

NATIVE PLANT SOCIETY OF NEW MEXICO NEWSLETTER

November & December 1991

Volume XVI Number 6

Special Native Plant Gardening Issue

LANDSCAPE ECOLOGY: THE GARDEN PATH TO SUSTAINABLE LIVING SPACES

By Judith Phillips

Our daily activities effect the world around us like ripples in a pond. That analogy is particularly apt in the desert southwest, where water is a precious resource. Developing an environmentally appropriate landscape begins with a thoughtful assessment of the site, how you will use it, and your relationship to the larger ecosystem surrounding you. Long and leisurely walks through nearby natural areas are the best preparation for planning such a landscape. Having evolved over time in response to environmental pressures, local native plant communities are made up of a core of co-dominant trees and shrubs, wildflowers and grasses. Translated to the garden, the trees and shrubs provide a basic framework, are the walls and ceiling, enhanced by drifts of wildflowers for seasonal color, and grasses as textural gracenotes that become the carpeting.

When building on a previously undisturbed site, preserve as much of the native cover as possible. This may involve a battle of wits with the developer and contractors. A clause in the contract requiring reimbursement for all unnecessary site disturbance may provide incentive where environmental awareness is lacking. Having time to live on the site and learn its peculiarities before making landscaping decisions gives you a better perspective for making those choices. Erosion is minimized, and the invasion of tumbleweeds and other noxious colonizers of disturbed soil is, if not entirely avoided, at least kept to a manageable level. If you have inherited

disturbance-caused weed problems with your site, expect to invest some time in reversing the damage as you work toward rebalancing the ecology.

To develop a functional plan, consider the physical characteristics of the site and your needs as its occupants. Work with the site, using exposure to sun and wind and existing contours to your advantage as you work to moderate the climate, stabilize the soil, and channel runoff to supplement plantings. Consider views, your need for privacy, and traffic patterns on the site to develop outdoor living spaces open to our amazing panoramas, but shaded in summer, and protected from wind.

Consider also your position in the surrounding ecosystem and the effect of your landscape on wildlife. As human development encroaches on habitat areas, your landscape can help mitigate losses by serving as a link in the network of greenspaces supportive of wildlife.

Reconsider the lawn as a basis for landscaping. Manicured lawns originated in England where the wet climate and heavy soil can easily sustain them, and at a time when maintenance labor was a bargain. Traditional lawns use more water and resources per square foot than any other type of landscape planting. Closely mowed turf also has little wildlife value. Limit such lawns to areas where they serve a clear purpose, such as play areas or patio extensions. Amend the soil to increase its water holding capacity. Since most cool season grasses, the traditional lawn species, are not deeply rooted compared with dryland natives, most of the potential root zone can be improved by tilling four or more inches of compost into the soil to a depth of 8 inches before seeding or sodding. Consider substituting more heat and drought tolerant native grasses in large areas, or use porous paved pathways bordered by groundcovers and shrubs, partly shaded by trees, in place of lawns.

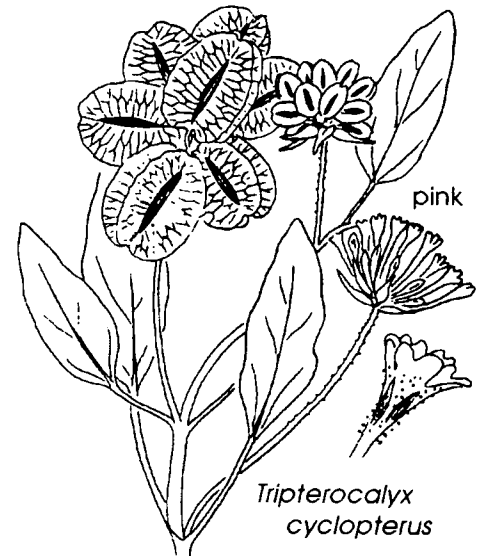
Select plants well-adapted to the site and their purpose in the landscape. In this climate, the majority of the plants should

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be drought tolerant. Climate adapted plants, especially natives, require no soil amendments at planting time or fertilizer once established. Peat moss, manure or compost added to the backfill when transplanting can have a containerizing effect on plant roots, alter the way water moves through the soil and limit the rooting of plants to the amended soil, making the plants less self-sufficient. Heavy clay soils require amendment of 70% sand or organic matter by volume to have any real effect. Adding smaller amounts of sand to clay results in a material more suitable for making adobe bricks than for planting anything, native or not. Selecting plants that adapt well to clay soils is a more reasonable approach, although it limits the plant palette somewhat. Ecologically, the suitability of the plants to the site is more important than their aesthetic quality, but most of us garden at least partially to fulfill a creative need, to participate in the creation of a place of beauty. The key to effective plant selection is balancing the desire for beauty with the realities of the site.

