Native Plant Society of New Mexico

NATIVE PLANT SOCIETY OF NEW MEXICO NEWSLETTER

September/October 1998 Volume XXIII Number 5

(Modified from the 1997 book, ***Wild Plants and Native Peoples of the Four Corners***, by Bill Dunmire Gail Tierney.)

UTAH JUNIPER

(Juniperus utahensis)

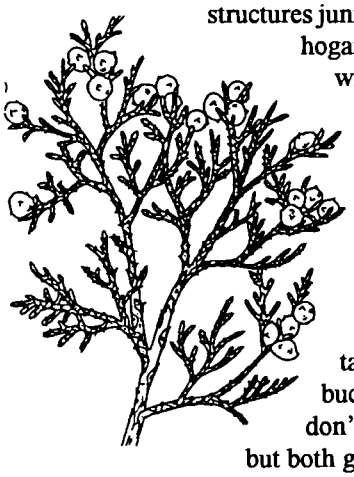
Although several species of juniper grow in Four Corners country, Utah juniper is by far the commonest; indeed, it seems to dominate mid-to-low elevation vegetation across the Colorado Plateau. This evergreen tree is sturdy-trunked, reaching to 25-feet tall. The tiny, scalelike leaves are aromatic, and the glaucous-blue, globular one-seeded berries produced on female trees are up to one-half inch in diameter. The berries of its nearest relative, one-seed juniper (*J. monosperma*), are just half that size and tend to be more greenish, then turning to purple when ripe.

Throughout the Southwest junipers collectively enjoyed a greater variety of Native American uses than any other group of wild plants. Coprolites that have been analyzed at Chaco, Mesa Verde, and a host of other Ancestral Puebloan sites confirm that juniper berries were regularly eaten. Although the berries of Utah juniper are rather dry and mealy, they make up for it in their generous size. All native peoples living in the Four Corners region and throughout New Mexico have relied on juniper berries for food at one time or another, especially during famine in times past. Hopi used to like to eat the berries with their famous piki bread, while the Navajo use water laced with ashes from burned juniper branches for making their blue cornbread.

Medicinal applications for Utah juniper are legion. This is especially true for the Navajo, who consider it one of their most revered plants. The wood is used to build a sweathouse, and juniper bark lines the floor. Various infusions of juniper twigs and leaves, sometimes mixed with other plants, are used by the Navajo to treat colds, headaches, stomachaches, nausea, acne and spider bites.

Hopi and virtually all other Pueblo women have a tradition of drinking juniper-sprig tea during labor or immediately after a child is born. An extract of juniper and sagebrush leaves has been taken for indigestion by Hopi; thus, it is not surprising that this mixture has been observed in coprolites from Ancestral Puebloan sites, suggesting that these plants regularly figured in concocting prehistoric medicines.

At many of the prehistoric villages juniper was used less often in construction than other trees. Only four percent of the wood beams at Pueblo Bonito in Chaco Canyon were of juniper, but juniper bark was favored by the Ute for covering their wickiups, which often were built of juniper branches and poles. However, Ute Indians avoided burning juniper in the central wickiup fire pit because "it might pop and set the shelter on fire". In less flammable structures juniper fuelwood is preferred to heat hogans or other homes because it burns with a hot flame and little smoke.



Juniper is a Navajo dye plant for wool. A boiled liquid of twigs, leaves and berries produces yellow to orange shades of tan. A mordant to fix other Navajo dyes comes from juniper leaf ashes and is traditionally used with mountain-mahogany root bark to dye buckskin moccasins red. The Hopi don't use juniper to create their dyes, but both groups string the seeds into necklaces, for sale everywhere in the region.

A host of other uses are associated with juniper. The bark is easily stripped from mature trees in long, loose strands, and it was used by Ancestral Puebloans to manufacture cordage, legging insulation in winter, roofing material and even toilet paper. Juniper bark was often wrapped with yucca to fashion prehistoric pot rests.

