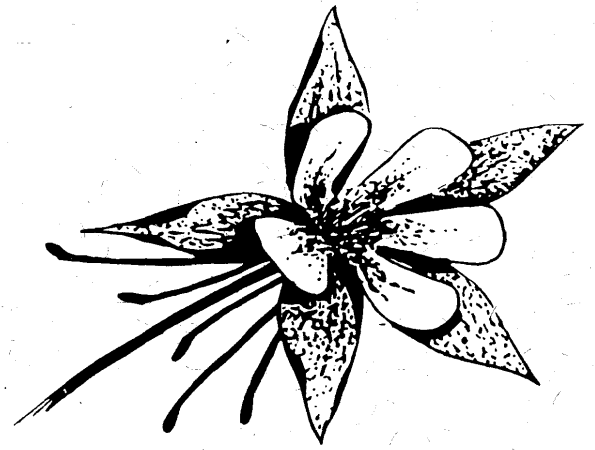


Aquilegia



Newsletter of the Colorado Native Plant Society

"... dedicated to the appreciation and conservation of the Colorado native flora"

Volume 23 Number 1

January—February 1999

The Year in Review CoNPS Board of Directors

1998 was truly a banner year for the Colorado Native Plant Society. From the extremely successful Annual Meeting through the well-attended workshops and field trips to strategic planning, the Society scaled many new peaks.

For much of the past year, CoNPS officers, chairs, and directors have struggled to identify how best to gather, direct, and expend the Society's resources in order to carry out its mission. In Spring, the Society hired Conservation Impact to meet with a randomly selected group of individuals from each chapter. Information gathered through this process coupled with the facilitated planning session held in August helped to form the foundation of the Society's strategic plan that will guide our actions and efforts during the next five years.

The goals we have developed thus far are: 1) double membership by the 2001 Annual Meeting, 2) maintain and enhance quality and quantity of core membership services, 3) positively influence the protection and management of at least ten sites that harbor rare species or exemplary natural communities by 2001, and 4) undertake at least four educational opportunities that reach 500 non-members each year. We hope that this plan will help to assure that the Society's limited resources are maximized to achieve our goals, and address the needs and desires of our members.

The level of activity and enthusiasm main-

tained by our Chapters has been truly inspirational to the Board. The following select reports submitted by several of our Chapters exemplify this.

The **Boulder Chapter** held seven meetings between October, 1997 and April, 1998, with attendance averaging 20 to 30 persons. Speakers included Bob Powell (Plants of the San Juans) and Jim Knopf (Waterwise Landscaping). We thank Mary Damm, Maria Mayer, Nancy Neupert, Lynn Riedel, and Effie Vranka for providing refreshments. In May, a picnic was held at the Foothills Nature Center, with a hike afterwards to some limestone and black shale outcrops on City Open Space at the mouth of Fourmile Canyon. The wildflower bloom was good, with about 75 plant species identified. Dr. William A. Weber participated in the hike, pointing out that the serviceberry on these outcrops is not the common East Slope *Amelanchier alnifolia*, but *A. utahensis*. Bell's twinpod

(*Physaria bellii*), endemic to these outcrops and others as far north as Fort Collins, was also in bloom. The first meeting of the 1998-1999 season was held October 8. Bob Powell presented a program on alpine plants of southeastern Colorado. On November 12, Dr. Ronald Hartman (Rocky Mountain Herbarium, University of Wyoming) presented an excellent talk describing the floristic inventories he and his graduate students have been conducting in Wyoming and Colorado. Six additional monthly meetings have been scheduled, with such speakers as Dr. Hugh Wilson, Jane Shellenberger, and Eric Lane. The Boulder chapter encourages CoNPS members and all other interested persons in the west (Golden, Wheat Ridge, Arvada) and north (Westminster, Northglenn, Thornton) portions of the metro area to attend meetings.

During 1998, the **Fort Collins Chapter** held seven monthly meetings, each with a

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guest speaker, to whom we extend another thanks: Scott Skogerboe (nurseries), Annette Miller (seeds), Bradley Johnson (wetlands), Susan Spackman (rare plants), Dr. Anthony Knight (poisonous plants), Ixchell Whitcher (*Corylus*), and Dr. Jun Wen (Araliaceae). In May, there was a field trip to examine the spring flora in the foothills near Fort Collins. Also in 1998, our Chapter sponsored a Native Plant Art Contest that was open to all members of the Society. Monetary awards were given to the three winners. We hope to sponsor a similar contest for students next year. It should be noted that many of our members also serve the Society as officers or com-

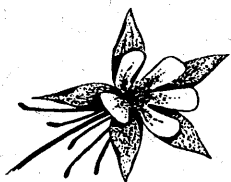
mittee chairs at the State level.

1998 was a busy year for the **Plateau Chapter**, as well. Hosting the Annual Meeting is still fresh in everyone's mind. Over 120 people attended workshops, field trips, and activities addressing sagebrush communities. In conjunction with the Meeting, a workshop and field trip on Lichen/Microbiotic Soil Crusts was led by Roger Rosentreter. Our thanks to all of the members who worked hard to make this event so successful. Additional Plateau Chapter events included two other Lichen/Microbiotic Soil Crust field trips/workshops conducted by Larry St. Clair in May. Evelyn Horn led plant identification ses-

sions and herbarium workshops to help mount Peggy Lyon's collection of plants for the BLM. Ethnobotany and paleobotany workshops were held in February. Several members led tours and helped host a grass workshop at the Crested Butte Wildflower Festival. Evelyn Horn presented programs and walks on Grand Mesa during the summer. Additionally, Evelyn Horn, Marian Fick, and Peggy Lyon, in conjunction with the Yankee Boy Preservation Committee, compiled a plant inventory of the Yankee Boy Basin near Ouray. 1998 was a great year for the Chapter, thanks to Gretchen Van Ryper's leadership. We thank Gretchen for serving

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Colorado Native Plant Society



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 Colorado's native plants. The Society sponsors field trips, workshops, and other activities through local chapters and statewide. Contact the Society, a chapter representative, or committee chair for more information.

