

Native Plant Society of New Mexico

NEWSLETTER

July, August, September 2004 Volume XXIX Number 3

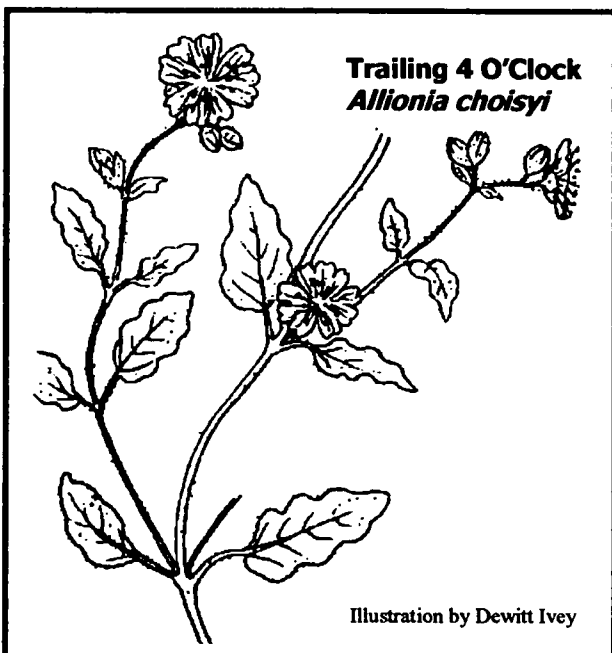
What is that plant?

The Wonderfully Confusing World of Taxonomy
by Wynn Anderson

Ever try getting a straight answer from a taxonomist? The reply is often evasive, such as "Well, it could be X...on the other hand..."

The reason is simple. The expert can't be sure without closer examination, often needing a good hand lens or a dissection microscope. Also, no one can keep details of every plant in mind; they may need a taxonomic key to be sure. And, sometimes, the part or parts of the plant that are needed for accurate identification are simply not present.

For example, there are two beautiful, almost identical, little trailing four-o'clocks in the northern Chihuahuan Desert region of New Mexico: *Allionia incarnata* and *Allionia choisyi*. *Cont'd Pg 8*



April Fool's Gag? Or Sierra Club Goof?

The annual Sierra Club Wilderness Calendar is one of the big perks for members. It's a chance to see the most gorgeous natural sites in America, as well as enjoy the work of some of the best nature photographers in the business.

But April's photo, showing a scene in the Badlands National Park in South Dakota, shot by Terry Donnelly, may have made members do a double-take! The beautiful yellow flora snaking through the valley is a notorious invasive familiar to many of us here in New Mexico...yellow sweet clover *Melilotus officinalis*!

When contacted for confirmation, Don Cohee, of the Sierra Club's calendar division in San Francisco, said he didn't know what that yellow plant was, but it "certainly would be embarrassing" if it turned out in fact to be an invasive plant.

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Guidelines for Collecting Seeds from Native Plants

1. DO NOT disrupt native plant communities either in the wild or on your property.
2. Obtain permission from all landowners (private or public) before collecting seeds.
3. Learn appropriate propagation methods before collecting seeds. All native plants require special techniques; avoid species that are difficult to propagate and that are rare, threatened, or endangered.
4. Select species that have originated in your immediate bioregion. Such plants and seeds are best adapted to the local climate, soil, predators, pollinators and disease.
5. Collect no more seeds than you can actually propagate. Be very careful to collect and store seeds properly so they are more likely to grow into viable plants.
6. Never collect all seeds from a single plant or small group of plants of the same species. Collect only a few seeds from different plants of a population. Leave most seeds for natural dispersal and as food for animals.
7. In order not to damage the surrounding flora and fauna, exercise extreme caution when collecting seeds, and leave no evidence that you were there.
8. Keep accurate records of where, what, and when you have collected seeds, and mark each seed container with this information.
9. Observe the plants in situ to accurately mimic their natural propagation regime. Notice the soil and moisture required for proper growth.
10. Promote the propagation of bioregionally native plants as an educational and conservation measure to encourage the preservation of natural habitats.
11. Openly share your botanical knowledge with the public, but ensure that native plant communities will not be damaged in the process.
12. Cooperate with arboreta, botanical gardens, museums, and universities in the propagation and study of native species.

Reprinted from Maryland Native Plant Society pamphlet.

A native plant is a plant that has mastered every survival skill except how to grow in rows.

Anonymous

MONK BUSINESS?

A local monastery was having financial problems and needed to raise money. One of the monks suggested that, since the monastery was known far and wide for its beautiful gardens, they should capitalize on their expertise and open a florist shop in town. This they did — and were soon raking in the big bucks.

But another florist in town was not happy with their success; the monks, after all, were taking away many of his old customers. He asked the friars to close up shop, but naturally they refused. He asked again, and still the monks refused. So the angry florist sent for his nephew, Hugh, who just happened to be a professional wrestler and was six-foot-seven, weighed almost three hundred pounds, and could bench-press a small car!

Hugh went to the monastery's shop and threatened the monks with bodily harm if they stayed in business. Hugh was very convincing, not to mention menacing, and the shaken monks quickly closed shop and retreated to their monastery.

Which just proves the old saying...only Hugh can prevent florist friars!

Sierra Club from front page

Well, Don, prepare to be embarrassed.

We showed the April photo from the Wilderness Calendar to Taos County Extension Agent, Rey Torres, who immediately verified that the flora in question was indeed yellow sweet clover. Then, just to be sure, we consulted NPSNM members Bob Sivinski, a botanist with the New Mexico Forestry Division, and Kelly Allred, a taxonomist and professor at NMSU's College of Agriculture, and they agreed with Torres.

Yellow sweet clover is native to Eurasia, and has naturalized throughout North America. It came to the U.S. in the late 1600s, and was used extensively as a forage plant and for honey production. Today, this weed is found in all 50 states.

The yellow sweet clover in the calendar was undoubtedly spread by grazing. Cattle eat this plant, then spread the seeds by...well, you know! If Mother Nature had been left alone, the photo would have been far more spectacular; that valley would have been filled with a dozen or more species of native wildflowers. #

SUBMIT!

Please don't make me seek you out. I know you have a letter-to-the-editor you're dying to write, or an article about something your chapter is doing in the community, or a botanical joke you'd like to share...Or, a local company that might advertise in these pages. Please don't be shy. The newsletter needs to hear from you. Email 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 Sept 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.