More recently the wood has been used to make hunting bows by the Ute. Navajo also crafted juniper bows as well as hoops for a baby's cradle, but unlike many Puebloans, they avoided using juniper bark as a cradle matting. According to Navajos, Utah juniper bark gives babies a rash. These people prefer to use shreddy cliffrose bark (*Cowania stansburiana*) for cradle matting.

Even the profuse yellow-green mistletoe (*Phorodendron juniperinum*) that often clings tenaciously to juniper branches (but does not really harm the tree) found uses among the Navajo. The globular, translucent berries of juniper mistletoe were once eaten fresh, although that's no longer the case today. A boiled mix of juniper and piñon sprigs plus mistletoe makes a lotion for ant or other insect bites. The berries, too, have had medicinal applications, including the prevention of baldness.

(See review of this book in this Newsletter, page 6)

Key to the Penstemons of New Mexico

David Bleakley has produced a key to the nearly 50 taxa (species and supspecies) of Penstemons in New Mexico. This should be a useful tool to accompany Jean Heflins new Penstemon book. The key was published in "The New Mexico Botanist" and is available in libraries and county extension offices.

Many thanks to Robert Dewitt Ivey for permission to use the wonderful drawings from his book *Flowering Plants of New Mexico*, in our *Newsletter*.

The ***Newsletter*** is published six times per year by the Native Plant Society of New Mexico. The Society is composed of professional and amateur botanists and others with an interest in the flora of New Mexico. Original articles from the *Newsletter* may be reprinted if fully cited to author and attributed to the *Newsletter*.

Membership in the Native Plant Society of New Mexico is open to anyone supporting our goals. We are dedicated to promoting a greater appreciation of native plants and their environment, and to the preservation of endangered species. We encourage the use of suitable native plants in landscaping to preserve the state's unique character and as a water conservation measure. Members benefit from chapter meetings, field trips, publications, plant and seed exchanges, and educational forums. A wide selection of books is available at discount. The society has also produced two New Mexico wildflower posters by artist Niki Threlkeld. Contact our Poster Chair or Book Sales representative for more information. Call chapter contacts for local information.

Advertising Schedule

Approved advertisements will cost $50 per year.

Membership Fees

Dues are $12.00 annually for individuals or families. "Friends of the Society" include organizations, businesses, and individuals, whose dues of $25.00 or more provide support for long range goals. To join us, send your dues to Membership Secretary, NPSNM, POB 5917, Santa Fe, NM 87502-5917

Newsletter Contributions

Please direct all contributions for the newsletter to Tim McKimmie, editor. See address below or email to tmckimmi@lib.nmsu.edu

Deadline for the next newsletter is October 1.

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REPORT TO NPSNM ON Biol. 120
BIOLOGY OF THE SOUTHWEST: FIELD BOTANY
Taught at Western New Mexico University, 6-22 JULY, 1 998

If one examines the major changes in the biology curriculum from grades K through 1 2 over the past 40 years it becomes obvious that there are two major omissions that the board of the Native Plant Society of New Mexico elected to address. First, the teaching of field courses in the life sciences has been steadily decreasing to the point of elimination. Second, the teaching of basic botany and the study of the local flora in those regions where the students live has been almost removed from the biology curriculum in elementary and secondary schools, as well as college biology courses. The reasons are easy to identify, and there is plenty of blame to go around, but that will not solve these serious problems in science education.

This is difficult to understand at a time when a rapidly growing portion of the larger society is moving from a homocentric, or "me society" to an ecocentic perspective in terms of what they consider of great value in their lives. Many more people are recognizing that they represent just one species out of millions of species of plants, animals and microorganisms, and that we each need to know much more about the lives of all living things. This attitude is reflected in the rapidly increasing memberships in organizations committed to protecting the environment, societies promoting the study of native plants and animals, and clubs devoted to the conservation of the natural world. Yet we are graduating students from our schools and colleges who know less and less about that portion of the green, natural world in their immediate vicinity.

