Native Plant Society of New Mexico

january–february 1980 newsletter

VOL 5 No. 1

PROGRAM SCHEDULE, Santa Fe Chapter

January 16: Bill Briggs from the Albuquerque office of the Nature Conservancy will talk on land acquisition in the State of New Mexico.

February 20: Fred Gross of the State Department of Natural Resources will describe the native vegetation prior to the 20th century and discuss some of the impacts of man and grazing.

March 19: Craig Jones of Los Alamos will talk on lichens and hopefully will lead a day field trip, pending his schedule for that week.

April 16: Helen Cannon on Geobotany (tentative).

May 21: Michael Moore will speak on herbal and medicinal uses of some native plants of New Mexico. He will also lead us on a field trip, as yet unscheduled, to describe identifying, collecting and preserving these plants.

June 18: Bill Isaacs of the State Heritage Program will discuss rare plants in the Santa Fe area and has also promised us a field trip.

July 16: Native Plant Landscaping Workshop conducted by Agua Fria Nursery and Plants of the Southwest.

NOTE: The Santa Fe Chapter of the Native Plant Society of New Mexico meets on the third Wednesday of every month at St. John's College in Room 118 of the Laboratory Building, 7:30 p.m. Our meetings are open to anyone interested and refreshments are generally provided. A special thanks goes to our Program Committee for organizing such an interesting diversity of speakers for the coming year.

The Las Cruces Chapter meets on the second Wednesday of every month at New Mexico State University. For more information contact Bob Reeves at 646-3021.

THREATENED OR ENDANGERED CACTI

During the months of October and November 1979, seventeen southwestern cacti were listed as endangered or threatened under the Endangered Species Act of 1973. Following is a list of the New Mexico cacti with Federal Register citations:

Coryphantha sneedii var. leei (Threatened: FR 44(208): 61554-61556)
1. southwestern Eddy County
2. eastern edge of Guadalupe Mountains
   Elevation: 1230-1890 m.

Coryphantha sneedii var. sneedii (Endangered: FR 44 (217): 64741-64743)
1. soueastern Dona Ana County, NM and northwestern El Paso County, TX
2. southern Organ Mountains, Bishop's Cap, and Franklin Mountains
   Elevation: 1300-1650 m.

Echinocereus kuenzleri (Endangered: FR 44(209): 61294-61927)
1. Otero and Chaves Counties (eastern edge of Central Highlands and Lincoln County)
   Elevation: 1740-1860 m.

Pediocactus knowtonii (Endangered: FR 44(210): 62244-62246)
1. northeastern San Juan County
   Soil: Rock-land-Travessilla
   Elevation: 1800-1950 m.

Sclerocactus mesa-verdae (Threatened: FR 44(211): 62471-62474)
1. Montezuma County, Colorado (Four Corners Platform area extending into San Juan County, NM)
   Soil: Mancos shale
   Elevation: 1200-1800 m.

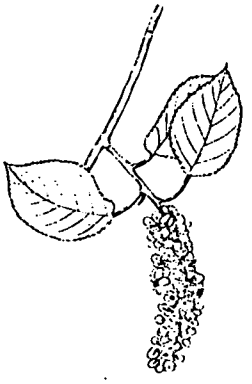
It is our annual responsibility to elect a Board of Directors! We have neglected this task of late, and so have this fresh and distinguished slate for 1980. In the future, recommendations for nomination should be made to the State Coordinator and will be included in the annual election. Please choose seven of the following nominees and return your ballot to the newsletter editor. Thank you!

Fairley Barnes ____
David Deardorff ____
Carol Dimeff ____
William Martin ____
Bill Isaacs ____
Roger Peterson ____
Melissa Savage ____
Write in _____

CHARACTERISTICS OF SOME COMMON PLANT FAMILIES IN NEW MEXICO*

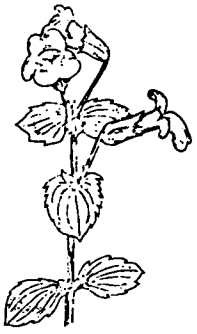
*Notes taken from a lecture given by Irene Mitchell at our November meeting in Santa Fe. Irene has been photographing our native flora for many years and is a regular garden columnist for the Denver Post. Thank you, Irene, for sharing your slides with us.

