New bentgrass variety provides a truer putting surface at Wilmington CC.

When David Kroll, CGCS, was dealt the problem of bentgrass deterioration on the greens of this prestigious country club, he called in the experts to help. The greens could not be salvaged, so they were treated with methyl bromide and completely re-greened.

Dr. Joe Duich, Penn State University, suggested seeding with a bentgrass coded PSU 126.

Two and a half years later, the greens look great and with PennLinks' more upright growth pattern, putt like a dream. That experimental variety is now named PENNLINKS, and is available in limited quantities.
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"Ten years ago when we first started using Roundup® herbicide for renovations, some lawn care operators in the area thought we were making mistakes...misapplying the product. I mean our signs started showing up in a lot of browned-out yards. We were doing renovations without rototilling or sod removal and getting predictable results every time.

"That's the thing about Roundup, it eliminates a lot of variables and problems that you can have with rototilling or overseeding. With Roundup you get a uniform stand of quality turf. You don't inherit any weeds or old turf to cause problems.

"With Roundup we can do a 10,000 square foot lawn in about fifteen hours—total. And that includes one spray pass with Roundup followed up by one day's work about two weeks later to aerate, thatch, slit-seed and fertilize. There's no mud and no mess. Plus, it's about half the time it would take to rototill and easily half the cost it would be to remove the sod.

"The guys who avoid renovations are thinking of all the problems of mechanical methods. That's why we only use Roundup. Incidentally, the lower cost of chemical renovation helps make it an easier sell to the homeowner, too."

George Kanavas
Kanavas Landscape Management, Inc.
Elm Grove, Wisconsin

George Kanavas, pioneered with Roundup in lawn renovations over 10 years ago. Now it's the only kind of treatment he uses.
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George Kanavas' experience in renovating lawns using Roundup® herbicide is typical of operators across the country. Roundup turns renovations into profit opportunities instead of problems. It's the modern, time, labor, and cost effective way to renovate. Using Roundup avoids the problems of rototilling or overseeding. It gives the homeowner the lawn he wants. And gives you the chance for referrals, continued maintenance and additional work from a satisfied customer.

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Frequently overlooked by turfgrass managers, fine fescues are among the most adaptable and versatile of lawn grasses, as research from Rhode Island proves.

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40 PUTTING POA IN ITS PLACE
Successful annual bluegrass control requires sound chemical and cultural practices, along with some understanding from the golfers.

44 DIVERSIFYING YOUR BUSINESS
Landscapers today find themselves in a more competitive market than ever before. As a result, 'diversification!' has become the cry of the '80s.
Aurora, Shadow and Bighorn qualify for Turf-Seed's blue tag incentive program. Write us or call your seed distributor for details.

Aurora, Shadow and Bighorn have consistently topped fine fescue turf trials, and have years of 'experience' in low maintenance and high percentage shade areas.

These fescues mix well with perennial ryegrasses and Kentucky bluegrasses for use in sod production and golf courses: Aurora and Bighorn in the roughs and Shadow on the fairways.

When seeded in a monostand, our fescues will help give a course the 'Scottish links' look around tees and in roughs, and blue-grey Bighorn adds another color dimension to course design.

Low growing Aurora, Shadow and even shorter growing Bighorn require less mowing, making them ideal for roadsides and other low maintenance areas.

All-in-all, when your turf area is in the shade, where water, nutrients and maintenance are costly, it'll pay you to look into Aurora, Shadow and Bighorn . . . the good look in fine fescues.
Drought rears its ugly head

A long, dry spring resulted in some radical water restrictions in Los Angeles lately. This type of action by the L.A. City Council could be a portent for other parts of the country hit by drought.

"A new ordinance provisionally passed by the City Council will establish strict xeriscape requirements for all landscaping on commercial, industrial and multi-family housing projects in Los Angeles," notes a press release from the California Landscape & Irrigation Council. The release says that points are awarded to xeriscaping features incorporated into the landscape. Each new site plan must meet certain requirements concerning drip/trickle/micro irrigation, automatic irrigation controls, swimming pool and spa covers, non-living ground cover and recirculating water features, among others.

California Gov. George Deukmejian, who drafted a contingency plan for a drought emergency, has requested the public to water lawns only during the evening or early morning.

And California is not the only place in the country facing a probable water shortage. LANDSCAPE MANAGEMENT technical advisor Doug Chapman says that spring rainfall measured less than one inch at Dow Gardens in Midland, Mich.—against a normal rainfall of more than four inches.

