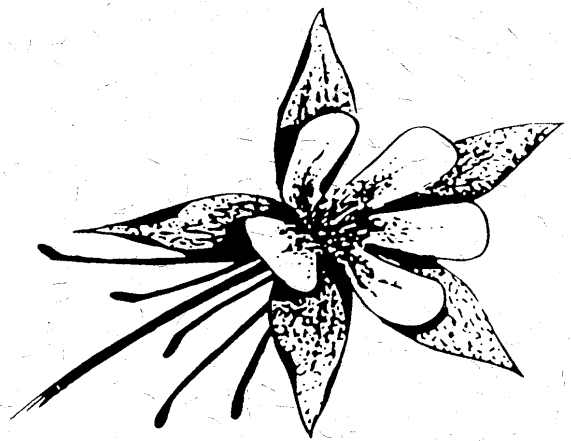


Aquilegia



Newsletter of the Colorado Native Plant Society

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

Volume 25 Number 4

May - June 2001

Comprehensive Statewide Wetlands Classification and Characterization Program Denise R. Culver, Colorado Natural Heritage Program

What types of wetlands exist across Colorado's landscape? What types of vegetation exist within them? What are their functions or attributes? Which types are rare and where are they located?

Classification is often considered the first step in understanding and defining the nature and dynamics of habitats in order to properly manage, restore, and protect them, as well as direct limited conservation resources and monies to the specific places where they will have the greatest impact. In 1999, the Colorado Natural Heritage Program (CNHP), in partnership with the Colorado Department of Natural Resources (CDNR) Division of Wildlife's (DOW) Wetlands Program initiated a Statewide Wetlands Classification to answer these questions as a key component of the on-going effort to define a Statewide Wetlands Strategy model for Colorado. This project is not only an essential and necessary tool to protect Colorado's wetlands, but can serve as a model conservation approach for other western states to follow.

The Comprehensive Statewide Wetlands Classification and Characterization (CSWCC) is a multi-year project designed to develop a tool for community-based conservation and protection of Colorado's wetlands and their biodiversity. The CSWCC creates a floristic wetland classification for Colorado following the U.S. National Vegetation Classification System (USNVC), the national standard for classification and inventory (Anderson et al. 1998; Maybury 1999). The primary goal was to utilize the abundant data collected by previous vegetation studies of Colorado's wetlands. The classification will be based on more than 20 field seasons of quantitative data collection throughout the state. The wetland classification will extend, and potentially refine, the current most comprehensive riparian classification of Colorado (Kittel et al. 1999), by including data from non-riparian wetlands and other investigators (e.g., Dr. David Cooper, CSU).

Phase One (FY 1999) of the CSWCC collected and synthesized existing data (4,511 plots), identified and collected data on gaps, and stratified the entire data set into nine Hydrogeomorphic (HGM) subclasses based on the HGM Classification of Cooper (1998). Phase Two (FY 2000) will complete the classification of the stratified data set, rank and prioritize each wetland plant association in terms of imperilment and biodiversity significance, and write or revise existing plant association abstracts with known ecological and environmental data. Phase Three (proposed for FY 2001) will complete the characterization of the wetland plant associations, as well as collect data on little known wetland types (e.g., iron fens, introduced or non-native, prairie seeps, and playas).

As part of Phase I, a pilot project was initiated between CNHP and the DOW's Riparian Mapping Project. This pilot, performed in South Park (Park County), documented the methodology and effort to cross reference CSWCC with the DOW's Riparian Mapping units. The South Park pilot project provides a comprehensive mapping project for federal, state, and private land managers. Coupled with CNHP's Statewide Wetland Classification, it is the necessary tool for man-

“Wetlands” continues on page 2



Salix amygdaloides
Artist: Gary Bentrup

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"Wetlands" continued from page 1

aging and preserving South Park's riparian wetlands. Most importantly, this project as part of the CSWCC reflects a true interagency, cooperative effort that recognizes the importance of classifying, mapping, protecting, and managing unique riparian habitats.

Literature Cited

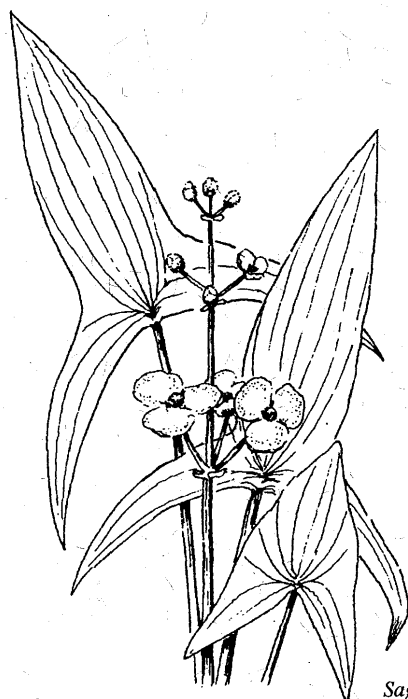
Anderson, M., P. Bourgeron, M.T Bryer, R. Crawford, L. Engelking, D. Faber-Langendoen, K. Gallyoun, K. Goodin, D.H. Grossman, S. Landall, K. Metzler, K.D. Patterson, M. Pyne, M. Reid, L. Sneddon, and A.S. Weakley. 1998. *International Classification of Ecological Communities: Terrestrial Vegetation for the United States*. Volume II. Arlington, VA: The Nature Conservancy.

