NATIVE PLANT SOCIETY OF NEW MEXICO
NEWSLETTER

November/December 1996 Volume XXI Number 6

Immortal Shrubbery
(*Quercus havardii*)

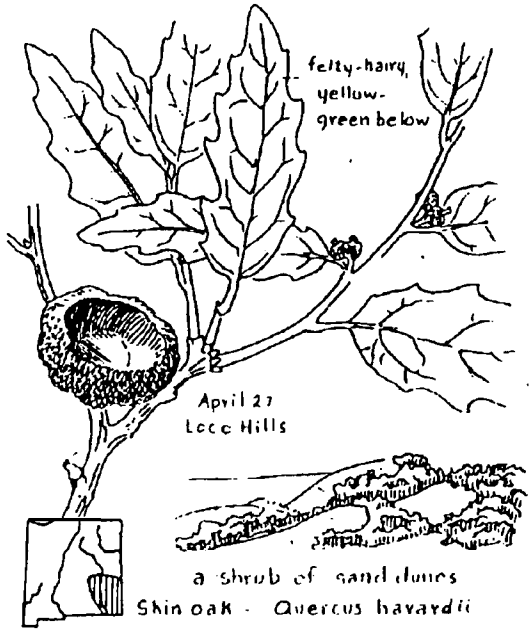
by Roger Peterson

Sand shin-oak (midget oak, Havard oak, *Quercus havardii*), dominates vegetation on more than a million acres of southeastern New Mexico and three or four million acres in Texas and Oklahoma. "Dominates" is the problem: until a century ago, these 1- to 3-foot-tall oak shrubs were sub-dominant under 3- to 6-foot grasses, so the shinnery (Louisiana French from cheniere, oak-wood) was by far New Mexico's most extensive tall-grass prairie. But cows prefer grass to shrubs and have disrupted the balance between the deep-rooted oaks and shallower grasses. Except in a few exclosures oaks have taken over and grasses struggle to get a share of the water. Instead of a thick grass-shrub mix, the shinnery now is a rather sparse shrubland, too open to protect soils and wildlife.

Ranchers (and therefore the Bureau of Land Management, which manages about a million acres) don't like shinnery: not only do the oaks compete with grasses but for several weeks in spring tannins of their leaves are toxic to cattle. So between 1981 and 1993 the Bureau sprayed 100,000 acres of New Mexico shinnery with tebuthiuron, eliminating or greatly reducing oak and at least temporarily converting treated areas to unnatural grass pastures.

Wildlife do like shinnery; in New Mexico, lesser prairie chickens and sand-dune lizards live nowhere else. On the Plains most of our white-tail deer spend at least part of their time in shinnery, and mule deer and antelope are common there. Shin-oaks, especially buds and the big acorns, are a main food for prairie chickens and mule deer. Wildlife have concentrated in shinnery for millennia; the ancients favored shinnery for bison hunts as well as acorn-gathering, and probably even-more-ancients hunted mammoths there. Pressure to protect habitat for prairie chickens, dune lizards, and other wildlife has led BLM to stop spraying oak, for now. (A 1991 resolution by the Board of the Native Plant Society was an important item in that pressure, thanks to Tom Wootten.)

A shin-oak is not easy to destroy; until tractors and herbicides arrived it didn't happen. The above-ground shoots are merely short-lived twigs of underground "trees" that may spread over a quarter-acre or more, and are probably immortal. Underground stems form intricate networks that can store water for future needs. The ratio of below- to above-ground mass is more than 10 to 1, reportedly to 16 to 1. The massive underground systems can be seen in shifting sands, for instance in the dunes south of US 380 35 miles east of Roswell.



Shin-oaks avoid birth as well as death. In the millions of acres of shinnery not a single young oak has been found; all are hundreds or thousands of years old. Fresh acorns grow readily in greenhouses, and they'll sprout underground in packrat nests, but apparently under our present climate they don't reproduce the species. The Soil Conservation Service for decades called shin-oak an "invader" to be resisted, not noticing that a species that doesn't reproduce can hardly invade new areas.

