

Colorado Native Plant Society



NEWSLETTER

Volume 7 Number 5
October-December 1983

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

CALENDAR OF EVENTS

9 JAN 1984. Yampa Valley Chapter meeting. Call Karen Wiley-Eberle for more information (phone number is on the back page of this newsletter).

? JAN 1984. Fort Collins Chapter field trip to find an evergreen fern west of Fort Collins behind horsetooth reservoir. Trip will be held one the of weekends at the end of the month when the weather is nice, we hope. Chapter members will be notified by phone. Non-chapter members will be notified if they write to the chapter at the Society's address.

4 FEB 1984. Yampa Valley Chapter Field Trip. Starting in the Craig area and moving to the Steamboat Springs area. See page 4 inside for details.

5 FEB 1984. Board of Directors meeting in Steamboat Springs in conjunction with the field trip on the 4th. If you would like to attend the board meeting please let the Society's secretary know so that you can get the latest information as to the time and arrangements.

First part of FEB 1984. Next newsletter. Much material needed. Do you use native plants to make dyes, paper, medicines or for some other use? How about letting us all know what you are doing?

5-6 MAR 1984. Sixth High Altitude Revegetation Workshop at Colorado State University. Write for more information to High Altitude Revegetation, Conferences and Institutes, Rockwell Hall, Colorado State University, Fort Collins CO 80523.

PICEANCE BASIN DEVELOPMENT THREATENS PLANTS & VEGETATION

The Bureau of Land Management's (BLM) White River Resource area is now preparing its Resource Management Plan (RMP) for the Piceance Basin Planning Area. This RMP will guide land use for the near future in the Piceance Basin and specifically set the pattern for the leasing process that will ultimately determine the course of oil shale development in this area.

The Piceance Basin has been the subject of several Colorado Native Plant Society field trips because of its unusual flora and vegetation, and its unique geological setting. It is the region's geology, particularly the trillion or so barrels of oil contained in the Green River Formation, that is the focus of potential mining on a scale unprecedented in Colorado or the western U.S.

A recent document, for example, outlines a proposed waste shale disposal site for a single 5,000 acre mining operation. The separate waste site would eventually consist of a pile of spent shale sloping from 400 to 1000 feet high, covering 4,800 acres (almost 8 square miles). As the Piceance Basin contains some 700,000 acres of potential oil shale lease lands, 70 of these disposal sites could occur in the basin. While it is not likely that this scale of development will occur in the immediate future, it is important to note that the BLM is considering offering leases in 1984 that could irreversibly give private companies the option to develop at this scale.

The BLM contracted with The Nature Conservancy in 1982 to conduct an inventory of the flora, rare plants, and vegetation of the basin. This work was completed by the Colorado Natural Heritage Inventory (CNHI). A five-volume report to BLM provided mapped locations, data, and photographs, for every rare plant and important vegetation site in the basin.

Two species new to science, *Physaria obcordata* and *Lesquerella parviflora*, were found during the inventory, and have just been published by Reed Rollins of the Gray Herbarium at Harvard. A third probably new taxon is under study by Rollins. Field trip participants may recall seeing some of the basin's rare taxa. These include *Astragalus lutosus*, *Festuca dasyclada*, *Gilia stenothyrsa*, *Thalictrum heliophilum*, *Aquilegia barnebyi*, *Sullivantia purpusii*, and *Gentianella tortuosa*.

The vegetation in the Basin is also unique, with about a fourth of the plant associations not occurring anywhere else in the world. Unfortunately, much of the Basin's vegetation has been altered by over 100 years of domestic livestock grazing, but

remnants of the original vegetation can still be found in inaccessible areas. More than a hundred of these remnants were located during the inventory. A few of the plant associations in the Basin have been extensively altered and now exist in good condition on only a few sites. For example, grasslands dominated by *Agropyron spicatus* var. *ineræ* (Awnless Bluebunch Wheatgrass), which are estimated formerly to have occurred on 25,000 to 50,000 acres in the Basin, now occur in good condition on only about 200 acres. The remaining sites now are dominated by *Koeleria cristata* (Junegrass) or weeds.

