Native Plant Society of New Mexico

NEWSLETTER

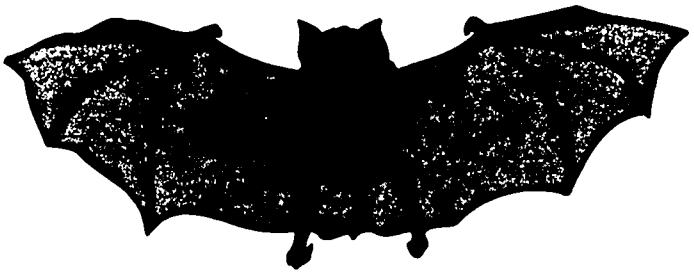
October, November, December 2004 Volume XXIX Number 4

Meet NPSNM's New Officers

The reins of leadership were handed over at the 2004 Annual Meeting in Alamogordo, August 7th, and Wynn Anderson (far right) began his two-year term as President. With him are the other new officers: Charles "Chick" Keller, Vice President (far left), Donna Stevens, Treasurer (2nd from left) and Sandra Lynn, Recording Secretary. Details of the 3-day meeting are on Page 6. And for a few words from the new President, turn to Page 5.

INSIDE

WIND ENERGY THREATENS BATS



Ironically, according to an article in *Bats*, the journal of Bat Conservation International, an important and much-heralded environmental approach is also becoming an environmental hazard — to our bat populations.

Merlin D. Tuttle, founder and president of BCI and the author of the article, "Wind Energy and the Threat to Bats," (Summer 2004), states that wind turbines are proliferating all over the country, providing green energy that is renewable and pollution-free. But, on the negative side, "Migrating bats are crashing into the spinning blades of the turbines in disturbing numbers."

And this situation can become worse very quickly. Wind power, says Tuttle, is the fastest growing segment of the U.S. energy industry, and tax subsidies that are expected from Congress this year could trigger a construction boom that will put thousands of wind turbines on high-risk ridges and mountains.

"The issue of bat kills at wind farms was widely neglected in early wind-power assessments," according to Tuttle, "simply because bats, unlike birds, have no broad-based legal protection. Reports of two or three bats per turbine being killed each year...seemed a relatively small price to pay for clean energy."

Tuttle says that we now understand that many more bats were killed but not reported. "Wind farms," he writes, "increasingly contain hundreds, sometimes thousands, of wind turbines; if even a few bats are lost at each turbine, total losses can add up quickly."

Research is currently underway to determine why bats — renowned for their amazing built-in radar systems — are fatally flying into these turbines and how that can be prevented.

LETTERS TO THE EDITOR

The year 2004 marks the 70th anniversary of Marcus Jones' death. Jones was one of several quite controversial botanists of the nineteenth century (e.g., Constantine Rafinesque, Edward Lee Greene). Few were as reviled as Jones.

Sally's adaptation of Lenz's "The Thorny Rose Affair" (July Newsletter) gives a clear sense of the acrimony surrounding him. Fortunately the smoothing and softening effect of seven decades and the cool rationality of history have mitigated the acerbity and obduracy often displayed by Jones. Despite the unfortunate aspects of his character, Jones was a prodigious collector and a fine botanist who described hundreds of new species from the Rocky Mountain West, California, and Mexico. Interestingly, 61% of the botanical names proposed by Jones are still accepted (Lenz, 1986).

Perhaps the best modern view of Jones is that given by the late Rupert Barneby in his dedication of his treatment of the Fabales in *Intermountain Flora, Volume 3B* (Cronquist, Holmgren, et. al., 1989): "This volume of *Intermountain Flora* is dedicated to the memory of Marcus Eugene Jones (1852 -1934), pioneer botanical explorer of the Intermountain West, monographer of American *Astragalus*, who long contemplated and worked toward a Flora of the Great Plateau, of which the Intermountain region is the territorial nucleus. His name is imperishably associated with many of the most strikingly individual plants of the region."

Gene Jercinovic
Torreon, NM

FYI: A society is being created to further the study, propagation, and sharing of desert trees such as *Acacia, Bursera, Adansonia, Caesalpinia*; many from the family Fabaceae (formerly Leguminosae). These plants are neither limited by family nor location; even the Saguaro can be considered a desert tree, as could a Baobab, or the desert willow (*Chilopsis linearis*). Right now there is no membership fee. Plans are being created for a plant and seed exchange, seed bank, and newsletter. Hopefully, our website can be expanded to include other projects such as an online 'database'. I can be contacted at morgan@bcrealtors.ca.

Morgan Smith
Fort Langley, B.C. Canada

Please check the listing of officers on Page 5. If your chapter needs updating, contact me at andrzej@laplaza.org.

This **NEWSLETTER** is published quarterly by the Native Plant Society of New Mexico, a nonprofit organization, and is free to members. The NPSNM 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 attributed to the author and to this Newsletter. Views expressed are the opinions of the individual authors and not necessarily those of NPSNM. Manuscripts and artwork are welcome and should be submitted to the editor:

POBox 607, Arroyo Seco NM 87514
andrzej@laplaza.org

Deadline for next issue is Dec 1, 2004

Membership in the NPSNM is open to anyone supporting our goals of promoting a greater appreciation of native plants and their environment and the preservation of endangered species. We encourage the use of suitable native plants in landscaping to preserve our 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 dealing with plants, landscaping, and other environmental issues are available at discount prices. The Society has also produced two New Mexico wildflower posters by artist Niki Threlkeld and a cacti poster designed by Lisa Mandelkern. These can be ordered from our Poster Chair or Book Sales representative.