This short course, that met from 8:00 to11:50 a.m. each day, forjust two and one-half weeks, was designed to provide an opportunity for an extremely heterogeneous group of enthusiastic teachers and other students to get to know more about the regional flora and discuss the various ways they might become more successful in teaching their students about the structure and function of the life zones where they live. This was a field and laboratory course, not constructed around lectures, but designed to compare the vascular flora of four major ecosystems in southwest New Mexico. In fact there were 1 3 students originally enrolled in the course, but three dropped the course when they discovered that this was to be a field course, a "doing course" if you will, and the amount of time the completing of the course objectives would require.

Because I have come to recognize over many years of teaching that both the teacher and the learners must be on the same wave length and have great enthusiasm for what they are studying, we made the philosophical basis of the course clear at our first few meetings. I wanted the students to understand that I did not have a hidden agenda, but that my value system for this course was constructed around just two important books. Aldo Leopold's, Sand County Almanac, with special emphasis on part three, "The Upshot", and The Geography of Childhood. Why Children Need Wild Places, which contains eight short personal stories written by Gary Paul Nabham and Stephen Trimble. Through the reading of the writings of Leopold I wanted the students to learn that conservation begins at home, all around us, and to develop a better understanding of the real and ethical values of those life zones that surround us. Although The Geography of Chidhood was not required reading, I encouraged the class to think about why children of all ages "need wild places" and that it is our role as teachers to be certain they experience these places. A CD-ROM or slide show can never replace the experience of being in nature.

We identified four plant communities for study: the pinyon-juniper-oak region; the ponderosa pine-oak region; a montane-riparian region; and the northern margin of the Chihuahuan desertscrub region. Beyond the vegetation we considered available moisture, elevation, soil, and flowering and fruiting dates for characteristic species. Collections were made, plants were identified and keyed using Flowering Plants of New Mexico (Ivey) and Trees and Shrubs of New Mexico (Carter). A short list of essay questions were distributed on the first day of the course that provided an outline for study beyond the classroom. Also, the students were encouraged to design classroom or research activities using higher plants that they might use in their teaching or that would promote the study of the regional flora. Several of the student projects will certainly be taken directly to their classrooms and involve their students in the study of the local flora.

Based on my personal experiences with this select group of people I feel we reached our objectives and that the native flora of New Mexico has a few good friends that will encourage the conservation of the green mantle that surrounds us.

Jack L. Carter
26 July 1998

CALENDAR

GILA

Sept. 20 Field Trip to the "Big Tree" at Ft. Bayard. 8 am. WNMU Fine Arts Building Parking Lot.
Oct. 4 Field trip to Bearwallow Mountain. 8 am. WNMU Fine Arts Building Parking Lot.

OTERO

Sept. 12 Edible Native Pot Luck. 2 pm Jack and Linda Green Home.

Sept. 18-20 Camping trip to Pelincillos.

Oct. 4 Wildflower walk at White Sands 7:00 **PM**

NPSNM Annual Meeting
Oct. 16-18, Amarillo Texas

LAS CRUCES

Sept. 9 "Landscaping with Native Plants" by Wynn Anderson. 7:30 pm. S.W. Environmental Center. 1494 S. Solano
Sept. 13 Field trip to White Sands Missile Range. 7 am. Kmart-Hwy 70
Sept. 19 Garden tour. 4 pm. 5259 Singer (Mandelkerns).
October 4. Field trip to San Diego Mtn. 8 am. Hwy 70 parking lot.
October 14 "Columbines" by Kelly Gallagher. 7:30 SW Environmental Center

ALBUQUERQUE

Sept. 3 "Landscaping for Wildlife" by Nancy Daniel. 7:30 pm, Albuquerque Garden Center, 10120 Lomas.

Oct. 1 "Diversity in NM Natural History" by David Hafner. 7:30 pm, Albuquerque Garden Center, 10120 Lomas.

Message from the Editor:

After much preparatory work and help from several others I will soon be preparing a Special Edition of the Newsletter. This issue will contain articles that focus on the native flora of our state and related issues such as landscaping and conservation. Many of the articles will be reprints or revisions of some of the better articles we have published in past issues of the Newsletter. However, I want to invite our members to contribute new material as well. If you know of a topic that you think should be included in this Special Edition, please write it up and send it in. The main criterion is that the material be such that it will not go out of date. This issue is intended to be "reprintable" as is for many years to come. Chapter contacts, please let me know how many extra copies your chapter wants.

