

## PENNEAGLE Creeping Bentgrass

13th hole, North Course, Des Moines Golf and CC

# // SINCE WE REPLACED OUR BLUEGRASS FAIRWAYS WITH PENNEAGLE, PLAYER SATISFACTION IS UP 500% //

Bill Byers completely renovated all 36 fairways at Des Moines Golf and CC over a period of three years ... nine in 1985, nine in 1986 and the remainder in 1987.

Three days after spraying the existing bluegrass/*Poa annua* fairways with a non-selective herbicide, Penneagle

*Bill Byers, CGCS  
Des Moines Golf and CC, Iowa*

was slit-seeded into the surface. When play resumed in seven days, members had the option of playing from the germinating fairways or taking a drop in the rough.

Bill finds that lightweight mowing keeps the *Poa* population in control. "I used the clippings for garden mulch one year, that resulted in a terrific stand of *Poa*. This illustrates the effectiveness of removing clippings and seed heads."

Overall, the new Penneagle fairways require less water than trying to maintain the old bluegrass/*Poa* fairways, and Penneagle proved to be drought tolerant during the dry summers.

"Bentgrass fairways are in demand in our area. Other courses in Des Moines have

made the switch," says Bill, "And we find that our player satisfaction is up 500%."

Oregon Certified PVP 7900009  
Penneagle is one of the "Penn Pals"

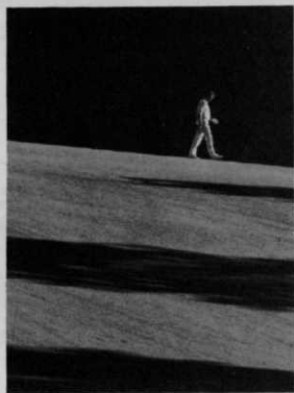


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# LANDSCAPE MANAGEMENT



On the cover: The new generation of golf course fairways at Oakmont C.C.

by Larry Kassell

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FAIRWAYS OF THE FUTURE**  
by Will Perry. There are issues and societal forces at work today that are changing the look and management of tomorrow's golf courses. Equipment manufacturers say they'll be ready for the 21st century.

**30 CONTAINERS AND WINTER INJURY**  
by Jim Borland. Planting boxes can create more problems than they were intended to solve: Choosing the right size and location is essential to keeping plant material healthy.

**40 SAFE AT ANY SPEED**  
by John N. Rogers III, Ph.D. The primary objective of experiments conducted at Penn State University was to advise high school athletic field managers of ways to improve playing field conditions. The conclusions were not surprising.

**45 THE DEMAND FOR DIESEL**  
by Dennis Bourgojn and Tom Kane. As the landscape management industry continues to grow in sophistication, so does its equipment—like diesel engines.

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by Don Taylor, Ph.D. Drought conditions and failure of the irrigation system produce interesting findings on an experimental green in the Midwest.

**54 TALL FESCUE IN URBAN LANDSCAPES**  
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**62 BOOST PRODUCTIVITY, BOOST PROFITS**  
by Ed Wandtke, CPA. Efficiency, morale and pride are three keys you can use to turn the lock of productivity. Once that lock is turned, you can open the door of profitability.

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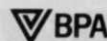
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Chickweed



Spurge

# Introducing the fine art of broadleaf weed control. New Gallery.™

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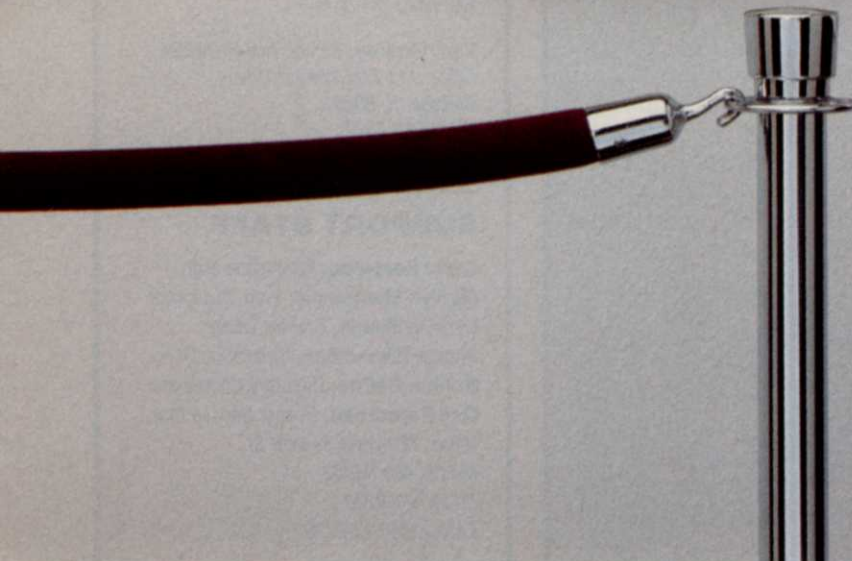
Elanco introduces the unique preemergence broadleaf weed control for golf courses. New Gallery 75DF. An original work of art. And science. With a new chemistry so advanced, it outdates postemergents, saving you time and labor costs.

