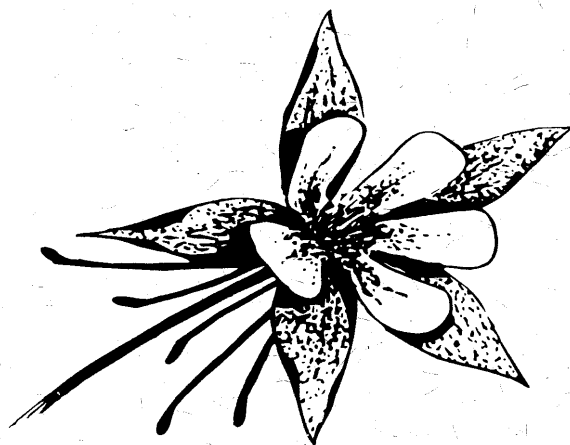


Aquilegia



Newsletter of the Colorado Native Plant Society

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

Volume 23 Number 3

May—June 1999

Our Missing Monkeyflower

Rick Brune, CoNPS

Allegheny monkeyflower (*Mimulus ringens* L.), a member of Colorado's missing flora, has not been seen in the state for over 100 years!

Mimulus ringens is typically two to three feet tall. The flowers are blue to bluish-purple to lavender, although on plants I've grown they are never blue. The flowers are strongly two-lipped and one 1.5 inches long, appearing from July into September. From a distance, it might be mistaken for great blue lobelia (*Lobelia siphilitica* L.), but it is not nearly as densely flowered nor are the flowers as blue. A complete description may be found in *Flora of the Great Plains* (Great Plains Flora Assoc. 1986) or *Manual of the Plants of Colorado* (Harrington 1954).

Alice Eastwood collected *Mimulus ringens* “along the Platte, near Denver, July 1892.” This specimen is in the herbarium of the New York Botanic Garden (NY). In Eastwood's *A Popular Flora of Denver, Colorado*, published in 1898, she described the location as “along the Platte near Valverde.” Valverde is now the intersection of West Alameda Avenue and the South Platte River in Denver — the Valverde Yacht Club is a local landmark.

Ellsworth Bethel, a mycologist and contemporary of Eastwood, collected *Mimulus ringens* in 1895 at a location given only as “Denver, CO.” This long-missing collection was discovered in the fall of 1998 by Jan Wingate in the Kathryn Kalmbach Herbarium at Denver Botanic Gardens. It is now in the University of Colorado Herbarium (COLO 496405, formerly KHD 14953).

Harrington (1954) included *Mimulus ringens* in his *Manual of the Plants of Colorado*. He reported: “Our record near Denver, Colorado, at about 5300 feet.” Harrington, according to Weber, recorded the collection as being by Bethel. There is no specimen at the Colorado State University Herbarium.

Colorado is probably the western limit for *Mimulus ringens*. It may be disjunct along the Front Range, left from a time of moister climate. The other species Eastwood reported growing along or near the Platte at Valverde provide an intriguing hint at what else may

have been growing there before the river was destroyed by channelization. Eastwood described the prairie gentian (*Eustoma russeianum* (Raf.) Shinnery) as growing “at Valverde, a single plant” and also further north on the “Broadway road.” She described the groundnut (*Apios americana* Medicus) as growing “at Valverde.” Giant bur-reed (*Sparganium eurycarpum* Engelm.) she reported from “a marsh near Valverde.” Narrow-leaved milkweed (*Asclepias stenophylla* Gray) also grew “near Valverde,” although this is an upland plant. All of these species are rare in Colorado today. Most are disjunct from their more eastern habitats.

The *Flora of the Great Plains* (Great Plains Flora Assoc. 1986) gives the range for *Mimulus ringens* as the eastern one-half of the Great Plains; southern Canada from Nova Scotia to southern Saskatchewan; and south to South Carolina and Texas, with separated sites in Colorado and Idaho. Habitats include “streamsides and edges of ponds, often emergent.” Other references state moist or wet places.

Does *Mimulus ringens* grow in Colorado today? My personal experience suggests that it is a tenacious survivor. I have grown it in a backyard pond since 1987, without giving it any attention. It readily reseeds into pots of other emergent plants and survives submersion in several inches of water. The ease with which it self-propagates leads me to believe that it may still exist in wetlands along the Front Range or elsewhere in eastern Colorado.

“Monkeyflower” continues on page 2

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"Monkeyflower" continued from page 1

Where should we look? Prime areas are where the apparently associated species are found today, generally in wet meadows and mesic tallgrass prairies. South Boulder Creek, Clear Creek, Left Hand Creek, and the St. Vrain and Poudre Rivers would be good places to begin. Similar habitats on the South Platte, Arikaree, and Republican Rivers might be fruitful. Habitat for Ute Ladies'-tresses orchid (*Spiranthes diluvialis* Sheviak) should be included, although the mowed areas of tallgrass prairies around Boulder would probably have eliminated *Mimulus* by constantly removing inflorescences and fruit. In 1996, I mapped the vegetation along the South Platte River from South Platte Park through Denver to the confluence with Sand Creek. Although I concentrated on plant associations, possible habitat for *Mimulus ringens* and other rare plants was also examined — I found nothing.

