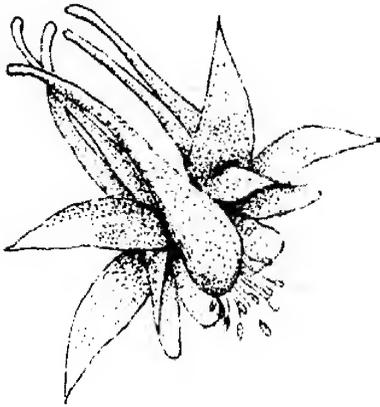


Colorado Native Plant Society

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



NEWSLETTER

Volume II Number 3

May-June 1978

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All correspondence and inquiries regarding activities of the Society should be addressed to Panayoti Peter Callas, Secretary, CONPS, 922 12th Street, Boulder, CO 80302.

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MEMBERSHIP RENEWALS AND INFORMATION

Sue Martin (Membership Chairman)
Colorado Native Plant Society
4700 Venturi Lane
Fort Collins, CO 80521

SCHEDULE OF MEMBERSHIP DUES

Life	\$250.00
Supporting	50.00
Society	25.00
Family	12.00
Individual	8.00
Student & Retired	4.00

The CONPS Newsletter is sent to all other Native Plant Societies in exchange for theirs. Nonmembers may subscribe to the Newsletter for \$4.00.

NEWSLETTER

EDITOR: Dieter H. Wilken, Dept. of Botany and Plant Pathology, Colorado State University, Ft. Collins, CO 80523.

The editor seeks articles of general interest to all aspects of Society activities. Such articles should not generally exceed 4 typewritten, double-spaced pages, although consideration will be given to longer articles if space permits.

Deadlines for the 6 bimonthly newsletters are the last day of January, March, May, July, September and November.

The editor welcomes comments, recent news items and the open discussion of controversial issues regarding the native plants and vegetation of Colorado.

NATURAL AREAS WORKSHOP SCHEDULED
FOR AUGUST 1-3, 1978

The "Colorado Natural Areas Workshop" will be sponsored by the Colorado Department of Natural Resources and the Natural Areas Council. The workshop is scheduled for August 1-3, 1978 and will be held on the campus of Western State College at Gunnison. The tentative agenda includes a brief history of the Natural Areas Act, panel discussions on the broad topics of inventorying, classification of natural areas, data storage, and local field trips. The various sessions will be chaired by the members of the Council. Several guest speakers also will be featured. For further information contact either Reed Kelley, Natural Areas Council, Dept. of Natural Resources, 1313 Sherman Street, Denver, 80203 or Hugo Ferchau, Western Colorado State College, Gunnison, 81230.

THE COLORADO NATURAL AREAS
PROGRAM

The Colorado Natural Areas Program was created by the 1977 Colorado Natural Areas Act. The Act directs the Department of Natural Resources to establish a systematic inventory of natural areas of the state and to maintain a registry of such natural areas. Inventory, in this context, refers to the statewide search for qualified natural areas, and not to detailed site-specific analysis. The registry is defined to be a list of those natural areas considered by the DNR to be qualified. The Act also directs the DNR to establish a system of designated natural areas for which articles of designation have been accepted.

A natural area is defined by the Act as "a physical and biological area which either retains or has reestablished its natural character, although it need not be completely undisturbed, and which typifies native vegetation and associated biological and geological features or provides habitat for rare or endangered animal or plant species or includes geologic or other natural features of scientific or educational value."

The inventory and designation process may involve both public (federal, state, or local) and private lands. The DNR and the Natural Areas Council have developed these guidelines to make the inventory and designation process orderly and open. As the term guidelines implies, it is expected that improvements and refinements will be made with time and experience.



