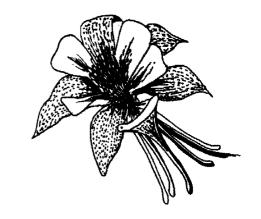
COLORADO NATIVE PLANT SOCIETY

NEWSLETTER

Volume 10 Number 2 March 1986



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

APRIL BOULDER CHAPTER MEETING

TALLGRASS PRAIRIE MANAGEMENT AND RESTORATION

Dr. Virginia Kline of the University of Wisconsin Arboretum will present a program on the botanical and political aspects of restoring and managing remnant tallgrass prairies in urban settings.

Dr. Kline has extensive experience managing the Curtis and Green Prairies in Madison, Wisconsin. Following the presentation, we will discuss the progress of the management plan and research needs for the Boulder Tallgrass Prairie.

DATE: Wednesday, April 9

TIME: 6.00 p.m

PLACE: Foothills Nature Center 4201 N Broadway, Boulder

NOTE THIS IS A DATE AND TIME CHANGE!

This program is sponsored by the Colorado Natural Areas Program and the City of Boulder and will be held jointly with the Boulder County Nature Association.

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1	FIELD	TRIPS 1986 #					
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1	April 25	Colorado National Monument #					
1	July 12	Green Horn Mountain #					
1	July 19	Florissant #					
	July 26	Taylor Col #					
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ŧ	Mark your	calendars NOW!					
		1					

APRIL DENVER CHAPTER MEETING

Peter Root will present a program entitled "Southwestern Ferns: Modern Fern Studies", which will include ferns of Texas and Colorado, and their biology, and discuss why there are not more ferns here in Colorado. Trained originally as an animal ecologist, Peter Root has had a twenty-five year interest in the ferns.

DATE: Wednesday, April 23

TIME: 7.30 P.M

PLACE: Botanic Gardens Admin House.

DUES REMINDER

There is still time to pay your dues. CONPS dues are payable on a calendar year basis, except that those joining in the last third of a year are credited with payment for the following year. notices for calendar 1986 were mailed in early December. To check on your status, look at mailing label on this newsletter--it says (in the upper right-hand corner) "PD THRU *yr", which should be self-explanatory! If you are "PD THRU *85" your membership has expired, and this newsletter may be your last!! Do it now---send your dues and return your "blue sheet" questionaire to the Membership Committee at P.O. Box 200, Fort Collins, CO 80522. The flora of Colorado thanks you!

---Membership Committee

Colorado landscape is habitat The over one hundred rare for plant many species, of which are bу development. threatened collecting, and overgrazing. Public awareness of the rare flora of state can help protect The Colorado Native Plant species. in cooperation with the Society Natural Areas Program, Colorado seeks to publish a rare plant monograph by Spring 1987. The Colorado Native Plant Society has pledged \$1000 from the treasury and hopes to raise an additional \$1000 from concerned members. A donation \$25.00 or more will entitle an individual to a complimentary copy of the monograph.

The Colorado Native Plant Society agreed to provide the also technical assistance for endeavor. A committee is being formed to assist in the collection photographs, artwork, information for the publication. Please contact Eleanor Von Bargen (756-1400) for more information.

ferns nestled in sandstone From canyons of the southeast, diminutive alpine relicts, to clayloving, barren-land endemics of the Colorado Plateau - our state enriched with one of the most North diverse floras in Your help is needed now to preserve Colorado's botanical treasures.

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Did You Know....??

Linnaeus, the originator of the binomial system used in present scientific nomenclature, recognized pistillate and staminate components of flowers as useful in plant classification, although their roles in plant reproduction were not yet understood.

The draft Resource Management Plan (RMP) for BLM's Little Snake Resource Area is. now complete and available to the public for comments. This area of Colorado, in the extreme northwest corner of the state, contains many rare plants, and the RMP recognizes the importance of the plant resources in several ways. One Research Natural Area (RNA), Limestone Ridge, and three Areas of Critical Environmental Concern (ACECs) are proposed in the "Preferred Alternative," the plan likely to be adopted unless public input causes reevaluation and revision. Cross Mountain Canyon, Irish Canyon, and Lookout Mountain are the proposed ACECs. Clearly, this RMP draws heavily on the excellent work done in the area by former BLM botanist Karen Wiley-Eberle, as well as by Colorado Natural Heritage Inventory botanical scientists.