Cooper, D.J. 1998. Classification of Colorado's Wetlands for Use in HGM Functional Assessment: A First Approximation. In: *Characterization and Functional Assessment of Reference Wetlands in Colorado*. Submitted to Colorado Department of Natural Resources, Denver by Colorado Geological Survey, Colorado School of Mines, and Colorado State University.

Kittel, G.M., E. VanWie, M. Damm, R. Rondeau, S. Kettler, A. McMullen, and J. Sanderson. 1999. *A Classification of Riparian Wetland Plant Associations of Colorado: User Guide to the Classification Project*. Colorado Natural Heritage Program, Colorado State University, Ft. Collins, CO.

Maybury, K.P. (Ed.). 1999. *Seeing the Forest and the Trees: Ecological classification for Conservation*. Arlington, VA: The Nature Conservancy.

NOTE: This article was reprinted from *The Green Line* Vol. 11, No. 4, by permission of the Colorado Riparian Association. For more information, please contact Denise Culver at (970) 491-2998 and dculver@lamar.colostate.edu or Kathy Carsey at (970) 491-6464 and kcarsey@lamar.colostate.edu



Sagittaria latifolia
Artist: Gary Bentrup

Colorado Riparian Association Welcomes New Members

Denis B. Hall, Colorado Riparian Association



Salix sp.

It seems like a "natural." Both the Colorado Native Plant Society and the Colorado Riparian Association (CRA) have common interests in Colorado's plant life and biological resources. As such, the Colorado Riparian Association would like to invite you to become a member.

The Colorado Riparian Association was formed in 1989 by a small group of dreamers who believed that our riparian zones should not become sacrificial areas. Now CRA shares that dream with an army of volunteers, landowners, citizens, agency staff, planners, and technical specialists. CRA shares its knowledge, enthusiasm, and experience with anyone who joins us in trying to improve Colorado's river systems and riparian ecosystems.

CRA works to promote the protection and restoration of Colorado's riparian areas and wetlands through better awareness of the values and long-term benefits of good management. We seek to foster a practical and scientific understanding of riparian areas and wetlands in Colorado. We promote sound management of riparian areas and wetlands through demonstration and education, and support communication and coordination among all people interested in riparian areas and wetlands in Colorado. We work to ensure that the long-term benefits of the riparian areas and wetlands of Colorado are maintained or improved.

Our membership consists of landowners, resource managers, organizations, and interested people promoting awareness of the values and long-term benefits of proper management of Colorado's thin green line — our riparian areas. Membership in CRA includes the opportunity to meet and work with other enthusiastic people at our Annual Conference, a great opportunity to hear the latest in riparian projects and science. Members also receive *The Green Line*, our newsletter, four times each year.

We also recently published *A Driving Guide to Riparian and Wetland Restoration in Colorado*. The Driving Guide was initiated through the Information and Education committee of CRA in order to highlight successful riparian and wetland restoration projects in Colorado. The Driving Guide features 46 projects that provide a reference for landowners and land managers. The book is easy to read, has lots of pictures, and contains a minimal amount of technical jargon.

Membership in CRA is available for as little as \$25 per year for an individual, \$15 for students, and a cool \$150 for a whole organization. Please direct inquiries or your request for membership to:

Colorado Riparian Association
2060 Broadway
Suite 230
Boulder, CO 80302.

Alternatively, our e-mail address is riparian@webspinners.com. And sure to visit our website at <http://coloradoriparian.org/index.shtml#menu>. Let's get together. See you on the green line!

SOCIETY NEWS AND ANNOUNCEMENTS

Summary of the January 6, 2001 Minutes

Alice Guthrie, CoNPS Secretary

At the January Board Meeting held at the Public Library in Longmont, the main agenda item was the 2001 Budget. To date, Georgia Doyle (Treasurer) had received \$2800 for memberships, \$485 for the Marr Fund, \$3300 for the Steinkamp Fund, and \$271 for general donations. Total income is \$28,425 and expenses are \$30,928. Eric Lane (Membership Chair) updated the dues estimate to \$8000. The Board had some questions for the Sales Committee regarding details of book and t-shirt sales, and ways to update the book inventory. The Board decided to create a category of "Statewide Meetings," which would include Annual Meeting expenses. Honoraria for special speakers, such as Gary Nabhan, would be charged to that category. The printing costs for the new Membership brochures were \$653. The Board discussed budgeting a laptop computer for the Finance Committee and approved the Newsletter budget, which included a postage increase.

The Board reviewed progress on the final two goals of the Strategic Plan, and made recommendations for completing unfinished items and updating goals and objectives to reflect current interests and resources. Details of the Strategic Plan Review will be published in *Aquilegia*. The goals reviewed follow:

- Maintain and enhance quality and quantity of core membership services, as measured by feedback from members.
- Influence the protection and management of a minimum of ten sites that harbor rare species or exemplary natural communities by January 1, 2001.

Gwen Kittel agreed to be Field Trip Committee Chair. Neil Snow is Chair of the Field Studies Committee, while Loraine Yeatts will continue to maintain plant lists. The Board voted to change the name of the Merchandise Committee to Sales. All committee chairs will work on revising their respective goals and functions, and bring a final draft to the Board in February or March.

Jill Handwerk is coordinating with Will Murray, Chair of the Natural Areas Council, with regard to sending a letter in support of CNAP from CoNPS to the Governor. A letter that members could use to send to their legislators to lend support for maintaining the CNAP program is being drafted and will be mailed to members subsequently.