Schedule of Membership Fees

Life	\$250
Supporting	\$50
Organization	\$30
Family or Dual	\$15
Individual	\$12
Student or Senior	\$8

Membership Renewal/Information

Please direct all membership applications, renewals, and address changes to the Membership Chairperson, Colorado Native Plant Society, P.O. Box 200, Fort Collins, CO 80522. Please direct all other inquiries regarding the Society to the Secretary at the same address.

Aquilegia

Aquilegia is published four to six times per year by the Colorado Native Plant Society. This newsletter is available to members of the Society and to others with an interest in native plants. Contact the Society for subscription information. Articles for *Aquilegia* may be used by other native plant societies or non-profit groups if fully cited to author and attributed to *Aquilegia*.

Please direct all contributions to the newsletter to:

Leo P. Bruederle
Biology, Campus Box 171
University of Colorado at Denver
P.O. Box 173364
Denver, CO 80217-3364

E-Mail: lbrueder@carbon.cudenver.edu

Short items such as unusual information about a plant, a little known botanical term, etc., are especially welcome. Previously published articles submitted for reprinting require permission. Camera-ready line art or other illustrations are also solicited.

Please include author's name and address, although anonymity may be requested. Articles submitted via e-mail or on disks (MAC preferably, or IBM) are appreciated. Please indicate word processing software and version.

Officers

President	Jeff Dawson ... 303-722-6758
Vice-President	Jill Handwerk ... 970-221-3460
Secretary	Alice Guthrie ... 303-651-3127
Treasurer	Denise Culver ... 970-225-1930

Board of Directors

Bill Jennings (99)	Louisville ... 303-666-8348
Andy Kratz (99)	Lakewood ... 303-914-8291
Eric Lane (99)	Lakewood ... 303-239-4182
Paula Lehr (99)	Gunnison ... 970-641-0671
Don Parker (99)	Golden ... 303-279-4549
Gay Austin (00)	Gunnison ... 970-641-6264
Leo Bruederle (00)	Denver ... 303-556-3419
Jeff Dawson (00)	Denver ... 303-722-6758
Christine Leahy (00)	Golden ... 303-425-1227
Peggy Lyon (00)	Ridgway ... 970-626-3195
Susan Spackman (00)	Loveland ... 970-667-2865

Chapter Presidents

Boulder	Carolyn Crawford ... 303-666-8348
Metro-Denver	Denise Larson ... 303-733-4338
Fort Collins	Don Hazlett ... 970-834-1493
Yamparika	Reed Kelley ... 970-878-4666
Plateau	Lori Brummer ... 970-641-3561
.....	and Evelyn Horn ... 970-533-7233
Southwest	Sandy Friedley ... 970-884-9245

Committees

Communications	Leo P. Bruederle 303-556-3419
.....	and Jeff Dawson ... 303-722-6758
Conservation	Bob Clarke ... 970-242-6067
Education	Rob Reinsvold ... 970-351-2716
.....	and Joyce Gellhorn ... 303-442-8123
Field Trips	Rick Brune ... 303-238-5078
Field Studies	Loraine Yeatts ... 303-279-3427
Hort/Restoration	Lisa Tasker ... 303-447-9431
Legislative Affairs	VACANT
Membership	Myrna Steinkamp
.....	and Sue Martin ... 970-226-3371
Publications	Rick Brune ... 303-238-5078
.....	and Velma Richards ... 303-794-5432
Publicity	VACANT
Rare Plant	Eleanor
Monograph	Von Bargaen ... 303-756-1400
Workshops	Bill Jennings ... 303-666-8348

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as Chapter President the past five years. Evelyn Horn and Lori Brummer have agreed to share the position as "Co-Chairmen" — neither likes the title "Co-President," as it sounds like too much responsibility. Evelyn and Lori would like to acknowledge the contributions of all Chapter members in keeping the group going, especially those willing to arrange workshops and field trips. Without their support, this job would be overwhelming, even for two people.

CoNPS committees have also been very active, advancing the mission of the Society. The following select committee reports reflect their activity.

The **Workshop Committee** completed its 14th season in May, conducting 19 workshop classroom sessions over the winter and spring — our third highest annual total. Only 1992-93 (21 sessions) and 1996-97 (22 sessions) had more workshop sessions. Eight separate topics were covered. Our workshop leaders did a great job, and we thank them for their hard work in preparation for and teaching of up to four sessions: Ken Heil, San Juan College (Cactaceae of Colorado); Bill Jennings, Carolyn Crawford, Maria Mayer, Myrna Steinkamp, Sue Martin (Small Plant Families of Colorado); Dr. Steve O'Kane, University of Northern Iowa (Brassicaceae: *Lesquerella* and *Physaria*); Dina Clark, University of Colorado (Dalea and related genera); Bill Jennings, Bob Nold, Susan Spackman (Colorado *Penstemon*); Dr. Janet Wingate, Denver Botanic Gardens (Early Spring Wildflowers); Dr. George Beck, Colorado State University (Weeds); and Carolyn Crawford, David Anderson, Caron Rifici (Milkweeds of Colorado, emphasizing *Asclepias uncialis* at Piñon Canyon). Handouts for most workshops are available at a small charge (copying and mailing) by calling Bill Jennings at 303-666-8348. The 1998-1999 season is already off to a great start with over 100 individual CoNPS members registering for one or more workshops. Six workshop topics are scheduled. Two sold-out sessions of the Helleboraceae workshop were held November 7-8. All additional scheduled workshops are full, but we are actively negotiating with workshop leaders to teach more sessions to meet

demand. Thanks to the enthusiastic support of our membership, the educational programs presented by our Workshop Committee continue to be one of the Society's most popular activities.