Inside...

(*Quercus havardii* cont'd from page 1)

Except for bison (and mammoths?), no one has designed a grazing system to protect the grass-shrub balance of healthy shinnery. Perhaps systems that approach that of bison-single herds visiting a given area seldom-would work. Oak-defoliators, notably a buckmoth larva that specializes in shin-oak and the lined bird locust (abundant in 1996), may temporarily shock the oak enough to release grass growth, but these agents haven't been known to do much over large areas. Fire may be an answer, although the number of oak shoots (as well as grass growth) may increase after fire.

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 $40 per year.

Membership Fees

Dues are $10.00 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 December 1.

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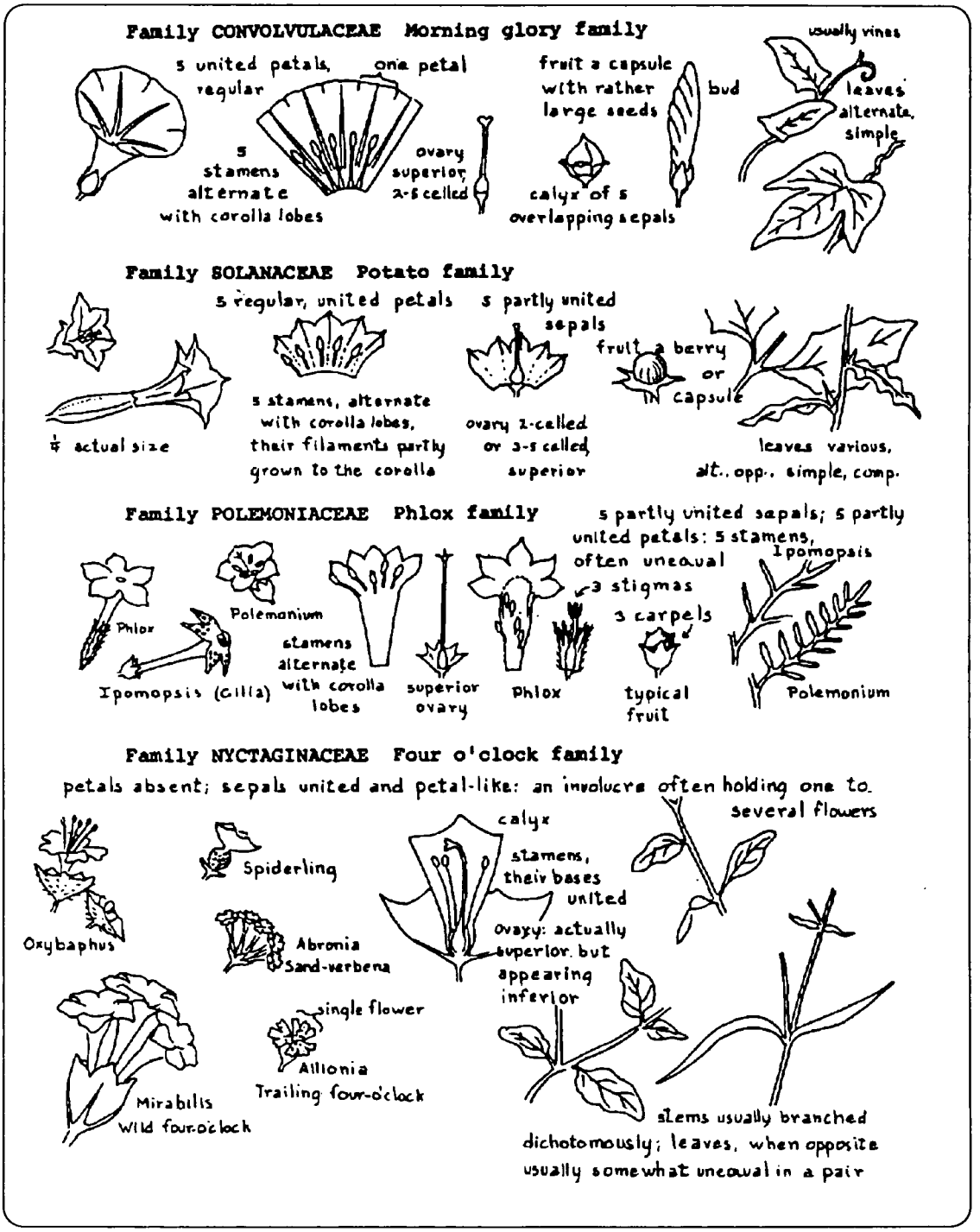
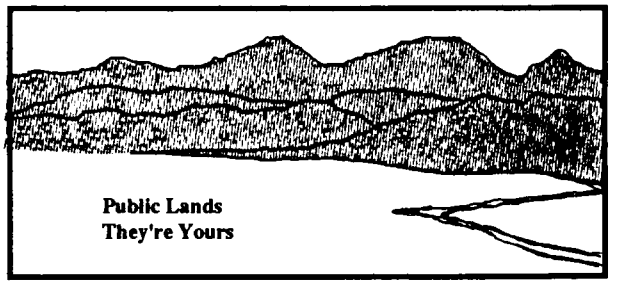
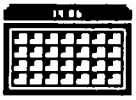
From *Flowering Plants of New Mexico* by Robert DeWitt Ivey