PROCEDURE

1. An area is suggested to the DNR by any individual or organization including staff and Council members. An "Area Identification Form" is filed with the DNR. The form describes what is known about location, ownership, biologic and/or geologic significance, size, and present and potential use of the area.
2. Based on available information, the identified area undergoes preliminary evaluation by the DNR staff and receives a priority rating of low, hold, or high (proceed). In this evaluation, the biologic and physical criteria (listed below) will receive primary consideration.
3. For each high priority area, the DNR staff fills out a "Site Evaluation Form" as completely as possible. This includes contact with the landowner(s). This form, emphasizing an area's biologic/physical factors, is then presented to the Natural Areas Council.
4. In light of the compiled information and in consideration of guideline criteria, the Council may accept the recommended area for inclusion on the list of qualified, inventoried natural areas. A conditional acceptance indicates the need for more information. Areas accepted by the Council and the DNR are put on a list of qualified, inventoried areas which constitutes the registry.
5. From the registry of natural areas, the Council recommends high priority areas for designation. The management criteria (listed below) will be seriously considered at this stage.
6. Draft articles of designation are prepared by staff in consultation with the owner of the recommended natural area.

7. The owner of the recommended natural area approves the draft articles of designation and files them with the DNR.
8. Following approval of the draft articles of designation by the Council, the area is recommended to the DNR for designation. This is to include use category recommendations for the area as described below, that is scientific, interpretive, scenic, and buffer.
9. The articles of designation may be accepted by the DNR. An area becomes a part of the designated natural area system when its articles of designation are in order and are accepted by the DNR.
10. The DNR certifies a notice of the designation to the appropriate county clerk and recorder as provided by law.
11. Amendments to any articles of a designated natural area will be made through this same process: negotiation with the owner, approval by the owner and the Council, recommendation by the Council to the DNR, and the acceptance of DNR.
12. Designated natural areas will be monitored at regular intervals. If the conditions and provisions of the articles of designation are not continuing to be met on a specific natural area, the DNR may remove the area from the designated natural area system. The Council may recommend such action.

USE CATEGORIES OF DESIGNATED NATURAL AREAS

Among designated natural areas, ecosystems differing in their degree of uniqueness, fragility, and/or frequency in the system will be represented. Therefore, to assure adequate preservation, some areas will require greater protection and restrictions than will others. For this reason, the use of land areas within the system may be categorized as scientific, interpretive, scenic, or buffer, with scientific areas having the most restricted use, as follows:

Scientific areas are of the highest quality and encompass, as closely as possible, the original natural features of the state. They are established for the protection of a unique or rare biological community, plant or animal species, or geological feature. Only scientific research is encouraged in these areas. Improvements are not permitted unless necessary for the continued preservation of the area's significant values. Because of the fragility of such an area or of the danger of disturbing research in progress, access is restricted and its exact location may be available only to valid scientific inquiry.

Interpretive areas represent outstanding, but not necessarily unique, examples of native plant and animal communities or other features of natural history. These areas can withstand, in addition to research, moderate use for educational purposes. Nature trails, observation platforms, and interpretive devices may be permitted when appropriately designed. Other improvements and facilities are permitted in buffer areas only (see below).

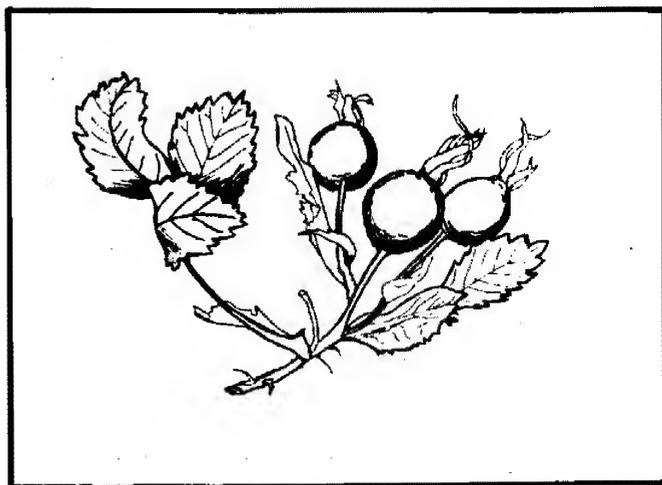
Scenic areas are of excellent scenic quality, in a comparatively undisturbed state or in the process of returning to their natural condition.

