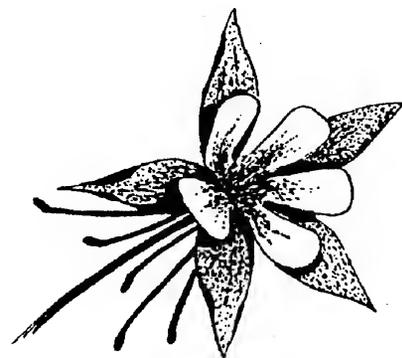


Aquilegia



Newsletter of the Colorado Native Plant Society

“... dedicated to the appreciation and conservation of the Colorado native flora”

Volume 15, Number 6

November/December 1991

The United States Forest Service, Sensitive Plants, and You

Elizabeth Otto

The federal government owns approximately 42% of the land in Colorado. This federal land is managed by two primary agencies: the United States Forest Service (Forest Service), a division of the Department of Agriculture; and the Bureau of Land Management (BLM), a division of the Department of the Interior.

In 1891 Congress passed the Federal Creative Act, which allowed the President to set aside forest lands. The Forest Service was established in 1905 by President Theodore Roosevelt, and was mandated to manage the lands under its jurisdiction for multiple use. Most of Colorado's National Forests were designated at that time.

Although, under the Department of Agriculture, the Forest Service views trees as a crop, under federal law, it must also allow for other uses of this land. These uses include recreation, grazing, mining for oil and gas as well as hard rock ores, wilderness preservation, and protection of endangered species. Under the Forest and Rangeland Renewable Resources Planning Act (RPA) of 1974, the Forest Service must also develop a Land and Resource Management Plan for each Forest Service District in the country. In addition

to outlining timber sales, these management plans must establish standards and guidelines for resource production.

As mandated by the Endangered Species Act of 1973, each Forest Service Management Plan must also contain some guidelines and a program for the protection of endangered plants and animals on the Forest.

The Forest Service manages 14.4 million acres in Colorado and many of the state's sensitive plant species are found in these lands. Although many Forest Service Districts have included programs for sensitive plant species in their Management Plans, some have included little or no guidance for plant protection. And, unfortunately, all too often, in those Plans which do include

language for plant protection, little is being done. Although most District Rangers are concerned about plant protection, staff and funding shortages often prevent much from being accomplished.

If you are concerned that the Forest Service should be doing more to protect the sensitive plants under its management, there is something you can do. We've included in this issue of *Aquilegia* the recommended list of sensitive plants for Region 2 (page 7), compiled by The Nature Conservancy's Heritage Task Force and Heritage Programs from states within Region 2. We also offer information from two groups who are monitoring the Forest Service's sensitive species policies.

—continued, page 6

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Annual Meeting, New Board

The 1991 annual meeting took place as scheduled Nov. 2nd at the Denver Museum of Natural History. More than one hundred plant enthusiasts weathered the early snowfall to learn more about our grassland ecosystems. Look for a full report on the meeting in the Jan/Feb issue.

We welcome the following new officers and board members who were elected at the annual meeting:

Carol Dawson, President
Tina Jones, Vice President

Board: Bill Jennings
Vicky Trammell
Gary Finstad
Jeff Dawson

Rob Udall and Myrna Steinkamp are continuing to serve as Secretary and Treasurer, respectively; Tamara Naumann was re-elected for another term on the board.

Volunteers Needed for Annual Meeting

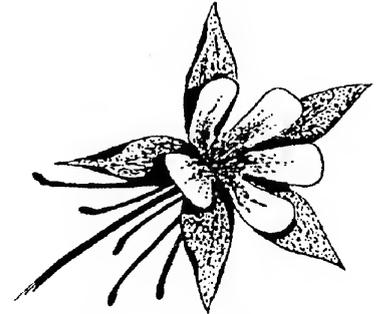
At the December board meeting, Tina Jones presented some preliminary ideas for the 1992 annual meeting. Please contact her if you would like to help with planning next fall's meeting.

Notebook Recall - Please!

As the new board takes office, one of the procedures we are trying to re-establish is the tradition of providing a Society notebook to board members. This was done in the Society's early days, and most

of the notebooks are out there somewhere. If you still have one of these original notebooks around, please contact a board member to return it. It would be extremely helpful!

- Sally White



Aquilegia

Aquilegia is published six times per year by the Colorado Native Plant Society. This newsletter is available to members of the Society and others with an interest in native plants. Contact the Society for subscription information.

Articles from *Aquilegia* may be used by other native plant societies if fully cited to author and attributed to *Aquilegia*.

The Colorado Native Plant Society is a non-profit organization dedicated to the appreciation and conservation of the Colorado native flora. Membership is open to all with an interest in our native plants, and is composed of plant enthusiasts, both professional and non-professional.

Please join us in helping to encourage interest in enjoying and protecting the variety of native plants in Colorado. The Society sponsors field trips, workshops and other activities through local chapters and statewide. Contact the Society or a chapter representative or committee chair for more information.