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- Sacramento Mts (Ruidoso)
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- Santa Fe
- Taos

I am interested in forming a new chapter in

Annual Dues:

Individual or Family.....	\$20
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Supporting Member.....	\$50
Sponsor.....	\$100
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Endowment contribution \$ _____
Total \$ _____

*Make your check payable to
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and send to*

**Membership Secretary
P.O.Box 2364, Las Cruces NM 88004**

A BEAUTIFUL TWILIGHT WITH EVENING PRIMROSES

by Donna Stevens
Fifth in a Series

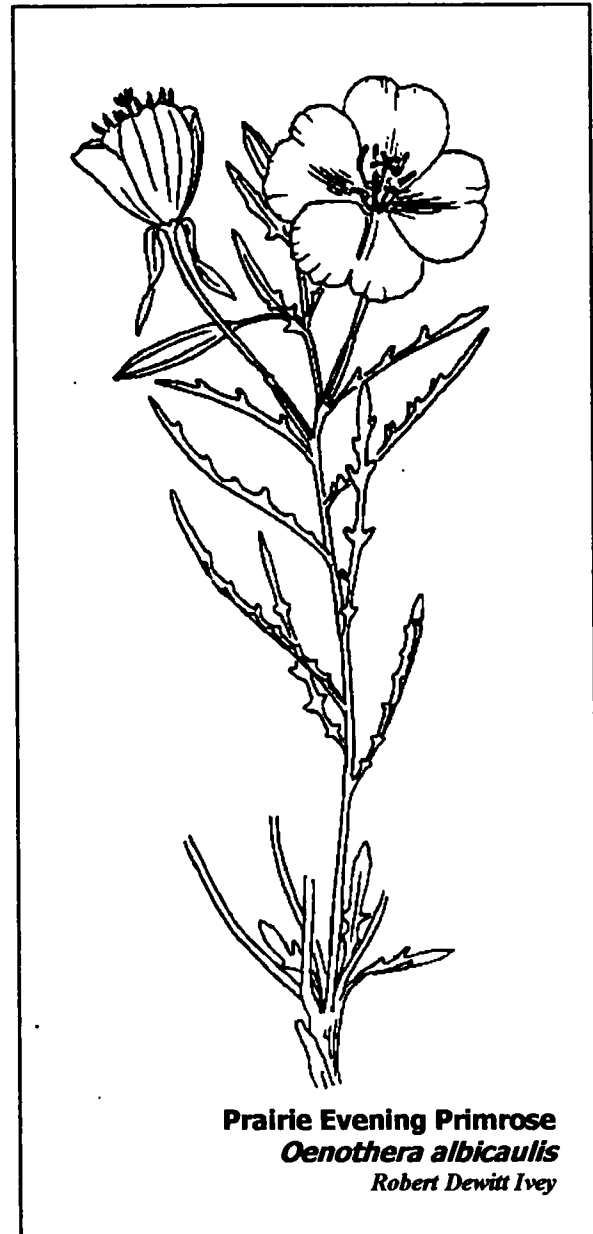
Even casual observers have been drawn to the floral beauty of the Evening Primrose family, or Onagraceae. In fields and along roadsides, evening primroses and sundrops are common sights, even during dry spells.

Evening primroses, genus *Oenothera*, are often white fading to pink, or yellow fading to orange. Sundrops, genus *Calylophus*, are usually yellow or orange. Both genera bear large, showy flowers. They close during the heat of the day and open up in late afternoon, hence their common name, evening primrose. (Evening primroses are not the same as primroses which are in a different family altogether.)

In New Mexico, members of the Onagraceae are herbs - as opposed to shrubs or trees - with (mostly) alternate leaves. The flowers are usually radially symmetrical, and most of them have four petals, four sepals, and eight stamens. The stigma is four-lobed in many genera, including *Oenothera* and *Epilobium*. The sepals often hang downward and remain attached at their tips. Onagraceae fruits are variable, but capsules are the most common. The capsules of *Epilobium* contain numerous tiny seeds, each with a tuft of hair. These hairs act like parachutes, conveying the seeds aloft in the wind. The wind-borne seeds of *Epilobium angustifolium*, fireweed, travel to recently burned areas and grow profusely in the new openings.

The blooms of most of the Onagraceae are open in the daytime, and are insect pollinated. Night-flying moths visit *Oenothera*, whose white color renders them visible in the dark. *Epilobium canum*, or Hummingbird Trumpet, is (surprise!) hummingbird pollinated. This beautiful wildflower is cardinal red, with red sepals, red capsules, and even some reddish leaves.

The glorious blooms of Onagraceae are some of my favorite wildflowers. Because these flowers wilt quickly when picked, you'll have to enjoy them in the great outdoors. But what a great excuse for an evening stroll.



Prairie Evening Primrose
Oenothera albicaulis
Robert Dewitt Ivey

ALBUQUERQUE SENIORS GET XERISCAPED

Thanks to the efforts of the Xeriscapic Council of New Mexico, and NPSNM member Judith Phillips, the homes of 15 low-income seniors in Albuquerque were relandscaped to make them more drought-tolerant and less labor-intensive.

The designs were done by graduate students in a UNM class taught by Phillips, a noted author and xeriscape expert. The students met with the homeowners to discuss personalized plans. As well as conserving water, the Senior Project also drastically improves property values, says Phillips.

Over twenty Albuquerque nurseries and landscape companies donated time and plants to the project.

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Editorial

Muchas Gracias, Governor Richardson

These are hard times for environmentalists (or conservationists, if you prefer). The message coming out of Washington is exploit, exploit, exploit!

One bright spot in the political world is our own Governor Bill Richardson who has put New Mexico's environment at the top of his priority list. His efforts to keep oil interests out of Otero Mesa have made the Bush administration and their oil buddies angry — and countless thousands of New Mexicans proud. Governor Richardson also has worked diligently on alternative energy sources and recently signed bills that boost green energy throughout the state. Among them is a law that requires utilities to produce 10% of their energy through renewable sources by 2011. He also has signed a bill providing tax incentives for people who purchase energy-efficient vehicles and support renewable energy development.

Significantly, Bill Richardson has set a new standard for other western governors who, traditionally, have been less than passionate about preserving natural areas and holding mining and oil interests at bay. One example: Wyoming's Governor Dave Freudenthal (D) is now seen as being more open to environmental thinking, thanks in some measure to our own Governor's leadership.

