

2015 CoNPS Annual Conference & Colorado Rare Plant Symposium

The 2015 CoNPS Annual Conference and Colorado Rare Plant Symposium were held from September 11-13 at the Colorado Mountaineering Center in Golden, Colorado. This year's CoNPS Conference, with a focus on native plants and pollinators was exciting and large, with 182 attendees, exhibits of organizations and products, the silent auction, and the giant book sale (over \$8,000 of books were purchased). The Rare Plant Symposium (described below), was held Friday, September 11th, and reviewed a number of plants around the state that are endangered. The symposium was followed by the Pizza and Beer Social Friday evening. We enjoyed a variety of pizzas (including gluten-free and dairy-free) from Lil Ricci's and had a chance to visit with friends while a crew led by Pat Murphy prepared for the book sale. Jessica Smith and Carol English worked at the check-in desk at the Pizza Social.

Report on the 2015 Colorado Rare Plant Symposium

by Pam Smith, Bernadette Kuhn, and Jill Handwerk



Photos from L to R, top row: Peggy Lyon, Jill Handwerk, Tim Hogan, Keith Schultz, Jessica Smith, Jen Kesler; Bottom Row: Judy King, Richard Bunn, Pat Murphy, Audience listening to talks, Dave Anderson and Mitchell McGlaughlin, Becky Hufft, Bernadette Kuhn, Pam Smith. Photos by Mo Ewing and Jan Turner

Botanists, members of the Colorado Rare Plant Technical Committee (RPTC) and other interested and interesting people were among the group of more than 80 people gathered in Golden, CO to attend the 12th Annual Colorado Rare Plant Symposium. The symposium is the event that precedes the kick-off of the Colorado Native Plant Society's (CoNPS) Annual Conference. The Rare Plant Symposium is hosted jointly by Colorado State University Colorado Natural Heritage Program (CNHP) and the Denver Botanic Gardens (DBG).

Everybody attending the symposium, whether a professional or an amateur, had common interests in Colorado rare plants and their conservation. Many of the attendees have been involved for years working to advance rare plant conservation and have new information from field observations of rare plant species, genetic studies, or information related to policy surrounding conservation issues. This forum offers the opportunity for people to come together to share these observations, see herbarium specimens, have discussions and learn about the newest information on Colorado's rarest plants conservation status, threats and new discoveries. Here are some highlights from the 2015 Symposium.

2015 Updates on Rare Plant Species:

New populations of rare plants reported in 2015 included populations of: skiff milkvetch (*Astragalus microcymbus*); Sleeping Ute milkvetch (*Astragalus tortipes*); Kremmling beardtongue (*Penstemon penlandii*); Graham's beardtongue (*Penstemon grahamii*); Troublesome phacelia (*Phacelia gina-glenneae*), North Park phacelia (*Phacelia formosula*); White River beardtongue (*Penstemon scariosus* var. *albifluvis*); Gypsum Valley cat-eye (*Oreocarya revealii*); slender spiderflower (*Peritoma (Cleome) multicaulis*); Arkansas Canyon stickleaf (*Nuttallia densa*); Arkansas Valley evening primrose (*Oenothera harringtonii*); rockcress draba (*Draba globosa*); Colorado Divide whitlow-grass (*Draba streptobrachia*); and Arizona willow (*Salix arizonica*).

Potential population losses reported for 2015 include: violet milkvetch (*Astragalus iodopetalus*); Kremmling milkvetch (*Astragalus osterhoutii*); Pikes Peak spring parsley (*Oreoxis humilis*); Rocky Mountain cinquefoil (*Potentilla ambigens*); and Dudley Bluffs bladderpod (*Physaria congesta*).

Additionally, a number of species were mentioned that did not have a good year in 2015: DeBeque phacelia (*Phacelia submutica*); dwarf milkweed (*Asclepias uncialis*); Ute Lady's tresses (*Spiranthes diluvialis*); and Colorado butterfly plant (*Oenothera coloradensis* subsp. *coloradensis*).

2015 Botanical Observations and Discoveries:

Schmoll's milkvetch (*Astragalus schmolliae*) has a new common name: Chapin Mesa milkvetch.

A new study finds that higher winter precipitation appears to be an important factor correlating to higher numbers of individuals.

There is potential to protect properties with Pagosa skyrocket (*Ipomopsis polyantha*) populations with a Colorado Natural Areas Program and Colorado Parks and Wildlife property purchase.



Asclepias uncialis Photo by Charlie Turner

A concern by many who monitor rare plants is to try to come up with assessments that do not damage the habitat or the plants while monitoring (especially those on steep slopes like Parachute penstemon (*Penstemon debilis*)).

