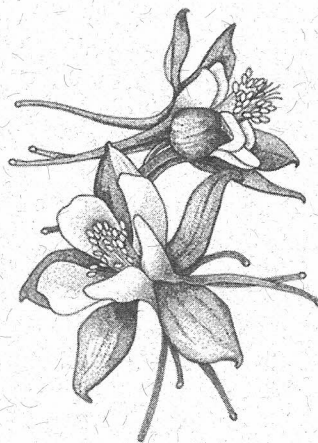


Aquilegia

Newsletter of the Colorado Native Plant Society



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

Volume 29 Number 2

FIELD TRIP EDITION

March - April 2005

The Board of Directors is pleased to announce the 2005 Field Trip Schedule. We have a variety of field trips on the Front Range and West Slope. Field trip leaders volunteer their time and we appreciate their sharing their knowledge and concern for our native flora. CONPS has a Field Trip Policy (www.conps.org, Field Trips) which we hope you will review. It forbids collecting (except under special circumstances) and bringing pets on field trips. We encourage carpooling and urge riders to reimburse drivers for mileage. We hope you will participate in a field trip this summer.

--Ivo Lindauer, Field Trip Committee Chair

Boulder Prairie Restoration II Mediterranean Sage Weed Pull

Date: Saturday, April 23

Trip Leader: Volunteers for Outdoor Colorado (VOC)

For the second year, Volunteers for Outdoor Colorado and Wildlands Restoration Volunteers will help to eradicate Mediterranean sage, an aggressive invasive that threatens the ecological health of Colorado's grasslands. Several agencies are working cooperatively with private landowners in Boulder County to manage the only known population in Colorado. Volunteers will spend the day walking through beautiful prairie grasslands north of Boulder, shovel in hand, popping Mediterranean sage from the prairie. To register, go on-line at www.voc.org, select VOC Projects, then Boulder Prairie Restoration II.

Rattlesnake Arches in Colorado Canyons

Date: Friday, April 29 or Friday, May 6

Trip Leader: Jeanne Wenger

This trip will involve carpooling and travel by four-wheel drive to the trailhead in Colorado Canyons National Conservation Area. We will see a half-dozen members of the Parsley Family (Apiaceae) including perhaps the best example of Canyonlands *Lomatium* (*Lomatium latilobum*) in Colorado. The hike will be moderately strenuous, approximately 5 miles long, and we'll see the greatest concentration of arches outside of Arches National Park. Contact Jeanne Wenger at 970-256-9227.

Adobes

Date: Saturday, April 30 or Saturday, May 7

Trip Leader: Evey Horn

This trip will involve easy walking in the Tongue Creek area of the lower slopes of Grand Mesa. Evey is currently writing a brochure of shrubs found in this environment and we may get to test her newest field guide. Call Evey at 970-835-8391 or email at botnbird@tds.net.

Spring Birding and Weed Identification

Date: Sunday, May 8

Trip Leader: Jeanne Wenger

This trip is in conjunction with the Grand Valley Audubon Society and will be easy walking on a paved trail along the Colorado River in Grand Junction. We will start at 8 AM and end before noon. For details, call Jeanne Wenger at 970-256-9227.

Flora of the Teec Nos Pos Environs of the Navajo Nation

Date: Saturday, May 14, 9 AM - late afternoon

Trip Leader: Arnold Clifford

Hike the rolling landscape north of Teec Nos Pos and west of Red Mesa. We will see *Asclepias macrosperma*, *A. cutleri*, *Bahia oblongifolia*, *Wyethia scabra*, *Astragalus episcopus*, and *Lupinus argenteus moabensis*. We may also visit Teec Nos Pos Canyon on the north edge of the Carrizo Mountains. Be prepared for moderate hiking over stony terrain. Bring water and lunch. Meet at 9:00 AM at the Historic Teec Nos Pos Trading Post on US 64 east of the US 160 intersection. Four-wheel drive, high clearance vehicles are recommended (no RVs or campers). Please carpool. The

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field trip will conclude by late afternoon with opportunities to leave earlier. For information, contact Charlie King, 483 Cliffside Place, Pagosa Springs, CO 81147, or 970-731-4794.