Group plants in communities according to their water needs and their function in the garden. The wettest zones may be oases surrounding the buildings and other high traffic areas, where the water used to maintain the garden also has a cooling effect on living spaces. An oasis is most effective in contrast to the arid



The **Newsletter** is published six times per year by the New Mexico Native Plant Society. The Society is composed of professional and amateur botanists and others with an interest in the flora of New Mexico. 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. Members benefit

from chapter meetings, field trips, publications, plant and seed exchanges and a wide selection of books available at discount.

We also encourage the use of suitable native plants in landscaping to preserve the state's unique character and as a water conservation measure.

We maintain a register of business and professional people who are members and can supply information and services related to native plants. To be added to this roster or to request information, contact the Membership Secretary.

Schedule of 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, 443 Live Oak Loop, NE, Albuquerque, NM 87122

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Deadline for the next newsletter is December 10.

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climate it moderates. Use more drought tolerant plants as a buffer and transition zone between the wetter zones and the desert, be it our high plains grassland or the asphalt desert of urban evolution. The transition zone may be a dry streambed where extra water is available periodically, harvested from adjacent roof and paved surfaces.

Such a streambed may also serve as a meandering pathway through the garden. The driest zone meshes with the surrounding ecosystem on suburban or rural sites. In urban areas, dry zones may be the harshest microclimates such as parking strips and street medians.

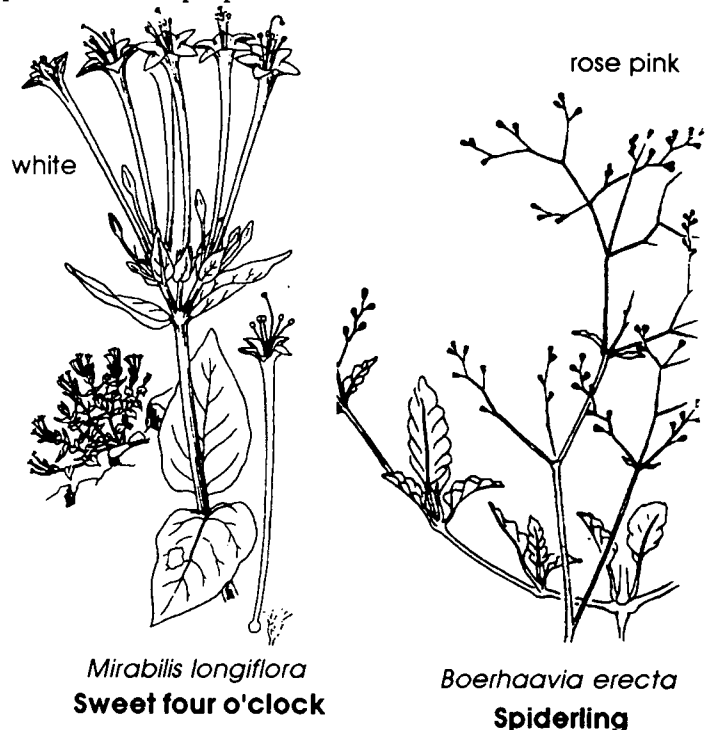
Irrigate efficiently. In the garden, plants use more water than in the wild. Plants are often planted more closely than they occur naturally, increasing the competition for moisture. Dryland grasses planted as lawn areas must support foot traffic as well as increased competition. Prolonging bloom cycles and maintaining leaf density also require consistent moisture. To minimize weed growth, limit watering to planting zones, and as specifically as possible, to the individual plants. When extensive soil disturbance is unavoidable, as in cultivating to sow native grasses or wildflower meadows, till and water repeatedly to germinate and destroy as much weed seed as possible before sowing the intended cover. This will reduce weed competition substantially. Deep mulching trees and shrubs stifles weed growth and speeds the establishment of new transplants by moderating soil temperatures and reducing moisture loss. Fiber mulches such as shredded bark and straw are cooler than gravel. Some heat-loving plants, especially those sensitive to overwatering, grow better in gravel mulches. The most effective depth of mulch varies from 2 inches around low-spreading herbaceous plants, to 3 or 4 inches under trees and shrubs, to 6 inches compacted for pathways. Air and water permeable weed barrier fabrics may be used under mulches to further reduce weed problems. The specific water requirements of plants vary with the seasons and with their stage of development in the landscape. New transplants require consistent moisture in order to develop the extensive root systems essential for later drought tolerance. The length of time it takes for plants to become well-established also varies. Generally, the better adapted the plant is to the site, the faster it will find its niche in the community. All plants use proportionately more water during hot weather and when flowering. Although evergreens require some winter moisture, avoid keeping arid land natives, especially the heat lovers, too wet when air and soil temperatures are low.

