Native Plant Society of New Mexico newsletter

VOLUME VII NO.3

MAY-JUNE 1982

May/June Southeastern Chapter has no set meeting date. For information on these months, call Nina Eppley at 622-1226.

May 5 Albuquerque Chapter meets(1st Wednesdays): Zane Dohner will show a film on the wildlife of the Sandia Mountains. 7:30 pm, Museum of Albuquerque, 2000 Mountain Rd. NW.

May 6 Glenn Niner Chapter meets(1st Thursdays): A walking tour around the Plant Materials Center in Los Lunas led by Lisa Johnston and Judith Phillips. 7:00 pm. Plant Materials Center, 1036 Miller St SW.

May 8 Las Cruces Chapter Field Trip to the Old Refuge. Meet at 8:00 am.

May 13 Las Cruces Chapter meets(2nd Thursdays): "When a Rose is not a Rose" is the topic of member Dovie Thomas. 7:30 pm. NMSU Ag Building, Room 156.

May 16 Albuquerque Chapter Field Trip to the Rio Grande Nature Center, 2901 Candelaria NW. 1:30 pm. Meet at the building and one of the staff will take us around.

May 19 Santa Fe Chapter meets(3rd Wednesdays): Landscape architect, Craig Campbell will speak on Landscaping with Native Plants. 7:30 pm. St. John's College, Lab Building, Room 118.

May 22 Santa Fe Chapter Spring Plant Sale. 9 am to 5 pm. at the Institute for American Indian Arts, Cerrillos Road. Come and see us!!

May 23 Otero-Lincoln Chapter meets(last Sundays): Field trip to Oliver Lee State Park, led by Darrell Warren. 1:00 pm. Approximately a 4 hour tour. Manz Nursery(cacti grown from seed) is down the road for those interested.

June 2 Albuquerque Chapter meets: Dan Scurlock will speak on Medicinal and Edible Plants in New Mexico. 7:30 pm. Museum of Albuquerque.

June 3 Glenn Niner Chapter meets: Workshop on how to do vegetative cuttings, layering, and other types of propagation. 7:00 pm. Plant Materials Center.

June 10 Las Cruces Chapter meets. NMSU Ag Building, Room 156, 7:30 pm.

June 16 Santa Fe Chapter meets: Chuck Chirieleison from Mountain Southwest will speak on Drip Irrigation Products for Landscaping Uses. 7:30 pm. St. John's College.

June 28 Otero-Lincoln Chapter meets: For information on this meeting contact Jean Dodd in Alamogordo(434-3041) or Bill Mayfield of Bent(671-4617).

MESSAGE FROM THE PRESIDENT

Native plants, like everything else, live when they can and die when they must. They have survived nature's millennia of perils only to arrive at a near-terminal illness aptly described by Dr. John H. Madison as Management Disease.

We aren't in control of the seasons nor of the geology that produces soils nor of the populations of insects and the pathogens. But must Management be a thunderhead of interference with the greatest success on record?

Mary C. Wohlers

WANTED: NATIVE PLANT STORIES AND ARTICLES

A kit is being put together which should be a big help in attracting new members, forming local nuclei for future chapters, and generally strengthening interest and activities in local chapters. Major feature stories have appeared in regional press; articles in New Mexico Magazine, Organic Gardening, Mother Earth News, Naturescape and many others. Informal write-ups of unusual chapter activies welcome. Duplicate copies useful so that more than one file may be established to lend to local or proposed chapters. Please send the material to NPS NM V-pres. Bill Mayfield, Star Route, Bent NM 88314. Once this is assembled, it will be available to any chapter.

EXTINCTION IS FOREVER

I want to urge all of the members of the New Mexico Native Plant Society to devote a small amount of time to a very important issue: the Reauthorization of the Endangered Species Act. First, read or reread the Special Edition of the newsletter and second, follow its advice.

With a certainty of being redundant, I am going to reiterate some points from the Special Edition newsletter and add a few comments. The Endangered Species Act(ESA) was originally passed in 1973 and is scheduled for one of its periodic reauthorizations this year. It is an extremely important piece of legislation designed to offer protection for threatened and endangered species of plants and animals and their native habitats.

With their short-sighted anti-environmental policies the Reagan-Watt administration is seeking to gut the ESA of whatever strength it presently has. The Endangered Species Act is endangered. Only through the expressed concern of those who care is there any hope for the ESA. The intense lobbying by development interests who seek to destroy the ESA is being fought by a coalition of some 25 national and international organizations. It is particularly important that as many of us as possible write soon to our Congressmen, particularly Senator Pete Domenici. He is on the Senate Environment and Public Works Committee, which will be conducting hearings on the ESA during April and May. The ESA must be renewed by Congress and signed by the President by October 1, 1982.