Subsequent to the inventory, the BLM management contracted with The Nature Conservancy to have all the data evaluated and to provide a set of recommended sites for potential designation as Research Natural Areas (RNAs) or Areas of Critical Environmental Concern (ACECs). An RNA is an official designation used by Federal agencies to provide protection for areas that have value for scientific research, and for perpetuation of rare plants and remnant vegetation. They generally exclude all other uses such as grazing, mining, woodcutting, etc. Their primary purpose is to serve as baseline areas retained in a natural condition in perpetuity, and as such they are very valuable as comparison areas for evaluating the effects of human land uses. An ACEC, in contrast, is a less restrictive designation that does not necessarily exclude all human uses, but requires that the uses be compatible with maintaining the particular resource that is of critical concern on the site. A gas pad, for example, could be placed within an ACEC if it did not directly affect a rare plant contained in the ACEC.

The Nature Conservancy's report to BLM identified 20 sites for potential ACEC and RNA designation. These 20 sites provide for a maximum amount of protection for the rare plants and vegetation remnants in a minimum area. Approximately 4% of the Basin would be included, with about 1% of the current level of grazing affected by the designations. The proposal was developed with the view that these 20 sites may be the only areas not opened for oil shale development in the future.

In the fall of 1983 BLM formulated four alternatives for the Resource Management Plan. These alternatives represent four extremes for the potential future land use in the Basin. These alternatives were published in the White River Report No. 3 in October 1983 by the White River Resource Area, Meeker, Colorado. The Wildlife Alternative includes 12 of the 20 sites; the Oil and Gas Alternative includes 3 of the

20 sites; the Oil Shale Alternative includes none of the 20 sites; and the Current Management Alternative also includes none of the 20 sites.

The Preferred Alternative is now being formulated and is due for public release in February of 1984. It may consist of any combination of parts of the other Alternatives or include new proposals. Preliminary indications suggest the Bureau may include none of the sites in the Preferred Alternative.

The Colorado Native Plant Society's (CoNPS) Board of Directors and its Conservation Committee have been following closely the development of the Resource Management Plan. After careful evaluation of The Nature Conservancy's recommendations, we believe that each of the 20 sites proposed for RNA or ACEC status has scientific merit clearly warranting such protection. Therefore, the Society strongly supports inclusion of all 20 sites in the Resource Management Planning process. A letter making such a request was submitted to the White River Resource Area in late October, but CoNPS has not yet received a reply. The Conservation Committee is now drawing up plans for additional action.

The outcome of this planning process is of extreme importance to the perpetuation of a unique part of Colorado's flora and vegetation. Although your Society is working to present the views of plant conservationists as a group, the importance of individual voices cannot be overestimated. Therefore, if you are concerned about this issue, we urge you to write immediately to Curt Smith, Resource Area Manager, White River Resource Area, BLM, P. O. Box 928, Meeker, Colorado 81641 (or call (303) 878-3601) and request information on how the 20 recommended plant sites will be addressed in the Preferred Alternative. Also request that a copy of the Preferred Alternative be sent to you when it is available (scheduled for February 15, 1984). Request a copy of White River Report No. 3, October 1983, if you wish to see for yourself the summarized resource management alternatives being used by BLM in the planning process. It appears likely the BLM will include few if any of the plant sites as RNAs or ACECs in the Preferred Alternative; only strong, concerted action by groups and individuals concerned about these plant resources has any chance of altering the situation in the final Resource Management Plan. Act now!!

An update report on the Piceance Basin planning process will appear in the next newsletter, along with suggestions for action. A copy of the Conservancy's report to BLM is available for inspection at the Colorado Natural Heritage Inventory office, 1550 Lincoln #110, Denver, Colorado 80203, or at the White River Resource Area Office in Meeker.

