

2015 Colorado Rare Plant Symposium – Golden, CO

Botanists, members of the Colorado Rare Plant Technical Committee (RPTC) and other interested and interesting persons 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 Societies (CoNPS) Annual Meeting. The Rare Plant Symposium is hosted jointly by Colorado State University Colorado Natural Heritage Program (CNHP) and the Denver Botanic Gardens.

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. A list of species discussed is attached to the end of this article.

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.

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 US.

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 include: global warming, flooding, oil and gas development; recreation and trail development; overgrazing (mountain goats, sheep, cattle, wild horses), alpine summit house replacements, lack of awareness and/or interest by decision makers and the public

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

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. However, as a result of the BioBlitz logging in the rare plant habitat will be reduced.

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 2012 USFS management plan and explained some of the new rules for the Forest Service. All units within the region have to update their management plans over the next 8 years to comply with the 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 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 Symposia.

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 Plan and Best Management Plan documents are also available on the RPCI and CNHP websites. Input and comments are welcome.

For more information:

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

We hope you can plan on attending in the fall of 2016. The Rare Plant Symposium is open to anyone with an interest in the rare plants of Colorado. Contact Jill Handwerk for more information at 970/491-5857 or jill.handwerk@colostate.edu. Check the CoNPS website which will post the details as they become available about the date for next year at www.conps.org.

COLORADO RARE PLANT SYMPOSIA
SPECIES LIST

| 1ST ANNUAL SYMPOSIUM | | | | | |
|--|---|--------|--------|--------|----------|
| 8TH ANNUAL SYMPOSIUM | | | | | |
| 12TH ANNUAL SYMPOSIUM | | | | | |
| 2004/2011/2015 - T&E Species Statewide | | | | | |
| State Scientific Name | Global Scientific Name | G Rank | S Rank | USES A | USFS/BLM |
| | | | | | |
| <i>Astragalus humillimus</i> | <i>Astragalus humillimus</i> | G1 | S1 | LE | |
| <i>Astragalus microcymbus</i> | <i>Astragalus microcymbus</i> | G1 | S1 | C | BLM |
| <i>Astragalus osterhoutii</i> | <i>Astragalus osterhoutii</i> | G1 | S1 | LE | |
| <i>Astragalus schmoliae</i> | <i>Astragalus schmoliae</i> | G1 | S1 | C | |
| <i>Astragalus tortipes</i> | <i>Astragalus tortipes</i> | G1 | S1 | C | BLM |
| <i>Eriogonum pelinophilum</i> | <i>Eriogonum pelinophilum</i> | G2 | S2 | LE | |
| <i>Eutrema penlandii (edwardsii)</i> | <i>Eutrema penlandii</i> | G1G2 | S1S2 | LT | |
| <i>Ipomopsis polyantha</i> | <i>Ipomopsis polyantha</i> | G1 | S1 | LE | |
| <i>Oenothera coloradensis</i> ssp. <i>coloradensis</i> | <i>Gaura neomexicana</i> ssp. <i>coloradensis</i> | G3T2 | S1 | LT | |
| <i>Pediocactus knowltonii</i> | <i>Pediocactus knowltonii</i> | G1 | SNA | LE | |
| <i>Penstemon debilis</i> | <i>Penstemon debilis</i> | G1 | S1 | LT | |
| <i>Penstemon grahamii</i> | <i>Penstemon grahamii</i> | G2 | S1 | | BLM |
| <i>Penstemon penlandii</i> | <i>Penstemon penlandii</i> | G1 | S1 | LE | |
| <i>Penstemon scariosus</i> var. <i>albifluvis</i> | <i>Penstemon scariosus</i> var. <i>albifluvis</i> | G4T1 | S1 | | BLM |
| <i>Phacelia formosula</i> | <i>Phacelia formosula</i> | G1 | S1 | LE | |
| <i>Phacelia submutica</i> | <i>Phacelia submutica</i> | G2 | S2 | LT | |
| <i>Physaria congesta</i> | <i>Lesquerella congesta</i> | G1 | S1 | LT | |
| <i>Physaria obcordata</i> | <i>Physaria obcordata</i> | G1G2 | S1S2 | LT | |
| <i>Sclerocactus glaucus</i> | <i>Sclerocactus glaucus</i> | G2G3 | S2S3 | LT | |
| <i>Sclerocactus mesae-verdae</i> | <i>Sclerocactus mesae-verdae</i> | G2 | S2 | LT | |
| <i>Spiranthes diluvialis</i> | <i>Spiranthes diluvialis</i> | G2G3 | S2 | LT | |

