One look tells you. A golf course just doesn't reach this level of beauty and playability without effective control of turf diseases.

Like large brown patch. When tees, greens and fairways come under its attack, things can get u-g-l-y.

Unless you attack back—with Rubigan, tank-mixed with a contact fungicide (Daconil 2787<sup>®</sup>, Chipco<sup>®</sup> 26019, or a thiram product).

This adds even more knock-down power to Rubigan's extended disease control. Just one application can clean out even a heavy presence of brown patch for 10-14 days.

One Rubigan treatment also can

keep your course dollar spotless—up to 28 days. One case of Rubigan will treat up to 4 acres of greens and fairways. It gives you powerful preventive action against anthracnose too.

This year, make Rubigan your foundation fungicide. Find out how quickly large brown patch and 13 other common turfgrass diseases find themselves overmatched. See your Elanco distributor. Or call toll-free: **1-800-352-6776.** 

Elanco Products Company A Division of Eli Lilly and Company Lilly Corporate Center Dept. EM-455, Indianapolis, IN 46285 U.S.A. Rubigan®—(thenarimol, Elanco) Daconi®—(chlorothatonil, Fermenta Plant Protection) Chipco®—(iprodione, Rhone-Poulenc)



Extends brown patch control up to seven days when tank-mixed with a contact fungicide.

Circle No. 116 on Reader Inquiry Card

#### Brown patch is no match for a Rubigan<sup>®</sup> tank mix.

Eden Prairie park supervisor Wes Dunsmore.

"We work closely together," notes Skranka. "We borrow his equipment, he borrows ours. We do a lot of sharing ideas and probably see each other a few times a week.'

Skranka also has another ace: he's a member of the city's volunteer fire



John Skranka

department. And that means that when he needs a basket truck for offthe-ground work, one is available.

Because of the fast-growing area, money for new projects is not hard to come by.

"We're going to open up another school and have a ground-breaking on another," says Skranka. "We're remodeling the high school and putting in a new varsity football field.'

But talk about your high-traffic areas-Eden Prairie's got them!

"Right now, the city's big on soc-cer," Skranka relates. "So we're letting them use six fields at the high school. Those fields are used two hours a night, six to 10 hours a week. The other ones at the high school are used another four hours a day.

"We have a problem scheduling seeding. We're going to pull two fields out of use when school's out for seeding."

Since one of the new schools is going up on the former site of Northrup-King Seed Co. test plots, he still gets consultation from people there. He uses Northrup-King Athletic Pro seed mix for most of the fields with Par-Ex fertilizer.

Skranka also swears by a new John Deere AMT-600 utility vehicle that supplements Jacobsen and Gravely mowers. Irrigation equipment (all fields are irrigated) is mostly Toro with some Buckner and Hunter.

"We're a lucky-type district because we're growing," Skranka, a 14-year veteran admits. "If we weren't, it'd be a lot harder to get the equipment and sprinklers."

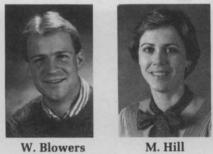
-Jerry Roche

Jacklin Seed Co. has named Wade Blowers research assistant of the warm-season grass seed breeding pro-

grams. He will also be involved with production research.

Henry Donselman, Ph.D., has been named vice president, director of research of Rancho Soledad Nurseries, Inc. He will oversee new research and development in plant production, coordinate the acquisition and testing of new ornamental plants, work closely with Ranch Tissue Technologies (the nursery's tissue culture division), oversee the production of palms and other tropicals in Hawaii at Palms of Paradise (the nursery's tropical interior plant nursery) and be available for consulting in landscape and interiorscape installations.

The first five inductees to the National Landscape Association's Hall of Fame are: Dr. J. Franklin Styer, former owner of J. Franklin Styer Nurseries, Concordville, Pa., Harold



M. Hill

Hunzicker, of Hunzicker's, Inc., Wellington Kennedy, of The Kennedy Nurserv, Inc., Dr. Richard P. White, former executive secretary of the American Association of Nurserymen and Dr. L.C. Chadwick, author of the association's Landscape Newsletter in 1945 and 1946.

Mark W. Beliczky has been named director of marketing at Lesco, Inc. Beliczky was formerly associated with ChemLawn Inc.

One of the nation's first interior landscape contractors. Robert Herrick Carter, recently died of cancer. He was 69.

Carter, former owner of Van Herricks Environmental Planting from 1946 to 1987, is credited with pioneering the use of flowering plants and trees in commercial developments in southern California in the mid 1940s. Carter is survived by his son, Robert, daughters Nancy and Catherine and two grandchildren.