The proposed RNA and ACECs total about 21,830 acres (of some 2.4 million acres administered by BLM within the planning area), and include a number of rare or special concern plants and plant associations. For example, Limestone Ridge contains a population of the endemic Yampa beardtongue, Penstemon yampaensis, as well as a plant association considered of Critical National Concern (Al ranking in The Nature Conservancy's natural heritage data system): the curlleaf mountain mahogany/Wyoming big sagebrush/whortleleaf snowberry/bluebunch wheatgrass association. The technical name for this plant association is <u>Cercocarpus ledifolius</u>/-Artemisia tridentata ssp. wyomingensis/-Symphoricarpos oreophilus/Agropyron spicatum. The proposed RNA also contains several other special plant associations ranked as being of state concern. Obviously, this scenic and botanically important area deserves designation as a Research Natural Area.

Lookout Mountain proposed ACEC is another scenic area in which several Special Concern plants are found, including the restricted endemic Sphaeromeria capaitata (which bears the colorful common name of "capitate chicken sage"), the northernmost population of the regional endemic Astragalus detritalis, the "debris milkvetch," and the only known Colorado population of the "hairy townsendia," Townsendia strigosa. Another endemic known only from

a few localities in Colorado, <u>Cryptantha caespitosa</u>, and examples of two important and uncommon plant associations also occur within this area. As you might guess from the plants and plant associations, the area is quite interesting geologically, as are Irish and Cross Mountain Canyons, the other proposed ACECs.

CONPS is very pleased that the Little Snake Draft Resource Management Plan recognizes and recommends Special Management Area (SMA) designation for these four areas. However, CONPS continues to support SMA designation for four other sites previously proposed:

(1) Ink Springs (280 acres), which contains populations of two regional endemics, <u>Penstemon yampaensis</u> and <u>Eriogonum tumulosum</u>, plus two plant associations (PA) of State Concern or Critical State Concern;

(2) G-Gap (about 275 acres), which includes the easternmost population of a rare regional endemic, Cymopterus duchenensis, as well as two plant associations of state concern;

(3) Horse Draw (ca. 690 acres), containing two plant associations of critical national concern (AI ranking) as well as another population of Cryptantha caespitosa; and

(4) Hell's Canyon (ca. 250 acres), which again has a population of <u>C</u>. caespitosa as well as the only known Colorado population of the regionally endemic <u>Eriogonum acaule</u>, the mat buckwheat.

Interestingly, BLM includes each of these sites as proposed RNAs or ACECs in one or more "alternatives" in the RMP, but drops them from the "Preferred Alternative." We believe that inclusion of these sites, totalling only 1,525 acres more than already proposed for protection, would add significantly to BLM's ability to protect these valuable elements of Colorado's flora. CONPS also plans to comment on three other proposed SMAs, Ace In The Hole, Vermillion Bluffs, and Vermillion Creek Falls, each of which contains a plant association considered "critically endangered throughout its range" (Al rank). BLM has recognized these sites and indicated intention to protect them by administrative means; of course CONPS favors stronger and more formalized protection.

A public hearing on the Little Snake Draft RMP will be held at 7:00 p.m., March 10, in Denver (Foothills Ramada Inn, 11565 W. 6th Avenue). IT WOULD BE VERY VALUABLE IF YOU COULD ATTEND THE HEARING AND MAKE A BRIEF PERSONAL STATEMENT SUPPORTING THE RECOMMENDATIONS ABOVE.

Statements at hearings of this type can be short and informal, and are intended to give BLM a feeling for the public's views. Simply saying that you appreciate the inclusion of the four SMAs, and that you support designation for the four proposed SMAs listed above, would be enough. Other interests (e.g., mining, grazing, ORV groups) might object even to the SMAs now proposed---so we need to show BLM our support for this kind of protective measure. CONPS fought hard seeking formal SMA protection for several important sites in the Piceance Basin; now we need to show support for this BLM Resource Area's plans to provide protection to plants.

If this newsletter reaches you in time, please go to the hearing. You will find the process and the comments from other individuals and groups interesting. Other CONPS members will be there, including someone who will make an official statement on behalf of the Society. You can make a difference just by your presence. For those living in other parts of the state, other hearings will be held March 12 in Craig (County Courthouse, 7 p.m.) and March 13 in Vernal (BLM District Office, 170 South 500 East, 7 p.m.).

Second, there is a written comment period that ends May 9, 1986. If you can't present comments in person at a hearing, please write to:

BLM, Craig District Office 455 Emerson Street Craig, CO 81625

A copy of the RMP can be obtained by requesting it from the same address.

Again we remind you that this is something concrete you can do to help conserve native plants. It doesn't take long to write a brief letter, or to attend a hearing and make a one-minute statement, but the cumulative effect of such actions by several people can be tremendous. Please do your part.