CALENDAR

ALBUQUERQUE

Nov. 7 "Black Soil Crust of the Southwest" by Juanita Ladyman. 7:30 pm, Albuquerque Garden Center, 10120 Lomas.

Dec. 12 Christmas Potluck, Election, Albuquerque Garden Center, 6:30 pm

GILA

Nov. 15 "Gymnosperm Identification" with Jack Carter. 7:00 pm, WNMU Harlan Hall

Nov. 16 Field trip, Gila NF, Gymnosperm Identification 8:00 am, WNMU Fine Arts Lot

Dec. 14 Holiday Potluck

LAS CRUCES

Nov. 13 "West Texas Preserves" by John Karges. 7:30 pm, SW Environmental Center, 1494 S. Solano

Dec. 4 Annual Planning meeting. 7:30 pm SW Environmental Center

OTERO

Nov. 2 Annual Potluck and Planning Meeting. Gordon's Home, La Luz, Noon.

FREE WORKSHOPS

Plants of the Southwest is presenting a series of talks on "Water Management and Conservation in the Home Landscape". These will take place at 6680 Fourth ST NW on friday afternoons at 3 pm. They are open and free to everyone.

November 8: "Drip Irrigation" by Robert Woods

November15: "Albuquerque's Water Ordinance and Conservation Efforts" by Doug Bennett

November 22: "High Desert Design, The Good, the Bad, and the Ugly" by David Cristiani

Reminder: Dues to Increase

Beginning January 1, 1997 membership dues will be increased to $12. You may save money by paying $10 in advance (prior to Jan. 1) for as many years as you wish.

Annual Meeting Report

The annual meeting in El Paso was held jointly with the Native Plant Society of Texas, Oct. 18-20. More than 250 people attended and took advantage of many different field trips, workshops, and garden tours. Most impressive. perhaps, were the symposium papers. These were very professional and informative on topics ranging from ecology and community, to geography, horticulture, history, geology, and flora. The 1998 Texas meeting will be held in the Texas panhandle and NPSNM is considering taking a part in this meeting as well.

Report from the Board

The NPSNM board met on saturday, Oct. 19. It was agreed to hold the 1997 annual meeting in the northwest part of NM since the group as a whole has never had a meeting there. Mary Goodman, our membership secretary, will look into holding the meeting in either Grants or Farmington. A committee from around the state will be formed in order to make this meeting a success. The treasurer reported that the NPSNM treasury now contains more than $45,000. In order to clarify the goals and mission of the NPSNM a retreat will be held in February, 1997. This meeting will be attended by board members and invited others. It is hoped that it will help guide the NPSNM into the next century. Topics to be addressed will include education, conservation, and the best use of our financial resources. Any NPSNM member who wishes to address concerns regarding the direction of the organization is encouraged to contact a board member for input.