**Pyramid Rock Natural Area
Annual West Slope Board Meeting & Field Trip**

Date: Saturday, May 21 and Sunday, May 22

Trip Leader: Dr. Ivo Lindauer

Field trip participants should meet at the DeBeque Post Office at 9 AM on Saturday, May 21. We hope to see DeBeque phacelia (*Phacelia submutica*) and the Uinta Basin hookless cactus (*Sclerocactus glaucus*) in bloom, as well as other interesting plants and geological features of the area. The board meeting will be Sunday at Ivo's home on Battlement Mesa, 269 Lodge Pole Circle, 3 miles southeast of the town of Parachute. Contact Ivo at 970-285-1112 or ivo38@aol.com.

Beginner Wildflower Identification

Date: Saturday, June 4, 9 AM - 1 PM

Trip Leader: Sue Kamal

Learn to key wildflowers in an outdoor classroom. The field trip is intended for those who do not know how to use a key and would like to learn. Janet Wingate's *Rocky Mountain Flower Finder*, an easy non-intimidating key, will be used and may be purchased on site for about \$10. Bring other keys as you wish. A hand lens is helpful and also may be purchased on site. Wear sturdy hiking shoes, and bring water, lunch, a hat, sunscreen and raingear. Meet at the Flatirons Overlook Trailhead, south of Boulder on the west side of Hwy 93, about one mile south of Highway 170 intersection (El Dorado Canyon road). To register, contact Sue Kamal, 970-351-1512 or Sue.Kamal@unco.edu. Limit 15.

Uncompahgre Plateau

Date: Saturday, June 4 or Saturday, June 11

Trip Leader: Gretchen Van Ryper

We'll look for Ladieslipper orchids and late blooming Pasque flowers on this trip. Gretchen Van Ryper has been working on the plateau and is very familiar with the flora of the area. There will be moderate walking with some elevation change. Contact Gretchen at gretchenv@juno.com for times and meeting site.

Early Summer Flowers at Roxborough State Park

Date: Saturday, June 11, 8:30 AM - Noon

Trip Leader: Vickey Trammell

This trip is geared to beginner and middle-level knowledge of flowers. Meet at 8:30 on the patio in front of the Visitor Center. Bring water, hat, sunscreen and your favorite flower book. Dress for the weather and for possible Jurassic mud. **A \$5.00 Day Pass is required** for every car entering the park, unless you have an annual State Park pass. Purchase the day pass at the gate. Contact Vickey Trammell to register, 5442 S. Cedar St., Littleton, CO 80120, 303-795-5843, or jrtrambo@aol.com. **Register by 5pm Friday, June 10.**

Those Hardy Plants of Cherry Creek State Park

Date: Saturday, June 18, 9 AM

Trip Leader: Raylene Owen

Biology teacher emeritus, Raylene Owen, will guide you on a tour of the flora of the Cherry Creek Basin with an emphasis on weeds. Copies of *Weeds of the West* will be available for purchase. This will be a walking tour of both the riparian and short grass prairie ecosystems. Meet at 9:00 AM at the Twelve Mile House Pavilion. We will return to the picnic pavilion at noon for lunch and a chance to test your identification skills. Contact Raylene at 303-755-2981 or RayleneOwen@aol.com to register and for more information. (Directions to the Pavilion: Enter the park at the east entrance at Parker Road and Lehigh. If you do not have a park pass, bring a copy of *Aquilegia* for free admission. Follow the road west and take the next two left hand turns; you will be going south. The Pavilion is on your left just before the road makes an abrupt turn to the west.)