Compositae, also referred to as Asteracae, is a large family with numerous representatives in New Mexico. Leaves are seldom compound, usually simple and alternate, stamens usually five. The main distinguishing feature is they have two kinds of flowers, both having sexual parts, but arranged on a head to appear as a single flower. Amateurs may be confused to find some composites have only ray flowers, like Chicory and Dandelions, while others have only disc flowers (e.g. Chamisa, Goldenrod and Brickelia). Erigeron looks alot like our common purple aster, but has a double layer of ray flowers and they are thinner. Gayflower (Liatrus punctata) may also be puzzling because it looks more like an orchid than a typical composite.



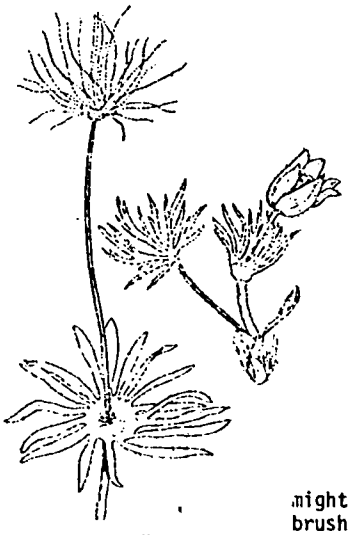
CHOKECHERRY

Rosaceae is well represented in the trees and shrubs of New Mexico. Pleated leaves with serrated edges is a common expression of this family, born alternately along the stem. Sepals are usually 5 or 4 and partly united; stamens 5 to many; ovary inferior. Many members of the rose family form plumes when they go to seed, like Apache Plume (Fallugia Paradoxa) and Mountain Mahogany (Cercocarpus montanus). Some other species of this family include raspberry, wild rose, thimbleberry, serviceberry, chokecherry and the cinquefoils. Chokecherry (Prunus virginiana) grows in moist areas of the Jemez and Sangre de Christo mountains. Most of the cinquefoils or Potentilla are shrubs, except P. thurberi, which is a groundcover and is native only to Arizona and New Mexico.



MONKEY-FLOWER

Ranunculaceae, the buttercup or crowfoot family, includes a tremendous variety of herbaceous perennuals having interesting leaves and flowers. Penstemons may be among the best known and loved. Delphiniums, Monkey-Flower (Mimulus), Baneberry (Actaea rubra), and the vine Clematis are also in this group. Buttercups can often be distinguished by their shiney petals (genus Ranunculus). Our beautiful Pasque Flower (Anemone patens), one of the earliest to bloom in spring, has wooly sepals that



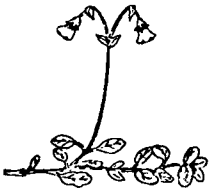
PASQUE FLOWER

might look like petals. Paintbrush (Castelleja) and Owlclover (Orthocarpus) are noted for their colorful bracts enclosing tiny, greenish flowers. The figworts (Pedicularis) have an interesting ferny foliage and a long flowering period.

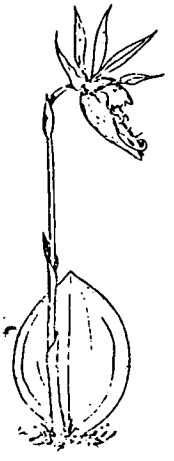
The pea family, Leguminosae or Fabaceae, includes some important trees and shrubs in New Mexico. The New Mexico Locust (Robinia neomexicana), Mesquite, Acacia, and Texas Mountain Laurel or Mescal Bean (Sophora secundiflora) are examples. If you catch the plant in fruit, it is easy to identify this family by its legume or pea. Otherwise look for pinnately compound leaves, usually entire, a superior ovary with 4-10 stamens, often united.

In montane areas where the soils are peaty and acid, you may be lucky to come across a member of the Araceae or philodendron family. 5 or 4 sepals and petals with stamens equal to or double the number of petals. Examples include Twinflower (Linnaea borealis) and Monescis uniflora.

TWINFLOWER



The Lily family is easily distinguished. These are monocots with perfect, regular flowers and all flower parts come in 3s or 6s. When veins run parallel with the leaves, you can expect its a monocot. Examples include yuccas, wild onion (Allium spp.), Mariposa Lily (Calochortus gunnisonii), Corn Lily (Veratrum californicum), Wood Lily (Lilium philadehicum var. andinum) and Solomons Seal (Smilacina stellata).



