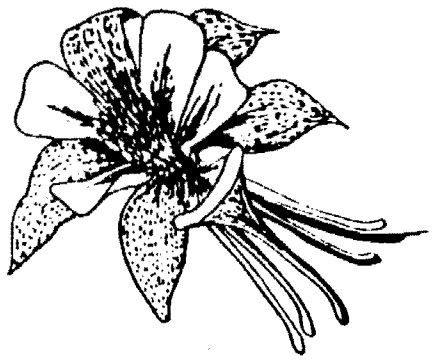
Aquilegia

Newsletter of the Colorado Native Plant Society



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

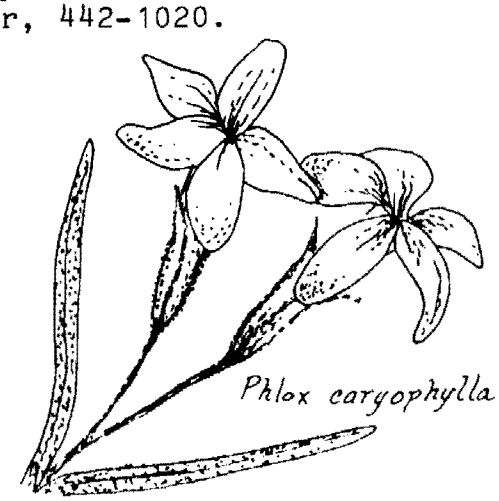
Volume 11, Number 2 March 1987

BOARD NOTES

The Board of Directors met on January 24, 1987, at the home of Myrna Steinkamp and Sue Martin in Fort Collins. Among the topics discussed were: cooperation with the Denver Audubon Society in the preparation of a Colorado Bird Atlas, formation of a CONPS Speakers Bureau, proposed off-road vehicle racing in the Little Snake Resource Area (see related article), and the possibility of a spring meeting and plant sale.

CONPS SPEAKERS BUREAU

Members who are knowledgeable in particular fields and willing to represent the Society as speakers before garden clubs and similar groups should submit their names and topics to Dr. Miriam Denham in Boulder, 442-1020.



CALENDAR

Mar. 21	Propagation of Colorado Native Plants Workshop: Jim Borland
April 11	Genus Eriogonum Workshop: Dr. Miriam Denham
May 2	Xeriphytic Ferns and Fern Allies Workshop: Peter Root

WILL THIS NEWSLETTER BE YOUR LAST?

Check your mailing label on this newsletter---if it says 'PD THRU 1986,' you have not renewed your membership for the coming year, and this will be your last newsletter!

You won't want to miss this year's planned activities, including Chapter programs, workshops, the exciting field trips currently being organized for summer '87, and a fall Annual Meeting to be hosted by the Metro Denver Chapter. In addition, you will have the satisfaction of supporting the Society's efforts to conserve native plants, and to provide educational programs for our members and for the public. Send your dues now to the Membership Committee at the Society's PO box address.

RARE PLANT SITES INFORMATION NEEDED

The Denver Audubon Society and the Jefferson County Open Space Department each are currently seeking information from amateur and professional botanists on rare or unique plant sites in the Denver area. Denver Audubon plans to incorporate this information into a critical wildlife habitat map and inventory for the plains environment of the Denver metropolitan area. Jefferson County Open Space needs information on rare or unique plant sites for a map and inventory of critical environmental areas within the County. Both maps will be used as tools to preserve critical environments.

Denver Audubon's project limits are defined by the town of Byers on the east, the town of Castle Rock on the south, the Dakota Hogback on the west, and the southern Weld County line and northern Boulder County line on the north. Jefferson County is interested in information pertaining to the County only.

Sites of interest for both projects include those which support: State or Federally listed threatened or endangered species; species of communities within the project limits stated above that are rare or have undergone a sharp decline; and concentrations of species or communities that are unusual for their diversity or other factors such as a relict status.

If you know of any plant sites that qualify for inclusion in the Denver Audubon or JeffCo Open Space mapping projects please contact: Rod Mitchell (399-3219) for sites related to the Denver Audubon project, or George Maurer (277-8332) for Jefferson County sites.

DENVER CHAPTER MARCH MEETING

Peter Root will present a program on Texas vegetation and wildflowers at Denver Botanic Gardens House, Wednesday, March 25, at 7:30 pm.