Proofreaders: Jane Mygatt, Beryl Schwartz, Donna Stevens, Sally Wasowski, Jackie Tamas and Ann Ellen Tuomey.
Mailing: Carolyn Gressitt

Web site: http://npsnm.unm.edu/

NPSNM Membership Application

Name(s) _____

Address _____

City _____ **State** _____ **Zip** ____

Telephone _____

E-Mail/Fax _____

I (we) wish to affiliate with the checked chapter

__ **Albuquerque**
__ **Carlsbad**
__ **El Paso, TX**
__ **Gila (Silver City)**
__ **Las Cruces**
__ **Otero**
__ **Sacramento Mts (Ruidoso)**
__ **San Juan (Farmington)**
__ **Santa Fe**
__ **Taos**

I am interested in forming a new chapter in

_____

Annual Dues:

Individual or Family.....	$20
Friend of Society.....	$30
Supporting Member.....	$50
Sponsor.....	$100
Patron	$250
Benefactor.....	$500
Life Member.....	$1,000
Limited Income, Family, Students & Seniors (65+).....	$12

Endowment contribution $_____
Total $_____

Make your check payable to
NPSNM
and send to
Membership Secretary
P.O.Box 2364, Las Cruces NM 88004

IT'S FOUR O'CLOCK TIME

by Donna Stevens
Sixth in a series

The inspiration for this article is all around me. In a two-minute walk around my house, I just observed three members of the beautiful four o'clock family. No doubt you've beheld our brightly colored native four o'clocks, too. But with so many fabulous flowers, how would you recognize a member of the four o'clock family?

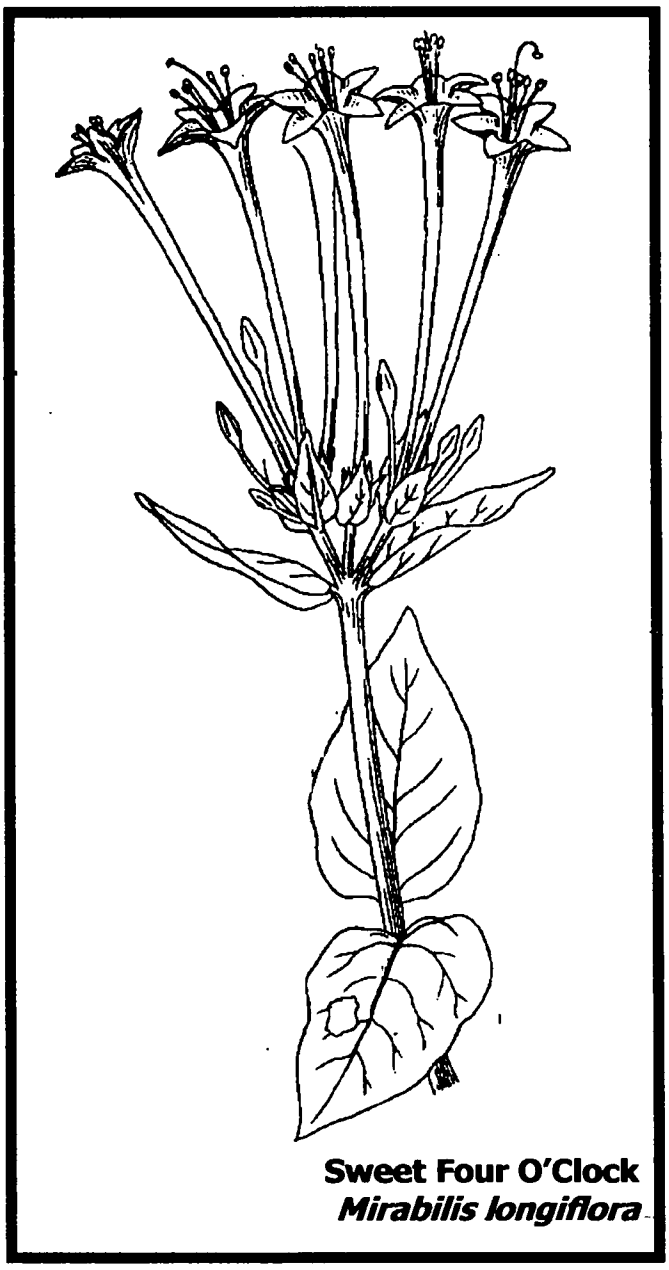
One diagnostic character is easy to see: plants in this family have opposite leaves, and often one leaf of the pair is noticeably larger than the other. Another family trait may be a bit confusing for beginners. The brightly colored flower parts are sepals, not petals. These five petal-like sepals are united to each other at least along part of their length. Sometimes several flowers grow together in an involucre, a green structure that looks like a leafy cup.

One conspicuous genus in this family is *Mirabilis,* meaning "marvelous or wonderful." These perfectly-named flowers range from pale pink to deep magenta, with bright stamens protruding from their floral tubes.

In New Mexico, there are several species of *Mirabilis,* the true four o'clocks, whose flowers close during the heat of the day and open in late afternoon. This habit is reflected in the scientific name of this family, Nyctaginaceae, which comes from the Greek *nyct*, or "night."

Spiderlings, in the genus *Boerhavia* (also spelled *Boerhaavia*), rival the four o'clocks for beauty, but not for size. You'll need a hand lens to appreciate their almost-iridescent charm. Some of these species have sticky stems with soil particles clinging to them. Other often sticky plants are the Windmills, in the genus *Allionia.*

Abronia and *Tripterocalyx* (say that five times fast!), though commonly called Sand Verbenas, are not Verbenas at all, but members of the Nyctaginaceae, with showy flowers and fruits.



Sweet Four O'Clock
Mirabilis longiflora

Illustration by Robert DeWitt Ivey

Nyctaginaceae's greatest diversity is in tropical and subtropical regions where the well-known *Bougainvillea* is a native. In New Mexico, all the members of the Nyctaginaceae are herbaceous plants, not shrubs or trees.

We've only a few more weeks of summer, so let a four o'clock inspire you tonight!