Schedule of Membership Fees

Life	\$250.00
Supporting	\$ 50.00
Organization	\$ 25.00
Family or Dual	\$ 12.00
Individual	\$ 8.00
Student or Senior	\$ 4.00

Membership Renewals/Information

Please direct all membership applications, renewals and address changes to the Membership chairperson, in care of the Society's mailing address. Please direct all other inquiries regarding the Society to the Secretary in care of the Society's mailing address.

Newsletter Contributions

Please direct all contributions to the newsletter to:

Peter Root
4915 West 31st Avenue
Denver, CO 80212

Deadlines for newsletter materials are February 15, April 15, June 15, August 15, October 15 and December 15.

Short items such as unusual information about a plant, a little known botanical term, etc. are especially welcome. Camera-ready line art or other illustrations are also solicited.

Please include author's name and address, although items will be printed anonymously if requested. Articles may be submitted on disks (IBM-compatible, 5.25-in. DS/DD) if desired; please indicate word processing software and version used.

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Hort/Rehab	Dorothy Udall	482-9826
Membership	Myrna Steinkamp	226-3371
Publicity	Julia Carlson	752-2738
Workshops	Bill Jennings	666-8348

Announcements

Southwestern Rare Plant Conference March 30–April 2, 1992

The New Mexico Forestry and Resources Conservation Division and the U.S. Fish & Wildlife Service are hosting a conference on southwestern rare plant biology and management March 30 to April 2, 1992. The conference will be held in Morgan Hall at the New Mexico State Land Office Building, 310 Old Santa Fe Trail, Santa Fe. For additional information, contact Robert Sivinski or Karen Lightfoot at the address below.

Interior Secretary Manual Lujan has been invited to give a keynote address; Faith Campbell of the Natural Resources Defense Council will also give a keynote address.

Session topics on rare plants in the Four Corners states are

- Rare Plants and the Endangered Species Act (keynote)
- Perspectives on Endangered Plant Conservation (keynote)
- Rare Plant Survey and Habitat Assessment
- Population Biology and Demographic Study
- Systematics, Genetics and Reproductive Biology
- Rare Plant Protection Strategies

Please pre-register by March 1st. The fee of \$30 covers the conference and published proceedings and is payable to

Native Plant Society of New Mexico
c/o NM Forestry Division
PO Box 1948
Santa Fe, NM 87504-1948 ♣

Nursery Trainee Position Available

Small organic nursery specializing in plants of the Rocky Mountain/High Plains bioregion. Housing plus stipend. Call or write Bob Howard, 8328 Valmont, Boulder, CO 80301; phone 666-0253.

Get an Early Start on Your Spring Gardening!

This summer's garden of brilliantly colored wildflowers—Indian Blanket Flower, Red and Yellow Mexican Hats, Black-eyed Susan, Purple Coneflowers*—has left an abundance of seeds to share/trade/barter.

Wanted: Perennial seeds/root divisions/plants/bulbs, any ornamental grasses, herb or mint varieties, or other?? The idea is to share the bounty of the harvest and maybe have some fun doing it.

If you have items to exchange, or would simply like some seeds, please write or call:

Chet Grabowski
WEBEWE FARM
3140 Yates
Denver, CO 80212
(303)455-4334

* *Gaillardia aristata*, *Rudbeckia hirta*,
Echinacea purpurea

Have You Paid??

Once again, it's reminder time—have you paid your CONPS dues? Dues notices were sent to members in early November. Please remember that dues cover a calendar year. Check your mailing label for the year THROUGH WHICH your dues are paid—i.e., PDTHRU 91 means you should remit your dues for 1992! However, if you have sent in your payment within the past few weeks, please note that the label could be incorrect due to the lead time required for the newsletter.

Membership Committee Chair Myrna Steinkamp also notes that the post office will not forward bulk mail, so if you move and want to continue to receive Society mailings, it is essential to notify the Society of your new address.

One final comment on our mailings: if you have a complaint about late delivery of your newsletter, only your local postmaster can help. Keep in mind that with our volunteer staff, we don't always get *Aquilegia* in the mail as early as we'd like. Bulk mail is handled on a somewhat unpredictable basis, but we have evidence that it does leave Denver promptly, so if you experience recurring delays (beyond when you know others have received their newsletters), contact your local postmaster to inquire about their bulk mail policies. (Isn't it odd how the junk mail always seems to get through!) We know that this can be a problem, and we hope you understand.

George Kelly

Dr. William A. Weber

George Kelly died on August 10th. The obit in the Green Thumb News, October 1991, doesn't list his age, but he was in his late 90's. I'm sorry to say that the article didn't reveal any of George's wonderful human characteristics, as if to indicate that there are few around who knew him in the old days. I was very much involved with George Kelly through the years; in many ways he was the beginning of the plant conservation movement in Colorado, and CONPS owes a lot to him.

