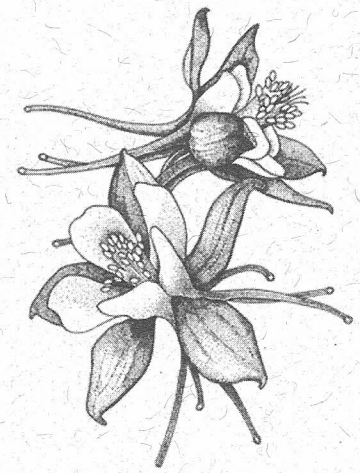


Aquilegia



Newsletter of the Colorado Native Plant Society

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

Volume 30 Number 1

January - February 2006

YEAR IN REVIEW

Leo P. Bruederle, President, and Laurel Potts, Past President

The Society experienced significant transition this past year, in the composition of the Board, as well as leadership of chapters and standing committees. We are extremely grateful to those dedicated chairs and officers who are stepping down, and are encouraged to see so many members stepping up to fill those niches. As illustrated by the following, our Society is clearly a vital organization. Yet, 2006 is already promising to build upon this activity, with the Board of Directors implementing several major projects, including an overhaul of our website (www.conps.org) spearheaded by webmaster Al Schneider, expansion of our research grants program coordinated by Jan Loechell Turner, an exciting Annual Meeting planned by several enthusiastic members of the Southeast Chapter, and a collaborative effort to study the rare Colorado endemic *Penstemon degeneri* coordinated by John Proctor. While reading the following review, consider volunteering in some capacity, contributing to our endowment, or giving a gift of membership in the Colorado Native Plant Society.

Annual Meeting 2005

Thank you to Southwest Chapter members Dick Moseley, Charlie King and Sandy Friedley for organizing our Annual Meeting entitled "The Flora of the Four Corners Region," which was held in Pagosa Springs on 16-18 September. The meeting was well attended and, for those of us who have not explored that part of Colorado, there was much to absorb. The Board of Directors presented a Lifetime Membership Award to Arnold Clifford, for his work on the Navajo Reservation, and Special Merit awards to Janet Coles and Tamara Naumann for their leadership of the twenty-year *Sclerocactus mesae-verdae* monitoring project. Keynote speaker Ken Heil, with team members Steve O'Kane and Linda Reeves, outlined the Flora of the Four Corners Region project. The project (1996-2007) is sponsored by San Juan College, Farmington, NM and will produce a field-portable flora of the Four Corners Region. Arnold Clifford shared his Navajo perspectives on botany and rare plants of the Navajo Nation within the San Juan River Basin. Lastly, a selection of field trips was available on Friday and Sunday, including the Chimney Rock

Archeological Area, Williams Creek Research Natural Area and Piedra River Canyon. In addition some enjoyed the spectacular Full Moon Program at Chimney Rock on Saturday night.

Standing Committees

Sarada Krishnan, who is also Director of Horticulture at the Butterfly Pavillion, became chair of the **Conservation** Committee in March and has already served CONPS very well in this capacity. She represented the Society in discussions held by the Southeast Boulder County Open Space Collaborative Group on management of 1,500 acres east of US Highway 287; participated in rare orchid monitoring and fund raising; participated in the Osha monitoring project in the Rio Grande National Forest; collected seeds for restoration at Rocky Flats; and attended the Plant Conservation Alliance Cooperators Conference in St. Louis. Megan Bowes took over as Chair of the **Education and Outreach** Committee in the spring and has been working with Annette Miller and others to update and reproduce two of our products: *Inside an Aspen Grove* and *Colorado Life Zones*. Megan and Leo Bruederle have also been compiling a list of contacts in higher education throughout the state to target outreach. In 2006, the Committee will again be staffing booths at the ProGreen Expo in January and Echter's Expo in March, and is looking for new venues. John Proctor, Chair of **Field Studies** coordinated a "botany blitz" of six fens on the east slope of the

