A DRY IDEA, from page 24

to choose alternatives other than buffalograss. She says that one-third of her clients choose xeriscaping.

Native plants are always recommended for new xeriscapes and conversions to xeriscapes. They are naturally adapted to the soil and environmental conditions and require less maintenance and irrigation. But as with all new plants, natives need to be watered sufficiently until proper root development has occurred.

As for irrigating lawns, Borland says, "so much of it is what they (customers) expect. How little water can we use and still get by with a goodlooking lawn?" The key is to find a balance between giving the customer the lawn desired while also giving them the maintenance desired, she adds.

The management principles naturally apply to arid areas where natural rainfall cannot keep up with public consumption, though xeriscaping can be used anywhere. "Inquiries are coming in on a global basis," says Ken Ball of the Denver Water Department. Ball is also secretary of the National Xeriscaping Council.

And xeriscaping is effective, often cutting down on water use outside the home by 40 percent or more.

Becky Garber of Colorado Landscape Enterprises, Arvada, Colo., says her company worked with a group of Aurora homeowners to implement xeriscaping and general water conservation practices on a 6¹/₂-acre property called Sunstone. She says the program reduced water bills by \$15,000 in one year.

A study was conducted among 548 townhouses in Marin and Sonoma counties in California. Xeriscaped townhouses averaged about an \$85 savings compared to conventional landscaping over the eight-and-a-half month test period. More importantly, water use was cut by 30,000 gallons per townhouse, a 54 percent reduction.

Xeriscaping councils exist in seven states (see list for contacts), with an eighth, New Mexico, expected this summer.

To help promote xeriscaping, many community xeriscaping councils have established exhibition gardens to give people a visual idea of what to expect.

"They show plants and how xeriscaping can be pulled off," explains Ball. "If there's something a person can go and wiggle their toes in and sit down with, it's more effective."

-Jeff Sobul

Not a ground breaking idea.

With a state of the state

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SLIDING AWAY

A valuable resource not given enough thought is soil. Topsoil is frequently lost from runoff due to heavy rainfall or improper irrigation.

While irrigation rates can be adjusted to correct a problem, rainfall can't. The impact of falling water on surface soil can destroy the structure of surface soil, cause surface to settle and seal, decreasing infiltration and increasing runoff, says Penn State's Tom Watschke, Ph.D. Therefore, it becomes necessary to protect the soil from eroding away.

The four basic types of erosion are:

• splash erosion when raindrops strike the soil surface an break soil aggregates into fine particles which can be carried away;

 sheet erosion when water moves across the soil surface and removes thin sheets of soil;

 rill erosion when water moves across the soil surface and cuts small ditches a few inches across; and

• gully erosion when water flows across one spot long enough to cut large gullies.

The best method of erosion control is establishing a good stand of turf. Under good conditions, and without stringent time requirements, reseeding can do the job.

But if the problem is severe, and immediate, Watschke notes it is better to use sod. The sod is more dense, and with bluegrass sod, "it's an instant fix. The day you lay it, the effect on runoff and erosion is immediate," he says.

The slow-establishing seed is less dense and subject to runoff. The problem with sod is a purely economic one. It costs more. Notes Watschke, it comes down to a cost vs. benefit decision.

But other methods are often more economical. They involve using geotextiles, either natural or synthetic.

On reseeded soil, says Watschke, putting a mulch/straw mix on top reduces the impact of rainfall. "The structure of the soil remains, the runoff decreases. Once the plants establish, they will take care of the runoff."

Other natural geotextiles come in blanket form, such as North American Green's straw and/or coconut fiber blankets. According to the company, the blankets are designed to reduce moisture loss while allowing *continued on page 29*



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moisture to infiltrate, and also to keep seed warm to facilitate germination. In time, the blankets brake down to provide a mulch covering.

Synthetic geotextiles come in a number of materials though they generally serve the same purpose as natural. American Enka's Enkamat, actually considered a geomatrix rather than a geotextile, is contructed of nylon monofilaments fused into a three dimensional form which leaves 90 percent of its area open. This area can be filled in with soil, gravel, etc. This stabilizes the soil, allowing seed to germinate. When the turf is established, the material continues to stabilize the soil substrate.