So — how about letting Gov. Richardson know how we feel? Drop him a thank-you note or call his office, and tell him that we the members of NPSNM appreciate what he's doing. Politicians (some of them) are people, too, and like a pat on the back from time to time.

And, while you're at it, call Senator Pete Domenici (R) and his heir-apparent, Rep. Heather Wilson, and give them an earful as to how we feel about their stances on environmental issues. We may not change their votes, but at least they'll know we're on to them.

Governor Bill Richardson
State Capitol, Room 400, Santa Fe NM 87501
505-476-2200

Sen. Pete Domenici
202-224-6621

Rep. Heather Wilson
202-225-6316

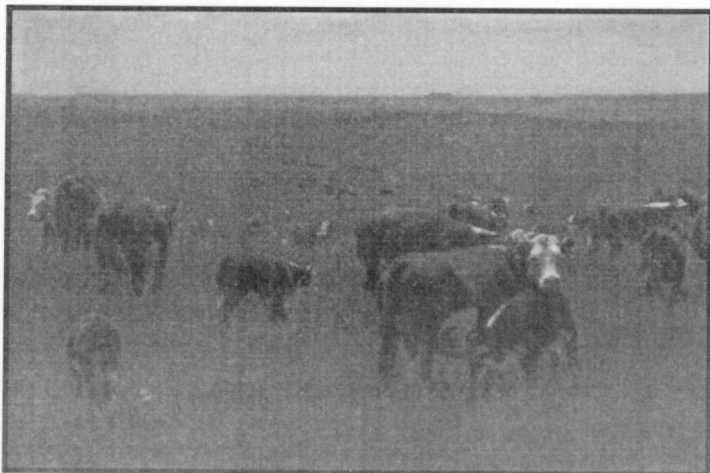
CONSERVATION CORNER

Jim Nellessen

Federal Lands Grazing

Over the last several years we have heard about the controversies over grazing livestock on federal lands, mostly in the west (e.g. Forest Service and Bureau of Land Management lands), including New Mexico. Federal lands grazing has a strong historical context rooted in settlement times. Opinions run strongly on both sides of this issue, not so much on whether grazing *per se* is bad, but because of how it is managed.

Great Plains grasslands actually do better with some grazing; after all, once vast herds of bison roamed the plains. Desert grasslands tend to be more susceptible to damage, and the effects vary by species (e.g. black grama is known to be more sensitive to overgrazing).



As a beef eater myself, I do not want to see cattle go away, but as a naturalist, plant ecologist, and native plant enthusiast, I *do* want to see a healthily managed ecosystem that conserves our native flora and fauna. It seems to me that everyone would agree; caring for the land that sustains us all should bring all parties together, not divide them.

That said, I would like to make a few comments about the proposed Voluntary Federal Grazing Permit Buy-Out Act. Recently, the NPSNM Board voted to support this act currently being put together by the National Public Lands Grazing Campaign. In essence, federal grazing permittees and lessees may voluntarily waive their grazing permits or leases to the appropriate managing agency in exchange for a generous financial compensation.

The plan would pay the permittee \$175 per AUM (animal unit month-amount of forage that would feed one typical cow and calf for one month). Compare this to existing programs under the USDA's Farm Bill Conservation Program that pays farmers to not plant on marginal lands and the Grassland Reserve Program that pays landowners for conservation easements to

limit development and subdivision. The federal agency would then permanently retire the grazing allotment.

As stated, the program is voluntary, so each permittee could voluntarily decide to receive the compensation depending on his or her financial situation and stage in their life plans.

Some statistics to keep in mind: only 3% of all livestock producers in the U.S. have federal grazing permits, although that does represent 22% of producers in 11 western states; there are a total of 27,000 permit holders, but 880,000 livestock producers have no federal grazing permits. Finally, the percentage of U.S. beef produced from federal lands is less than 3%. Consequently, federal rangelands could be returned to native wildlife such as deer, elk, pronghorn and others, and be given a chance to return to natural conditions.

This may take awhile because, in areas now dominated by shrubs where once grasses dominated, shrubs will continue to dominate unless some other environmental influence - perhaps humans again—push the balance back the other way through ecological restoration.

ACTIVITIES & EVENTS

ALBUQUERQUE

2nd Thursdays at 7 PM at Albuquerque Garden Center, 10120 Lomas NE.

July—TBD. Call Tiana Scott (323-1697) for information if calling prior to July. After July 1, call Gary Runyan (242-9758) or Beth Herschman (892-2230).

August 28, 9 AM-4 PM. Plant Sale with Daylily Society. Pinon & Patio Room. Speakers: 10 AM. "Creating Wildlife Habitats in Your Own Yard," Virginia Burris.

1 PM "Birdscaping," Melissa Blood.

September 9. Program. "Selected Plants from Southern New Mexico State Parks," DeWitt Ivey.

September—Field trip. Mushroom walk led by Ruth Bronson and Gary Runyan. Date TBD

GILA (Silver City)

Programs at Harlan Hall, WNMU Campus, 7 PM. Field trips meet at 8 AM in south parking lot of WNMU Fine Arts Center.

July 18. Field trip. Wildflower viewing upstream at Meadow Creek north of Pinos Altos. Led by Gerry Niva.

August 15. Field trip. CD trail on Jack's Peak. Led by Gerry Niva.

Sept. 17. Program. Slide show on Asteraceae, the aster/daisy/composite family. Speaker TBA.

Sept. 19. Field trip. Introduction to work by San Francisco River Association near Glenwood to plant native vegetation along the San Francisco River.

SANTA FE

July 11. Bus tour. Valles Caldera National Monument. Selected locations with walks to botanize. The tour part will be four hours long. Cost approximately \$24 to NPSNM members. Limited 24 people. Led by Jonathon Coop, who is doing his PhD thesis at the Reserve. Car pooling recommended to Banco Bonito Ranger Station. Meet either at PERA parking lot Santa Fe at 7 AM or at Sullivan Field Parking lot Los Alamos at 8 am. To register or for more info call Chick Keller, 662-7915.

