

Colorado Native Plant Society



NEWSLETTER

Volume 9, No. 1
January-February 1984

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

CALENDAR OF COMING EVENTS

See Colored Center Page

RECENT ACTIONS OF THE BOARD OF DIRECTORS

The Board adopted a new policy governing the publication of the "Colorado Native Plant Society Newsletter." Five newsletters will be published during the year with mailing dates to be the 15th of January, March, May, August, and November. The deadline for submitting material for the newsletter will be the 1st of the month preceding publication. This decision will become effective with the January 1985 newsletter.

The entries submitted in the poster contest sponsored by the Colorado Native Plant Society were judged by the members of the Board. The winning poster design for the new Colorado Native Plant Society poster was submitted by Paula Nicholas. Printing of the posters has been approved by the Board.

The Board approved the renewal of the organizational membership in the Colorado Open Space Council (COSC) for one year.

Honoraria for the 1984 Annual Meeting speakers were approved by the Board.

---Eleanor Von Bargen

MEMBERSHIP REMINDERS

Membership renewal notices and questionnaires for 1985 were sent out in November, 1984. If you have not yet renewed, now is the time to do so! Early renewal is especially important if you wish to hear about and participate in activities sponsored by the Society's chapters. All memberships are on a calendar year basis; those joining after mid-summer also are credited with dues for the following calendar year. The mailing label on this newsletter contains information on your current dues status. In the upper right corner of the mailing label is an asterisk followed by the year through which your dues are paid. Very recent renewals, of course, may not be correctly shown.

The membership committee also reminds you to let them know your new address if you move. Under the rules of our mailing permit, newsletters and other Society mailings are not forwarded and are not returned to us---they are dead lettered!! So if you fail to inform us of your changed address, we have no way of knowing, and you are effectively lost from us.

Thanks to the many members who took time to fill out the survey. As needs arise, those who indicated an interest in a particular committee or a willingness to perform a service will be contacted. Special thanks, too, to those members who have given additional support to the Society through donations and extra class memberships.

*****ANNOUNCEMENT***** MEETING OF WESTERN NATIVE PLANT SOCIETIES

The Oregon Native Plant Society is organizing a meeting of Native Plant Societies of the western states. This meeting will be held in LaGrande, Oregon, August 2-4, 1985. LaGrande is described as "a gateway to the Wallowa mountains, a beautiful area both scenically and botanically."

The program, still in the planning stages, may include panel discussions on conservation and on legislation for protection of native plants. Each Native Plant Society represented at the meeting will present a short report describing the Society and its activities. In addition, the meeting organizers are soliciting short (20-30 minute) presentations "...on any special subject or project that would be of interest to Native Plant people." One such presentation already scheduled will describe the *Castilleja* of California and the northwest.

The CONPS Board has decided against sending an official representative. Anyone who might wish to participate in the program as an individual, however, should contact the program chairman, Michael D. Fahey, 215 Phoenix Way, Vancouver, WA 98661.

FLORISSANT UPDATE

1985 will mark the fourth year of the Colorado Native Plant Society's plant inventory and herbarium project at Florissant Fossil Beds National Monument, and the end is not in sight as long as we continue to find new species. The past summer of 1984 saw 56 new species added to our list, raising the total collected to date to 370.

Florissant Fossil Beds National Monument is 35 miles west of Colorado Springs on U.S. Highway 24, about 0.5 miles south of the town of Florissant. The Monument comprises an area of approximately 6000 acres of rolling, hilly terrain, open and park-like with Ponderosa pine as the dominant tree species. A broad, flat meadow through the central portion of the Monument marks the bed of ancient Lake Florissant. The Florissant area is in the upper montane zone ecologically since the elevation varies from 8300 to 8800 feet. In spite of its elevation, Florissant is a comparatively dry area, with a yearly average precipitation of only about 18 inches. A small permanent stream, Grape Creek, runs through the central valley, and there are other small streams, both permanent and intermittent, throughout the Monument. These wet areas are rich in species and more collecting needs to be done there. Though nearly two thirds of the monument has been collected, there are still several large areas that have not yet been explored. A field trip into some of these areas will be planned by the Florissant committee for mid or late July.

