



New DURSBAN: No stink, no squawk, no bugs.

New formulation reduces neighbor complaints.

Let's face it. DURSBAN* insecticide used to have a very pronounced air about it. One that could even trigger complaints occasionally.

But no more.

New technology.

DURSBAN Turf Insecticide now contains a more highly purified grade of chlorpyrifos, its active ingredient. And minimizing the impurities has significantly reduced the odor.

Apply without worry.

That means you can apply DURSBAN Turf Insecticide whenever it's needed, even on the hottest days. Without worrying about odor-triggered complaints from neighbors or customers. Applicators, who live with it all day long, will appreciate it, too.

Insect control remains unparalleled.

Your chances of getting called back for re-treatment are slight, too. DURSBAN is famous for effective control of most any surface feeding insect you'll

encounter. And for its 6 to 8 weeks of residual control, to catch late-arriving insects.

DURSBAN bonds tightly to organic matter in soil as soon as it dries. So it stays put and keeps controlling. Won't wash away. And you can use it with confidence, because it has a proven human safety record.

First in the industry.

DURSBAN insecticide's first label was for turf applications, indicative of Dow's continuing commitment to the lawn care industry. And DURSBAN has earned the industry's respect for its broad spectrum effectiveness, residual control and cost efficiency... which all add up to today's best insecticide value.

New DURSBAN Turf Insecticide is available in 2.5 gallon plastic jugs and 55 gallon drums. If you prefer a wettable powder, you can get the same advantages in DURSBAN 50W, now offered in water soluble packets for the easiest, quickest mixing and measuring ever. Whichever you choose, you'll get fewer complaints—from neighbors, or applicators. Get the full story from your chemical distributor today.



DURSBAN*

The "no offense" insecticide.



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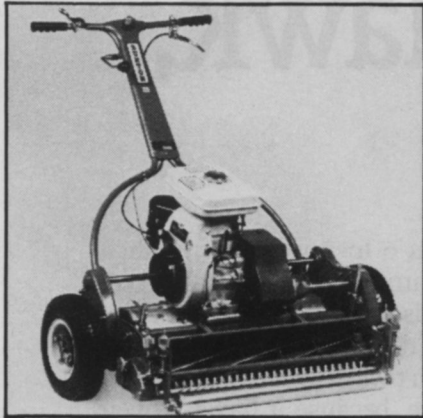
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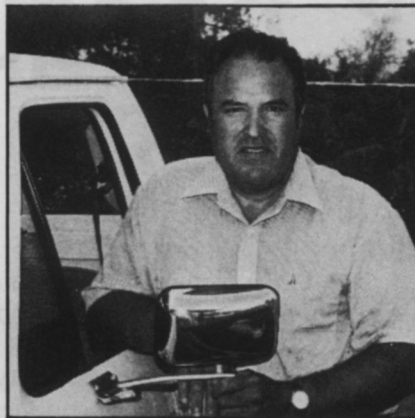
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WEEDS TREES & TURF

The Magazine of Landscape and Golf Course Management Since 1962



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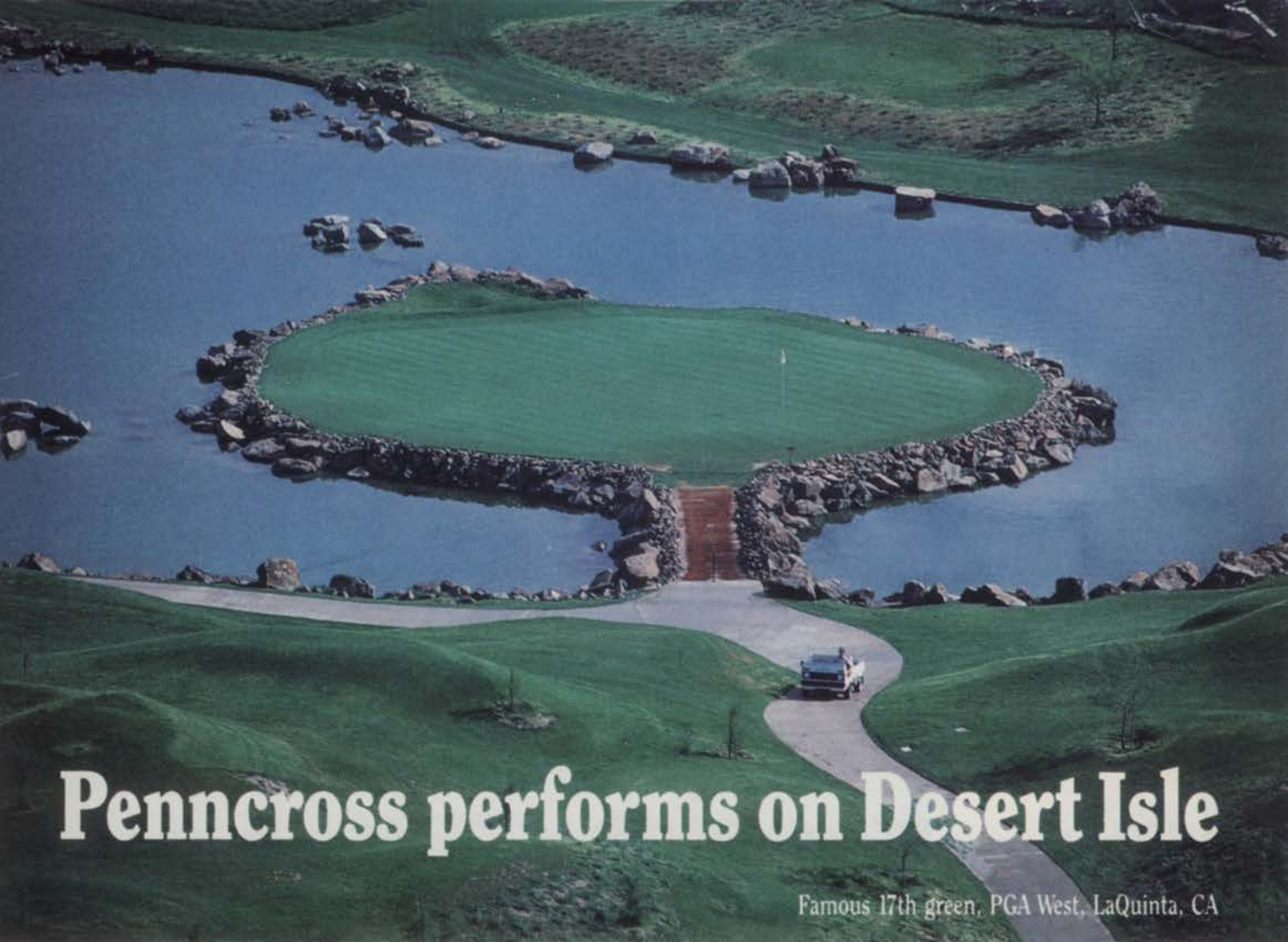