On other matters, I'd like to encourage chapters to report on all of their activities, not just meetings and field trips in regular newsletter issues. What about plant sales, landscaping projects, or conservation efforts? Also I think we need more articles on northern NM flora, etc. Maybe our new members from Taos will contribute.

More and more, newsletter submissions are made via email. This proves to be a very convenient way to manage files. You may also send diskettes or laser quality material to scan.
Tim

IN A DESERT GARDEN

by John Alcock, W,W. Norton, New York, 1997, 186 pp., $27.50, ISBN 0-393-04118-2
Book Review by Alice Anderson

"Ancient Agaves have Rich History" reprinted from Southwest Lawn and Landscape in the July/October issue of this newsletter, recommended Diazinon to kill agave borers. I was surprised to see such a recommendation in this newsletter. Most of our members like to garden as naturally as possible. There are several reasonsnot to use such chemicals.
1)The agave borer grows up to be a rare and beautiful butterfly,
2)The agave borer has a fascinating life history, See James A, Scott, The Butterflies of North America.,Stanford Univ, Press, p. 420.
3)The agave borer and the agave have been living together for thousands of years without our help, Even if the borer kills a few plants occasionally the population of agaves persists.
4)Diazinon is a dangerous chemical* It can kill non-target organisms, upsetting the ecological balance many of us strive for.
5)A native garden is incomplete if it has only plants. To be an ecosystem, the garden needs a suite of other organisms, including animals (vertebrates and invertebrates), fungi, and bacteria. If the gardener kills the insects, the garden becomes aesthetically jejune.

John Alcock's *In a Desert Garden* chronicles his recreation of a fragment of Sonoran desert in his Tempe, Arizona suburban yard, A fragment isolated from the whole is unstable, so Alcock's garden required much care. He spent many hours pulling up the alien grass red brome, and the annual invasion of whitefliesf set off by short-sighted pesticide practices by nearby cotton growerst was troublesome. Nonetheless, Alcock is delighted with what his yard became. Since Alcock is by profession an entomologist,, he devotes much of his attention to the insects in his garden. Wasps, caterpillars, beetles, termites, and others are lovingly described. This book will help us all to see what is in our own desert places.

CHAPTER REPORTS

Las Cruces - Lisa Mandelkern

April 25/Earth Day

Our chapter participated in the Earth Day event at Klein Park in Las Cruces with some eight members working at our display. We sold quite a few "Chihuahuan Desert Gardens" booklets and some posters. People are always interested in native gardening! Terry brought two flats of seed grown native wildflowers to be given away, and they were gone quickly. John had our chapter's yearly schedule and other information about NPS on hand. Gregg loaned us several blooming native plants in one gallon pots. Thanks to everybody who helped, and thank you to the "Keep Las Cruces Beautiful" committee for organizing the event.

The April 8 meeting featured Laura Huenneke, professor of biology at NMSU. Her subject was "Global Warming". She discussed how one can judge what is really going on about global warming versus political opinion. The greenhouse effect in itself is not a bad thing, as a matter of fact, it allows life on earth to exist, because it creates a tolerable temperature range on our planet. Carbon Dioxide (CO2) is not the only greenhouse gas, but the most abundant. From 1958 to 1986 the concentration of CO2 in the air was measured at Mauna Loa observatory. From this data two conclusions were reached: First, the earth's living plants have an impact on the earth's atmosphere, and second, there is an accelerating increasing trend of more CO2 in the atmosphere. Deforestation (land conversion), soil and organic matter and fossil fuel (once below the ground!) all contribute to the increase of CO2. What we do know is that there was a half of a degree increase in the average temperature in the last century, and that 1997 was the warmest year on record. We know that glaciers are decreasing and there is a temperature rise in the antarctic as well as Northern Alaska. At the Global Warming Conference of 1997 in Kyoto, the participants decided to recommend to limit the emission of CO2, and scientists around the world are working on computer generated global circulation models, to get more realistic climate projections. In reviewing the vast literature about global warming, it is important to check whether the text is a peer reviewed paper. One should also be aware an evaluate the institution that publishes the text. For example, caution should pervail with internet data - anything can be published there.