The Board was pleased with the new design of the membership brochure. MRW Associates donated the graphic design work. The Board voted to send letters of appreciation to Mary Reed Wolff and Laurie Shields, along with one-year memberships.

The Annual Meeting Committee comprises Jill Handwerk, Laurel Potts, Georgia Doyle, Dave Anderson, Denise Culver, Don Hazlett, Annette Miller, and Sue Martin. The Meeting will be held at the University Park Holiday Inn in Fort Collins in late September. The subject will be "25 Years of CONPS – A Historical Perspective." Details will be printed in *Aquilegia* this spring, with registration information to follow in the July-August issue.

Neil Snow and Gay Austin are working with Dr. William Weber

to create a Rare Lichen List for Colorado, which would cost approximately \$1000. The Board supported the effort and asked them to discuss this further with Dr. Weber, investigate additional sources of funding, and report back to the Board.

Summary of February 24, 2001 Minutes

Alice Guthrie, CoNPS Secretary

The Board again met at the Longmont Public Library in February. The first item on the agenda was a request from the Central Rockies Chapter of the Society for Ecological Restoration (CeRSER) to send registration information to CoNPS members for the conference in April. The Board approved giving mailing labels to CeRSER for this mailing, specifically, and decided to add a checkbox to the member survey/renewal notice that members could check to receive additional mailings. CeRSER requested a \$350 donation/sponsorship, which the Board approved. CoNPS will get a table for book sales and members can register as SER members. The Board approved an additional request to include some of CoNPS' policies and guidelines in the workshop notebook.

Gay Austin and Neil Snow have been working with Dr. William Weber on a "Rare Lichen List for Colorado." Neil and Gay will coordinate the review of the document and finalize the contract. The Board approved payment of \$500 when it is signed and \$500 upon completion of the work. The next steps are finalizing a contract, reviewing the list, clarifying publication rights, and discussing options for publication. The USFS and BLM are also contributing funds.

The Research Grants Committee, represented by Gwen Kittel and Neil Snow, recommended three grant proposals for funding, which the Board approved:

Marr Fund

- B. Koblitz — Interactive Identification Key to the Vascular Plants of the Laramie Foothills. \$500.
- J. Riser — Spatial Genetic Structure in Southwestern White Pine: Effects of Bird Dispersal on Evolutionary Potential. \$500.

Steinkamp Fund

- J. Whittall — Pollinator Shifts, Habitat Preferences, and Speciation in North American Columbines: The Crucial Role of Colorado *Aquilegia* (Ranunculaceae). \$500.

Leo Bruederle (Newsletter Committee) discussed having an interactive web form to collect information for a Directory of Colorado botanists. The Board supported the idea and asked him to draft up potential criteria for review and work with Sara Hill (Webmaster) on its development.

Several changes to the 2001 Budget were discussed and adopted by the Board. Based on 2001 estimates, the budget is very tight. The difference from last year stems from merchandise income and donations that are less than anticipated. Finally, members who have not renewed for 2001 will not receive another issue of the newsletter, but will be contacted via a more cost-effective method.

"February minutes" continues on page 4

SOCIETY NEWS AND ANNOUNCEMENTS

"February minutes" continued from page 3

Pat Ploegsma is coordinating a poster contest for the 2001 Annual Meeting. Original drawings, photographs and computer-generated graphics will be accepted. Pat will prepare guidelines for artists and do targeted mailings for submissions. A \$100 prize will be presented at the Annual Meeting, where the winning piece will be raffled off. Income is estimated at \$1250 for 2001.

Rick Brune asked for assistance from CoNPS to administer grant funds for production and distribution of the North Jeffco Area Group handbook, "Environmentally Responsible Development." CoNPS, as a non-profit association, would be the recipient and administrator of the grant funds and receive an administrative fee. The Board approved the request, with a written agreement delineating the terms.

The May meeting in Grand Junction will include a day hike on Saturday, 19 May, 2001 and the Board Meeting on Sunday, 20 May, 2001.

Rare Cryptogams in Colorado

Dr. Neil Snow, University of Northern Colorado

The Colorado Native Plant Society offers its warmest thanks to Dr. William A. Weber, Professor Emeritus of CU-Boulder, for producing a checklist entitled "Rare Cryptogams in Colorado" for CoNPS. This list is available to any interested parties by contacting CoNPS at P.O. Box 200, Fort Collins, CO 80522. Few states have such a list, so Colorado is fortunate in this regard. The checklist covers rare mosses, lichens, and hepatics (liverworts).

FIELD TRIPS

June 16, 2001 Bonner Peak Trip Added Peaks, Domes, and Barrens

Bonner Peak is located in the outer foothills near Livermore, north of Fort Collins. The flora of this area is a rich mixture of prairie and lower montane species. On this trip to be led by **Scott Ellis**, we will see several of the less common plants with eastern U.S. affinities, including wild sarsparilla (*Aralia nudicaulis*), carrionflower (*Smilax lasioneuron*), and snakeroot (*Sanicula marilandica*). In addition, we will examine the flora of decomposed granite barrens (natural rock gardens), and the plant inhabitants of a granite dome called Bobcat Rock. If we have a reasonably wet spring, there should be a good show of several *Astragalus*, *Penstemon*, and *Senecio* species.