God has cared for these trees, saved them from drought, disease, avalanches, and a thousand tempests and floods. But he cannot save them from fools. *John Muir*

BOARD OF DIRECTORS

President	**Wynn Anderson** 915-533-6072 wanderson@utep.edu
Vice-President	**Chick Keller** 662-7915 alfanso@cybermesa.com
Recording Sec'y	**Sandra Lynn** 234-1772 slynn@cavern.nmsu.edu
Membership Sec'y	**John Freyermuth** 523-8413 jfreyerm@lib.nmsu.edu
Treasurer	**Donna Stevens 388-5296** dstevens@gilanet.com

DIRECTORS AT LARGE

Albuquerque/Philip Melnick	345-9877 philm@pmelnick.com
Carlsbad/Sandra Lynn	234-1772 slynn@cavern.nmsu.edu
El Paso/Brent Pearson	915-877-3808 bpearson1@elp.rr.com
Gila/Jack Carter	388-9221 jmcarter@zianet.com
Las Cruces/Terry Peterson	523-5295 terrywp@zianet.com
Otero/Chris Baker	434-9291 ravensnest@direcway.com
Sacramento Mts/Linda Barker	439-5458 1barker@fs.fed.us
San Juan/Nancy Rominger-Abe	320-0567 plantscapes@gobrainstorm.net
Santa Fe/Chick Keller	662-7915 alfanso@cybermesa.com
Taos/Judy Lister	776-1183 glister@newmex.com

Book Sales	**Lisa Johnston** 748-1046 nps_nmbooks@hotmail.com
Poster Chair	**Mary Whitmore** 454-0683 whitmore@newmexico.com
T-Shirt Sales	**Lisa Mandelkern** 526-0917 lisamand@zianet.com
Website Editor	**Lolly Jones** 771-8020 ljones20@comcast.net
Newsletter Ed.	**Andy Wasowski** 776-1498 andrzej@laplaza.org
Conservation	**Jim Nellessen** 867-7905 jnellessen1@taschek.net
Finance	**Jack Carter** 388-9221 jmcarter@zianet.com
Publications	**Sally Wasowski** 776-1497 magpiemum@yahoo.com

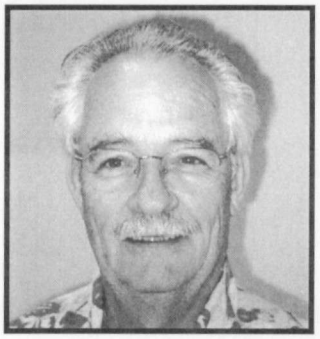
CHAPTER CONTACTS

Albuquerque	**Beth Herschman** 892-2230 bherschman@aol.com
Carlsbad	**Sandra Lynn** 234-1772 slynn@cavern.nmsu.edu
El Paso	**Wynn Anderson** 915-533-6072 wanderson@utep.edu
Gila	**Judy Muncrief** 388-4771 ranchito@zianet.com
Las Cruces	**Lisa Mandelkern** 526-0917 lisamand@zianet.com
Otero	**John Stockert** 585-2546 jwstockert@msn.com
Sacramento	**Robert Hall** 258-2440 bobnbets@zianet.com
San Juan	**Les Lundquist** 326-7194 lslundquist94@sanjuanportal.com
Santa Fe	**Chick Keller** 662-7915 alfanso@cybermesa.com
Taos	**Ann Smith** 737-9611 asmith@laplaza.org

Send Membership Dues & Changes of Address to:
Membership Secretary,
P.O.Box 2364, Las Cruces NM 88004

THE PREZ SEZ

Wynn Anderson



Overwhelmed is a good word to describe my feelings at being elected NPSNM State President. **Inadequate** fits well too, especially when I look back at our outstanding former Presidents whose hard work and dedication had special and lasting impact on this organization. Thank goodness these good people are still active because I'm going to need their advice and counsel as we try to stabilize and reinvigorate our organization.

Why do I say stabilize and reinvigorate? Because I fear that the phenonomen that has devastated so many other organizations in the last ten years is nipping at the edges of our own NPSNM. Nationally, club memberships are aging, meeting attendance and public participation is waning, and volunteerism as reflected in service as officers, committee members and project workers seems to be increasingly rare. No, luckily our membership is not declining; but our new members barely keep ahead of the loss of existing members. Obviously, we can successfully recruit new members with our message — *but we are not doing what it takes to keep them once they are in the fold.*

The heart of this organization is our local chapters. They make NPSNM viable by providing educational opportunities and outdoor entertainment (yes, field trips and native garden tours are a form of entertainment!) at the local level. The NPSNM Board of Directors *must find better ways to serve the needs of local chapters.* For example: I'd like to see a north/south regional speakers list to assist chapters in obtaining quality programs.

We are planning a free-of-charge leadership workshop at the annual winter Board Meeting at the Sevillita Wildlife Refuge, January 28, 2005. Using a professional facilitator, we hope to offer

Continued on Back Page

2004 MEETING IN ALAMOGORDO

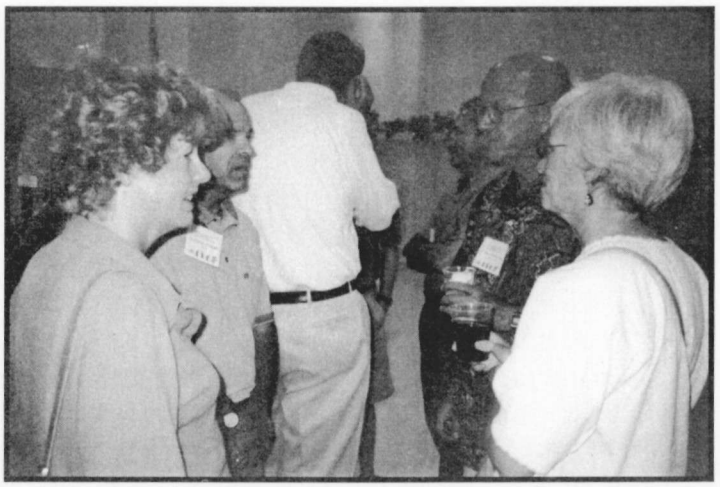
Reported by John Stockert

The 2004 Annual Meeting of the NPSNM, hosted by the Otero Chapter in Alamogordo, August 6 - 8, gave us the opportunity to show off the vegetative diversity found in the 8,100-foot elevation difference from the Tularosa Basin to the top of the surrounding mountains.