FAIRY SLIPPER

New Mexico also has a number of orchids native to the state, another monocot family. Those most frequently seen are the bog-orchids of the genus Habenaria, having small green or white flowers. Favored among collectors are the yellow Ladyslipper (Cypripedium calceolus var. pubescens), which is in danger of extinction, and Fairy Slipper (Calypso bulbosa), which also should be protected because it is a very-fragile plant and picking or transplanting usually destroys the roots. Most of our native orchids are found in moist places, but there are a few dry species, like the red Corallorhiza.

THE NEW MEXICO NATURE CONSERVANCY

The Nature Conservancy is a national, non-profit conservation organization whose single goal is the preservation of ecological diversity through the protection of natural areas. Since 1950, the Nature Conservancy has helped in the preservation of over 1.5 million acres - forests, prairies, mountains, deserts, wetlands and islands - in over 49 states and Central America, including over 240,000 acres of significant land in New Mexico alone.

A year ago a field office was set up at 610 Gold Avenue, SW in Albuquerque to handle the increasing interest in land preservation in New Mexico. There are currently 350 members in New Mexico. The State Heritage Program works with office manager Bill Briggs by pinpointing desirable natural areas and making recommendations.

State objectives include:
(A) Identify areas that either provide habitat for endangered species or represents a unique ecosystem worthy of preservation.
(B) Determine appropriate method of protection:
- Acquire through donation or purchase at full or partial value.
- Obtain conservation easements or agreements with the owner not to use pesticides or subdivide the property.
- Locate an effective stewardshop (usually a government agency) that will properly enforce the provisions specified in a contract of sale.
- Increase protection of all areas under government agency control by promoting public awareness.

Accomplishments to date include:
(1) Purchased 220,000 acres (the Sevilleta Land Grant) from the Campbell Farming Association, one of the worst overgrazed areas in New Mexico. The land has since been turned over to the U. S. Fish and Wildlife Service, which is studying what will happen to the native vegetation over a period of time if left alone.

(2) Given 665 acres in Water Canyon, Mt. Taylor, which in turn has been passed on to the Biology Department at UNM (Donor's wish) for study purposes.

(3) Purchased two tracts along the Gila River, one at Turkey Creek. Both reparian areas, totalling 95 acreas, are to be sold to the U. S. Forest Service for management and protection.

(4) Purchased the Sargent Wildlife Refuge, west of Chama, also to be sold to a federal agency. This is a good example of how The Nature Conservancy can make a purchase when the land comes up for sale and turn it over to a government agency when they get the money. A revolving fund recycles the Conservancy's money in order to increase its purchasing power.

A future goal of The New Mexico Nature Conservancy is to turn over a preserve to the stewardship of its members or volunteers. The Conservancy is now looking at 20 different areas identified in the State, but one problem is finding one that is close enough to a population center where sufficient volunteers can be mobilized. This project would make an excellent learning experience for a school or youth group.

The Nature Conservancy, the "quiet conservationists", has developed a healthy and mutually advantageous prototype for cooperation between the private sector and agencies of the federal, state and local governments. If you'd like to become a member, you'll receive bi-monthly the beautiful "Nature Conservancy News", which keeps you informed about Conservancy projects and contains interesting articles about nature, ecology and endangered species. You'll also be kept up-to-date on conservation news in New Mexico through periodic newsletters and bulletins. Send your check ($15/Family, $10/Subscribing or $5/Student) to The Nature Conservancy, P. O. Box 1846, Albuquerque, NM 87103. Contributions are tax-deductible.

TRANSPLANTING CHAMISA

This is a good time of year to transplant young Chamisa plants from sandy arroyos into your home landscape. Actually, any time during winter dormancy is best for perennials. One NPS member, David Howard of Chamisa Landscaping, offers these suggestions:

Look for plants that are no more than 2-3 feet tall and plant to dig down at least 1 foot. Try to pull the tap root out if you can, though this is usually not possible unless it runs along the surface. Have holes dug in your yard the day prior to digging. Try to get as much of the root as is possible and get the plant into the ground as soon as possible. Cut the plant back 5-6 inches to balance roots with top growth. It is not necessary to amend or fertilize the soil, unless it is particularly heavy, in which you may want to mix in some peat moss and/or sand. Water the planting hole thoroughly then mulch with any available material to help conserve water. Keep the hole slighly moist until the weather warms up and the plant shows sign of growth. If well-maintained most should survive the transplant (60-70 percent if watered well, 10-20 percent if not). One year later no supplemental watering should be necessary.