Allow space for plants to attain their mature sizes without "shrink-to fit" pruning. Thinning plants to enhance their natural forms is an interesting way to learn about the growth patterns of individual plants. Shearing creates artificial looking tortured forms, and guarantees your next appointment with the shears. Never remove more than a quarter of the plant's mass at any one time, and remove the suckers from tree-form plants in early summer to limit the amount of regrowth. Landscapes that are planned with long term objectives in mind will look underplanted the first season or two. Using wildflowers as short term fillers creates interest without creating subsequent maintenance problems. Mulches

also give a new planting a more finished look.

As part of the design process, develop a management plan based upon the time and resources you consider reasonable to maintain the landscape. Be realistic. Well timed mowing, fertilizing, pruning, pest control and weeding assure that the landscape will develop as intended. With careful planning it is possible to have a landscape that ages gracefully, and requires little more than periodic deep watering and seasonal clean up. Avoid excesses. Too much water and fertilizer can result in abundant soft growth more susceptible to insect attack. An ounce of timerelease fertilizer per bushel of back-fill when planting in spring or early summer, and small amounts of calcium nitrate (1 tablespoon per 1 gallon size plant, 2 tablespoons per 3 or 5 gallon, 3 tablespoons per 15 gallon and 1 pound per 1000 square feet of grasses and/or wildflowers) at budbreak for the first few years after planting, will help establish the plants on site more quickly. The better the plants are adapted to the site and soil, the sooner they will develop symbiotic relationships with soil microorganisms and become self-sustaining. Likewise, the best approach to dealing with insect activity in the garden is to first learn to distinguish the good from the bad, (some people never quite come to terms with the ugly), the insect predators from the pests they help control. There is no need to eliminate insect pests. Balance is the objective and flexibility is the shortest route to that end. If the plants are well adapted, as they become established they will progress from needing protection for survival to providing protection. By observation and participation, learn when to intervene and when to leave well enough alone.

Sustainability is the essence of an environmentally appropriate landscape. There is a resonance to such gardens because they fit their place and purpose. That they can be managed with minimal effort on an occasional basis is a happy by-product for the people who choose to create and live in them.



LANDSCAPING WITH NATIVE NEW MEXICO GRASSES

by Kelly W. Allred

More and more home gardeners and landscape artists are turning to grasses for borders, hedgerows, contrasts, and accents in their landscape plans. The New Mexico grass enthusiast has more than 460 kinds of grasses that grow in the state from which to choose. Unfortunately, space here permits only the listing of native grasses to consider as you plan the landscape for home or business. When deciding on a landscape grass, one should consider sun or shade tolerance, invasiveness, water requirements, soil adaptations, winter hardiness, weedy potential, mode of propagation, and growth characteristics such as height and season. (a=annual; p=perennial)

Short grasses (less than 1 ft)

Bouteloua hirsuta (p)
Chloris cucullata (p)
Erioneuron pilosum (p)
E. pulchellum (p)
Festuca minutiflora (p)
Hilaria belangeri (p)
H. pusillum (a)
Muhlenbergia minutissima (a)
M. torreyi (p)
Munroa squarrosa (a)
Scleropogon brevifolius (p)
Sporobolus nealleyi (p)

Tall grasses (more than 3 ft)

Andropogon gerardii (p)
Bothriochloa alta (p)
Calamovilfa gigantea (p)
Muhlenbergia emersleyi (p)
M. metcalfei (p)
Panicum virgatum (p)
Phalaris arundinacea (p)
Phragmites australis (p)
Sorghastrum nutans (p)



Hordeum stebbensii

FOXTAIL BARLEY (*Hordeum jubatum*)

Description: Perennial, although sometimes short-lived, bunch-grass 1 to 2.5 feet tall. Foliage is light green or greenish yellow. Flowers appear in attractive, golden-yellow, long-bristly spikes, which break into wind-borne segments when dry.

Planting and Care: Foxtail barley is a cool-season grass. It grows best in full sun on well-drained soils but will go dormant during hot periods in the desert areas. Sow during autumn or early spring, watering frequently. Plants may become weedy.

Propagation: By seed.

Uses: Foxtail barley is an extremely attractive plant when grown in dense clumps among broad-leaved ornamentals, or to add accents and contrasts to drives, rock gardens, and backdrops. The shattered seedheads may be a bit messy or troublesome.