Amendments are bieng proposed to eliminate plants and amphibians from consideration by the ESA. You should urge Senator Domenici to work for a strong ESA which gives equal protection to all endangered plants and animals. In the present draft bill before the Senate committee there are several very undesirable amendments. One of these seeks to weaken sections 7 and 9, which relate to the actions of federal agencies and to criminal penalties for "taking" endangered species. The alternate amendment proposed by the National Audubon Society concerning these sections should be recommended.

There is no second chance. Extinction is forever. Our industrial civilization in its blind power is destroying our natural heritage, the diversity of living species resulting from hundreds of millions of years of evolution. When we bulldoze the last of a species of wild orchid, cactus or other plant or animal, we lose a genetic resource of incomparable value. We lose a creation more beautiful, complex and unique than any work of art; and for what, a few kilowatts of energy most of which we waste.

-T.A.

SANTA FE

Reggie Fletcher, regional Botanist for the US Forest Service, spoke to the Santa Fe chapter in March on Threatened & Endangered Species. As more and more populations of rare plants are discovered, the Federal Government has dropped species from the T & E listing. In December 1980, 79 species were deleted. Another 70 species are expected to be removed this year, bringing the total listed, proposed or nominated to 154 species in Arizona and New Mexico. Only 12 species are now formally recognized as either threatened or endangered.

The Forest Service intent is to reduce the number to include only good candidates for listing that warrant federal protection. There is also a sensitive species list for those species that need special attention but aren't formally listed. Most of the examples Reggie showed us were plants in isolated mountain ranges in southern New Mexico.

A handbook of Threatened & Endangered species in New Mexico , with line drawings, is being published by University of NM press. It should be ready for distribution by late summer or early fall.

If you discover what you think might be a new population of an endangered species, contact Reggie Fletcher (Alb), Bill Isaacs (Santa Fe) or Rich Spellenberger (Las Cruces).

-C.D.

LAS CRUCES

The April 8th meeting was given by Jeff Lewis of the New Mexico Soil and Water Conservation Division. He discussed the history of why the Division was established, and its relationship to local and national soil and water conservation districts, and the function of the Division. A major water pollution problem in New Mexico is sediment deposit, said Mr. Lewis. The New Mexico Soil and Water Conservation Division gives technical assistance at the local level concerning planning and administration of the long range conservation goals established by the local districts.

-J.L.

ALBUQUERQUE

Dr. Jeff Gottfried of the New Mexico Museum of Natural History spoke at the March meeting of the Albuquerque Chapter. He told us of the museum's fund raising efforts and brought a model of the future museum building, explaining some of their ideas for exhibits. Of particular interest to society members will be the native landscaping which will be used in the from of the museum. Beginning with a Chihuahuan desert zone complete with cacti, yucca, agaves etc a path will wind through the pinyon-juniper zone to the higher elevation zones with various evergreen species. Throughout this landscape exhibit, wildflowers of the various zones will be planted.

Inside, the museum plans call for various biological provincial regions (Plains, Rocky Mountain etc.) in which both fossil and current representative of faunal and floral life will be exhibited. There is going to be a center for nature study with facilities for public use in identification and study of plants, rocks, animals,etc. There are also plans for reference library of natural history materials which will be available for research use by the public.

All in all, exciting times are ahead for those interested in the natural world around them, especially for those of us in New Mexico. However, none of this can be achieved without the help of all of us who want to see the museum become a reality If possible, senda a contribution to the New Mexico Museum of Natural History Fund Raising Committee, P.O. Box 7010, Albuquerque NM 87194. A $15.00 contribution will make you a member of the museum and you will recienve the museum newsletter (already being published) informing you of upcoming field trips being planned in conjunction with the Museum Foundation. One trip is being planned to three caves in southern New Mexico including a tour to Carlsbad Caverns at night through an entrance closed to the general public. Another trip being planned for June which will be led by Paul Knight of the State Heritage Program, will begin at the Rio Grande and work its way up to the crest of the Sandias examining the plant life and flowers along the way.

-T.H.