CONPS SEED LIST AND PROPAGATION INFORMATION

The COMPS seed list contains both wild collected and segregated grown seed. General germination instructions are included here and will not be included on the individual seed packets - so keep this newsletter for future reference.

GERMINATION CATEGORIES

None: These seeds need no special treatment and should germinate readily. Som seeds by covering with soil equal in depth to twice the diameter of the seed. Sown pots or seed beds must be kept moist until germination. Since germination is relatively rapid, sowing should be done in spring when the ground warms.

Scarification: Some seeds have such a dense or otherwise water impermeable seed coat that they must be mechanically broken to allow water penetration. This is accomplished erratically in nature through normal weathering processes, but may be done immediately and artificially by nicking the seed coat with a file or by rubbing between two sheets of sandpaper. Upon water penetration these seeds usually germinate quickly and should be handled as those in the "none" category.

Hot Water Soak: This is another form of scarification which can soften temperature mensitive meed coats and thus allow water penetration. Boiling or near-boiling water is poured over the meeds and the meed-water mixture is then allowed to cool naturally for 24 hours.

Stratification: This treatment is for seeds which must spend a period of time fully saturated with water at temperatures between 34%F and 41%F in order for the seed to germinate. This can be accomplished by mixing the seed with equal volumes of moist sand, peatmoss or vermiculite, placing this mixture in a plastic or glass container and then holding this container in the refrigerator for the prescibed period. If, upon periodic observation, germination begins within the refrigerator, the seeds must be removed and sown in the normal fashion. Stratified seeds that have been allowed to dry out may be killed or forced into an even more complicated dormancy. This process should be timed in order that the stratified seed can be handled properly at the end of stratification process. Seeds in this category may also be sown outdoors in the fall, kept moist over winter, with expectations of at least some germination in the spring.

Warm Moist: A few species of seed must experience a period of warm (601-751F) and moist conditions prior to the stratification treatment. This can be accomplished similar to the stratification treatment but maiting for the prescribed period before placing the container in the refrigerator. These seeds can also be sown outdoors but must be planted early enough in order that the prescribed warm period be satisfied.

The listing of more than one treatment for a few of the species is due to differences noted either in the literature or in experience. The prior history and nativity of any seed lot is often reflected in its germination characteristics and often results in different instructions for optimum germination.

Many of these otherwise unavailable species are excellent garden plants that would complement either dryland or contemporary landscapes. Please share your successes (or failures) in the newsletter.



Please :	send the	following	varieties of	seed:	SEED
	do 10 TV 40 TV 40 TV	·		Qty	
		·			

Species

Amorpha canescens Aquilegia micrantha Argemone polyanthemos Arnica latifolia Astragalus asclepiadoides Astragalus crassicarpus Atriplex canescens Atriplex cuneata Balsamorhiza sagittata Calchortus nuttallii Castilleja integra Ceanothus fendleri Cercocarpus ledifolius Cowania mexicana Dalea aurea Dugaldia hoopesii Erigeron caespitosus Eriogonum umbellatum Fraxinus anomala Happlopappus spinulosus Heliomeris multiflora Hoffmanseggia drepanocarpa Hymenoxys acaulis Ipomoea leptophylla Juniperus osteosperma Mentzelia decapetala Mentzelia nuda Mirabilis multiflora Oenothera caespitosa Denothera serrulata Penstemon alpinus Penstemon alpinus ssp. brandegi

Penstemon grandiflorus

Penstemon linarioides Pensteaon secundiflorus

Petalostemon purpureum Ratibida columnifera

Sphaeralcea parvifolia

Penstemon virens

Senecio longilobus

Stanleya pinnata

Yucca angustissima

Ribes aureum

Yucca glauca

Common Name

Leadplant Amorpha Cliff Columbine Prickly Poppy Broadleaf Arnica Milkweed Milkvetch Broundplum Milkvetch Fourwing Saltbush Castle Valley Clover Saltbush Arrowleaf Balsaeroot Sego Mariposa Lily Wholeleaf Indian Paintbrush Fendler Ceanothus Curlleaf Mountain Mahogany Mexican Cliffrose Silktop Dalea Orange Sneezeweed Tufted Fleabane Sulphur Wild Buckwheat Singleleaf Ash Ironolant Soldenweed Showy Goldeneve Sicklepod Rushpea Stemless Actinea Bush Morning Glory Utah Juniper Ten petal Mentzelia Bractless Mentzelia Colorado Four o'clock