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White Clover

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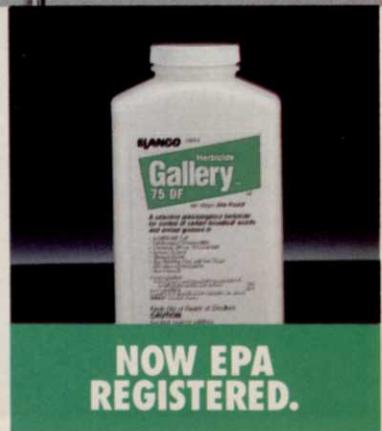


as spurge, chickweed and white clover. With no reproductions allowed.

All you'll see is masterpiece turf. Free from broadleaves. And free from injury. New Gallery is actually more tolerant to all major species of cool and warm season turf, including bentgrass, than other herbicides. And there's no risk of off-site damage to nearby ornamentals.

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## Food for thought

As your stomach cells absorb the day's lunch, here are some interesting observations that should get your brain cells going, too.

● **Dr. Gerald Kidder** of the University of Florida believes that lawn and tree care companies should consider purchasing shredders. Why? "Instead of throwing away tree debris (leaves, pine needles, prunings, etc.), people can run that stuff through the chipper/shredder and produce decorative mulch," Kidder kids not. "I hope lawn care services will start using this technology and beautify the yards they serve with material they now throw away."

(which makes up nearly 20 percent of the state's municipal solid waste) will no longer be allowed in Florida landfills beginning in January, 1992. This is a trend which may touch landscapers in other parts of the country, especially highly-populated areas in states like New York, New Jersey and Pennsylvania.

Something to think about.

● The total herbicide market in the U.S. has leveled off, according to Kline & Company, an independent research company based in Fairfield, N.J. In a press release titled "Intense Competition and Mounting Environmental Concerns Ahead for U.S. Herbicide Suppliers," Kline noted that the U.S. herbicide market will increase 1 to 2 percent annually until the year 2000.

Non-crop herbicides, such as those in the turf/ornamental market, will experience the most rapid growth, the report said.

"Kline expects groundwater contamination will be the most critical environmental issue facing the industry in the 1990s," the press release noted. (That's the ag industry, not the landscape industry, I might note. Although groundwater concerns rank high in the agricultural community, they have not yet fully reached the landscape "community.")

So growth of herbicide use in the U.S. appears to be on "hold." Something to think about.

● Our congratulations to **Dr. Roy L. Goss** on his retirement from Washington State University. And another round of applause to him for establishing the Roy L. Goss Turfgrass Endowment Fund at his former school. Dr. Goss says that he will match each \$15 donated with \$1 of his own (with a ceiling of \$10,000) for the next 12 months.

This is a noble and welcome gesture on Dr. Goss's part. He is to be commended.

Contributions may be mailed to 223 Hulbert Hall, W.S.U., Pullman, WA 99164. Monies collected will be used to support turfgrass research education and scholarships, according to development officer **Rich Swantz**.

Something to think about...until next month.