CLOUD RIDGE NATURALISTS

Cloud Ridge Naturalists has arranged another outstanding season of field seminars. Topics include: The Hills of Home: A Natural History of the Foothills - June 5-9; Nesting Ecology of Flammulated Owls - July 8-12; and A Grassland Primer: Grasses and Grasslands of the Great Plains - August 14-16. Other seminars deal with topics as diverse as Rocky Mountain butterflies and wetland and aquatic ecosystems. These programs are conducted by the best instructors available who have first-hand research or working experience with their subjects.

For further information, contact: Audrey Benedict, Cloud Ridge Naturalists, Overland Star Route, Ward, CO 80481, 459-3248.

LUCIAN M. LONG (1912-1987)

It is with great sadness that we report the death on February 7th of Lucian M. Long, a well-known member of our Society. Lu, a retired attorney who resided in Colorado Springs, contributed in many ways to the success of the Society, having been involved in field trips, workshops, Chapter programs, and even Annual Meetings. In addition to sharing his time and knowledge, Lu was a true benefactor of CONPS---not only was he a Life Member, but he also made generous gifts in support of several Society projects. His special interest was in native orchids, and he was always willing and eager to share his knowledge of them.

Lu also was active with the Denver Botanic Gardens, the Denver Museum of Natural History, The Nature Conservancy, and many other environmental and horticultural groups. Those who were privileged to know Lu will remember him for many reasons, including his gentle manner and never-failing cheerful laugh. He will be missed.

GRASSLAND INSTITUTE

Denver Audubon Society, in cooperation with the University of Northern Colorado and the US Forest Service, is holding its 13th annual Grassland Institute at the Pawnee National Grassland near Briggsdale, Colorado. The Institute draws on the arts, sciences, and humanities to familiarize participants with the short-grass prairie ecosystem. Field trips and evening programs cover such topics as grassland botany; insects; birds and other vertebrates; geology; meteorology; anthropology and archeology; coal mining and land reclamation. The curriculum includes an evening of story-telling and a traditional barn dance.

Spring is the liveliest time of year on the prairie. Participants will camp out for six nights under the cottonwood trees. Meals, transportation on field trips, and instruction are all included in the tuition of $325.00. College credit also available.

To obtain a descriptive brochure and registration form, call Denver Audubon, 399-3219.



Have you ever <u>really</u> noticed the leaves of the common spring crocus? Take a look this spring! And that's not the only unusual feature of <u>Crocus</u> sp.---for instance, the flower tube is so long that the ovary is below the soil level, protected from cold weather. It's a good thing, given our wet, cold Colorado "spring."



Penstemon grahamii

PENSTEMON ENTHUSIASTS TAKE NOTE!

If you find penstemons to be among the most fascinating and beautiful of American wildflowers, plan your summer vacation to include late June in Northern New Mexico. The American Penstemon Society will hold its 1987 annual meeting in Santa Fe, June 20 - 23 at St. John's College. The program will include visits to gardens and commercial plantings featuring penstemons in Santa Fe and Albuquerque, hikes and car trips to see them in native habitats, talks and slides, a penstemon show, plant sales and optional activities around the cities.

The Santa Fe area has a wide variety of plant communities ranging from grasslands to alpine tundra. Many species of penstemons from the low mats of <u>P. crandallii</u> and bush-like mounds of <u>P. ambiguus</u> to tall spikes of <u>P. barbatus</u> and <u>P. strictus</u> can be found there.

For more information on the Society or this meeting, contact Ellen Wilde, 110 Calle Pinonero, Santa Fe, NM 87505, (505) 982-1406.

CONPS Workshops

Sat., March 21, 1987
(or Sat., April 25 in Fort Collins. Call Bill Jennings for exact location.)
Propagation of Colorado Native Plants
Leader: Jim Borland

Special techniques and procedures for starting native seed will include descriptions and demonstrations of stratification, scarification and after-ripening processes to overcome dormancy problems. Many of our alpine-to-desert species can also be easily propagated by the same cutting techniques used for African violets and philodendrons. Bring knife, pruners, or scissors, fingernail file, large Ziploc bags and a large dose of inquisitiveness. To be held at Foothills Nature Center, 4201 N. Broadway, Boulder.