April 26/L.C. chapter field trip

John Freyermuth took our group to the Red House Mountain area, a few miles northeast of Hatch. We hiked a two and a half mile loop, climbing up a canyon for quite a while. Then we hiked up the east side of a mountain to the top and descended on the west side back to our parked cars. The canyon was lined with beautiful old twisted specimens of Juniperus monosperma (Oneseed Juniper) and plenty of Scutellaria potosina (Mexican scullcap), Salvia henryi (Crimson Sage), and Dalea formosa (Feather Peabush). Other blooming plants in the canyon and on the hill included: Bahia absinthifolia (Sageleaf Bahia), Stenandrium barbatum (Shaggy Stenandrium), Rhus microphylla (Littleleaf Sumac), Streptanthus validus (Twistflower), Fallugia paradoxa (Apache Plume), Senecio douglasii var. longilobus (Threadleaf Groundsel), Nicotiana trigonophylla (Desert Tabacco), Erigeron sp. (Fleabane), Yucca baccata (Banana Yucca), Stephanomeria pauciflora (Wirelettuce or Skeleton Plant), Tiquilia sp. (Dog's Ear), Oenothera sp. (Yellow Primrose), Lesquerella sp. (Bladderpod), Linum vernale (Yellow Flax), Baileya multiradiata (Desert Marigold), and Dithyrea wizlizenii (Spectacle Pod), Thelesperma megapotomicum (Hopi tea, greenthread), Polygala scoparioides (broom milkwort). On the hillside we saw some eight different species of small cacti. In bloom and fruit we observed Epithelantha micromeris (Buttoncactus), These are not easy to spot, because of their small size. While the tiny pale pink flowers are almost hidden in the apex of the plant, the bright red fruits, often called "little chilies", certainly stood out. Echinocereus coccineus (Hedgehog Cactus) greated us everywhere with its bright red flowers. Lastly, about fifty yards from our cars, we saw some specimens of Echinocereus fendleri (Fendler's Hedgehog) with their huge magenta flowers. John had saved the best for the last. Fendler's hedgehog blooms only for a couple of days each year, and we had obviously hit the right weekend to see it.

Otero - Jean Dodd

On 7-18-98 the Otero Chapter went to the Holcomb Ranch as we previously have done in 1988,1991, and 1993-all in July. So far we have had dry days in the midst of the rainy season in the mountains. The group met in Timberon to carpool. Not too far down the road to the ranch we saw 5 deer-some on each side of the road. They turned and looked at us - like they were-the welcoming committee*

Once you park at the cluster of very old buildings it is not hard to know where to go* There is a well worn path up the mountain. Some of the group went all the way to Monument Springs(we were in Monument Canyon)._The water cascades over a moss covered caliche bluff.-How much water and moss is a function of.the amount of rainfall that year,

Some of the group stopped part way up where the water still cascaded down what looked like steps. One of the wonderful sounds was the water running down the hill. The other wonderful sound on the way back was the wind blowing through the trees, Was like a wind symphony, These are very, very old trees with lots of leaves to rustle.

Checking back we saw many of the same plants we have-seen before, Some of the trees are chokecherry, hop tree, velvet ash, Box elder, SW white pine, Doug Fir, Ponderosa pine, and N.M.Locust. The large trees towered overhead.

S.C. (Doc) Dodd died June 27, 1998 from the terminal stage of COPD (emphysema). Many thanks from his wife Jean for all the cards, gifts, food, kindness, and helpfulness of so very many people.