August & September—TBD

The Thorny Rose Affair

Adapted by Sally Wasowski from the article
by Lee W. Lenz in *ALISO* 10(2), 1982

On Wednesday morning April 5, 1882, four men — two prestigious botanists, a lad who would later be an eminent botanist, and a botanist whose reputation was ruined by this escapade — left San Diego to collect plants in northwestern Baja California. As late as 1971, stories, rumors, and tempers were aroused by what happened on this trip.

The winner of this contretemps was Charles Christopher Parry (59-years old at the time of the expedition). Renowned for his "accuracy of fact and freshness of viewpoint," Parry was also known for his love of the limelight. He was friends with many prominent botanists, including Asa Gray, John Torrey, George Engelmann, D.C. Eaton, and J.D. Hooker.

The loser was Marcus Eugene Jones, (30-years old), referred to as the "Professor," although he was not one. A resident of Salt Lake City, Jones never traveled or collected on Sunday. He was ambitious and became known for his "independence of thought" and his hasty and erroneous judgments of other people.

Parry and Jones had botanized together in the summer of 1880 in Utah with George Engelmann. Meeting again in San Diego, Parry invited Jones to join him on a trip to Ensenada with that "prince of collectors," Cyrus Guernsey Pringle. Also in the party was 18-year old Charley Russell Orcutt, who in later years became an authority on the plants (especially cacti), insects, and shells of our southwestern deserts.

Stickem-up!

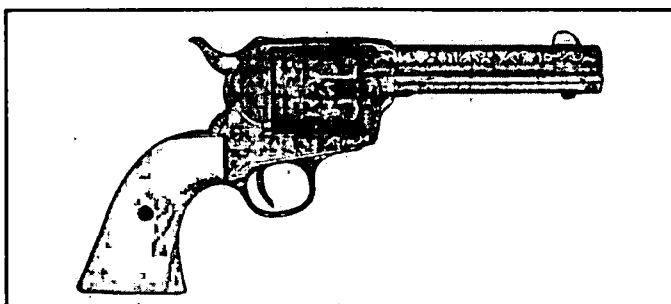
The trip did not go well, but everyone was a good sport until the last Sunday when Jones was left behind in Sulphur Springs. On Monday, April 17, Charley and his brother returned for Jones who, believing the lads impertinent, drew a pistol on them, seized the wagon, and forced the boys to find their own way home.

One newspaper, *The Sun*, ran a story about the incident with the headline, "A Pious Professor: He Objects To Riding On Sunday, But Is Willing To Shoot A Man On Monday."

That's the sensational part of the tale; the rest has to do with who got credit for discovering and naming what is now *Rosa minutifolia*.

Mail Egos?

On the following Monday, Parry wrote to Engelmann saying, "We have a *Rosa* for you." On Tuesday, Jones wrote Engelmann, "I discovered a rose, that I will name *Rosa horrida*." Engelmann replied to Parry, "Jones says he found and named [the rose] before you did." Also, commenting on the newspaper article, "I see that Jones is making himself thoroughly disagreeable. Of Jones' vanity I have known long but this goes a little too far."



Pringle wrote to Engelmann, "I began to find Jones a disagreeable botanizing companion from the first; and after a few days his conduct became almost intolerable." Parry wrote to Engelmann, "I have told you all that is necessary to say of the dirty (deleted word) Jones. If he tries to publish himself, he will only add to his infamy and disgrace." In another letter, Parry begged Engelmann to describe and name the rose so "we will head off the *Jonesia horrida*."

Parry also wrote to Asa Gray, "Jones has behaved shamefully on the trip capping the climax of his conceit and ignorance by drawing a pistol on an inoffensive young man of the party. Jones has intimated that he will 'steal a march' on us in the publication of new species of which I wish to give you warning."

Parry continued writing, especially to Asa Gray and to the editor of the *Torrey Bulletin*, where Parry wanted the rose to be published. His efforts paid off and the rose was introduced in the August issue of the *Bulletin of the Torrey Botanical Club* as *Rosa minutifolia* Engelm. in Parry. While discovery was credited to Pringle, Orcutt, Jones, and Parry, it was Parry's name that was part of the rose's official identification. Needless to say, Marcus Jones was not pleased!

From Front Page

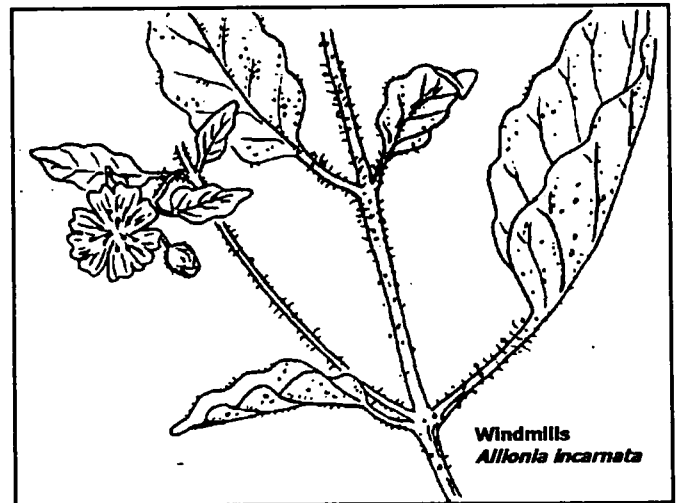
The first is usually a perennial plant with a semi-woody root developing with age, while the second is normally, but not always, an annual plant with a herbaceous stem joining the rootstock. Both have prostrate, trailing stems that in *A. choisyi* tend to be smooth and glabrous (without hairs), but in *A. incarnata* are viscid and pubescent (sticky feeling with fine short hairs) in *A. incarnata*. Sometimes, however, *A. choysia* can be lightly pubescent while older stems of *A. incarnata* may tend to lose their sticky hairs with age.

Confusing? Then let's look at foliage. *Allionia incarnata* often has ovate leaves with sinuate (very wavy) margins while on *Allionia choisyi* the leaves tend to be more oblong with crisped (slightly wavy) edges. But not always. Both the leaves are darker green on top and paler below and are paired opposite each other — but, oddly enough, the paired leaves are usually unequal in size!

Since the leaves don't help much, let's try the flowers. Both have perfect flowers (containing both male and female sexual parts) arising from the leaf axils (where a leaf joins the stem), and while appearing to be a single blossom with nine rosy pink petals, this display is actually a cluster of three separate, short, funnel-like, flowering tubes, each ending with three petals (actually tepals, but that's another story), all enclosed by a single sack-like bract. These flowers are identical in both species, but flowers of *Allionia choisyi* tend to be slightly smaller (by a single millimeter on average) than cousin *A. incarnata*. In other words, no help here!

