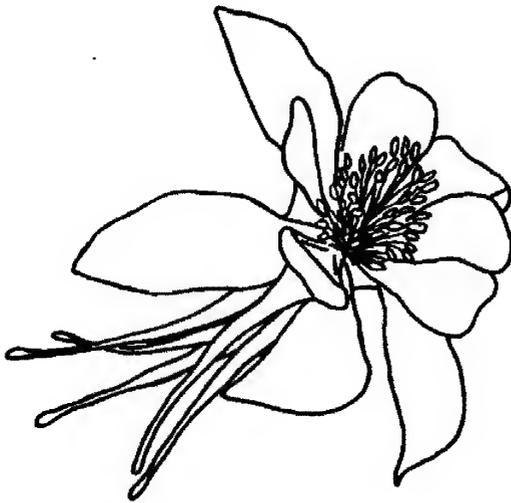


Colorado Native Plant Society



NEWSLETTER

Volume 8
January-February

Number 1
1983

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

CALENDAR OF COMING EVENTS

12 March, Monday, 7:30pm, Yampa Valley Chapter meeting. See page 2.

19 March, Monday, 7:30pm, Yampa Valley Chapter meeting. See page 2.

22 March, Thursday, tentative date for Boulder Chapter meeting. Contact chapter president for time and place. If you don't know who your chapter president is check page 8.

28 March, Wednesday, 7:30pm, Fort Collins chapter meeting. Please note change in date from that announced at last chapter meeting. More on page 2.

7 April, Saturday, 1:00pm, Longmont, Board of Directors meeting. Notify secretary if you would like to attend. Non-members of the Board are always welcome at the meetings and it is a good way to find out about all the things the Society is involved in.

First part of April, watch your mail for the next newsletter. Details on the early field trips and much, much more.

19 April, Thursday, 8:30-12:30, Turf, Native and Ornamental Grasses for the Front Range workshop. See page 4.

Last part of May. First field trip. Details in the next newsletter.

14 June, Thursday, PENSTEMON - Sentinel of the west: A Native Plant with Many Landscape Possibilities workshop. See page 4.

August ?, Dryland Perennials and the Perennial border workshop. See page 4.

NO MORE NEWSLETTERS?

If you haven't paid your dues...

We hope that those of you who have not yet renewed your membership for 1984 will do so at this time. Members not renewed by March 31, 1984, will, unfortunately, have to be dropped from membership. If possible, please fill out the blue membership form mailed late last year. If you didn't receive it, or misplaced it, a schedule of membership categories and the society address are printed on the back page of every newsletter. The year through which your membership extends is printed on your address label attached to this newsletter.

Local chapters of the Society are located in Boulder, Fort Collins, and the Yampa Valley (Craig-Steamboat Springs). If you wish to be a member of one of these, indicate this specifically or you won't be affiliated with a chapter. Continue to support and learn about Colorado's native plants by keeping up your membership on CONPS. 1984 promises to be an exciting year for CONPS, so, don't miss out!!!

Recently paid memberships may not be shown correctly on the mailing label. If you have any questions please contact the membership committee.

YAMPA VALLEY CHAPTER

The next meeting of the Yampa Valley Chapter of the CONPS will be on March 12, at the Craig Middle School, east campus, in Craig at 7:30pm. We are expecting this meeting and workshop to be both fun and informative. Following a brief business meeting, Sue Allard will be conducting a workshop on plant families and the use of plant keys. You are invited to attend. Bring you plant books and prepare for the bloom of spring.

On March 19, tentatively at the same location and time, check the newspaper, a conservation film prepared by The Nature Conservancy titled "The Garden of Eden" will be shown.

FORT COLLINS CHAPTER

On Wednesday, February 8, the Fort Collins Chapter of the CONPS enjoyed a slide presentation by Anna Thurston of Wild Iris Landscape Design and Consultation titled "Art and Nature in Landscaping." About 25 people attended and enjoyed refreshments after the presentation. Our thanks to Anna for a very enjoyable and informative program.

On Wednesday, March 28, 7:30pm in the Overland Trail Room of the Fort Collins Museum, 200 Mathews, the Fort Collins Chapter of the CONPS will show a conservation film prepared by The Nature Conservancy titled "The Garden of Eden" and possibly one other film not as yet determined. The general public is welcome so bring your friends.