Riverdale Chemical Company's new regional sales manager is Lonnie M. Pell. Pell will be responsible for the company's sales activities in the southeastern portion of the United States.

Martha Hill, landscape technology instructor for Hinds Community College in Raymond, Mississippi, was installed as president of the American Society of Landscape Architects.

The Nebraska Turfgrass Foundation elected new officer and directors at its recent conference. The re-elected officers include Larry Hergott, president, Hans Bross, vice president, and Twyla Hansen, secretary-treasurer.



S. Rom

J. Kelly

Newly-elected board members are Steve Paustian, Hans Bross and Carlos Stimson.

The new executive vice president of operations for Chapel Valley Landscape Company is Stewart Rom. Rom is the newly-elected president of the Landscape Contractors Association for Baltimore, Washington, DC, and northern Virginia. Also promoted were Paul Drummond to manager of business development, Bruce Phillips to Virginia landscape department manager and Charles Whealton to Maryland maintenance department manager.

**Clemson University Extension** Service horticulturist John Kelly has been honored by two horticultural organizations.

The American Society for Horticutural Science recognized him as an outstanding young educator and the South Carolina Nurserymen's Association presented him with an award for outstanding service to the state's nursery industry.

Ken Jenner, co-founder and third executive director of the California Landscape Contractors Association, died Jan. 29 in California. He was 83.

Jenner began in the landscaping industry in the 1940s and participated in the organizational committee that created the CLCA in 1951. As the groups part time executive secretary, Jenner's first budget was under \$2,000. When he retired in 1972, CLCA had a budget of nearly \$250,000.

During his tenure, CLCA established its Trophy Awards program, offering health insurance to members, launched a public relations program, opened a second office in southern California and published the book Landscape Management by James W. Griffin. Jenner is survived by his wife Betty, daughter Joan Rowles, grandson Michael Sewell and brother Theodore H. LM

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### THE BEST OF THE ROADSIDES

When the National Roadside Vegetation Management Association held its conference last fall, it named annual contest winners. Here are brief profiles of three outstanding programs.



The use of wildflowers along North Carolina's highways wasn't implemented as a cost saving measure, says Bill Johnson of the state's DOT. Their purpose is simply to bring color to the roadway.

#### **Innovation in N. Carolina**

#### by Jerry Roche, editor

andscape engineer Bill Johnson and the North Carolina Department of Transportation took the NRVMA award in the state/federal category. Johnson, one of the founders of the NRVMA, likes to think of himself on the cutting edge of the industry.

try. "We try to be innovative," he notes. "We try to do things first, change things, look at new programs. We really react well to public sentiment and public influence on our program." One of Johnson's pet projects is his wildflower program.

"There was a lot of interest in wildflowers. We reacted quickly. We seem to have been a little more blessed with resources than some groups across the nation.

"The wildflower program is probably the most popular thing I've ever seen happen in DOT. It's more popular than roads, really. The response is overwhelming. It's a visible change."

Johnson said he heard his boss speaking to a group recently, saying that he's been complimented on four things—and three had been on the wildflowers.

"We can't save money using wildflowers," Johnson continues. "That was not its purpose. The purpose was to add color to the roads, to improve aesthetics, to give an interest that is fairly low-maintenance."

What is spent on the wildflower program—and more—is saved by implementing plant growth regulator and low-volume herbicide spraying programs. "We have documented cost savings on both of those," says Johnson. "The wildflower program is about \$250,000 a year. The other savings are considerably more than that."

Controlling vegetation in North Carolina is no small task. The 400-person Landscape Unit maintains 285,000 acres of routinely-mowed vegetation and nearly 300,000 total acres with reforested areas included. This acreage is among the nation's largest state-maintained highway system with more than 76,000 miles of roadways.

Because of its location smack-dab in the middle of the transition zone, the state DOT maintains a good working relationship with North Carolina State University, especially Dr. Joe Di-Paolo (who made the NRVMA award nomination). DiPaolo has done research on turfgrass species that has saved Johnson some money.

DiPaolo, in his nomination letter, notes a 50 percent savings in roadside vegetation control in North Carolina with the use of maleic hydrazide or mefluidide + chlorsulfuron as growth regulators on tall fescue.

"In 1971, fescue was used into the ocean and was certainly not adapted to a large part of the state," observes Johnson. "We now use three different warm-season grasses. We also use regular Kentucky-31 tall fescue, bluegrass and some of the hard fescues in our cool-season mixes. Centipede is a warm-season material that we're very interested in. It's shown some adaptation into the cool-season areas because of its low maintenance. It's really a no-mow type of material."