Saturday, April 11, 1987
Genus Eriogonum
(Polygonaceae - Buckwheat Family)
Leader: Dr. Miriam Denham

The members of genus Eriogonum native to the eastern slope of Colorado will be studied in this workshop. The familiar Sulphurflower is in this group. Dr. Denham has prepared a key and bibliography on the plants, and will discuss some of the rare western Colorado species as well as all the eastern species. Numerous botanical specimens will be available for study. To be held at Foothills Nature Center, 4201 N. Broadway, Boulder.

Saturday, May 2, 1987
Xeriphytic Ferns and Fern Allies
Leader: Peter Root

The ferns and fern allies of Colorado are found only in moist foothills ravines and in damp subalpine forests, right? Nope! In dry southwestern and southeastern Colorado and at scattered locations on the Plains, such as Pawnee Buttes, ferns and fern allies can be found. Many of these are the same species that grow in the southwestern deserts, reaching northern limits here. This workshop gives persons interested in the ferns and fern allies a chance to study intensively some very interesting members of Cheilanthes, Notholaena, Pellaea, Selaginella, and a few other selected genera. Participants should have a copy of John Mickel's How to Know the Ferns and Fern Allies. To be held at the Denver Botanic Gardens.

Enrollment in workshops is always limited, usually due to room constraints, so you must register in advance. To register, contact CONPS workshop coordinator, Bill Jennings, 360 Martin Drive, Boulder, 80303, 494-5159. Be sure to

include your mailing address and phone number if you mail in your registration. Registrants will be notified by mail about two (2) weeks prior to the workshop regarding final location, time, lunch, suggested references, etc. Please register promptly as workshops tend to fill up fast. However, cancellations sometimes create openings, so you might check with Bill up to the night before the workshop if you want to try to register at the last minute.

The fee for each workshop is $8 for members. For non-members, the fee is $16. If you plan to attend more than one workshop per year, it is cheaper to join CONPS as an individual ($8/year) and come to workshops as a member. You may pay in advance or at the workshop, whichever you wish.

It takes considerable time and effort for the instructors to plan and develop workshops and field trips. Because of the long lead times, we must soon plan the workshops for the 1987-88 winter season. Please let us know how you like the workshops and field trips we plan. We need your suggestions for others, as well as your feedback on whether you found them informative and exciting or dull and uninteresting. We need to know whether we are serving you, our members, the way you wish.

FEASTING AT ANOTHER'S TABLE:
Parasitic Flowering Plants
by Judy von Ahlefeldt

The lifestyle and occurrence of parasitic and saprophytic flowering plants was the topic of the CONPS workshop presented by Dr. Frank Hawksworth at CSU on January 17. Dr. Hawksworth, who is a plant pathologist with the US Forest Service, is also a world authority on dwarf mistletoe.

The parasitic way of life has developed in 7 orders of vascular plants. Some species are highly specialized tropical organisms with some parasitizing other parasites. Others are found in temperate climates parasitizing hardwoods and conifers as well as a variety of herbaceous species and subshrubs.

Parasitic plants may attach to roots or stems of the host plant. Holoparasites are entirely dependent on the host, while hemiparasites are capable of photosynthesis but grow best when associated with a host plant.

A few are of major agricultural importance - Striga (witchweed) attacks corn, Orobanche parasitizes beans in north Africa, and Cuscuta (dodder) is a familiar parasite found in the southern United States.

Parasitic and saprophytic plants in Colorado are found in 7


Castilleja

families. Saprophytes include 4 species of Corallorhiza in the orchid family, and 2 genera in the heath family. Root parasites of the broomrape family attack several species of herbaceous plants. Orobanche fasciculata, which parasitizes Artemisia is a good example. Many genera in the Scrophulariaceae are hemiparasites, including Castilleja and Pedicularis. The mistletoes are important parasites of trees. Mistletoes belong to Viscaceae and include one species of Phoradendron parasitic on juniper and 5 species of Arceuthobium (dwarf mistletoe) found on pines and Douglas fir.

WHEN IS A PLANT NATIVE?

(reprinted by permission from The Green Thumb, journal of the Denver Botanic Gardens.)

continued from Aquilegia vol. 11, no. 1

Some terms for non-indigenous plants are: "adventive" -- coming from elsewhere, usually accidentally; "introduced -- deliberately brought in; "escaped from cultivation"; "weed" -- often used in the same context but even native plants can behave as weeds, Helianthus annuus (common sunflower) and Cleome serrulata (Rocky Mountain bee plant), for example. The word "weed" has an enormous number of different connotations; they don't concern us here. People probably get the notion from using floras that the botanist has some miraculous way of knowing whether a particular plant is indigenous or not. Unfortunately, they do not; and too often they dutifully copy what someone else has said without applying their minds to the local situation. The purpose of these pages is to extend Mr. Webb's interesting question to the Colorado scene, and to bring up some other random but interesting points about indigenous flora.

