

TECH CENTER

Responding to the drought

Here's how to make the drought of 1991, now a mere memory, pay handsomely.

by Jeff Lefton, Ph.D., Purdue University

■ The drought of 1991 is history, but in many parts of the country its aftermath still brings opportunities. Listed below are tips to help maximize customer satisfaction during the months ahead.

● Make customer contact during the winter via letter or phone call. The highest cancel group will be the customers in the two-year-or-less group. Make phone contact with these customers, asking them about their upcoming needs for the spring. This should be a proactive experience.

● Lawns with less than 50 percent turf are prime candidates for dormant seeding. This can be started when the soil temperatures drop to 40 degrees or below. Use a customer leave-behind to explain that the seed will not germinate until late spring. Weed control should not be used until the new seedlings are well established.

● An early winter fertilization coupled with a middle- to late-fall fertilization will help thicken lawns. For maximum effect, it should be applied before the turf browns in the early winter.

● Consider starting the early spring production with a granular fertilizer. This will give seedlings a boost. In addition, a three-year study at Purdue University has demonstrated that a standard amine salt formulation of a broadleaf herbicide will not show acceptable weed control until late spring. In this same study, the ester formulation was effective about two weeks earlier.

● Use a standard three-way broadleaf herbicide on established turf that has not



been seeded. A research study at Michigan State University showed acceptable weed control in East Lansing through mid-November. This might be important in some areas to help reduce the winter annual (common chickweed and henbit) populations.

● Consider a soil testing service in the early spring. This could include the garden area, ornamental beds or the lawn itself. Identify a good soil test lab and use its expertise in setting up this program.

● Deep root fertilization and pruning are services that should be made available to landscape customers.

● Attend as many technical meetings as possible during the winter. Take all of your employees. After the training session, have a branch meeting and ask, "What did we learn that can make us better?"

Remember that the customer buys your service for two reasons: (1) to feel better about his or her property, and (2) to get solutions to problems. During the months ahead, ask your employees to target their thinking on these factors. Make 1992 a proactive, successful year.

Xeriscaping: Is it the answer?

The seasonal droughts of recent years have focused the public's eye on water-saving landscapes employing xeriscaping techniques.

by Dr. Eliot C. Roberts

■ Town ordinances are being considered in most all parts of the country that would force developers to use xeriscaping techniques when they construct new homes and other structures.

Xeriscaping is a landscaping approach
Continued on page 34

ELSEWHERE

IPM or PHC?
same care,
p. 34

**Post-emergence
crabgrass control,**
p. 36



Xeriscaping Arizona: A beautiful setting and the ultimate in low water use landscapes.

that conserves water by planting native or drought-resistant species.

All plants need water for survival and growth, even the cactus found in the desert. But some require a lot more than others. Some plants, such as grasses, require more water but they cover the ground with sufficiently tight vegetative cover to cut back on loss of soil water by evaporation.

Lawngrasses are particularly effective in this way; a low-cut canopy of green foliage not only maintains a highly humid environment above the soil surface, it also creates conditions which enhance rainfall infiltration into the soil and reduce run-off.

This may not be of critical importance in areas of limited rainfall, but it is very important in humid regions of the country. The cactus-and-gravel look may be ideal for the arid Southwest, but not for other parts of the country.

Generally, native plants—both woody and herbaceous—are better acclimated to local environments than introduced species.

One prairie grass, buffalograss (*Buchloe dactyloides*), has high drought tolerance and fair to good growth characteristics for a lawngrass. When used in arid and semi-arid locations, it produces better lawns without irrigation than any other grass.

But most lawngrasses used in the United States are not native. Even Kentucky bluegrass, which is now the dominant lawngrass in the cool humid region, is not native to Kentucky. The most drought-tolerant lawngrass for use in

this region is tall fescue, not so much because it uses less moisture, but because its extensive root system permits it to use soil moisture more effectively.

In the warm, humid South, bermudagrasses, St. Augustinegrasses, zoysiagrasses, centipedegrasses and bahiagrasses all have originated outside of this country. Bermudagrasses are generally more drought-tolerant than the others, but all do a reasonably good job in landscape situations.

Ed Davis of Okeechobee, Fla., has considered xeriscape from the perspective of a sod producer and has concluded:

"The turf industry supports the wise use of water in the landscape. We also continue to sup-

port the need for practical turf areas. The term 'practical turf area' is a replacement for the negative term of 'limited turf' found in early xeriscape material.

"An example of a non-practical turf area would be the narrow strip of turf found along the side of a parking lot, road or building. Islands of turf in the parking areas are also a non-practical use of turf. These areas consume large amounts of water and labor. The mounds that are so popular in the landscape design today are also an example of non-practical turf usage.

"There must be a balance of practical turf areas, plant areas and impervious surfaces in the landscape. Xeriscape, if it accomplishes nothing else, will focus attention on this balance."

—The author is director of The Lawn Institute in Pleasant Hill, Tenn.



Dr. Eliot Roberts:
All plants need water.

IPM or PHC? Same care, different names

Soaps, oils and biologicals are combined with plant selection and spray techniques for tree/turf pest control at the Davey Tree Co.

■ The Davey Tree Company continues to make progress in its efforts to eliminate company-wide pesticide use by 95 percent over the next four years, says Dr. Roger Funk, Davey's director of research.

The gradual reduction in chemical use is one facet of the Kent, Ohio, company's "Plant Health Care" program, begun in the late seventies. Funk thinks the term Plant Health Care will soon replace Integrated Pest Management as a more practical description of what it is horticulturists and turf managers do. Funk also believes the term, "health care" is more acceptable to today's society than "pest management."

● Plant selection is the first step in tree/turf health care: If a plant is not truly adapted to a site, no amount of maintenance will make it healthy.

● Funk reports that Davey will begin widespread use of the biological control, B.t. (*Bacillus thuringiensis*) for gypsy moth and lepidoptera control on trees in 1992.

"After several years of research and field testing," reports Funk, "we find that the newest B.t., the 4A formulation, is satisfactory if you catch the lepidopterous insect in the early stages."

Davey has also been testing the M1 B.t. strain for elm leaf beetle larvae. Results have been good, but Funk cautions that the timing must be "exactly right."

● Milky spore for turf is more successful in the transition zone; the company notes poor results in the Midwest and East.

● Horticultural soaps and oils for tree care are also being tried and tested more than before, says Funk.

"Generally, oil does a better job on mites than soaps, and soaps do a better job than oil on aphids," says Funk. Company