And how's this for planting? In preparation for the 1987 summer Olympic Festival, the DOT planted an unbelieva-



"The wildflower program is probably the most popular thing I've ever seen happen in DOT," says Bill Johnson of the North Carolina DOT.

ble 53,000 dozen annual flowers, 2,100 junipers, 1,900 crepe myrtles, 1,000 pampasgrass plants, 5,000 daylilies and 28,000 cannalilies along 20 interchanges—in six months.

Finally, one more new program with which the DOT is experimenting involves the state's Wildlife Resources Commission. Recognizing that roadsides serve as a linear wildlife refuge, a pilot project provides roadside feeding areas for small game.

"An added benefit is that this should reduce our maintenance costs," says the ever-frugal Johnson. "We want our roadsides to be more attractive to people and an asset to wildlife as well. From these projects we will be able to develop a program that could receive wider application in the future.

#### **Two decades of control**

ay Dickens, Ph.D., professor of turf management at Auburn University, was presented with the NRVMA's award in the academic category in appreciation of two decades of service to managing roadside vegetation.

Dr. Dickens initiated and developed Auburn's first course in turfgrass management soon after joining its academic staff in 1968. Today, as the primary consultant to the Alabama Highway Department, he remains among the pioneers doing efby Will Perry, managing editor

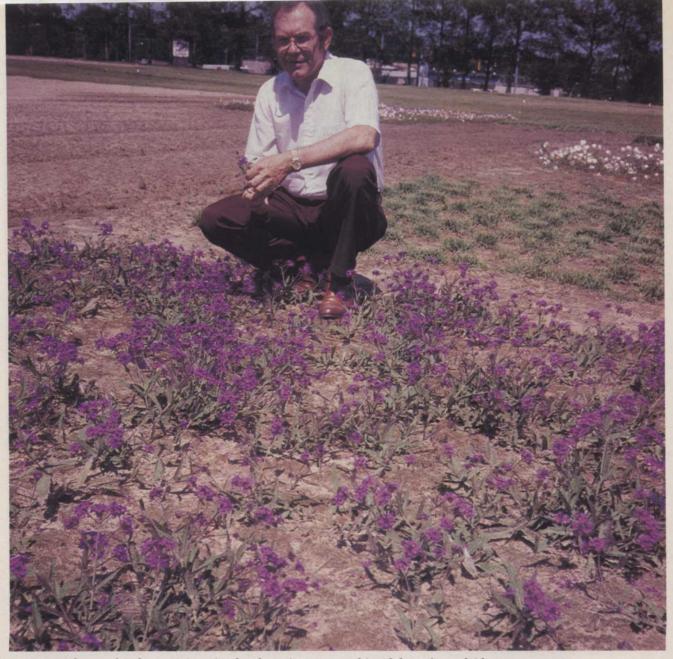
fective research on managing roadside vegetation.

His early work showed the effectiveness and economy of weeping lovegrass as a temporary cover when seeded in a seed mixture. At the same time, he was helping identify the areas on which crown vetch, an attractive cover, is adapted.

Dr. Dickens also provided the research needed to select Sericea lespedeza adapted for acid road cuts. This cooperative work resulted in the release of two cultivars recommended specifically for highways: Interstate and Interstate 76.

Dr. Dickens' recent research on highway vegetation has emphasized chemical growth control, particulary MSMA and 2,4-D, in lieu of mechanical mowing. Dr. Dickens' cost-effectiveness studies of fan-cage sprayers compared to other application methods is indicative of research that has resulted in a sharp drop in maintenance costs for the state of Alabama Highway Department.

Dr. Dickens' research is largely re-



Dr. Ray Dickens, of Auburn University, has been instrumental in Alabama's roadside management.

sponsible for the state eliminating tall weeds and grass in favor of bermudagrass during the summer. Winter weeds are controlled by herbicide applications during bermudagrass dormancy.

Dickens' 1978 study of several roadside mulch materials showed that seedling establishment is increased by adding cellulose, excelsior, or other mulch materials to erosion control nettings. He also showed that incorporating plant nutrients into the adhesive appears to be an acceptable method of applying fertilizers to mulched areas.

Dr. Dickens also aids in writing and interpreting construction specifications and arbitrating conflicts between contractors and the state highway department.