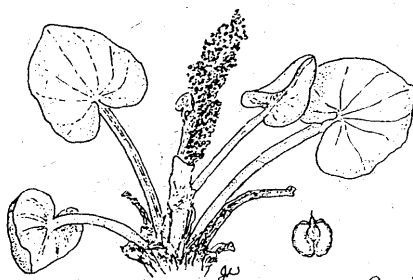
Could *Mimulus ringens* be an escape? I don't think so, but I did a little research into early water gardens in the Denver area. According to John Mirgon of the Colorado Water Garden Society, the earliest water gardens probably appeared in the 1880's or 1890's. The earliest water gardener may have been John Rexleigh, who had gardens in Englewood near the Highline Canal. Rexleigh increased his stock and began selling waterlilies commercially around 1915. His 1916 and 1917 catalogs listed many waterlilies for sale, along with goldfish, turtles, and desert tortoises, but no emergent plants of any kind. *Mimulus ringens* would have been an easy and presumably profitable plant to grow. *Mimulus ringens* is rarely grown in water gardens around Denver today. In fact, I'm not sure anyone but myself grows it. There was probably a good market for spectacular, exotic waterlilies around the turn-of-the-century, but not for native plants. So what's new?

Mimulus ringens would be a good species to use in future wetland restorations. I have probably recommended it, but I now think it shouldn't be used until we are sure that there are no native populations left. I have on two occasions encountered sweetflag (*Acorus calamus* L.), another state rare species, while doing wetland surveys. Once it was fairly obvious that it had been introduced. The other time it took two years to conclude with some certainty that it was also planted. Uncontrolled, random planting of rare species makes vegetation surveys needlessly time consuming, and may produce misleading information about rare plants. [NOTE: Genetic concerns may exist, as well.]

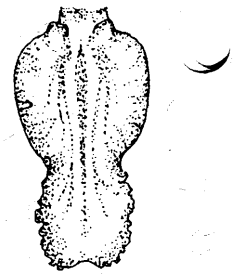
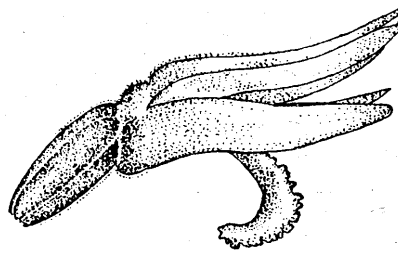
Eastwood, A. 1898. *A Popular Flora of Denver, Colorado* Zoë Publishing Co., San Francisco.

Great Plains Flora Association. 1986. *Flora of the Great Plains*. University Press of Kansas, Lawrence.

Harrington, H.D. 1954. *Manual of the Plants of Colorado*. Sage Books, Denver.



Oxyria digyna
Artist: Jan Wingate



Spiranthes diluvialis
Artist: Carolyn Crawford

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.

Triteleia grandiflora found in Colorado

Leslie Stewart

Last spring, a large population of *Triteleia grandiflora* Lindl. (Wild Hyacinth) was found in Montezuma County by Charlotte Thompson. Charlotte, a USFS seasonal employee, was searching for Goshawks in a proposed timber sale. She didn't find the Goshawks, but did find this lovely pale violet lily.

Triteleia grandiflora (*Brödiaea douglasii* S. Wats.) grows up to 7 dm tall. It has an open umbel of 8 to 10 flowers; each flower is 19 to 24 mm long and pale violet, similar to the color of wild iris. Its range is documented as extending from eastern British Columbia south to eastern Oregon and east across Idaho to southwest Montana, western Wyoming and northern Utah (Cronquist et al. 1977). The population was estimated at about 2000 individuals scattered over 15 acres, six miles northeast of Dolores, Colorado. The habitat was dry Ponderosa pine / scrub oak in sandstone derived soils, at about 7900 ft. It was in full bloom on June 20, 1998. Four specimens were collected, verified by Dr. William A. Weber, and now reside in the University of Colorado Herbarium.

The Southwest Chapter of CoNPS is planning a field trip to the site on June 12, 1999 to see the plant and search for additional populations in the general vicinity. For additional details or more information about *Triteleia*, call Leslie Stewart at (970) 882-7241.

Cronquist, A., A.H. Holmgren, N. Holmgren, J.L. Reveal, P.K. Holmgren. 1977. *Intermountain Flora. Vascular Plants of the Intermountain West, U.S.A.* Vol. 6. New York Botanic Garden, Bronx.

Notes From the Light Table

Robert Epley

With spring quickly approaching, many of us are planning hikes and intend to bring along our cameras. Here are a few ideas that will help you bring home more of the pictures you want.

