

# Colorado Native Plant Society



## NEWSLETTER

Volume 9, Number 4  
July-August-September 85

"DEDICATED TO THE APPRECIATION AND CONSERVATION OF THE COLORADO FLORA"

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### CALENDAR OF COMING EVENTS

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| 18 AUG, Sunday, 8:00 a.m. Boulder Chapter Field Trip cosponsored by the Boulder County Nature Association. See page 5.             | 25 SEP, Wednesday, 7:30 p.m. Denver Chapter Meeting. See page 4.                    |
| 14 SEP, Saturday, 7:30 a.m. Denver Chapter Field Trip to Chatfield Reservoir. See page 4.  | 19 OCT, Saturday. 1985 ANNUAL MEETING See page 2.                                   |
| 17 SEP, Tuesday, 7:30 p.m. Fort Collins Chapter meeting, program not yet determined, call Chapter President for more information.. | 26 OCT, Saturday, 10 a.m. Denver Chapter Meeting replaced by this tour. See page 4. |

## RECENT ACTIONS OF THE BOARD OF DIRECTORS

The Board approved contracting with Simply Delightful to provide lunch for the Annual Meeting.

Approval was given for the payment of organization dues to Colorado Open Space Council (COSC).

The Yampa Valley Chapter has been deactivated because it no longer meets the minimum membership requirements.

The Board approved a resolution that the Colorado Native Plant Society's funds derived 1) from paid Life Memberships, 2) from \$100 provided by the Society for each Honorary Life Membership it awards, and 3) from

one-half of any non-restricted donations of \$100 or more shall be deposited in an interest-bearing Account. The interest from this account to be included with the Society's annual spendable income, but the principal to remain intact and to be considered non-spendable. This fund shall be called the "CONPS PERMANENT FUND." Permanent Fund monies shall be deposited in an interest-bearing account, separate from other Society monies, the specific account to be selected by the Treasurer as most advantageous and suitable. The Permanent Fund shall be reported as a separate category in financial reports to the Board and membership.

---Eleanor Von Bargaen

## WATER, WETLANDS AND NATIVE PLANTS CONPS ANNUAL MEETING - 1985

(Ed. Note: This is the second announcement of the 1985 Annual Meeting of our Society, to be held 9:00 a.m. to 5:00 p.m. October 19, at the University of Colorado's Events Conference Center in Boulder. Watch for a special mailing around the first part of September, with full program details.)

As the population of Colorado grows, so increases the consumption of water. How much growth can Colorado absorb without reaching the limit of available water? As the technology of water transport and storage is improved, this limit seemingly is raised...but at what price? And as the agricultural economics of the United States make it desirable to irrigate marginal lands, both the Great Plains 'Ogalalla Aquifer' and surface water continue to be depleted. Current water issues and their impact on the Colorado landscape will be the focus of the 1985 Annual Meeting, organized and sponsored by the Boulder Chapter.

The meeting's theme topic, "Water, Wetlands and Native Plants," will be explored in these ways:

1. A choice of two morning field trips (9 to 11 a.m.), one a xeriscape landscape tour of Boulder, the other a visit to the Boulder Creek Riparian Project.
2. Annual Business Meeting and luncheon (A delicious catered buffet luncheon

will be available to preregistrants for a prepayment of \$6, or you may bring a sack lunch if you prefer.)

3. High Country Water Issues (1:30 - 3:00)  
(This first afternoon session will look at the political and ecological issues related to the diversion of water from our mountains to the Front Range cities. The Holy Cross Wilderness will serve as the example of the many unresolved problems such diversions bring.)
4. Plains Water Issues (3:30 - 4:30)  
(In this session the speaker will describe ecology and water issues for the Platte and Arkansas rivers, where reduced peak and mean annual water flows threaten to change the natural landscape.)

In addition, there will be a native plant photo display---plan to bring two of your best photos mounted for display (the plants must be identified!). Exhibits by several CONPS Chapters and Committees and sales of CONPS posters and T-shirts also will add to the festivities.

Watch for the special mailing that will give full details of the program and speakers, and help us plan for the meeting by preregistering. DON'T FORGET.....

OCTOBER 19TH!!

## NEW SPECIES OF ORCHID DESCRIBED FROM COLORADO

A new species of native orchid from Colorado: *Spiranthes diluvialis* Sheviak has been recently described in *Brittonia* 36:8-14. During a study of the *Spiranthes cernua* complex of species, Dr. Charles J. Sheviak of the New York State Museum found several herbarium specimens collected at widely scattered localities in Nevada and Utah that had been variously identified as

*S. rozanoffiana*, *S. cernua*, or *S. porrifolia*. Later, after receiving live specimens from Colorado and subsequently collecting in Colorado and Utah he became convinced the plants were an undescribed species. Chromosome studies helped underscore his contention. *Spiranthes rozanoffiana*, common in the Colorado  
(Continued on the top of the next page)

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Mountains, has  $2n=44$  and *S. magnicaeporus*, known in modern times from as far west as North Platte, Nebraska, has  $2n=30$ . The new species consistently shows  $2n=74$ , indicating hybrid origin from the above species. Technically this is known as amphiploidy.