If spring weather is any indication, it will be a long, dry summer, so landscape managers should begin making their own "contingency plans" now.

EPA official sees higher prices

The Environmental Protection Agency's requests for additional data on lawn care pesticides could result in fewer and higher-priced chemicals, says Cathleen McInerney, deputy chief at the Policy and Special Projects Office of the EPA.

"Producers may raise prices in order to compensate for the costs of generating additional data," she told attendees at the most recent GCSAA conference and show. "They may also simply stop making the product, or they may choose to take it off the home market and restrict it to golf courses and other non-home uses.

"Products containing active ingredients which are only registered for use on golf course would be unaffected by any new data requirements."

McInerney said that the EPA plans to issue 15 new pesticide registration standards and 10 final standards. She also predicted that this year, 13 special review decisions would be made.

Her speech also referenced biological control agents including nematodes and endophytic grasses.
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LEGISLATION

Sign-posting, licensing laws in the books

Recent legislation in three states will have an effect on how pesticides are applied. The states—Connecticut, Maryland and Kansas—have restricted pesticide application in different ways. Here is a brief rundown on new laws facing pesticide applicators in those states:

**Connecticut**
 Anyone who sprays pesticides for non-agricultural purposes—including homeowners—will have to post warning signs. The law, passed by the state legislature in May, is expected to take effect in 1990.

The law is probably the first in the country to be jointly supported by industry and environmental groups. "The parties have agreed on everything involving the posting," says Don Kiley, executive director of the Professional Pesticide Users of Connecticut.

Specific regulations are to be completed by the Department of Environmental Protection by Oct. 1, 1989. Kiley says industry and environmentalists have agreed that 4x5-inch signs should be posted at conspicuous points of entry, with black letters on a yellow background reading: "Pesticide Application."

The name and phone number of the company or person doing the application would be on the back of the sign, and the property owner would be responsible for removing it after 24 hours.

The two groups also agreed that a registry of individuals who wish to be notified prior to applications should be established by the state. Pesticide applicators who spray abutting properties would then be responsible for notifying these individuals one day in advance. Applicators would be excused in the event of an emergency application.

**Maryland**
 Mandatory sign posting, approved by the state legislature last year, will begin some time in July or August. The specific requirements were being finalized at the time this magazine went to press.

The requirements as they stand are almost identical to those in Massachusetts: LCOs must post 4x5-inch yellow signs with the image of a person walking with a dog, with black letters reading: "Pesticide Application. Keep Off."

One difference is that the customer is instructed to remove the sign after 48 hours, not 72 hours as in Massachusetts, says Mary Ellen Setting, an entomologist with the Maryland Department of Agriculture. The back of the sign must have the applicator's company and phone number.

Many companies began voluntary compliance this spring, Setting says. The law covers all commercial and government lawn and ornamental applications.

**Kansas**
 All who apply lawn care chemicals commercially for one year after Jan. 1, 1989 will have to be licensed. The legislature recently passed the requirement with the support of the Professional Lawn Care Association of Mid-America, according to Dave Murphy, association president.

Applicators will work their first year as registered technicians; they will receive verifiable training by a certified applicator. After one year, they will have to pass a test administered by the Department of Agriculture.

Kansas is one of a handful of states to require mandatory training of all lawn care applicators. The Professional Lawn Care Association of Mid-America is lobbying for a similar bill in Missouri.

Only handlers of materials in the "restricted-use" category, designated by the Environmental Protection Agency, require certification or supervision under the Federal Fungicide, Insecticide and Rodenticide Act.

Most lawn care chemicals do not fall under this category.

—Lawn Care Industry

PESTICIDES

It's official: Daconil innocent

On May 9, nearly five years after the fact, Daconil fungicide was cleared of any complications in the death of Navy Lt. George Prior.

Judge Paul S. Sheridan, Circuit Court of Arlington County, Va., dismissed the $16 million lawsuit against Diamond Shamrock and the Army/Navy Country Club for the death. The suit was filed by Prior's widow, Liza, who claimed Prior died as a result of Daconil exposure.

"We're pleased with the judgment in this case as it relates to our product, Daconil 2787," says Ed Sabala, manager of corporate communications for Fermenta Plant Protection, which presently manufactures Daconil.

Prior, 30, died in September of 1982 of toxic epidermal necrolysis (TEN), a rapidly progressive and often fatal disease, 14 days after playing golf on the continued on page 11