THE SEARCH FOR *Malaxis* NATIVE ORCHIDS

At least 21 and probably more species of wild orchids are native to Colorado. Several more species may eventually be found in the state. Two likely candidates are *Malaxis ehrenbergii* (Reichenbach) O. Ktze, and *Malaxis macrostachya* (Lexarza) O. Ktze. *Malaxis* orchids are small, obscure, rare orchids seldom seen by the general public, and hence they really do not have common names, although addersmouth has been applied to some species. The two species in question occur in the high, dry plateau country of Mexico, Arizona and New Mexico. A third species, *M. monophylos* (L.) Swartz, has been collected a few times in Colorado.

In the Denver Botanic Gardens "Green Thumb" (Vol. 40, No. 1, Spring 1983) I suggested that these orchids should be looked for in extreme southern Colorado. Dr. William A. Weber (personal communication) had indicated that *M. ehrenbergii* had been reported in an environmental impact statement (EIS) filed by Kaiser Steel. Kaiser has coal mines in Colfax County, New Mexico, about ten miles south of the Colorado state line and about thirty miles west of Raton.

After a series of letters and phone calls, a meeting was set up with Kaiser personnel on August 19, 1983, to search for the orchids along the Colorado-New Mexico state line.

My wife, Susan, and I met with Marcia Wolfe, reclamation ecologist, who was our guide. She showed us the mine's herbarium sheets of the orchids. They had two specimens of *M. ehrenbergii*, one of which had white flowers instead of the usual burgundy purple. A single specimen of *M. macrostachya* (sometimes called *M. sulei* L. O. Williams) was also seen. These collections were made in New Mexico but very near the state line.

Malaxis ehrenbergii was seen at two sites in New Mexico on steep, mossy, north-facing slopes at elevations in the 7500-8000 foot range. The first is adjacent to the coal wash plant tailings pond near the mine, about 9 1/2 miles from the state line. The second was in Spring Canyon, near Vermejo Park at the Bartlett mine site about 4 1/2 miles from the state line. Time did not permit visiting the *M. macrostachya* site, which is in wild country north of the mine, about 2 1/2 miles inside New Mexico. The site is on a flat hilltop between Patten Canyon and the Right Fork of York Canyon at 8500 feet.

Areas searched in Colorado were immediately adjacent to the state line in the headwaters of Spring, Gonzales, and Wet Canyons, immediately south of Tercio townsite. The orchids were not found, but some areas did have good habitat. Orchids *Goodyera oblongifolia* Rafinesque and
(Continued on page 6, right side of page)

PICEANCE BASIN UPDATE

An article "Piceance Basin Development Threatens Plants and Vegetation" that appeared in the October-December 1983 CONPS Newsletter (Vol. 7, No. 5) discussed the Resource Management Plan (RMP) that is being written for the Bureau of Land Management (BLM) land in the Piceance Basin. This article discussed BLM's handling of 20 sites proposed for natural areas protection. The sites were identified by The Nature Conservancy for the BLM, following a comprehensive botanical inventory of the Basin, as containing nationally significant rare plant species and vegetation types (plant associations). At the time of the newsletter article BLM had not drafted its Preferred Alternative, though preliminary indications were that it would not recommend natural area designation for any of the 20 identified sites. Please refer to the first article for more detailed information.

In the newsletter article just mentioned it was suggested that members write to BLM to present individual views. Apparently many responded, because a BLM employee informed a CONPS Board member that many CONPS members wrote letters requesting information and supporting designation of the 20 sites. It was suggested that CONPS could do "something more constructive" than occupy BLM's time responding to such letters. It is not clear why such public participation in the planning process is not constructive. It should be encouraged. Your Board members feel it is indeed constructive to oppose the destruction of valuable botanical resources; BLM's attitude must not deter our continued insistence that this public agency listen to and act constructively on our comments.