Medium grasses (2-3 ft)

Aristida dissita (p)
A. longiseta (p)
A. purpurea (p)
Bothriochloa laguroides (p)
B. springfieldii (p)
Bouteloua curtipendula (p)
Bromus fondosus (p)
Danthonia parryi (p)
Elymus canadensis (p)
Eragrostis erosa (p)
Festuca arizonica (p)
Glyceria striata (p)
Heteropogon contortus
Hordeum jubatum (p)
Leptochloa dubia (p)
Lycurus phleoides (p)
Muhlenbergia montana (p)
M. pungens (p)
M. setifolia (p)
Oryzopsis hymenoides (p)
Panicum bulbosum (p)
P. capillare (a)
Pappophorum vaginatum (p)
Phalaris caroliniana (a)
Phleum alpinum (p)
Poa palustris (p)
Schizachyrium cirratum (p)
S. neomexicanum (p)
S. scoparium (p)
Sitanion hystrix (p)
Sporobolus airoides (p)
S. flexuosus (p)
Stipa neomexicana (p)

INDIAN RICEGRASS (*Oryzopsis hymenoides*)

Description: Perennial, densely-tufted bunch grasses 1.5 to 2.5 feet tall. Foliage is light to bluish green and fine-leaved in arching sprays. Flowers are borne in stiffly branched, airy clusters, with hairy seeds protruding.

Planting and Care: Indian ricegrass is a cool-season grass, growing during spring and fall. It thrives in full sun in dry, loose, sandy soil. It is drought tolerant, but it is not suited to poorly drained sites.

Propagation: By seed, readily available from commercial sources, or it can be gathered from native plants.

Uses: Indian ricegrass is widely used for range restoration and erosion control. A clump of seedheads makes an attractive dried bouquet. Plants are suitable for rock gardens and native plant landscapes.



SIDEOATS GRAMA (*Bouteloua curtipendula*)

Description: Perennial bunch-grass 1 to 2.5 feet tall. Foliage is light green, generally low, and rather coarse. Flowers are borne on little flags usually on one side of the slender stems (whence the name, sideoats), which break off and fall to the ground as the seedhead matures.

Planting and Care: Sideoats grama is a warm-season grass found naturally throughout most of New Mexico. It prefers full sun in calcareous soil and is drought tolerant. Clumps become a bit scraggly and coarse with age and should be thinned or divided.

Propagation: By seed, which should be sown in fall, or division of large clumps. Seed is available commercially.

Uses: The little flags of the seedheads make a delightful accent mixed in native landscapes, or as a backdrop or corner effect in rock and cactus gardens.



INDIAN-GRASS (*Sorghastrum nutans*)

Description: Perennial, loosely-tufted or short-creeping grasses from underground runners (rhizomes), growing 3 to 6 feet tall. Foliage is light or bluish green, somewhat coarse, and turns orange or purplish after frost. The fuzzy seedheads are rusty, coppery, or bronze-colored, with delicate bristles.

Planting and Care: Indian-grass is a warm-season grass native to the Great Plains. It thrives in full sun in a variety of soils, but prefers moist, well-drained sites. Plants reseed themselves readily.

Propagation: By seed, root stocks, or division of large clumps. Seed is readily available commercially.

Uses: Indian-grass is useful in mixed stands, in native plant gardens and naturalized areas bordering the garden or yard. Dense stands make attractive screens and hedges.



SWITCH-GRASS (*Panicum virgatum*)

Description: Perennial, tussock-forming grass spreading by underground runners (rhizomes), mostly 3 to 5 feet tall, occasionally taller. The long leaves are medium green to bronze, drooping and giving a fountain effect. Flowers are displayed in attractive, reddish clusters.

Planting and Care: Switch-grass prefers loamy soil, full sun, and plenty of water. It is a warm-season grass, but is hardy except in extremely cold areas. The underground runners invade adjacent ground in light, sandy soils, but less so in heavier soils.

Propagation: By seed, which is available commercially, and root stocks, both of which can be gathered from plains and prairie meadows.

Uses: Switch-grass plantings make an effective backdrop, border, screen, windbreak, or large accent. Seedheads are used occasionally in cut flower arrangements. Switch-grass is most attractive when grown in dense stands, and also provides wildlife cover and bird seed. There are several varieties of this species.

BIG BLUESTEM (*Andropogon gerardii*)

Description: Perennial, scraggly bunch-grasses 3 to 7 ft tall. Some plants also spread by underground runners (rhizomes), especially in sandy soil. Foliage is gray-green, turning reddish or purplish in the fall. Flowers are displayed in dark, turkeyfoot-like branches rising above the leaves at the tips of the shoots.

Planting and Care: Big bluestem, a common warm-season grass of the prairie and plains regions of the state, grows best in light, well-drained soils. With ample ground water, it thrives in hot, dry sites in full sun. The forms with underground runners must be contained.

Propagation: By seed or root stocks. The seed is easily available commercially or can be gathered by hand.

Uses: Big bluestem can be put to many landscaping uses, as a border, backdrop, screen, living fence or hedge, and to give fall colors. Dried seedheads are sometimes used in flower arrangements.