Alpine Penstemon Brandegee Penstemon Shellleaf Penstemon Toadflax Penstemon Sidebells Pensteann Green Pensteaon Purple Prairie Clover Prairie Coneflower Golden Currant Threadleaf Groundsel Small leaf Globemallow Desert Princes Plume Fineleaf Yucca Small Scapweed

Tufted Evening Primrose

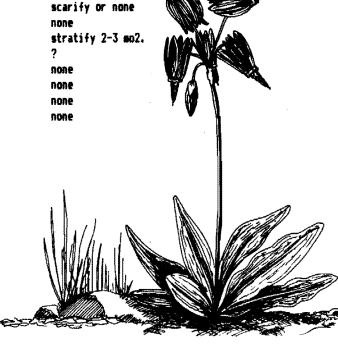
Germination Instructions

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ER FORM

rices are 25 cents/pkt, plus 25 cents/4 pkts postage.Please nd your payment to COMPS,

> c/o Jim Borland, 320 Adams, Denver, CO 80206



The Education Committee requests interested photographers to submit slides for the show being prepared on the Natural History of an Aspen Grove.

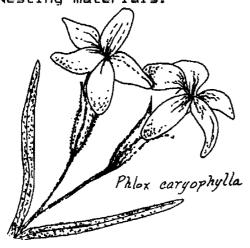
Kodachrome 64 film is preferred. Duplicates slides may be submitted, but originals must be available for reproduction if your slides are chosen.

Please label all slides with location, date, your name and address, and a brief description of features.

The following list may serve to spur your imagination:-

Winter scenes Footprints in the snow Any bird activity Showshoe hares Bark stripping & healing Beaver trails Bear claw marks Signs of rodents Animal droppings Insects, on snow or bark Nest remnants Snow tunnels Evidence of water availability Bare areas for grazing Berries/buds above the snow Aspen trunks, cankers Anything else interesting!

And as Spring comes:Breaking of buds, male and female
Unfurling of leaves
Nesting birds
Insect activity
Leaf curlers
Birds foraging for insects
(who eats what?!)
Nesting materials.



Due to unforseen circumstances, it was not possible to publish Volume, 9, #5 of the newsletter. This was the October, November, and December issue. I am sorry if this caused any inconvenience for anyone.

Velma Richards, Sue Galatowitsch, and Ann Cooper very graciously came forward to assure that Volume 10, #1 and Volume 10, #2 would be published on time. I would like to thank them for a job well done.

A new editorial committee has now been formed and will begin work with Volume 10, #3. Velma Richards, Elizabeth Otto, and Peter Root have all consented to serve on this committee. I wish to thank them for volunteering to assist with the work involved in publishing the newsletter.

I also wish to thank Les Shader who has served as the editor of the newsletter since 1982. All of the time and effort that he gave to this endeavor is appreciated.

-Eleanor Von Bargen

A LITTLE GOOD NEWS TODAY ...

The clove phlox, Phlox caryophylla, is among the plants considered by the U.S. Fish and Wildlife Service as candidates for listing as "Threatened" or "Endangered." In a little good news for the day, it appears from summer 1985 field work by botanists and ecologists from the Colorado Natural Areas Inventory, together with their colleagues from agencies such as BLM and FWS, that the clove phlox still exists in much greater numbers than previously known. Several large populations of clove phlox were found on BLM land in southwestern Colorado, and others nearby in New Mexico were located by the New Mexico Natural Heritage Inventory. A status report on the taxon has been written, and it appears likely that Phlox caryophylla eventually will be removed from the candidate species list. It's always good news when a plant taxon need no longer be considered rare, but we should note that this happens less frequently than the opposite --- that a formerly widespread or abundant plant becomes uncommon or rare, often through humans' destruction of its habitat.

LOCATION:

Colorado National Monument

_DATE:

April 18 - 20

LEADERS: Jim Borland (329-9198), Ron Abbott (333-6151)
MEETING PLACE: Parking lot of the Monument Visitors Center

9.00 a.m. both Saturday and Sunday

Colorado National Monument is an outstanding Natural Area located less than a full days drive west of Denver. Within its boundaries and nearby may be found plants representative of Great Basin Desert, Badlands, and even montane environments. Its character is so special, in fact, that Colorado National Monument has been declared by UNESCO to be an International Biosphere Preserve.

Shake off winter doldrums by transporting yourself into the springtime of this wonderful place! Members must bring their own food and equipment for the trip, and although conditions can be quite nice in the Monument in April, participants should still come prepared for wet or cold weather. An excellent campground is located near the Visitors Center at the north-west end of the Monument. Members should be prepared to pay entrance and daily campsite fees, though it is unlikely that these will be in effect in April. Motel and private camping facilities are also available in nearby Fruita and Grand Junction.