When I first came to Colorado in 1946, Denver had a little Botany Club, and I went down there to do a little extracurricular teaching. Dr. Brunquist and Mrs. Crisp were staunch supporters, and through them I got to know George Kelly. He was the Colorado Forestry and Horticulture Association, and somewhere along the line several of us began to meet with George at Horticulture House on Bannock St. to try to find ways and means of setting up a State Parks system in Colorado. It was a pretty depressing outlook because recreation seemed to be the tail wagging the dog. Even setting up wayside rest stops appeared to be impossible. But I'm sure that the present State Parks system is one of George's legacies to Colorado.

George had a green thumb and fingers full of ground-in dirt. He was plain spoken. But unlike his friend Walter Pesman, he was not intimidated or self-conscious around professional botanists. It was George who encouraged me to expand my mimeographed *Flora of Boulder County*, "published" in one hundred copies, to become, in 1953, *Handbook of Plants of the Colorado Front Range*, and later *Rocky Mountain Flora*. I am grateful to George for writing a very complimentary preface to it and recommending it highly to horticulturists.

George helped charter, and became the first director of, the new Denver Botanic Gardens in 1951, and one of George's interests, ignited by Kathryn Kalmbach, was to make an herbarium for it. I spent many weeks or months going down to Horticulture House to train Katherine and several volunteers to mount plants according to the best professional standards. We had great times together. Our intent was to establish a small herbarium of native and, especially, cultivated plants of Colorado to serve as a resource for amateur botanists and gardeners of the Denver area. This is now the Kathryn Kalmbach Herbarium. It was George's baby.

George strongly believed in, and was almost alone in, growing Colorado native plants for Colorado gardens, and he pursued this to the end of his life. Visiting him on his property in McElmo Creek was always exciting, because he had the most fabulous collection of wild Colorado plants, especially woody ones, in cultivation. Even when he became extremely frail, almost blind and very deaf, he would manage to take us through the garden and show us things we never believed were in cultivation.

"Rocky Mountain Horticulture is Different" was the name of his first and, I think, best book. He preached this gospel all his life and tried to teach people how to use Colorado-grown stock in preference to mail-order catalog plants from the East and Midwest. Few nurseries have picked up the baton in earnest. The nursery that comes closest to following George's

ideal is Ludwig's Pleasant Avenue Nursery in Buena Vista, where the Ludwig family is experimenting in many native species likely to be hardy in middle altitude gardens in the mountains.

George gave me lots of pointers about key characters for my books, and he also had some imaginative suggestions for common names; one that comes to mind is "tomato-soup flower" for *Sphaeralcea coccinea*.

**George strongly believed in,
and was almost alone in,
growing Colorado native plants
for Colorado gardens,
and he pursued this
to the end of his life.**

As time went on, George's books became more reflective, introspective, and filled with his own poetry and drawings. Visiting George in his nineties with a

group of students was always a chance for George to get on his pulpit and preach conservation and a return to the ideals that made this country great. He was always worth listening to. He really was obsessed in his message, and he published, on his own, a lot of books. But he had no skill in marketing, so eventually these books filled his garage, and I don't know what happened to them. I know he would have gladly donated them free to everyone who could use them.

On my infrequent trips to the Ute country, I always tried to drop in on George and have my students and companions meet him to get exposed to this extraordinary human being. I'm sure he will live in their memories for a long time. ♣

Management of Sensitive Species – a National Perspective

Jasper Carlton
Biodiversity Legal Foundation

The U.S. Forest Service manages 191 million acres (77 million hectares) of forests and grasslands. In total area slightly smaller than the states of Colorado, Utah and New Mexico combined, Forest Service lands extend from subarctic Alaska to tropical Puerto Rico. These public lands provide essential habitat for at least 194 federally classified threatened or endangered species, along with another 2,254 species designated by the Forest Service as "sensitive" (i.e., candidates for listing under the Endangered Species Act and other species of special concern that are supposed to be receiving priority management attention).

Under the Reagan and Bush administrations the Forest Service has routinely and vigorously opposed the listing and protection of new species under the Endangered Species Act (ESA). This occurs because the federal listing often places restrictions on Forest Service development activities

where sensitive species or their habitat exists. Because of the intentional foot-dragging of the U.S. Fish and Wildlife Service in the listing of new species under the Act, the Biodiversity Legal Foundation (BLF) estimates that the Forest Service is only managing for half of the species that are, in fact, biologically threatened or endangered on our National Forest lands.

In addition, the Forest Service intentionally resists adding new species to its "sensitive species" program at the regional level. There is a major gap between the number of species on each Forest Service regional list and the number of species recommended for sensitive classification by the Nature Conservancy's State Heritage Programs and other scientific sources. The BLF estimates that, nationally, the Forest Service is failing to classify and manage at least 1,000 native vertebrate, invertebrate, and plant species that merit this special management classification.