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Park Range in North Park, all of which were reported to support *Drosera rotundifolia*. Six teams, comprising a total of 25 botanists representing CNHP, USFS, CSU and CONPS, were assigned a fen to survey. This effort confirmed six historic and some new occurrences of *D. rotundifolia*, as well as *Utricularia minor*, *Carex leptalea*, *C. limosa*, *C. livida*, *C. lasiocarpa*, *C. buxbaumia*, *Eriophorum gracile*, *Juncus filiformis*, *Botrychium multifidum*, *Azaleastrum albiflorum*, *Comarum palustre* and *Menyanthes trifoliata*. The survey may also result in new state records, which will be reported in *Aquilegia*! The Sales Committee had a very successful year, with sales of \$12,086 and a net income of \$2175, with Jan Wingate's *Rocky Mountain Flower Finder* and *Illustrated Keys to the Grasses of Colorado* as sales items. Major accomplishments included becoming an Amazon Associate, which facilitates web book sales resulting in virtually effortless income; increasing sales of relevant titles at Society and other professional workshops; increasing the diversity of offerings, including titles for children; and converting accounting to Quick Books. Outgoing Chair April Wasson gratefully thanks all who have helped over the past two years, including Sue Kamal, Pat Murphy, Jim Trammell, Laurel Potts and Patti O'Neill. And while April is thankful for the opportunity to serve CONPS, it is we who have been lucky. Good luck April, we wish you well on your adventure! In 2005, the Research Grants Committee awarded a Myrna P. Steinkamp grant to Lynn Moore and John W. Marr grants to Christina Alba and Michelle DePrenger-Levin in support of their research on native plants and ecosystems. We look forward to summaries of their research in upcoming issues of *Aquilegia*. Thanks to the generous contributions of many members and supporters, a total of nearly \$3,000 will be available for research grants in 2006!

News from Chapters

The **Boulder** Chapter remains a large and vibrant chapter, and Chapter President Tommi Wolfe reports that 2005 was a full year with many exciting meetings. Topics included a South American travelogue of alpine plants, native gardening, the world of lichens, the effects of fire on the Front Range, and a very special evening of memoirs with Dr Bill Weber. A great spring wildflower hike and picnic, led by Megan Bowes and Lynn Riedel, yielded a satisfying number of wildflower "finds." The **Metro-Denver** Chapter continues to thrive, with both membership and active participation growing. The chapter joined the Denver Botanic Gardens Plant Society group, allowing ongoing use of meeting rooms at the Gardens, as well as providing all CONPS members statewide a \$5 discount off new or continuing DBG membership. The **Fort Collins** Chapter secured meeting space for their members at The Gardens at Spring Creek. President Denise Culver reports a terrific slate of speakers with presentations on topics, including Roosevelt National Park and the impact of leafy spurge on the soil seed bank, conservation of critical biological resources in Larimer County, native plant propagation, Shambhala Mountain Center's native gardens near Red Feather Lakes, and the wonderful, colorful, and sometimes arcane world of common plant names. The final meeting of 2005 featured the results of the botany blitz in North Park, including photos of wetland plants and CONPS members in action. The **Southeast**

Chapter had exceptional speakers, field trips and workshops, including Steve Jennings of UCCS, Herb Meyer of the Florissant Fossil Beds National Monument, Andy DeNaray, a photographic artist, and Tass Kelso, Colorado College. Members went on field trips to the Fort Carson Recreation Area Buckhorn Trail where *Calypso* was observed; Elk Park Knoll where early spring alpine species were found; the annual *Cypripedium* survey in Emerald Valley; a tour of native plant restoration at the Cripple Creek and Victor Mines; and conducted two field surveys. The Plateau Chapter began the year with an exhibit at the Landscapes West Garden Show in Grand Junction. In early April, Cindy Carlson led off the field trip season to observe lichens at Devils Canyon. The field trip to Rattlesnake Arches was once again cancelled due to weather; Plan B was a hike to "Otto's bathtub" in Colorado National Monument. A joint Grand Valley Audubon/CONPS hike led by Jude Sirota along the Audubon Trail in May emphasized bird and weed identification. Ivo Lindauer led a great field trip to Pyramid Rock Natural Area near De Beque, where participants observed many Uinta Basin hookless cacti, De Beque phacelia, and De Beque milkvetch, as well as a caravan of Halliburton trucks. Rounding out the season were field trips to the Uncompahgre Plateau and Telluride area fens.