The new slate of officers were all elected and took office. The NPSNM now has approximately 530 members.

CHAPTER REPORTS

Otero-Jean Dodd

On 9-7-96 the Otero Chapter walked the Rails to Trails Grand View Trail, a section near High Rolls. The vistas were magnificent! Along the trail you could see Salado Canyon, Laborcita Canyon, and the Mescalero Reservation. On one stop we saw Salinas Peak in the distance and many of us had just been up there. Further up the trail the scenery includes White Sands and Fresnal Canyon. Otero has done plant sheets for the Rails to Trails so we used the one for the Grand View. There are a total of 10 stakes and a listing of both the surrounding plants and what you see looking at the views. DeWitt Ivey's wonderful sketches are on both sides of the sheet so that hikers can match up the names with the pictures. So far the Rails to Trails people have not yet installed permanent stakes or a distribution system for the plant sheets. Some of the plants along the trail are green-flowered rabbitbrush, brickellia, 4 o'clocks-2 kinds, *Rhus trilobata*, yucca baccata, Mt. Mahogany, Mormon tea, pinon, wavy-leaf oak, algerita, beargrass, juniper,allthorn, creosote bush, peabush-*Dalea formosa*, Wright silktassel, prickly pear, lots of soltol in one place, 4-wing saltbush, alligatorjuniper, apache plume, little leaf sumac. Flowering ash -*Fraxinus cuspidata*- is quite common in the area. In several places clumps of cactus appeared to be growing right out of the rocks. After the trail we went over to the property of Ken ~ Neoma Smith near High Rolls.The day before the trip the Smiths had made fresh apple cider from their 100 year old trees-they have been researching the plants on their property.What a refreshing addition to the lunches people had brought. After lunch members could buy Otero's new T-shirts . Was the first time most had seen it. Dr. Hildy Reiser had gone over the property with the Smiths before the meeting. At the meeting she spoke of the possible choices the Smiths could make in the management of their land to solve current problems and prevent new ones. In talking about the decisions to be made, Hildy noted that the Smiths would not live long enough to see the results of what they do now since it would take a very long time for the time, effort, and financial resources put into the land to bring the desired results. Makes you wonder how many small landowners have this kind of assessment of their property keeping in mind the whole ecosystem as it is and could be.

Otero keeps having super trips-the latest on August 10 to Salinas Peak on White Sands Missile Range with Dr. Dave Anderson. It was our second range trip with him and it will be followed by a trip to Oscura Peak August 9,1997. We were lucky to have wonderful weather for the day and enough 4-wheel drive vehicles to accomodate everyone. Dave pointed out the different land-forms and the flora as we started toward the Peak. Saw some hills covered with ocotillas, some with soltol, and some with yuccas. Early in the drive we saw an outcrop of rock in front of a dense stand of yuccas as if it were an island.A string of horses going across the road caused an unscheduled stop. Lots of Golden-eye,*Vigeria stenobla*,in bloom along the roadside.The Apache Plume had fluffy,pink plumes. A big patch of Clammyweed (*Polanisia trachysperma*) reminded us of the ones near the St.Augustine Pass before the road was widened. Lots of yellow zinnias hugging the ground along the roadsides. Up tp 5,800" we started seeing *Acacia neovernacosa*, paintbrush, Blackfoot daisies,4 o'clocks-Trailing Windmills & *Mirabilis multiflora*. At 6,000' were *Mahonia metacarpa*, *Aloysia wrightii*, and Wright's Silktassel plus *Calylophus Hartwegii*. The higher we went the more we could see of the great beauty of this vast area. Except for the drivers, the rest of us kept exclaiming at the wonderful vistas we saw. Seemed like there was a new and more beautiful one at each turn as the road twisted and turned up to the Peak at 8,200'+. Looking down at the Peak was like looking out the window of an airplane. At one point on the road up we stopped where people had lived at one time. Henrietta Mitchell told how the boards on a house would be taken down and numbered. Everyone would square dance and when they were through the boards would go back up matching the numbers on the house. She said the farmers raised goats for mohair. When the mohair was ready for market, it was stored at R.D. Champion's store in Tularosa waiting for the price to go up. However this did not always work. Sometimes the price would really go up after it was sold. Going back down the mountain we stopped at a riparian area where we saw Desert Willow, Hop tree,Ephedra,Long-stalk greenthread, cut-leaf Brickle Bush, and *Croton lindheimer*. One of the problems that cropped up on the trip was the many changes in classification of familiar plants. Guess we need to find an updating service.