This trip requires a willingness to scramble on and around rocks, and to do some off-trail hiking (total roundtrip distance about two miles, with an elevation gain of about 500 vertical feet). The trip is planned around lunch on an overlook of the canyon of the North Fork of the Poudre River. This trip is limited to 15 people. To register and for more information, please contact Scott Ellis at (970) 493-6069 or sellis@ensr.com.

CoNPS 25th Anniversary Poster Contest Pat Ploegsma, Chairperson

You are invited to join us in celebrating the 25th anniversary of the Colorado Native Plant Society by creating a poster to be used for promoting the Society and local chapters. CoNPS will also benefit from sales of prints of the winning entry. Paint, draw, photograph, or digitally capture your favorite native flower, plant, or scenery. The finished product should be no larger than 12 x 16 inches and include the CoNPS logo, address, and web site address, if possible. Submission without this information will be accepted and, if chosen, the artwork will be modified to include this information in a border.

Submissions, for which the **deadline is July 31, 2001**, may be mailed or delivered to Pat Ploegsma at 1620 Donoven Street, Strasburg, CO 80136 or taken to FMS Digital Print Shop at 4101 E. Louisiana Avenue, Suite 101 in Denver. Use this location if you do not want to send your submission through the mail. Kathy Hadsall (303-744-9800) is owner and operator, and willing to answer questions.

Judging will be held in August, with a single prize of \$100 to be awarded at the Annual Meeting on September 29, 2001 in Fort Collins. Reproductions of the winning entry will be sold at that time. The original poster will also be on display throughout the meeting and auctioned off that day. For more information, contact Pat Ploegsma at (303) 622-9439 (home) or (303) 229-3007 (cell).

And...

Carol Spurrier, past CoNPS Board member, was recently selected to serve as the Bureau of Land Management (BLM) National Botanist in Washington, D.C.! Congratulations, Carol!

CoNPS member and Horticulture and Restoration Committee Co-chair Kathy Damas was featured recently in an article written by Niki Hayden entitled "Go Native" published in the April 15, 2001 issue of *Front Range Living*, a Colorado weekly online magazine. In addition to suggestions for implementing and maintaining a garden comprising native plants, CoNPS is touted as a source of information regarding natives. Visit <http://www.frontrangeliving.com> to read the article in its entirety.

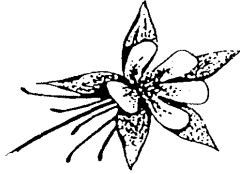
CoNPS took third place in the Educational Exhibits Display category at the Colorado Home and Garden Show. Thanks to Megan Bowes and Jennifer Rolles for volunteering to maintain the display.

AQUILEGIA Deadline Approaches

Submit on or before June 15, 2001

Please submit contributions for Vol. 25 No. 5 of *Aquilegia* on or before June 15, 2001. Include author's name, address, and affiliation. Follow the format from previous issues as closely as possible. Spell check. Articles must be submitted via e-mail or on disks — MAC, preferably. Please submit the contribution as a MS Word or rtf (rich text format) document.

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 or Corporate\$30
- Family or Dual\$20
- Individual\$15
- 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: lbruederle@earthlink.net

Articles not exceeding 2000 words in length and short items, such as unusual information about a plant, 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; if possible, submit as an RTF (rich text format) file.

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- Vice-President ... David Anderson. 970-484-0774
- Secretary Alice Guthrie. . . 303-651-3127
- Treasurer Georgia Doyle .. 970-491-6477

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- Laurel Potts (02) . . . Fort Collins . . 970-484-4076
- Neil Snow (02) Greeley 970-330-4823

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- Southwest Sandy Friedley . . 970-884-9245

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- Outreach and Alice Guthrie. 303-651-3127
- Field Studies . . Neil Snow 970-330-4823
- Field Trips Gwen Kittel 303-258-0908
- Finance Denise Culver . . . 970-225-1930
- and Georgia Doyle 970-491-6477
- Horticulture and. Kathy Damas . . . 303-543-1492
- Restoration . . and Lisa Tasker . . 970-544-3633
- Membership . . . Eric Lane 303-239-4182
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- and Velma Richards 303-794-5432
- Rare Plant Eleanor
- Monograph . . Von Bargaen . . . 303-756-1400
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- Website Bob Clarke. 970-242-6067
- Workshop: East . Bill Jennings . . . 303-666-8348
- West Gay Austin 970-641-6264

* interim chair

MEMBERSHIP APPLICATION AND RENEWAL FORM

Name(s) _____

Address _____

(Address) _____

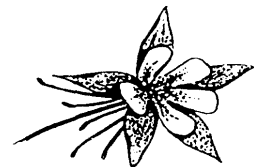
City _____ State _____ Zip _____

Phone () _____ E-mail _____

Chapter: _____ Boulder _____ Fort Collins _____ Metro Denver _____ Plateau _____ Southwest

- MEMBERSHIP CLASS:**
 Dues cover one calendar year.
- ___ Individual, \$15.00
 - ___ Family/dual, \$20.00
 - ___ Senior/Student, \$8.00
 - ___ Student, \$8.00
 - ___ Corporate, \$30.00
 - ___ Supporting, \$50.00
 - ___ Lifetime, \$250.00

In addition to my membership, I have included \$_____ as a contribution to the John Marr Fund (endowment in support of small grants-in-aid of research), \$_____ as a contribution to the Myrna P. Steinkamp Memorial Fund (endowment in support of small grants-in-aid of research), or \$_____ as a general contribution to the Society.