We will neet for organized outings at 9.00 a.m. both Saturday and Sunday, in the parking lot of the Monument Visitors Center. Be sure to wear sturdy shoes and bring plenty of water. All trip participants MUST preregister with a trip leader (names and phones above). Only 20 spaces are available, so don't delay.

LOCATION:

Green Horn Mountain Saturday, July 12

DATE: Saturday, July 12 LEADER: Dr. Neal Osborn

MEETING PLACE: The K-Mart parking lot by the Canon City exit of I-25 -- look for the red caboose. 7.00 a.m.

Green Horn Mountain is the largest and southernmost peak in the Wet-Mountain Range. A good road runs to the summit and we shall stop at points of interest along the way. We will see <u>Abies lasiocarps</u> arizonica at its northernmost limit. We will also examine the revegetation of an area that was cleared by a tornado some years ago. Meal also likes this particular area for its woody-species diversity.

Pack a lunch, bring raingear, water and rugged footwear and join Dr. Osborn for a day of high altitude botany. Bring Weber! Hiking distance: very short - we should be able to drive right to the tundra. Altitude subalpine to alpine. For furthur information, or to register for the trip, call Dr. Osborn at 546-0319

LOCATION:

Florissant Fossil Beds National Monument

DATE:

Saturday, July 19

LEADERS:

Mary Edwards, 233-8133; Velma Richards, 794-5432, Miriam Denham, 442-1020

MEETING PLACE: Visitors Center. 9.00 a.m.

Florissant Fossil Beds National Monument is 35 miles west of Colorado Springs on U.S. Highway 24 to the town of Florissant and then 1 mile south to the Visitors Center at the Headquarters of the Monument. This will be a working, but fun trip, to add any uncollected species to the COMPS collection of plants for the FFBNM Herbarium Project. This will be a great chance for amateurs to learn to identify plants and to collect and press them properly. Bring lunch, water, rain gear, and a small digging tool. You may wish to camp and collect on Sunday as well.

For more information call any of the leaders at the numbers given above, or to register, send a postcard to COMPS, P.O Box 200, Fort Collins, Colorado BOS22

LOCATION:

Taylor Col

DATE:

Saturday, July 26 Dr. Beatrice Willard

LEADER:

MEETING PLACE: Aspen Center for Environmental Studies. 7.30 a.m.

This trip offers an opportunity to visit a recently discovered site that supports an unusually large number of threatened and endangered alpine plants—over 30 at present count. Start from Aspen Center for Environmental Studies, just west of the post office off Mill Street in central Aspen. Time: 7.30 a.m. for an adequately early start to reach this remote site before the lightning does! Bring warm jackets, windbreakers, rain gear; wear warm clothing, heavy boots and plenty of sunburn cream. Bring lunch, mid-afternoon snacks and drinking water, as the day will be long. Four wheel drive vehicles will be needed. Subarus and Eagles can negotiate the road. Jeeps are available for rent at the Aspen Airport Jeep Rental. We will walk about four miles total, all of them above 12,300 feet elevation in easy terrain. There is no need for binoculars, unless you particularly want them.

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Ft. Collins	Carol Brandt	484-9251
Enua Cassass	C	
Four Corners	Scott Hetzler	565-21/5
SCHED	SCOTT HETZIEF ULE OF MEMBERSHIP FEES 00 FAMILY OR DUAL	
SCHED	ULE OF MEMBERSHIP FEES	\$12.00

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

RETURN AND MAILING ADDRESS Colorado Native Plant Society P. O. Box 200 Fort Collins, CO 80522

	COMMITTEES	
CONSERVATION	Sue Martin	226-3371
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EDUCATION	Miriam Denham	442-1020
FIELD TRIPS	Nevin BeBee	733-1038
FLORISSANT	Mary Edwards	233-8133
HORTICULTURE &	Anna Thurston	433-3705
REHABILITATION		
MEMBERSHIP	Myrna Steinkamp	226-3371
PUBLICITY		
WORKSHOPS	Bill Jennings	494~5159

Please direct all contributions to the newsletter to
Peter Root,

4915 West 31ST Avenue, Denver, CO 80212.

Deadlines for newsletter materials are <u>one month</u> prior to publication dates, which are january 15, March 15, May 15, August 15, and November 15.

There is a special need for short filler items such as some unusual information about a plant, a little known botanical term, etc. Please include author's name and address, but items will be printed anonymously if requested.

Please direct all membership applications, renewals and address changes to the MEMBERSHIP chairperson, in care of the Society's mailing address.

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