Thank you to the following members who donated to the various funds of the Society, including the Marr and Steinkamp Research funds, general donations, or for the Annual Meeting: Ronald Abbott, Sue Ellen Alishouse and Les Golden, Gay Austin, Sharon Balius, Richard Beidleman Family, Yolanda Benally, Robert Blackwell, Bruce and Catherine Bosler, Charlotte Briber, John Bridges, John Brink, Cheryl and Joseph Brooks, Leo Bruederle, David and Sandy Buckner, Dennis and Lisa Buechler, Patricia Butler, Stanley Carlson, Zephyr and Roger Cecchi, Dina Clark, Robert Clemans, Ann Cooper, Kenneth Curtis, Mary Carolyn Damm, Renate Davenport, Jackson Dennis, Jean Dietemann, Kathleen Dwire, Paula Edwards, Brian Elliott, Mo Ewing, Margaret Foderaro, Frances Fraser, Eve Gilmore, Susan Gordon, John and Susan Halabrin, Elizabeth Hall, Susan Harris, Barbara Hawke, Timothy and Ann Henson, Warren Hern, Dexter and Violet Hess, Elaine Hill, Tim Hogan, George Huggins, Tina Jones, Sue Kamal, Mary Kemp, Charles and Anita King, Hugh Kingery, Martha Kirk, Janet Klempere, Jane Kopperl, Andrew Kratz, Sarada Krishnan, Barry Levene, Ivo Lindauer, Wayne Logan, Joan Lutz, Sue Martin, Stephanie Mason, Linda Miller, Paul and Annette Miller, Ted and Mary Miller, Patrick Murphy, William Murray, Tamara Naumann and Peter Williams, Patricia O'Neill, Walter and Susan Orloff, Neal Osborn, Elizabeth Otto, Donald and Mary Parker, The Hensley Peterson Family, Steve Popovich, Janet Porter, Eric Rechel, Renth Family, Sandy Righter, Andrea Robinsong, Joseph Rocchio, Rocky Mountain Nature Association, Terence Ryan, Patricia Saito, Joan Sapp, Richard Scully and Mary Jane Howell, Rebecca Siegle and Matt Schweich, Moras and Erne Shubert, Erica Smith, David Steingraeber and Carol Simmons, Dale and Grace Sutherland, Ron Turner, Jeffrey Uhlich and Janell Edman. Karen Vail, Carla Vandervoort, Gretchen Van Reyper, J. T. Verbeck, Gail Wagner, Travis and LaDonna Ward, Olin Webb, David Weber, Jannette Wesley, Denise Wilson, Stephen and Kenna Yarbrough, Ann Young.

Short-term Effects of Fire and Postfire Rehabilitation on the Forest Understory: A Case Study from the Colorado Front Range

Paula Fornwalt and Merrill Kaufmann, US Forest Service

Rocky Mountain Research Station, 240 West Prospect Road, Fort Collins, CO 80525

High-severity fires can greatly increase runoff and erosion potential in coniferous forests by changing vegetation, litter, and soil structure. Damage caused by increased postfire runoff and erosion can be extensive and costly, especially when both ecosystem dynamics and human values are affected. Consequently, land managers often prescribe emergency rehabilitation treatments to minimize the risk of erosion-related damage. These rehabilitation treatments are often implemented over large portions of intensely burned landscapes shortly after the fire is contained. Many of the common postfire rehabilitation treatments aim to reduce runoff and erosion potential by increasing ground cover (e.g., seeding with native or non-native understory species; mulching with straw or other materials), by breaking up the hydrophobic soil layer (e.g., soil scarification with rakes, chains, or machinery), or by providing traps to capture sediment as it moves downhill (e.g., placing logs or straw bales along hillside contours).

While these rehabilitation treatments may decrease erosion-related postfire impacts, they may also cause undesirable changes to the forest understory. To quantify the effect of rehabilitation treatments on understory plant communities, we compared a suite of understory response variables between unburned, burned, and burned-and-rehabilitated plots in and around the 2002 Hayman Fire. The postfire rehabilitation treatment evaluated in this study was a seed-and-scarify treatment, which covered approximately 5,000 of the 11,400 hectares rehabilitated in the Hayman Fire by the U.S. Forest Service (Robichaud et al. 2003). Specifically, this research aimed to address two questions about the effects of the Hayman Fire and the postfire seed-and-scarify treatment: 1) What are the effects of wildfire and postfire rehabilitation on the native and non-native plant communities as a whole? 2) What are the effects of wildfire and postfire rehabilitation on an array of individual species, including (a) the most common species; (b) food plants for *Hesperia*

leonardus montana (Pawnee montane skipper), a threatened butterfly; (c) threatened, rare, sensitive or at-risk plants; and (d) noxious weeds?