What's left? The fruits! And they *do* have the answer if you have a good hand lens! The seeds of both species are about 4 mm long, rather flattened with a brown leathery surface but, on what appears to be the inside flat surface, two small wings emerge and run parallel the length of the seed and these protruding wings hold our answer. In *Allionia incarnata*, each wing has no more than three broadly triangular teeth without glands and both wings seem to curve inward to nearly fold together over the seed surface. On *Allionia choisyi*, the two wings are composed of several rather slender teeth, each tipped by a small glandular knob, and the wing structures are outward spreading or only slightly incurved.

And that, my friends, is enough to differentiate between two different species. But in the field, when seeds have not yet matured or the experts you are following don't have a hand lens or the time to make a careful examination or, more likely, when they are simply handed a small piece of stem with a flower carefully saved in a plastic bag, and they look confused and give an evasive answer like, "Well, it's an *Allionia* in the Four-O'clock family but I don't know which one," go easy on them. Maybe they know too much to give you a simple answer and that beats a wrong answer, any time.



Windmills
Allionia incarnata

Dewitt Ivey

New Mexico's *Allionias* are commonly known as *Umbrella-Wort*, *Pink Windmills*, *Trailing Four O'clock* or *Hierba de Hormiga*. Perennial *A. incarnata* is found across the Southwest, from California to New Mexico, Texas and south through Mexico to Peru, while short-lived *A. choisyi* is more restricted to the northern Chihuahuan Desert from southeastern Arizona, southern New Mexico, west Texas, south into Mexico and, interestingly enough, the West Indies. They both prefer dry, gravelly or sandy soils of hillside slopes, alluvial fans and open flats and can send their long trailing stems out several feet from where the plant emerges from the ground. With adequate moisture, individual plants can appear almost mat-like, clamoring over rocks and other small plants. The small attractive flower clusters are pink to rose-red or magenta and sometimes nearly white. They bloom from late spring to fall and are easy to establish from collected seed by scattering the seed in coarse sandy or gravelly soil and letting them determine just where they will be happy. Remember that fertilizer is unnecessary and go easy on the water — although a little extra irrigation is useful during those hot, dry days before the summer rains begin. #

CURRENT ARTICLES OF INTEREST

Jim Tuomey, Taos Chapter, sends along this list of articles available at the Taos Public Library. Chances are, your library will also carry them.

Americas, April 2004

"In the Arms of the Desert," Jeffrey P. Cohn. This study of Sonoran saguaros, one of the world's tallest cacti, uncovers much about the survival of other plants in this extreme climate. Pp. 28-37

Discover, March 2004

"The Ecology of...Roadkill," Alan Burdick. How does a deer cross the road? Very, very carefully — yet alive and intact thanks to new eco-passages for wildlife. Pp 22-23

High Country News, March 29, 2004

"New Mexicans Take a Stand Against Oil and Gas," Bobby Magill. The fight to keep drillers off Otero Mesa could set the tone for the November election. Page 4

Science, March 12, 2004, Vol. 303, No. 5664

"All Downhill From Here?" Kevin Krajick. Biologists say climate change may already be affecting high-mountain ecosystems around the world where plants and animals, adapted to cold, barren conditions, now face higher temperatures and a surge of predators and competitors. Pp 1600-1602

Science, March 19, 2004, Vol. 303, No. 5665

"Ecology," Elizabeth Pennisi. Naturalists' surveys show that British butterflies are going, going... Page 1747

Science, March 26, 2004, Vol 303, No. 5666

"Plant Pathology," Erik Stokstap. Nurseries may have shipped sudden oak death pathogen nationwide. Page 1959

Science News, April 3, 2004

"A Frond Fared Well," S. Perkins. Genes hint that ferns proliferated in shade of flowering plants. Page 214

Thanks, Jim

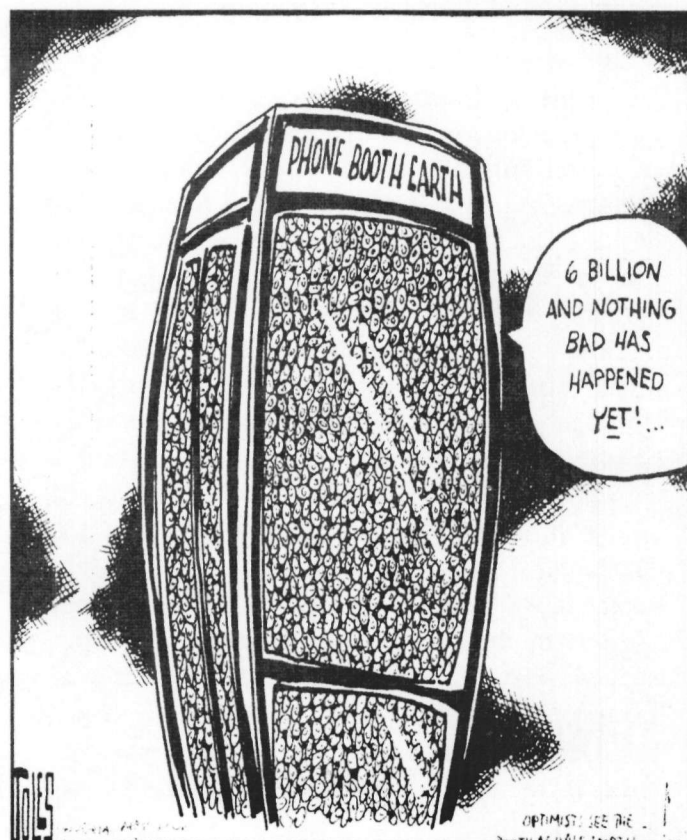
A GENTLE REMINDER!

If you still haven't sent in your registration form and check for the 2004 Annual Meeting in Alamogordo...

DO IT NOW!!!!!!!