COMMON REED (*Phragmites australis*, syn. *P. communis*)

Description: Perennial, cane-like plants that spread vigorously from underground runners (rhizomes), producing large, dense stands. Stems are bamboo-like, 8 to 16 feet tall. Foliage is medium green or greenish yellow, coarse; one selection has variegated leaves. Flowers are displayed in silky plumes atop the stems. Plants are sometimes confused with giant reed, which is generally a taller, coarser plant with larger panicles.

Planting and Care: Common reed is a cool-season grass, but flowers throughout the growing season. Plants do best in low, wet areas, such as pond and stream banks, springs, and boggy ground. Careful planning is required to keep plants from invading and dominating the landscape, especially in sandy ground.

Propagation: By root stocks, which are readily available from wet habitats throughout New Mexico.

Uses: Common reed forms dense thickets in wetland areas, providing habitat for wildlife. Plantings should be restricted to large, open areas and are useful as living fences, windbreaks, screens, and accents against ponds and streams. The silky plumes persist through the winter and are employed in dried arrangements.

PURPLE THREEAWN (*Aristida purpurea*)

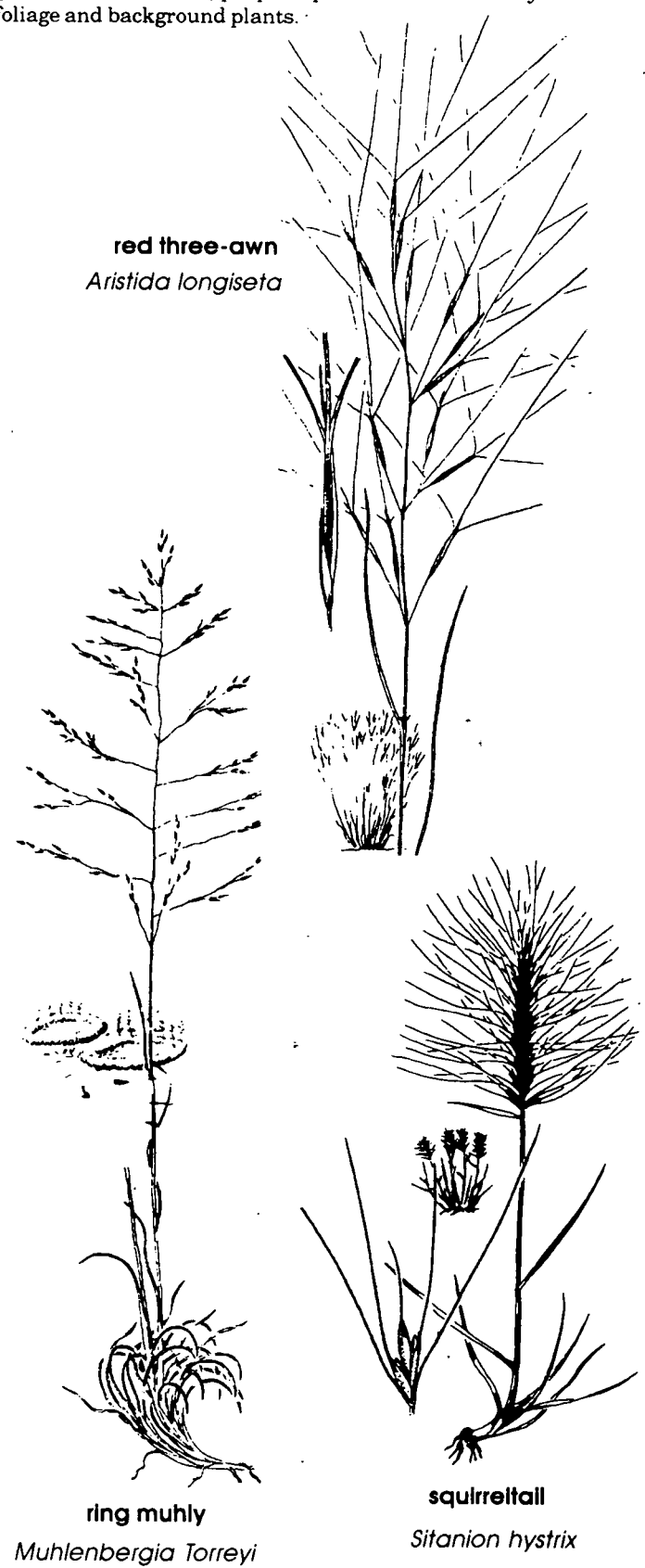
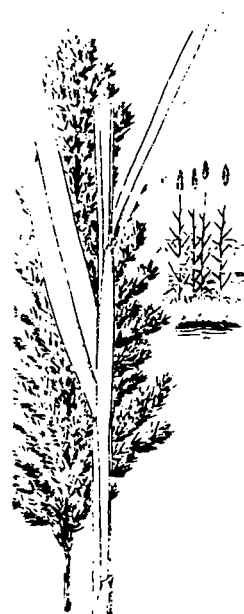
Description: Perennial, densely-tufted grasses 1 to 2.5 feet tall. Foliage is medium to light green and fine textured. Flowers are arrayed in plume-like, nodding, purplish seedheads with long bristles.