National Forests are among this country's most important reservoirs of biodiversity, but they are being seriously abused. The cumulative impact of development activities on these public forests is causing the extirpation of hundreds of threatened, endangered, and sensitive plant and animal species. In most cases the Forest Service has failed to complete comprehensive flora and fauna inventories or to develop and implement adequate management plans for these species.

The BLF has encouraged the Forest Service to implement programs that focus on all species and habitats threatened by human development, and to start developing conservation plans for entire natural diverse ecosystems, of which the national forests are an integral part. Only in this way is there a chance of retaining native biodiversity on these public lands. ♣

Regional Box Scores: How Region 2 Adds Up Sensitive Species by Region – U.S. Forest Service, October 11, 1991

<i>Forest Service Region</i>	<i>Birds</i>	<i>Mammals</i>	<i>Herps</i>	<i>Fish</i>	<i>Clam/Crust.</i>	<i>Insects</i>	<i>Plants</i>	<i>Regional Total</i>
Northern	13	9	1	8	0	0	130	161
Rocky Mtn. (Region 2)	--	--	--	--	--	--	--	--
Southwest	76	51	36	20	12	14	118	326
Intermountain	13	6	1	9	--	--	198	227
California	4	5	1	1	0	0	307	318
Pacific NW	13	7	9	9	0	21	384	443
Southern	35	25	56	55	39	33	549	792
Eastern	3	11	10	20	18	19	67	148
Alaska	4	1	0	3	0	--	--	8
National total*	129	105	109	121	69	93	1654	2280

* Species in more than one region are counted only once in totals.

Getting the Forest Service to Protect Sensitive Plants

Rocky Smith

Colorado Environmental Coalition

There is no doubt that Forest Service lands in Colorado contain a wide variety of plant life. There is also no doubt that many of these plants are sensitive, that is they have significant current or predicted downward trends in populations, density, and/or distribution. These species may need the formal protection of the Endangered Species Act if the downward trends are not reversed or at least stopped.

A study by the Nature Conservancy's Heritage Task Force, funded by the Forest Service, found 70 species with such problems in Forest Service Region 2. This region includes all of Colorado, most of Wyoming, and the Black Hills of South Dakota (see list, page 7). The study also identified an additional 39 species that need to be closely watched and eight species about which too little is known to evaluate whether or not their populations are stable.

In April 1991, however, the Forest Service proposed to protect only 23 plant species in Region 2. The Colorado Environmental Coalition (CEC) commented that this draft list was inadequate. We asked why the Forest Service decided not to use the results of the study it funded. We also criticized

the very strict criteria used for determining the species considered sensitive, criteria which seemed designed to ensure that few species made the draft list.

The Forest Service has a strong obligation to protect rare plants and animals on its lands. Federal lands may be the only place some sensitive species can exist, as private lands have already been, and continue to be, extensively developed for municipal, industrial, agricultural, and residential uses, destroying habitats for and populations of rare and declining species. Agency internal direction requires the Forest Service to "maintain viable populations of ...wildlife, fish and plant species in habitats distributed throughout their geographic range on National Forest system lands."

The draft list would blatantly violate this directive, as many species needing protection to ensure their continued existence would not receive it. In a meeting in early October, CEC strongly urged Regional Forester Gary Cargill to issue a final list that includes all the species that the Nature Conservancy's study recommended as sensitive. Mr. Cargill replied that he did not want to issue such a list without instruction to

district rangers and forest supervisors on how to use it. We see no concern with such instructions, but the need for instructions should not be used to justify further delay.

If you agree with CEC that the Forest Service is not meeting its responsibility to protect and maintain the biological diversity on agency lands, please write to:

Gary Cargill
USDA Forest Service
11177 W. 8th Ave.
Lakewood, CO 80225

Politely but firmly insist that Mr. Cargill issue a final list of sensitive species for Region 2 that includes all of the plants on the Nature Conservancy's list. If you have knowledge of particular species that should be protected, present this in your letter as well. CEC is continuing to monitor this issue, but it may take considerable pressure on the Forest Service to protect rare plants. Your letters will help. ♣

**Region 2 is one of only two
Forest Service regions with
no designated sensitive
plant species .**

The Forest Service, sensitive species and you, continued from page 1

Check the list of plants included in this newsletter to find which plants occur in the National Forest nearest you. Consult your Rare Plant Monograph to become familiar with those species most in need of protection. Then write to your District Ranger and ask her or him what that District is doing to protect these species. Request to be notified of any proposals the District is considering that may adversely impact these species.

Or visit the District Ranger's office to talk with him or her about your concern for the sensitive plant species in that District. By all means, be polite, but don't be afraid to question assumptions.

Try to build a solid working relationship with the Ranger based on trust and openness. When future plans for development arise, the Ranger will be more likely to listen to your concerns and, perhaps, modify the plan if need be. Try to include constructive suggestions if you think modifications are necessary.

Ask to be placed on the mailing list so you can become involved in a project during the early stages. Take every opportunity to express your concerns about sensitive plants: scoping comments, hearings, public meetings, written comments.