It is Sheviak's theory that during a cooler and wetter time in the Pleistocene, *S. magnicaeporus* was widespread in the West, permitting hybridization to take place with *S. rosenzoffiana*. In the last several thousand years, *S. magnicaeporus* has retreated eastward and *S. rosenzoffiana* retreated upward, leaving the stable hybrid to colonize the few scattered moist localities in a now arid region.

The orchid has a spike of white flowers on a stalk about a foot tall. Leaves are all basal and rather long and narrow. The lip

of the flower usually bends back under the flower and almost touches the ovary. The lip is slightly constricted but nowhere near as much as *Spiranthes rosenzoffiana*.

The only known Colorado location for the plant is along Clear Creek in Jefferson County, but a site in Daggett County, Utah, is only a few miles west of the Colorado state line, so the plant is to be expected in Moffat County. All other known localities are in Utah and Nevada. A number of reports in the literature of *Spiranthes* at low elevation in the West may also refer to *Spiranthes diluvialis*, but voucher specimens are still being sought. With only ten known populations in the three-state range, it is certainly our rarest orchid. The Denver Botanic Gardens and several individuals assisted Dr. Sheviak in his research and are acknowledged in the article.

---Bill Jennings

### "THE ROOTS OF LIFE"

World Wildlife Fund-U.S. and the Garden Club of America have produced a new slide-tape show about plant conservation. The 15 minute program uses some of the special plants of Hawaii, Africa, Chile, and the Mediterranean to help illustrate the need to preserve our flora. This show also describes ways plants contribute to a life.

The program is available on loan for \$3 from WWF-US. (Arrangements for a WWF-US speaker on plant conservation also can be made.) Contact Jane MacKnight, World Wildlife Fund-U.S., Plant Conservation Program, 16101 Connecticut Ave. N.W., Washington, D.C. 20009 (Phone: 202-387-0800).

\*\*\*\*\*Chapter Program Directors note:\*\*\*\*\*  
The Boulder Chapter of CONPS plans to feature this program at a September meeting, and would welcome coordinated use by other Chapters. Contact Ann Cooper (447-9169) or Sue Galatowitsch (569-4354) immediately if you are interested.

### VALERIAN - VALIUM\*???

Recently several CONPS members have asked me whether the well-known tranquilizer Valium\* is derived from the genus *Valeriana*. Where this rumor arose I do not know, but the answer to the question, simply, is NO! Herbal preparations from a number of valerian species (there are several hundred, scattered around the world) are known for sedative and other properties, but the active principles are chemically unrelated to diazepam, the active ingredient of Valium\*. Diazepam is not known as a natural product, but was synthesized and patented by chemists at Hoffman-La Roche, the major drug company that still produces the tranquilizer. Perhaps the similarity of names has led to the confusion.

--Sue Martin

### ORCHID-IRIS-LILY WORKSHOP REPORT

Considerable time has passed since this special workshop was held in March. Bill Jennings developed the concept and plans for the workshop, and he and Dieter Wilken reviewed the iris and lily families. A generous donation from Lucian Long of Colorado Springs (well known for his interest in and knowledge about Colorado's native orchids) made it possible to bring Dr. Charles Sheviak from New York to make the presentation on orchids. Dr. Sheviak is an expert on orchid taxonomy, and the group benefitted enormously from his instruction and expertise. We were pleased that Lu Long and Ruth Ashton Nelson could be present for that part of the session.

Bill Jennings had arranged for herbarium specimens of every orchid, iris, and lily known from Colorado to be available for perusal by workshop participants, so this was truly a "hands-on" learning experience.

We had the opportunity to study each group comparatively, and really grasp the differences among taxa (and the characters used in our most familiar Colorado keys!).

We were sorry that some potential participants had to be denied admittance because of space limitations. Because of the enthusiastic reception to this workshop and a previous one led by Miriam Denham (both sponsored and arranged by the Boulder Chapter), the CONPS Board of Directors has asked Bill Jennings to evaluate potential topics for future workshops. Bill is now soliciting information on plant taxa or groups of special interest, so if you have a favorite group that might form the basis for a workshop (and especially if you would be willing to help organize or lead it!), let Bill know (360 Martin Drive, Boulder CO 80303).