CONPS IS A NON-PROFIT ORGANIZATION -- DUES AND CONTRIBUTIONS ARE TAX-DEDUCTIBLE

CALENDAR

CHAPTER EVENTS

- Boulder Chapter**
- May 9 Annual Picnic and Hike
 May 12 Weed Pull at Harper Lake
 June 26 Field Trip: Walker Ranch Post-Fire
- Metro-Denver Chapter**
- June 2 Cherry Creek Weed Pull
- Plateau Chapter**
- May 12 Xeriscaping with Native Plants
 June 15 Field Trip: Pinyon Mesa
- Southwest Chapter**
- June 9 Field Trip: Flora of Black Rock Canyon
 July 7-8 Field Trip: Chuska Mountains

SOCIETY EVENTS

- Aug 31 Deadline for 25th Anniversary Poster Competition (see page 4 for details)
- Annual Meeting**
- Sept 29-30 Fort Collins, CO
- Board Meetings**
- May 20 USFS Office, Grand Junction, CO
- Field Trips**
- May 19 Ute Canyon Field Trip
 May 26 Wildflowers on the Edge
 June 2 Prairies and Wetlands of Chico Basin
 June 16 Bonner Peak
 June 17 Flora of the Rampart Range
 July 14 Determining Range Condition
 July 15 Grand Mesa Fen Inventory
 July 21 Crested Butte High Altitude Field Studies
 July 21 Grays Peak
 July 28 Rocky Mountain Willows
 Aug 25-26 Middle St. Vrain Weed Survey Backpack Trip
 Sept 1-3 Storm Ridge Rare Plant Survey

FIELD TRIP POLICY

The Society wishes to remind field trip participants of the guidelines for participation in Society trips. By joining a CoNPS field trip, you indicate acceptance of these policies.

1. Plant collecting is forbidden on CoNPS field trips, with two exceptions. Collecting is permissible for scientific study (with the appropriate collecting permit, if required, for the area in question). "Scientific study" means, for the purposes of this policy, study by a trained botanical scientist with an expectation that the study results will lead to published information: collected specimens will be deposited in a recognized, publicly-accessible herbarium.

A trip leader or other person whose responsibility is to instruct trip participants may collect plants for immediate demonstration, explanation, or keying for full identification. Such collecting should be done inconspicuously (so that persons not with the trip group are neither offended nor motivated to do likewise), and with regard for any possible effect on the plant population. Rare, threatened, endangered, or sensitive species should never be collected for instructional purposes.

2. Car-pooling and ride-sharing are encouraged on CoNPS trips. All drivers who provide rides to others will graciously accept payment. Passengers should pay the driver at the conclusion of the trip (without being asked) as follows:

- 1 passenger, 5 cents per mile
- 2 passengers, 4 cents per mile
- 3 passengers, 3 cents per mile, etc.

3. Pets are not permitted on field trips. Pets trample plants, disturb wildlife, and annoy other trip participants.

4. Field trips are designed primarily for adults, unless the trip description specifically states otherwise. Parents should consider the appropriateness of a given trip for a child. If a child is brought, the parent assumes full responsibility for keeping the child under strict control to prevent his/her damaging or disturbing the flora or fauna, or becoming a burden to the group. No child unaccompanied by a parent is permitted.

5. CoNPS' expressed purpose is to promote appreciation and preservation of our flora. Take care not to damage the very features you have come to see and enjoy. Use photographs, sketches, or other methods of recording the plants that you see—do not pick plants or plant parts.

6. Field trip participants MUST sign a waiver of liability.



Opuntia sp.

FIELD TRIP REPORTS

CLASSES

Third Annual Weed Survey Backpack Patricia Butler

Four members of the Colorado Mountain Club backpacked into the Indian Peaks Wilderness Area along Middle St. Vrain Creek on August 26, 2000 to resurvey infestations of Canada Thistle (*Brea arvensis*, Asteraceae) that we had been tracking over the previous two years. We hiked five miles and set up camp west of the junction with the Red Deer Lake trail, at the western-most infestation. In contrast to last year (with its very wet summer), we saw far fewer flowers, mostly late-bloomers such as bottle gentian (*Pneumonanthe affinis*, Gentianaceae) and arctic gentian (*Gentianodes algida*). Although the weather had been sunny all day, a storm rolled in as we tried to hike up to Gibraltar Lake, so we returned to camp and pulled thistle for the rest of the afternoon. The next morning we hiked out, meeting three CoNPS comrades, and pulled thistle in four other locations between our camp and the parking area. Several of us who had been involved all three years observed that we seemed to be making modest progress on several of these sites, although it's hard to know whether this is due to our efforts or the drier summer. A special treat for the plant-lovers — as opposed to the weed haters — in the group, was the opportunity to confirm sightings earlier in the summer of lanceleaf moonwort (*Botrychium lanceolatum*, Ophioglossaceae), a species considered to be imperiled. We were all impressed with the surprisingly large population of this tiny plant in an open, sandy area near the trail. We finished the trip after spending over an hour pulling a very large infestation of thistle and some yellow toadflax (*Linaria toadflax*, Scrophulariaceae), where the trail leaves the road near the parking area. We'll be doing this trip again late this summer — August 25-26, specifically — and would love to have more CoNPS members along!