The **Field Trip Committee** reports that the 1998 field trip season was a great success, with 19 field trips sponsored by East and West Slope members. Approximately 290 people participated, not including the field trips sponsored as part of the Annual Meeting. Field trips covered Colorado from the prairies in the east, through the intermountain plateaus, to the alpine areas of Yankee Boy Basin near Telluride. Several events were working field trips. For example, Yankee Boy Basin was inventoried by West Slope participants, while sites in the area of the Buffalo Creek fire in Pike National Forest were inventoried by East Slope members. If you attended a field trip, how about sharing your experience with those members who couldn't attend, by reporting your experience in *Aquilegia*. Reports don't need to be highly technical, just interesting. Remember Chris Pague jumping into a pond and emerging holding a big snapping turtle by the tail!



Leuocrinum montanum
Artist: Sue Galatowitsch

The **Field Studies Committee** reports that during the past field season a dedicated group, including some CoNPS members, has been actively documenting the plants of Golden Gate Canyon State Park (GG) by collecting, identifying, and making specimens for the GG Park herbarium and the Denver Botanic Gardens' Kathryn Kalmbach Herbarium. This is a continuing study authorized by CoNPS and Golden Gate State Park. The most significant find this summer was a low elevation popula-

tion of *Aster alpinus* var. *vierhapperi*, known previously in Colorado from a few sites near James Peak. Plants observed on 1998 field trips are being added to the field trip plant list database on an ongoing basis by Loraine Yeatts. An updated list of plant lists will be available for publication in *Aquilegia* by early spring.

Thanks to the support of the many CoNPS members attending the 1998 Annual Meeting, the **Publications Committee** reports that book sales were again a resounding success. The secure setting provided for the sales in a room separate from the Meeting was greatly appreciated. Book sales at the meeting totaled \$4011.70, of which about \$346 was from the sale of used books. For comparison, sales at past Annual Meetings have been: \$3537.74 in 1997, \$2356.30 plus auctioned items totaling \$498.50 in 1996, \$1993.50 in 1995, and \$4237.69 in 1994. Best sellers for 1998 ranked by number of books sold were: *Lichen Primer* (Weber) with 24 copies sold, *Wild About Wildflowers* (Warren) with 18 copies sold, and *Illustrated Keys to the Grasses of Colorado* (Wingate) with 15 copies sold. Best sellers ranked by dollar amount were: \$360 from *Lichen Primer* (Weber), \$288 from *Wild About Wildflowers* (Warren), and \$276 from *Intermountain Flora Volume 3A*. Co-Chairs Velma Richards and Rick Brune wish to express their appreciation to all of the people who helped with book sales, especially Mary Edwards, Pat Murphy, Eleanor Von Bargen, Jan Wingate, and Dick and Loraine Yeatts.

In 1998, the **Communications Committee** witnessed the development of a WWW site for the Society, as well as the return to schedule of *Aquilegia* publication. Members Sara Hill and Sandy Smith are to be credited for developing a web page which went online in November at <http://carbon.cudenver.edu/~shill/conps.html>. Thanks, complements, and suggestions should be submitted to webmanager Sara. The editors also wish to thank Sandy Smith and Sally White, as well as the other members of this Committee for their active role revitalizing *Aquilegia* which, in 1998, was published five times.

Clearly, 1998 was an exciting year for the Colorado Native Plant Society!

Have you been receiving *Aquilegia*?

Communications and Membership Committees

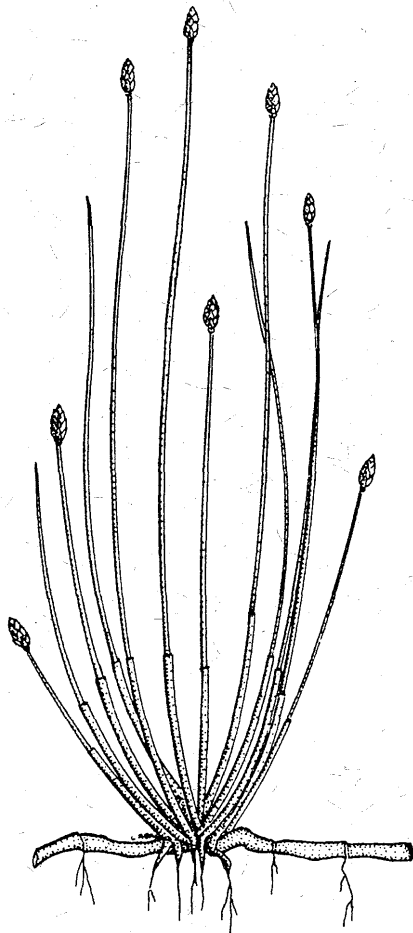
It has been brought to our attention that some members have not been receiving their issues of *Aquilegia*. It is not uncommon to have inquiries about missed newsletters. Almost always, in such cases, the problem is related to the post office.

Labels for the newsletter are generated from the master membership database, which is carefully maintained by the Membership Committee. The number of labels is then matched to the expected number based upon the aforementioned database. There is a single mailing of newsletters, with two or more individuals overseeing this process. All newsletters are subsequently hand-delivered to the Denver Post Office by the Editor. Despite these efforts, some newsletters invariably do not meet their intended destination.

If it comes to your attention or you suspect that you have not received your newsletter — and please allow two weeks for bulk mailing — contact the:

- 1) **Communications Committee** (Leo Bruederle at 303-556-3419), who will immediately replace your issue.
- 2) **Membership Committee** (Myrna Steinkamp and Sue Martin at 970-226-3371), who will verify up-to-date payment of dues, as well as your correct mailing address.
- 3) **Post Office**, who will investigate delivery problems, as well as handle address changes.

If all else fails, you may want to consider paying first class postage, which is optional and not included in regular Society dues.



Eleocharis palustris
Artist: Kris Miering

A Forb is a Forb is a Forb...

Rick Brune

The word "forb" is sometimes reported to be derived from a contraction of the words "forest" and "herb." However, the *Glossary of Botanical Terms Commonly Used in Range Research* (USDA Misc. Publ. 110, rev. 1950, issued 1931) reported that "forb" is derived from the Greek "phorbe," meaning "forage" and "a non-grasslike herb."