To portray the growth habit of a plant, use light coming from behind the plant toward you. This will give you a profile of the plant. Although this won't give you any detail on the side of the plant facing you, the shape of the plant will stand out. Be careful to prevent the sun from striking your lens, this causes the picture to be washed-out.

Light coming from behind you is the best way to record details of the plant's structure. The most interesting light occurs before mid-morning and after mid-afternoon. Sunlight around the middle of the day produces poor pictures. Shadows from the overhead sun will obscure interesting plant details. Colors tend to be washed out in mid-day pictures. When you want to show texture or emphasize the "fuzziness" of blossoms or other parts of the plant, position yourself so that the light goes across the plant. Sidelight is the best way to show texture of any kind.

Many people enjoy going to higher elevations for hikes and picture taking. You will probably remember to bring sun screen so you won't get a nasty burn. Ultraviolet radiation records as blue on color film. However, you can improve the color fidelity of your photos by using an ultraviolet filter. Check with your camera dealer, especially if you have a "point and shoot" camera. UV filters are much more than a lens protector — in Colorado they are an essential piece of equipment for accurate colors.

We Need Your Help!

In the Northwest corner of the Cherry Creek Neighborhood, at the terminus of Columbine St. at Third Pl., sits Bromwell Elementary School. After 130 years in the neighborhood, Bromwell is building a unique and innovative outdoor classroom. We broke ground on Phase One last Spring. The ecosystem garden, on axis with Columbine St. and framed by the new arch, will be a focal point for the neighborhood and business district. This garden will replicate the Ponderosa Pine/Shrubland Ecosystem of Colorado. Elements within the landscape will replicate flora and geologic formations, and will demonstrate relationships that exist between plants, wildlife, soils, water, and environmental conditions.

This is a very exciting project that will serve as a model for other Denver Public Schools...

The 2500 square foot garden has been regraded, with trees, boulders, walks, steps and irrigation installed, and is ready and waiting for plants. During the week of May 17, we will be having an all-school planting with students, parents and teachers. BUT WE HAVE NO PLANTS! We do have a list of plants that we would like to include in the garden. If you have any of these that you would like to donate, please call Jennifer Kalin at (303) 744-2429, who will coordinate a drop-off or pick-up schedule. We could also use volunteers during planting week to help instruct the children about planting native flora. If you have the time, please contact Jennifer.

This is a very exciting project that will serve as a model for other Denver Public Schools and we hope the members of the Colorado Native Plant Society can help us.

Common name

Blanketflower
Wild blue flax
Creeping mahonia, Holly-grape
Dwarf pussytoes
Fringed sage, Silver sage
Dalea
Greenleaf penstemon, Beard-tongue
Indian potato

Common harebell
Indian paintbrush
Mexican coneflower
One-sided penstemon
Pasque flower
Bush morningglory
Sulphur flower, Wild buckwheat
Spiderwort
White evening-primrose
Big Bluestem
Blue grama
Buffalo-grass
Indiangrass
Needle-and-thread
Indian ricegrass
Sideoats grama
Little bluestem

Scientific name

Gaillardia aristata
Adenolilium lewisii (Apper)
Mahonia repens
Antennaria parvifolia
Artemisia frigida
Dalea purpurea
Penstemon virens
Pediomelum (Psoralea) esculentum
Campanula rotundifolia
Castilleja integra
Ratibida columnifera
Penstemon secundiflorus
Pulsatilla patens
Ipomoea leptophylla
Eriogonum umbellatum
Tradescantia occidentalis
Oenothera caespitosa
Andropogon gerardii
Chonodrosium gracile
Buchloe dactyloides
Sorghastrum nutans
Stipa comata
S. (Oryzopsis) hymenoides
Bouteloua curtipendula
Schizachyrium
(Andropogon) scoparium

