Featured Story

Colorado Rare Plant Symposium: The Year in Review

By Lisa Tasker

Fort Collins saw 80 botanists and members of the Rare Plant Technical Committee attend the 15th Annual Colorado Rare Plant Symposium, Friday, September 14. Each fall, this meeting of botanical minds is hosted by the Colorado Natural Heritage Program and held in conjunction with the Colorado Native Plant Society Annual Meeting. Dina Clark, collections manager at the CU Herbarium, provided herbarium specimens of northeast Colorado rare species—the emphasis of this year's symposium—and presenters encouraged participants to share their relevant observations while learning the latest efforts to conserve Colorado's rare plants.

A cross-section of passionate botanists, both professional and amateur, are attracted to this meeting each year due to a common interest in conservation of Colorado's rare plants. CNHP team leader and botanist Jill Handwerk expertly started out the day with data and photos of rare species with this year's focus on northeast Colorado. Jill later reviewed Colorado's lengthy list of critically imperiled (G1) and federally listed plants along with current conservation efforts. CNHP senior botanist Susan Panjabi presented a new working list of plants of potential conservation interest across Colorado's eastern plains. She is looking for feedback, including additions or deletions to the list. Contact her at susan.panjabi@colostate.edu if you'd like to review or comment on the list.



Attendees listen as Jill Handwerk reviewed Colorado's list of critically imperiled and federally-listed plants. © Jim Piscarowicz



Through a demonstration on SEINet, Steve Olson, botanist for the Pike and San Isabel National Forests and Cimarron and Comanche National Grasslands, revealed some challenges and subsequent suggestions for navigating SEINet data. He discussed a project during which he analyzed the distribution of plants of the entire Pike/San Isabel/Comanche Grassland using SEINet. He investigated over 200 quads and discovered data gaps and other issues such as common species not being documented. He had a list of suggestions to consider in future SEINet queries and data entries.

Repeated this year was an afternoon review of United States Forest Service and Bureau of Land Management sensitive species led by Tyler Johnson and Carol Dawson, respectively. Changes to the USFS Sensitive Species List are underway as the Regional Forester Sensitive Species List is being phased out and a Species of Conservation Concern list will now be created. The former list contained species with a downward population trend or trend of heading towards federal listing and included species that only had to be suspected of occurring on USFS land.

■ The new Species of Conservation Concern lists will be based on the new USFS Sensitive Species Concept and each forest entity will have its own list. To be a Species of Conservation Concern a plant must be native, known to occur on USFS land, be ranked as G1 or G2 by NatureServe, and have substantial concern regarding its persistence. Also considered, as written into the USFS manual, are four "indicators of substantial concern" including climate change, declining trend in population or habitat,

restricted range (disjunct or endemic), and low population on the forest unit. Tyler stated a species does not have to have all four indicators to be considered a Species of Conservation Concern and emphasized the flexibility he sees in this new process. The existing **USFS** Sensitive Species List will continue to be updated for forests not currently undergoing revision to their management plans.

Carol Dawson announced plans to update the BLM Sensitive Species list with its field offices in the coming year. The Sensitive Plant Species List is one the BLM

must be proactive about regarding conservation; and Carol reminded attendees that there are specific criteria for species making the list, noting it was last updated in 2015. She reviewed the status of the latest survey and monitoring data for the BLM Sensitive Species including accounts of negative data and opportunities for future research.

Botanists with the Denver Botanic Gardens provided a wonderful overview of on-going projects at the Gardens. Michelle DePrenger-Levin presented results of demographic monitoring for *Astragalus microcymbus*, *Eriogonum brandegeei*, and *Sclerocactus glaucus*. Overall trends appear stable for *Astragalus microcymbus* and *Sclerocactus glaucus*, but *Eriogonum brandegeei* appears to be in decline since 2011. Alexandra Seglias discussed the successes and pitfalls in seed collection of our rare plant species for genetic preservation.

Notable discoveries this year included *Anemone virginiana* var. *cylindroidea* (tall thimbleweed) found by Audrey Boag, with assistance from Irene Weber, on Jefferson County Open Space; and *Campanula aparinoides* (bedstraw bellflower) found on a Douglas County Open Space, by Elizabeth Taylor, Barb Harbach, and Cathy Fischer, all volunteer Colorado Native Plant Masters® conducting a botanical inventory of the site. Several new occurrences of Colorado's federally listed and candidate species were

also reported including: Astragalus microcymbus (skiff milkvetch) in Gunnison County, Sclerocactus glaucus (Colorado hookless cactus) near Cameo on the west slope, and Eriogonum brandegeei (Brandegee's wild buckwheat) near Salida.

Attendees also reported on numerous other observations of rare plant species within the state. The finding of new populations of rare plants every year reminds us that more treasure is yet to be discovered out there on our beautiful Colorado landscapes.



Anemone virginiana var. cylindrodea, also called tall thimbleweed.
© Audrey Boag

For more information:

All the information from this meeting as well as previous symposia is available online at the Colorado State University, Colorado Natural Heritage Program website: www.cnhp.colostate.edu.

The Rare Plant Symposium is open to anyone with an interest in the rare plants of Colorado. For more information contact Jill Handwerk at jill.handwerk@colostate.edu and check the CoNPS website (www.conps.org) for details as they become available about next year's symposium.

Lisa Tasker is a botanist for CNHP, and works primarily on Western Slope projects. She likes to boast about being a member of CoNPS since 1992. She feels beyond fortunate to be connected to both of these amazing organizations.

Editor's note: The Winter issue of Aquilegia will feature a species profile and story by Elizabeth Taylor about the rediscovery of Campanula aparinoides (bedstraw bellflower) mentioned in this summary of the Rare Plant Symposium.