Telluride Fen

Date: Saturday, July 16th, 9 AM - 3:30 PM

Trip Leader: Dr. David Cooper

Explore the fens of Prospect Basin on Telluride Mountain with Dr. David Cooper, CSU Wetland Ecologist and botanist. David will lead a moderately strenuous hike into four to five fens where we will hear about the flora, ecology, hydrology, and research in these unusual ecosystems. We will see three species of cotton-grass (*Eriophorum gracile*, *E. angustifolium* and *E. altaicum*), bog buckbean (*Menyanthes trifoliata*), various forbs and fen sedges (*Carex illota*, *C. magellanica* and *C. saxatilis*). **RUBBER BOOTS OR SANDALS ARE REQUIRED** for walking through cold water. **Limit 10.** Contact Gay Austin, 970-641-6264 or austinaceae@frontier.net for more information and registration.

Alpine Wildflower Identification Workshop

Date: Saturday, July 23 and Sunday, July 24

Trip Leaders: Dr. E. Keith Longpre and Gay Austin

Learn to easily identify the beautiful, tiny alpine wildflowers on Cottonwood Pass in Gunnison County. No previous experience in plant identification is necessary. Relaxed easy walks. The workshop will be led by Dr. E. Keith Longpre, Professor Emeritus of Western State College, and Gay Austin, U.S. Forest Service. The fee is \$25, which includes, *Alpine Flower Finder* and *Rocky Mountain Flower Finder*, and a 10X hand lens (\$10 fee if you already have the books and hand lens). Pre-registration is required. Contact Gay Austin, austinaceae@frontier.net or 970-641-6264. Limit 15.

Beginner's Wildflower Identification - Gunnison Basin

Dates: Saturday, July 30, 9 AM - 4 PM and

Sunday, July 31, 9 AM - 3:30 PM

Trip Leader: Dr. Keith Longpre

Dr. Keith Longpre will lead a Saturday morning basic plant identification workshop at Western State College with Saturday afternoon and Sunday field trips to help people get started in wildflower identification. Relaxed easy walks. \$20 registration fee includes the cost of the *Rocky Mountain Flower Finder*. Contact Gay Austin at 970-641-6264 or austinaceae@frontier.net.

"Field Trips" continues on page 4

The species of *Bothriochloa* (Poaceae) on the West Slope of the Rocky Mountains, Colorado

Michael W. Denslow

Rancho Santa Ana Botanic Garden, 1500 N. College Ave., Claremont, CA 91711
(Present address: 659 Timberlane Dr., Boone, NC 28607)

Bothriochloa is a genus of about 35 species, distributed in tropical and subtropical regions worldwide (Allred 2003). The generic name is Greek for "pitted grass" (bothri- [a pit] and -chloa [a grass]) alluding to the pitted glumes of some species. Some *Bothriochloa* species are cultivated as ornamentals (e.g. *B. barbinodis*) and others have been introduced for revegetation and forage (e.g. *B. bladhii* and *B. ischaemum*). Members of *Bothriochloa* previously were included in *Andropogon* but differ from this genus in a number of features, most obviously by possessing a longitudinal, translucent furrow along the pedicels and rachis internodes. *Bothriochloa* forms intergeneric hybrids with *Capillipedium* and *Dichanthium* (Watson & Dallwitz, 2004), suggesting a close relationship with these genera, supported by preliminary molecular data (Mathews et al. 2002).

In *A Checklist of the Vascular Plants of Colorado*, Hartman and Nelson (2003) list six taxa of *Bothriochloa* as present in the state of Colorado: *B. barbinodis* (Lag.) Herter, *B. bladhii* (Retz.) S.T. Blake, *B. ischaemum* (L.) Keng, *B. laguroides* (DC.) Herter subsp. *torreyana* (Steud.) Allred & Gould, *B. saccharoides* (Sw.) Rydb. and *B. springfieldii* (Gould) Parodi. Since the present paper only covers the western part of the state, all collections of *Bothriochloa* from the east slope have not been examined. However it appears unlikely that *B. saccharoides*, a species of the West Indies, occurs in Colorado. It is most likely included as a result of the misapplication of the epithet "*saccharoides*" by past authors. The name *B. saccharoides* has been misapplied to both *B. barbinodis* and *B. laguroides* as well as its varieties.