Planting and Care: Purple threeawn is a warm-season grass and prefers full sun in well-drained soils. It is extremely drought tolerant. Seed may be gathered from native plants throughout the plains,

prairies, and desert areas of the state.

Propagation: By seed or plant division of large clumps.

Uses: Purple threeawn creates an attractive accent in native plant gardens. The delicate, purplish plumes contrast nicely with other foliage and background plants.



red three-awn
Aristida longiseta

ring muhly
Muhlenbergia Torreyi

squirrelltail
Sitanion hystrix

PLANTING TO ATTRACT WILDLIFE

by Dr. G. Scott Mills and Mark Rarning, SWCA, Inc.

Vegetation is generally the most important environmental factor that affects the numbers and kinds of wildlife in both natural and urban environments. A recent study of breeding bird populations in urban and natural habitats conducted by SWCA, Inc. clearly showed vegetation to be the most important factor affecting bird populations in urban areas. This study, funded by the Estes Company, included 34 study sites encompassing a wide range of housing densities and amounts (volumes) of native and exotic vegetation. These sites fell into four general categories: urban areas dominated by native vegetation, urban areas dominated by exotic vegetation, natural desert with no houses, and urban parks dominated by exotic vegetation.



minimize exotic birds, areas of lawns and volumes of exotic trees and shrubs should be minimized. Small exotic plants, such as perennial or annual flowers, account for a small percentage of vegetation volume in an area and therefore have little effect on bird populations.

Some species of "near-native" plants, those native to adjacent states or higher elevations but not the Tucson valley (such as Mexican paloverde, yellow bird-of-paradise, perhaps Chilean mesquite), appear to be used as much as native plants by some native birds. Some exotic plants, such as pyracantha or cape honeysuckle, may also be used by some native bird species. It is not fully known which exotic plants provide significant resources for native birds and are "acceptable." Some exotic species, however, such as eucalyptus, African sumac, and Italian cypress, are clearly of little value to native birds because they provide virtually no food resources. Indeed, one reason that some of these plants are recommended by nurserymen is because of their lack of "insect pests."

Each native bird species reacts differently to the kinds, amounts and structure of native plants. With proper planting, it is possible to attract specific species. Hummingbirds are probably the most obvious birds that can be attracted by planting certain plant species, but many other species, such as thrashers, cardinals, and woodpeckers can be attracted through planting of specific plant species.

Though restrictions appear to be greater, populations of native small mammals and lizards can also be increased through extensive use of native plants.

Increased use of native plants to attract wildlife is generally consistent with low water use landscaping.

To attract native wildlife in urban areas:

- * Plant only native trees and shrubs
- * Minimize exotic plants and areas of lawn
- * Maximize the amount (volume) of vegetation
- * Plant a mix of species and create a mix of structural types (low shrubs, grasses, wildflowers, trees)
- * Include cacti, especially chollas, which provide nesting sites for many species
- * Let some of your yard "go wild"
- * Keep cats indoors

Major results and conclusions of this study are summarized below.

1) Vegetation had a much greater direct influence on bird densities and numbers of species in urban areas than did aspects of housing density. Areas with high amounts of vegetation supported more birds than areas with low amounts of vegetation.

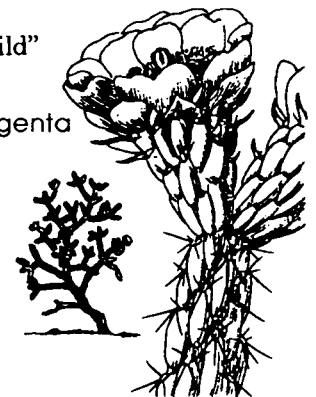
2) Though housing density had little direct impact on bird populations, it was clear that housing density can significantly impact bird populations through its effects on vegetation. Increasing housing densities limit the area available for planting vegetation and thus limit the amount and structure of vegetation.

3) The type of vegetation (native or exotic) very significantly influences bird populations. Urban areas with large amounts of native vegetation supported large densities and varieties of territorial native birds. Urban areas with large amounts of exotic vegetation supported the highest densities of exotic birds, which were often most closely associated with the area of lawn. Two non-territorial native birds, White-winged Dove and House Finch, were much more common in areas with exotic vegetation than areas with native vegetation. Both species frequently nest or roost in one area and feed elsewhere.