SOCIETY ANNOUNCEMENTS AND NEWS

Membership Note

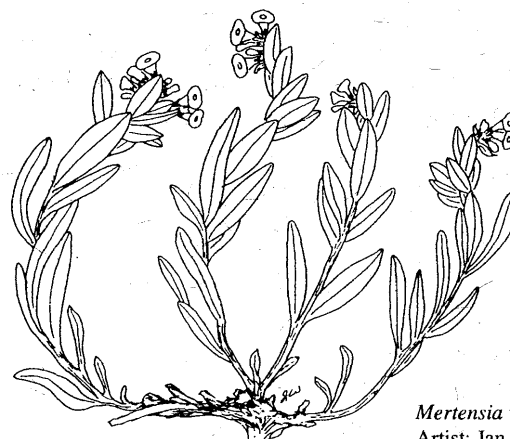
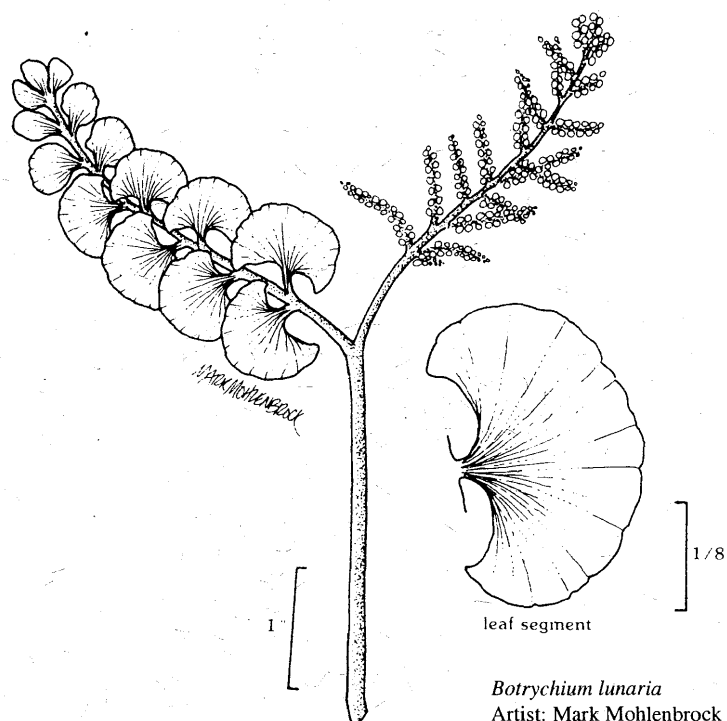
Don't worry... the fact that you received this newsletter means your membership is current (through 1999, at least). The Membership and Communications Committees apologize for a miscommunication that has led to considerable confusion. Included in *Aquilegia* Vol. 23 No. 2 was a dues reminder that referred to a "Paid Through" date on the mailing label — but no date was printed on the labels. In fact, everyone who received issue No. 2 was, and is, current on dues. If as a result of this confusion you sent additional dues for 1999, your membership has been extended for another year. This additional year will show as the "Paid Through" date when you next receive a membership renewal and survey form, which will be mailed to all members late in 1999. If you would prefer a refund for current dues you overpaid, please contact the Membership Committee.

AQUILEGIA Deadline Approaches

Please submit contributions for Vol. 23 No. 4 of *Aquilegia* on or before June 15, 1999. Include author's name and address, although anonymity may be requested. Note that previously published articles submitted for reprinting in *Aquilegia* require permission from the editor of original publication. Articles submitted via e-mail or on disks — MAC preferably, or IBM — are much appreciated. Please indicate word processing software and version.

Correction!

In *Aquilegia* Vol. 23 No. 2, it was reported that the city of Boulder Open Space/Real Estate Department is purchasing 400 acres of land, the Van Vleet property, for \$8.75 million. The actual purchase price of the Van Vleet property is \$3 million, not \$8.75 million.



Mertensia viridis
Artist: Jan Wingate

Workshops Announced, Help Wanted

Workshop Committee

Eight workshops (16 sessions) for the 1999-2000 season are in the process of organization. Local instructors already lined-up include Dr. Leo P. Bruederle (University of Colorado at Denver), for a much-requested workshop on Colorado *Carex*. Other local workshop leaders are Dr. David Buckner (Asteraceae); Peter Root (Colorado Ferns); Bill Jennings (The Botanical Detective); and Robert Epley (Wildflower Photography). From out-of-state, Dr. N. Duane Atwood (Brigham Young University) will present a workshop on the Hydrophyllaceae. Dr. Atwood recently completed the treatment of *Phacelia* for *Flora North America*. Dr. J. Mark Porter of Rancho Santa Ana Botanic Garden has agreed to repeat his very interesting Polemoniaceae workshop and expects to present new results from his taxonomic studies. Dr. Ronald L. Hartman (University of Wyoming) has also been approached, but has not yet confirmed. Watch for the announcement of the November, December, and January workshops in *Aquilegia* Vol. 23 No. 5; subsequent workshops will be announced in Vol. 23 No. 6.

Some major changes are underway in the Workshop Committee. Long-time Chairperson Bill Jennings has announced his second "retirement" from the Workshop Committee. Bill headed the Committee from 1985, until his first "retirement" in 1993; and again since 1995. Since the inception of the workshop series in January 1985, 185 workshop sessions have been held!

Bill has agreed to continue to contact potential workshop leaders, schedule classes, and find places for them to be held. However, the Committee is looking for additional help with the remaining responsibilities. The current plan is to have a "foreman" for each one- or two-session workshop. The Committee needs persons willing to do some or all the following activities necessary for a successful workshop: maintain the registration list; prepare and mail notices; handle cancellations and session-switching; set up classrooms; provide refreshments; and collect money (the really fun part!). Investigations are in progress regarding cost and feasibility of a voice-messaging system to take registrations. **If you'd like to increase your role in the Society, and ensure the continuation of this very popular CoNPS program, call Bill at (303) 665-6903. Volunteer your help NOW!**

CHAPTER NEWS

Boulder Chapter

Monthly meetings are held October through May on the second Thursday of each month. For information, contact Carolyn Crawford at (303) 665-6903 or (303) 666-8348.