In general, the intensity of the rehabilitation treatment was low in the rehabilitated area we studied. U.S. Forest Service land managers seeded two annual grass species as part of the seed-and-scarify treatment—*Hordeum vulgare* (barley) and *Triticosecale rimpaii* (triticale; a wheat/rye hybrid). Of these, we found that only *T. rimpaii* established in our burned-and-rehabilitated study area, providing less than one percent cover. It also established in our burned-only study area, but to a lesser degree; how the seeds entered this area is unknown. While the intensity of the soil scarification treatment could not be assessed in our study area, we suspect that it was also low, as there were no visible signs of it remaining in 2004 (one and a half years after completion).

In our research areas, we found that the Hayman Fire had some effect on the structure of the understory plant community as a whole and on the distribution and abundance of individual species within the community, but the seed-and-scarify treatment within the Hayman Fire had little additional effect. Both native species richness and cover were not significantly different between unburned, burned, and burned-and-rehabilitated plots. Non-native species richness and cover were low overall, but were generally higher in burned and burned-and-rehabilitated plots than in unburned plots. However, no effect of the postfire rehabilitation treatment per se could be detected for non-native species richness and cover.

When we assessed the effects of fire +/- postfire rehabilitation on a suite of individual species, the findings varied by species. For these analyses, plant frequency and cover data for each understory plant were used to classify each plant in one of three ways: (a) tolerant - the species' distribution and abundance were unaffected by the fire +/- the postfire rehabilitation treat-

ment; (b) stimulated - the species' distribution and abundance were positively affected; or (c) sensitive - the species' distribution and abundance were negatively affected. Most of these species were tolerant of the fire +/- postfire rehabilitation, but stimulated and sensitive species were also found. More information about each species and its response to fire observed in this study is given in Table 1 (see page 4).

It is not likely that the seed-and-scarify postfire rehabilitation treatment met the goals of the Hayman BAER team, since the treatment did not appear to reduce erosion (though we did not measure erosion in this study). While the composition of the understory did not appear to be increasingly affected by seed-and-scarify rehabilitation treatment in the Hayman Fire, results may have been different if the treatment had been more successful. If land managers decide to implement this postfire rehabilitation treatment in the future, the effects of the treatment on the understory plant community must also be monitored to determine the relationship between treatment success and understory response.

Acknowledgements

This research was funded by the National Commission on Science for Sustainable Forestry, the Joint Fire Science Program and the Rocky Mountain Research Station. For more information, contact Paula Fornwalt at pforwalt@fs.fed.us.

References

Available by contacting Paula Fornwalt at pforwalt@fs.fed.us or *Aquilegia* Editor Alice Guthrie, molly82@earthlink.net.



Liatris punctata.

Photo provided by Paula Fornwalt.

Table 1. Individual species that were analyzed followed by the response observed in this study. All information about the species' attributes is from Weber and Wittman (1996) unless otherwise noted.