Currently, the Preferred Alternative is still under development and probably will not be released by the date in February scheduled by BLM and reported in the newsletter. The Colorado Natural Areas Program, State of Colorado, Department of Natural Resources, has met with BLM and requested designation for 9 of the 20 sites. Their input and that from CONPS is being considered by BLM. Based on BLM's response received in December to the CONPS's letter written in October to the White River Resource Area, and on discussions with the Colorado Natural Areas Program and Colorado Natural Heritage Inventory (CNHI), it now appears that BLM may propose in the Preferred Alternative a number of "other management options...to provide protection" for rare plants and vegetation. From all indications, no formal designation as Research Natural Areas (RNAs) or Areas of Critical Environmental Concern (ACECs) would occur for the 20 sites. The alternative means of "protection" include "no-surface-occupancy" stipulations and "avoidance" stipulations that would be attached, for example, to oil and gas leases at the time they expire, or when application is made for a drilling permit. Such stipulations presumably also could be

included in oil shale mining leases at the time of issue. The "avoidance" stipulation would request that lessees avoid disturbing rare plants and vegetation remnants "when-ever possible," but could not be enforced in all cases. The "no-surface-occupancy" stipulation would prevent actual surface disturbance by an oil-and-gas drill pad or by mining activity, but again this could not be enforced in all cases. Such stipulations could not be attached to existing producing oil and gas leases. It also is unclear now whether BLM will include needed buffer areas in addition to the actual plant populations and vegetation remnants under these stipulations so that the actual plant populations and vegetation remnants would not be threatened by activities on adjoining lands.

Most importantly, these stipulations would not prevent destruction or alteration of any of the 20 sites by domestic livestock grazing or other land uses. Livestock grazing has altered most of the natural vegetation in the Piceance Basin. While forage conditions (range condition) reported by BLM may be accurate, many sites with abundant forage have been highly altered in composition from their presettlement condition. For example, an estimated 25,000-50,000 acres in the Basin once contained grasslands dominated by *Agropyron spicatum* var. *inerme*, beardless bluebunch wheatgrass. Domestic grazing has changed all but about 200 acres of this area to grasslands dominated by *Koeleria cristata*, junegrass, or other more weedy species. Although *Koeleria* forage is abundant, the original grasslands have been nearly extirpated. All the remaining 200 acres that are on BLM land were included among the 20 proposed sites. BLM's "avoidance" and "no-surface-occupancy" stipulations would provide no protection from grazing for these 200 acres, which should be designated officially as ACEC's and RNA's and permanently excluded from domestic livestock grazing by fencing or other means. If these 200 acres are not now protected the last remnants of these natural grasslands could be lost forever, along with the valuable scientific knowledge that might have accrued by studying these sites. Protected remnants such as these could eventually yield scientific information that could be used by BLM to help rehabilitate mined or overgrazed lands, and to help maintain lands that are used for domestic grazing in a natural and productive condition. Given the potential value to BLM of the 20 proposed sites, it is unclear why no designations and no protection from grazing are likely to appear in the Preferred Alternative.

If the Preferred Alternative continues to emphasize the "stipulation" approach rather than official protection by designation as ACECs or RNAs, CONPS members may want to be alert to and possibly publicize the potential smoke screen this presents. The casual reader may be impressed by the attention and concern expressed in the language

regarding "Special Management Areas." We can appreciate that the concern may be real, but the actual protection afforded by stipulations is inadequate, particularly regarding protection from domestic livestock grazing, but also because stipulations are to be applied only "whenever possible," not whenever needed. "Whenever possible" obviously is subject to interpretation depending on external and internal pressures, and does not assure that future decisions will be based on appropriate recognition of the scientific importance and irreplaceable qualities of a rare plant or vegetation remnant.

BLM also has determined that 8 of the 20 sites do not qualify as potential ACECs as they lack "relevance" or "importance." Because they were determined not to be "potential ACECs" under BLM regulations they do not have to be considered further during the planning process. After again examining the CNHI report to BLM, CONPS feels that the 8 sites that were dropped are in fact both "relevant" and "important," and should be included in the planning process and be designated. Several means are being considered to encourage BLM to include these 8 sites.