Most *Bothriochloa* species are restricted to the east slope of the Colorado Rocky Mountains and formerly only *B. barbinodis* was reported from the west slope. In 2000 a small population of *B. laguroides* subsp. *torreyana* was discovered in

Montrose County, representing the first record for the western part of the state. It is documented by the following specimen: M.W. Denslow 506. 1 Aug. 2000. Montrose County, Lower San Miguel River Basin, ~5 miles SE of Uravan, along Highway 141 at milemarker 70.3, UTM Zone 12, 702727E, 4243080N. (Uravan Quad: T47N R16W S19, NW/4): 1561 meters. Growing on north side of road in gravelly soil just off pavement edge (NMCR!, RSA!).

Although *B. laguroides* subsp. *torreyana* is native to eastern Colorado, the population discovered in Montrose County may represent a waif. At this time it is unclear whether *B. laguroides* subsp. *torreyana* will persist on the west slope in Colorado. However, the range of this taxon seems to be increasing in the western U.S., possibly as a result of human activities. For example, this taxon was not listed in *The Intermountain Flora* (Cronquist et al. 1977), but has now been documented in several localities in Utah.

In researching the distribution of *Bothriochloa* species on the west slope, it was discovered that the only other collection for the genus was of *B. barbinodis*, collected by W. A. Weber in 1955 (W.A. Weber 9526. 22 August 1955. Mesa County, Canyon of the Dolores River 20 mi south of Gateway, near the covered spring (COLO, NY, RM, RSA!). Outside of Colorado, *B. barbinodis* is a common and widespread species ranging from the southwestern United States through Mexico, Central America and into South America (Allred 2003). It grows in many habitats, such as dry rocky slopes, roadsides and coastal dune areas in California. The Weber specimen represents one of the most northern collections of this species.

B. barbinodis is listed in the West Slope Flora as "infrequent on talus slopes of canyonsides, Dolores River Valley" (Weber & Wittmann 2001 p.251).

However, it may no longer occur in the state. The Dolores River valley where the Weber specimen was collected was included in a flora completed by Lyon (1996). Surveys for other sensitive species have been conducted in this area and the road has been traveled many times by the author; yet the 1955 specimen still remains the only documentation for this species in Colorado. It is possible that *B. barbinodis* did not persist at this site and may no longer occur in Colorado. Since *B. barbinodis* has not been collected in Colorado for almost 50 years, it is suggested that it be added to the Colorado Natural Heritage Program list as G5, S?, indicating that the species is demonstrably widespread, abundant and secure globally but that its distribution in Colorado is unclear. Further surveys, along with voucher specimens for both *B. barbinodis* and *B. laguroides* subsp. *torreyana*, should further document their distribution in Colorado.

The following key, adapted from Allred (1993, 2003), is provided to separate the taxa of *Bothriochloa* currently known from the entire state of Colorado.

1. Pedicellate spikelets about as long as the sessile spikelets: hairs below sessile spikelets not obscuring them: panicle usually appearing reddish.
 2. Panicle axis longer than the branches...*B. bladhii*
 - 2'. Panicle axis shorter than the branches...*B. ischaemum**
- 1'. Pedicellate spikelets obviously smaller than sessile spikelets: hairs below sessile spikelets obscuring them: panicle appearing silvery white.
 3. Sessile spikelets less than 4.5mm long and less than 1.0 mm wide; awns less than 18mm long...*B. laguroides* subsp. *torreyana*

"*Bothriochloa*" continues on page 4

"Bothriochloa" continued from page 3

3'. Sessile spikelets greater than 4.5 and greater than 1.0 mm wide; awns greater than 18mm long.