NEW PLANTS FOUND

Did you know that new plant species are still being discovered in Colorado? There have been three species new to science described in the past year: *Thalictrum heliophilum* (Sun-loving Meadow Rue), *Physaria obcordata* (Piceance Twinpod), and *Lesquerella parviflora* (Piceance Bladderpod). All three of these were discovered in the Piceance Basin. The Meadowrue is in the Ranunculaceae (Buttercup family), while the Twinpod and the Bladderpod are members of the Brassicaceae (Mustard family).

The Sun-loving Meadowrue is currently known to occur on barren exposures of the Green River geologic formation on Cathedral Bluffs in the Piceance Basin and the Roan Cliffs in the Parachute and Roan Creek drainages. This species recently was described in the botanical journal BRITTONIA by Dr. Dieter H. Wilken, curator of the Colorado State University Herbarium. There are only about a half dozen occurrences of this unique plant known in the world.

The Piceance Twinpod and the Piceance Bladderpod also occur on exposures of the Green River formation and currently are known only from the Piceance Basin. These two unique mustard species were discovered by Bill Baker of the Colorado Natural Heritage Inventory (CNHI) during an inventory of the Basin for the Bureau of Land Management (BLM) in 1982. The specimens collected were then sent to Reed C. Rollins of the Gray Herbarium of Harvard University by Dr. Wilken for scientific description. Dr. Rollins, who is the world's foremost botanical authority on the Mustard family, described them in the most recent issue of THE JOURNAL OF THE ARNOLD ARBORETUM. The currently known occurrences for the Twinpod number only two, and those for the Bladderpod less than a dozen.

There are additional plants in the Basin that presently are either under study or recently submitted for publication as new plant species. If you would like information on the new species or those plants currently under study, please contact CNHI, 1550 Lincoln Room 110, Denver CO 80203.

MEMBERSHIP REMINDERS AND INFORMATION

Membership renewal notices and questionnaires for 1984 have been mailed. Your address label on this newsletter indicates the calendar year through which your membership extends. Life and 1984 members are asked to fill out the questionnaire and, if interested, to join one of the local chapters. (1984 members who completed the questionnaire at the fall annual meeting won't receive this form.)

If you wish to be a member of a local chapter (one only, please), please mark this on your renewal form. It will not be assumed on the basis of address that you are automatically a member of a chapter. Also, you need not live in a particular city or area to be a member of a given chapter.

Membership in a chapter means that a portion of your "state" dues is set aside to support that chapter's activities and expenses, and that you will be notified (if at all possible) of local activities; this is especially important if a program is set up on short notice. Of course, everyone is welcome to attend all Society and Chapter functions, but chapter "non-members" generally will have to rely on the newsletter and public notices to learn about such activities.

All CONPS members should be aware that we have a bulk mailing permit under which our newsletters and some correspondence are sent out. Post office rules are very strict for this type of mail. This may affect you in several ways: (1) delivery is not always timely, especially if you live out-of-state; we can only apologize for this; (2) this type of mail may not be forwarded if you move, and even if you have arranged with the Post Office for forwarding it may be quite slow; (3) if bulk mail is not deliverable to you, it is NOT returned to us even though there must be a return address on the item. Thus, unless you notify us of address changes, we have no way of even guessing that you have moved! If you have notified us of a change-of-address but are not receiving newsletters (etc.) as you think you should, please check with us again. As we all know, for some reason the Post Office doesn't always deliver. (Furthermore, even we occasionally make mistakes!)

WINTER FIELD TRIP

Rumor has it that the Yampa Valley Chapter will sponsor a winter field trip in early February, possibly the 4th. Participants from Craig will meet there and on a Saturday morning will tour the river valley near Craig (bring cross-country skis!) with expert leaders who will help with winter identification of shrubs. About noon the group will travel to Rabbit Ears Pass where those from Steamboat Springs (or the Front Range??) could join in a cross-country ski tour of the beautiful area and its variety of conifers. A winter camp-out (building snow caves) may be included for those who so desire, or many accommodations are available in Steamboat Springs. Participants would be welcome at a Board of Directors meeting tentatively scheduled for February the 5th at Steamboat Springs. Contact Karen Wiley Everle, President of the Yampa Valley Chapter, at 824-8261 for further details and confirmation of dates.