In addition, should the Preferred Alternative remain inadequate, additional effort will be directed by the CONPS Board of Directors toward alternative means of mounting legal and public response challenges and appeals to the Piceance Basin RMP. While the CONPS Board of Directors continues to represent Society goals toward rare plant and vegetation protection in the Piceance Basin, it is very important that your individual voices are heard regarding this important planning process. The next appropriate time for this will be in official comments on the Draft RMP and its Preferred Alternative, due to be released at some unknown time in the next month or two. Though CONPS will be represented at public hearings on the Draft RMP it also will be very important for you to attend one or more of these hearings and express your personal views. The CONPS Board of Directors is planning a special mailing as soon as the Preferred Alternative is made public. This mailing will analyze the adequacy of protection for the 20 sites, discuss possible comments, and publicize hearing dates. If you have additional questions, contact CONPS President Sue Martin, or any member of the Board of Directors. If you have not already written to BLM for information and to state your views, it is not too late---see the previous newsletter for the address.

3 HORTICULTURAL WORKSHOPS FOR '84!

The CONPS Horticulture and Rehabilitation Committee under the leadership of Gayle Weinstein has scheduled three 1984 workshops. Each of these will be co-sponsored with another group, and will include consideration of appropriate native plants as well as introduced plants and horticulturally developed cultivars. Further details of the programs will be sent to CONPS members as soon as they are finalized. For your planning, the dates and topics are:

1. TURF, NATIVE, AND ORNAMENTAL GRASSES FOR THE FRONT RANGE

Thursday, APRIL 19, 8:30-12:30, at Denver Botanic Gardens; Co-sponsored with the Denver Botanic Gardens.

A description of Front Range communities' ordinances pertaining to grasses will begin the program, followed by speakers who will cover the topics of Conventional Turf-grasses, Dryland Turfgrasses, Introduced Ornamental Grasses, and Ornamental Native Grasses. Water use and water conservation will be important considerations in the presentations. The disadvantages, both in Front Range landscapes and those known from uses elsewhere, as well as advantages of each specific grass also will be presented. Some of the native grasses that may be discussed in the program include the current "hot topic," buffalo-grass, *Buchloe dactyloides*; blue grama, *Bouteloua gracilis*; western wheatgrass, *Agropyron smithii*; the wild ryes, *Elymus*; the often showy needle-grasses, *Stipa*; and perhaps some *Bromus* species.

2. PENSTEMON - SENTINEL OF THE WEST: A Native Plant with Many Landscape Possibilities.

Thursday, June 14, in John Mitchell Hall, at Denver Botanic Gardens; co-sponsored with Denver Botanic Gardens and the American Penstemon Society.

The first part of this program will be a symposium with speakers outlining the *Penstemon* species of the southern Rockies and Great Basin area and the uses of both native and introduced *Penstemons*, and appropriate companion plants, in gardens. Cultural conditions for *Penstemons* also will receive attention. After lunch, there will be a *Penstemon* sale and a guided tour of the outstanding *Penstemon* plantings at DBG.

3. DRYLAND PERENNIALS AND THE PERENNIAL BORDER.

Sometime in August, time and place to be announced later; probably will be co-sponsored by the CSU Department of Horticulture and Extension Service, and the Denver Botanic Gardens.

This interesting day will include both classroom sessions on dryland perennial

plants, their potential uses and water requirements, and afternoon trips to research plots and trials.

Watch for details to follow on these programs, and plan to expand your knowledge of landscaping uses of our native plants by attending. CONPS and DBG members will receive discounts on registration fees.

Help will be needed in preparation before the workshops and at the registration tables during the workshops. To volunteer please call Dorothy Borland (for the first workshop) at 329-9188 or Gayle Weinstein (for any of the workshops) at DBG, 575-3751.

IS LOGGING NECESSARY TO SAVE COLORADO'S ASPEN GROVES?

Media stories have begun appearing recently that report that without an active increase in the amount of logging of aspen, we are going to lose our beautiful aspen forests. The number of such stories has increased since a November 1983 announcement that Louisiana-Pacific Corporation would like to construct a \$17 million plant near Montrose, Colorado, to produce waferboard from aspen. The plant would reportedly initially require 2,500 acres of mature aspen per year.