4) As in studies conducted elsewhere, urban areas generally support higher bird populations but fewer species than adjacent natural habitats. Part of the increase in densities is accounted for by increased vegetation in urban areas, but part of it appears to be due to increased nonvegetative resources, such as bird feeders and water.

These results indicate that the numbers of bird species and densities are affected by the type and amount of vegetation. To maximize density and numbers of native species, high volumes of native trees and shrubs should be planted. To

Many thanks to Robert Dewitt Ivey for permission to use his wonderful drawings from *Flowering Plants of New Mexico*, second edition, in our newsletter



magenta

tree cholla

Opuntia imbricata

Book Review

By Jean Hefflin

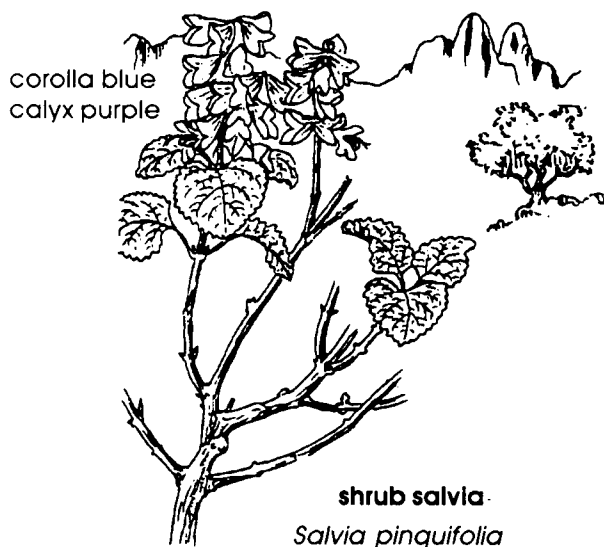
The Xeriscape Flower Gardener, A Waterwise Guide for the Rocky Mountain Region, Jim Knopf, 1991, Johnson Books, Boulder, Colorado, 14.95

A beautiful cover photograph of a garden of Iris and several Penstemons will draw you to this book and you will find it filled with all kinds of useful information for gardeners of the Rocky Mountain region, which the author defines as an area extending from Albuquerque and Flagstaff to Reno on the west, Spokane and Lethbridge, Alberta on the north and Bismarck and Dodge City on the east.

The forward and first chapter define and explain the concepts of Xeriscape and why they are important to the Rocky Mountain region and give data for climate in major cities of the area covered. I found the author's quantity figures for high, moderate and low watering zones particularly interesting. He uses 18 - 20 gallons of irrigation water added per square foot per 20 week season for high water zones such as Bluegrass and pansies, 10 gallons per square foot per season for Echinacea, Potentilla and Fescue lawn and three or less gallons for Ratibida, Rabbitbrush and native grasses.

"In landscapes designed for water efficiency, flowers have compelling advantages over traditional lawns in many situations. Considering the beauty and relatively low maintenance needs of semiarid flowers, they could be appropriately incorporated into landscaping much more often than they have been." So begins the introduction to the second chapter: Planning and Designing Waterwise Gardens. I could not agree more! The compelling figures for conversion from high water use plant materials to moderate and low water use materials for a property were a change from 137,000 gallons of water use over a season to less than 20,000 gallons!

Several following chapters deal with building, irrigating and maintaining the waterwise garden and then a section of plant profiles lists many useful plants with their light and water needs and more detailed information and photographs of some of them. The book concludes with an appendix giving blooming sequence, suggestions for meadow mixes, butterfly and hummingbird attractors, edible wild plants, seed and plant sources, demonstration gardens and organizations that support Xeriscaping. Interesting sidebars throughout the text on a tremendous variety of subjects from how to evaluate manure to how to control slugs will add to your gardening skills.



FROM THE EDITORS' DESK

With this special issue we hope to provide relevant information which many of you can use in your landscaping endeavors. Thanks to all of you who contributed. We have had many compliments on the quality of the Newsletter, but it is your Newsletter and we depend on you to keep us in "copy".

The article in the previous Newsletter titled "Livestock Factsheet" prompted two of you to write expressing disagreement with the content of that piece. The message you two gave us was that the livestock industry is a supporter and protector of our native landscapes. This issue is a lively one in the Southwest and provokes strong opinion. It is our responsibility as editors to provide information which is both timely and factual. With that in mind we encourage our membership to contribute to this debate with articles for us to print. Articles with references are most desirable because the reader can check the validity of statements. Opinion pieces will also be considered although we may ask for clarification if questionable material is submitted. Be assured that we are here to edit, not to censor. We don't think that you want a publication that avoids controversy, for through quality debate we can all learn.