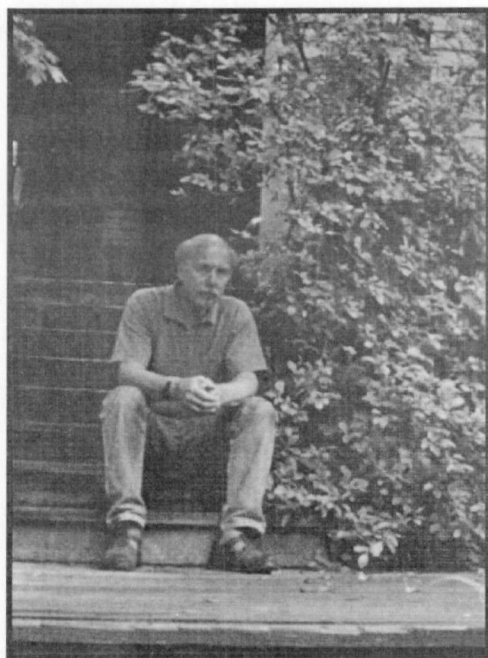
All the details of speakers, programs, panel discussions, workshops, field trips, book & plant sales...plus food (including "cooking wild" delicacies) and fun...are in the April-June newsletter.

Can't find it? Call Judy & Don Tribble at 505-585-9017 or email them at gecko@netmdc.com.



A CHANGE IN EMPHASIS

In the Oct-Dec '03 newsletter, you met Lorrie Otto, one of the giants of the native plant movement. I also said that from time to time I'd introduce you to other people from across the country who are working to change the way America landscapes. In this issue, I'd like you to meet Don Walker, director of the Conway School of Landscape Design in Conway, Massachusetts.



DON WALKER

Most laypeople are amazed to learn that students of landscape architecture are exposed to very little plant information during their schooling. The typical curriculum devotes less than 10 percent of classroom time to the flora that will compose the designs that they will create; the remaining class time is devoted to hardscaping: planning and installing lighting, erecting retaining walls, laying out and constructing walkways and irrigation systems. What consideration is given to plants is invariably limited to conventional nursery stock; native plants are rarely if ever touched upon.

Little wonder then that the vast majority of landscaping projects that come from these landscape architects has little to do with nature and almost always reflect the controlled, formalized, high-maintenance and water-wasting style seen around most residences and corporate headquarters from coast to coast.

Happily, that is changing — albeit slowly. Among the relative handful of institutions that

are combining environmental studies with their landscape architecture curricula are: the University of Georgia, the University of Michigan, and Syracuse University. One of the best examples of this change in emphasis is the Conway School of Landscape Design in Conway, Massachusetts.

Founded in 1971, the Conway School operates under the direction of Don Walker who came to the faculty in 1978 after 15 years of teaching undergraduate and graduate courses at the University of Illinois and Ball State University in Muncie, Indiana. An award-winning landscape architect in his own right, Walker has a passionate commitment to the natural world, and he insists that his students must fully understand the ecological consequences of their work.

At Conway, students are offered a ten-month master of arts program covering site design and land use planning that has at its core a true sense of respect for the natural environment. They come to this sleepy New England village not just from all over the U.S. and Canada, from as far afield as Germany, Japan and Brazil.

The school structure itself reflects the intimacy of the experience, being housed in a converted house and barn. John Martin, professor of landscape architecture at the University of Massachusetts, says he was attracted to “the human scale” of the school and a curriculum that “rejects glitz and gimmicks,” and concentrates on combining sound design principals with conservation.

The program, structured around professional-level work for residential, municipal, and nonprofit organizations strongly stresses understanding and accommodating natural systems. Toward this end, students are given a basic knowledge of geology, climate, soils, hydrology, wildlife, and other natural sciences, as well as specific skills in engineering, construction, planning, and conservation. They are also exposed to some of the finest minds in this and related fields through a distinguished list of guest lecturers who come to Conway to share their insights.

Andy Wasowski



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Of all the wonders of nature,
a tree in autumn is perhaps
the most remarkable — with
the possible exception of a
moose wearing spats singing
“Embraceable You.” *Woody Allen*

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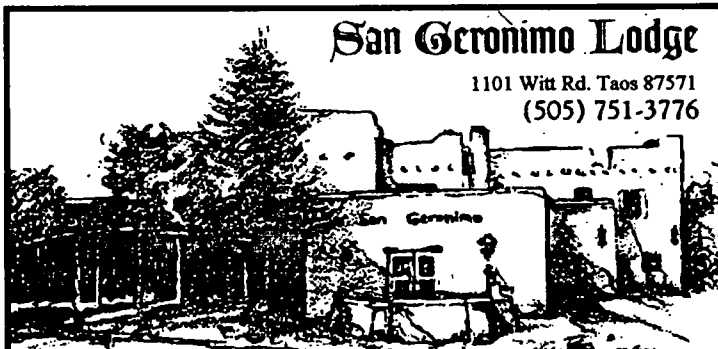
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EPA AND LAWN CHEMICALS

In the Spring 2004 issue of *Pesticides and You*, the quarterly bulletin from Beyond Pesticides (formally the National Coalition Against the Misuse of Pesticides), Executive Director Jay Feldman describes a visit to EPA HQ in Washington, DC where he saw a poster reading: "*Learn to Use Pesticides Safely.*"

"When I first saw that sign," Feldman writes, "I was struck (again) by how EPA's pesticide program has misinterpreted its mission by not alerting the public to the real dangers of pesticides....How can you use a pesticide safely or, as EPA says, in accordance with label instructions, if the agency knows pesticides (1) have not been fully tested for health outcomes generally and for subpopulation groups specifically, (2) could be synergistic with other chemicals, and (3) are regulated by risk assessments that allow some rate of illness to occur, ignore exposure patterns outside an arbitrary norm, and have high uncertainty factors?"

During his visit, Feldman saw another poster: **Pesticides Are Meant to Poison These** (picture of insects), **Not These** (picture of baby children), and commented that "It was good to see EPA acknowledge that pesticides are poisons, if only subtly. But the second part of the sign *should* read: **And They Poison Babies Every Day, Too.** The message is that pesticides only hit their target pest population, which EPA knows is untrue given pesticide drift and volatility. It also misleads the public into thinking that all insects are bad.

"EPA's pesticide program views as one of its major responsibilities the quelling of public concern about pesticide hazards. Does the EPA says straightforwardly: pesticides can kill you...cause cancer...damage your children's ability to concentrate and learn...cause respiratory illness...and that toxic pesticides are unnecessary in managing (garden) pests in most situations and are unwarranted, in light of their hazards, for cosmetic uses? No, EPA does not!"