At the end of September Otero continued what has become an annual event-an edible native potluck at the home of Jim & Betty Claypool near Bent. It is a beautiful time of the year and the food is interesting as well as good to eat. New this year was a taste of wine made by vintner Len Henndzel. One wine was from cactus and the other a combination of cactus and mission grapes. A good way to start a meal.Usually signs tell us what edible natives were used in each dish. Salads were Tumbleweed salad, watercress salad, and cactus salad. Cactus punch was available as well as the wine.Roth mesquite muffins and amaranth muffins were a good accompaniment to slices of juniper berry brisket, chicken-pinon casserole,and wild rice and chicken casserole.

Jujubes were there as a fruit from the tree and stewed.Desserts were many.Some were algerita crisp with icecream, black walnut cake, prickly pear cookies,prickly pear cooked to a soft sauce and layered with whipped cream. Prickly pear juice is a beautiful color.

If you are interested in edible native cooking, visit your local library. Carolyn Niethammer is a good author. She has or did have field trips in the Tucson area to show students what plants are good to eat and how to fix them.

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

CHAPTER REPORTS

Gila-Martha Carter

Twenty two members and seven guests participated in a weekend that included glorious fall weather, great food, all the Asteraceae anyone could desire, (along with all the other expected trees and shrubs of the Coronado National Forest), and a very informative talk and walk with Dr. Tom Swetnam on Sunday. After a refreshing lunch under the tall pines at the Visitor Center of the Chiricahua National Monument, the group heard Dr. Swetnam summarize research the team at the Laboratory of Tree-Ring Research at University of Arizona has conducted over the past few years.

The fire history of the Rhyolite Canyon watershed of the Chiricahua National Monument indicates that fire has played a key role in shaping the diverse plant communities found there at the present time. Three distinctly different community types occur along this drainage due to an elevational gradient from grassland, oak-conifer woodland, to upland pine forest. Analysing fire-scar samples, scientists have reconstructed a five-century long record of fire activity in this watershed from the earliest fire date in 1476 to the last in 1983. These were major fires burning throughout the drainage at intervals of 1 to 19 years. They have determined that fires occur primarily between May and late July, coinciding with the "monsoon" seasonal pattern in the southwestern United States. Hiking a short distance up the Rhyolite Canyon Trail, Tom took us to a large Apache Pine, *Pinus engelmannii*, where the Tree-Ring Lab. is collecting cambial phenology data. An instrument with a probe inserted into the cambium is measuring precipitation, temperature, humidity, and the cambium growth on an hourly basis. Knowledge of fire seasonality and typical fire recurrence intervals aids in assessment of change during the past century and predicting the probable effects of management actions.

Our thanks to field trip chairman, Jim Swetnam and his brother, Dr. Tom Swetnam, for an interesting and educational afternoon in the Oak-Pine Woodland of the Rhyolite Canyon of the Chiricahua National Monument.

Las Cruces-Paul & Betty Shelford

In our meeting of August 14th, we voted to contribute $100. each to Forest Guardians and to Gila Watch. Dr. Norm Lounds, Professor in the NMSU Agronomy and Horticulture Department, talked on the subject "Drought Tolerant Plant Production: Questions but Few Answers." The challenge here is finding plants which do well in the sandy soil, the paucity of water and the extremes of the climate. After all is said and done, the best media for the difficult transplanting of Texas Madrone is a mixture of bark and sand. "Soil in the Southwest is more of a concept than a reality."