At night a beehive may seem asleep, but if you put your ear to the door(an act of bravery in itself), the sound you hear will astonish you. Wax makers are hanging torpidly in corners while being gorged with honey by their fellow bees. They are exuding wax plates from glands under their abdomen. Others pull off these plates of beeswax and take them to various construction areas where wax formers masterfully form the wax into beautiful hexagonal-shaped honeycomb. All night the nursebees stick their heads down into cells of honeycomb to feed and care for the larval bees. The queen is laying eggs. Bees are ripening honey by drawing it out and letting it drip back into other cells while other bees fan air over the combs to evaporate water from the ripening nectar and ventilate the hive. Cleaning bees are gathering bits of debris, dead bees, wind-blown leaves and are taking them to the door to be taken out in the morning. Bees are feeding bees. Work, work, work. Bees become inactive for a few minutes a day but never really sleep.

At night the field bees, the ones people see out on the flowers and around waterholes, help with hive work, or just hang around and buzz their wings to make heat. (Wax can only be formed at temperatures of 100-110°F.). As soon as it gets warm enough, thousands of them are off, gathering tens of thousands of droplets of nectar a day. They also gather pollen from the stamens of the flowers. Many gather water to humidify and cool the hive during the hot, dry New Mexican days. Others gather a gummy substance from the buds of poplar trees and other plants. This gummy substance, called propolis, has antibiotic properties and is used to fill cracks in the hive and to disinfect the hive.

Soon the air is filled with bees out gathering a living for the hive. The scout bees are looking for water, propolis producing plants, new flower patches, or even new places to set up a hive, just in case the hive needs to move or send out a swarm.

A scout bee's life can be very interesting here in New Mexico. Seeds dormant for many years can suddenly sprout to life after a few unexpected rains, bringing forth unexpected blooms. They are always poking around colorful flowers, such as mesquite, desert marigold, clover and indigobush. They also pollinate many garden crops such as squash, cucumbers, melons, and corn. When a scout bee finds something good, it fills its storage tank or pollen basket with the loot and rushes off to the hive. There the scout passes some around to the waiting field bees. The bees gather around the scout in a circle, watching its curious little dance. The direction and amount of movement in the dance somehow tell the bees watching how to find the flower patch. When the dance is done, the audience rushes off to find what the scout has told them about. Then the scout repeats the dance for another set of bees.

A bee has a number of problems, too. Certain birds eat them, wasps and hornets attack them in midair and bite their heads off to squeeze nectar and honey out of the bee's storage tanks. Spiders trap them, Fly swatters squash them, and little boys step on them. But worst of all is the poison. Misinformed gardeners spray them.

Chemical companies invent microincapsulated insecticides that look like shiny apples to all pollinating insects. The pollen-gathering insects gather these little poison pellets as if they were pollen and take them into the hive or nest. Thousands of bees die this way every year. The New Mexico Department of Agriculture, charged with enforcing pesticide-use laws is the most flagrant violator of those laws. They illegally killed thousands of bee colonies last year.

We must learn how to use insecticides only as a last resort and only when they are needed, instead of when the chemical companies tell us we need to. Spraying or dusting on calm evenings with a short-lived insecticide helps. Also, quickly cutting flowers that attract bees is absolutely necessary before using insecticide.

Let's get beekeepers and botanists together more often and find out what native plants are useful to bees. Often an area begins to produce nectar or pollen and the beekeeper has no idea which plants the bees are working on. Some native New Mexican honeys such as desert marigold(Baileya multiradiata) and wild buckwheat(Eriogonum sp.) are very dif-

ferent and delicious. Bee pollen collected from bees here in the Rio Grande Valley is all the colors of the rainbow, including black and white.

The honey bee has a place in New Mexico. There were at least 18,000 colonies in the state in 1981, and they produced 702,000 pounds of honey(39 lbs/ colony). They pollinated orchards, crops, and native plants. They offered many hours of enjoyment to hobbyist and commercial beekeepers. Please don't spray them to death.

-L.C.

Cleome serrulata
Rocky Mountain beeplant

HONEY PLANTS

There are many plants that bees rely on as as source of nectar for honey. Two families the Pea (Leguminosae) and Mint (Labiatae) contain a large number of honey species.

Like people, bees have particular tastes and certain plants are preferred above ot-others. One of these is Indigobush (Dalea scoparia). The plants have a sweetish aroma and bees have been known to travel up to 7 miles for this nectar. (Normally they only go about 1-2 miles.) Another favorite is milkweed (Asclepias species). The honey bees are so impatient for this nectar that they will tear open the buds to get at it.

In New Mexico, Salt Cedar(Tamarix sp), although not a native, is a very important honey plant, producing a dark honey used primarily in baking.