Additional recent interest in logging aspen was expressed by the Glenwood Springs Resource Area of the Bureau of Land Management (BLM) whose Draft Resource Management Plan (RMP) proposed to log 17,000 acres of aspen in order to increase downstream water yields. This proposal was later modified in the Final Plan, after considerable opposition from many sources, to include smaller scale tests prior to large scale logging. A recent article in the Colorado Wildlife Federation's January 1984 issue of "Colorado Wildlife" describes the positive wildlife benefits from logging aspen as well as promoting the idea that logging is necessary to save our aspen groves, which will otherwise be lost. The Colorado Wildlife Society's Winter Meeting on January 25-27, 1984, included a symposium on "Research, Management, and Utilization of Aspen Communities" with presentations by Forest Service personnel and a spokesperson for Louisiana-Pacific. While all of these meetings, reports, and media articles are presenting a rather favorable picture of the need for logging to "save" aspen in Colorado, there is another side to the story.

Aspen, *Populus tremuloides*, apparently does not reproduce by seed now in Colorado. Though seeds are viable and germinate readily, they fail to grow in the wild, perhaps because of a climate that is

currently unfavorable. Most aspen stands probably got where they are now by seeding in during a more favorable climatic period, probably just after the close of the Pleistocene some 10,000 years ago, and have persisted since by repeated root sprouting. While many aspen stands in Colorado are large, covering whole hillsides, aspen also persist in small amounts even in most of the oldest subalpine spruce-fir forests, where it, or lodgepole pine, explodes in abundance if the stand is burned or logged. Aspen root sprouts invade these areas rapidly after disturbance, beating out the slow seed-reinvasion of spruce and fir.

Recent studies of presettlement fire-history in Rocky Mountain subalpine forests (e.g. Romme, 1980. USFS Gen. Tech. Rep. RM-81) document very infrequent fires, on the order of once every 300-400 years on most sites, so that a burned spruce-fir forest would, in the past, have passed through a 40-100 year period of aspen dominance prior to a return to spruce-fir for 200-300 years.

The rapid settlement of Colorado after the mid-1800's interrupted the natural fire cycle in these subalpine forests. Much scientific research in the western United States has documented substantial changes in forests due to fire suppression efforts begun in the early 1900's. Forests as a result generally became more dense with undergrowth, and less open and grassy, as many of the natural fires burned through forests on the ground without destroying overstory trees. Less well-known and well-studied is the dramatic increase in the number of fires during the period of settlement and mining in the latter half of the 1800's, prior to this fire suppression era. The Ute Indians, for example, may be responsible for setting fire to most of the Park Range in 1879, possible to express their feelings about settlement and disruption of their life (Bunin, 1975. PhD, Univ. of Colo.). Other large fires occurred in the Pikes Peak region, and scattered throughout Colorado. William Henry Jackson's photographs of the Boulder county area in the early 1870's show large areas of burned forest. Fires were set intentionally by miners and settlers to clear forest to make exploration for minerals easier, though some fires probably escaped accidentally and could not be controlled. Aspen as well as lodgepole pine invaded these burned areas. Coupled with increased fires was the development of the logging industry, as well as personal cutting for construction. Logged areas also resulted in aspen and lodgepole pine invasion. The result of this widespread and unprecedented burning and logging, occurring over much of Colorado in a 50 year period, was a rapid replacement of older spruce-fir and conifer forests by young forests of aspen and lodgepole pine. These young aspen stands are now 80-120 years old, and most are at the stage where spruce and fir are regaining their former dominance. If the natural fire cycle were to continue uninterrupted by the Forest

Service's plans for logging aspen, the next two hundred years would probably result in a return in many areas of the former old growth spruce-fir forests. The unfortunate result of rapid destruction of the old growth in the late-1800's is that now the cycle is occurring simultaneously over a large expanse of Colorado's subalpine forest, so that aspen may actually decline in area over the next few decades. Should we mourn the loss of aspen or welcome the return of old spruce-fir forests?