DBG Director of Research Carol Dawson Receives Wildflower Award Andrew Kratz, Regional Botanist, USDA Forest service

Dr. Carol Dawson, Director of Research for the Denver Botanic Gardens (DBG) and CoNPS member, recently received the **2001 Karl Urban Celebrating Wildflowers Award** from top leadership of the USDA Forest Service and Bureau of Land Management. Dawson received the award during a special USFS-BLM reception at the North American Wildlife and Natural Resources Conference in Washington D.C.

The award honors the memory of Karl Urban (former botanist on the Umatilla National Forest in northeastern Oregon), acknowledging his extraordinary contributions to the national "Celebrating Wildflowers" program. This award was first presented in 1999 to Karl Urban, posthumously, for his outstanding wildflower drawings and ceaseless efforts to encourage and facilitate people to "Celebrate Wildflowers." Subsequently, individuals have been nominated by the USFS and BLM for their significant contributions to the native flora of North America; creativity, perseverance and commitment to the annual "Celebrating

Exploring the Colorful world of Lichens Ann DeBolt and Dr. Roger Rosentreter

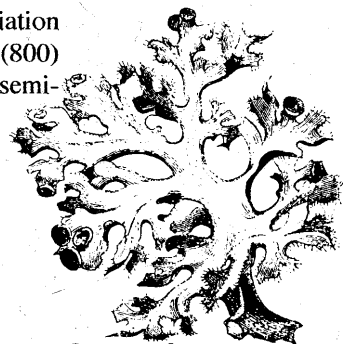
From meadows through woodlands to the alpine tundra, lichens are present on many different substrates, including rocks, soil, humus, stumps, and trees. The colorful world of lichens will be revealed on a variety of hikes and excursions throughout Rocky Mountain National Park. The distinguishing structures of these small "plants" will be introduced to the student, both in the classroom and during outdoor sessions.

Instructors: Ann DeBolt is a former Park Service employee, with stints in Canyonlands and Glacier National Parks. Her annotated lichen list of the biologically diverse Glacier National Park includes over 400 species. Dr. Roger Rosentreter has been fascinated by lichens since his high school days as a canoe guide in Wisconsin. His lichen expertise has been incorporated into many regional projects, including the Northwest Forest Plan and biological soil crust standards for rangeland management.

Registration: The cost for this class, for which you may obtain one credit of Colorado State University graduate or undergraduate credit, is \$110. For more information about Rocky Mountain Field Seminars 2001, contact the Rocky Mountain Nature Association (www.rmna.org) at (970) 586-3262 or (800) 748-7002 (toll-free), via e-mail at fieldseminars@rmna.org, or via snail-mail at:

Rocky Mountain Nature Association
1895 Fall River Road
Estes Park, Colorado 80517

Cetraria islandica



Wildflowers" program; involving communities and partners in the "Celebrating Wildflowers" effort; and for integrating educational elements through the "Celebrating Wildflowers" program.

The award recognizes Dawson's leadership at DBG: developing an internet-accessible virtual herbarium of the native Colorado flora; establishing rare plant monitoring programs in Colorado and being first in the state to develop long-term demographic studies to document rare plant population viability; hosting the "Celebrating Wildflowers" kickoff event attended by more than 2,000 school children and their teachers each May; and utilizing the wildflowers program to develop effective partnerships with the Forest Service, BLM, and many others in fostering research to support native plant species and plant community conservation.

More than a dozen other awards were presented at the reception, covering conservation of plants and animals, and their habitats; however, Dawson was the only non-federal individual recognized by the Forest Service and Bureau of Land Management.

CHAPTER NEWS

Boulder Chapter

Monthly meetings are held October through April at the Foothills Nature Center, located in Boulder at 4201 North Broadway, opposite its intersection with Sumac Ave. The Chapter meets on the second Wednesday of each month, at 7:00 PM for business, a speaker, book sales, and socializing with refreshments. Please join us at 5:00 PM for supper with our speaker at Efrain's Mexican Restaurant, 1630 N. 63rd St, just north of Arapahoe in Boulder. For more information, contact Chapter President Caryl Shields at (303) 665-6312 or Program Chair Carolyn Crawford at (303) 665-6903.

May 9, 2001, 5:30 PM Annual Picnic and Hike

Meet around 5:30 PM at the picnic tables on the west side of East Boulder Recreation/Community Center, near the tennis courts and playground. The Center is located off 55th St. between Baseline and South Boulder Roads. Bring your own main dish and drink; the Boulder Chapter will provide snacks. At about 6:15 PM, we will stroll over the bridge to the east into the South Boulder Creek State Natural Area/Boulder Open Space, and botanize until dark. Lynn Riedel and Ann Armstrong will share issues with regard to the management of this area. Bring insect repellent, plant books, hand lenses, binoculars, and flashlights?



Iris sp.

May 12, 2001 8:00 AM Weed Pull at Harper Lake

Help is needed to pull diffuse knapweed and Canada thistle surrounding Harper Lake, a city drinking water reservoir in Louisville Open Space. To volunteer and for more information, please contact Bev Baker at (303) 666-1972. DIRECTIONS: From South Boulder Road, on the west side of Louisville, go south on McCaslin Blvd. one-half mile to Washington Ave., where you turn east, then north into the parking lot at the southwest corner of the Lake. If you are coming from the south, travel 1.4 miles north of Highway 36 on McCaslin to Washington Ave.