Webster's New World Dictionary (3rd Ed., 1988) also reported forb as derived from the Greek "phorbe," meaning fodder, and fodder derived from the Greek "pherbein." Forb is defined as "a broad-leaved herbaceous plants, as distinguished from the grasses, sedges, shrubs, and trees."



Oxyria digyna
Artist: Janet Wingate

Colorado Botanists: Joseph Dalton Hooker

Hilary Davis

Joseph Hooker (1817-1911) served as director of the Royal Botanic Gardens at Kew from 1865-1885 and was President of the Royal Society of London. His publications included *Flora Tasmaniae*, published in 1860, after his visit to Tasmania where Hooker worked as surgeon and botanist with the expedition of James Ross. From 1862 to 1883, Hooker wrote *Genera Plantarum* (3 vols.) with George Bentham. These volumes were a landmark for understanding genera and classification systems. Hooker and Bentham made thorough descriptions of plant families and genera based on original observations. They treated 97,000 species and 200 families, and adopted a classification similar to that of de Candolle.

Hooker came to America in 1877 to explore the flora of the Colorado Rocky Mountains and the Sierra Nevada Mountains of California. He traveled to Pueblo, Colorado with a group of colleagues including Asa Gray. Later, Hooker traveled to La Veta Pass, camping with a group of naturalists and explorers. The group later traveled to the Sangre de Cristo range, where Hooker and Gray conducted a plant survey and wrote a manuscript describing their experience, *The Vegetation of the Rocky Mountain Region and a comparison with that of other parts of the World* (1880).

Hooker was highly respected by his colleagues and extolled the work of his American contemporaries, such as Charles Parry, whom he dubbed the king of Colorado botany. Hooker was also a close friend and supporter of Charles Darwin. When Hooker realized that Wallace was about to present publicly his findings on evolution, which were similar to Darwin's, he helped arrange for the shared presentation of Darwin's and Wallace's papers to the Linnaean Society of London in 1858.

From the CoNPS Board of Directors

October 31, 1998. The Board met at the Meadows Branch Library in Boulder. Sara Hill (Communication) gave an update on the CoNPS web site, which will be on-line involving a server at CU-Denver. The newsletter will be added later, with a delay in posting so that members receive their hard copy first. The Board decided to add summary reports from the Chapters and Board to the next newsletter, and possibly book reviews as an on-going feature. The topic of selling advertising in *Aquilegia* was also discussed, but more information on rates is needed before a decision is made.

The 1999 Annual Meeting, for which Carolyn Crawford is forming an *ad hoc* planning committee, will be held September 25-26 in the Boulder area. The general topic of "Ethnobotany" and related subcategories were discussed. Considerable local interest is anticipated, so it will be a good opportunity to advance education and increase membership. The year 2000 Meeting may be held on the Western Slope, possibly in Grand Junction, Montrose or Glenwood Springs. Peggy Lyon will contact Western Slope chapters to start planning. Ideas for topics include wetlands, the Roan Plateau or Mancos Shale ecosystems, barren land ecology, or the broader topic of sandstone or Colorado Plateau plants. The Fort Collins Chapter volunteered to host the Meeting to be held in 2001, since it will be the 25th anniversary of the Society.

Treasurer Denise Culver distributed a Profit & Loss Statement for Jan-Oct, 1998. To date, expenses total \$24,540 and income \$30,857. The General Fund has about \$10,000, while the Rare Plant Book fund has \$9,229. Currently there is \$22,408 in the Marr Fund, and approximately \$1000 in interest available to support research. Culver explained that the John Marr fund started with a principle of \$20,000, and that donations are added to the principle, as is any interest that is not distributed in a year.

The Board appointed an *ad hoc* group comprising Eric Lane, Rob Reinsvold, Kathy Carsey, and Denise Culver to recommend funding levels, selection criteria, and procedures for soliciting Marr Fund proposals. The Board decided that, for this year, proposals will be solicited via the webpage and *Aquilegia*, and are due January 15, 1999. They will be reviewed at the subsequent January 30 meeting.

The Workshop Committee reported that all workshops are full. The Conservation Committee reported from several GOCO public meetings and will report back on ideas for working with GOCO. The Education Committee is soliciting volunteers for a Speakers Bureau. The Membership Committee has added an option for "gift membership" to the renewal form to be mailed in early December. The Horticulture/Restoration Committee is working on a policy concerning sale of plant materials.

December 12, 1998. The Board of the Colorado Native Plant Society met at the Foothills Nature Center in Boulder. Following a brief discussion of programs, chapter presidents and committee chairs were asked to submit 1999 budget proposals for consideration at the January 30 meeting. This will be an opportunity for the

Board, chapters, and committees to discuss projects for the upcoming year, the resources needed to accomplish our goals, and a means by which to increase the John Marr Fund.

Leo Bruederle (Communication) requested that the Board approve the purchase of desktop publishing software for newsletter production. A related discussion ensued regarding advertising in *Aquilegia*. An *ad hoc* sub-committee consisting of Jeff Dawson, Denise Larsen and Leo Bruederle will meet to discuss rate structure, advertising guidelines, and sales, from which a cost analysis will be presented to the Board. The Board approved Sara Hill as co-editor for the newly constructed website. The Board also authorized Rick Brune to pursue a proposal from CRC Press regarding a link to their website and commission on resultant book sales.

The Board approved revising the conservation goal agreed upon as part of strategic planning to read "By Jan 1, 2001, undertake 10 site specific projects that promote the protection and management of Colorado's native flora, with an emphasis on exemplary plant communities." The Committee will be contacting chapter presidents to begin identifying conservation sites for each chapter. Other work items include 1) developing standard language for commenting on EIS's or reviewing projects that identify issues of importance to CoNPS; and 2) contacting GOCO to see how the Society can be more involved with GOCO projects.

It was reported that the Education Committee is updating the Rocky Horticultural slide show and working with Susan Spackman (Colorado Natural Heritage Program) to develop a rare plant slide show.

Bill Jennings, Chair of the Workshop Committee, reported an increased interest in workshops in 1998-99 when compared to previous years. About 125 people, or one-fifth of the membership, registered for at least one workshop. Extra sessions have been scheduled for several of the workshops.