And let us know how you do. If you need help from CONPS members for your District, write an article for *Aquilegia* and ask members to write letters in support or opposition to a project.

Agencies often cite lack of funds or staff, or overwhelming workload, to explain why action on rare plants is delayed. Because few people encourage them to take stronger plant protection measures, it is easy for them to overlook or postpone. Let's make sure they know that we do care about rare plants and what happens to them. ♣

Recommended Sensitive Plant Species, USFS Region 2 (3/31/90)

Forest Service Draft List (4/9/91)

Species	Occurrence	Nominated by	Rank	
Adenocaulon bicolor	Black Hills	SD, WY	G5/SU, S1	
Adiantum capillus-veneris	Black Hills	SD	G5/S1	
Aletes humilis	Roosevelt	CO	G1/S1	Aletes humilis
Aquilegia laramiensis	Medicine Bow	WY	G2/S2	
Arctostaphylos rubra	Shoshone	WY	G2/S1	
Armeria scabra ssp. sibirica	Arapaho, Pike	CO	G5/S1	
Arnica lonchophylla	Bighorn, Black Hills	WY	G2/S1	
Aster mollis	Bighorn	WY	G2Q/S2	Aster mollis
Astragalus anisus	Gunnison	CO	G3/SU	
Astragalus molybdenus	Gunnison, Pike, White River	CO	G?	
Astragalus osterhoutii	Arapaho	CO	G1/S1	Astragalus osterhoutii
Astragalus proximus	San Juan	CO	G3/S2	
Astragalus ripleyi	Rio Grande	CO	G2/S2	Astragalus ripleyi
Botrychium ascendens	Shoshone	WY	G2/S1	
Botrychium campestre	Black Hills	WY, NE	G2/S1	
Braya glabella	Gunnison, San Isabel	CO	G?	
Braya humilis ssp. ventosa	Gunnison, Pike	CO	G4T2/S2	
Carex alopecoidea	Black Hills	WY	G5/S1	
Carex intumescens	Black Hills	SD	G5/S2	
Carex livida	Pike, Shoshone, Routt?	WY, CO	G5/S1	
Carex pedunculata	Black Hills	SD	G5/S1	
Chenopodium cycloides	Cimarron N.G., Comanche N.G.?	KS	G3G4/S2	
Claytonia lanceolata var. flava	Shoshone	WY	G5T1/S1	Claytonia lanceolata var. flava
Corallorhiza odontorhiza	Black Hills	SD	G5/SU	
Descurainia torulosa	Shoshone	WY	G1/S1	Descurainia torulosa
Draba pectinipila	Shoshone	WY	G1Q/S1	
Draba smithii	Rio Grande, San Isabel	CO	G3/SU	
Drosera rotundifolia	Gunnison, Routt	CO	G5/S1	
Epipactis gigantea	Bighorn, Black Hills	SD, WY	G5/S1	
Equisetum scirpoides	Black Hills	SD, WY	G5/S2, S1	
Erigeron lanatus	Gunnison, White River	CO	G4/S1	
Eriogonum visherii	Buffalo Gap N.G.	SD	G3/S3	Eriogonum visherii
Eriophorum altaicum var. neogaeum	Gunnison, Rio Grde, San Jn	CO	G4T?/S1	
Eutrema penlandii	Pike	CO	G1/S1	Eutrema penlandii
Festuca hallii	Bighorn, Roosevelt, Shoshone	CO	G2G3/S1	
Frasera coloradensis	Comanche N.G.	CO	G2/S2	Frasera coloradensis
Gilia penstemonoides	Gunnison	CO	G3/S3	
Ipomopsis aggregata ssp. weberi	Medicine Bow, Routt	WY, CO	G5T2?/S1, S2?	
Ipomopsis globularis	Pike	CO	G2/S2	
Lesquerella pruinosa	San Juan	CO	G2/S2	Lesquerella pruinosa
Lycopodium complanatum	Black Hills	SD, WY	G5/S1	
Lycopodium dendroideum	Black Hills	SD, WY	G5/SU, S1	
Mimulus gemmiparus	Pike	CO	G2/S2	Mimulus gemmiparus
Muhlenbergia glomerata	Bighorn, Black Hills, Shoshone	SD	G4/SU	
Neoparrya lithophila	Rio Grande	CO	G2/S2	
Orchis rotundifolia	Shoshone	WY	G5/S1	
Parrya nudicaulis	Shoshone	WY	G2G4/S1	
Parthenium alpinum	Pawnee N.G.	CO	G2/S1	
Penstemon harringtonii	White River	CO	G3/S3	Penstemon harringtonii
Penstemon haydenii	McKelvie	NE	G1/S1	
Penstemon mensarum	Gr Mesa, Gunn, White R, Unc.	CO	G2/S2	
Phacelia submutica	White River	CO	G2/S2	Phacelia submutica
Platanthera orbiculata	Black Hills	SD	G5?/S1	
Primula egaliksensis	Shoshone	WY	G2/S1	
Ptilagrostis porteri	Pike	CO	G2T?/S2	Ptilagrostis porteri
Rhamnus alnifolia	Black Hills, Shoshone	SD	G5/SU	
Rubus arcticus ssp. acaulis	Arapaho, Bighorn, Pike	CO, WY	G5T5/SU, S1	
Salix lanata ssp. calcicola	Pike	CO	G4/S1	
Salix myrtillofolia var. myrtillofolia	Shoshone	WY	G?T?/S1	
Salix serissima	Black Hills	SD	G4/S1	
Sanguinaria canadensis	Black Hills	SD	G5/S4	
Scirpus cyperinus	Black Hills	SD	G5/S1 (WY)	
Scirpus pumilus	Pike, Shoshone	WY, CO	G5/S1	
Senecio dimorphophyllus var. intermedius	Uncompahgre	CO	G4T2/S1	
Shoshonea pulvinata	Shoshone	WY	G2G3/S2	Shoshonea pulvinata
Sisyrinchium pallidum	Medicine Bow	WY	G2?/S1	
Sullivantia hapemanii	Bighorn	WY	G2/S2	
Townsendia condensata var. anomala	Shoshone	WY	G5T1/S1	
Vaccinium membranaceum	Black Hills, Shoshone	SD, WY	G5/SU, S1	
Viola selkirkii	Black Hills	SD	G5?/SU	