Species Name	Response	Attributes
Dominant species:		
<i>Allium cernuum</i> (nodding onion)	Sensitive to fire; somewhat sensitive to fire+rehab	Native perennial forb found on grassy slopes and dry meadows; sprouts after fire (Stickney and Campbell 2000)
<i>Antennaria parvifolia</i> (small-leaf pussytoes)	Tolerant of fire +/- postfire rehab	Common native perennial forb found in open montane forests; colonizes from offsite sources after fire (Matthews 1993)
<i>Arabis fendleri</i> (Fendler's rockcress)	Stimulated by fire; somewhat stimulated by fire + rehab	Native perennial forb common in the Front Range foothills; postfire regeneration strategy undocumented
<i>Artemisia ludoviciana</i> (white sagebrush)	Tolerant of fire +/- postfire rehab	Native perennial forb or subshrub found on rocky mid-elevation slopes; sprouts after fire (Anderson 2005)
<i>Carex rossii</i> (Ross' sedge)	Tolerant of fire +/- postfire rehab	Native perennial sedge common in ponderosa pine forests; sprouts after low/moderate intensity fire and colonizes from seedbank after fire; seeds require heat to germinate (Cope 1992)
<i>Chenopodium fremontii</i> (Fremont's goosefoot)	Stimulated by fire +/- postfire rehab	Native annual forb common in CO woodlands; <i>Chenopodium</i> sp. likely colonize from offsite sources/seedbank after fire (Thompson and Grime 1979); responds best to heavy burn (Bartos and Mueggler 1981)
<i>Chenopodium leptophyllum</i> (narrowleaf goosefoot)	Stimulated by fire; additionally stimulated by rehab	Native annual forb; <i>Chenopodium</i> sp. likely colonize from offsite sources/seedbank after fire (Thompson and Grime 1979)
<i>Heterotheca villosa</i> (hairy goldenaster)	Tolerant of fire +/- postfire rehab	Native perennial forb abundant throughout foothills; sprouts after fire (USDA NRCS 2001)
<i>Mertensia lanceolata</i> (prairie bluebells)	Somewhat stimulated by fire +/- postfire rehab	Abundant native perennial forb abundant; often found in disturbed areas (Beidleman et al. 2000); postfire regeneration strategy undocumented
<i>Muhlenbergia montana</i> (mountain muhly)	Tolerant of fire; somewhat sensitive to fire+rehab	Native perennial grass common in mid-elevation forests; capable of sprouting after low /medium intensity fire (Vose and White 1987, Walsh 1995)
<i>Packera fendleri</i> (Fendler's ragwort)	Tolerant of fire +/- postfire rehab	Abundant native perennial forb found in open foothill forests, usually on gravelly soil; <i>Senecio</i> sp. likely colonize after fire from offsite sources (Halpern 1989)
<i>Potentilla fissa</i> (Bigflower cinquefoil)	Tolerant of fire +/- postfire rehab	Abundant native perennial forb found in Front Range foothills; <i>Potentilla</i> spp. likely colonize from offsite sources after fire (Tirmenstein 1987)
<i>Verbascum thapsus</i> (mullein)	Stimulated by fire; tolerant of fire+rehab	Biennial forb native to Asia (Whitson et al. 2001); CO List C noxious weed; colonizes from offsite sources after fire (Stickney and Campbell Jr. 2000)
<i>Yucca glauca</i> (soapweed yucca)	Tolerant of fire; somewhat sensitive to fire+rehab	Abundant native perennial shrub/ subshrub found in rocky areas; sprouts even after high-severity fire; readily colonizes after fire from seedbank/ offsite sources (Tirmenstein 1989)
Species critical for Pawnee Montane Skipper, <i>Hesperia leonardus montana</i>:		
<i>Bouteloua gracilis</i> (blue grama)	Tolerant of fire; sensitive to fire+rehab	Native perennial grass common in the plains, foothills, and intermountain parks; sprouts after fire (Anderson 2003)
<i>Liatris punctata</i> (dotted blazing star)	Tolerant of fire +/- postfire rehab	Common native perennial forb found throughout the Rocky Mt. foothills; can sprout and colonize from offsite sources after fire (Walsh 1993)
Native species at moderate risk for extinction:		
<i>Aletes anisatus</i> (Rocky Mtn. Indian parsley)	Tolerant of fire +/- postfire rehab	Native perennial forb found only in the hills/mountains of CO, usually on dry rocky soil (Harrington 1964); postfire regeneration strategy undocumented
<i>Mentzelia speciosa</i> (jeweled blazing star)	Tolerant of fire +/- postfire rehab	Native perennial forb found only in CO and WY; postfire regeneration strategy undocumented
Noxious weeds:		
<i>Cirsium arvense</i> (Canadian thistle)	Tolerant of fire +/- postfire rehab	Aggressive perennial forb native to southeast Eurasia (Whitson et al. 2001); CO List B noxious weed; capable of sprouting and of colonizing from the seedbank/ offsite sources after fire (Zouhar 2001)
<i>Linaria vulgaris</i> (butter-and-eggs)	Tolerant of fire +/- postfire rehab	Short-lived perennial forb native to Eurasia (Whitson et al. 2001); CO List B noxious weed; <i>Linaria</i> spp. are capable of sprouting and of colonizing from seedbank/ offsite sources after fire (Zouhar 2003)

Society Announcements

Education & Outreach Committee

Attend Echter's 11th Annual Spring Gardening Expo March 3-5. This is the largest gardening event of its kind in Colorado, and is designed to educate and entertain the entire family! Seminars and demonstrations provide information and inspiration from experts in all areas of gardening. CONPS will again be on-hand to educate Echter's customers on Colorado's native flora and our society. This is a great opportunity to share your passion and enlighten others on the wonders of native plants. Contact Megan Bowes (303-561-4883 or bowesm@bouldercolorado.gov) to volunteer for the CONPS booth.