COLORADO RARE PLANT SYMPOSIA
SPECIES LIST

| | | | | | |
|---|--|---------------|---------------|---------------|-----------------|
| 2ND ANNUAL SYMPOSIUM | | | | | |
| 7TH ANNUAL SYMPOSIUM | | | | | |
| 2005/2010 - G1 Species Statewide | | | | | |
| State Scientific Name | Global Scientific Name | G Rank | S Rank | USES A | USFS/BLM |
| <i>Aletes latilobus</i> | <i>Lomatium latilobum</i> | G1G2 | S1 | | BLM |
| <i>Aliciella sedifolia</i> | <i>Gilia sedifolia</i> | G1 | S1 | | FS |
| <i>Astragalus deterior</i> | <i>Astragalus deterior</i> | G1G2 | S1S2 | | |
| <i>Astragalus lonchocarpus</i> var. <i>hamiltonii</i> | <i>Astragalus hamiltonii</i> | G4T1 | SNA | | |
| <i>Boechera glareosa</i> | <i>Boechera glareosa</i> | G1 | S1 | | |
| <i>Botrychium lineare</i> | <i>Botrychium lineare</i> | G2G3 | S2S3 | | FS |
| <i>Botrychium</i> tax. nov. "furcatum" | <i>Botrychium</i> tax. nov. "furcatum" | GNR | SNR | | |
| <i>Cirsium scapanolepis</i> | <i>Cirsium scapanolepis</i> | G1G2Q | SNR | | |
| <i>Oreocarya revealii</i> | <i>Cryptantha gypsophila</i> | G2 | S2 | | BLM |
| <i>Descurainia kenheilii</i> | <i>Descurainia kenheilii</i> | G1 | S1 | | |
| <i>Draba malpighiacea</i> | <i>Draba malpighiacea</i> | G1? | S1? | | |
| <i>Draba weberi</i> | <i>Draba weberi</i> | G1 | S1 | | FS |
| <i>Erigeron wilkenii</i> | <i>Erigeron wilkenii</i> | G1 | S1 | | |
| <i>Eriogonum brandegeei</i> | <i>Eriogonum brandegeei</i> | G1G2 | S1S2 | | FS/BLM |
| <i>Gutierrezia elegans</i> | <i>Gutierrezia elegans</i> | G1 | S1 | | FS/BLM |
| <i>Hackelia gracilenta</i> | <i>Hackelia gracilenta</i> | G1G2 | S1S2 | | |
| <i>Ipomopsis ramosa</i> | <i>Ipomopsis ramosa</i> | G1 | S1 | | |
| <i>Lygodesmia doloresensis</i> | <i>Lygodesmia doloresensis</i> | G1G2 | S1S2 | | BLM |
| <i>Mimulus gemmiparus</i> | <i>Mimulus gemmiparus</i> | G1 | S1 | | FS |
| <i>Oreoxis humilis</i> | <i>Oreoxis humilis</i> | G1 | S1 | | FS |
| <i>Penstemon gibbensii</i> | <i>Penstemon gibbensii</i> | G1G2 | S1 | | BLM |
| <i>Phacelia ginaglennae</i> | <i>Phacelia ginaglennae</i> | G1 | S1 | | |
| <i>Physaria pulvinata</i> | <i>Physaria pulvinata</i> | G1 | S1 | | FS/BLM |
| <i>Physaria scrotiformis</i> | <i>Physaria scrotiformis</i> | G1 | S1 | | FS |