June 26, 2001 6:30 PM Field Trip: Walker Ranch Post-Fire

Claire DeLeo (Plant Ecologist, Boulder County Parks/Open Space) will show us what's growing and how the restoration efforts are progressing after the September fire. Meet at Gross Dam Reservoir Parking Lot, 8.7 miles up Flagstaff Rd. from Gregory Canyon, where Baseline Rd. ends and Flagstaff Rd. begins. The Parking Lot is across the road from the turn off to Gross Dam Rd. The drive will take about 30 minutes from downtown Boulder. Come early to picnic! For more information and to sign-up, contact Caryl Shields at (303) 665-6312 or via email at buchloe111@aol.com

Fort Collins Chapter

Monthly meetings are scheduled October through April at 7:00 PM in the Main Conference Room of the National Seed Storage Laboratory (NSSL) at CSU. The NSSL is located just west of the railroad tracks, about one block north of Pitkin Street (enter on west side of building). For more information, contact Chapter President Don Hazlett at (970) 834-1493.

Metro-Denver Chapter

Monthly meetings are held at 7:00 PM from September through April in the Morrison Center at the Denver Botanic Garden. For more information, contact Chapter President Denise Larson at (303) 733-4338 or Leo P. Bruederle at lbruederle@earthlink.net.

June 2, 2001 9:00 AM - 2:00 PM Cherry Creek Weed Pull

Join us for a day of botanizing, while removing a variety of noxious weeds from along the banks of Cherry Creek near Quebec. This portion of Cherry Creek is a surprising mixture of non-native vegetation, such as smooth brome, and native vegetation, such as plains cottonwoods, needle-and-thread grass, and sand verbena. We will meet at the parking lot of Place Middle School off of Quebec and Cherry Creek on Saturday at 9:00 AM. Bring gloves, sunscreen, and a sack lunch; drinks and snacks will be provided by the Chapter. For more details, please call Denise Larson (303) 733-4338.

Plateau Chapter

Chapter activities are scheduled throughout the year. For more information, contact Chapter President Jeanne Wenger at (970) 256-9227 and Bluecrow2u@aol.com or Program Chair Lori Brummer at (970) 641-3561 and lbrummer@gunnison.com.

May 12, 2001 Xeriscaping with Native Plants

Co-sponsored by CoNPS and the Montrose Botanical Society. Jim Borland will give a presentation on xeriscaping with native plants. His program will be followed by a tour of gardens in the Hotchkiss, Cedaredge, and Delta area. For information and registration, contact Gay Austin at gaustin@juno.com or at (970) 641-6264.

June 15, 2001 10:00 AM Field Trip: Pinyon Mesa

Join us to look for *Artemisia cana* and other local plants of interest. Exact destination will depend on what is blooming. Plan on a 3-4 mile easy walk, with some elevation gain. Meet at the Glade Park Store. Bring lunch! Contact Jeanne Wenger at (970) 256-9227 to register.

Southwest Chapter

For more information regarding news and activities, please contact Chapter President Sandy Friedley at (970) 884-9245 or by email at friedley@frontier.net.

CHAPTER NEWS

"Events" continued from page 8

June 9, 2001 9:00 AM

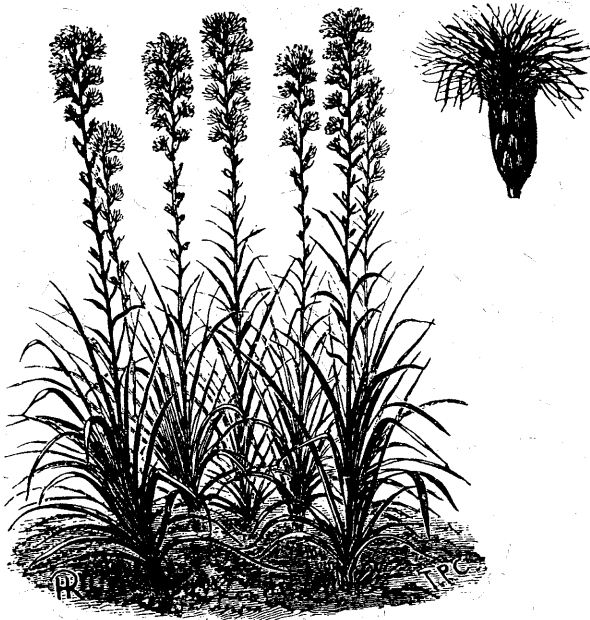
Field Trip: Flora of Black Rock Canyon in the Carrizo Mountains

By virtue of a kind invitation extended by **Arnold Clifford** (Navajo Botanist and Geologist), we are again privileged to observe plants in this part of the Colorado Plateau within the Navajo Nation. Meet at the intersection of US Highway 160 and US Highway 64 near Teec Nos Pos, Arizona at 9:00 AM. Bring lunch and water, and be prepared for some moderate hiking into glorious scenery, specifically an andésite porphyritic laccolith. After leaving US 64, we will drive on a dirt road (car pooling with high-clearance vehicles) as far as practicable, probably within a half mile of the canyon mouth. The hike may extend an additional two miles one way on the canyon floor, returning by the same route. Species of interest include *Astragalus calycosus*, *A. coltonii*, *Erigeron argentius*, *Heuchera rubescens*, *Pterophyton caespitosum*, *Phlox austromontana*, and *P. cluteanea*. Call Charlie King (970) 731-4794 or Sandy Friedley (970) 884-9245 for information.