4. Rachises less than 5 cm long, with many branches (more than ten)... *B. barbinodis*

4'. Rachises greater than 5cm long, with few branches (two to nine)...*B. springfieldii*

*Two forms of *B. ischaemum*, sometimes recognized as varieties, have been separated by the presence of pubescence on the nodes, *var. songarica* (Rupr. Ex Fisch. & C.A. Mey.) Celarier & J.R. Harlan or by having glabrous nodes, *var. ischaemum*.

Acknowledgements. I would like to thank Kelly Allred for verifying determinations and for discussion of distributions and subtleties within the genus; Tim Hogan (COLO) and Ron Hartman (RM) for sharing information from their respective herbaria; and Bill Jennings and Neil Snow for making helpful comments.

Literature Cited

Allred, K.W. 2003. *Bothriochloa*: In Barkworth, M. E., K. M. Capels, S. Long & M. B. Piep (eds.) Flora of North America North of Mexico, Magnoliophyta: Commelinidae (in part): Poaceae, part 2. Oxford University Press, New York.

Allred, K.W. 1993. A Field Guide to the Grasses of New Mexico. Department of Agricultural Communications, College of Agriculture and Home Economics, New Mexico State University, Las Cruces.

Cronquist, A., A. H. Holmgren, N. H. Holmgren & J. L. Reveal. 1977. Vascular Plants of the Intermountain West, U.S.A. Intermountain Flora. 6: 1-584. Columbia Univ. Press, New York.

Hartman, R.L. & B.E. Nelson. 2003. A Checklist of the Vascular Plants of Colorado.
<http://www.rmh.uwyo.edu/colorado/index.html>. website accessed 12/15/2003.

Lyon, M.J. 1996. A Floristic Survey of the San Miguel and Lower Dolores River Drainages. (Colorado and Utah). Masters Thesis. University of Wyoming, Laramie.

Mathews, S., R.E. Spangler, R.J. Mason-Gamer & E.A. Kellogg. 2002. Phylogeny of Andropogoneae inferred from phytochrome B, GBSSI and ndhF. Int. J. Pl. Sci. 163(3): 441-450.

Watson, L. & M. J. Dallwitz. Grass Genera of the World, <http://biodiversity.uno.edu/delta/grass/www/bothrioc.htm>. website accessed 12/5/2003.

Weber, W.A. & R.C. Wittmann. 2001. Colorado Flora: Western Slope, 3rd ed. University of Colorado Press, Boulder.

"Field Trips" continued from page 2**Owl Creek Pass**

Date: July/August (tentative)

Trip Leaders: Gretchen Van Ryper and Jeanne Wenger

A long hike or possible overnight trip to the Cimarron area off Owl Creek Pass will be led by Gretchen and Jeanne. **Look for more info as summer approaches.**

Eighth Annual Middle St. Vrain Weed Survey

Date: Saturday, August 27

Trip Leader: Pat Butler

In partnership with the USFS and Colorado Mountain Club, we will hike about six miles (and up 1500 feet) into the Middle St. Vrain Creek drainage in the Indian Peaks Wilderness to monitor and pull several existing stands of Canada thistle (*Brea arvensis*) and yellow toadflax (*Linaria vulgaris*) and look for new infestations. Come join the fun and help remove these pests from the wilderness. To register and receive more information, call Pat Butler, 303-440-0586. (People interested in pulling thistle around the Camp Dick parking areas without hiking should also contact Pat.)

CONPS Workshop Series

Title: Fossil Forests and Community Change during the Eocene- Oligocene Transition in Colorado and the West

Leader: Herb Meyer, Paleontologist, Florissant Fossil Beds National Monument

Date: Saturday, April 9 & Sunday, April 10, 9 AM - 3 PM

Location: Bruce Curtis Building, Room E280, University of Colorado, Boulder.