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A HARDCOURT BRACE JOVANOVIH PUBLICATION



Penncross performs on Desert Isle

Famous 17th green, PGA West, LaQuinta, CA

Penncross not only survives, but thrives on all 18 greens at this innovative Pete Dye designed course.

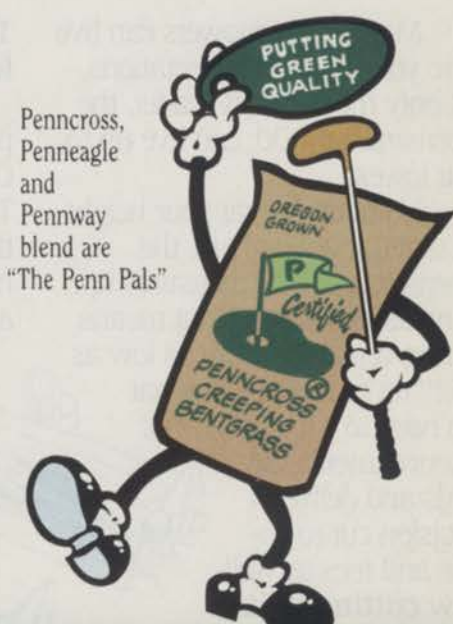
You've seen this awesome 17th green in pictures, or maybe you've had the good fortune of playing this 147 yard challenge, but we're reasonably sure you didn't know that it's Penncross creeping bentgrass. Television announcers won't tell you and magazines don't print it, but the putting greens that have made more champions on some of the greatest courses in the world are Penncross.

PGA West is a revolutionary new course with target greens, stadium spectator mounds and punishing hazards. Why would such an innovative designer use a strain of bentgrass that's been around for so many years? We maintain that there is no better all-around bentgrass anywhere!

Some people say that bentgrass won't survive the intense sunbelt heat. We have evidence to disprove that notion. Penncross, and its Penn Pal, Penneagle have grown in popularity on courses from California to Florida . . . where bermuda-grass used to reign.

Pete Dye specified Penncross for this desert isle, as he did for his famous Sawgrass island green in Ponte Vedra, Florida. Penncross is no ordinary putting green grass . . . and Pete Dye is no ordinary designer.

Watch Penncross perform in the *Skins Game* at PGA West, Nov. 29 and 30, 1986.



Penncross, Penneagle and Pennway blend are "The Penn Pals"

*Penncross is a tried and true cultivar developed by Professor Burt Musser at Penn State University and released in 1955.

Penncross is marketed by TEE-2-GREEN CORP / PO Box 250, Hubbard, OR 97032 / 1-800-547-0255 / TWX 510-590-0957

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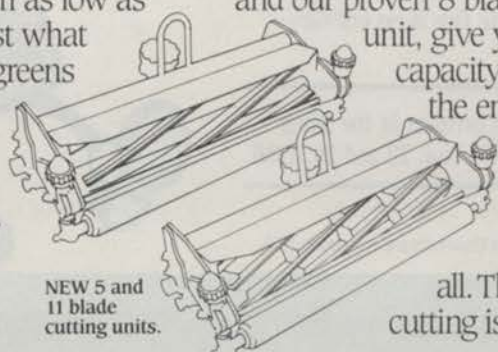
The Green 300 lives lowest ex

Most greensmowers can live up to your highest expectations. But only the industry leader, the Greensmaster 300, can live up to your lowest.