Over 150 people took part in a variety of lectures, workshops, panel discussions and field trips highlighting this year's theme: Conifers to Cacti.

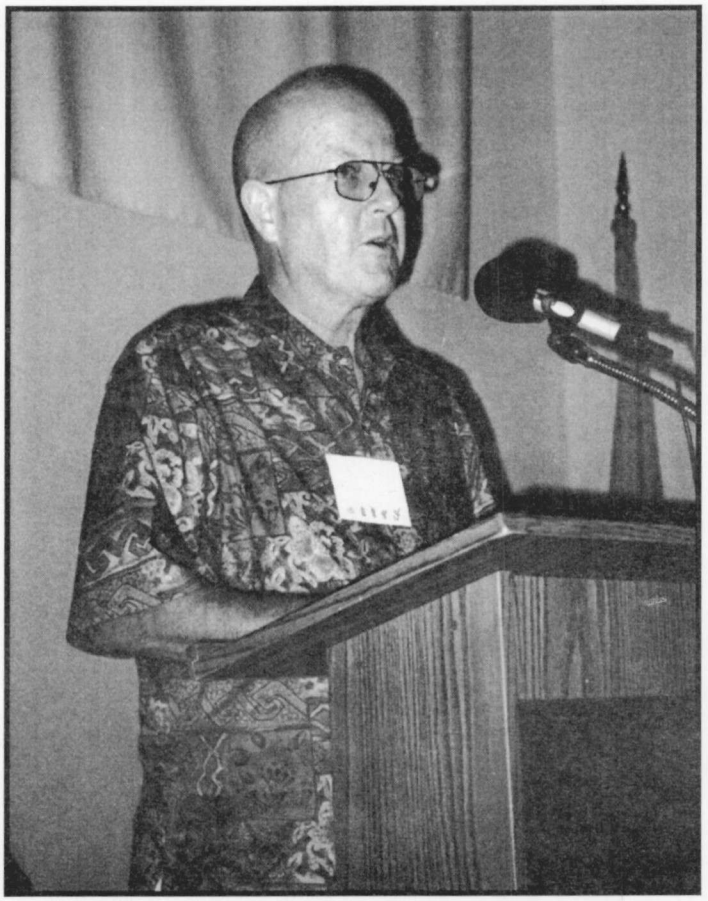
A very special event, the Cooking Wild reception, showcased hors d'oeuvres, soups, salads, entrees, breads, desserts and beverages incorporating over 25 different native edibles. Recipes for these and other dishes were available in a cookbook bound in hand-made paper covers containing preserved native flowers. A tasting of local wines made by Chapter members rounded out the event.

As a remembrance item for the 2004 Meeting, the chapter sold caps and tote bags that incorporated the logo design, "Conifers to Cacti."



Our one disappointment, due to circumstances entirely beyond our control, was the last minute cancellation of the Otero Mesa trip. We were preempted by the start of a previously unannounced military exercise the day before the trip. Other than that, our late monsoons brought in much-needed rainfall the week preceding the meeting to make the wildflower and plant displays on the other trips well worth the visit.

The panel discussions on "Current Conservation and Environmental Issues" and "The Water Pie - How We Slice and Share the Impossible," which were open to the public, were also well-received and accentuated the necessity for such measures in the drought-stricken areas throughout New Mexico.



Dr. Spellenberg addresses the banquet crowd

The Saturday night banquet featured keynoter Dr. Richard Spellenberg who spoke on "The Plant Diversity and Relationships in the South-Central New Mexico Region," using superior wildflower illustrations and statistics. The event also saw long-time members Lucille Wilson, Nancy Hutto (an Otero Chapter charter member), and Betty Claypool (Cooking Wild founder) honored. Each was presented with a framed commemorative inscription "for volunteering time and talents above and beyond expectations for the betterment and advancement of New Mexico's native plant heritage."

The evening was concluded with the announcement that the 2005 Annual Meeting will be hosted by the Albuquerque Chapter next August.

RHUS TRILOBATA

by Peter Wong

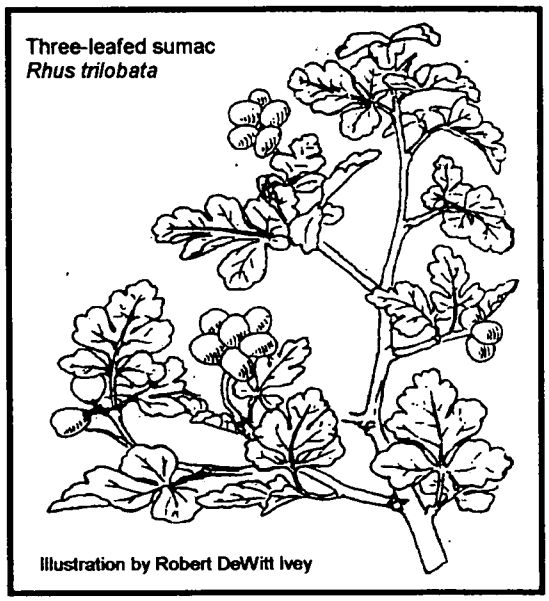
Rhus trilobata (three-leafed sumac) is a native shrub that is one of the more commonly planted natives in Albuquerque. This is easy to understand because it is a compact shrub, grows fairly quickly, and uses very little water.

The three-lobed leaves are attractive and medium green to olive green. In the fall they turn red, orange and yellow. In late summer through winter, three-leafed sumac may have red berries at the tips of its branches but, although attractive, they aren't usually produced in enough numbers to be impressive from a distance.

Rhus trilobata's growth can be accelerated by irrigating, and can thus grow 12 to 24 inches a year, although with greater growth the plant can become lanky and weak, needing pruning. As the plant reaches the desired size, the water can be decreased to maintain plant size. Continued irrigation will produce a shrub that can reach 6-10 (or more) feet tall. Without irrigation, *Rhus trilobata* generally remains half that size. According to David Christiani, its natural range in New Mexico extends from the Colorado plateau south to Roswell.