Geotextiles like the polyesters from Warren's and polypropylene Typar from Du Pont control erosion and also prevent weeds from growing. They can be used on flat areas as well as slopes such as river and lake banks, road and rail cuts, etc.

In the end, though, there is only one way to stop erosion, and that is to treat different parcels of land according to the individual needs and capabilities.

-Jeff Sobul



Circle No. 156 on Reader Inquiry Card

Local xeriscaping councils

A number of councils exist as part of the National Xeriscape Program Network. The following is a list by state and city with a contact included.

*indicates the program has a xeriscape demonstration garden.

National Xeriscape Council, Inc., c/o Highlands True Value Hardware & Nursery, 8080 S. Holly, Littleton, CO 80122; (303)779-8822. Contact: Jim Grabow, president, NXCI.

ARIZONA

Flagstaff, (602) 774-5281. Contact: Frank Abeyta, Jim Clevenger or Vicki France.

Phoenix, Arizona Municipal Water Users Assn., (602) 256-0999. Contact: Robin Stinette. Tucson*, Southern Arizona Water Re-

sources Assn., (602) 881-3939. Contact: Marybeth Carlile.

CALIFORNIA

So. California Xeriscape*, Santa Ana, (714) 973-1023. Contact: Mary Cooper

State of California, Department of Water Resources, Office of Water Conservation, Sacramento, (916) 445-4403. Contact: Suzanne Butterfield.

Contra Costa, Contra Costa Water District, Concord, (415) 674-8000. Contact: Debora Maxon.

Fresno, Water Division, (209) 488-1408. Contact: Dave Todd.

Oakland*, Alamo, (415) 820-6600. Contact: Richard Bennett.

San Diego*, San Diego County Water Authority, Cuyamaca College Office of Public Information, (619) 297-3218. Contact: Pete Rios.

COLORADO

Arvada*, Parks Department/Utilities Division, (303) 420-0984/431-3035. Contact: Mike Lee or Sterling Schultz.

Aurora, Čity of Aurora Utilities, Water Conservation Dept., (303) 695-7387. Contact: Kim Hout.

Boulder, Planning Department, (303) 441-3270. Contact: Peter Pollock, Ron Donahue or Stan Zemler.

Denver*, Denver Water Department, (303) 628-6329. Contact: Ken Ball

Ft. Collins*, Water Utilities Department, (303) 221-6681. Contact: Molly Nortier.

Genesee Estates*, Homeowners Assn., E. Golden, (303) 526-1339. Contact: Muff Mackey.

Greeley, Ext. Svc. Weld County. (303) 356-4000 x.4465. Contact: Donna Liess

Lakewood, Parks & Recreation, (303) 987-7800. Contact: Bill Jewell.

Longmont*, Municipal Utilities, (303) 776-6050. Contact: Kathy Faatz.

Wheat Ridge, Parks Dept., (303) 237-6944 x.283. Contact: Bill Cassel.

FLORIDA

Southern Fla., S. Florida Water Mgmt. District, West Palm Beach, (356) 686-8800 x.391. Contact: Bruce Adams.

NEVADA

Reno*, Great Basin Xeriscape, Inc., (702) 329-4329, Contact: Tom Stille.

Sierra Pacific Power Company*, Reno. (702) 689-4116. Contact: John M. Metcalf.

TEXAS

Abilene, Water Administration. (915) 676-6000. Contact: Cynthia Manning.

Arlington, Utilities Dept., (817) 275-3271. Contact: John Kubala.

Austin*, City of Austin Xeriscape Program, Resource Management Dept., (512) 462-6265. Contact: Martha Latta.

Brownsville*, Public Utilities Board, (512) 544-3800. Contact: Pamela Gross Downing.

Corpus Christi^{*}, Corpus Christi Botanical Society, (512) 992-5337. Contact: Dr. Sue Gardner.

Denton, Operations & Energy Mgmt., (817) 566-8448. Contact: Lisa Tindel.

Ft. Worth*, Ft. Worth Water Department, (817) 870-8220. Contact: Cari Hyden.

McKinney, Heard Natural Science Museum and Wildlife Sanctuary, (214) 542-5566. Contact: Marcia Coale.

San Antonio*, South Central Texas Xeriscape Program, c/o Bexar County Extension Service, (512) 220-2776; Contact also: Doug Welsh, Texas A&M College Station, (409) 845-7341.