Native Plants for Southwestern Landscapes

Judy Meilke, U. of Texas Press, 1993
Review by Tim McKimmie

Somehow this book was not previously reviewed for the *Newsletter*. Recently I had an opportunity to take a closer look at it and decided that readers need to know there is a great deal of valuable information here. With the proliferation of landscaping books to appear in the past few years it is easy to get book"gun"-shy. This is particularly true for those works that attempt to be all things for all people. And although this book does encompass 3 deserts (the Chihuahuan, Sonoran, and Mohave) I think that it contains enough information to make it a valuable reference tool for even the most sophisticated native plant enthusiast.

The photos are beautiful and really seem to capture the essence of the plants. The plant descriptions are brief but packed with info. The sections on physical characteristics, landscapes uses, and native distribution enable the gardener to work the plants into their design scheme. Culture requirements include preferred soil type, temperatures, sunlight, and moisture regimes suggested for best results. The reader will have to search elsewhere for propagation information, however.

The bulk of this work describes 280 perennials including grasses. A section on annual wildflowers suggests 40 more plants to try. Introductory chapters treat soil preparation, weeds, irrigation, pruning, and revegetation. The index by plant type is somewhat unique in its categories, for example "deciduous tree", "evergreen shrub", etc., but also "seasonal color", "fragrant flowers", and "plants for attracting wildlife".

Why We Garden

Jim Nollman, Henry Holt & Co., 1994
Review by Tim McKimmie

Although this work does not focus on native plants it does deserve mention. The alert reader has noticed that gardening books are sprouting up everywhere. In this case, the particular genre is gardening philosophy and there are lots of new sprouts in this category too. Two notable features of "Why We Garden" are the way the author relates the activities of gardening to landscapes as a whole and the excellent prose. So good in fact, that it forces one to slow down and enjoy it, savor it, even ponder individual sentences.

Let it speak for itself. "... the Navajo of the American Southwest coined ... when we walk in beauty outside, we walk in beauty inside. It is an aesthetic statement rich in respect for the natural environment, a spiritual one-liner suggesting every reason ever set forth to develop a sense of place. Though the Navajo grow corn and beans, they do not utilize their gardens in the Western sense of a primary aesthetic expression of nature. Sand painting serves that function instead."

A minor distraction is the division of the chapters into months of the year which to me added nothing to the work. Indexed by subject with a handy bibliography for those who may want to try out related works.

Wild Plants and Native Peoples of the Four Corners

William W. Dunmire and Gail D. Tierney
Museum of New Mexico Press, 1997
Review by Tim McKimmie

Here is a work useful for many people including the amateur botanist, the traveler, herbalist, archaeologist, and those interested in Native Americans. Much more than a field guide, the parts of this work can be enjoyed on their own in a leisurely fashion. Beginning with geographic descriptions of the 4 corners area the book weaves stories of the pueblo culture and the design of villages, foods, clothing, and other ways in which plants were used. The maps are useful and the photographs magnificent. This is ethnobotanical literature that comes alive and the reader will likely come away craving more.

There are approximately 50 plants described. These are not the descriptions one would find in a field guide but rather descriptions of the usefulness of the plants to peoples who relied on plants on a daily basis for most of their needs. Both photographs and line drawings depict the plants, and often there is enough description in the text to make the work usable for identification in the field. The real enjoyment, though, will likely be through the stimulation of the readers imagination and musing over a lifestyle long disappeared. Nevertheless, as the authors point out, many of these plants are also useful in today's world.

Barton Warnock, professor and Chihuahuan Desert botanist extraordinaire, died June 11, 1998. Well known as author of *Wildflowers of the Big Bend Country, Wildflowers of the Guadalupe Mountains*, and *Wildflowers of the Davis Mountains*, Warnock had retired from Sul Ross University in Alpine Texas.

He discovered numerous new plants and had many plants named after him such as *Sclerocactus warnockii*. In 1937 after the federal government acquired the property for Big Bend National Park, Warnock was selected to catalog the plants. "He probably knew more about the Big Bend country than anyone else, alive or dead, not just the plants but the land, its history and its people" relates John Mac Carpenter, a former student.