On August 18th, Jennifer Atchley led eleven members on a field trip into the north branch of lower and middle Achenbach Canyon in the Organ Mountains. John Freyermuth compiled a list of 91 native plants found; the most striking were as follows: Desert Holly with pinkish white flowers, Yerba de Pasmo, Curlycup Gumweed (Mountain Gum Plant), Desert Zinnia with white flowers, Plains Zinnia with yellow flowers, Fishhook Barrel Cactus, Pancake Cactus, Clammy Weed, Dayflower with blue and white flowers, Hairy Bindweed, Hairy Evolvulus, Silky Evolvulus, Bristlecup Morning Glory (rose pink), Crestrib Morning Glory (lavender blue), Scarlet Morning Glory, Bush Croton, Knotweed Leafflower, Propeller Plant, Naked Hibiscus, Palmate Globemallow, Whiteball Acacia, Trailing Windmills, Dark Red Spiderling, Cyphomeris, Narrow-leaved Desert Four O'Clock, Dark Milkwort, Red Orange Portulaca Suffretescens, Showy Flameflower, Apache Plume, Narrowleaf Penstemon (lavender, dark blue to purple), False Noseburn, Spicebush, and Pink Vervain.

On September 11th, Keven Bixby, Director of the Southwest Environmental Center, spoke on "Restoration of the Rio Grande." The Rio Grande is largely controlled by the International Boundary Water Commission, along with the Interstate Stream Commission and the various Soil Conservation Irrigation Districts. With all of the ongoing controversy regarding the ownership of the Elephant Butte Dam, it was interesting to learn that it was built to assure a sufficient supply of water to meet treaty requirements with Mexico, after a threatened suit by Mexico against the United States. For this reason, in dry years, Mexico gets its water before anyone else, 60,000 acre feet per year, or 10% of the total water flow. After Mexico, the New Mexico and Texas Irrigation Districts receive their water allotments. Mr. Bixby showed a map of the Mesilla Valley, drawn in the mid-1800s, on which the Rio Grande was a meandering river with many S-curves and oxbows running through a wide floodplain bosque. He is a member of a committee exploring the possibilities of reintroducing biological diversity along the river. Among the several interested parties serving on this committee is the Bureau of Reclaimation, which originally built all the dams along the river, and they have exhibited a positive interest in this subject. There are many interested parties in this matter and the legal ramifications are complex.

On September 15th, Herb Ruetzel led eleven members on a field trip to the foothills and adjacent areas of the Dona Ana Mountains. John Freyermuth compiled a comprehensive listing of 85 native plants by family, genus, species, and common names along with their locations. The common names of the most striking plants are as follows: Heath Carlowrightia, Fringed Pigweed, Blackfoot Daisy, Lemonweed, Abert's Dome (Sanvitalia), Cowpen Daisy, Giant Goldeneye, Desert Zinnia, Spectacle Pod Mustard, Clammy Weed, Dayflower, Crestrib Morning Glory, Scarlet Morning Glory, Globe Berry (Deer Apples), Toothed Poinsettia, New Mexico Lotus, Gray's Limabean, Stinging Cevallia, Pale Globemallow, Littleaf Mulberry, Trailing Windmills, Spiderling, Boerhavia (flowering pink), Delicate Darling, Rough Menodora, Devil's Claw, Blue Trumpets, Phlox, Hoptree, Oak-leaved Thorn Apple, Phyla Nodiflora var. rosea (flowering pale pink), and Warty Carpetweed.

On September 21st, ten members took part in the onemile highway cleanup that our chapter has adopted. It isn't much fun, but there is a lot of satisfaction in seeing the shoulders of the road clean again.

On the afternoon of September 28th, instead of our local garden tour we met at Dripping Springs headquarters to see the condition of the native plant garden, which we planted four years ago, and the supplimentary landscaping designed by Greg McGee. Fourteen members enjoyed a delicious potluck dinner in the nearby wooded picnic area.