Total Recommended: 70 species

Draft list total: 23

Designated sensitive: 0

Notes: Ranks given are for nominating state(s) unless otherwise indicated. The Forest Service draft list also includes 8 taxa not on the recommended list, including the following plants occurring in Colorado: *Asplenium adiantum-nigrum*, *Gaura neomexicana* var. *coloradensis*.

Quick Reference to Forest Service Lands in Colorado

- 1 Arapahoe National Forest
- 2 Roosevelt National Forest
- 3 Pawnee National Grassland

240 W. Prospect Road
Fort Collins, CO 80526-2098
(303)498- 1100

- 4 Grand Mesa-Uncompahgre N F
- 5 Gunnison National Forest

2250 Highway 50
Delta, CO 81416-8723
(303)874-7691

- 6 Pike National Forest
- 7 San Isabel National Forest
- 8 Comanche National Grassland

1920 Valley Drive
Pueblo, CO 81008
(719)545-8737

- 9 Rio Grande National Forest

1803 West Highway 160
Monte Vista, CO 81144
(719)852-5941

- 10 Routt National Forest

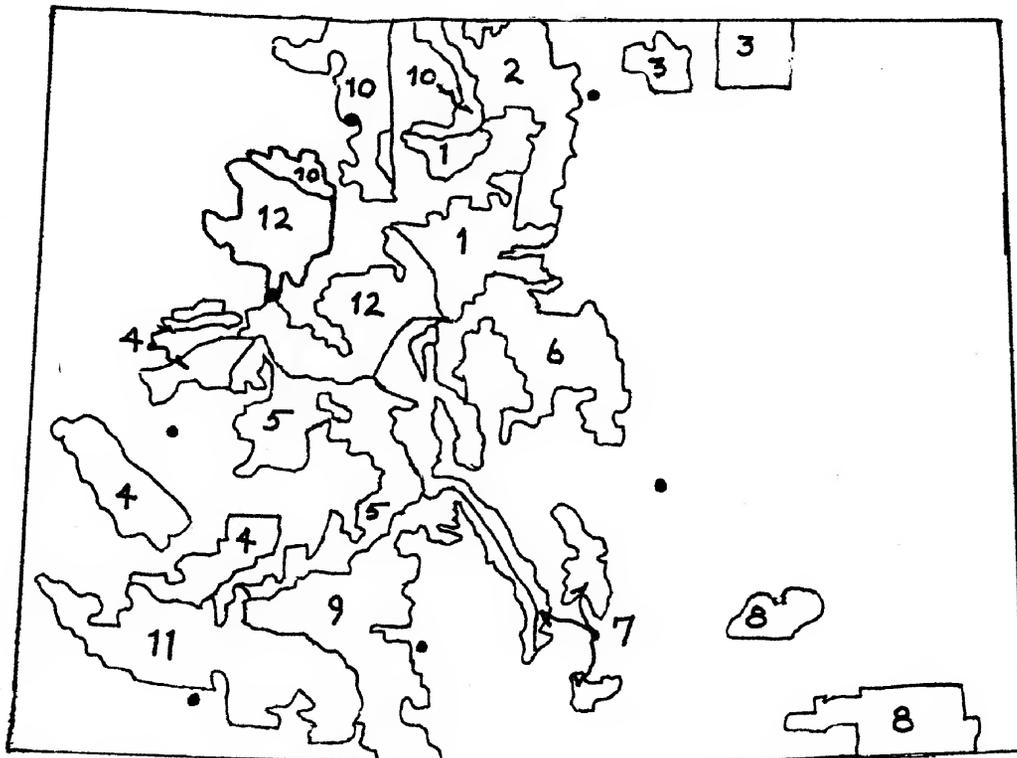
29587 West U.S. 40, Suite 20
Steamboat Springs, CO 80487
(303)879-1722