The Board reviewed guidelines presented by Eric Lane for procedures regarding funding from the John W. Marr Fund. A format for proposal requests was reviewed, updated, and distributed for the current year. Proposals will be reviewed at the January 30, 1999 Board Meeting. The *ad hoc* committee chaired by Lane will develop criteria for reviewing proposals, although the Board must still decide upon amounts available to fund proposals on an annual basis. The revised guidelines will be presented at the January meeting.

The CoNPS Board will meet on the following dates:

January 30	Meadows Branch Library, Boulder
March 13	Meadows Branch Library, Boulder
April 10	location TBA
May 22	Grand Junction

Call Jeff Dawson at (303) 722-6758 for information, or if you have any business or announcements to present to the Board at the aforementioned meetings.

Lakewood's Prairie Dog Problems on City Open Space Lands

Sally White

When complaints from neighbors alerted the City of Lakewood to a possible prairie dog problem, a consultant was called to evaluate it. The consultant assured them that they did indeed have a problem, estimating 84 acres of prairie dogs in the Bear Creek Greenbelt. The solution: poisoning the prairie dogs at a cost of \$7,000. Of seven existing prairie dog colonies, elimination of five was originally proposed. After local citizens objected, the project was scaled back to the two largest colonies, sparing half the colony area. On inspection by concerned citizens, the total area affected by prairie dogs turned out to be only 15 acres.

The Bear Creek Greenbelt includes 560 acres of undeveloped open space along the Creek. It was purchased with about one-third county open space funds, the rest with Lakewood attributable shares and other sources. As condos and other human homes have burgeoned on the lower-lying areas along the corridor, parts of the greenbelt have become the last refuge of prairie dogs that once had a wider, less crowded distribution. Now they are being blamed for spreading the weeds that settlers brought from Europe. Bill Jewell, Manager of Regional Parks and Golf in Lakewood's Department of Community Resources, claims that prairie dogs cause weeds. He hasn't cited any scientific support for his position.

A new citizens' organization, Prairie Dog Advocates, sprang up to suggest alternative solutions to the problem. They proposed putting up more raptor perches to help keep the prairie dog populations in check. They suggested other less lethal alternatives. Some residents in nearby neighborhoods spoke in favor of sharing their habitat with prairie dogs, of leaving the prairie dogs alone.

A court case was filed claiming a violation of State law because of the incidental kill of non-target species. Although the prairie dog is technically a rodent, and therefore exempt from some of the protections accorded other "wildlife," the species that share its burrows are not. Therefore, the provision that it is "unlawful to take

wildlife with any leghold trap, ... or by poison or snare in the state of Colorado" (CRS Section 33-6-203) does apply to, and protects, such species.

On November 25, District Court Judge Leland P. Anderson issued a temporary injunction against Lakewood's proposed eradication, pending a trial on the merits. The court said plaintiffs, Prairie Dog Advocates, can probably succeed on the merits of their claim. The court further said the plaintiffs can demonstrate "that the city's issuance of its [extermination] permit was based upon a record so devoid of significant and meaningful data that the issuance of the permit can only be deemed arbitrary and capricious." Indeed, the plaintiffs showed, apparently to the court's satisfaction, that the permit was issued "based on a record replete with speculation, inconsistency, supposition, and surmise." On balance, Judge Anderson reported that the "City has a recognizable interest in seeking ecological balance in the green-belt areas... when such interest is pursued in accordance with established law and is based upon the rational exercise of its duties."

Lakewood has requested an emergency writ in hopes that the Colorado Supreme Court will review the case. Until that decision is made, "everything is in limbo," reported Jennifer Melton, attorney for the prairie dogs and their advocates. If the Supreme Court refuses, the trial on the merits can be scheduled. Stay tuned...



Thamosma texana
Artist: Carolyn Crawford

CoNPS Donors

In 1998, many members made donations, either to the John Marr Fund or to the Society's General Fund to be used where most needed in support of our many other activities. These contributions are very important to the success of our special projects. Thanks to the following donors, as well as to 14 others who wished to remain anonymous: Laura Backus, Caroline M. Ball, Ted N. Beegle, Linda and Richard Beidleman, Doris Bennett, Dr. Sara G. Bishop, Rochelle Blumenstein, Bruce and Cathy Bosley, Linda Bourgeois, Charlotte Briber, Cheryl and Joseph Brooks, Leo P. Bruederle, Joe and Lori Brummer, Duncan and Elinor Burchard, Carol and Dave Butler, Judy Capra, Cindy Carlson, Ann and John Cooper, Bonnie L. Dehart, Robert Dellapina, Stanley Dempsey, Dr. Miriam Denham, Hobart N. Dixon, Adele Douglas, Anne Ophelia Dowden, Bob Enever, Dich Fisher, Sandra Starr Friedley, Barbara Jean Gard, Mark and Nancy Gershman, Solange G. Gignac, Martha Grewal, Betty Hall, Susan K. Harris, Peter and Jan Henson, Dr. Dexter Hess, Elaine Hill, Tim Hogan, Richard and Elizabeth Hoops, Janis Y. Huggins, Corey Sue Hutchinson, Allison Jones, Sue Ann Kamal, Gabrielle Katz, Anita and Charles King, Tim and Gwen Kittel, Gary Klearman, Naomi Kuhlman, Jeff Lakey, Denise E. Larson, Paula J. Lehr, Dianne and Alan Lembitz, Peggy Lyon, Mark E. Meremonte, Annette and Paul Miller, Merle M. Moore, Bruce Moorman, Anna M. Naesser, Tamara S. Naumann, Betsy Neely, Katharine Noll, Larry A. Nygaard, Neal Osborn, Christopher and Katie Pague, Randal Pair, Donald Parker, Barbara Perin, Vicki L. Ray, Marion S. Reid, Marjorie Rhoades, Angela Lynn Riedel, Janet and David Robertson, Andrea Robinsong, Peter Root, Mary Lou Rottman, Joan L. Sapp, Steven W. Schouten, Patrick B. Shafroth, Moras and Erne Shubert, J. Michael Spoon, Dale and Grace Sutherland, Lydia Toll, James R. Trammell Jr., Robert and Mary Udall, Jeffrey Uhlich, Chuck and Nancy Warner, Olin L. Webb, Gayle Weinstein, Jun Wen, Jeanne and Steve Wenger, Starla L. White, Sharon Scott Wieser, Dr. Beatrice E. Willard, and Lori and Roland Westl