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In the meantime, if you just can't wait for spring, come and help the committee mount and file plants that were collected last summer. This activity takes place at the Kathryn Kalmbach Herbarium of the Denver Botanic Gardens, where mounted specimens for the future Florissant herbarium are currently housed. The Florissant committee would welcome interested helpers. Call Mary Edwards at 233-8133 for more information.

---Mary Edwards

ROCKY MOUNTAIN NATIONAL PARK LAND ACQUISITION PROJECT

An effort is underway to purchase a 39.24 acre parcel of privately owned land that lies within the boundaries of Rocky Mountain National Park (RMNP). This tract is in the Kawuneeche Valley, five miles north of Grand Lake and just west of the Colorado River. A lodgepole pine/Englemann spruce forest, part of Baker Creek, some dry meadows, and some wetlands whose vegetation is affected by the Colorado River all are included. The goal is to acquire this tract (which actually is 3 separate parcels) and add it to RMNP.

The property apparently has been divided on paper, and there is a threat of subdivision and development. Several potential means of obtaining these parcels have been explored, but apparently the only feasible one has been determined to be a straight purchase. As a result, Rocky Mountain Nature Association has signed a purchase contract with the property owners. Now funds must be raised to meet the demands of the contract, which included a down payment, monthly payments, and final balloon payment due November 23, 1985. Fund raising efforts have been under way for some time. Tax deductible donations may be sent to: Rocky Mountain Nature Association, Rocky Mountain National Park, Estes Park, CO 80517. Certificates of Appreciation are presented to donors of \$5.00 or more.

Once the purchase is completed, title will be presented to the U. S. Government with the understanding that the tract will be restored to natural conditions (there is a cabin there now, and some other evidence of human activity) and managed as a natural area. The property is habitat for river otter, which RMNP is trying to reintroduce into the Colorado River ecosystem, as well as for elk, deer, and coyote. CONPS will make a small donation, and we encourage you to consider a personal donation to this project.

THE SEARCH FOR EPIPACTIS ORCHIDS

Epipactis gigantea is a large-flowered very distinctive orchid that is unmistakable when seen. Being limited generally to fairly low elevations in the western and southern parts of the state causes this orchid to be seldom seen or collected. What collections there are fall into three geographic areas: the margins of the Uncompahgre Plateau in Mesa, Delta, and Montrose counties; Mesa Verde National Park; and Poncha Hot Springs in Chaffee County.

The orchid has been collected twice at Poncha Hot Springs, the old resort sitting on a hill above the town of Poncha Springs. This is apparently where the orchid was first collected in Colorado (Bethel in 1894, specimen at Colorado State University). Dr. John Long in his book Native Orchids of Colorado reports seeing the orchid there on July 9, 1964. I have seen the orchid at that location three times during the 1970's.

Welsh and Erdman collected *E. gigantea* twice on Wetherill Mesa in Mesa Verde National Park (1959, 1961, specimens at University of Colorado), but these areas are probably not accessible to the general public.

The main center for *E. gigantea* in Colorado is the Uncompahgre Plateau margin. There are three localities where the orchid has been found. Five collections have been made in Escalante Canyon, southwest of Delta, in the area where Mesa, Montrose, and Delta counties adjoin. All these collections have been made in the last ten years. There is a single collection in Unaweeep Canyon along Colorado Highway 141. There are two old collections from the Grand Junction area, housed at the Rocky Mountain herbarium, but Dr. W. A. Weber reports in his unpublished checklist of Mesa County plants that a recent collection has been made in the area.

Epipactis is a lover of springs, seeps, hanging gardens, and rocky alcoves and can be found at scattered localities from British Columbia to Mexico, and as far east as the Black Hills of South Dakota. The orchid has been collected twice in northern Wyoming.

There are no collections in the Front Range area, and the Chaffee County site is the only Colorado collection east of the Continental Divide. However, it should be looked for up and down the Arkansas Valley from Buena Vista to Canon City. Other likely localities are around warm or hot springs such as are in the Glenwood Springs area or the Juniper Hot Springs area of Moffat county. Most collections are from at 5,000 to 7,500 feet elevation. Most collections have been made between June 10 and July 10. In Utah, *E. gigantea* is associated with *Platanthera sparsiflora* which is also rare in Colorado.