- 11 San Juan National Forest

701 Camino del Rio, RM 301
Durango, CO 81301
(303)247-4874

- 12 White River National Forest

Old Federal Bldg.
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Winter Workshops 1992

Genus *Draba* in Colorado Saturday, January 11, 1992

Leader: Dr. Robert Price

The Colorado Native Plant Society is fortunate to be able to bring Dr. Price back to Colorado to present this workshop. A Colorado native, his early work in genus *Draba* was done in Colorado. Now at Indiana University, he will present the latest research in this interesting genus in the mustard family (Brassicaceae).

A special lecture on *Draba* will be presented Friday night, January 10, at

Mitchell Hall at the Denver Botanic Gardens. Co-sponsored by the American Rock Garden Society, this will be a joint meeting beginning at 7:30 p.m.

If demand is sufficient, a second section of the workshop will be held Sunday, January 12. Workshops will be held at the University of Colorado, Boulder (special thanks to Tom Ranker).

Colorado Ferns Saturday, January 25, 1992

Leader: Peter Root

Pteridophytes are the ferns and similar plants which are called fern allies. The main emphasis of this workshop will be identification of the ferns and fern allies of Colorado. The relationships of the various groups will also be discussed. There are about 45 species of true ferns in the state, and other than bracken and

a few others, most are seldom seen. Participants will find John Mickel's *How to Know the Ferns and Fern Allies* to be helpful.

To be held at the herbarium, Denver Botanic Gardens, Denver.

Botanical Illustration III Saturday, February 22, 1992

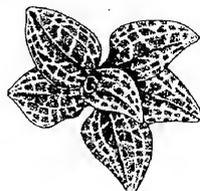
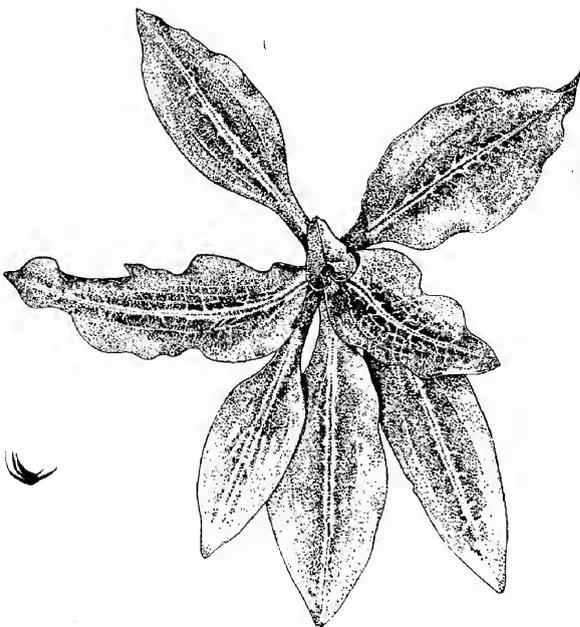
Leader: Carolyn Crawford

Our workshops on Botanical Illustration remain popular, and Carolyn Crawford has agreed to present a second advanced workshop. Dissection and drawing of flowers and flower parts will be the emphasis of this workshop.

In addition to the techniques of colored pencil and pen & ink, Carolyn will demonstrate her main medium, pastel pencil.

To be held at Foothills Nature Center, Boulder.

— more workshops, see next page



How to Know the Families Saturday, March 21, 1992

Leader : Miriam Denham

Are you bewildered by the huge variety of spring and summer wildflowers you see in Colorado? You want to be able to identify the plant, but you're not really sure how to use a botanical key? How can you tell if it's a monocot or a dicot? How can you decide whether it's in the borage family or the figwort family? Here's your chance to clear up all your

botanical problems (well, some of them, anyway). Miriam Denham will tell us how to identify the most frequently encountered plant families and explain their special characteristics and terminology.

To be held at the Foothills Nature Center, Boulder.

Genus *Astragalus* of the Front Range Saturday, April 4, 1992

Leader: Loraine Yeatts

About 25 species in genus *Astragalus* can be found within a 50-mile radius of Denver—a large number for a relatively small area. Differences between closely related species are often obscure and identification in *Astragalus* can be difficult or time-consuming. Loraine Yeatts has taken the time to research

this interesting but perplexing genus and she is going to share her knowledge with us. Specimens will be available to dissect so that participants can understand the species.

Location Foothills Nature Center, Boulder. ♣

REMINDER Denver Chapter Meetings

Jan. 22nd: Dr. Sanford, academic coordinator of the program for ecological studies at Colorado State University, will discuss "Roots that climb in the Amazon Rainforest." Classroom C.