The indigenous flora of the eastern Front Range foothills is somewhat of an extension of the Black Hills flora; eastern woodland-prairie species formerly reached to the base of the Rocky Mountains along the river systems, and Rocky Mountain species occurred along the ridges as far east as western Iowa. The drying up of the Great Plains left bits and pieces of the eastern flora in cool protected gulches of the foothills. There are a number of indisputably indigenous species in this category. Pedicularis canadensis (a lousewort), Hypoxis hirsuta (yellow-eyed grass), Stipa spartea (porcupine grass), Betula papyrifera (paper birch), and Sporopbolis heterolepis (prairie dropseed) are good examples. They are scattered in small populations near to extinction up and down what will soon be a completely "urban corridor".

Several indigenous plants of eastern United States, however, were discovered in such places around Boulder. Viburnum lentago (nannyberry), Impatiens capensis (jewelweed), and Sambucus canadensis (elderberry) are a few examples. After a lot of waffling I finally decided that these were not indigenous but introduced. Why? First, they did not occur in any other localities, but only around Boulder. The elderberry only occurred along ditches that carried runoff water from the Darwin M. Andrews nursery (he specialized in growing natives). Jewelweed also occurred only along ditches (it has later spread to other floodplains). Nannyberry grows in Bluebell Gulch, along with Narcissus; Berberis vulgaris, common barberry; Viburnum lantana, wayfaring tree; Lonicera, honeysuckle; and Papaver orientale, Chinese poppy. I suggested that the early settlers of Boulder, having no irrigation but wanting to grow some of their favorites, planted them in the gulch where they would not need irrigation. The occurrence of these eastern natives along with obvious introductions could be called "guilt by association". I presume I guessed right, but I may be wrong, just as the senator [J. McCarthy] was.

Many of our introductions originally were garden plants from the mining days (Saponaria officinalis, bouncing bet; Papaver croceum, Iceland poppy; Linaria vulgaris, butter-and-eggs; Clematis orientale, oriental clematis. Some of these behave themselves very well as roadside weeds. Oriental clematis

probably was cultivated in Idaho Springs and spread up and down the Clear Creek Valley but nowhere else -- until recently; with highway construction it has turned up in Moffat and Garfield counties. St. Johnswort, a poisonous plant that photosenitizes white cattle that graze on it, may have been introduced with straw during the building of the railroad around 1918 and for many years it covered thousands of acres on Rocky Flats without showing any tendency to spread. Suddenly it has begun to spread along roads up into the mountains and is established near Glenwood Springs.

A little southern European annual Alyssum minus appeared in a pasture near Kiowa in 1953. In 1964 it dominated the embankments of the Boulder-Denver turnpike. Now it is all over the plains and the western slope, coloring the rights-of-way pale green in May, but not giving late-comers much competition since it withers within a few weeks. The big thistle, Carduus nutans first appeared in Boulder County as a few plants in the floodplain of South Boulder Creek. Now it covers enormous tracts in pastures, fields and rights-of-way all over Colorado. There are new examples almost every year of weeds that evidently started in a small patch, sat there and patiently let natural selection bring out an ecotype perfectly adapted to the area and all of a sudden -- poof! A new plague! Why are some introductions so terribly aggressive and some so tame?

Some introductions do not "take". Luckily, this seems to be true of some Mediterranean weeds imported in flower seed packets meant to "revegetate" disturbed areas. A baby's breath, a bright scarlet flax, and other strangers have turned up on the Mesa Trail near Boulder, but thus far the introductions have been unsuccessful. Revegetation so often means covering an area with something -- anything -- green. Why can't we Americans learn the lesson of Australia that you cannot casually introduce plant species and expect them to stay put. Australia introduced the prickly pear and then introduced the rabbit to take care of it, and then all hell broke loose. This could happen here with misguided revegetation buffs seeding our roadsides, quarries and denuded forests broadsided with everything under the sun.