The plants sold in Albuquerque are not the same as the plants you see growing wild in the foothills (just as the *Cercocarpus montanus* being sold isn't what is native here). What you see in the nurseries is generally of a broad-leafed form, the color ranging from medium green to grass green. Some plants have a cupped leaf. In contrast, the plants native to the Albuquerque foothills tend to have small leaves, with widely spaced leaflets, which are dark olive green. Although the broad-leafed plant is attractive in its own right, I suspect that these plants originated from plants in higher rainfall areas. (Sally Wasowski thinks the nursery clone is from the sandy shores of Lake Michigan) This may account for the significant differences between the wild form, and the form that is generally sold.

Although the nursery plants tolerate drought fairly well (you may see them defoliate in the midsummer along Tramway), I have always been disappointed in the fall color of the commercial plants. Although they are promoted as being colorful, I haven't seen any in Albuquerque with the flaming colors that are seen in books. This may be because the climate isn't right for these plants to develop color, so they just turn brown and fall off. The native plants in the foothills do turn color in the fall, but are more commonly an equally attractive plum purple rather than reddish-orange.



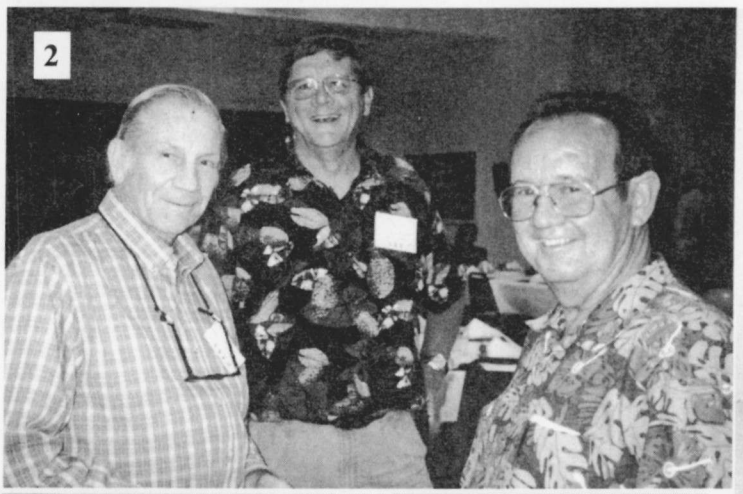
Rhus trilobata is generally propagated from seed. Although this is beneficial for maintaining genetic diversity, the seedlings will be variable in quality. Judith Phillips warns that cuttings are tricky however, and timing is essential.

This year, I attempted to grow some from root cuttings of a vigorous, small leafed plant with purple fall color and fall leaves that lasted into December. I took four-inch tip cuttings in mid-June. The spring growth was complete and the stems had firmed but were not woody. Two half-inch strips of bark were peeled from the lower ends of the cuttings. I then dipped them in a 10:1 dilution of Dip 'N Grow brand rooting solution and inserted them into a mixture of small perlite and seed starting mix. The pot was placed in a plastic bag, and I left on vacation. Three weeks later, I noticed growth on the cuttings, with roots showing though the drainage holes. These plants were then potted separately.

If you have plants of *Rhus trilobata* that have especially good form and good consistent fall color, you might try taking cuttings. Or let me know; I would love to have a few!

Peter Wong is a practicing physician and gardening enthusiast. He is currently in the UNM Masters Program of Landscape Architecture.

ANNUAL MEETING SNAPSHOTS



1. John Stockert welcomes one and all to Alamogordo. *2&3.* A few laughs at the Saturday Night Banquet.

4. Members of the Cooking Wild Culinary Crew.
5. Showing interest at the Plant & Cacti Sale

6. Hearty appetites at the Cooking Wild Reception. ***7.*** Lucille Wilson gets honored. **8.** Danke, Lisa! ***9.*** Silent auction action.

Conservation Corner
Jim Nellessen

The Ebb and Flow of Natural Plant Communities

Does conservation of native plant communities mean preserving everything we see in a certain habitat or landscape location *as is*? In other words, does it mean preserving the existing community's appearance as a static and unchanging entity? No!

Most plant communities are dynamic, continually changing entities. That rate of change may be relatively fast to human eyes if it happens to be in an early succession stage (5 to 50 years), but it is usually a very slow process that lasts much longer (hundreds to thousands of years). And, yes, there are such things as climax communities.

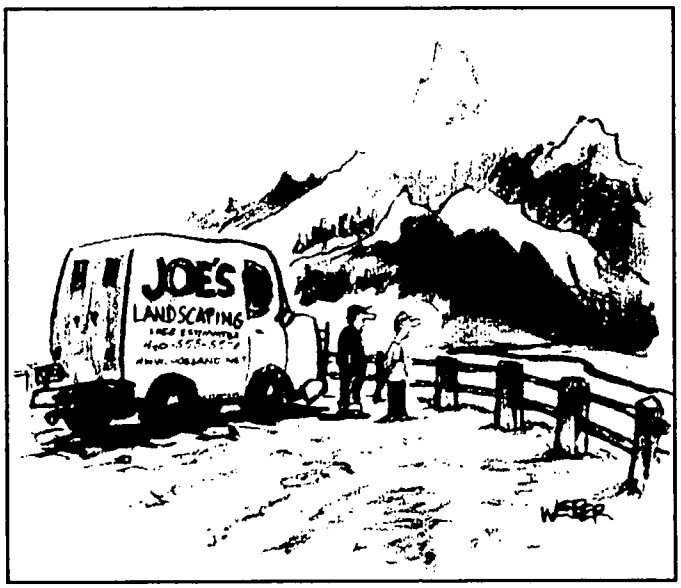
A climax plant community is the community, based on our accumulated scientific knowledge, that is most stable (i.e., resilient or resistant to change) and consequently most long-lasting on a certain landscape. The plant community that will occupy a particular landscape will be dependent on soil type, the parent material (e.g., rock substrate) from which that soil formed, the slope and aspect, and overall climatic conditions. Some plant species have much wider tolerance ranges for soil types and local climatic conditions. For example, ponderosa pine generally requires at least 12 inches or more of rain a year and does not tolerate alkaline soils. This is why it does not naturally grow in, say, the Albuquerque/Rio Rancho area without a lot of extra water and substantial soil amendments, whereas a plant such as many-headed groundsel (*Senecio spartioides*) can be found from 3000 feet to 8000 feet on a variety of soil types and sites. It is an early successional, opportunistic species that takes advantage of temporary openings in the plant community.