Fort Collins Chapter

Indoor monthly meetings are held October through May. For additional information call Don Hazlett at (970) 834-1493.

June 5, 8:30 AM

A Tributary to St. Vrain Creek Tributary
Cynthia Parker, a new member, has arranged for a field trip to her property near Platteville in Weld Co., a poorly botanized part of Colorado. Meet at Cynthia's house at 8:30 AM. This trip will last until after noon, so bring a lunch and water. Cynthia's house is about 45 minutes from Fort Collins. Take the Highway 66 exit east off I-25. Go about four miles, down a hill, and over the unmarked St. Vrain Creek. Cross the creek and turn right (south) onto WCR 17, a gravel road. Travel one mile south to Road 28, turn left (east), and go another 0.25 mile. The house at 8234 is Cynthia's, use the driveway. Call Don Hazlett at (970) 834-1493 to register.

Metro-Denver Chapter

Indoor monthly meetings are held October through April. Please contact President Denise Larson at (303) 733-4338 for Chapter news and activities.

Plateau Chapter

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

May 15, 10:00 AM

Fairview Natural Area Field Trip

Explore the unique adobe plant communities with **Amanda Clements** in search of some of the rare plant species for which this RNA was established to protect. Meet at the downtown Montrose City Market parking lot. Bring lunch, walking shoes, and a windbreaker. For more information and to register, contact Amanda Clements at (970) 249-3564.

May 22-23

CoNPS Board Meeting and Field Trip

The May meeting of the Board will take place in Grand Junction. A field trip to canyon country in search of desert flora is being organized for Saturday at 9 AM. All CoNPS members are invited to attend the field trip, as well as the subsequent meeting on Sunday at 9 AM. For more information, contact Gay Austin at (970) 641-0471 (W) or (970) 641-6264 (H), or via e-mail at gaustin7@juno.com.

June 6, 10:00 AM

Warner Fire Field Trip

Learn about the role of fire in our native plant communities, as well as fire rehabilitation practices and community restoration on this trip led by **Amanda Clements**. The Warner Fire burned 800 acres in 1996 near The Black Canyon National Monument. See the effects of seeding, weeds, fire intensity, and vegetation types on vegetation recovery. Meet at the downtown Montrose City Market parking lot. For more information and to register, contact Amanda Clements at (970) 249-3564.

July 14, 7:00 PM

Slide presentation: The European Alpine
Gretchen Van Reyper will be hosting a Dutch horticulture student on his first visit to the U.S. He has traveled extensively in the alpine regions of Spain and Italy and would enjoy sharing his knowledge and slides of the European alpine with us. Join us for an interesting evening exploring foreign floras. Call Gretchen at (970) 835-3268 for additional information, including the location for this program in Delta, CO.

July 16-17

San Juan Weekend Field Trip

The budding botanist from the Netherlands, mentioned above, is looking forward to seeing the native plants of our area. The spectacular scenery and flora of the Ouray area is a good introduction to the Colorado Mountains. We will do two day hikes (possibly Governor Basin and Blue Lakes Pass) and camp overnight in the vicinity. Meet at the Rotary Park in Ouray at 9:00 AM Friday morning, July 16. For additional information, call Gretchen Van Reyper at (970) 835-3268.

August 7, 9:00 AM - 4:00 PM

Fen Field Trip

Dr. David Cooper (CSU Wetland Ecologist) will lead this trip to three or four different types of fen peatlands in the Gunnison Basin near Cumberland Pass and Tincup. Be prepared to walk in water all day looking for mosses, lichens, sedges, rushes, and other wetland plants. This trip is limited to 20 people. To register, and for more information, call Gay Austin.

September 27-28

Short Course: Genetic Issues in Using Native Plants for Revegetation

This introductory course, to be held in Boulder, will teach the basics in genetics as related to native plants and revegetation/restoration. Discussion will include: how "local" is "local," when it comes to native plants; genetic concerns when using native plants for revegetation; outbreeding concerns; genetic analysis; how to build seed transfer guidelines; common garden studies; and being practical, but cautious. Speakers will include Dr. Valerie Hipkins, (Director of Forest Service NFGEL Lab), Steve Monsen (Plant Ecologist, Shrub Sciences Lab), Andy Kratz USFS Regional Botanist), and Jay Kitzmiller (Geneticist, Pacific Southwest Research Station). Costs: \$20 to defray travel expenses for speakers. For more information and to register, contact Gay Austin at (970) 641-0471 (W) or 641-6264 (H), or via e-mail at gaustin7@juno.com.