ANNOUNCEMENTS AND NEWS

Summer Seasonal Employment Opportunities

**Elizabeth Anderson, Regional Fire Effects Specialist
United States Department of the Interior**

The Intermountain Region of the National Park Service is looking for students who are interested in seasonal summer employment on fire effects monitoring crews. These crews are involved in long-term vegetation monitoring to determine the effects of prescribed fire. Monitoring results are used to evaluate the outcome of prescribed burns and make necessary adjustments to future fire prescriptions. The jobs require comprehension of plant taxonomy, a working knowledge of plant keys, and an understanding of statistics and natural resource sampling techniques. Each park issues the vacancy announcements and time frames will vary. Please contact the park of interest for further information. Vacancy Announcements are also posted at WWW.USAJOBS.OPM.GOV/ under the Biological Technician series 404.

Following is a list of National Parks having vacancies, along with contacts: Bandelier National Monument (NM), Laura Trader, (505) 672-3861 ext. 559; Big Bend National Park (TX), John Morlock, (915) 477-2397; Big Thicket National Preserve (TX), Dave McHugh, (409) 283-5824; Dinosaur National Monument (CO), Steve Petersburg, (970) 374-3009; Glacier National Park (MT), Caroline Lansing, (406) 888-7811; Grand Canyon National Park (AZ), Tonja Opperman, (520) 638-7921; Grand Teton National Park (WY), Mack McFarland, (307) 739-3313; Rocky Mountain National Park (CO), MaryKay Watry, (970) 586-1285; Saguaro National Park (AZ), Kathy Schon, (520) 296-7071; Yellowstone National Park (WY), Phil Perkins, (307) 344-2180; and Zion National Park (UT), Henry Bastian, (435) 772-0193.

Great Plains Grasslands at the Millennium

The 1999 Annual Meeting of the Society for Range Management, entitled "Great Plains Grasslands at the Millennium," will be held February 24-25, 1999 in Omaha, Nebraska. Symposium topics include: Grassland Biodiversity, Invasive Species, Current Landscape of Biodiversity, Conservation Strategies, and Fragmentation, among others. This meeting is sponsored by: U.S. Forest Service, Ecological Society of America, Society for Range Management, Center for Grassland Studies, University of Nebraska, and the Center for Great Plains Studies at the University.

For more information, please contact: Lori Hiding, Program Manager, Ecological Society of America at (202) 833-8748, lori@esa.org, or <http://esa.sdsc.edu/graslands.htm>; or Society for Range Management at (303) 355-7070, srmden@ix.netcom.com, or <http://srm.org/meetings>.



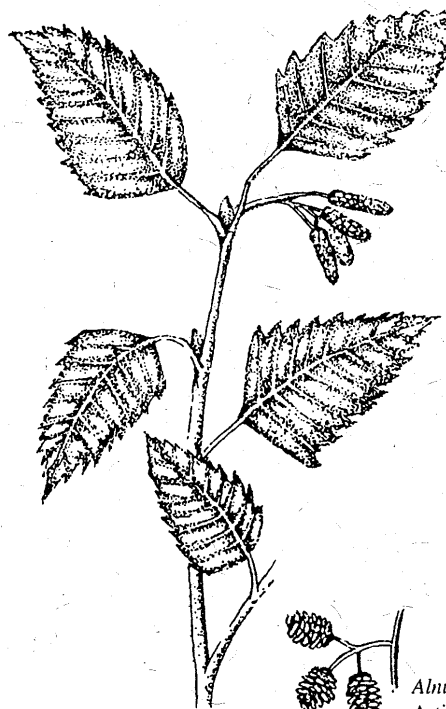
Colorado Floras Out-of-print

Colorado Flora: Eastern Slope and *Colorado Flora: Western Slope*, both by Wm.A. Weber, are out of print. The publisher

apparently has no plans to reprint these in the immediate future. However, you may occasionally locate a copy in a bookstore, if you don't already have one. The Publications Committee has a very limited number of new and used previous editions, mostly *Colorado Flora: Western Slope*. If anyone has unused copies of Weber's floras, past or current, consider donating them to the Society. All book contributions are tax deductible. Contact Rick Brune at (303) 238-5078 or Velma Richards at (303) 794-5432 for information.

1999 Dues Reminder

Please check your mailing label. If it does not say "Paid Thru 1999" (or later), your dues are now due. Remember, CoNPS dues cover a calendar year. If you are not paid through 1999, please send your renewal to: Colorado Native Plant Society, P.O. Box 200, Fort Collins, CO 80522. This could be your last newsletter, renew today!



Abus tenuifolia
Artist: Gary Bentrup

AQUILEGIA Deadline Approaches

Please submit all contributions for Vol. 23 No. 2 of *Aquilegia* on or prior to February 12, 1999. Short items, such as unusual information about a plant or a little known botanical term, are especially welcome. Please note that previously published articles submitted for reprinting in *Aquilegia* require permission from the editor of original publication. Camera-ready line art or other illustrations are also solicited.

Please include author's name and address, although anonymity may be requested. Articles submitted via e-mail or on disks (MAC preferably, or IBM) are very much appreciated. Please indicate word processing software and version.

CHAPTER NEWS

Boulder Chapter

Monthly meetings are held through May on the second Thursday of each month at the Foothills Nature Center located in Boulder on North Broadway opposite its intersection with Sumac. For more information, contact Carolyn Crawford or Bill Jennings at (303) 665-6903 or (303) 666-8348.