Jerry Roche, editor

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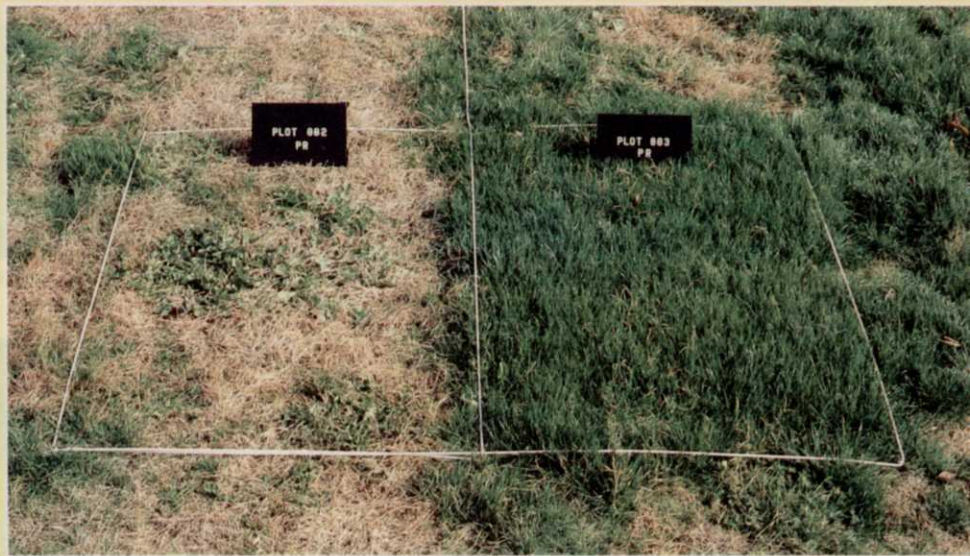
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## LANDSCAPE MANAGEMENT

### PESTICIDES

# EPA gives its blessing to 'Confront' and 'Gallery'

## 'Campaign' and 'Avid' labels are expanded

WASHINGTON — Confront and Gallery herbicides have received registrations from the U.S. Environmental Protection Agency.

Confront is used for the control of annual and perennial broadleaf weeds in ornamental turf and cool-season grasses, according to the Dow Chemical Company. Gallery 75 dry flowable is approved for use on certain broadleaf weeds and annual grass in established turf.

The active ingredient in Gallery, a selective pre-emergence compound, is isoxaben. Among the 44 broadleaf weeds it is labeled for are chickweed, henbit, plantain, purslane, oxalis, spurge and white clover.

Gallery is stable on the soil surface, but must be activated by 1/2-inch of rainfall or irrigation within 21 days. Established turf can be reseeded in the fall after spring application.

Gallery is also labeled for use on trees, ornamental shrubs and ground covers.

Confront, a non-phenoxy, will be introduced in November, 1989.

Confront is composed of an amine salt formation containing one part clopyralid to three parts triclopyr per gallon. Both ac-



tive ingredients act as a plant hormone mimic, disrupting plant cell growth, Dow says.

Initial control results are noticed four to six days after treatment, according to Rob Peterson, Dow's turf marketing manager.

Triclopyr controls ground ivy, oxalis, spurge, violets, chickweed and speedwell (among others), while clopyralid controls weeds such as musk thistle, clover, dandelion and plantain.

As action picked up at the EPA recently, the federal organization also expanded the labels of Campaign herbicide from Monsanto and Avid miti-

cide/insecticide from MSD Agvet.

Campaign's new label allows it to be tank-mixed with Oust or atrazine, widening the window of application. The label also permits application in bahiagrass or tall fescue.

Campaign was used last year in the South for summer release of actively-growing bermudagrass. The new label allows the product to be used for:

- bermudagrass release in the spring prior to green-up;
- release of bahiagrass; and
- spring and summer applications in tall fescue.

Campaign is said to be especially valuable to roadside vegetation managers.

Avid is now approved for control of spider mites and leafminers on woody ornamental plants. Previously, the product had been regis-

tered for use on flower crops, foliage plants and other non-woody ornamentals.

Avid can also be used on such important nursery plant types as deciduous shrubs, groundcovers and vines, perennials, annuals and bedding plants. It has not been cleared for use on conifers, however.

For more information on these products contact:

◆ **Elanco Products Company** at Lilly Corporate Center, Indianapolis, IN 46285; (800) 352-6776 for Gallery.

◆ **Dow Chemical Company** at 9001 Bldg., Midland, MI 48640; (517) 636-1000 for Confront.

◆ **Monsanto Industrial Products Group**, Box M2L, 800 N. Lindbergh Blvd., St. Louis, MO 63167; (314) 694-6640 for Campaign.

◆ **MSD Agvet** at P.O. Box 2000, Rahway, NJ 07065-0912; (201) 574-4000 for Avid. □



## Lofts expands

ALBANY, OR. — Lofts Seed Inc. recently expanded its facilities. Its West Coast division, Lofts/Great Western, has added more than 5,000 acres for turfgrass seed production. Storage and loading facilities have been increased by adding a new 33,000 sq. ft. warehouse (above) that holds 4 to 5 million lbs. of seed.

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