Errata

In the last issue, we identified Gene Jercinovic as a member of the Alamogordo Chapter. Our mistake; Gene belongs to the Albuquerque Chapter.

By the way...Anyone in your chapter deserving of recognition? Give us their names and short descriptions of their contributions to NPSNM and the environment in general. E-mail to andrzej@laplaza.

Volunteer Profile



Lolly Jones
Albuquerque Chapter

NPSNM Website Editor Lolly Jones moved to New Mexico from California in 1990 and joined NPSNM soon after. She was born and raised in the high Nevada desert, so the Albuquerque area felt like coming home - except that the plant diversity is much greater than in the Nevada Great Basin.

Lolly always had a love for botany and briefly studied botany at the University of Nevada in Reno. Upon moving to New Mexico, she started learning about native plants and found the NPSNM web page and newsletter very helpful. She took over the editorship of the website in July 2003.

She and her husband, Al, retired from Sandia National Laboratories four years ago and she now uses the computer, project management, and administrative skills she developed over her work life to work on things she cares about. Aside from NPSNM, she is on the board of a local open space preservation group, Las Placitas Association, and chairs the Las Huertas Creek Watershed Project, helping to form a collaborative group to protect and restore this important watershed in Placitas.

Lolly says that working on our web page has allowed her to get to know and appreciate the dynamic and innovative members of NPSNM.

BOOK REVIEWS

REQUIEM for a LAWNMOWER:

Gardening in a Warmer, Drier World

Revised and Updated Second Edition

by Sally & Andy Wasowski

Taylor Trade Books, 2004

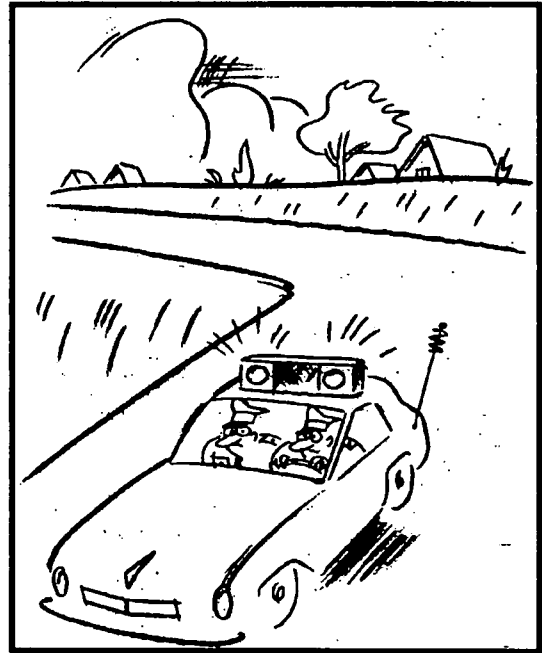
Paperback \$16.95 ISBN 1-58979-063-4

Reviewed by Lorrie Otto, founder/The Wild Ones

Our first view from outer space was of a glorious green-blue planet so special that we wept. Today the astronauts' cameras show brown-beige consuming our earth. We look with horror and shame.

Our oceans are in terrible trouble with large dead spots caused by pesticides and fertilizers. Clean water is becoming scarce. The earth is indeed becoming warmer and drier. And individuals as well as corporations can certainly be blamed for environmental mismanagement of the land.

Sally and Andy Wasowski are landscaping naturalists who can help the public address the warning of the warming. *Requiem for a Lawnmower* is such a satisfying title for their latest book. And, as its subtitle indicates, this new edition reflects our environmental concerns.



"Car 88, proceed to 143 Edison Street. Couple growing penstemons and coneflowers in front yard!"

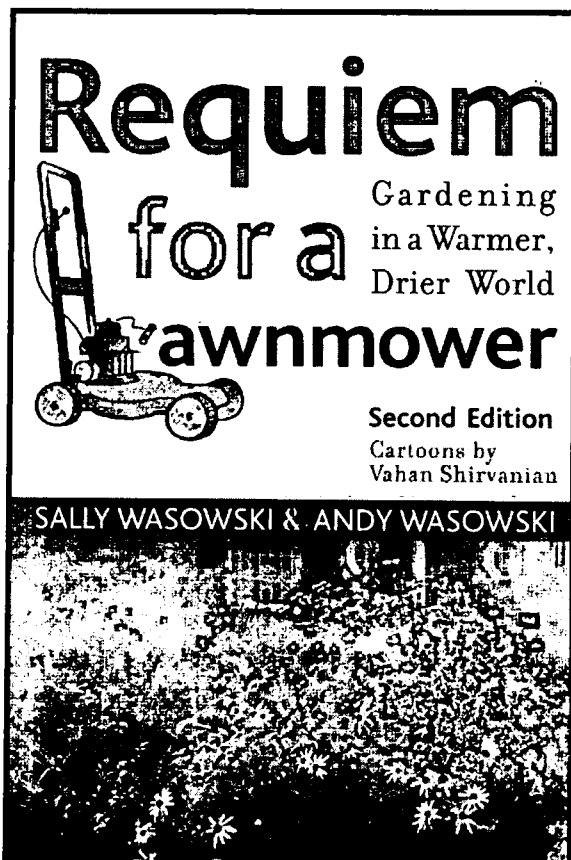
From Chapter 43, Weeding Out Bad Weed Laws

Written with wit and wisdom —and illustrated with delightful cartoons — *Requiem* escorts us into a world of common sense gardening and respect for our endangered habitats. Sally and Andy offer us a way to go with our thoughts and our energy. *Requiem* can inspire homeowners to create beautiful, healthy and diverse landscapes that are also environmentally responsible.

Of course, neither national nor local governments will help us; politicians are too locked in with lawn-care companies. Only our conscience can give us strength and support. Being a patriotic person is a bit more than just flying an American flag; we can do better. Can we really justify the use of power equipment that adds to the ozone threat, the warming of the earth and the squandering of fossil fuels?

As I write, the May migration is in full force, yet I hear no songbirds. Power mowers, blowers, clippers, edgers, spreaders, sweepers, shredders and chippers blast all the subtle and happy sounds of spring out of my life. And now I read in the news that the new John Deere rider-mower is out with even more horsepower and creature comforts: lumbar support, cruise control, automatic transmission, power ports for plugging in cell phones and CD players!

Lorrie Otto



A Region of Astonishing Beauty

Roger L. Williams.

Rinehart Publishers, 2003. 209 pp.