Fortunately, the story is not this simple, though media accounts do not report the whole story. Recent studies of aspen forest in Colorado reveal that many of these forests are "climax." This means that they are fully self-reproducing forests that are stable aspen, not succeeding to spruce-fir forest after 40-100 years, not even having any successful spruce-fir invasion, and not in any sense declining or dying in the absence of fire or logging. There are many aspen stands in Colorado that are more than 140 years old, and thus of presettlement origin, and quite healthy. Some stands have trees 180 years old. Though ecologists in the Rocky Mountains have debated the issue of aspen succession since 1925, recent studies, particularly those by George Hoffman and Robert Alexander of the U. S. Forest Service's Rocky Mountain Forest and Range Experiment Station in Fort Collins (Research Papers 221, and 249) document six kinds of common climax aspen forests on the Routt and White River National Forests. These authors describe a broad zone of climax aspen roughly from 7,300 to 9,700 feet in elevation in the Routt NF, and from 8,400 to 10,000 feet in elevation in the White River NF. Similar climax aspen forests have been reported throughout Colorado, generally occurring in a broad zone below the climax spruce-fir zone. There is no evidence of decline or loss of the large expanses of aspen in this zone. Contrary to media accounts, it is not necessary to log these forest to prevent their loss.

Logging, if it does occur as planned, will most likely target first the stands of large old trees. These old stands occur primarily in the aspen zone, and not in the 80-120 year old aspen stands most common in the spruce-fir zone. It is ironic that the logging that is being proposed to "save" our aspen groves very likely will occur first in the most beautiful old stands that do not require disturbance in order to be perpetuated, while if the younger aspen stands at higher elevations are logged, this will simply forestall return of these areas to their former coniferous dominance.

---Bill Baker

(Continued from page 2)

Corallorhiza sp. were seen. The elevation in the areas searched is about 9000 feet and this may be too high and cold for the orchids. Perhaps around 8000 feet is more appropriate and areas at this elevation in Colorado along the state line would be due north of the mine rather than northwest.

The area bounded roughly by Colorado State Highway 12, the Crest of the Sandre de Cristos, U. S. Highway 64, and Interstate 25 (roughly Colfax County, New Mexico, and the southwest quarter of Las Animas County, Colorado), about a million acres, is all private land controlled by CF&I Steel, Kaiser Steel, and Pennzoil, and as a consequence is very poorly botanized. Permission is required for entry.

In conclusion, it seems just a matter of time until the orchids will be found in Colorado. I intend to get together with MS. Wolfe again this coming summer.

---Bill Jennings

THE SEARCH FOR *Spiranthes* NATIVE ORCHIDS

In his thesis, entitled "The Native Orchids of the Prairies and Plains Region of North America," Dr. Larry Magrath reported finding *Spiranthes cernua* (L.) Rich. near North Platte, Nebraska, on September 28, 1970, (Magrath #6457 Univ. Kansas). On October 7, 1983, I relocated the Magrath site, finding five plants still in bud. Friends in North Platte visited the site regularly during October and November and reported that the plants never bloomed. A live plant was dug up and is in a pot in my kitchen, but it, too, refused to bloom. The overwinter leaf rosette, however is green and healthy. Identification is tentative but the plant is probably *S. agnicapora* Sheviak not *S. cernua*.

The area along the South Platte River from North Platte to Sterling, Colorado was searched, but no other *Spiranthes* sites were found. However, the plant probably is in Colorado, or was, along the South Platte. Dakes Ames, the great Harvard orchid specialist published on *Spirantes* in 1905, citing a specimen, among other, under *S. cernua*: "Nebraska, South Fork of the Platte, September 1856, Lt. Bryan Expedition."

After much library research, the route of the Bryan Expedition was discovered. On Friday evening, September 5, 1856, the expedition camped on the Cache La Poudre River near where it empties into the South Platte near Greeley. They followed the South Platte until they were 15 miles beyond the mouth of Beaver Creek (modern-day Brush), then went easterly cross-country, beginning Monday morning, September 15, 1856. The citation "Nebraska" was correct at the time of the collection, as everything north of 40

degrees N. latitude (Baseline Road in Boulder) and east of the Continental Divide was Nebraska territory in 1856. Colorado was not organized as a territory until 1861.

If Ames' citation is correct, this places *S. magnicaeporus* (or *S. cernua*) in Colorado somewhere along the South Platte between Greeley and Brush, more or less. The actual specimen Ames referred to has not yet been located. Dr. Charles J. Sheviak, a specialist in *Spiranthes* orchids and the botanist who described *S. magnicaeporus*, has been informed of these findings, and he is actively searching for this important specimen.