This workshop will examine evidence for community changes in response to climatic cooling and review fossil floras ranging in age from 35 to 27 million years. Changes in vegetation, physiognomy, and floral composition will be emphasized, along with the dynamic mechanisms of community change. A selection of fossil plants from the collections of the University of Colorado Museum will be available for closer examination.

Title: Beginning Plant Identification

Leader: Dr. Tom Ranker

Date: Saturday, May 7 & Sunday, May 8, 9 AM - 3 PM

Location: University of Colorado Plant Lab, Ramaley Building

This workshop is designed for the beginner and will cover the basics of plant morphology with reference to what characters are important in identifying plants. We will go over the key characteristics of the most common 10-12 plant families in Colorado and the Rocky Mountain Region.

Workshop registrations are mail-in only and non-refundable. The cost is \$12/workshop. Workshops are one day sessions. To register, please send check, address label, name, address, telephone number and email address to:

Mignon Macias, Workshop Coordinator

5447 Blackhawk Rd.

Boulder, CO 80303

Announcements

Boulder County Ecosystem Symposium Species in Peril Monday, April 25, 10 AM

The 2005 Boulder County Ecosystem Symposium will explore the status of threatened plants and wildlife in the northern Front Range area. Presenters will include Jeff Mitton (keynote talk), Lynn Reidel (rare and sensitive plants), Anne Ruggles and Carron Meaney (Preble's meadow jumping mouse), Wendy Keefover-Ring (mountain lion), Steve Jones (rare and declining birds), Blake Schmidt (Swainson's hawk) and Tanya Shenk (lynx). The agenda is on the Boulder County Nature Association (BCNA) website, www.BCNA.org. Free registration begins at 10 AM at the Boulder Public Library auditorium. The symposium is sponsored by BCNA, Boulder County Audubon Society, Colorado Native Plant Society, City of Boulder Open Space and Mountain Parks, and Boulder County Parks and Open Space.

AWARD NOMINATIONS SOLICITED

Nominate fellow botanists, CONPS members and plant enthusiasts for outstanding contributions to the mission of the Colorado Native Plant Society. Awards will be approved by the Board of Directors and presented at the annual meeting in September. Submit your nominations to President Laurel Potts, PO Box 200, Ft. Collins, CO 80522.

Non-members

Special Merit Award

Members and Non-members

Recognition Gifts

Certificate of Appreciation

Lifetime Achievement Award

Members

Certificate of Merit

Honorary Lifetime Membership

MEMORIAL SCHOLARSHIP ESTABLISHED

The Ann B. Armstrong Horticulture Scholarship has been established at Colorado State University (CSU) honoring Ann's lifelong passion for Colorado native flora and ecology. Ann graduated with a degree in horticulture from CSU in 1966 and was a long-time CONPS member. The scholarship will help inform the next generations of local naturalists and conservationists. The fund is intended to support students from Colorado who demonstrate financial need and show an interest in studying Colorado native flora and ecology or advancing the field of ecological restoration.

Donations for 50% of the goal of \$25,000 have come from family, friends, colleagues and organizations. Hopefully, the remaining funds can be raised in time to fund students for the fall 2005 term. For more information, contact John Armstrong (970.493.3548; johna43@gmail.com) or AnnBArmstrong.org. Donations may be made directly to the CSU Foundation, PO Box 1870, Fort Collins, CO 80522-1870, Reference Account #56435. All contributions are tax deductible.

EDUCATION AND OUTREACH COMMITTEE CHAIR NEEDED

The Board of Directors is recruiting for chair of the Education and Outreach Committee. The position is crucial as the Society works to make the general public aware of the value of native plants, how they fit in the environment, and most of all, the enjoyment one receives planting and growing them. Volunteers staff three or four events a year, often in Denver. An exhibit display is part of the outreach effort, as are handouts of many kinds and free native seed packets. Please consider volunteering for the Society. Contact President Laurel Potts, kalmia127@earthlink.net, or Sue Kamal, sakamal@unco.edu, for more information.