---William F. Jennings

BOOK REVIEW

Aven Nelson of Wyoming

by Roger L. Williams, 1984, Colorado
Associated University Press, Boulder,
Colorado.

In a biography which reads like a novel, the author focuses on Nelson, the man and the teacher, more than on the noted taxonomist and botanist that he eventually became.

Nelson's life spanned almost a century, the latter half of the nineteenth and the first half of the twentieth, when western botany, had much to be discovered. Nelson's character was molded by the morals and mores of that time at the turn of the century. His father, who immigrated from Norway as a young man, instilled in Aven a basic morality based on integrity, thrift, industry, unselfishness, and kindness. These characteristics remained with him throughout his life and were passed on to a large extent to his children and to his students.

The story of his early years at the University of Wyoming includes his struggle to become proficient in the subjects that were more or less forced upon him in the beginning. He had been hired originally as a professor of English. He early took a leave without pay to attend Harvard University where he acquired the MA degree, after which, in the fall of 1892, he returned to Laramie. During the next few years he made several attempts to secure a more lucrative and prestigious post elsewhere; but by the time he had acquired the requisite qualifications for such a position he had become committed to Wyoming.

His accomplishments were many. He was the principal force behind the founding of the Rocky Mountain Herbarium and the Colorado-Wyoming Academy of Science. For the herbarium he did most of the early collecting and mounting. His extensive revision of the Coulter Manual of Rocky Mountain Botany was essentially a completely new treatment. He acquired the Ph.D. degree, kept up a running barrage of articles and publications, all while teaching a full schedule of classes. In addition he served as President of the University for five years.

While giving him due credit for all of these and other accomplishments and acknowledging his impact on the botany of Wyoming and Colorado, the author leaves one with the impression that Nelson's greatest contribution after all was the army of students who left his classes to spread his precepts and his love of the beautiful through out the land.

The work, though carefully researched, is written with a deep empathy with the subject. Roger Williams is a Distinguished Professor of History at the University of Wyoming and a botanist by avocation.

—Berta Anderson

WHAT IS

POLEMONIUM BRANDEGEI?

Just before one reaches the top of the grade of Trail Ridge road, just before where the tundra begins, there is, in June, a beautiful display of a loosely-clumped white-flowered *Polemonium*. This is *Polemonium brandegei* (Gray) Greene. Harrington followed the monographer, Davidson (who seems not to have done any field work in Colorado), in making this synonymous with *P. viscosum*, the blue-flowered Sky Pilot of the tundra. However, *P. brandegei* is a plant of scree and talus slopes, often at quite low altitudes (down to 6-7,000 feet in some canyons); it has a loose aggregation of stems, the leaves of the previous year remain as dry straw rachises, the flowers are pale yellowish or white, with the corolla tube narrow, 2 to 3 times as long as the calyx, and with the flower in a loose inflorescence. *Polemonium viscosum*, on the other hand, grows on stable tundra and boulderfields above timberline, its stems are crowded and low, the leaves are not obviously marcescent, the flowers are blue, the corolla tube is broad, hardly 2 times as long as the calyx, and the flowers are in tight ball-like clusters.

Why were these plants put together under one name? Well, there are white mutants of *P. viscosum*, and there are pale blue plants of *P. brandegei*. Simple enough? Not quite. If you will walk down the road from Rock Cabin site, you will see perfectly clear *P. viscosum* (Species A, below) growing on the tundra. Then as you go down slope you begin to see plants like *P. brandegei* but the flower tubes are too short, and there are white-flowered plants. Farther down there is a beautiful display of long-tubed *P. brandegei* (Species B, below) plants, some white and others pale blue. What is going on?