A gigantic species of butter-and-eggs, Linaria dalmatica, invaded an Iris-covered slope near my house, the first time I had encountered it in Colorado. Now it covers acres and acres in the Arkansas Valley near the Chalk Cliffs, and in eastern Moffat County. But strangely enough, without any attempt on anyone's part to control it, the population near my house has disappeared almost without a trace. Why? I have no idea, but it's a very interesting fact. But there seems to be a natural check on some weeds, easy come, easy go!

Introductions are not always from one continent to another nor accomplished by the hand of man. In Boulder there is a fine specimen of scarlet oak perched at the base



Carduus nutans—Musk Thistle

of the first Flatiron. I do not think that Ernest Greenman, who planted Gambel oaks around here to see if they would survive in the wild north of Denver and Evergreen, was responsible. A beautiful purple-leaved Rosa also has colonized the Flatiron screes. The vector is probably the Steller's jay, carrying fruit from gardens in town. A pinon pine tree about 40 years old once stood in middle Boulder Canyon, probably moved from Goodview Hill east of Boulder. Isolated trees in Rist Canyon and other places near Fort Collins probably came from seeds brought by birds from the Owl Canyon population (which, incidently, seems to have been "introduced" by squirrels rifling an Indian trader's pack).

Then there are the tumbleweeds and other weedy plants of the desert-steppe areas of the West. While it is taken for granted that the Russian thistle is an introduction, this weed probably has been here as a native from Tertiary times. It is not the Salsola kali of the Atlantic seacoast but rather what Aven Nelson called S. pestifer. It is known under an older name, S. iberica (Iberia does not mean Spain in this case, but the Caucasus!) and probably it is one of the old Tertiary Asiatic-western American things. The stickseeds, Lappula redowskii and its relative L. diploloma (or something very similar) belong to a diverse Asiatic genus. And only a few years ago the first American species of the Russian mustard genus Stroganovia was discovered, a clear native, in Nevada!

When was tamarisk introduced? Most people think fairly recently, but Father Escalante talks about crossing riverbottoms filled with it in his journey of 1776. There seems no doubt that it was introduced, but when and by whom -- the Spanish? Or the Carthaginians who Barry Fell [Harvard author of Saga America] says traveled all over our [illegible] leaving their tracks in coinage and rock drawings in the times of the Punic Wars? Whichever answer is right, we have to be open-minded and careful not to accept blindly the first answers that come to mind.

One summer day I took a Russian botanist up to Geneva Basin. I had explained to him that we have no species of Caragana growing here outside of gardens and that its place is largely taken in America by mountain-mahogany, Cercocarpus. Darned if we didn't round a bend four miles north of Grant and come upon a whole colony of Caragana aurantiaca thriving as if it belonged there. We think this species was once planted by the Forest Service for erosion control but it is hard to locate the records. Near Creede there is a mountainside covered with buffalo-berry, Elaeagnus commutata, probably planted by the CCC during the depression. It's obvious, isn't it, that in order to know whether a thing is native or introduced, a whole body of history and plant geographical information has to be available to us.

Now here is something that intrigues me. In a chapter I wrote for a Swiss book on the Grand Canyon I pointed out that European tourists should always feel at home traveling by bus on the highways of our West because, since they cannot see beyond the right-of-way, practically all of the plants they do see are ones they are familiar with in Europe. Why are the European plants, not necessarily weedy in their homelands, so aggressive here? Why are not American native species becoming equally aggressive weeds in Europe and elsewhere? A few are. Mesquite is a pest in India; Parkinsonia in other dry tropical areas such as the Galapagos Islands.

Adventive plants arrived in our country by ship during the 19th century, the seeds being dumped at our ports with ballast carried in the empty cargo holds. Portland, New York, and Charleston were major jumping-off places. After acclima-

tization, the weeds simply followed the railroads west or east, eventually arriving in Colorado. Jim Hill mustard commemorates one of the railroad magnates of the day. There are some ballast sites in Europe but not many American plants seem to have spread from them. However, plant collecting in Sweden, for example, has been so intensive over the centuries that the precise direction and speed of the spread of weeds is comparatively well known and documented.

Alien plants cannot survive in a new area unless they are suited to the climate. The distribution of aliens in our country mirrors the climate of the areas in which they were native. Therefore, each region of the United States has a special adventive flora. California has species from the Mediterranean shores. Colorado seems to have a southeast Europe-middle East flavor. Salt Lake City has still another species spectrum not found in Colorado. In other words, the kinds of introduced plants that survive in an area should indicate precisely what parts of the world have the most similar climates. Such information cannot be gotten as cheaply or quickly by the most sophisticated instrumentation available to science.