February 11, 7:30 PM

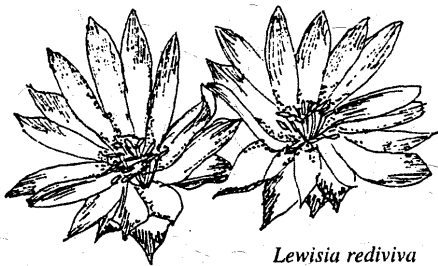
Military Impacts and Mitigation at Piñon Canyon

David Anderson (U.S. Army Land Condition Trend Analysis, Fort Carson) will talk about the military impacts and mitigation of those impacts at the Army's Piñon Canyon Tank Maneuver site in Las Animas County. Significant populations of dwarf milkweed (*Asclepias uncialis*), and other rare and interesting plants occur at both Piñon Canyon and Fort Carson.

March 11, 7:30 PM

New Trends and Topics in Rocky Mountain Gardening

Jane Shellenberger, editor and publisher of *Colorado Gardener*, will talk about new plants for landscaping in Colorado, with emphasis on low-water-usage plants and recently developed gardening techniques.



Lewisia rediviva
Artist: Nicola Ripley

Fort Collins Chapter

Monthly meetings convene in the conference room at the USDA National Seed Storage Laboratory. For additional information call Don Hazlett at (970) 834-1493.

February 2, 7:00 PM

Surprise Guest Speaker!

March 2, 7:00 PM

Rare Plants of Australia Dr. Darren Touchell

Metro-Denver Chapter

Excepting the February 23 meeting, monthly meetings are held in the Morrison Center at the Denver Botanic Garden. For additional information, contact Denise Larson at (303) 733-4338.

January 26, 7:30 PM

Highlands of Southeastern Colorado

Bob Powell will discuss the ecology and plants of the Greenhorn Mountain range including the alpine areas of Pueblo and Huerfano Counties, and Fisher Peak Mesa southeast of Trinidad in Las Animas County. Bob will briefly discuss the plants and ecology of the northeast side of the Sangres de Cristos in Fremont County.

February 23, 7:30 PM

Denver Natural Areas Program

The City of Denver has recently started a Natural Areas Program to preserve and restore natural areas in Metro Denver including the South Platte river corridor, Cherry Creek corridor, and isolated pockets of sandhills and shortgrass prairie. **Gayle Weinstein** (Naturalist) will talk about the Program and discuss some of the planned natural areas. NOTE: The location for this meeting is DBG Classroom C.

March 23, 7:30 PM

Colorado Natural Areas Program

Kathy Carsey, a research scientist with the Colorado Natural Areas Program for Colorado State Parks, will discuss this Program, in general, and describe some of the Natural areas around Colorado.

Plateau Chapter

For more information, contact Co-Presidents Lori Brummer at (970) 641-3561 or Evelyn Horn at (970) 835-8391.

January 24, 1:00 PM

The Uncompahgre Basin Survey

This meeting will begin with a business discussion, after which **Peggy Lyon** will present a slide show summarizing the results of the Uncompahgre Basin survey (2:00 PM). This meeting will be held in the conference room at the USFS in Delta. For

information, contact **Peggy Lyon** at (970) 626-3195.

February 5, 1:00 - 4:00 PM

Herbarium Session

Last winter, **Evelyn Horn** and a group of volunteers met to mount **Peggy Lyon's** collection. While accomplishing a good deal, **Jim Ferguson** has informed us that the BLM has acquired another equally large collection that is awaiting mounting. All interested individuals are welcome to meet at the BLM in Montrose. For information, contact **Evelyn Horn** at (970) 835-8391.

February 19, 4:00 PM

Fen Wetlands on the Western Slope

Dr. David Cooper will explain the difference between bogs and fens, why there are no bogs in Colorado, threats to fens, agency policies concerning fens, and what constitutes unique fens on the Western Slope. Join WSC faculty and students for this event, to be preceded by a social at 3:30 PM. The workshop will be held at 227 Hurst Hall at Western State College in Gunison. Contact **Dr. Robin Bingham** at (970) 943-3355 if you plan to attend.

February 20, 10:30 AM

Fen Wetlands on the Western Slope

Dr. David Cooper will repeat and expand upon his presentation of February 19 at the Forest Service in Delta. For information, contact **Gay Austin** at (970) 641-6264.

March 27, 9:30 AM

Rabbit Valley Field Trip

Robert Clarke will lead this field trip to Rabbit Valley, which will commence at McDonald's in Fruita (I-70 Exit 19). For information, contact **Bob Clarke** at (970) 242-6067 or **Betty Hall** at (970) 241-5677.

Southwest Chapter

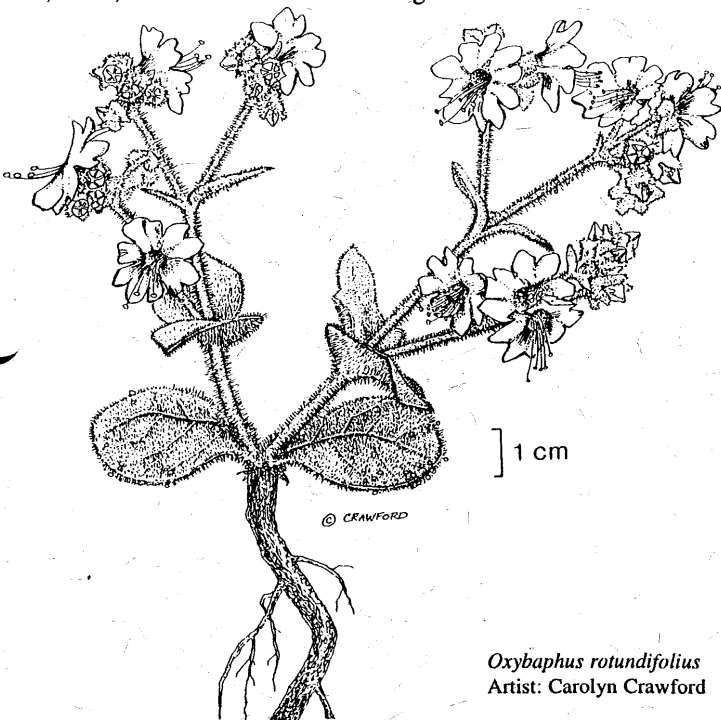
Please contact **Sandy Friedley** at (970) 884-9245 for Chapter news and activities.