Although soil types affect plant community composition, plants also affect and modify the soil. Plants can affect nutrient availability, pH, salt content, organic matter content, and may add chemical inhibitors to the soil, e.g., allelopathic compounds that affect other plants. Consequently, the soil is not an independent, unchanging entity; it is modified by living things.

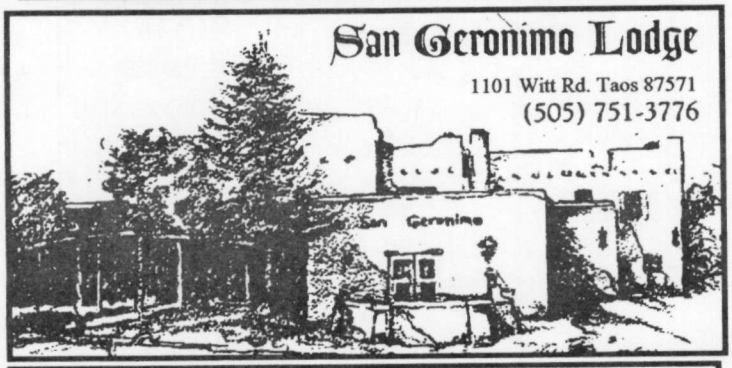
Plant community change can happen quickly in what might otherwise appear to be a stable community. The massive die-off of thousands of piñons in many parts of New Mexico due to the combined effects of drought and bark beetles has been a sudden change. This sudden change, just as the sudden change resulting from fires, does not have to be viewed as negative. Historic fires have given us many of our nice stands of aspen. Piñons and junipers have been invading many of our grasslands for at least 75 to 100 years, perhaps longer. Partly this is due to past overgrazing practices, partly it is due to periods of higher precipitation or the timing of precipitation events. For similar reasons, mesquite and creosote bush have been making advances into desert grassland.

By contrast, another shrub-dominated community that has been substantially reduced by human activity is Havard shin oak (*Quercus havardii*) communities which occur in southeast New Mexico. While many of these natural areas in adjoining Texas have been eliminated, New Mexico remains one of its strongholds.

In summary, change in plant communities is expected. Natural change (change beyond human influence) should not be a concern. How much change we are willing to tolerate at the hands of human influence is another question. Because we live within the system, and we appear to be the only organism that has studied the system, we've come to understand how the system works, and can influence its health. We have an obligation to protect that system, and all the processes that make it work.



"I would have done this differently."



VOLUNTEER PROFILE

Terry Peterson
Las Cruces Chapter

Terry appeared at a chapter field trip around the mid-1990s, just wanting to learn something about native plants. Did he ever! Within a year he was experimenting with natives of the Chihuahuan Desert in his own yard. Since then, his garden has been featured in several garden tours.

But Terry's interests reached beyond his own garden; he was a regular attendee at the chapter meetings and, as his expertise grew, he eventually began giving programs and leading field trips — some to a 50-acre natural hillside he and his wife Marlene purchased near Lake Valley. He also gives talks to other chapters and organizations in Southern New Mexico and El Paso.

Terry began serving on the NPSNM Board of Directors in 1999 and is Board Representative and Director-at-Large for the Las Cruces Chapter. He also serves as Treasurer for that chapter.

An avid photographer, Terry combined this talent with his computer know-how, and began scanning plants and producing a unique art form called "scanographs" which he presented at the State Meeting in Silver City in 2002.

Among his other related activities, Terry completed a Master Gardener's course and also works as a volunteer for the Chihuahuan Desert Nature Park's annual Desert Expo.

ACTIVITIES & EVENTS

Albuquerque

Programs at 7 PM, Albuquerque Garden Center, 10120 Lomas SE.

Oct. 14. "*Thrifty Plants in a Thirsty Land.*" Mechanisms which plants use to conserve and use available water. Margo Murdock, Katie Babushka, Virginia Burris, Barbara Shapiro. Patio Room.

Nov. 4. "*Cacti of New Mexico.*" Kevin McKeown. Plus, Election of Officers. Pinon Room

Dec. 9. Christmas Pot-luck. Pinon Room

Gila (Silver City)

Programs at 7 PM, Harlan Hall, WNMU Campus.

Oct. 15. *"Wildflowers of the Florida Mountains"* Gene Jercinovic.

Nov. 19. *"Rare and Endangered Plants of New Mexico"* Bob Sivinski. Also, election of officers.

December: Holiday potluck, date and location TBA.

Las Cruces

Oct. 9. Field Trip to the Jornana Experimental Range. Led by Dr. Whitford. Meet 8:00 AM at North Main K-Mart parking lot.

Oct. 13. "*Grasslands to Shrublands.*" Dr.Walter Whitford, Preofessor Emeritus at NMSU. Unique features of the Chihuanhuan Desert. 7:00 PM. Good Samaritan.

Oct. 27. Planning for 2005 Activities. 7:00 PM at Good Samaritan.

Nov 10. "*New Mexico Flora.*" Robert DeWitt Ivey, author, teacher, naturalist.

Nov. 13. Field Trip to The Cedar Hills natural area. Led by Terry Peterson and Lisa Mandelkern. Meet at 9:00 AM at North Main K-Mart parking lot.