CARLSBAD

This report starts July 26th and 27th when two NPS members, James Brunt and Mariel Campbell made a research trip to Lake Avalon just North of Carlsbad. They are members of the Carlsbad Madrone Chapter, though they live most of the time in Albuquerque. Mariel Campbell is a MS of Zoology working with the Hanta Virus Research at UNM. James Brunt is an ecologist with the Sevilleta LongTerm Research, his office is at UNM. A graduate student from the School of Oceanography at the University of Washington asked them to help her in her study of the estuarine Copepod (*Evrytemora Affinis*). She had a paper written in 1964 which stated that this critter was found in 1935 in Lake Avalon just north of Carlsbad.

Their first attempts were sucessful. They got the right creature and it was still in Lake Avalon but the samples did not reach Washington alive, seems like the sloshing about from here to Albuquerque was too much and they weren't alive when the reached Washington. So James and Mariel came back on the 9th of August and repeated the process, only they Fed Xed the samples from here. All is well , but they will repeat the process one more time.

We have finally had some rain and everything is blooming. In one place where someone had cleared a field at one time there was a sheet of yellow blooms, beautiful to see until you realized it was all Buffalo Burr (*Solanum Rostratum*) in the potato family and a very noxious weed full of burrs that get in your dog's hair and your horses' tails.

There was an abundance of Trailing Four O'Clocks or Trailing Windmills (*Allonia Incarnata*) in the Nyctaginaceae Family. There are three bright pink flowers, all crowded together to look like one flower. They grow close to the ground on a short stalk and a creeping stem.

The Salt Cedar (Tamarisk)is thick on both sides of the river. This is a beautiful tree or shrub depending on how it has been allowed to grow. Everyone I asked about the species said "The only good salt cedar is a dead one." Along the river these trees are not only thick, they are big, at least 18 in. in diameter. Twisted and crooked, maybe 25 ft. to 30 ft. in height. It is a great cover for wildlife. Tamarisk is another of the trees that has been introduced from a foreign land and become naturalized in our region. It is native from North and East Africa to Southwest Asia including India and China. It was introduced in the U.S. as an ornamental. Also to help in soil erosion and because it is drought resistant and tolerant of alkaline and salty soils. The wood is a very pretty dark brown with streaks of pink and is capable of taking a high polish. There is one species that has been proposed for use in making fine cabinet wood. As an ornamental, planted in yards, the tree can grow large. A prize example is a tree in Albuquerque that measures 7 ft 3 in. in circumference and is 44 ft tall with a crown spread of 45 ft. This was reported by Samuel Lamb in 1975. There are also some large specimens in Superior Arizona.

The Dept. of Agriculture in Jerusalem, 1966, reported that a scale insect living on the leaves of one species of Tamarisk secrets a honeydew, which in a solidified mixture with leaves and other debris forms sweet pellets forming a manna used by the people of the middle east. This may be the biblical manna.

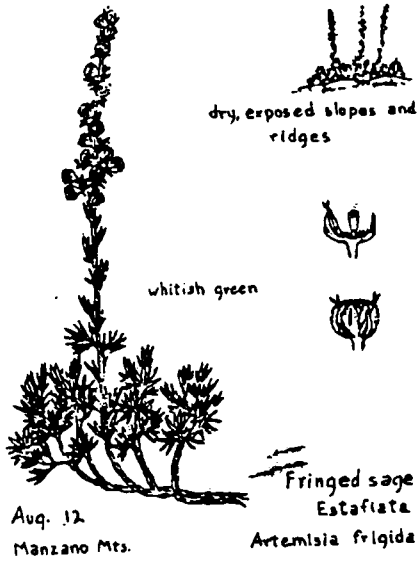
We got carried away with the erosion control and let the species escape cultivation, now we have a problem. I am hoping we don't create a worse problem by trying to get rid of it.