THE USES OF BOTANY

by Brenton Braley

(reprinted, with permission, from the Bulletin of the NATIVE PLANT SOCIETY of OREGON, Vol. XVI, No. 9, Sept. 1983)

There should be no monotony

In studying your botany;
It helps to train and spur the brain
Unless you haven't got any.

It teaches you--does botany
To know the plants and spot any
And learn just why they live and die
In case you plant or pot any.

You learn from reading botany
Of woolly plants and cottony
That grow on earth and what they're worth
And why spots have not any.

You sketch the plants in botany;
You learn to chart and plot any
Like corn and oats. You jot down notes
If you know how to jot any.

Your time, if you'll allot any
Will teach you how and what any
Old plant or tree can do or be--
And that's the use of botany.

MX MISSILE SYSTEM MAY AFFECT A CANDIDATE ENDANGERED PLANT

The draft environmental impact statement (DEIS) for the MX ("Peacekeeper") missile system is southeastern Wyoming and western Nebraska has been released. Potential environmental effects described in the DEIS include a possible adverse effect on the Colorado Butterfly Plant, *Gaura neomexicana* ssp. *coloradensis*. This species, a federally listed candidate endangered plant, occurs adjacent to and within Warren Air Force Base in Cheyenne. A new road or roads needed to transport the missiles from a storage area to the deployment area could pass through the limited habitat for these plants. Three proposed alternatives are given in the DEIS: (1) Alternative R2, the Proposed Action - a new road through the habitat; (2) Alternative R1 - use existing roads (but this requires construction of two new overpasses to allow transports to pass under Interstate Highway 25); (3) Alternative R3 - move roads farther north and south (this would avoid overpasses with I-25, but put a new road through the plant habitat). Although the deadline for comments on the DEIS technically has passed (Nov. 28th), comments probably still could be useful. Send to: Major Peter Walsh, AFRCE-BMS/DEV, Norton AFB, CA 92409.

Copies of the DEIS are available at the Colorado State University Library and undoubtedly at other libraries throughout the state.

FLORISSANT
FOSSIL BEDS
NATIONAL MONUMENT
Plant Inventory
List of Synonyms

Continued from Vol. 7, No. 3.

On this page is the rest of the list of old and new names on the Florissant Fossil Beds National Monument plant inventory. The new names were published in Vol. 1, No. 1, of the NEWSLETTER. This list also has the new names on it with lines beginning with "Syn." showing the older names. The list also contains the old names with a line beginning "See" showing the current names.

****Portulacaceae

Crunocallis chamissoi (Ledeb.) Rydb.

Syn. *Montia chamissoi*

Montia chamissoi (Ledeb.) Durand & Jackson

See *Crunocallis chamissoi*

****Ranunculaceae

Batrachium trichophyllum ?

Syn. *Ranunculus trichophyllus*

Ranunculus trichophyllus (Chaix) Schultz

See *Batrachium trichophyllum*

****Rosaceae

Argentina anserina (L.) Rydb.

Syn. *Potentilla anserina*

Chamaerhodos erecta (L.) Bunge ssp. *nuttallii* (Pickering ex T. & G.) Hulten

Syn. *Chamaerhodos nuttallii*

Chamaerhodos nuttallii (T. & G.) Pickering in Rydb.

See *Chamaerhodos erecta* ssp. *nuttalli*

****Rosaceae

Dryocallis fissa (Nutt.) Rydb.

Syn. *Potentilla fissa*

Erythrocosa triflora (Pursh) Greene

Syn. *Geum ciliatum*

Fragaria americana (Porter) Britton

See *Fragaria vesca* var. *bracteata*

Fragaria ovalis (Lehm.) Rydb.

See *Fragaria virginiana* var. *glauca*

Fragaria vesca L. var. *bracteata* (Heller) R. J. Davis

Syn. *Fragaria americana*

Fragaria virginiana Duch. var. *glauca* Rothr.