William Weber
Illustrations by Doris Peacock

WORK CONTINUES ON THE RARE PLANT PUBLICATION

Members of CONPS have been photographing and researching over ninety rare plant species for the Rare Native Plant publication to be published by the Colorado Natural Areas Program. The endangered flora publication will contain an overview of the conservation of rare plants in Colorado and descriptions and illustrations of each species.

Members have photographed nearly sixty species and completed research on approximately eighty species. The next newsletter will contain a list of plants that still need to be photographed. CONPS has donated $1000 of general funds and pledged to raise another $1000 toward the publication costs. The Colorado Natural Areas Program hopes to raise most of the $50,000 for publication through grants from private foundations. Only $400 is needed to meet the CONPS goal of $2000. A donation of $25.00 or more will entitle an individual to a complimentary copy of the monograph. The book should be published by December 1987.

Please send contributions to:
"Rare Plant Monograph"
Colorado Native Plant Society
P.O. Box 200
Fort Collins, CO 80522

AN OFF-ROAD RACE THROUGH AN ACEC?
[---BLM's at it again.]

Unbelievably, the Bureau of Land Management (BLM)'s Little Snake Resource Area is considering allowing Off-Road Vehicle (ORV) races, including a 4-wheel drive (4WD) race that would pass directly through the length of a proposed Area of Critical Environmental Concern (ACEC). Currently an Environmental Assessment (EA) is being prepared for the "Sand Wash racing events," proposed for fall 1987.

In 1986, the Little Snake Resource Area (which encompasses public lands in most of Moffat and Routt counties and a smaller portion of Rio Blanco county in extreme northwest Colorado) completed its Resource Management Plan (RMP). The RMP was reasonably progressive with respect to its provisions for the many rare plants of the area, including two plants on the candidate list for federal listing as Endangered, and 23 plants noted as having Colorado BLM "sensitive" status. Indeed, in addition to other management actions, 19,380 acres were proposed for designation as ACECs or RNA (Research Natural Area) to protect these sensitive

plants. One of those proposed ACECs is centered around and named for Lookout Mountain, a prominent landmark in Moffat County, and includes the scenic Vermillion Bluffs. More importantly, the proposed Lookout Mountain ACEC includes populations of the rare plants Astragalus detritalis (debris milkvetch), Cryptantha caespitosa (caespitose catseye), Sphaeromeria capitata (capitate chicken sage), and Townsendia strigosa (hairy townsendia), as well as two plant associations of special concern: Juniperus osteosperma/-Artemisia nova/Agropyron spicatum, and Atriplex confertifolia/Agropyron spicatum.

There is an existing dirt road passing through the proposed Lookout Mountain ACEC, and it is our understanding that the planned 4WD race route would use this road. As a result, the racing vehicles would pass through or closely adjacent to populations of each of the three rare plant species. ACEC designation does not preclude "multiple use," a concept BLM often applies as if it were "multiple mis-use," as this race proposal suggests.

What is being done?

CONPS has filed a written objection to the race route. We believe that if the race is permitted, there will be not only direct damage to the rare plant populations, but also massive surface disturbance, followed by long-term erosional consequences that would adversely affect the plants. Further, our objection stated, "...it is inconceivable that an ORV race of any type should be permitted to traverse ANY area worthy of ACEC status---what do the words 'CRITICAL ENVIRONMENTAL CONCERN' mean, if not that the area contains uncommon features whose loss, damage, or destruction is unacceptable to society?" We asked that the 4WD route be moved out of the ACEC, and that the motorcycle race be rerouted away from several sensitive plant associations near which the proposed route passes.

What should you do?

WRITE (by March 6th, if possible):
Mr. Roy Jackson, Area Manager
BLM, Little Snake Resource Area
1280 Industrial Avenue
Craig, CO 81625

Express your opinion about the Sand Wash ORV races. Please remember that if we as individuals don't speak up, those who promote or allow the destruction of our environment will have their way. Local residents who stand to profit from the races, which have the potential of drawing a large number of participants from far outside the immediate area, will be vocal in support; we and other opponents must be equally vocal about our concerns.