Goodyera repens

Artist: Carolyn Crawford

Southwest Chapter

This summer marks the sixth anniversary of the Southwest Chapter! To commemorate, we've planned our trips to include many new areas. To volunteer, offer suggestions for improving the program, or for more information, please contact Sandy Friedley at (970) 884-9245.

"Chapter News" continues on page 6

"Chapter News" continued from page 5

May 15, 9:00 AM

Flora of Beclabito Dome and the Carrizo Mountains

This is a unique opportunity to discover the shrubs and wildflowers of the Carrizo Mountains of the Navajo Reservation and, if time permits, the Red Mesa area. **Arnold Clifford**, a botanist with the Navajo tribe, will lead the trip, which will meet at 9:00 AM at Teec Nos Pos, AZ just south of the Four Corners National Monument at the junction of HWY 160 and US 64. Primitive camping will be available for Friday and Saturday nights, courtesy of the Navajo tribe. Space is limited, so please contact Charlie King at (970) 731-4794 for reservations and details.

June 12, 10:00 AM

Wild Hyacinth and other Flora of Boggy Draw

Leslie Stewart will lead this field trip to Boggy Draw to look for *Triteleia grandiflora* (Wild Hyacinth). This new state record was identified in 1998; additional work needs to be done to identify other populations that may be present. We'll carpool from the USFS Office in Dolores, CO where we'll meet at 10:00 AM. Contact Leslie at (970) 882-7241 for information.

July 31, 10:00 AM

Flora on the Slopes of Pagosa Peak

Charlie King and **Dick Moseley** will lead this field trip to open meadows and wetlands on the flanks of Pagosa Peak. Meet at the Fina station (Corner store) at the junction of Piedra Road (three miles northwest of Pagosa Springs) and HWY 160 at 10:00 AM. Contact Dick at (970) 731-5918 for details.

August 14, 10:00 AM

The Grape Ferns of Molas Pass

Sue Komarek and **Leslie Stewart** will lead this field trip to Molas Pass to look for grape ferns. This is an opportunity for a joint field trip involving the Plateau and the Southwest Chapters. Meet at new San Juan Skyway pullout on the north side of Molas Pass at 10:00 AM. Camping is available at Little Molas Lake, just one-half mile north of the top of the pass. Contact Sandy Friedley at (970) 884-9245 or Andrea Rosen at (970) 872-3952 for details.

Yamparika Chapter

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

**August 22-23, 1998 Weed Survey at Red Deer Lake
Field Trip Report**

Pat Butler

As mentioned in last summer's *Aquilegia*, I led a trip (sponsored by the Colorado Mountain Club) into the Indian Peaks Wilderness Area to look for invasive weeds. One other CMC member and two CoNPS members had a great weekend looking for weeds and enjoying wonderful late wildflowers and a beautiful rainbow. Although finding weeds was our objective, we naturally had mixed feelings about the quarter acre stand of Canadian thistle (*Cirsium arvense* (L.) Scop.) at the beginning of the hiking trail from Camp Dick. We found two much smaller stands of thistle further up the Middle St. Vrain, one inside the wilderness area. We observed none of our target weeds around Red Deer Lake, however, or on the trail between the Red Deer Lake trail and the Buchanan Pass trail. I was glad to have spent time at the CU Herbarium looking at native thistles because until it flowers, *Cirsium undulatum* (Nutt.) Spreng. can be mistaken for Canadian thistle. Although the USFS weed management plan may eventually permit some use of chemical controls, our job was to pull as many of the plants as possible and carry out the seedheads, which we did on the hike into and out of the area. The infestation at the start of the trail could benefit from many pairs of hands and could be a good conservation project for CoNPS, or civic or scout groups. Its proximity to the parking area means a short hike to help out.

I am leading another trip into this area (co-sponsored by CMC and CoNPS) to monitor last year's infestations and check the trail further to the west. On August 28-29, 1999 we will backpack eight miles to camp at about 10,800 ft beneath Gibraltar Lake and the St. Vrain Glaciers. The trip involves an elevation gain of about 2200 feet, although anyone willing to drive four miles of bad 4WD road could reduce their hike. Call Pat at (303) 440-0586 to sign up.



Salix amygdaloides
Artist: Gary Benstrup

Fieldtrip Plant Lists Available!

Loraine Yeatts, Field Studies Committee

Plant lists for 73 CONPS fieldtrips, dating back to 1977, are on file with the Field Studies Committee and are ready for distribution. It should be emphasized that the lists are based primarily on field observations and are not generally documented by specimen collection. Nomenclature follows Weber and Wittman's latest Colorado floras. Commonly used synonyms and common names are included, but any information in the database (such as author references, common names, etc.) can be included or excluded, by special arrangement. Also, lists from repeat trips to the same region can be combined.

To Place An Order, use a copy of the enclosed list as an order form. For each of the field trip lists desired, please provide the following information:

1. trip name and date
2. format preferred (listed alphabetically by family, alphabetically by genus, or one of each)
3. total number of pages for all lists requested.