As qualified natural areas, they necessarily contain significant natural attributes. These areas may have some obvious man-made intrusions which are impossible to exclude due to the scale of the natural phenomena or feature. They can withstand moderate to heavy educational and visitation use.

Buffer areas, additional acreage or easements, may be needed within the boundaries of some natural areas to provide greater protection for the inherent values of the area and to help insure these values over a long period of time. For example, an area may have one portion managed as an interpretive area, another a buffer area. Necessary parking facilities would be located in the buffer area. However, lack of a buffer will not exclude an area from designation. Mass recreational activities, camping, or organized sports are not to be permitted in any natural area. Natural areas are intended for research, wildlife observation, hiking, art, photography, and other similar or compatible activities. A given area may have any combination of use categories within it.

GUIDELINE CRITERIA

The goal of the Natural Areas Program is the identification, evaluation, and protection of a sufficient array of natural areas representing all types of biotic communities and significant natural features typical of Colorado's natural heritage. Natural features include land forms and geologic formations, soils, streams and lakes, and terrestrial and aquatic communities of plants and animals and their component organisms. Ideally, the goal is to represent each kind of ecosystem, wetland type, or geologic feature in each of the physiographic regions of the state in which they exist. Such a broad geographic distribution of natural areas will help provide protection for species and their geographic variants. Each significant natural feature needs to be adequately represented in the designated natural area system to offer reasonable assurance that it will not be lost by natural catastrophe, developmental intrusions, external land transformations, pollution, or errors in management. Replication of each type will not only help insure protection but also make each type more accessible to the public and increase the possibility for comparative research.



The following criteria are divided into biologic/physical and management factors. The biologic/physical criteria are used to evaluate the quality of an area and will be of paramount importance in the consideration of an area's potential for inclusion on the registry. The management criteria are used to evaluate the feasibility of including an area in the designated natural area system which involves a management agreement. These criteria must be considered in determining priorities for designation of natural areas. A particular factor may figure importantly in a decision about one area while it may be relatively unimportant in another. The limiting factors in natural area designations will be staff time and resources to complete evaluations and the negotiation of articles of designation.

Biologic and Physical Criteria

1. Knowledge of the area: An area must be well enough understood to make an informed decision about its significance.
2. Representation: Adequate representation of each type of natural feature is important. Areas representing natural features which are lacking or inadequate on the registry or in the system will receive greater consideration than those already well represented.
3. Quality: Areas that are prime representatives of their particular type will merit greater consideration. Factors influencing the quality of areas include (but are not limited to):

Ecologic Factors:

- a. An area significantly illustrating characteristics of an ecological type or types.
- b. A biota of relative stability maintaining itself under natural conditions, such as a climax community.
- c. An area significantly illustrating the process of succession and restoration to natural condition following disruptive change.
- d. A habitat supporting an endangered, rare, endemic, or restricted species.
- e. A relic flora or fauna.
- f. A seasonal haven for concentrations of native animals, or a vantage point for observing concentrated populations, such as a constricted migration route.
- g. An area containing significant evidence illustrating important scientific discoveries.
- h. An area containing species at the extremities of their range.
- i. An area exhibiting a species with unique anatomical, physiological, and behavioral characteristics and adaptations for survival.
- j. A study site for the biology of a particular species or taxonomic group.
- k. An area demonstrating well-developed, diverse, or unusual community structure.

Non-ecologic Factors

- a. Outstanding geologic formations or features significantly illustrating geologic processes.
 - b. Significant fossil evidence of the development of life.
 - c. Example of scenic grandeur, high aesthetic value, or unusual natural features.
 - d. An area exhibiting classic research and/or educational functions.
4. Disturbance: Areas with near-natural landscapes and community composition will be given greater consideration than those areas where human alteration has been more significant.
 5. Size and Buffer: The size and adequate buffer potential are important in judging an area's expected persistence over a long period of time and its compatibility with adjacent land use.
 6. Use: Areas with a greater potential for scientific studies and educational use, and those containing a wider variety of values, will merit higher consideration.