Otero

Oct. 9. Hike (2.7 mi) in the mountains east of NMSU-A. Meet at 9 AM at the Space Museum's parking lot. Bring water, lunch, wear good hiking boots. For more info call John Stockert, leader (505) 585-2546.

Oct. 30. Annual chapter meeting; elections. Noon Potluck at Gordon home 131 Lower Cottonwood Tr. For details call John Stockert (585-2546) or Helgi Osterreich (585-3315).

San Juan

Oct. 2. Field trip to a native plant nursery in the Albuquerque area. Deatios TBA.

Oct. 21. "*Future park-planning for Farmington.*" Jeff Bowman, City Parks Mgr. 7 PM at San Juan College, Rm.TBA.

Nov. 18. "*Insects and Parasitic Plants and Diseases.*" Stefani Sandoval, NM State Forestry Dept. 7 PM at San Juan College Rm.1010.

Santa Fe

Programs at 7:30 PM, Randall Davey Audubon Center (Upper Canyon Rd.)

Oct. 20. "Coming your way: The northern Chihuahuan Desert and its plants." **Wynn Anderson**, Botanical Curator for the Chihuahuan Desert Gardens, UTEP.

Nov. 17. "New Happenings at the Leonora Curtin Wetland Preserve." Linda Milbourn, Exec Dir. of Santa Fe Botanical Garden, and Sara Cunningham, Program Director, Santa Fe Botanical Garden

---

Ed: A fitting follow-up to last issue's front page article by Wynn Anderson, "

Ode To DYCs

(Sing to Pete Seeger's "Little Boxes")
by Nan Simpson

Little flowers on the hillside
Little flowers that are Compositae
And they all have different names, except
They all look just the same...

There's Macheran'thera and Senecio
And Senecio and Senecio
Malacothrix, Helianthus
Sonchus asper...all the same.

There's Verbesi'na and there's zinnia
Thelosperma and Psilostro'phe
And there's Pectis and Gaillardia
For they all have diff'rent names

There's a yellow one, and a yellow one,
And a yellow one and a .....yellow one
And they all are on the hillside,
And they all look just the same.

And the botanists on the plant walk
Have long and deep discussions on –
This Senecio, that Senecio,
And the others that we see...

And DeWitt and Gene and George do
Come to some common understanding of
All the D little Y compositate
That still look just the same to me!

Rocky Mountain Marshmallows

by Broox Boze

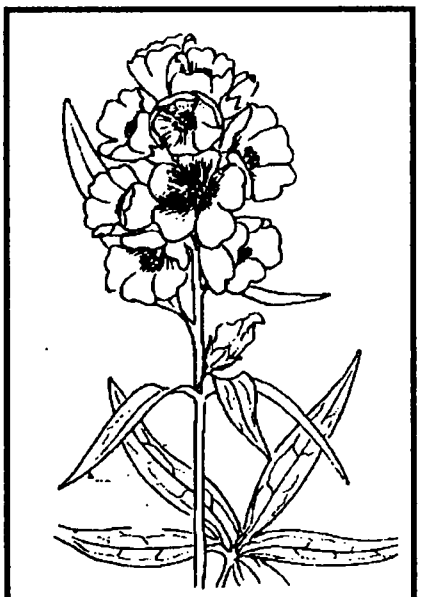
Sitting around a campfire in the southern Rockies is a time to toast marshmallows. However, most of us do not make the connection between this treat and the flowers in our surroundings. The first marshmallows were made from the crushed root of the Marsh Mallow, *Althaea officinalis*, found in wet areas of Western Europe and naturalized in New England.

The name historically refers to a medical remedy. Marsh Mallow is highly regarded by herbalists as an effective demulcent and emollient that can be used topically to soothe skin irritations and internally to remedy respiratory and digestive ailments. The sweet mucilaginous confection was named after the plant from which it was extracted and Kraft Foods first began to market the marshmallow product in the early 1950s.

Unfortunately, the Jet-Puffed marshmallows we buy today do not contain any Marsh Mallow root. Originally marshmallows were made by mixing mallow root sap, egg whites and sugar into a mold. French candy stores in the 1800s were unable to keep up with the high demand for marshmallows, so they created a quicker manufacturing technique which replaced the plant root with gelatin.

Marsh Mallows belong to the Mallow family (Malvaceae), which includes important plants such as Cotton (*Gossypium*) and Okra *Hibiscus esculentus*. Thirteen genera of this family occur in New Mexico: *Alcea* (Hollyhock), *Hibiscus* (Rose Mallow), *Sidalcea* (Checker Mallow), *Malva* (Cheese weed), *Malvella* (Mallow), *Callirhoe* (Poppy Mallow), *Iliamna* (Wild Hollyhock), *Sphaeralcea* (Globe Mallow), *Rhynchosida* (Buff-petal), *Herissantia* (Bladder Mallow), *Allowissadula* (Indian Mallow), *Anoda* (same common name) and *Sida* (Fan-petal). The last genus was used by SMU's botanist, Lloyd Shinners, as the name for the journal published by the Botanical Research Institute of Texas.

In New Mexico the Ramah Navaho consumed a cold infusion of our native Checker Mallows for internal injuries. The crushed roots contain a foamy white mucilaginous material that can be wrapped around a stick and eaten. A marshmallow product



White Checker Mallow Sidalcea candida

Illustration by Robert DeWitt Ivey

Two species of Checker Mallow occur in New Mexico, *Sidalcea candida* and *S. neomexicana.* Both occur in the north central region in high, wet, sunny mountain meadows. Both grow erect to about three feet tall with the upper leaves distinctly three- to seven-parted and the lower ones orbicular with coarsely dentate lobes. The prefix "checker" comes from the checker pattern created by veins on the petals.

White Checker Mallow *Sidalcea candida* has leaves that lack hairs on the upper surfaces and white flowers. New Mexico Checker Mallow *Sidalcea neomexicana* has leaves that are hairy on both surfaces and flowers that are purple to rose-purple in color.

Hiking in New Mexico allows us the opportunity to enjoy numerous and colorful wildflowers. That enjoyment is always enhanced when one can recognize the plant's name and understand some of its interesting history.