#### **Orange County Weed Busters**

by Terry McIver, associate editor

**B** ill Tidwell, winner in the county category, is the supervisor for EMA/Public Works for Orange County, Anaheim, Calif. Originally a park ranger, Tidwell has steadily progressed up the educational and professional ladder. He earned his masters degree in environmental studies, and holds lifetime teaching credentials in ecology and agriculture.

Tidwell's division is responsible

## Look at it this way.

# Is there really any other choice in grub control?

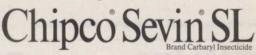
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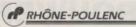
grubs. Plus control of 29 other destructive turf pests—including sod webworms, chinch bugs and bluegrass billbugs. It even provides dependable control of more than 86 insects known to attack trees, shrubs and ornamentals.

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for special protective clothing, no odor, and play can be resumed as soon as the spray has dried. CHIPCO® SEVIN® brand SL carbaryl insecticide is low in toxicity to fish, and other formulations of SEVIN® brand are used for control of pests on household pets, poultry and some game birds.

When you add it all up, is there really any other choice in grub control?





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for managing all vegetation, including trees, brush, noxious weeds, grass and litter on all county-owned land. This includes 813 miles of county-owned roadway; 303 miles of flood control channels, basins and drains; 15,000 acres of park land and a few hundred thousand landscape trees. The total area adds up to 26,000 acres.

Aesthetically, Tidwell's "Weed Busters" crew has kept up with county development and growth. The unit has managed to keep the areas under its jurisdiction attractive despite the hazards of a roadway system which operates at near rush hour volume all day long.

"The road shoulders are kept free of weeds with a program of tank-mixing a post-emergence and pre-emergence herbicide to keep weed seeds from germinating while controlling existing weeds," says Tidwell. "The county is using low maintenance landscaping instead of high maintenance exotic plants which require constant care, minimizing the time the crews must spend on the welltraveled highways."

Tidwell says Orange County's pesticide section excels in the areas of application and applicator safety. Pesticide use is regulated by agri-



Bill Tidwell: Dealing with Proposition 65 positively.

cultural commissioners in the state, however, because the county is a public agency, the management has directed the goup to comply with all Cal-OSHA safety requirements as well, says Tidwell. Notable is the fact that all personnel in the section have a state applicator's license, and all suspected groundwater contaminants were removed three years before the passage of Proposition 65.

For extra added innovation, Orange County uses a high-line boom for certain applications. The unit's spray crew can treat a 14-mile long, 300-foot wide stretch of flood control channel in 12 hours. On-board computers are also used in the trucks to track scheduling and progress.

Perhaps the most innovative aspect of Tidwell's operation is the use of computerized herbicide recommendation inventories which include roadways, flood control channels and parks. These recommendations are used to schedule activities, document use and order materials. It is combined with the vegetation section of a Maintenance Management Plan that is used for all the county's public works operations. This information allows the manager of public works to determine that all functions are staying on course and on time while staying within the budget for that activity. "Research of this current information allows excellent forecasting for future budgets," Tidwell explains.

ED. NOTE: Mayor Jerry E. Abramson of Louisville, Ky. and the city of Boca Raton, Fla. tied for the NRVMA award in the municipal category. They were not included in this installment because of space considerations, but will be noted in future issues of LANDSCAPE MANAGEMENT. LM

- HIK

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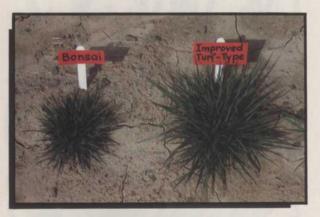
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Inspired by the mysteries surrounding this ancient craft, and cognizant of the desirability that dwarf features would bring to the professional turf grass grower, TMI has developed Bonsai. This double dwarf, turf type tall fescue is shorter, finer and darker than any other commercially available variety.

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Dollar Spot first appears as yellow-green blotches on grass blades. Overall view of affected area shows patches from a few inches to several feet in diameter. Treat preventively at a rate of 1 oz./1,000 sq.ft. every 28 days.



Red Thread, in its latter stages, is distinguished by the presence of bright coral pink thread-like structures 1/16-1/4 inch in length. Use Banner preventively, before disease problems begin, with 2 oz. every 14-21 days.



Summer Patch first appears as small patches of light green turf but can fade within hours to a light straw color. Research indicates best results are obtained with a preventive application of 4 oz. when soil temperature reaches 60-70°, followed by a second application 30 days later.



Anthracnose is most severe on Poa annua and first appears as irregular patches of yellowing turf which eventually turn bronze before fading to light tan. Prevent damage with 1-2 oz. of Banner every 14-28 days.

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