Syn. *Fragaria ovalis*

Geum ciliatum Pursh

See *Erythrocosa triflora*

Pentaphylloides floribunda (Pursh) A. Love

Syn. *Potentilla fruticosa*

Potentilla anserina L.

See *Argentina anserina*

Potentilla fissa Nutt. in T. & G.

See *Dryocallis fissa*

Potentilla fruticosa L.

See *Pentaphylloides floribunda*

****Rubiaceae

Galium boreale L. ssp. *septentrionale* (R. & S.) Hara

See *Galium septentrionale*

Galium septentrionale R. & S.

Syn. *Galium boreale* ssp. *septentrionale*

****Saxifragaceae

Ciliaria austromontana (Wieg.) W. A. Weber

Syn. *Saxifraga bronchialis* ssp. *austromontana*

Saxifraga bronchialis L. ssp. *austromontana* (Weig.) Piper

See *Ciliaria austromontana*

ANNUAL MEETING

The business part of the annual meeting was, as is usual, the election of our new members of the board of directors. The five new directors are:

Bill Baker, Boulder
Dr. Dexter W. Hess, Lajunta
Tamara Naumann, Longmont
Myrna P. Steinkamp, Fort Collins
Eleanor Von Bargen, Denver

A sixth director was elected to fill the one year remaining on the term of John Anderson who resigned because he moved out of the state. This new director is:
Ann Cooper, Boulder.

The presentation by Dr. F. Martin Brown, "Brownie", was very interesting. He filled us in on the history of the Florissant and then Dr. Miriam Denham told us about the current flora of the area.

Following the annual meeting there was a short board of directors meeting. Our president, Sue Martin; secretary, Eleanor Von Bargen; and treasurer, Myrna P. Steinkamp agreed to serve at least one more year and our new vice-president is:
Harold Weissler, Golden.

Most of the committee chairs agreed to continue but a few declined and all have been replaced except our publicity chair. The change is:

Nevin Bebee replaces Scott Ellis as Field Trips chairman.

Our representative to COSC (Colorado Open Space Council) was John Anderson. Ann Cooper has agreed to take on this job with Tamara Naumann serving as an alternate.

1984 ENDANGERED WILD FLOWER CALENDAR

This year's calendar features 15 new color photographs of endangered flowers. There are members of the orchid, lily and cactus families and a carnivorous species. Some of the species are Alkali Mariposa Lily, *Calochortus striatus*; the Island Larkspur, *Delphinium kinkiense*; and the Marsh Paintbrush, *Castilleja uliginosa*, with text and information provided by Susan Cochrane, Thomas Oberbauer, Lawrence Heckard and Alice Howard.

The calendar is 10 1/4 x 17" when open and contains 32 pages with room for notes on each day.

Calendars may be ordered from Endangered Wildflower Calendar, in care of Biology Department, Brooklyn College, Brooklyn, NY 11210. Costs are \$5.40 each or \$4.50 each for 3 and \$4.25 each for 10 or more. Gift calendars will be sent directly to addresses that are provided, along with your name and a brief greeting. Add \$1.00 for delivery by first class mail.

WEEDS OF COLORADO

A Book Review

Periodically over a period of years I tried to identify a couple of weeds from my yard using standard plant references and keys. My knowledge and skills (or patience) were not equal to the task. Even if I arrived at the correct species it was but one of two or more alternatives which might have been chosen.

Then I acquired the book WEEDS OF COLORADO. I quickly learned that the two troublesome plants were *Polygonum aviculare*, prostrate knotweed; and *Euphorbia serpyllifolia*, thyme-leaved spurge. I even learned that the *Polygonum* was a native plant.

Bolstered by those successes I converted many more unknown "weeds" in my yard and garden into known plants including, but not limited to: *Salvia reflexa*, lanceleaved sage; *Euphorbia dentata*, toothed spurge; *Sonchus oleraceus*, common sowthistle; *Verbena bracteata*, prostrate vervain; *Dyssodia papposa*, fetid marigold; and the smartweeds, *Polygonum pennsylvanicum* and *P. persicaria*.