Location: 9170 W. 52nd Avenue, Arvada. Hours: Friday, March 3, 3-5:30; Saturday, March 4, 10 - 5:30; and Sunday, March 5, Noon - 4. Echter's Information: www.echters.com.

Workshop Committee

Thank you to Mignon Macias for your service on the workshop committee. We appreciate the great job you have done and wish you well in your new endeavors! I welcome the 2006 workshop chair, Mary Ellen Ford, who has lived in the Denver/Boulder area since 1957, and finished her doctorate last year at the University of Colorado - Boulder in Ecology and Evolutionary Biology with an emphasis in Plant Systematics. As you can see from the workshop below, now she shares her love of all aspects of botany by teaching and preaching to everyone. Thanks for taking this on!

-- Leo Bruederle, President

PLANT TERMINOLOGY WORKSHOP

Leader: Mary Ellen Ford, Ph.D.

Location: University of Colorado Greenhouses

Session I: April 29, 2006

Session II: April 30, 2006

Time: 9 am - Noon

We will gain a working knowledge of the terminology used in plant identification. Using the text *Plant Identification Terminology* (Harris and Harris, 2nd ed. 2001) and the amazing plant collection at the 30th Street greenhouses, we will learn the terminology by category, focusing on stems, surfaces and leaves. We will not identify plants - just plant parts! Visit the CONPS website for registration information, www.conps.org

Book Review

Plants of the Rocky Mountains

Linda Kershaw, Andy MacKinnon and Jim Pojar
Edmonton, AB: Lone Pine Publishing, 1998. 384 p.

Entertaining and informative, *Plants of the Rocky Mountains* is definitely a book to add to your collection. Containing over 900 color photos and 700 line drawings, this attractive guide provides the reader with a great deal of interesting information about 1,362 plants found in the Rocky Mountains from British Columbia to New Mexico. It is difficult to find other identification guides of this size that include so much information on native uses, ecology, related species and meanings of the plant names, in addition to plant descriptions and good quality photographs. Plants are arranged by groups including trees, shrubs, wildflowers, aquatics,

grass-like plants, ferns and allies, bryophytes (mosses and liverworts) and lichens. An illustrated glossary, two pages of references, selected keys and a detailed index are valuable additions.

-- Jan Loechell Turner

Native Plant Master Program

Native or noxious? Distinguishing native plants from noxious weeds is just one of the skills that participants learn in the Native Plant Master program, sponsored by Colorado State University (CSU) Cooperative Extension. The field-based courses focus on plant identification, ecology, landscaping and other human uses. The goal of the program is to increase public awareness of the biological and human values of native plants resulting in preservation and protection of native plant resources in Colorado. CONPS members are encouraged to participate in this enjoyable, educational outdoor program. Both amateur and professional botanists can benefit from the courses. Registration is limited. Applications are due by March 17, 2006. The cost is \$85/course (\$340 for all). It is offered at a reduced rate (\$45 each or \$180 for all) to participants who agree to teach at least 30 people per year in public programs about native plants. Graduates who satisfy the teaching requirement become Certified Native Plant Masters. Registration information is available at 303-272-6646 or on the web at <http://www.coopext.colostate.edu/jefferson>.