A list of honey plants includes:

LEGUMINOSAE
- Amorpha fruticosa (False Indigobush)
- Dalea scoparia (Indigo bush)
- Medicago sativa (Alfalfa)
- Melilotus species (Sweet Clover)
- Petalostemum species (Prairie Clover)
- Prosopis juliflora (Honey Mesquite)
- Robinia neomexicana (New Mexico Locust)

LABIATAE
- Agastache (Giant-Hyssop)
- Marrubium (Horehound)
- Mentha (Mint)
- Monarda (Bee-balm)
- Salvia (Sage)

OTHER PLANTS
- Allium species (Wild Onion)
- Asclepias species (Milkweed)
- Baileya multiradiata (Desert Marigold)
- Chilopsis linearis (Desert Willow)
- Cleome serrulata (Rocky Mt. Beeplant)
- Eriogonum species (Wild Buckwheat)
- Phacelia species
- Tamarix species (Salt Cedar)
- Wislizenia refracta (JAckass Clover)

For more information on bees see The Dancing Bees by Von Frisch.

PROPAGATION NOTES

Bioresearchers are cloning redwoods in the lab for export to France, and before long, we'll no doubt find a self-polishing apple in Stark's catalog. These exotic commercial applications of plant technology may work their way to the home grower, but simpler approaches are still viable.

A wide range of plants in New Mexico have yet to be grown from cuttings. This year I'm trying Cliffrose, Mexican Elderberry, Indigobush, Anisacanthus thurberi, and two Penstemons.

Home growers can take note of easy applications of simply obtained and used root stimulants to grow cuttings. No doubt you have bought commercial products at high prices. When I read G.G. Nearing's statement on propagation of evergreen plants: "Chemicals to promote root growth are to me something of an enigma, and after experimenting with them for a number of years I have stopped using them...", I began to wonder if Rootone is really what it's cracked yp to be. Nearing's article, "Wildflower Propagation" in the Brooklyn Botanical Garden's Volume 18, No. 1, is worthy reading for its description of his propagation techniques.

While Nearing downplays chemicals, Makota Kawase at the Agricultural Research Center in Wooster, Ohio, describes a method of growing softwood or herbaceous plants from cuttings by using a simple extract from the current year willow shoots.(See Organic Gardening, September 1981 or Ronald Smith's synopsis in the January, 1982 Pomona, the North American Fruit Growers Quarterly, Vol XV,No.1, pp 64-65.)

If willow extract will work, how about cottonwoods? And in the southern part of New Mexico, maybe we'll try two Baccharis species, B.glutinosa and B.emoryi, of the Gila Valley. Seepwillow is easy to root by forcing wands.

Adriance and Brison in Propagation of Horticultural Plants(p 122) suggest that "dilute solutions of vinegar and cane sugar" have been used successfully on some plants. These authors suggest keeping whatever auxin is chosen slightly below the toxic level with the strongest soaking to hardwood cuttings, next to intermediate to semi-hardwood and evergreen types, and the weakest to herbaceous plants.

-J.E.

OVERLOOKED

"Bryophytes new to New Mexico," by Ireland, Talbot, and Todsen (1981, Bryologist 84:423-425), reminds us that one group of native plants receives little attention here. Tom Todsen is of course a Native Plant Society member in Las Cruces, but for bryophytes he's mainly a collector; identification and taxonomic work are (so far as I know) out-of-state activities. The 1981 paper brings totals for the state to 189 mosses (including a Bryum theretofore known only on a Canary Island) and 45 liverworts--a fraction of Arizona's totals, presumable due to lack of collecting here. Let's!

Beginners can start with H.S. Conard, 1956, How to Know the Mosses and Liverworts, Wm. C. Brown & Co. The next stage for mosses os S. Flowers, 1973,Mosses: Utah and the West, Brigham Young Univ. Press. Available form the University of Colorado Museum, Boulder, are Wm. A. Weber's 1973 Guide to the Mosses of Colorado and a stack of punch-cards (1972): Random-Access Key to the General of Colorado Mosses.

- R.P.