This seems to be a clear case of introgressive hybridization on a small scale. Late flowering plants B have the opportunity to hybridize with early flowering plants of A on the borders of their habitats. The first generation plants (A+B) will exhibit dominance of one parent (in this instance B) and will survive best on the habitat most like B's. Since they are most like B, no F1 plants will invade the habitat of A. Backcrossing will be to late-flowering plants of B, hence there will be some variability among the progeny along the edge of B's habitat. But dominance of A will tend to mask the A genes moving in the B population. In other words, while there will be a visible zone of intermediacy, both parental populations will remain essentially as they were except that the B population may be somewhat more variable. This is common in interspecific crosses (*Aquilegia*, *Oxytropis*, and other genera), and is beautifully developed by Edgar Anderson in his book, Introgressive Hybridization.

—W. A. Weber



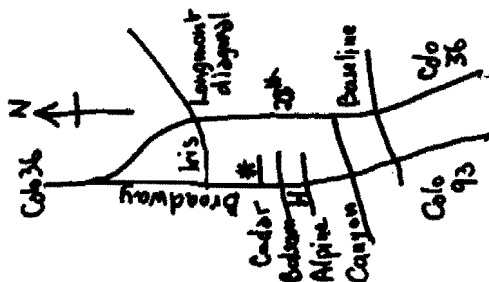
BOULDER CHAPTER of the COLORADO NATIVE PLANT SOCIETY

BOULDER CHAPTER CALENDAR

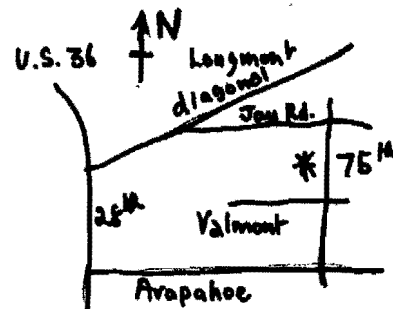
- JANUARY 9** "Wild Flower Photography", a slide-talk, will be presented by Betty Seacrest, and will include close-up techniques, the use of fill-in flash, and composition. Bring up to five of your own 35 mm flower slides to be critiqued. Time: 7.30 p.m. Place: Washington School, Broadway and Cedar, Boulder.†
- JANUARY 19** Dr. Miriam Denham will conduct a workshop on identification of the Fabaceae (Pea) family, with special emphasis on the Genus Astragalus. Please call Miriam at 442-1020 to reserve a place or request coverage of other genera within the pea family. Time: 1-4 p.m. Place: A-frame, Walden Ponds Wildlife Habitat.††
- FEBRUARY 9** "Getting Ready for Spring", a workshop for beginners wanting to learn how to key out plants, will give general tips on recognizing plant families, and work step by step through a key. Bring a hand lens if you have one. (Led by Sue Galatowitsch) Time: 9-11.30 a.m. Place: A-frame, Walden Ponds Wildlife Habitat.
- FEBRUARY 13** Dr. Tom Veblen from CU will talk on "Recent Changes in Boulder County Forests", and show 'before and after' slides to illustrate his talk. Time: 7.30 p.m. Place: Washington School, Broadway and Cedar, Boulder.
- MARCH 9** Bill Jennings will present a workshop, "Identification (and taxonomic problems involved in identification) of the Lilies, Irises and Orchids in Colorado," The workshop, which will cover 68 species, including the Agaves, will begin at 10:00 a.m. in Room E-112, Plant Science Bldg., Colorado State University, Fort Collins. ††Call Bill at 484-5159 to register.
- MARCH 13** "Bring 'em Back Alive", the art of growing wildflowers in your yard WITHOUT decimating the wild, will be presented by Panayoti Kelaidis, Curator of the Rock Alpine Garden at Denver Botanic Gardens. Time: 7.30 p.m. Place: Washington School, Broadway and Cedar, Boulder.
- APRIL 10** General meeting - topic to be announced - 7.30 p.m. Washington School
- APRIL 27** "Plants of the Shale." Come on a field trip to explore the plants of Six Mile Fold. Share your knowledge of flowers, soils and geology of this unique area. Meet at Scott Carpenter Park -30th and Arapahoe in Boulder, at 9.00 a.m. to car-pool for this half day trip.
- MAY 8** General meeting - topic to be announced - 7.30 p.m. Washington School.
- MAY 11** Reserve this afternoon for a potluck/business-meeting/hike at the home of Sue Galatowitsch. Time to firm up details of the Annual General Meeting of CoNPS, which our chapter will host this year, and also to socialise with other chapter members before the field season.