# **Colorado Native Plant Society Denver Chapter**

**Sat. Sept. 14      7:30 am      Fieldtrip      Chatfield**

Joint fieldtrip to Chatfield Reservoir with the Denver Field Ornithologists. Late season birds and botany will highlight the trip. Meet at 7:30 am in the parking lot to the west of the May D&F in the Bear Valley Shopping Center. For more details phone Jan Justice at 936-4547.

**Wed. Sept. 25      7:30 pm      Meeting      DBG House**

**"Managing Our Western Water Heritage."** The development and implementation of present and future water management systems and their impact on our environment will be discussed by two speakers: Gene Reetz, Chief of the Water Quality Requirement Section, Environmental Protection Agency and Gary Beers, Deputy Project Manager for the Metropolitan Denver Water Supply Environmental Impact Statement, Engineering Sciences.

**Sat. Oct. 26      10 am      CU Boulder Herbarium  
tour/presentation**

Our regular Wed. night meeting at the Denver Botanic Garden House will be replaced this month only by a Sat. tour of the new CU Herbarium facility in the basement of the Claire Small gym on the Boulder campus. Dr. William Weber, curator of the herbarium, will give the tour and also talk about how a modern herbarium works and its value to science. Parking can be found in the metered lot off of 20th and Broadway. A map of the campus is posted near the lot. This trip is limited to 25 people, so contact Ron Abbott (333-6151) or Nevin Bebee (733-1038) to reserve a space and to arrange carpooling.



# BOULDER CHAPTER

## TALLGRASS NATURAL AREAS FIELD TRIP

So you thought the plains of Boulder County were all shortgrass prairie? Now you can learn the other side of the story. Much of Boulder County was once covered with tallgrass and midgrass prairies, and, in spite of continued consumptive land use, a few remnants are to be found within the City of Boulder Open Space. The ecological value of the remaining tallgrass sites has warranted the designation of eight of them as State Natural Areas by the Colorado Natural Areas Program.

We are most fortunate to have Bill Baker conduct this field trip for us. As a former plant ecologist for the Colorado Natural Heritage Program, he was instrumental in the designation of these sites. Bill is presently conducting field work for his doctorate on the riparian ecosystems of the upper Colorado River Basin.

Don't miss this opportunity for a guided tour of Boulder's little known tallgrass prairies! Sunday, August 18, 8.00 a.m at Scott Carpenter Park. (That's at 30th and Arapahoe in Boulder.)

More details - call 447-9169

This is jointly sponsored by the Boulder County Nature Association and Boulder Chapter of CONPS.

### T-Shirt Order Form

ORDER YOUR NEW CONPS T-SHIRT!! The Shirt is navy blue, with a light blue shading to white design of columbines and the Society's name. Shirts are available in 100% cotton or in 50% cotton/50% polyester. Use this form to order by mail, or buy through your chapter (or on some Society field trips.) Please enclose \$6.50 for each shirt, plus \$1.00 postage and handling cost for each shirt ordered. Allow 4-6 weeks for delivery. Send orders to:

CONPS T-Shirt, P.O. Box 200, Ft. Collins CO 80522.

SHIP TO:	ADULT SIZE	-----Number-----	
		100%	50%/50%
Name _____	Small (34-36)	_____	_____
Address _____	Medium (36-38)	_____	_____
Address _____	Large (40-42)	_____	_____
City/State/ZIP _____	X-Large (44-46)	NOT AVAILABLE	_____

No Fabric Substitution...(if your first choice of fabric is not available, we will substitute the other unless this box is checked.)

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-----SCHEDULE OF MEMBERSHIP FEES-----  
 LIFE \$250.00 FAMILY OR DUAL \$12.00  
 SUPPORTING 50.00 INDIVIDUAL 8.00  
 ORGANIZATION 25.00 STUDENT OR SENIOR 4.00

-----COMMITTEES-----

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-----NEWSLETTER CONTRIBUTIONS-----

Please direct all contributions to the EDITOR in care of the Society's mailing address. There is a special need for small filler items such as some unusual information about a plant, a little known botanical term, etc. All contributions should include the author's name and address, but items will be printed anonymously if it is requested.

Deadlines for Newsletter material are the first of the months of January, March, May, August, and November. The Newsletter will be mailed about the 15th of the same month.

-----MEMBERSHIP RENEWALS AND INFORMATION-----  
 Please direct all membership applications, renewals and address changes to the MEMBERSHIP Chairperson, in care of the Society's mailing address.

Please direct all other inquiries regarding the Society to the SECRETARY in care of the Society's mailing address.

RETURN AND MAILING ADDRESS  
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