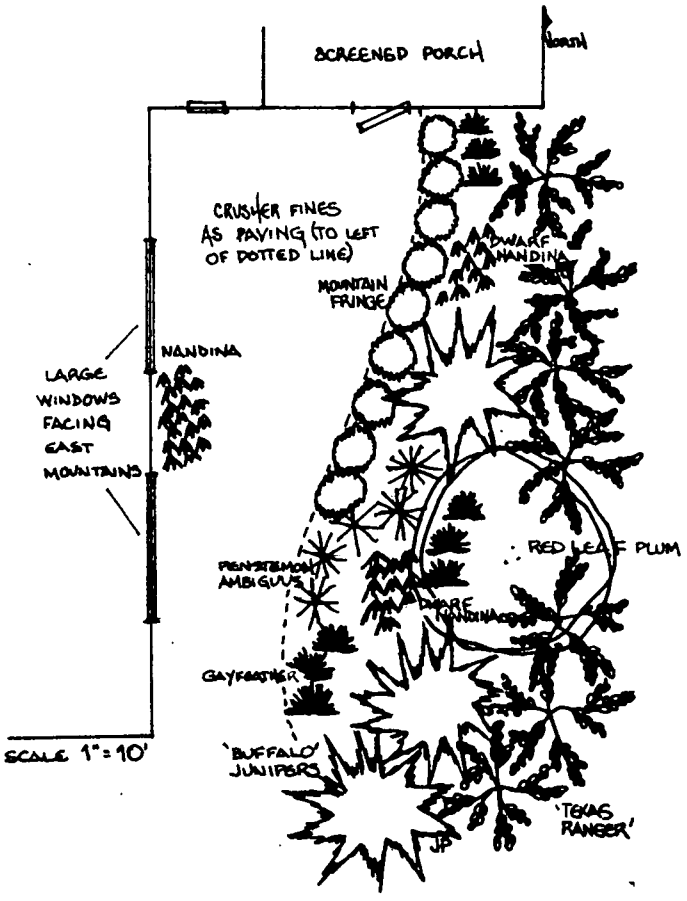
KESTRAL KAUTIONS

An addendum to Anna Deardorff's call for readying Kestrel boxes is in order. This most colorful of our falcons is an active grasshopper pursuer, but in southern New Mexico and areas where ground foraging lizards tend our vegetable and flower gardens, the Kestrel can in fact reduce our major natural check on insects. The whiptails, earless tree and fence lizards, wreck havoc on countless insects each summer. Kestrels are often seen atop a utility pole or snag eating lizards. I would suggest placing the Kestrel boxes in areas where dead trees have been felled for firewood, where natural cavities have been reduced, but nowhere near a garden. In northern New Mexico, the balance may tilt in favor of Kestrels nearby. Consider your lizards in the same breath, and if you want to increase reptile numbers where they appear scattered, introduce boards, logs and boulders near or in your garden. These basking areas are attractants, but then again, it's not a clear cut case. You may get sowbugs under the boards. So much for the Bongo board of nature.

-J.E.

"We have built a solar adobe home and still haven't a notion about landscaping one small space to the east of the house. Large windows look out toward the mountains and at present there is one Red Leaf Plum tree established there. Aside from Nandina, I'd prefer using natives to perhaps screen off the neighboring house and provide an attractive foreground for our mountain view. I especially like 'Texas Ranger'. . . ."

-Jean Dodd



Here's one idea we came up with. TEXAS RANGER(Leucophyllum frutescens) used as a low screen provides year round soft gray colorfoil for the evergreens, but is especially effective in contrasting the Plum foliage. BUFFALO JUNIPERS(Juniperus sabina 'Buffalo') are a deceptively durable evergreen groundcover, providing an airy textural interest and fresh green color, with an 18" by 8' mature height and spread.

NANDINA(Nandina domestica and nana). The tall Nandina is located near the windows to tie the landscape into the room, while the dwarf Nandina works as a textural and color accent within the planting. Blazing red late fall and winter color keep the landscape interesting throughout the seasons. MOUNTAIN FRINGE (Artemisia frigida) as a border, extends the silvery colorfoil to the forefront of the landscape--another appaently delicate textural contrast that gets high marks for dependability.

PENSTEMON AMBIGUUS continues the flower color show from the early spring of the Plum through early and mid-summer. GAYFEATHER(Liatris punctata) intensifies the color of the Texas Ranger in late summer with its dramatic spikes of purple. You might fill in with DESERT MARIGOLD (Baileya multiradiata) for even more summer color until the permanent plantings mature.

The crusher fines as paving allows access to the windows(for cleaning) and the landscape(for tending and enjoy ng). A bench would give the option of mountain-watching indoors or out. Any alternate suggestions for Jean? Contact her at: 1302 Canyon Rd, Alamogordo, NM 88310.

-The Editors

Native Plant Society of New Mexico
P.O. Box 5917
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Rare or Endangered plants		
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Field trip		
Program planning		
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