The 1974 edition of WEEDS OF COLORADO, which I have, includes 194 plants which are considered to be "weedy". Of those, 88 are designated as native plants, 78 are designated as introduced. One genus, *Cuscuta*, the dodders, is not divided into species. The genus includes both natives and introduced species in Colorado. That leaves 27 species which are undesignated. I was surprised to learn that so many natives are considered weedy; especially such plants as *Iris missouriensis*, wild iris; *Linaria vulgaris*, butter and eggs; *Sarcobatus vermiculatus*, greasewood; *Cleome serrulata*, Rocky Mountain bee plant; and *Argemone polyanthemus*, prickly poppy.

Weeds are defined briefly as "unwanted plants out of place", but more than a page of text is devoted to explaining the characteristics of weeds.

There are several reasons why WEEDS OF COLORADO has proven very useful to me, an amateur, for plant identification.

1. Many of its plants are ones which we encounter daily around our home.
2. Some of its plants are difficult to "key out".
3. Every plant is illustrated by drawings which show its habit of growth plus details of all plant parts (flowers, seeds, leaves, fruits, etc.) that are needed to identify it.

I found that I could identify many plants without consulting the key that is included in the book. I used a simple two-step approach:

1. Find the drawing or drawings that look most like the plant in question,
2. Consult the written description that accompanies each drawing.

If doubts remained I then ran it through the key and proceeded from there. As a final verification I often consulted a standard plant manual also.

WEEDS OF COLORADO was written by Bruce J. Thornton, Harold D. Harrington and Robert L. Ziadahl and published by Colorado State University. It is designated Agricultural Experiment Station Bulletin 514-S revised. The 1974 edition includes 211 pages, is 6 by 9 inches and has a heavy paper cover. The recently revised edition may be longer. Copies may be purchased from Bulletin Room, 171 Aylesworth Hall, Colorado State University, Fort Collins CO 80523. The present price is \$5.50 plus \$1.00 if it must be mailed.

---Lloyd Hayes

FIELD TRIP REPORT SHRINE PASS TRIP 30 JULY 1983

TRIP LEADER: Nevin Bebee.

The high point of the trip was to see the White Bog Orchid, *Limnorchis dilatata*.

An appetizing side line was to hear Nevin describe the important ecological relationship between Lodgepole Pine, *Pinus contorta* Dougl. var. *latifolia* Engelm., and Engelmann Spruce, *Picea engelmannii* (Parry) Engelm.

Following are only some of the delights we saw:

- - -Asteraceae
Anaphalis margaritacea (L.) B. & H.
<Pearly Everlasting>
- Antennaria* spp. <Pussytoes>
- Arnica cordifolia* Hook
- Erigeron peregrinus* (Pursh) Greene
<Subalpine Daisy>
- - -Boraginaceae
Mertensia ciliata (James) G. Don
<Tall Mertensia>
- - -Caryophyllaceae
Minuartia ssp. <Sandwort>
- - -Ericaceae
Vaccinium myrtillus L. ssp. *oreophilum*
(Rydb.) Love, Love & Kapoor <Myrtle Blueberry>
- Kalmia polifolia* Wang. <Laurel>
- - -Fabaceae
Astragalus alpinus L. <Alpine Milk Vetch>
- Lupinus argenteus* Pursh <Common Lupine>

FIELD TRIP REPORT MOFFAT COUNTY TREK JUNE 18-19, 1983

TRIP LEADERS: Karen Wiley-Eberle and Scott Peterson

On Saturday morning June 18, over 20 people met at the Maybell Park to begin a two day wild plant study. Our first stop was in Greystone where we continued the journey using 4 wheel drive vehicles only. When we arrived at Douglas Mountain, we viewed the mountain mahogany, *Cercocarpus montanus*, as well as hearing a lecture by K. C. Eberle on burn control. We drove on to Chicken Springs where we saw a new species of evening primrose, *Oenothera acutissima*. We continued on to the top of Douglas Mountain where we visited a cushion community and enjoyed the view. From there, we journeyed back down Douglas Mountain and on toward Dinosaur National Park where we camped for the night at the Gates of Ladore.