REQUEST FOR PROPOSALS

The Board of Directors is soliciting proposals for a 30 April, 2005 (postmarked) deadline. Information on guidelines and requirements for proposals may be obtained by contacting Board member Jan Loechel at jloechel@regis.edu or 303-458-4262. The Colorado Native Plant Society supports research projects in plant biology and natural history of Colorado native plants from the John W. Marr and Myrna P. Steinkamp funds by means of small grants. The Steinkamp Fund is targeted towards rare species and those of conservation concern. Field and laboratory studies are eligible for funding. Most awards will not exceed \$500. Recipients of the awards must agree to summarize their studies for publication in *Aquilegia*, the Society's newsletter.

BOOK SALES INFORMATION

Two new books are available, *Xeriscape Colorado* and *Snowmass Village Wild at Heart: A Natural History Guide*. Check out the CONPS website for book sales through Amazon.com. Go to www.conps.org and click on CONPS Store.

2005 Annual Meeting September 16 - 18, Pagosa Springs The Flora of the San Juan River Basin

The 2005 Annual Meeting, hosted by the Southwest Chapter, will be held at the Pagosa Lodge in Pagosa Springs. The meeting will feature presentations by Ken Heil and Arnold Clifford. Field trips will be on Friday and Sunday with presentations and Society business sessions on Saturday. Program and registration information will be in upcoming issues.

Silent Auction

We need a leader and assistants to organize a silent auction. It will require finding items for donation, transporting them and organizing the auction at the meeting. Please contact Dave Anderson, dgander@lamar.colostate.edu, 970-491-5857.

AQUILEGIA DEADLINE - MAY 15

Submit contributions for Vol. 29, No. 3 by May 15, 2005. Submit via e-mail or on disks as an MS Word or rtf document. See page 7 for additional information.

CHAPTER NEWS

Boulder Chapter

Monthly meetings are held 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 Scanes, scanesclan@comcast.net or 303-682-1208.

April 14 Lichens. Barbara Hawke.

May 12, 6 PM Annual Picnic & Hike.

Fort Collins Chapter

Month meetings are held **Wednesday** at 7 PM at the Gardens on Spring Creek, 2145 Centre Ave. Ft. Collins. Dinner with the speaker will be at 5:15 pm at The Rainbow on Laurel St. Please contact Annette Miller the day before if you will join us for dinner. Leave a message at 482-3063 or 495-3240 or almiller@lamar.colostate.edu.

April 6 Research on Native Plant Propagation. Dr. Ann Grant.

Metro-Denver Chapter

Monthly meetings are held September through April at 7 PM in the Waring House 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.

April 26 A Tale of Two Sedges. Akanita Sangaumphai, Nathan Derieg, and Leo P. Bruederle, University of Colorado at Denver and Health Sciences Center. *Carex cryptolepis* and *C. lutea* (Cyperaceae) are closely related North American endemics, but there the similarity ends. Whereas *C. cryptolepis* is widespread in the Great Lakes Region and New

England, *C. lutea* is restricted in distribution to two counties on the Coastal Plain of southeastern North Carolina, where it was first described by Richard LeBlonde and colleagues in 1994 from rare savannas occupying wet sandy soils underlain by coquina limestone. Associates include other rare plants, such as Cooley's meadowrue (*Thalictrum cooleyi*) and Thorne's beakrush (*Rhynchospora thornei*). Spend an hour on the Atlantic Coastal Plain and learn more about the ecology and conservation biology of *C. lutea*.

Plateau Chapter

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

Southeast Chapter

Activities are scheduled throughout the year. The chapter is recruiting for the office of President. For chapter information or to volunteer, contact Doris Drisgill, Ddrisgill@cs.com, 719-578-1091, or George Cameron, gpcameron@juno.com, 719-634-4431.