May Course (May 6, 13, 20) - Mount Falcon Open Space Park
June Course (June 3, 10, 17) - Lair O the Bear Open Space Park
July Course (July 8, 15, 22) - Reynolds Ranch Open Space Park
September Course (Sept. 9, 16, 23) - Plains Conservation Center
-- Jan Loechell Turner, Native Plant Master Program Trainer

Protection Finally Proposed for Wildflower January 19, 2006

Responding to the Fish and Wildlife Service's proposal today to protect the Graham's beardtongue (*Penstemon grahamii*) as a threatened species under the Endangered Species Act, a coalition of conservation groups (including the Colorado Native Plant Society) applauded the proposal and urged the government to follow through as quickly as possible because threats from oil and gas drilling are mounting. Graham's beardtongue is found only on oil shale outcrops in the Uinta Basin of Utah and northwestern Colorado. The Fish and Wildlife Service estimates there are only 6200 individual plants left. Graham's beardtongue first became an official Candidate for Endangered Species Act protection in 1975. The listing proposal includes 3,500 acres of critical habitat. "The Uinta Basin is home to many rare wildflowers that are a part of Colorado's unique natural heritage," said Dave Anderson, Vice President of the Colorado Native Plant Society. "We are relieved to see that the Fish and Wildlife Service recognizes the threats these special plants are facing and is doing something about it in the case of Graham's beardtongue."

AQUILEGIA DEADLINE - APRIL 7

Submit contributions for Vol. 30, No. 2 by April 7, 2006.
Submit via e-mail as an MS Word or rtf document. See page 7 for additional information.

CHAPTER NEWS

Boulder Chapter

Monthly meetings are on the second Thursday of the month at 7 PM at the City of Boulder Open Space and Mountain Parks offices in the north building conference room, 66 South Cherryvale Road. From South Boulder Road, go south on Cherryvale 1/10 mile and turn west onto a lane to the offices. Contact Tommi Wolfe, scanesclan@comcast.net or 303-682-1208.

March 10 Topic TBA.

April 13 Topic TBA.

May 11 Annual Picnic and Wildflower Hike to celebrate the spring!

Fort Collins Chapter

Month meetings are held **Wednesday** at 7 PM at the Gardens on Spring Creek, 2145 Centre Ave., Fort Collins. Dinner with the speaker will be at 5:15 pm at The Rainbow on Laurel St. Please contact Denise Culver the day before if you will join us for dinner, dculver@lamar.colostate.edu or 970-491-2998.

Metro-Denver Chapter

Monthly meetings are held September through April at 7 PM in the Waring House Main Room (unless otherwise noted) at the Denver Botanic Garden (the mansion just south of the main entrance on York Street). To enter, head south on York past the Gardens main entrance. Make an immediate right into parking lot that says "Staff Parking." Members are invited to join speakers at 5:30 PM for pizza at Angelo's, 620 East 6th Ave (between Pearl and Washington) in Denver. For more information, contact Chapter President Naomi Nigro, 303-366-6033, or email naomi4CoNPS@hotmail.com.

February 28 Saving Table Mountain: Advocacy Success. Don Parker.

March 28 Monitoring *Sclerocactus mesae-verdae*. Janet Coles.

April 25 The Wonderful World of Common Names. Ron West, Resource Planner/Ecologist, Boulder County Parks and Open Space. Denver Botanic Gardens, Location TBA.

Denver Botanic Gardens - Discount Membership

Contact Denver Chapter President Naomi Nigro for details and coupon.

Plateau Chapter

Contact Chapter President Jeanne Wenger at 970-256-9227, stweandjaw@acsol.net or Program Chair Lori Brummer at 970-641-3561, lbrummer@gunnison.com for meeting information.

April 13 Mee Canyon, Early Early Bloomers. Moderate hike. For more information and registration, call Cindy Carlson at 970-245-6465 or contact Bob Clarke at rclarke@mesastate.edu or 970-242-6067.

April 29 Rabbit Valley-McDonald Creek to river. Early bloomers, petroglyphs, lichens! 1.5 miles easy to moderate hike to the river. Contact Cindy Carlson for registration and more information at 970-245-6465.

Help! We need someone with good organizational skills to be President of the Plateau Chapter. Contact Gay Austin at austinaceae@frontier.net or 970-641-6264 for more information.

Southeast Chapter

Activities are scheduled throughout the year and often held at the Beidleman Environmental Center, on Caramillo St., north of Uintah, off Chestnut, in Colorado Springs. The chapter is recruiting for the office of President. For chapter information or to volunteer, contact Liz Klein, eklein@kiowaengineeringcs.com, 719-633-5927 or Elsie Pope, 719-596-4901.

Southwest Chapter

For news and activities, contact Chapter President Sandy Friedley at 970-884-9245 or by e-mail at friedley@mydurango.net.

Boulder County Nature Association Classes

Visit www.BCNA.org. Scholarships of up to \$50 are available for each class.