COLORADO RARE PLANT SYMPOSIA
SPECIES LIST

| 3RD ANNUAL SYMPOSIUM | | | | | |
|---|---|----------|--------|--------|----------|
| 9TH ANNUAL SYMPOSIUM | | | | | |
| 2006/2012 - G2 Species SE Colo | | | | | |
| | | | | | |
| State Scientific Name | Global Scientific Name | G Rank | S Rank | USES A | USFS/BLM |
| | | | | | |
| <i>Asclepias uncialis</i> ssp. <i>uncialis</i> | <i>Asclepias uncialis</i> ssp. <i>uncialis</i> | G3G4T2T3 | S2 | | FS/BLM |
| <i>Cleome (Peritoma) multicaulis</i> | <i>Cleome multicaulis</i> | G2G3 | S2S3 | | BLM |
| <i>Delphinium ramosum</i> var. <i>alpestre</i> | <i>Delphinium alpestre</i> | G4T2 | S2 | | |
| <i>Delphinium robustum</i> | <i>Delphinium robustum</i> | G2? | S2? | | |
| <i>Draba exunguiculata</i> | <i>Draba exunguiculata</i> | G2 | S2 | | FS |
| <i>Draba grayana</i> | <i>Draba grayana</i> | G2 | S2 | | FS |
| <i>Draba smithii</i> | <i>Draba smithii</i> | G2 | S2 | | FS |
| <i>Frasera coloradensis</i> | <i>Frasera coloradensis</i> | G2G3 | S2S3 | | |
| <i>Herrickia horrida</i> | <i>Herrickia horrida</i> | G2? | S1 | | |
| <i>Nuttallia chrysantha</i> | <i>Mentzelia chrysantha</i> | G2 | S2 | | BLM |
| <i>Nuttallia densa</i> | <i>Mentzelia densa</i> | G2 | S2 | | BLM |
| <i>Oenothera harringtonii</i> | <i>Oenothera harringtonii</i> | G3 | S3 | | |
| <i>Oonopsis foliosa</i> var. <i>monocephala</i> | <i>Oonopsis foliosa</i> var. <i>monocephala</i> | G3G4T2 | S2 | | |
| <i>Oonopsis pueblensis</i> | <i>Oonopsis pueblensis</i> | G2 | S2 | | |
| <i>Oxybaphus rotundifolius</i> | <i>Mirabilis rotundifolia</i> | G2 | S2 | | |
| <i>Penstemon degeneri</i> | <i>Penstemon degeneri</i> | G2 | S2 | | FS/BLM |
| <i>Physaria calcicola</i> | <i>Lesquerella calcicola</i> | G3 | S3 | | |
| <i>Ptilagrostis porteri</i> | <i>Ptilagrostis porteri</i> | G2 | S2 | | FS |
| <i>Telesonix jamesii</i> | <i>Telesonix jamesii</i> | G2 | S2 | | |

COLORADO RARE PLANT SYMPOSIA
SPECIES LIST

| | | | | | |
|---|--------------------------------|---------------|---------------|---------------|-----------------|
| 4TH ANNUAL SYMPOSIUM | | | | | |
| 10TH ANNUAL SYMPOSIUM | | | | | |
| 2007/2013 - G2G3 Species NE Colo | | | | | |
| State Scientific Name | Global Scientific Name | G Rank | S Rank | USES A | USFS/BLM |
| | | | | | |
| <i>Aletes humilis</i> | <i>Aletes humilis</i> | G2G3 | S2S3 | | |
| <i>Aletes nuttallii</i> | <i>Lomatium nuttallii</i> | G3 | S1 | | |
| <i>Aquilegia saximontana</i> | <i>Aquilegia saximontana</i> | G3 | S3 | | |
| <i>Astragalus sparsiflorus</i> | <i>Astragalus sparsiflorus</i> | G2 | S2 | | |
| <i>Bolophyta alpina</i> | <i>Parthenium alpinum</i> | G3 | S3 | | |
| <i>Carex oreocharis</i> | <i>Carex oreocharis</i> | G3 | S2 | | |
| <i>Draba crassa</i> | <i>Draba crassa</i> | G3G4 | S3 | | |
| <i>Draba globosa</i> | <i>Draba globosa</i> | G3 | S1 | | |
| <i>Draba streptobrachia</i> | <i>Draba streptobrachia</i> | G3 | S3 | | |
| <i>Eriogonum exilifolium</i> | <i>Eriogonum exilifolium</i> | G3 | S2 | FS | |
| <i>Nuttallia sinuata</i> | <i>Mentzelia sinuata</i> | G3 | S3 | | |
| <i>Nuttallia speciosa</i> | <i>Mentzelia speciosa</i> | G3 | S3 | | |
| <i>Oonopsis wardii</i> | <i>Oonopsis wardii</i> | G3 | S1 | | |
| <i>Phacelia denticulata</i> | <i>Phacelia denticulata</i> | G3 | SU | | |
| <i>Physaria bellii</i> | <i>Physaria bellii</i> | G2G3 | S2S3 | | |
| <i>Potentilla ambigens</i> | <i>Potentilla ambigens</i> | G3 | S2 | | |
| <i>Potentilla rupincola</i> | <i>Potentilla rupincola</i> | G2 | S2 | FS | |
| <i>Sisyrinchium pallidum</i> | <i>Sisyrinchium pallidum</i> | G3 | S2 | | BLM |