Jeweled blazingstar (*Nuttallia sinuata*) and wavy-leaf stickleaf (*N. speciosa*) will likely be combined into a single species.

Thinleaf cottonsedge (*Eriophorum viridicarinatum*), a high altitude fen species is known from Colorado in the literature and was recently documented with a voucher specimen submitted to the University of New Mexico.

New genetics information and/or seed propagation protocols are available or studies are underway for the following species: *Phacelia formosula*, *Penstemon penlandii*, *Ipomopsis polyantha*, *Phacelia submutica*, *Botrychium lineare*, *Sclerocactus* spp., *Corispermum navicula*, and *Oreocarya revealii*.

A biocontrol agent release in Canada to control houndstongue (*Cynoglossum officinale*) has been found to impact native members of the Boraginaceae and could be heading to the United States.

Staunton State Park is a designated State Natural Area which will help conserve one of Colorado's rarest plant species, budding monkeyflower (*Mimulus gemmiparus*).

The newly completed Colorado State Wildlife Action Plan adopted in September 2015 now includes plant species for the first time.

Some of the biggest threats to rare plant conservation in 2015 were discussed. They include: global warming, flooding, oil and gas development; recreation and trail development; overgrazing (mountain goats, sheep, cattle, wild horses), alpine summit house expansion, lack of awareness and/or interest by decision makers and the public

Three presentations were given at the symposia and are described briefly below:



L to R: Judy von Ahlefeldt, Gwen Kittel, Tyler Johnson Photos by Mo Ewing

Judy von Ahlefeldt (CoNPS) discussed a Pineries Open Space BioBlitz in the Black Forest where seven species of rare and uncommon plants with nearly 4,000 individuals were mapped in a proposed post fire clearcut area. This area had been burned in 2013 and potential recovery efforts include logging in these sensitive areas. It is anticipated that these results will reduce proposed logging in this area.

Gwen Kittel (NatureServe Ecologist) presented information on *Salix arizonica* described in 1975 by Bob Dorn and known from only one occurrence in Colorado. Gwen found more plants this year, expanding the boundaries of the known population in southern Colorado. She also provided valuable information on morphological differences to tell this species apart from a similar species, *Salix boothii*.

Tyler Johnson (USFS Region 2 Botanist) explained the definitions of "USFS Sensitive Species" vs.

"Species of Conservation Concern" as they relate to the new planning rule of 2012 which changes how USFS implements the Nation Forest Management Act (NFMA). All units within the region have to update their management plans over the next 18 years to comply with the new 2012 rules.

Updates on the Rare Plant Conservation Initiative and the Rare Plant Guide

Susan Panjabi, CNHP Botanist, has been working on the newest edition of the *Rare Plant Guide*. She noted that there is new artwork and photographs available for some of our rare plant species. Many of these new images and drawings are provided by the Rocky Mountain Society of Botanical Artists, who are now



Susan Panjabi Photo by Mo Ewing

touring Colorado with their new exhibit: RARE II. Each species profile included in the Guide also has information about research activities and summary notes from the annual Rare Plant Symposium.

To see these latest additions, please visit the *Colorado Rare Plant Guide*, hosted on the Colorado Natural Heritage Program website: <http://www.cnhp.colostate.edu/rareplants/>. If you have additional photos or artwork that could be included, contact Susan at: susan.panjabi@colostate.edu.

The Rare Plant Guide is just one example of the activities encouraged by the Colorado Rare Plant Conservation Initiative (RPCI). The guiding document for this Initiative is the *Colorado Rare Plant Conservation Strategy*, also available through the CNHP website here: <http://www.cnhp.colostate.edu/teams/botany.asp#initiative>

The RPCI is currently an unfunded initiative, but the Strategy articulates the most important steps and objectives for ensuring the long term conservation of Colorado's most imperiled plant species. Several Conservation Action Plans and Best Management Plan documents are also available on the RPCI and CNHP websites. Input and comments are welcome.

About the Authors:

The authors work for the Colorado Natural Heritage Program (CNHP). Pam Smith and Bernadette Kuhn are botanists with CNHP and Jill Handwerk is the team leader and botanist.

Humorous Tidbit

There was a brief discussion on the name change of *Cleome multicaulis* to *Peritoma multicaulis*. Dave Anderson, CNHP Director, who named one of his daughters Cleome (after this particular species) mentioned that he would likely not be changing his daughter's name to Peritoma to follow the update, as he was certain she would not approve.

Friday Night Pizza & Beer Social: Food, Fun, & Friends!



CoNPS 2015 Annual Conference Photo Album