Paperback US \$19.95

ISBN 1-57098-397-6

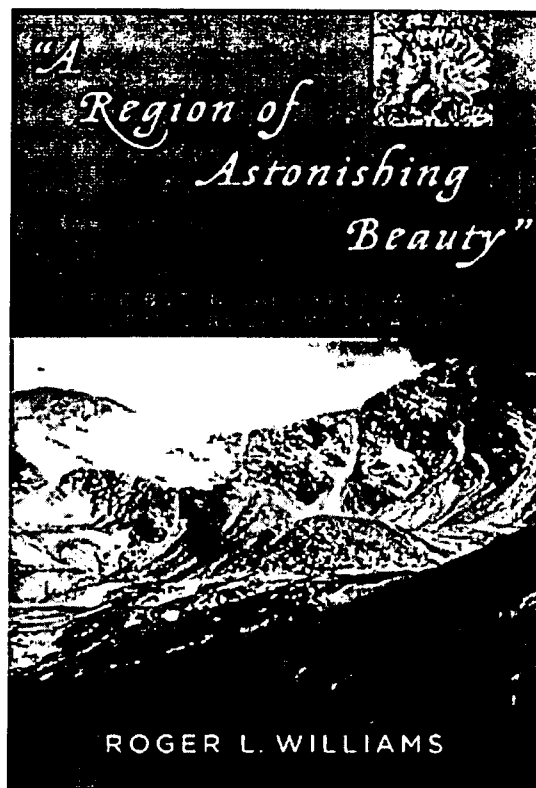
Review by Bonnie Heidel, Wyoming NPS

Roger L. Williams, Distinguished Professor Emeritus and former head of the History Department at the University of Wyoming, is well-versed in the history of Europe, the history of scientific inquiry, and the flora of the Rocky Mountains and the windblown Laramie Basin. Out of his eclectic expertise arose a superlative documentary — *A Region of Astonishing Beauty*. The breadth of this undertaking casts light on the history of botany as it developed into a separate scientific discipline during the 19th century, and as it illumined the course of regional history.

Twenty-five botanical explorers, variously trained in botany as well as theology, medicine, horticulture, and geology are prominently featured in 19 chapters that follow approximate chronological order. The title is taken from a statement by Edwin James, the first botanist to explore the alpine flora on Pike's Peak in the Rocky Mountains. Other botanical explorers include Meriwether Lewis, Thomas Nuttall, John Charles Fremont, Ferdinand Hayden, Marcus Jones (see page 7), Per Axel Rydberg, and Aven Nelson. Quotations are used judiciously, illustrations are absent, and footnotes are faithfully recorded. Contributions to botany are the focus, and not the adventure tales en route.

If there are any common threads, they are linked to the question: How do you classify life forms? This most basic intellectual problem of the 18th Century, with its tension between "artificial" vs. "natural" classification emerging from the Age of Enlightenment, played out in the early documentation of the Rocky Mountain flora in the 19th Century. The active debates shifted from taxonomic framework to more pedantic questions of nomenclatural conventions over the following century, sometimes pitting botanists of the New World and the Old, and botanists of the east and west. As Williams wryly notes, "The long memory of such quarrels greatly contributed to the traditional conviction that botanists are by nature an exceptionally quarrelsome lot."

A Region of Astonishing Beauty does not take the place of more detailed books on individual explorers (e.g., the biography of Aven Nelson published earlier by Williams in 1984). But it presents a broad cast of characters and a sense of the collective breadth and depth of Rocky Mountain botanical explorations regardless of state lines, expedition mandates, and individual predilections. Far more comprehensive treatments on the subject of North American botany explorers are presented by Reveal and Pringle (1993). Articles on individual botanical explorers are also posted on <http://uwadmnweb>, the Wyoming Native Plant Society homepage.



Williams does not address contemporary botany except obliquely: "*Whereas in the eighteenth century lengthy expeditions or field trips, commonly of two or more years, had been the graduate schools for botanists, after about 1890 one attended a formal graduate school: and graduate degrees became the licenses to practice. Everyone is aware of what has been gained through that transition. Probably very few are conscious of what has been lost.*"

Who is the audience for this book? If you have read this far – it is definitely for you. Chances are you will want to read it more than once.

HANGING CHAD-PROOF BALLOT

The election of officers for a 2-year term (mid-year meeting, 2004 to mid-year meeting, 2006) will be held from 7/1 to 8/1, 2004. Results will be announced August 6th at the semi-annual Board Meeting at the annual State meeting in Alamogordo, August 6-8. The Nominating Committee of the Board of Directors has nominated the following:

President: *Wynn Anderson, El Paso Chapter.* Currently State Vice President, past President El Paso Chapter, Botanical Curator Chihuahuan Desert Gardens at UTEP. **Vice President:** *Charles "Chick" Keller, Santa Fe Chapter.* Currently represents Chapter on State Board of Directors, President of Santa Fe Chapter, Retired Director U.C. Institute of Geophysics & Astrophysics. **Secretary:** *Sandra Lynn, Carlsbad Chapter.* Currently represents Chapter on State Board of Directors, President of the Chapter, former President Albuquerque Chapter. Writer and Asst. Professor of English, NMSU Carlsbad. **Treasurer:** *Donna Stevens, Gila Chapter.* Currently VP Gila Chapter, organizer of 2002 State NPSNM meeting, co-author "Common SW Native Plants" and employed by Upper Gila Watershed Alliance. *In addition, there is one petition candidate for the position of Treasurer: Don Tribble, Otero Chapter.* Currently State Treasurer, former Chapter Representative on State Board of Directors, retired.

PRESIDENT: Committee Nominee, **Wynn Anderson** _____

Write in _____

VICE PRESIDENT: Committee Nominee, **Charles "Chick" Keller** _____

Write in _____

SECRETARY: Committee nominee, **Sandra Lynn** _____

Write in _____

TREASURER: Committee Nominee, **Donna Stevens** _____

(vote for 1 only) Petition Nominee, **Don Tribble** _____

Write in _____

Voter certification: I am a current member of NPSNM .

Signed _____

Ballots must be returned by August 1 to LISA MANDELKERN, President NPSNM, 5259 Singer Road, Las Cruces, NM 88005.
This ballot may be duplicated for use by any NPSNM Member. One vote per member. All ballots must be signed or enclosed in a signed envelope.

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