More details of any of these events may be obtained by calling 447-9169 or 440-4133

† Washington School, 1215 Cedar, Boulder:



†† A-frame, Walden Ponds Wildlife Habitat:



-----Metro Denver Chapter-----

- 23 JAN, Wednesday, 7:30 pm at Botanic Garden House. Propagation of Native Plants. Jim Borland, propagator at the Denver Botanic Gardens, will discuss propagating native plants.
- 27 FEB, Wednesday, 7:30 pm at Botanic Garden House. CONPS Florissant Project. Mary Edwards will discuss and show slides on the CONPS Florissant project. The Society's Florissant Committee is compiling a complete plant list and herbarium for the Monument. (Mary led a two day collecting trip to the Monument last July.)
- 27 MAR, Wednesday, 7:30 pm at Botanic Garden House. Hunting Native Plants. Larry Schlichenmayer, nurseryman at Old Farm Nursery, will give a lecture and slide show on hunting native plants and introducing them into the nursery trade.
- 24 APR, Wednesday, 7:30 pm at Botanic Garden House. To be announced.
- 22 MAY, Wednesday, 7:30 pm at Botanic Garden House. To be announced.

-----Yampa Valley Chapter-----

The next meeting will be with the local Archaeology Society (no further information available at press time). Call Sue Allard at 824-8958 for details of time and place.

-----Fort Collins Chapter-----

- 15 JAN, Tuesday, 7:30 pm at Fort Collins Museum, 200 Mathews, entrance at rear of building. Speaker will be from the Audubon Society.
- 19 FEB, Tuesday, 7:30 pm at Fort Collins Museum, 200 Mathews, entrance at rear of building. Contact Les Shader at 484-0107 for details.
- 19 MAR, Tuesday, 7:30 pm at Fort Collins Museum, 200 Mathews, entrance at rear of building. Contact Les Shader at 484-0107 for details.

THE SEARCH FOR
PLATANATHERA ORCHIDS

The green and white bog orchids (*Platanthera hyperborea* and *P. dilatata*; also placed in *Habenaria* and *Limnorchis* by some authorities) are two of the commonest native orchids in Colorado. But another green-flowered big orchid, *P. sparsiflora*, is very rare in Colorado. Dr. W. A. Weber does not list it for the Front Range in Rocky Mountain Flora and Dr. H. D. Harrington indicated the species had been consistently reported for Colorado, but he could find no specimens. Dr. D. S. Correll, in Native Orchids of North America North of Mexico, lists Rio Blanco and Montrose Counties as the only locations in Colorado.

During the course of my survey of the local herbaria for Scott Peterson of the Colorado Natural Heritage Inventory, a number of specimens identified by others as *P. sparsiflora* were found to be misidentified. Although my as yet uncompleted survey of the common green bog orchids may show some of them to be misidentified, and to be in fact *P. sparsiflora*, at present there are only five good collections of *P. sparsiflora*. Four are specimens collected by Lucian Long of Colorado Springs during the last five years. These specimens are at the Denver Botanic Gardens. The fifth collection was made by E. B. Payson near Montrose in 1910. This specimen, at the University of Wyoming (Rocky Mountain Herbarium) was annotated by Correll and is the Montrose county citation. The specimen collected in Rio Blanco county and referred to by Correll has not been located. Two more Lucian Long collections show affinities to *P. sparsiflora*, but also show features of other species and may be hybrids.

Known localities are:

- near Montrose, Payson in 1910, RMH
- near Valley View Hot Springs, Saguache Co., Long in 1979 and 1981, DRG
- southeast of Norwood, San Miguel Co., Long in 1978, DRG
- Eagle River at Edwards. Eagle Co., Long in 1981, DRG

Platanthera sparsiflora is a species of Mexico, the Southwest, the Great Basin, and the Sierra Nevada. Specimens from New Mexico of typical *P. sparsiflora* were seen at the Denver Botanic Gardens, University of Colorado, and Rocky Mountain Herbaria.