Yamparika Chapter

Please contact **Reed Kelley** at (970) 878-4666 for Chapter news and activities.

1999 CoNPS WORKSHOPS

Demand for workshops has been very high this season. Extra sessions have been scheduled, but all are currently full. If demand continues to be high, we will approach our workshop leaders about even more sessions. Persons wishing to get on the wait list for any workshop or potential extra sessions are encouraged to call Bill Jennings at 303-665-6903 or 303-666-8348, or write P.O. Box 952, Louisville, CO 80027. In addition, the Poaceae workshop originally scheduled for December 5-6, 1998, has been rescheduled for January 23-24, with an additional session on February 20. Refer to the following schedule for all currently scheduled workshop sessions. All workshops are one-day classes, 9 AM to 3 PM, at the location given. (Note: Persons wishing a copy of the handouts for the Helleboraceae Workshop, held November 7-8, 1998, should contact Bill Jennings.



Oxybaphus rotundifolius
Artist: Carolyn Crawford

COLORADO'S MISSING FLORA

Leader: Susan Spackman

First session: Saturday, February 13, 1999

Second session: Sunday, February 14, 1999

Third session: Sunday, February 21, 1999

Location: Foothills Nature Center, Boulder

The title refers to those species that are thought to be extinct or extirpated from Colorado, or have been collected once or twice and never seen again within the State. This workshop will focus on making these species better known to botanists in hope that these plants may someday be relocated within Colorado. Susan and her associates at the Colorado Natural Heritage Program will make available for us an abstract of each of these species, along with herbarium specimens of the species, if available. Information on many of these species is presented in the *Colorado Rare Plant Field Guide*, published by the Heritage Program or is presented in *Rare Plants of Colorado*, published by the Native Plant Society.

POLEMONIACEAE OF COLORADO

Leader: Dr. J. Mark Porter

First session: Saturday March 6, 1999

Second session: Sunday March 7, 1999

Location: University of Colorado, Boulder

Our second out-of-state workshop workshop leader is Dr. J. Mark Porter (Rancho Santa Ana Botanic Gardens. He has been actively involved in the development of the new San Juan Basin Flora, as well as study of the Polemoniaceae of the Four Corners area. Participants on the field trip to the Four Corners area may remember Mark as one of the co-leaders. He has some exciting new ideas about this family and will bring us up to date on recent research into this complex and confusing family. When is a *Gilia* not a *Gilia*? When it's an *Alicella*, a new genus proposed by Dr. Porter.

BOTANICAL ILLUSTRATION: FIELD SKETCHING

Leader: Carolyn Crawford

First session: Saturday, April 17, 1999

Second session: Sunday, April 18, 1999

Third session: Saturday, May 1, 1999

Fourth session: Sunday, May 2, 1999

Location: Foothills Nature Center, Boulder

THE POACEAE: HOW TO KNOW THE TRIBES

Leader: Dr. David Buckner

First session: Saturday, January 23, 1999

Second session: Sunday, January 24, 1999

Location: National Inst. for Standards & Technology, Boulder

Third session: Saturday, February 20, 1999

Boulder Location: Foothills Nature Center, Boulder

In this workshop, Dave will discuss the structure of various natural groups within the grass family and how they can be identified. The grass family is so large that, without some understanding of the tribes within the family, identification of an individual grass becomes a formidable challenge. Keys to the tribes and genera will be available as handouts. Specimens of many grasses will be available for study. Every Colorado botanist should have a working knowledge of the grass family. Come and refine your grass identification skills.

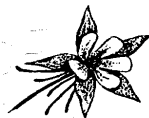
Well-known botanical artist Carolyn Crawford will present the techniques she uses for on-the-spot botanical illustration. Topics to be covered include the use of colored pencils, a good dry medium for use in the field. There will be ample plant and flower material available for participants to work with. There is no better way to really see and know a flower than to draw its parts. Even if you never intend to illustrate commercially, drawing for enjoyment or for your own records is a good aid in flower identification.

CALENDAR

CHAPTER MEETINGS AND EVENTS

- Boulder Chapter**
Feb 11 Military Impacts and Mitigation at Piñon Canyon
March 11 Trends and Topics in Rocky Mountain Gardening
- Fort Collins Chapter**
Feb 2 Surprise Guest Speaker!
March 2 Rare Plants of Australia
- Plateau Chapter**
Jan 24 The Uncompahgre Basin Survey
Feb 5 Herbarium Session
Feb 19, 20 Fen Wetlands on the Western Slope
March 27 Rabbit Valley Field Trip
- Metro-Denver Chapter**
Jan 26 Highlands of Southeastern Colorado
Feb 23 Denver Natural Areas Program
March 23 Colorado Natural Areas Program

NOTE: Mailed on or about 20 January 1999



Colorado Native Plant Society
P.O. Box 200
Fort Collins, Colorado 80522

SOCIETY EVENTS

- Jan 16, 17 **Chenopodiaceae: The Goosefoot Family**
First Session: Saturday, January 16
Second Session: Sunday, January 17
- Jan 23, 24 **The Poaceae: How to know the Tribes**
First Session: Saturday, January 23
Second Session: Sunday, January 24
- Jan 30 **CoNPS Board Meeting**
- Feb 13, 14 **Colorado's Missing Flora**
First Session: Saturday, February 13
Second Session: Sunday, February 14
- Feb 20 **The Poaceae: How to know the Tribes**
Third Session: Saturday, February 20
- Feb 21 **Colorado's Missing Flora**
Third Session: Sunday, February 21
- March 6, 7 **Polemoniaceae of Colorado**
First Session: Saturday, March 6
Second Session: Sunday, March 7
- March 13 **CoNPS Board Meeting**

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