Calculate charges based on the rate of \$.25 per page with a minimum of \$.60 if ordering fewer than three pages. Enclose a check made payable to Loraine Yeatts for the total amount of your written order and mail to her at 1395 Nile Street, Golden, CO 80401.

Fieldtrip Plant Lists Available!

To place an order, use this list as an order form. For each fieldtrip list desired, please:

1. Indicate trip name and date by circling the trip number. For example, if you would like a list for Aiken Canyon, circle "1" for Aiken Canyon.
2. Indicate format preferred by circling the number of pages in the family and/or genus columns; choices include alphabetically by family or alphabetically by genus or one of each. For example, if you would like Aiken Canyon sorted alphabetically by family, circle "5" pages.
3. Total the number of pages for all lists requested.
4. Calculate total charges, following the instructions on the reverse side of this form.

Trip name (1 - 35)	Date begun	Leader(s)	No. of pages	
			Family	Genus
01. Aiken Canyon	6/06/92		5	4
02. American Basin	8/11/95	Gay Austin	2	2
03. Billy Pardee Ranch	6/06/90	Rick Rhoades	1	1
04. Buffalo Creek Fire	5/30/98	Steve Vest, Rick Brune	5	4
05. Butler Ranch	6/06/90	Rick Rhoades	3	2
06. Cap Rock Preserve	5/21/94	Terri Schulz	3	2
07. Cedar Mesa and vicinity	5/15/91	Rick Brune, Loraine Yeatts	5	4
08. Chimney and Lewis Canyon	6/21/79	Don Hazlett, Bruce Bosley	6	5
09. Coal Creek	5/24/95	Mike Scott, Jonathan Friedman	2	1
10. Colorado Sandhills, Wells Ranch	6/13/98	Rick Brune	3	2
11. Conejos River Basin	6/20/92	Patsy Douglas	5	4
12. Devil's Head	8/05/89	Judy Von Ahlefeldt	1	1
13. Dinosaur National Monument	5/01/93	Lynne Riedel	3	3
14. Dinosaur National Monument	5/11/96	Tamara Naumann	3	2
15. Dolores River	5/21/94	Leslie Stewart	3	3
16. East Carrizo Creek	5/21/89	Rick Brune, Meg Van Ness	1	1
17. East Cottonwood Creek	5/21/89	Rick Brune, Meg Van Ness	1	1
18. Enchanted Mesa	4/24/77	Boulder Chapter	2	1
19. Florissant Fossil Beds	6/27/87	Mary Edwards	4	3
20. Fort Carson: the Hogback	5/20/89	Rick Brune, Meg Van Ness	2	1
21. Four Corners	5/28/95	Richard Moseley, Charlie King	4	3
22. Four Corners Area	5/16/98	Ken Heil, Mark Porter	4	3
23. Green Mt.	6/03/95	Gayle Weinstein	2	2
24. Green Mt.	6/01/96	Loraine Yeatts, Dick Yeatts, J. Wingate, V. Richards	4	3
25. High Creek Fen	7/11/92	Alan Carpenter	2	2
26. Hoosier Ridge	7/17/94	Robin Bingham	3	2
27. Horseshoe Cirque	7/12/92	Barbara Siems	3	2
28. Hovenweep Ruins	5/09/98	Leslie Stuart	5	3
29. I-25 rest area near Pueblo	5/19/89	Rick Brune, Meg Van Ness	2	1
30. Kennebec Pass	7/30/94	Sue Komarek	3	2
31. Kim Area	5/21/89	Rick Brune, Meg Van Ness	1	1
32. Long Lake / Niwot Ridge	7/01/80	Miriam Denham, Jane Foley	3	2
33. Los Lagos Ranch, Rollinsville	7/23/94	Betsy Baldwin	4	3
34. McElmo Canyon (Sand Canyon)	5/13/95	Leslie Stewart, Sue Komarek	3	2
35. Mesa de Maya	8/22/87	Ivo Lindauer	5	4