On Sunday, we drove through Irish Canyon with a stop on the way to see an interesting grass, *Banthonia unispicata*. We proceeded up Cold Springs Mountain with our final destination being the Beaver Creek area.

Submitted by the newly formed Yampa Valley Chapter of CONPS.

- - -Liliaceae
Zigadenus elegans Pursh <Death Camas>
- - -Orchidaceae
Limnorchis dilatata (Pursh) Rydb. ssp. *albiflora* (Cham) Love & Simon <White Bog-Orchid>
- - -Polemoniaceae
Collobia linearis Nutt.
- Ipomopsis aggregata* (Pursh) V. Grant
<Scarlet Gilia>
- - -Portulacaceae
Lewisia pygmaea (Gray) Robinson <Pigmy Bitterroot>
- - -Ranunculaceae
Anemone narcissiflora L. ssp. *zephyra* (Nels.) Love, Love & Kapoor <Subalpine Anemone>
- Caltha leptosepala* DC. <Marsh-Marigold>
- - -Rosaceae
Geum triflorum <Pink Plum>
- - -Saxifragaceae
Saxifraga oregana Howell var. *montanensis* (Small) C. L. Hitchcock
- - -Scrophulariaceae
Castilleja miniata Dougl. <Scarlet Paintbrush>
- C. rhexifolia* Rydb. <Rosy Paintbrush>
- Pedicularis bracteosa* Benth. var. *paysoniana* (Pennell) Cronquist
<Lousewort>
- P. groenlandica* Retz <Elephantella>
- P. parryi* Gray
- P. racemosa* Dougl. ssp. *alba* Pennell <Curled Lousewort>
- Penstemon whippleanus* A. Gray <Dusty Penstemon>
- Veronica woraskjoldii* R. & S. <Alpine Speedwell>
- - -Valerianaceae
Valeriana capitata Pallas ex Link ssp. *acutiloba* (Rydb.) F. G. Meyer

-----OFFICERS-----

President:	Sue Martin	226-3371
Vice-Pres.:	Harold Weissler	278-9186
Secretary:	Eleanor Von Bargaen	756-1400
Treasurer:	Myrna Steinkamp	226-3371

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Lloyd Hayes (84) Fort Collins	226-5365
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Les Shader (84) Fort Collins	484-0107
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CHAPTER PRESIDENTS ARE ALSO MEMBERS OF BOB
 Boulder, Amy Struthers 494-5674
 Fort Collins, Les Shader 484-0107
 Yampa Valley, Karen Wiley-Eberle 824-8261

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FIELD TRIPS:	Nevin Bebee	733-1038
GOVERNMENTAL AFFAIRS:	J. Scott Peterson	733-1038
HORTICULTURE & REHABILITATION:	Gayle Weinstein	575-2548
MEMBERSHIP:	Myrna Steinkamp	226-3371
PUBLICITY:		
FLORISSANT:	Mary Edwards	233-8133

-----REPRESENTATIVES TO ORGANIZATIONS-----

COSC: Ann Cooper (Alternate-Tamara Naumann)

Colorado Native Plant Society
 P. O. Box 200
 Fort Collins CO 80522

Address Correction Requested

-----MAILING ADDRESS-----

COLORADO NATIVE PLANT SOCIETY
 P. O. BOX 200
 FORT COLLINS CO 80522

-----SCHEDULE OF MEMBERSHIP FEES-----

LIFE	\$250.00
SUPPORTING	50.00
ORGANIZATION	25.00
FAMILY OR DUAL	12.00
INDIVIDUAL	8.00
STUDENT OR SENIOR	4.00

-----NEWSLETTER ARTICLES-----

Please direct all contributions to the EDITOR in care of the Society's mailing address.

Deadlines for contributions to the NEWSLETTER are the first day of January, March, May, July, September, and November with publication around the last day of the month. The 4 issues March through September will be published without fail, the January and November issues will be published as material is available.

-----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.

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