COLORADO RARE PLANT SYMPOSIA
SPECIES LIST

| 5TH ANNUAL SYMPOSIUM | | | | | |
|-------------------------------------|--|--------|--------|--------|----------|
| 2008 - G2G3 Species SW Colo | | | | | |
| State Scientific Name | Global Scientific Name | G Rank | S Rank | USES A | USFS/BLM |
| <i>Astragalus anisus</i> | <i>Astragalus anisus</i> | G2G3 | S2S3 | | BLM |
| <i>Astragalus cronequistii</i> | <i>Astragalus cronequistii</i> | G2 | S2 | | |
| <i>Astragalus equestris</i> | <i>A. desperatus</i> var. <i>neesiae</i> | G5T1 | S1 | | BLM |
| <i>Astragalus iodopetalus</i> | <i>Astragalus iodopetalus</i> | G2 | S1 | | FS |
| <i>Astragalus naturitensis</i> | <i>Astragalus naturitensis</i> | G2G3 | S2S3 | | BLM |
| <i>Astragalus piscator</i> | <i>Astragalus piscator</i> | G2G3 | S1 | | BLM |
| <i>Astragalus rafaelensis</i> | <i>Astragalus rafaelensis</i> | G2G3 | S1 | | BLM |
| <i>Boechera crandallii</i> | <i>Arabis crandallii</i> | G2 | S2 | | BLM |
| <i>Camissonia eastwoodiae</i> | <i>Camissonia eastwoodiae</i> | G2 | S1 | | BLM |
| <i>Castilleja puberula</i> | <i>Castilleja puberula</i> | G2G3 | S2S3 | | |
| <i>Cirsium perplexans</i> | <i>Cirsium perplexans</i> | G2G3 | S2S3 | | |
| <i>Draba graminea</i> | <i>Draba graminea</i> | G2 | S2 | | |
| <i>Erigeron kachinensis</i> | <i>Erigeron kachinensis</i> | G2 | S1 | | BLM |
| <i>Eriogonum clavatum</i> | <i>Eriogonum clavatum</i> | G2 | S1 | | BLM |
| <i>Eriogonum coloradense</i> | <i>Eriogonum coloradense</i> | G2 | S2 | | BLM |
| <i>Lepidium crenatum</i> | <i>Lepidium crenatum</i> | G2 | S2 | | |
| <i>Lomatium concinnum</i> | <i>Lomatium concinnum</i> | G2G3 | S2S3 | | BLM |
| <i>Lupinus crassus</i> | <i>Lupinus crassus</i> | G2 | S2 | | BLM |
| <i>Machaeranthera coloradoensis</i> | <i>Machaeranthera coloradoensis</i> | G3 | S3 | | FS |
| <i>Oreocarya osterhoutii</i> | <i>Cryptantha osterhoutii</i> | G2G3 | S2 | | BLM |
| <i>Physaria alpina</i> | <i>Physaria alpina</i> | G2 | S2 | | |
| <i>Physaria pruinosa</i> | <i>Lesquerella pruinosa</i> | G2 | S2 | | FS/BLM |
| <i>Physaria rollinsii</i> | <i>Physaria rollinsii</i> | G1 | S1 | | |
| <i>Physaria vicina</i> | <i>Lesquerella vicina</i> | G2 | S2 | | BLM |
| <i>Puccinellia parishii</i> | <i>Puccinellia parishii</i> | G2G3 | S1 | | |
| <i>Salix arizonica</i> | <i>Salix arizonica</i> | G2G3 | S1 | | FS |
| <i>Thelypodiopsis juniperorum</i> | <i>Thelypodiopsis juniperorum</i> | G2 | S2 | | |
| <i>Townsendia glabella</i> | <i>Townsendia glabella</i> | G2 | S2 | | |
| <i>Townsendia rothrockii</i> | <i>Townsendia rothrockii</i> | G2G3 | S2S3 | | |