From the descriptions, *P. sparsiflora* and *P. hyperborea* sound a lot alike, but comparison of specimens and reference to Luer's photographs in Native Orchids of the United States and Canada shows some significant differences. In general, *P. sparsiflora* shows a typical-looking green bog orchid flower from afar, but up close it is generally larger, with a big column completely filling the hood. The spur is often straight and sticking rigidly behind the flower. The flower is rather elongated and the hood comes to a bit of a point. The whole flower looks like a typical green bog

orchid flower that was stretched by pulling at the top of the hood and end of the lip or the spur. The sparseness of the inflorescence, implied by the name, is very variable and cannot be used as a diagnostic feature for any of the green bog orchids in my opinion. I have noticed a peculiar yellowish tinge on flowers on live plants, also shown in Luer's photographs. The other green-flowered *Platantheras* show a much richer, darker green flower, but this is probably too subjective a point to be used for primary identification.

Persons botanizing for orchids in the western and southern parts of the state are advised to carefully check green bog orchids to see if they are *P. sparsiflora*. The collections are mostly from late June or early July, mostly at about 7,500 feet elevation. It is probably more common than collections indicate because people assume it is the common *P. hyperborea*.

---William F. Jennings

THE SEARCH FOR
LISTERA ORCHIDS

In January-February 1984 issue of the Colorado Native Plant Society Newsletter, I wrote that the orchid *Listera borealis* appeared to be not as rare as originally thought, with five known stations. Since that time I have been conducting a study of the orchid collections in regional herbaria for Scott Peterson of the Colorado Natural Heritage Inventory, and as a result some new information has come to light regarding the distribution of the three species of *Listera* orchids in Colorado.

L. borealis

There are eight specimens at the University of Colorado herbarium, two of which were misidentified as *L. convallarioides*. There are two specimens at the University of Wyoming and one at the Denver Botanic Gardens. The Callas/Cose specimens collected in Summit County in 1983 do not seem to be at any of these herbaria, but the collectors are reliable and their collections are here considered valid. These specimens represent eight localities for *L. borealis*:

- Gold City ghost town, Grand Co.
- Loveland Pass, Summit Co.
- Monte Cristo Peak, Summit Co.
- Silver Placer, Clear Creek Co.
- St. John, White River, Garfield Co.
- St. Elias vicinity, Chaffee Co.
- (4 collections)
- Gothic vicinity, Gunnison Co.
- (4 collections)
- Silver Lake Res., Gunnison Co.

L. convallarioides

There are seven specimens at the University of Colorado herbarium, two at the Denver Botanic Gardens, and one at Colorado State Botany Herb. The other specimens represent four localities for *L. convallarioides*:

(Continued on the top of the next page)

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Steamboat Springs, Routt Co.
RMNP near Estes Park, Larimer Co.
(3 collections)
Peaceful Valley area, Boulder Co.
(2 collections)
Green Mountain, West of Boulder, Boulder
Co. (4 collections)

L. cordata

There are dozens of sheets in the herbaria checked with collections from at least ten counties, making this one of the commonest orchids in Colorado. It is to be expected in all the higher mountainous areas of the state.

The important conclusions drawn from the data are that *L. borealis* is far more wide spread than ever suspected, with collections from five counties well scattered over the higher mountains. *Listera convallarioides*, on the contrary, is much rarer than suspected with all collections but one from a strip of the east slope between Boulder and Estes Park. *Listera convallarioides* is disjunct in southern Arizona, so it is likely that undiscovered populations exist in remote areas south of the known range. *Listera cordata* is present in many areas but its range still needs definition, especially in the southern Front Range, Sangre de Cristos, and western slope. One other *Listera* orchid, *L. caurina*, is present in northwestern Wyoming and should be looked for in the Park Range of Routt and Jackson counties where so many other North-western plants have disjunct stations.

Botanical collectors are encouraged to look for these small green-flowered orchids outside the well-collected areas mentioned above. *Listera cordata* sometimes produces deep burgundy purple flowers and the range of these plants also needs further definition.