The seeds are so minute and are so easily spread. Even the brine trucks for the oil fields spread the seeds unknowingly.

According to Wm. Dick-Peddie in his book "New Mexico Vegetation Past, Present, and Future", changes in New Mexico vegetation can be attributed to human activities. If we had let Nature well enough alone, these invaders such as salt cedar and others would not have gotten such a hold. If you haven't read his book, you certainly should.

References:

1. Trees, Shrubs and Woody Vines of the Southwest Robert Vines 1960
2. Arizona Flora Kearney & Peebles 1951
3. Weeds of the West 1992
4. A Field Guide to Texas Trees Benny Simpson 1988
5. Wild Flowers of the Guadalupe Mts. Barton H. Warnock 1974
6. Woody Plants of the Southwest Samuel H. Lamb 1977
7. The Audubon Society Field Guide to North American Trees Western Region 1980
8. The Audubon Society Field Guide to North American Wildflowers 1979
9. Trees and Shrubs of the Southwestern Deserts Benson & Darrow 1945-81
10. New Mexico Vegetation Past, Present, and Future Wm A Dick-Peddie Contributions by W.H. Moir and Richard Spellenberg. 1994



Ugly Shrubs Get No Respect

by Steve Nelle
reprinted from the *Native Plant Society of Texas News*, 14(3):4, May/June 1996.

Most of the native shrubs we rave about have either pretty flowers, striking foliage, persistent, colorful fruit or a combination of these attributes. We brag about how wonderful native plants are, but only when their attractiveness rivals that of the exotic ornamentals. We generally do not pay much attention to or appreciate, the less handsome members of native plant communities.

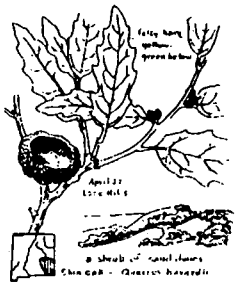
Consider these shrubs: lotebush, condalia, algerita, catclaw mimosa, catclaw acacia, pricklyash, wolfberry and tasajillo. Most have spines or thorns, inconspicuous flowers, drab fruit, small unimpressive leaves and, in general, an unkept appearance. These shrubs only rarely find their way into our landscapes and can seldom be found even in native plant nurseries. However, they are all common shrubs on millions of acres and have important ecological values we often overlook.

These shrubs, mostly short and compact, provide excellent nest concealment for a great variety of songbirds. Deer hide their fawns and quail hide from hawks in these bushes. Beneath their low canopies are often found burrows which house dozens of species of small mammals and reptiles. The fruits and seeds are eaten by birds ranging from mockingbirds to turkeys. The insects which pollinate their flowers and eat their foliage are themselves used as food in complex food webs.

As obvious as these roles are, these ugly shrubs may perform even more critical roles. These shrubs are tough. No matter how severe conditions get (drought, hail, insects, fire), these shrubs persist. Their thorns or taste repel browsing and grazing animals. Even on badly overgrazed ranges, many species of desirable grasses, forbs and other shrubs find refuge among the thorny branches. The protection afforded to these other species allows them to thrive, make seed and disperse that seed where they would otherwise not exist. Ugly shrubs are a nursery for other species.

On poorly managed ranges, where grass cover is thin and where soil erosion is occurring, ugly shrubs along with their island of vegetation protect the soil. The fallen leaves provide a rich mulch and the decomposition of those leaves adds organic matter and fertility to the soil. Runoff from adjacent bare ground is intercepted by these shrub communities so it can seep into the ground. The environment created by these shrubs is usually cooler, moister, more fertile and more diverse than nearby areas. Ugly shrubs modify and improve their immediate surroundings.

Range managers call these shrubs invaders. Game biologists consider them low quality browse. Ranchers call them noxious brush. Ugly shrubs get little or no respect from man, but continue to do their jobs and do them well. Next time you're tempted to cuss these thorny, ugly bushes, notice the role they play; the niche they fulfill.



Ed. note: *Quercus havardii* is also a candidate for "ugly shrub".

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