It is suggested that members of the CONPS interested in orchids should look for this plant in the Platte Valley during September and October. *Spiranthes magnicaeporus* is very resistant to frost and will also tolerate some disturbance. On the plains, it grows well in native prairie hay meadows that are cut in July or August. See Luer's Native Orchids of the United States and Canada for more details on the plant.

---Bill Jennings

THE SEARCH FOR *Listera* NATIVE ORCHIDS

In 1893, the orchid *Listera borealis* was described as a new species by Thomas Morong. In 1899, K. M. Wiegand revised the genus *Listera*. In his treatment of *L. borealis*, he listed four specimens that he had personally examined; one is of interest to Colorado botanists, a specimen collected in "Colorado, Sawatch Range, Alpine" by T. S. Brandegee. In 1880 Brandegee, a civil engineer, was working for the Denver, South Park, and Pacific Railroad. Alpine was a booming mining camp located on the railroad 4.4 miles east of St. Elmo in the Chalk Creek Valley, Chaffee County. When Rydberg published his Flora of Colorado in 1906, he listed *L. borealis* for Colorado, citing the Sawatch Range as its location.

Brandegee's specimen was the only known collection in the state until William A. Weber located a specimen in the New York Botanical Garden herbarium and published this fact in 1966. The specimen he located was collected at Silver Plume, Clear Creek County on July 7, 1912, by an unknown collector.

Joseph Barrell published A Flora of the Gunnison Basin in 1969. On pages 326-7, Barrell reports that at the time of Rydberg's work, no Colorado botanist knew where to find *L. borealis*, and that Weber had tracked down the source of the Rydberg report. Barrell is, of course, mistaken, since Rydberg could not possibly have known about the 1912 Silver Plume collection when he wrote his flora in 1906. The significant part of Barrell's work is that he located *L. borealis* growing in the vicinity of the near-ghost town of Gothic, Gunnison County, on July 11, 1961. Since then, *L. borealis* has been seen and collected several times in the Gothic area.

During the summer of 1983, Panayoti Callas of the Denver Botanic Gardens and Fred Case of Saginaw, Michigan, reported two more sites for *L. borealis*: the west slope of Loveland Pass and along Monte Cristo Creek on the north slope of Hoosier Pass. Both localities are in Summit County. Specimens collected have been deposited at the University of Colorado.

Therefore, there are five known stations for *L. borealis* in Colorado. Thus it is probably not as rare as once believed, but merely overlooked, since it is quite small, only 3 or 4 inches tall. The tiny flowers, which are very distinctive, require a hand lens for positive identification.

---Bill Jennings

-----OFFICERS-----

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

-----BOARD OF DIRECTORS-----

Bill Baker (85) Boulder 449-0771
 Ann Cooper (84) Boulder 447-9169
 Lloyd Hayes (84) Fort Collins 226-5365
 Dexter Hess (85) La Junta 384-2464
 Sue Martin (84) Fort Collins 226-3371
 Tamara Naumann (85) Longmont 772-9370
 Claire Semmer (84) Steamboat Village 879-3259
 Les Shader (84) Fort Collins 484-0107
 Myrna Steinkamp (85) Fort Collins 226-3371
 Eleanor Von Bargaen (85) Denver 756-1400

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

-----COMMITTEES-----

CONSERVATION: Tamara Naumann 772-9370
 EDITORIAL: Les Shader 484-0107
 EDUCATION: Miriam Denham 442-1020
 FIELD TRIPS: Nevin Bebee 733-1038
 GOVERNMENTAL AFFAIRS:
 (Help!)
 HORTICULTURE & REHABILITATION:
 Gayle Weinstein 575-2548
 MEMBERSHIP: Myrna Steinkamp 226-3371
 PUBLICITY: Lorraine Seger 482-9456
 FLORISSANT: Mary Edwards 233-8133

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

COSC: Ann Cooper (Alternate-Tamara Naumann)

-----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 15th of January, March, May, July, September, and November with publication around the first day of the next month. The 5 issues February through October will be published without fail, the December issue 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.

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

Non-Profit Org. U. S. Postage PAID Permit #7 Ft. Collins, CO
--