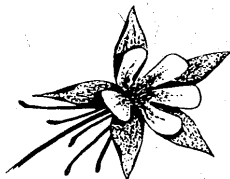
page subtotal for trips 1 - 35 _____

Trip name (36-73)	Date begun	Leader(s)	Family Genus	
36. Mesa Verde	6/10/95	Dick Moseley, Charlie King	4	3
37. Middle Park	6/18/89	John Anderson	2	1
38. Moffat County	5/23/87	Steve O'Kane	3	3
39. Montezuma County	5/28/83	Carol Brandt	3	3
40. Mt. Bross	7/14/85	William A. Weber	3	2
41. Mt. Evans	8/29/93	Betty Willard	3	2
42. Mt. Zirkel Wilderness Area	7/16/77	Fort Collins Chapter	4	3
43. Neota Wilderness	7/27/96	Jody K. Nelson	5	4
44. North Table Mt.	5/14/94	Sally White, Loraine Yeatts	5	4
45. North Table Mt.	5/23/98	Paul Kilburn	4	3
46. Pagosa Springs Country	6/11/94	Dick Moseley, Charlie King	4	3
47. Pawnee National Grassland	6/02/79	M. Shoop, J. Dodd, R. Engle, G. Turner	2	1
48. Pawnee National Grassland	5/29/87	Rick Brune	4	3
49. Pawnee National Grassland	6/05/93	Jim Borland, Rick Brune	6	4
50. Perly Canyon	5/20/89	Rick Brune, Meg Van Ness	2	2
51. Phantom Canyon	6/10/89	Alan Carpenter	4	3
52. Phantom Canyon Preserve	7/15/95	Nature Conservancy	3	3
53. Pinon Canyon	5/25/83	Tom Eamons	1	1
54. Pinon Canyon Maneuver Site	5/10/98	Carolyn Crawford, Dave Anderson	6	5
55. Plains Conservation Center	5/01/80	A. Armstrong, S. Emrich, D. Buchner, M. Denham	3	2
56. Poudre Canyon - Laramie River	6/30/90		4	4
57. Pueblo Lake	5/06/95	Jim Locklear	3	2
58. Pueblo West	7/08/88	Jim Borland	3	2
59. Purgatoire Canyon - Dinosaur Trackway	9/02/95	Dexter Hess	3	2
60. Rampart Range	6/28/87	Dave Powell, Neal Osbourne	3	2
61. Rampart Range	6/25/88	Frank Hawksworth	3	2
62. Rattlesnake Canyon	5/28/94	Dr. Walter A. Kelley	3	3
63. Raven Ridge	5/12/96	Tamara Naumann, Rusty Roberts BLM	3	2
64. Roxborough State Park	5/30/80	Susan Kraner, Vicky Trammel	3	2
65. Sewemup Mesa	5/29/94	Walter A. Kelley	2	2
66. Shrine Pass	7/13/97	Nicole Ripley	3	2
67. Taylor Arroyo	5/20/89	Rick Brune, Meg Van Ness	2	2
68. Unaweep Canyon	8/10/91	Scott Ellis	2	2
69. Uncompahgre Wilderness	8/10/95	Gay Austin	3	3
70. Vallecito Creek	7/15/95	Sandy Friedley	4	3
71. Western Slope	5/27/79	Jim Ratzloff, Scott Ellis	4	3
72. Wolf Creek Pass	8/05/95	Dick Moseley, Sara Brinton, Charlie King	2	2
73. Wray	6/04/94	Bruce Bosley, Don Hazlett	6	5

page subtotal for trips 36 - 73	_____	_____
page total for trips 1 - 73 (add subtotals)	_____	_____
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Colorado Native Plant Society



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

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

Schedule of Membership Fees

Life	\$250
Supporting	\$50
Organization	\$30
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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:

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P.O. Box 173364
Denver, CO 80217-3364

E-Mail: lbrueder@carbon.cudenver.edu

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

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

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

Enclose an additional \$2.00 to receive newsletters by First Class Mail.

CALENDAR

CHAPTER MEETINGS AND EVENTS

- Boulder Chapter**
May 13 Picnic and Hike
- Fort Collins Chapter**
June 5 Field Trip: A tributary to St Vrain Creek Tributary
- Plateau Chapter**
May 15 Fairview Natural Area Field Trip
June 6 Warner Fire Field Trip
July 14 Slide Presentation: The European Alpine
July 16-17 San Juan Weekend Field Trip
August 7 Fen Field Trip
Sept 27-28 Short Course: Genetic Issues in Using Native Plants for Revegetation
- Southwest Chapter**
May 15 Flora of Beclabito Dome and the Carrizo Mountains
June 12 Wild Hyacinth and other Flora of Boggy Draw
July 31 Flora on the Slopes of Pagosa Peak
August 14 The Grape Ferns of Molas Pass

NOTE: Mailed on or about 15 May 1999



Colorado Native Plant Society
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Fort Collins, Colorado 80522
<http://carbon.cudenver.edu/~shill/conps.html>

SOCIETY EVENTS

- May 22, 23 CoNPS Board Meeting and Field Trip
May 23 Lovable Little Lichens
May 28 Prairie Restoration at Rocky Mountain Arsenal
June 5 *Aletes humilis* in the Wind Forest
June 6 Newlin Gulch *Carex saximontana* Survey
June 12 TENTATIVE: Chalk Bluffs
June 13 Pawnee Buttes and Vicinity
June 19 Willows of Golden Gate State Park
June 20 Wildflowers and Natural History at Alderfer-Three Sisters Park
June 26-27 Bonny Prairie Natural Area Work Day and Field Trip
July 10 Kettle Lakes of Jackson County
July 17 *Potentilla rupincola* at Prairie Divide
Aug 28-29 Wilderness Weed Survey and Backpack

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