Tim McKimmie
Rick Castetter

BEAR MOUNTAIN GUEST RANCH



Guided Tours:

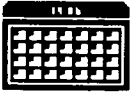
Wildflowers, Birds,

Ghost Towns

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Silver City, N.M. 88062

Bosque Fall Festival

The Festival of the Cranes will be held at the Bosque del Apache National Wildlife Refuge November 22 - 24. Volunteers are needed to staff the Native Plant Society Booth. Contact your chapter representative for information.



CALENDAR

OTERO

2 November- Potluck at noon followed by annual business meeting to plan the 1992 schedule. Home of Ad and George Hanawalt. Just after, or north of the 50 mph sign at the south end of Tularosa turn west. Got to dead end. Turn left.(south). Go 1.5 miles until you cross the RR tracks. Hang a hard right after the tracks onto Hanawalt's land. BYO CHAIRS. Also bring your personal calendar, something to write on, and ideas about where you would like to go and what you would like to do.

LAS CRUCES

13 November — Pot Luck Dinner. St. James Episcopal Church, South Main and St. James, 6:00 p.m.
11 December — Organizational meeting for 1992 at 7:30 in Room 190 of NMSU Ag Building. Bring your ideas.

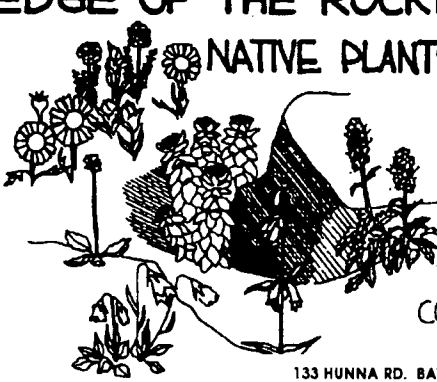
SANTA FE

Meetings 3rd Wednesday of the month at 7:30 at St. John's College.

EDGE OF THE ROCKIES '91

NATIVE PLANTS AND SEEDS

FROM
THE SOUTHERN
ROCKY MOUNTAINS
TO
THE DESERT OF THE
COLORADO PLATEAU



133 HUNNA RD. BAYFIELD, CO 81122-9758

VIEWS FROM THE SOUTH

One Member's Opinion

Recently I talked at length with a District Ranger with the U.S. Forest Service about the need for "Ancient Forests" and why they are so important to the long term health of any forest system. He expressed surprise saying he had recently learned that there are actually some people who think that natural predator-prey relationships are beneficial and should be allowed to function where ever possible. He explained to me that in like manner, he felt that forests need to be managed, by logging, to reduce pests such as mistletoe and spruce bud worm. The point I tried to make to him is that there are a growing number of people who feel that mistletoe, spruce bud worms, coyotes and such are natural phenomena and there should be areas left where natural processes can function. Neither agreement or disagreement was expressed by him, but he felt those people should be satisfied with the areas already designated as "Wilderness".

GILA

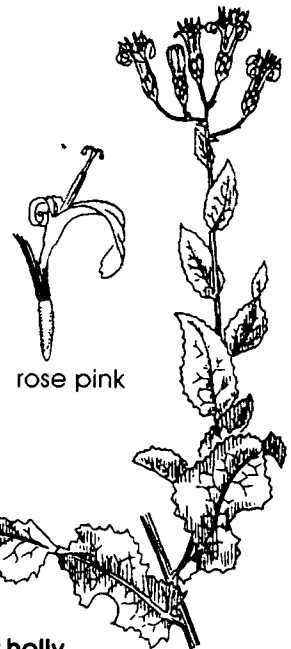
10 November - Cave Creek, Chiricahua Mtns., Arizona.
This is a must trip for those who have never been to this area on the western slope of the Chiricahua Mtns. near Portal. For those of us that have been to the area, we are always ready to go back. The fall color should be outstanding, and we will see plant species that don't occur in our area. The birdlife is also outstanding in the Chiricahuas.

Leader is Bob O'Keefe 385-5101

virgin's bower
Clematis ligusticifolia



a vine
enveloping trees
and fences



rose pink

desert holly
Perezia wrightii

This seems to bring again the question "How much is enough?" Since our conversation, I have continued to ponder this question. It seems to me that what is not considered in his statement is the fact that our population keeps increasing, our mobility keeps increasing, and our development of previously undisturbed areas continues, making the protected areas that seemed adequate years ago, inadequate today. Additionally we are fragmenting ecosystems and /or populations with our activities when we really should be leaving connecting corridors. Some excellent articles appear in the August 16 issue of "Science" regarding the long term damage to our ecosystem occurring because of over use.

Certainly you will not find me saying that I want all timber operations stopped, but I do say that we are being extremely short sighted and reckless with our present levels of production on the forests of southern New Mexico. We must continue to look for and push for less commodity orientation by our public land managers and for a much stronger preservation ethic. Leadership to this end must come from our elected officials, but it can start with local land managers as well.

Tom Wooten