ITEMS FROM BUSH GREENWATCH

The Bush Administration has failed to meet a deadline to develop a plan to minimize the killing of migrating birds during military training exercises. The National Defense Authorization Act, passed Dec. 2002, granted the Pentagon a temporary one-year exemption from complying with the Migratory Bird Treaty Act. *And...*

The Defense Department has argued that complying with environmental laws interferes with military readiness. It has lobbied Congress to exempt the military from environmental laws ranging from the Marine Mammal Protection Act to the Clean Air Act.

SAVE THE DIRT!

Probably the first thing concerned citizens think of when the word "endangered" pops up is an animal: the California condor, the giant panda, the bowhead whale, the leatherback sea turtle. But right under our feet may be something equally endangered — the soils of America.

Of the 13,129 soil "series," or species, that occur in the United States, 4,540 are classified as : rare" (having a total area of less than 2,500 acres) or "rare-unique" (present in only one state, and having a total area of less than 25,000 acres).

According to Ronald Amundson, a soil scientist at the University of California, Berkeley, and his colleague, if more than 50 percent of a rare or rare-unique soil has been lost to such incursions as housing, highways, or agribusiness, the soil should be considered endangered.

The earth scientists caution that the diversity of soils on Earth today is the product of an unrepeatable combination of unique fauna and flora (many of them now extinct), as well as cyclic glaciations beginning about 1.6 million years ago. The resulting soil types — characterized by such features as depth, mineral composition, organic content, and texture — are, therefore, as unique as living species. Unusual soil types, moreover, are often the substrate for rare plants. Alter the soil and the ecosystem changes.

By correlating a map of soil distribution with a satellite map showing land use, Amundson's team found 508 U. S. soils that are now endangered. California leads the list with 104, the most of any state. The rare soils of the country's agricultural heartland are in greatest jeopardy; more than 80 percent of Indiana's and Iowa's rare soils, for instance, are endangered.

Natural History magazine, 10-03

We think we know what we are doing. We have always thought so. We never seem to acknowledge that we have been wrong in the past, and so might be wrong in the future. Instead, each the result of bad thinking by less able minds — and then confidently embarks on fresh errors of its own.

Michael Crichton *Prey*

BOOK REVIEW

Strategic Ignorance

Why the Bush Administration is Recklessly Destroying a Century of Environmental Progress

by Carl Pope & Paul Rauber

Sierra Club Books 2004

Hardcover $24.95; Amazon $16.97

Americans ought to be madder than they are about the Bush administration's environmental deceit: that's the not-surprising core message of this detailed book, coauthored by Pope, executive director of the Sierra Club, and Sierra magazine editor Rauber. That citizens aren't appalled and outraged in greater measure, they write, is thanks to what they cast as the slick rhetoric, obfuscated facts, deliberate disinformation and Orwellian way with words of Bush and his pro-growth cohorts (a Clean Air Act that adds to pollution, a Healthy Forest Initiative that encourages both more logging and more forest fires).

In impassioned broad strokes, Pope and Rauber report that Bush and his environment-unfriendly cabinet (Interior, Energy, Agriculture and EPA, in particular but not exclusively) have stripped 235 million wilderness acres of protection from logging and mining interests; funneled billions of dollars in subsidies to giant agribusinesses; rewritten scientific reports to excise unwelcome findings on global warming; defunded Superfund cleanup of hundreds of toxic waste dumps; given near carte blanche to polluting industries to self-regulate; and even lied about the quality of Manhattan's air in the days after September 11.

But the real energy of the book comes from its accumulation of small facts to paint the picture of obsessive secrecy, crony capitalism and (or so the authors claim) the administration's conscious, unabashed commitment to the economic exploitation of the air America breathes, the water it drinks and the earth it walks on.

Reprinted from Publishers Weekly

Strategic Ignorance will "spur those who care about the kind of world left to future generations to get out there and fight for it." ***Robert Redford***

"This book is a call to arms for defenders of America's priceless natural heritage." ***Senator Barbara Boxer***

Continued From Page 5

guidance to chapter leaders and prospective chapter and state leaders on how to conduct effective meetings, how to recruit new members, how to stimulate volunteers and use them in meaningful ways, and much more. Anyone interested in further details should contact their Chapter representative on the NPSNM Board, or me personally at wanderson @utep.edu, 915-533-6072, 3015 Piedmont, El Paso, TX, 79902.

Next, we will encourage greater chapter involvement in the development and submissions of proposals for NPSNM grant funding. Many fine projects and activities have been funded in recent years for organizations or civic entities that could also have benefited from local chapter expertise and volunteer involvement.

Proposals are in the works to stimulate chapter involvement in long-term monitoring of local endangered and threatened plant species. This "adopt an endangered species" concept by trained chapter members will greatly enhance the efforts of the too few and overworked professional botanists in New Mexico.

Well, the list goes on but the space for this column does not. Back to being overwhelmed: your help and active participation in local activities is the key to a viable State organization.

You have a great team of officers: "Chick" Keller (Santa Fe) as Vice President, Sandra Lynn (Carlsbad) as Recording Secretary, John Freyermuth (Las Cruces) as Membership Secretary and Donna Stevens (Gila) as Treasurer join me as President. Our e-mail and phone numbers are published in every newsletter. It is up to you to use them to communicate your ideas and opinions about NPSNM — and I hope you do so.

Finally, let me part with a reminder to the chapters that, just as we work hard to preserve diversity in the ecosystem, we must respect it in our organization. Native Plant Societies are made up of a wide range of people, not all of whom share the same interests, the same opinions, or the same politics. Let's keep a place at the table for everyone.

Wynn Anderson, President

The Native Plant Society of New Mexico
734 North Reymond St
Las Cruces NM 88005
RETURN SERVICE REQUESTED

Non-profit
Organization
U.S. Postage
PAID
Permit #946
Las Cruces, NM

Be sure to check your membership renewal date on your address label

Printed on Recycled Paper