Mysteries of Bird Migration: Scott Severs

March 15, March 19, April 15, May 7. Tuition: \$90 (\$80 BCNA members). To register, call Scott at 303-684-6430 or email rostrhamus@aol.com.

Owls: Steve Jones

April 20, April 22, June 10, June 24. Tuition: \$85 (\$75 BCNA members) To register, call Steve at 303-494-2468 or email Stephen.jones@earthlink.net.

Geology of the Front Range: Paula Hansley

April 13, April 23, April 30.

Tuition: \$70 (\$60 BCNA members). To register, call Paula at 720-890-2628 or email hansleyp@att.net.

Identification of Spring Wildflowers: Joyce Gellhorn

Session I: April 19, April 26, April 29.

Session II: May 3, May 10, May 13.

Tuition: \$65 for Session I or II (\$55 BCNA members); \$120 for both Sessions (\$105 BCNA members). To register, call Joyce at 303-442-8123 or e-mail jgellhorn@sprynet.com.

Bird Song: Steve Jones

May 18, May 20, June 3, July 8.

Tuition: \$85 (\$75 BCNA members). To register, call Steve at 303-494-2468 or email stephen.jones@earthlink.net

Aquilegia via Email

Aquilegia is available via email as an Adobe document. File size is typically 2-3 MB and fast internet connections are needed to download or view it. Send your email address to Eric Lane, eric.lane@ag.state.co.us, or Alice Guthrie, molly82@earthlink.net.



Colorado Native Plant Society

Aquilegia

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

Please join us in helping to encourage interest in enjoying and protecting 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 Eric Lane (Chair of Membership), 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 is published four or more 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. Articles for *Aquilegia* may be used by other native plant societies or non-profit groups, if fully cited to author and attributed to *Aquilegia*.

Articles from 500 to 1500 words in length, such as unusual information about a plant, are welcome. Previously published articles submitted for reprinting require permission. Digital photographs or line drawings are also solicited. Please include author's name and address, although anonymity may be requested. Articles must be submitted electronically.

Please direct all contributions to the newsletter to:

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509 Collyer
Longmont, CO 80501
E-Mail: molly82@earthlink.net
guthriea@ci.boulder.co.us

Officers

President	Leo Bruederle ..	303-556-3419
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.....	Liz Klein	719-633-5927
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Sales	Mary Ellen Ford	303-
Workshop		

MEMBERSHIP APPLICATION AND RENEWAL FORM

Name(s) _____

Address _____

(Address) _____

City _____ State _____ Zip _____

Phone _____ E-mail _____

MEMBERSHIP CLASS:
 Dues cover a 12-month period.

Individual, \$15.00

Family/dual, \$20.00

Senior, \$8.00

Student, \$8.00

Corporate, \$30.00

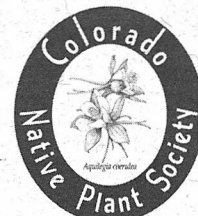
Supporting, \$50.00

Lifetime, \$250.00

Chapter (Circle one): Boulder Fort Collins Metro Denver Plateau Southeast Southwest

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 2005 - 2006

CHAPTER EVENTS

- Boulder Chapter**
- February 9 Vegetative Mapping Project, Boulder Open Space and Mountain Parks
- March 10 Topic TBA
- April 13 Topic TBA
- May 11 Annual Picnic and Wildflower Hike

Metro-Denver Chapter

- February 28 Saving Table Mountain: Advocacy Success
- March 28 Monitoring *Sclerocactus mesae-verdae*
- April 25 The Wonderful World of Common Names
- April 26 Topic TBA

Plateau Chapter

- Feb. 10 - 12 Landscape West conference

SOCIETY EVENTS

Workshops

- March 4 & 5 Front Range Vegetation Zones and Rare Plants
- April 29 & 30 Plant Terminology
- May 20 & 21 Beginning Plant ID

Outreach Events

- March 3-5 Echter's Echxpo, Arvada

Board Meetings

- February 18 American Mountaineering Center, Golden
- April 8 To Be Announced

2006 Annual Meeting

- Sept. 8-10 Colorado Springs

TIME SENSITIVE MATERIAL

P.O. Box 200
Fort Collins, Colorado 80522
<http://www.comps.org>