COLORADO RARE PLANT SYMPOSIA
SPECIES LIST

| 6TH ANNUAL SYMPOSIUM | | | | | |
|--|--|--------|--------|--------|----------|
| 11TH ANNUAL SYMPOSIUM | | | | | |
| 2009/2014 - G2G3 Species North & Central Colo | | | | | |
| | | | | | |
| State Scientific Name | Global Scientific Name | G Rank | S Rank | USES A | USFS/BLM |
| | | | | | |
| <i>Anticlea vaginalis</i> | <i>Zigadenus vaginalis</i> | G2 | S2 | | |
| <i>Astragalus debequaeus</i> | <i>Astragalus debequaeus</i> | G2 | S2 | | BLM |
| <i>Carex stenoptila</i> | <i>Carex stenoptila</i> | G2 | S2 | | |
| <i>Ipomopsis aggregata</i> ssp. <i>weberi</i> | <i>Ipomopsis aggregata</i> ssp. <i>weberi</i> | G5T2 | S2 | | FS |
| <i>Ipomopsis globularis</i> | <i>Ipomopsis globularis</i> | G2 | S2 | | |
| <i>Limnorchis zothecina</i> | <i>Platanthera zothecina</i> | G2 | S1 | | |
| <i>Mertensia humilis</i> | <i>Mertensia humilis</i> | G2 | S1 | | |
| <i>Nuttallia rhizomata</i> | <i>Mentzelia rhizomata</i> | G2 | S2 | | BLM |
| <i>Oenothera acutissima</i> | <i>Oenothera acutissima</i> | G2 | S2 | | BLM |
| <i>Oxytropis besseyi</i> var. <i>obnapiformis</i> | <i>Oxytropis besseyi</i> var. <i>obnapiformis</i> | G5T2 | S2 | | |
| <i>Penstemon fremontii</i> var. <i>glabrescens</i> | <i>Penstemon fremontii</i> var. <i>glabrescens</i> | G3G4T2 | S2 | | |
| <i>Penstemon scariosus</i> var. <i>cyanomontanus</i> | <i>Penstemon scariosus</i> var. <i>cyanomontanus</i> | G4T2 | S2 | | |
| <i>Physaria parviflora</i> | <i>Lesquerella parviflora</i> | G2 | S2 | | BLM |
| <i>Saussurea weberi</i> | <i>Saussurea weberi</i> | G2G3 | S2 | | |
| <i>Thalictrum heliophilum</i> | <i>Thalictrum heliophilum</i> | G2 | S2 | | FS/BLM |
| <i>Thelypodium paniculatum</i> | <i>Thelypodium paniculatum</i> | G2 | SH | | |

COLORADO RARE PLANT SYMPOSIA
SPECIES LIST

| SPECIES FOR FUTURE SYMPOSIA | | | | | |
|---|------------------------|---------|--------|--------|----------|
| State Scientific Name | Global Scientific Name | G Rank | S Rank | USES A | USFS/BLM |
| USFS/BLM Sensitive Species | | | | | |
| <i>Aletes lithophilus</i> | | G3 | S3 | | FS/BLM |
| <i>Aquilegia chrysanthia</i> var. <i>rydbergii</i> | | G4T1Q | S1 | | FS/BLM |
| <i>Astragalus ripleyi</i> | | G3 | S2 | | FS/BLM |
| <i>Penstemon harringtonii</i> | | G3 | S3 | | FS/BLM |
| USFS Sensitive Species | | | | | |
| <i>Armeria scabra</i> ssp. <i>sibirica</i> | | G5T5 | S1 | | FS |
| <i>Astragalus leptaleus</i> | | G4 | S2 | | FS |
| <i>Astragalus missouriensis</i> var. <i>humistratus</i> | | G5T1 | S1 | | FS |
| <i>Astragalus proximus</i> | | G4 | S2 | | FS |
| <i>Botrychium campestre</i> | | G3G4 | S1 | | FS |
| <i>Botrychium paradoxum</i> | | G3G4 | S1 | | FS |
| <i>Braya glabella</i> var. <i>glabella</i> | | G5T5 | S1 | | FS |
| <i>Calochortus flexuosus</i> | | G4 | S2 | | FS |
| <i>Carex diandra</i> | | G5 | S1 | | FS |
| <i>Carex livida</i> | | G5 | S1 | | FS |
| <i>Chenopodium cycloides</i> | | G3G4 | S1 | | FS |
| <i>Cylactis arctica</i> ssp. <i>acaulis</i> | | G5T5 | S1 | | FS |
| <i>Cypripedium calceolus</i> ssp. <i>parviflorum</i> | | G5 | S2 | | FS |
| <i>Drosera anglica</i> | | G5 | S1 | | FS |
| <i>Drosera rotundifolia</i> | | G5 | S2 | | FS |
| <i>Epipactis gigantea</i> | | G4 | S1S2 | | FS |
| <i>Eriophorum altaicum</i> var. <i>neogaeum</i> | | G4?T3T4 | S3 | | FS |
| <i>Eriophorum chamissonis</i> | | G5 | S1 | | FS |
| <i>Eriophorum gracile</i> | | G5 | S1S2 | | FS |
| <i>Festuca hallii</i> | | G4 | S1 | | FS |
| <i>Kobresia simpliciuscula</i> | | G5 | S2 | | FS |
| <i>Malaxis monophyllos</i> ssp. <i>brachypoda</i> | | G4Q | S1 | | FS |
| <i>Parnassia kotzebuei</i> | | G5 | S2 | | FS |
| <i>Primula egaliksensis</i> | | G4 | S2 | | FS |
| <i>Salix candida</i> | | G5 | S2 | | FS |
| <i>Salix myrtillifolia</i> | | G5 | S1 | | FS |