Management Criteria

1. Responsible Party: Who will manage the area? Is there an individual, organization, or agency willing to do so?
2. Degree of Threat and the Potential Effect of Designation on Conservation of the Area: The degree of threat existing for a given area is a very important consideration in evaluating natural priorities. Due to the limited resources of the CNAP, theater areas must receive higher consideration than unthreatened ones. Threat may be defined as a rating of an area's security in the foreseeable future (with respect to the maintenance of the structure and integrity of its plant communities and other natural features). What is the degree of threat to the area? What is the likely effect of designation on the protection of the area?
3. Availability: What is the probability of an area coming under protective designation either by agreement, purchase, or gift? Is the owner willing to cooperate with the CNAP?
4. Security of Tenure: What is the strength of the protective agreement for a potential designated area?
5. Boundaries: Do they present a difficult maintenance problem? Are they secure with minimal maintenance problems?
6. Manpower: What are the manpower needs for maintenance and management?
7. Liabilities: Is there a high possibility of future development on or near the site which could affect the natural values? Is there an unfavorable clause in the agreement? Are there known liabilities?
8. Cost: What are the projected costs of protection, purchase, and/or manpower?
9. Access: What is the appropriate right-of-way access?

SPRING WILDFLOWER DISPLAYS

As many of us are aware, 1978 will prove to be an outstanding year for viewing wildflowers throughout Colorado. On a recent trip to the western slope, I had the opportunity to do some botanizing along the Utah border, from Mesa County north to Moffat County. Along U.S. Highway 50 between Fruita and the Utah border were spectacular displays of Sphaeralcea (GLOBE MALLOW) and Calochortus (MARIPOSA LILY). Environmental conditions permitted luxuriant growth of the Mariposa Lily, which in some areas grew in clumps of from 5-10 plants. Other annual taxa were also abundant, including several species each of Gilia, Mentzelia, Oenothera, Camissonia, Eriogonum, Lupinus and Ipomopsis. Several other uncommon species were encountered in great abundance, including Androstegium breviflorum, Astragalus asclepiadoides and Pediocactus whipplei. Similar displays were observed throughout much of north-western Colorado. With the high levels of moisture precipitated as snow in the higher elevations throughout Colorado, the 1978 summer should offer some excellent opportunities for botanizing throughout the state.

AREAS OF BOTANICAL INTEREST

North Park of Jackson County (July-August)
Access from ~~Gandy or Kremmling~~ to the south and via Laramee from the north. Highway 14 over Cameron Pass is undergoing extensive work this summer and will result in considerable delay. Numerous localities in North Park are of botanical interest, particularly the Lone Pine Creek Trail and the Big Creek Lakes area. Buffalo Pass north of Rabbit Ears Pass will not open until late July. Travelling from Steamboat Springs? Be sure and visit the subalpine meadows along the old highway at the Pass.

South Park of Park County (late July--August)
A pleasant trip over Hoosier Pass south to Antero Junction and then to a number of different junctions and highway will reveal a diversity of alpine and subalpine communities as well as the extensive meadows of South Park. If you possess a highlung vehicle, try the road over Boreas Pass from Breckinridge to Como. A handsome stand of Bristlecone Pine occurs about 5 miles east of Breckinridge as well as extensive alpine meadows along the north-eastern slopes of Mt. Silverheels.

GREY ROCK MOUNTAIN FIELD TRIP

The field trip to the summit of Grey Rock Mountain on May 27 yielded some interesting plant sightings. Among the more notable species encountered were such ferns as Asplenium septentrionale (GRASS FERN), Asplenium viride (GREEN S. WORT), Asplenium trichomanes (MAIDENHAIR SPLEENWORT), and Cheilanthes fendleri (FENDLER LIPFERN). The summit of Grey Rock Mountain also supports an extensive population of Oreoxis alpina (ALPINE PARSLEY), a plant more commonly found in alpine tundra throughout Colorado.