---William F. Jennings

EDITOR'S CORNER

As noted elsewhere the Newsletter will now be published 5 times a year with mailings on the 15th of January, March, May, August, and November. Deadline for material for an issue is the 1st of the month it is to be mailed.

A brightly colored center page will contain the calendars of events for the individual chapters. Please take it out of the Newsletter and hang it in a convenient place to remind you of your chapter's activities.

The more important actions of the Board of Directors meetings will be reported by the Secretary so that you, the general membership, will be more informed about what your Board of Directors is doing and what the Society as a whole is being committed to.

Again, if you have a hobby that makes some special use of plants, if you have some special interest in plants, if you have found some special plant or you have any other topic that might be of interest to the membership, please send it in to be published in the Newsletter. Several people are available that can rewrite the material if needed and your name need not be published with the material but please include it when you send in the material.

If you look at the back page you will see several holes. We still need Chairpersons for the Publicity, Conservation and Governmental Affairs Committees. If you can fill one of these position or know someone who could please let us know.

Your editor is still waiting for the first electronic transfer of material for the newsletter. I have a modem and can connect my computer to the telephone line and communicate with another computer to send or receive material. Let's give it a try!?

The next issue, March mailing, will contain the details on at least the earliest field trips so don't make your summer commitments until you see that issue. An effort is being made to get field trips scheduled early this year so that things can be set up before other commitments are made for the summer for both the leaders and the participants.

FOUND! *Oreocarya aperta* Eastwood
(Syn. *Cryptantha aperta* (Eastwood) Payson)

The most elusive species in the Colorado Flora must be *Oreocarya aperta*. It was described by Alice Eastwood in 1903 from a collection she said was collected by her "at Grand Junction", June 27, 1892. Nothing was said about the habitat, and the specimen is an old fruiting specimen with only one or two corollas remaining. The only material is at California Academy and, fortunately, Miss Eastwood was able to save it during the earthquake of 1906, or we would have no idea what it really looked like. For years we have been looking for the plant without success, thinking that it probably grew on the adobe hills around Grand Junction along with *O. elata*.

Walt Kelley has been watching *Oreocarya* (*Cryptantha* subgenus *Oreocarya* to most) for some years, and last year reported a Utah species, *C. mensana*, from the foothills of the Douglas Pass area, in Garfield County. This is a species which ranges into Colorado from adjacent Utah. I happened to examine his specimens in order to add the species to my West Slope keys, and was struck by the similarity of them to the type specimen of *O. aperta*, which I had examined earlier. In fact, with Walt's help, I have now seen it in the field myself, and there is no doubt that this is indeed *O. aperta* Eastwood.

The identification of Walt's plants as *O. mensana* was vouched for by Elizabeth Neese, who knows the plant well in Utah. Although

he had been expressly hunting *O. aperta* for some time, Walt was evidently thrown off the track by interpreting Eastwood's description "stems several, rather slender, 1-2 dm high, branching from near the base with many spreading simply or 2-forked spikes, those of all the stems aggregated into a closely branched thyrse," etc., as implying that the plant was densely caespitose, like *O. nana* or *O. fulvocanescens*, which it is not, and he is happy to accept the finding that *O. mensana* and *O. aperta* are one and the same. Unfortunately for the Intermountain people, *O. mensana* will have to become a synonym of the earlier name, *O. aperta*.

For the first time, then, we have a clear picture of the aspect and habitat of *O. aperta*, which Eastwood probably did not get very close to Grand Junction at all; she merely listed that as the nearest town. It is a plant of openings in pinon-juniper woods at about 6,000 ft. alt., in the south side of the escarpment leading up to Douglas Pass. It occurs along with *O. flavoculata*, but probably does not occur south of the Colorado River. It has been found in several places along different roads leading into the hills, so *O. aperta* is probably not rare, although in order to find it one would have to scramble up pretty steep north-facing slopes in the pinon-juniper. It has about the shortest flower tubes of any of our species.

---W. A. Weber

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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

-----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 1sts 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.

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