paul Slichter also submitted sighting reports for 13 different

populations in that general region including a dark-red-flowered rockcress (Boechera atrorubens) from his and Ron Toonen's ongoing botanical survey of the Klickitat Wildlife Area's Simcoe Mountain acquisition. At the time of publication, volunteers have submitted 28 monitoring reports for potentially new populations.

High up in a mountain pass of Mt. Baker-Snoqualmie National Forest, Jennie Green found a potentially new population of clubmoss mountain heather (Cassiope lycopodiodes). It is only the third known population in the state! Jennie spotted these trailing plants on a rock face during her 2021 assignment. Clubmoss mountain heather is much more common in circumboreal regions such as Russia, southern islands of Alaska, and British Columbia. The Washington occurrences are quite disjunct from the rest of the species' range and are likely the last refugia for clubmoss mountain heather in the lower 48 states since the glaciers of the last ice age receded.

Adding potentially new populations to our shared knowledge of Washington State rare flora is always exciting. It gives you the sense that discovery is possible at any moment, and provides important documentation for land managers to help them make informed management decisions.



Elyssa Kerr, Connor McDermott, and Cameron McCallum. Photo: Elyssa Kerr



Dark-red-flowered rockcress (Bochera atrorubens) Photo: Paul Slichter



Tanya DeMarsh-Dodson collecting tall agoseris (Agoseris elata) seeds. Photo: Anna Carragee

#### PARTNER SPOTLIGHT: TARA CALLAWAY



Tara Calloway surveying showy stickseed habitat.

Photo: Wendy Gibble

Did you know that the U.S. Fish & Wildlife Service (USFWS) is one of the agencies responsible for administering the Endangered Species Act? Alongside NOAA Fisheries, USFWS is entrusted with conserving all federally listed fish, wildlife, and plants. USFWS is also a very important partner that Rare Care collaborates with on endangered plant species recovery. And we're excited to highlight one of the people doing much of the behind-the-scenes coordination--Tara Callaway! Tara is the Shrub Steppe Zone Supervisor, and until last month was the Washington State Recovery Coordinator.

Tara holds a Bachelor's degree in Biology from Northern Illinois University and a Master's degree in Plant Genetics from Western Washington University. In between earning her degrees, Tara worked many seasonal jobs for a non-profit and multiple federal and state agencies to gain experience for her current position. In those roles, she ranged all over the western U.S. from as far south as Joshua Tree National Park in southern California to as far north as the Alaska Peninsula/Becharof National Wildlife Refuges near King Salmon, Alaska.

Her first permanent job with the USFWS was as an Endangered Species Biologist in Palm Springs, California, focused on a large portfolio of 18 listed species including desert tortoise, Amargosa voles, and many listed plant species.

In 2018, Tara returned to Washington as a Fish and Wildlife Biologist, primarily serving as the botanical lead in central Washington for the agency's Washington Fish and Wildlife Office (WFWO). From March 2021-September 2022, Tara served as the Washington State Recovery Coordinator, and recently moved into the role of the Shrub Steppe Zone Supervisor. Rare Care has had the privilege to work in partnership with her on many projects in all of these roles since 2018.

"Something that I'm very proud of is that with Rare Care and our other partners in central Washington, we've done a great job of bringing attention to these endemic species."

As the Washington State Recovery Coordinator, Tara worked very closely with partner agencies and species experts on recovery planning and implementation for all listed species across the state. Recovery planning creates a series of planning documents, such as the recovery plan, to then direct implementation actions in the future. USFWS and partners use these documents to prioritize recovery actions until they have reached the recovery goals and a species is recommended for down- or delisting from the Endangered Species Act.

Additionally, Tara helped facilitate the Recovery Implementation Program for WFWO, which funds partners to do high priority recovery actions across the state. Organizations and agencies across the state like Rare Care, Washington Department of Fish and Wildlife, Department of Natural Resources, and the Washington Natural Heritage program have been successful in submitting projects that were selected for funding. These organizations and agencies implement various recovery and conservation efforts of federally listed species in Washington State. The Recovery Implementation Program carefully allocates resources to have the most impact on species conservation. Tara says, "We try to put as much money as we can on the ground to see recovery."

Ongoing Rare Care and USFWS collaborations include recovery work on Umtanum desert buckwheat (Eriogonum codium), Wenatchee Mountains checkermallow (Sidalcea oregana var. calva), White Bluffs bladderpod (Physaria douglasii ssp. tuplashensis), Spalding's catchfly (Silene spaldingii), and showy stickseed (Hackelia venusta). For these projects, Tara says, "Rare Care hits on a vital need we have in Washington State for a program that can tackle recovery actions. You know they're on the ground, they do the outplanting, they figure out how to set up experimental designs, and figure out what's the best way to reintroduce a population."

Tara emphasizes that Rare Care's impacts don't just end with the onthe-ground recovery work, but are enhanced by all the outreach efforts Rare Care supports. Specifically, Tara says, "Something that I'm very proud of is that with Rare Care and our other partners in central Washington, we've done a great job of bringing attention to these endemic species." Our community of plant enthusiasts who act as volunteers, donors, and advocates have drawn attention to the endemic species such as Umtanum desert buckwheat and Wenatchee Mountains checkermallow, leading to robust recovery plans and the best chance these species have to persist in perpetuity.