Southwest Chapter

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

LEARNING OPPORTUNITIES

Boulder County Nature Association

Springtime Butterflies in the Front Range - Jan Chu
Saturday, May 28, 9 AM - 1 PM

This is a good walk for any beginning butterfly watcher. We'll identify all the butterflies we can see, looking for migrants, local "hatchers," butterflies that have overwintered, and caterpillars.

Tuition: \$20 (\$16 for BCNA members). To register contact Jan at 303-494-1108; chuhouse@hotmail.com.

Denver Botanic Garden

CONPS members may attend classes and lectures at DBG for half price when they register as a group through Jennifer Kessler. Email her at KeslerJennifer@hotmail.com. The following classes are open. For detailed course descriptions, go to www.botanicgardens.org, click on Education, Programs for All Ages, then 2005 Certificate in Rocky Mountain Gardening.

Invasive Plants and Native Plant Conservation

Presenter: Dr. George Beck, Professor of Weed Science at CSU
Saturday, April 16, 8 AM - 5 PM
CONPS Member Cost: \$59
Registration due April 11

Creating a Certified Wildlife Habitat

Instructor: Sheridan Samano
Wednesday, April 6, 13, 20, 27, 6-8 PM
CONPS Member Cost: \$59
Registration due April 2

CU Museum Galleries

STONE LACE - The Fragile World of Florissant Fossils

Come see a selection of fossils from one of the best fossil collections in the world! Stone Lace presents rarely seen fossils from the Museum's collection, making this a unique opportunity for visitors to admire these ancient treasures. The Florissant Fossil Beds is one of the world's richest fossil sites, boasting more than 1,700 diverse fossil species. Many delicate plants and insects from the Eocene have been perfectly preserved, revealing much about the evolution of plant and animal communities and supplies important information about the climate of ancient Colorado.
<http://cumuseum.colorado.edu>

Aquilegia via Email

Aquilegia is available via email as an Adobe document. File size is typically 2-3 MB and fast internet connections are recommended 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 not exceeding 2000 words in length and shorter items fewer than 500 words in length, 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 (IBM preferably) are appreciated. Please indicate word processing software and version; if possible, submit as an RTF (rich text format) file.

Please direct all contributions to the newsletter to:

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

Officers

President	Laurel Potts	970-328-8633
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Workshop	Mignon Macias	303-249-2977

MEMBERSHIP APPLICATION AND RENEWAL FORM

Name(s) _____

Address _____

(Address) _____

City _____ State _____ Zip _____

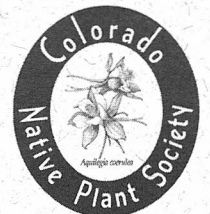
Phone _____ E-mail _____

Chapter: Boulder Fort Collins Metro Denver Plateau Southeast Southwest

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

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

CHAPTER EVENTS

Boulder Chapter
April 14 Lichens
May 12 Annual Picnic & Hike

Fort Collins Chapter
April 6 Native Plant Propagation Research

Metro-Denver Chapter
April 26 A Tale of Two Sedges

SOCIETY EVENTS

WORKSHOPS

April 9 & 10 Fossil Forests
May 7 & 8 Beginning Plant Identification

BOARD MEETINGS

Longmont
Parachute

FIELD TRIPS

Scheduled throughout the summer.
www.conps.org.

ANNUAL MEETING

Sept. 16-18
Pagosa Springs
The Flora of the San Juan River Basin

OTHER BOTANICAL EVENTS

April 25 Boulder County Ecosystem Symposium,
Boulder Public Library Auditorium
[www. BCNA.org](http://www.BCNA.org)

Now - Summer 2005, University of Colorado Museum
Stone Lace - The Fragile World of
Florissant Fossils

TIME SENSITIVE MATERIAL

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