July 7 - 8, 2001

Field Trip: Introduction to the Flora of the Chuska Mountains

With this two full-day field trip, **Arnold Clifford** provides us with yet another opportunity to botanize within the Navajo Nation. The Chuska Mountains, south of Shiprock, New Mexico, are a 60 plus mile long ridge-like uplift containing basaltic and sedimentary outcrops with elevations of over 9000 feet, and numerous ponds and small lakes. This trip will involve considerable backcountry travel, some moderate hiking, and primitive camping. Arnold will show us rarities, endemics, and other goodies, which he has discovered on his extensive investigations of these mountains. Details will be available in early June. If you wish to be placed on the mailing list, contact Charlie King at 483 Cliffside Place, Pagosa Springs, CO 81147 and (970) 731-4794 or Sandy Friedley at (970) 884-9245.



Liatris spicata

A Checklist of the Vascular Plants of Colorado

Ronald L. Hartman and B. E. Nelson
Rocky Mountain Herbarium
University of Wyoming, Laramie

Generic circumscriptions largely traditional; relevant names from regional floras and checklists included with explicit attribution.

We are pleased to announce that a checklist has been developed for use by students and staff at the Rocky Mountain Herbarium. This checklist will serve as an aid in the identification of the vascular plants of Colorado and in the databasing of specimens from major floristic inventories in that state (ten projects thus far; more than 85,000 numbered collections) and the Rocky Mountain Region. It is now available for viewing or downloading (as MS Word or .pdf documents) from the Rocky Mountain Herbarium website at <http://www.rmh.uwyo.edu>. The disposition of names, here accepted or synonymized, from five taxonomic references for the Great Plains, Utah, and Wyoming are explicitly indicated using three-letter abbreviations. This is also true for H. D. Harrington's (1954) *Manual of the Plants of Colorado*, four checklists and floras published for the state by Weber and Wittmann (since 1992), the *Synthesis of the North American Flora* by Kartesz and Meacham (1999), The PLANTS Database (USDA: NRCS, February 1997 version), *Flora of North America*, and other references. The internet version was placed online March 23, 2001 and is 183 pages in length. Corrections will be posted periodically and included in future updates.

Statistics from this checklist on the Colorado flora follow:

- Invasives from outside North America = 393 taxa;
- Invasives from elsewhere in North America = 105 taxa;
- Total invasives in Colorado = 498 taxa or 14.5 percent of total flora;
- Endemics (taxa currently known to be confined to Colorado) = 97 taxa, including 79 species, 14 varieties, two subspecies, and two named hybrids.
- Size of the Colorado Flora:
 - Species = 3025 (3051 *vide* Kartesz and Meacham, 1999);
 - Hybrid Species = 35;
 - Subspecies = 19;
 - Varieties = 351;
 - Unique Taxa = 3430 (3525 *vide* Kartesz and Meacham, 1999).

The philosophy for infraspecific taxa follows: subspecies used as a grouping category (i.e., quadrinomials) are omitted except in synonymy, as are *formae*; varieties are the preferred infraspecific category, if the combination is available.

Conserving Colorado's Flora: A 25 Year Retrospective

The 2001 annual meeting will be held 29-30 September 2001 in Fort Collins, where CoNPS began in 1976. To celebrate our 25th anniversary, we will look back at the people, places, and plants that have shaped the Society. Speakers will highlight past, present, and future conservation and educational efforts of CoNPS. Watch for the agenda and registration in the next issue of *Aquilegia*.

CoNPS Donors

Georgia Doyle, CoNPS Treasurer

Twenty five donors were inadvertently left off of the donor list published in *Aquilegia* Vol. 25 No. 3 – with our apologies, we republish the list to include all donors for year 2000. Donations to the Marr Fund in 2000 totaled \$2,263 bringing the fund to \$34,000. Donations to the Steinkamp Fund totaled \$6,897 and, combined with the Rare Plant Book royalties, bring the fund to \$19,500. The principal of the two Funds earns interest to fund research grants. General donations, which are used to support CoNPS activities including conservation efforts, education, and outreach, totaled \$893 in 2000. All contributions are very important to the success of CoNPS. Thanks to the following donors, as well as 33 others who wished to remain anonymous.

Sue Ellen Alishouse and Les Golden, Ann Armstrong, Larry and Caroline M. Ball, Ronald Beane, Tedd N. Beegle, Linda and Richard Beidleman, Dan W. Bench, Audrey and Jim Benedict, Rita Berberian, Robert Blackwell, Rochelle Blumenstein, Bruce and Cathy Bosley, Linda Bourgeois, Meagan C. Bowes, Sally Boyson, Charlotte Briber, Cheryl Brooks, Dr. Leo P. Bruederle, Adele M. Bryan, Dennis and Lisa Buechler, William W. Bulla, Duncan and Elinor Burchard, Judy Capra, Cindy Carlson, Kathy Carnival, Danielle Carre, Dina Clark, Kathleen Conlon, Kathleen Cook, Kenneth W. Curtis Jr., Mary C. Damm, Kathleen Davenport, Bonnie L. Dehart, Robert Dellapina, Stanley Dempsey, Corey Sue Derfus, Hobart N. Dixon, Adele Douglas, Jerry and Sarann Duncan, Mary Edwards, Kevin Essington, Marian M. Fick, Dian Fisher, Vickie and John Flower, Veronique and Tom Foster, Frances Fraser, Sandra Starr Friedley, Mark Fusco, Joyce G. Gellhorn, Mark and Nancy Gershman,

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Colorado Native Plant Society
P.O. Box 200
Fort Collins, Colorado 80522
<http://www.conps.org>

Place
Stamp
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