COLORADO RARE PLANT SYMPOSIA
SPECIES LIST

| SPECIES FOR FUTURE SYMPOSIA | | | | | |
|--------------------------------|------------------------|--------|--------|--------|----------|
| State Scientific Name | Global Scientific Name | G Rank | S Rank | USES A | USFS/BLM |
| USFS Sensitive Species | | | | | |
| <i>Salix serissima</i> | | G4 | S1 | | FS |
| <i>Triteleia grandiflora</i> | | G4G5 | S1 | | FS |
| <i>Utricularia minor</i> | | G5 | S2 | | FS |
| <i>Viola selkirkii</i> | | G5? | S1 | | FS |
| BLM Sensitive Species | | | | | |
| <i>Amsonia jonesii</i> | | G4 | S2 | | BLM |
| <i>Astragalus detritalis</i> | | G3 | S2 | | BLM |
| <i>Astragalus duchesnensis</i> | | G3 | S1S2 | | BLM |
| <i>Astragalus linifolius</i> | | G3Q | S3 | | BLM |
| <i>Astragalus musiniensis</i> | | G3 | S1 | | BLM |
| <i>Astragalus sesquiflorus</i> | | G3G4 | S1 | | BLM |
| <i>Bolophyta ligulata</i> | | G3 | S2 | | BLM |
| <i>Cryptogramma stelleri</i> | | G5 | S2 | | BLM |
| <i>Cymopterus duchesnensis</i> | | G3 | S1 | | BLM |
| <i>Eriogonum acaule</i> | | G3 | S1 | | BLM |
| <i>Eriogonum contortum</i> | | G3 | S1 | | BLM |
| <i>Eriogonum ephedroides</i> | | G3 | S1 | | BLM |
| <i>Eriogonum tumulosum</i> | | G3Q | S2 | | BLM |
| <i>Eriogonum viridulum</i> | | G4Q | SH | | BLM |
| <i>Frasera paniculata</i> | | G4 | S1 | | BLM |
| <i>Gentianella tortuosa</i> | | G3? | S1 | | BLM |
| <i>Gilia stenothyrsa</i> | | G3 | S1 | | BLM |
| <i>Mimulus eastwoodiae</i> | | G3G4 | S1S2 | | BLM |
| <i>Oreocarya caespitosa</i> | | G4 | S2 | | BLM |
| <i>Oreocarya rollinsii</i> | | G3 | S2 | | BLM |
| <i>Packera pauciflora</i> | | G4G5 | S1 | | BLM |
| <i>Pediomelum aromaticum</i> | | G3 | S2 | | BLM |
| <i>Sphaeromeria capitata</i> | | G3 | S1 | | BLM |
| <i>Townsendia strigosa</i> | | G4 | S1 | | BLM |
| <i>Trichophorum pumilum</i> | | G5 | S2 | | BLM |