[For additional information, contact CONPS Conservation Chair Sue Martin.]

FLORAS NEEDED

The Colorado Natural Areas Program maintains the database for rare plants in Colorado, conducts field surveys for rare species and protects rare plant habitat in designated natural areas.

Although our budget is small, our impact in habitat protection is large. Because of our limited budget, we rely on volunteer efforts and private contributions. In order to adequately advance our plant inventory and protection efforts, we are requesting that members of CONPS take a look at their personal libraries. If you have an extra or unwanted copy of any of the following books, please consider donating them to the Natural Areas Program. Perhaps, as in the case of W. A. Weber's upcoming Flora of Colorado: Western Slope, you would consider purchasing the book for the program. All contributions are tax-deductible. We thank you for your generous help in past projects and thank you for

your continued support.

Manual of the Plants of Colorado (Harrington)
Rocky Mountain Flora (Weber)
Flora of Colorado (Rydberg)
Flora of the Great Plains (Great Plains Flora Assoc.)
Utah Flora (Welsh - anticipated)
Rocky Mountain Flora: Western Slope (Weber - anticipated)
Intermountain Flora, vols. I, IV, VI (Conquist et al.)
Atlas of North American Astragalus (Barneby)

If you have any of these books to donate, contact:

Steve O'Kane
Colorado Natural Areas Program
1313 Sherman, Room 718
Denver, CO 80203
866-3311

PICEANCE ACECs PROPOSED!!

Many CONPS members will recall the controversy over BLM's Piceance Basin Resource Management Plan (RMP). In 1984 a draft RMP was issued, public comment was accepted, and a proposed final RMP was issued in March, 1985. During the RMP preparation, CONPS and a number of members had commented, either at public hearings or in writing, on the need for protection of the Piceance Basin's plant resources.

CONPS and four other groups or individuals protested the final Plan on the basis of the refusal to provide any valid protective measures for twenty areas containing rare plants or plant communities. Those twenty sites had been identified in a study conducted by botanists and plant ecologists of The Nature Conservancy under contract with BLM. Thus, BLM in the proposed Piceance RMP chose to ignore completely those recommendations.

CONPS's protest to the BLM Director in Washington cited the Society's consistent objection to the RMP's lack of protection for these important botanical resources by designation of Areas of Critical Environmental Concern (ACEC) and Research Natural Areas (RNA). The Society also objected to imprecise language purporting to provide management and protection to the plants, but having no recognized standing. We are happy to report now that BLM has indeed reconsidered these aspects of the RMP, consulted with the State of Colorado's Natural Areas Program, and in a recent "Information Bulletin" has described decisions that will become part of the Piceance Basin RMP. The Plan will propose designation of five ACECs totalling about 6,635 acres: Deer Gulch, Dudley Bluffs, Lower Greasewood Creek, South Cathedral Bluffs, and Yanks Gulch/Upper Greasewood Creek (encompassing two of the initially recommended areas). In addition, 787 acres of another area, Soldier Creek, is proposed for designation as an ACEC "if, and when, CDOW [the Colorado Division of Wildlife] designates" a 2,339 acre parcel it owns. Yet another area, School Gulch (320 acres) is proposed for designation as an ACEC if monitoring studies now in progress indicate that such designation is needed to protect and perpetuate the rare plant (Astragalus detritalis) and remnant plant association (Juniperus osteosperma/Elymus salina) it contains.

The Society's Conservation Committee reviewed the proposed BLM action for each site, considering new information now available on frequency of occurrence of some of the rare plants and plant associations, and recommended support for the new proposals. We believe BLM is to be complimented for moving, if belatedly, to protect the Piceance's outstanding plant resources, and for its ultimate responsiveness to public outcry.

Finally, each of you who spoke or wrote letters on this subject has earned the appreciation of us all, for it is your efforts that have led to this outcome. Thanks!!

[Sue Martin, Conservation Chair]

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Membership	Myrna Steinkamp	226-3371
Publicity	-----	
Workshops	Bill Jennings	494-5159

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

NEWSLETTER CONTRIBUTIONS

Please direct all contributions to the newsletter to
Peter Root
4915 West 31st Avenue
Denver, CO 80212

Deadlines for newsletter materials are February 15, April 15, June 15, August 15, October 15 and December 15.

There is a special need for short 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.

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.

Colorado Native Plant Society
P.O. Box 200
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