Pinons and Ponderosa Pines are also dug at this time of year and landscapers are busy digging now. Roots are balled and wrapped in burlap immediately. Ponderosa pines are more difficult to transplant than Pinons. If the root ball breaks, it'll probably die. Again, success seems dependent upon how the plants are maintained after digging.

Before you go out and start digging, it is necessary to obtain a collecting permit from the New Mexico State University Department of Agriculture. Then obtain permission from the BLM, the Forest Service or whoever owns the land in question. A permit to collect Chamisas costs only a few cents per plant, but you must have a tag for each plant collected. Permits to dig trees are more expensive. The Forest Service charges $3.60 for any tree 3-6 feet tall and $4.00 for trees larger than 6 feet.

Nurseries seem to prefer growing Chamisas from seed because you can grow hundereds of seedlings per flat and germination is easy. Seedlings are transplanted into containers filled with a mixture of sand, peat moss, soil and sometimes pumis in various proportions. A successful medium that is easy to produce is mostly sand with about 30 percent earth. If kept well watered, most seedlings will live.

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NEWS AND NOTES

Intermediate Plant Identification
Bill Isaacs, Instructor

Course Description: Spring flora and fauna. For those with some experience in plant identification or knowledge of plants. Begins Monday, March 24th, and the class will meet each Monday evening, 8-9:30 p.m., for eight consecutive sessions. Lectures will be held in Benildus 104 of the College of Santa Fe. Field trips to various interesting areas of New Mexico will also be taken. Register through the Office of Continuing Education anytime now through the first day of class. $35.

REGIONAL MEETING

The California Native Plant Society is sponsoring a meeting of western native plant societies or, in the case of Hawaii, native plant committee of the Botanical Society. The meeting will be held in Reno, Nevada, on February 23rd, and at least one representative of the Native Plant Society of New Mexico will be in attendance.

LOGO CONTEST

Original drawings are still being accepted for a new logo of the Native Plant Society of New Mexico. The winner will receive three different Penstemons in one gallon cans. Submit your entry to Carol Dimeff, Rt. 4, Puesta del Sol, Santa Fe, New Mexico 87501.

MEMBERSHIP

Dues for the calendar year 1980 are now being accepted by our new Membership Secretary, Dorothy DeWitt, 1414 Old Pecos Trail, Santa Fe, New Mexico 87501. If you paid mid year or later and feel an adjustment is in order, just make a notation to that effect and send Dorothy a check. It is important to hear from everyone if you wish to maintain your name on our mailing list. Also, our membership roster is to be updated soon.

BOOKLETS

NPS booklets are still available by writing to Carol Dimeff, Rt. 4, Puesta del Sol, Santa Fe, New Mexico 87501, and sending $1.15 (includes postage) for either Native Plants for Landscaping in Southern New Mexico or Native Plants for Landscaping in Northern New Mexico with its 8-page supplement.

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BOOK REVIEW

Survival or Extinction: The Practical Role of Botanic Gardens in the Conservation of Rare and Threatened Plants

Edited by Hugh Synge and Harry Townsend
The Bentham-Moxon Trust, Royal Botanic Gardens, Kew, Australia, 250 pp

This book comprises the proceedings of a conference held at the Royal Botanic Gardens in Kew, Australia. The conference aimed to highlight the crucial role of botanic gardens in plant conservation.

One principle emerges clearly: conservation in the wild is nearly always the most desirable policy. Indeed, the conservation activities of botanic gardens are most successful when directed to that end.

In numerous ways the conference pointed the road ahead as well as providing success stories in the following areas:
- establishing a new garden with minimal resources;
- undertaking a joint program with botanic gardens and conservation bodies to conserve threatened or endangered species;
- developing ideas for 'evacuating' critically endangered species to rehabilitated ecosystems;
- extracting support funds from government agencies.