The Native Redwood

Ahuehuete
Montezuma Cypress
Taxodium mucronatum

Mexico's Ageless Giant is New Mexico's Forgotten Redwood. We all know that the biggest tree in the world is a redwood. But consider that it may not be the redwoods in California but a species that grows from Central America up into Mexico and the watershed of the Rio Grande Valley. American Forests Big Tree Program does not keep a World Wide Register of Big Trees, but if it did, the Montezuma Cypress would surely be the biggest. The champion tree in the State of Oaxaca, Mexico, in the town of Santa Maria del Tule, has a circumference of 119 feet, a crown spread of 150 feet and height of approximately 170 feet. Consulting scientists have found that this huge Mexican tree is at least 3,500 years old and in good health. Because of deforestation and lack of regeneration only 12 specimens are found in the area of this tree with more occurring along the streams of the Northwestern Mountains of Mexico. Once covering Mexico and parts of Texas and New Mexico and the lower Colorado River basin, this mighty redwood is now limited to relict populations.

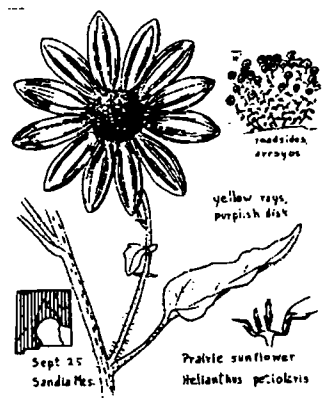
Having found redwood-like timbers in old missions, haciendas and other Spanish Colonial buildings in the Middle and Lower Rio Grande Valleys (such as the mission in Socorro, south of El Paso), I was convinced that this species could still be found somewhere in New Mexico. After years of collecting seed from trees in the Lower Rio Grande Valley and from Mexican trees, doing provenance testing and watching for cold tolerance something amazing happened! I collected seed from a large tree in the Mesilla Valley near Las Cruces, New Mexico and the progeny proved hardy down to at least minus 7 degrees F. As a rule the other populations I had collected from had a tolerance level of plus 10 degrees F. before major loss occurred. The tree in the Mesilla Valley is reported to be a cultivated specimen planted in 1926, but if you check the soil maps of the area, it is growing on a former river bank of the Rio Grande cir. 1900. This particular plant is approximately 90 feet tall with a crown spread of over 100 feet and a DBH of 5 feet. There are cultivated specimens over 400 years old in locations of longer growing seasons and more rainfall that are smaller than the Las Cruces tree. This makes me wonder if it is a native of the area and not planted in 1926 as reported. I was convinced that this type of redwood could still be found somewhere in a deep lost valley of Southern New Mexico. After years of hiking up stream beds, dry arroyos and deep canyons through-out the Southwest I found my trees on a small mountain stream, two trees and one stump to be exact. After collecting seeds and growing out the progeny of these two trees I have found the cold tolerance to be even greater than the Las Cruces tree with 2 year old whips surviving the cold winters of central Illinois at the Starhill Arboretum.

by Michael Martin Melendres, owner, Trees That Please Nursery, Los Lunas, NM

editors note: Trees that Please offers a wide variety of native oaks.

1998 Native Plant Society of New Mexico Annual Meeting

This years annual meeting will take place in Amarillo Texas, October 16-18. It will be in an area of scenic canyons such as Palo Duro Canyon. We will be meeting concurrently with the Native Plant Societies of Texas and Oklahoma. Field trips, speakers, workshops, a silent auction, plant sales, books, and more will be offerred. Registration materials will be mailed under separate cover at the end of August. Headquarters will be the Radisson Hotel near the airport.



Festival of the Cranes
November 20-22, 1998

New Taos Chapter Forming

An enthusiastic group of native plant lovers has emerged in the Taos area. They have submitted bylaws to the board of the NPSNM and requested affiliation as an NPSNM chapter. The board will consider this at it's next meeting on Sept. 12. The group has already had several meetings and field trips. For more information contact Sandra Ross at 751-9605.

Many thanks to Robert Dewitt Ivey for permission to use the wonderful drawings from his book *Flowering Plants of New Mexico*, in our *Newsletter.*

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