### CHAMBER'S PAINTBRUSH

If you have the fortune to be botanizing in southwest Washington, you might have the chance to encounter one of Washington's rare paintbrush species. At first glance you might think this is the common, harsh paintbrush (Castilleja hispida) since both species have the same vibrant, orange-colored bracts and both are found at low to mid elevations. But it is in fact Chamber's paintbrush (Castilleja chambersii), and when you look more closely at the leaves, you will see what is so unusual about this species. The leaves are alternate. sparsely hairy or glabrous, and deeply lobed, with the 3-7 (or more) lobes erect to ascending, linear to lance-shaped, and pointed at the tip.

This species is locally endemic of the Pacific Coast Range in northwestern Oregon and southwestern Washington in Pacific County on both sides of the Columbia River. Chamber's paintbrush is found at elevations from 630-950 meters in the coastal mountains. In both Washington and Oregon, Chamber's paintbrush is ranked as S1, or Critically Imperiled, and globally it is

ranked as G1- Critically Imperiled. There are only five known populations across its entire range. In Washington State we only know of one population, located on private land.

The species is named for Oregon State University botanist Kenton Chambers who collected specimens of this special paintbrush in Clatsop County, Oregon in 1973 and 1974. It wasn't until 1999 that the species was officially described by E. Mark Egger. The Washington population was not discovered until a specimen was collected in 2015 by Weyerhaeuser Company forester Kristi Tausch. This voucher extended the known range of Chamber's paintbrush 70 kilometers north.

The Washington population is made up of six sub-populations all within 1 kilometer of each other. It grows in wet crevices and ledges on basaltic cliffs within a matrix of managed Douglasfir (Pseudotsuga menziesii) and western hemlock (Tsuga heterophylla) forest. Staff from the Washington Natural Heritage Program, DNR Natural

Areas Program and Rare Care met recently with a plant ecologist and forester from Weyerhaeuser to visit the population and provide input on their conservation efforts. Rare Care also collected seeds for the Miller Seed Vault. Additional searching would augment our understanding of the rarity of this remarkable species.



Chamber's paintbrush (Castilleja chambersii)
Photo: Wendy Gibble

## **MONITORING WEEKEND**

How do you complete 21 monitoring assignments in three days? Call all your Rare Care friends in for a camping weekend! 25 Rare Care volunteers from all corners of Washington State, and even a few from Oregon joined us in early June in Klickitat County. Most of our work was on Department of Natural Resources land, but we also monitored rare plants in the Gifford Pinchot National Forest and one exceptional private property. Full summary report: bit.ly/TroutLakeWknd



VORS

Photo Top: Josh Wozniak Bottom Photo Bottom right: Anna Carraged

# THANK YOU 3.538 total volunteer hours

Rare Care is grateful for the valuable contributions of our volunteers, who gave 3,538 hours in fiscal year 2022.



Pasqueflower (Anemone patens var. multifida) Photo: Teddy Pierson

#### \$1.000 & ABOVE

Eleanor Boba and Alan Humphrey Deupree Family Foundation Christopher Mealy and Ara Jane Olufson Bobby and Lily Takatsuka Susan Wheatley Washington Native Plant Society Salal Chapter

#### \$500 то \$999

Anonymous V. Lee Ellis Dorothy P. Gibble George Thornton and Lee Miller

#### \$250 TO \$499

Suzanne Anderson, Ph.D. and Marvin Anderson Thomas and Donna Blanton Pamela Camp Community Foundation of North Central WA Earl and Tena Doan Andrew Rapin Paul Slichter Curtis Sundquist George Thornton and Lee Miller

#### \$100 то \$249

Ron Bockelman

Tom and Sally Cahill Mickie Chamness Emil Doyle and Susan Plunkett Peter Dunwiddie, Ph.D. and Elizabeth Rell Dana Ericson Shelley Evans Walter Fertig, Ph.D. and Laura Fertig Timothy Fullam, Ph.D. Wendy Gibble Janka Hobbs Catherine Hovanic and Bill Brookreson Shaun Hubbard and Harold Kawaguchi Richard Johnson, M.D. and May Reed, M.D. Virginia King Kathleen Learned Larry Loftis Frederick McDonald Michael McGoodwin, M.D., in memory of Rebecca C. McGoodwin Rae Meaney Steven and Katie Messick Deborah Naslund **lason Onties** Puget Sound Mycological Society Oueen of Spades Garden Club Ann Risvold and Lawrence Donovan Susan Saul Lyle and Jessica Stone Hally Swift and Eric Strandburg William and Molly Tomita Sue Trevathan Susan Van Leuven Mr. and Mrs. Robert Virden, in loving memory of Rachel Elizabeth Virden Hulscher Cheryl Wagner Jeffrey Walker

Stephen West, Ph.D.

Jennifer Youngman

Withey Price Landscape & Design

### \$50 то \$99

Walt and Dona Bubelis

Ieanette Burkhardt Clara Burnett Ann Freeman Marie Hitchman Stacy Kinsell Ron Klump James and Colleen Lourie, in honor of George Thornton Donald and Maureen Schmitz Nelda Siemion, in honor of Barbara Molloy-Olund Laurie Skinner Ted Thomas **Brian Thompson** Andrew Walker Mary Water John and Melissa Winters Veronica Wisniewski and Edoh Amiran

#### **UP TO \$49**

Tanya Demarsh-Dodson Mark Fessler Tom Guobis Michael Hobbs Bob and Judy Kent Helen Lau, in honor of Don Knoke Shelagh Tucker Barbara Varnum

#### **CORPORATE MATCHES**

The Boeing Company

Rare Care is grateful for support from the Miller Charitable Foundation, Center for Plant Conservation, Washington Native Plant Society, Hugh and Jane Ferguson Foundation, Seattle Garden Club, Tacoma Garden Club, private organizations and individual donors.