Feb. 26th: Tina Jones, regional naturalist, will present the Natural History of Aspens. Classroom C.

All meetings this year will be held at the Denver Botanic Gardens at 7:30 p.m. unless otherwise announced. Meetings are generally held on the last Wednesday of the month. Contact Ron Abbott, 333-6151, for meeting information.

We look forward to seeing you soon!



Miners and Geologists Seek *Eutrema*

Botanists joined miners and geologists from Alma American Mining Co. to look for new locations of *Eutrema penlandii* in the Hoosier Pass/Mosquito Range area. This rare alpine plant in the Brassicaceae is proposed for listing as threatened under the Endangered Species Act. After fielding a crew and training them to recognize *Eutrema*, Alma American produced an updated status report on the species for the U.S. Fish & Wildlife Service. [An original status report was prepared in 1981 (Johnston, *et al.*) and updated in 1988 by Tamara Naumann, then with the Colorado Natural Areas Program.]

Reporting on 34 total field days of searching (about 10 of which were by biologists), Alma American (Schwendinger *et al.*, 1991) found "new populations or subpopulations" in five areas or basins from which *Eutrema penlandii* had not been reported, extended the range of known subpopulations in three previously reported areas, and relocated two populations thought to be extirpated. No new sites for the species were found in areas searched outside the Mosquito Range. Based on this effort, and a review of conditions at the sites, the Alma American report reaches the following conclusions:

Status Update:

"As a result of this study *Eutrema penlandii* have now been found in fourteen separate basins or areas in the Mosquito

Range of Park County, Colorado. Rough estimates of plant population sizes now total in excess of 16,000 plants, over three times previous estimates made in 1988. These plant populations stretch over an 18-mile arcuate belt along the crest of the Mosquito Range from Horseshoe Basin on the south to Hoosier Ridge on the north."

Rarity:

"It appears from this study that whether *Eutrema* is, in fact, a rare plant cannot be concluded until many other favorable areas in the western U.S. have been investigated as thoroughly as has been the Mosquito Range."

Threats:

"It is concluded that there are no significant threats to known populations of *Eutrema penlandii* Rollins which exist because of either 4WD vehicles or present or past mining activities.

"Existing mines are not discharging acid water into any of the known populations of *Eutrema*. In addition, it now appears that the plants prefer somewhat acidic conditions."

Listing:

"It is the primary conclusion of this study that there is no justification for the classification of *Eutrema penlandii* Rollins as a threatened species." ♣

Extended Comment Period to end in January

The Alma American report has apparently received very limited distribution despite an extensive list of interested parties, including the Colorado Native Plant Society, in the 1988 status report. As of Nov. 27th, the closing date for comments on the report and the listing of *Eutrema penlandii*, no one in the Society had officially reviewed or responded to the report. Following an outcry by interested parties, the U.S. Fish and Wildlife Service decided to extend the comment period by 45 days beginning with the date the

extension is published in the Federal Register, which will probably be mid-December.

If you have knowledge of *Eutrema penlandii* that would be valuable to the Service as they consider listing this species, please contact Lee Carlson to comment or request a copy of the Alma American report: Colorado State Supervisor, Fish & Wildlife Enhancement, U.S. Fish & Wildlife Service, 730 Simms Room 290, Golden, CO 80401. Phone: 231-5280. ♣

News on *Spiranthes* Listing

On November 19th, the Biodiversity Legal Foundation, Sierra Club Legal Defense Fund, Clear Creek Land Conservancy, Southern Utah Wilderness Alliance, and Colorado Environmental Coalition filed a 60-day notice of intent to bring suit with the U.S. Fish and Wildlife Service for failure to list *Spiranthes diluvialis* as a threatened species.

According to Jasper Carlton of the Biodiversity Legal Foundation, this orchid has languished as a candidate species for too long and has experienced "inordinate delays" in gaining federal listing and protection. The Service is in violation for failing to list *Spiranthes* within the one-year period provided by the Endangered Species Act.

Fish and Wildlife Service personnel have assured CONPS members that the listing is proceeding smoothly and will occur early in 1992, however this notice enables the groups to take legal action should the listing of *Spiranthes* be further delayed. ♣



Calendar Overview

1992 Workshops

- Jan 11** **Genus Draba in Colorado**
at Univ. of Colo., Boulder
Dr. Robert Price
- Jan 25** **Colorado Ferns**
at Denver Botanic Gardens
Peter Root
- Feb 22** **Botanical Illustration**
at Foothills Nature Ctr, Bldr.
Carolyn Crawford
- Mar 21** **Know the Families**
at Foothills Nature Center
Miriam Denham
- Apr 4** **Genus Astragalus**
at Foothills Nature Center
Loraine Yeatts

Denver Chapter Meetings

- Jan 22** **Roots that climb in the Amazon**
- Feb 26** **Aspens**



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