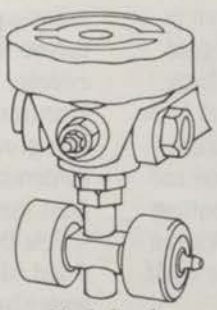
No matter what your height of cut requirements are, the Greensmaster 300 measures up. Or measures down. That means cutting versatility from as low as 3/32" up to 11/16". Just what you need to cut your greens to tournament standards and deliver a precision cut to aprons and tees as well. **New cutting units and Toro's Variable Speed Kit.**

The perfect combination for a precision cut.

What makes the precision cutting of the Greensmaster 300 possible? The correct choice of cutting blades for your desired height of cut. Our new 5 and 11 blade cutting units, and our proven 8 blade unit, give you the capacity to cover the entire height-of-cut range for the truest ball roll of all. This precision cutting is achievable



NEW 5 and 11 blade cutting units.



Single-hand bedknife adjustment knob.

in combination with Toro's exclusive Variable Speed Kit. It allows you to select a consistent ground speed while maintaining a constant, even clip.

Another exclusive feature for varying cutting conditions.

The Greensmaster 300 also features an exclusive cutting unit attitude leveling adjustment through its rear roller. This lets you set the correct attack angle of the bedknife for varying cutting conditions. **Additional cutting versatility at the flip of a handle.**

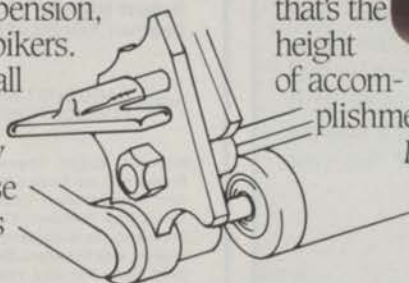
With Toro's quick height-of-

Greensmaster[®] lives up to your expectations.

cut kit you can easily change your height-of-cut to 5 different levels. Each flip of the handle alters the height-of-cut by .100 inch within a total range of 1/2" above the cutting unit bench setting.

For further versatility and productivity, Toro provides a full range of bedknives, rollers, combs and brushes. Plus options that include direct suspension, thatchers and spikers.

Put them all together and it's easy to see why more Golf Course Superintendents depend on the Greensmaster



Quick height-of-cut adjustment.

300 than any other riding greensmower in the world. And why you should, too. For precision cutting, only the Greensmaster 300 lives up to your lowest expectations. And in a profession like yours, that's the height of accomplishment.

More information available from your Toro Distributor.

Contact your

local Toro distributor for additional information or a demonstration. Or write The Toro Company, Commercial Marketing/Dept. G3, 8111 Lyndale Ave. So. Minneapolis, MN 55420.



Greensmaster 300.



The professionals that keep you cutting.

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Jerry Roche



Ken Kuhajda



Heide Aungst

New insecticides fight pests naturally

■ Some trees have a natural insect repelling ability, and several companies want to cash in on it.

Western red cedar is one tree which naturally wards off pests. Cedar-Al products Inc. in Clallam Bay, Wash., is marketing a mixture of cedar essence and water, called Cedar Oil.

The company currently sells \$1 million annually in room deodorizers. But preliminary tests show that Cedar Oil is effective against gypsy moths. If the EPA approves Cedar Oil as a pesticide, the company's sales could jump to \$20 million.

"Natural pesticides are clearly the wave of the future," says Robert Metcalf, professor of entomology at the University of Illinois.

Stimson Lumber Co. of Forest Grove, Ore., wants EPA approval for a natural insecticide which fights pine beetles. Norpine, made from a chemical found in pine trees, is being tested by the Agriculture Department and the Forest Service.

A British Columbia company, Safer-Agro-Chem Ltd. makes insecticidal soaps from the fatty acids found in trees. The soaps kill insects which prey on Douglas fir, spruce, and other trees, along with fruit and vegetable crops.

Pesticide accidents decreasing

■ The average number of lethal pesticide accidents in the United States is decreasing, according to reports from the U.S. Office of Vital Statistics.

Though exact records were not kept until 1968, more than 100 annual lethal accidents were estimated during the 1950s by personnel at Vanderbilt University's Medical School. Between 1968 and 1970, 55 were reported to the National Center for Health Statistics, but between 1980 and 1982 there were just 28.

The National Center also reports that, of 4,293 lethal poisonings in 1983, just 22 were the result of agricultural chemical ingestion.

Dr. Keith C. Barrons notes the statistics are available in a pamphlet entitled "Agriculture and the Enviro-Extremists" which is published by the National Council for Environmental Balance, P.O. Box 7732, Louisville, KY, 40207.

Kikuyugrass: friend or foe?

■ Kikuyugrass is prospering in some warm-season areas but whether or not that's good is a matter of opinion. Some golf superintendents in the Los Angeles area are managing the grass with good results. Riviera Country Club is practically all kikuyugrass. Other superintendents are trying to get rid of it. It can have an extreme thatch layer and may give the golfer a bad lie if not maintained properly. Whether or not it's right for you depends on your climate and management program.

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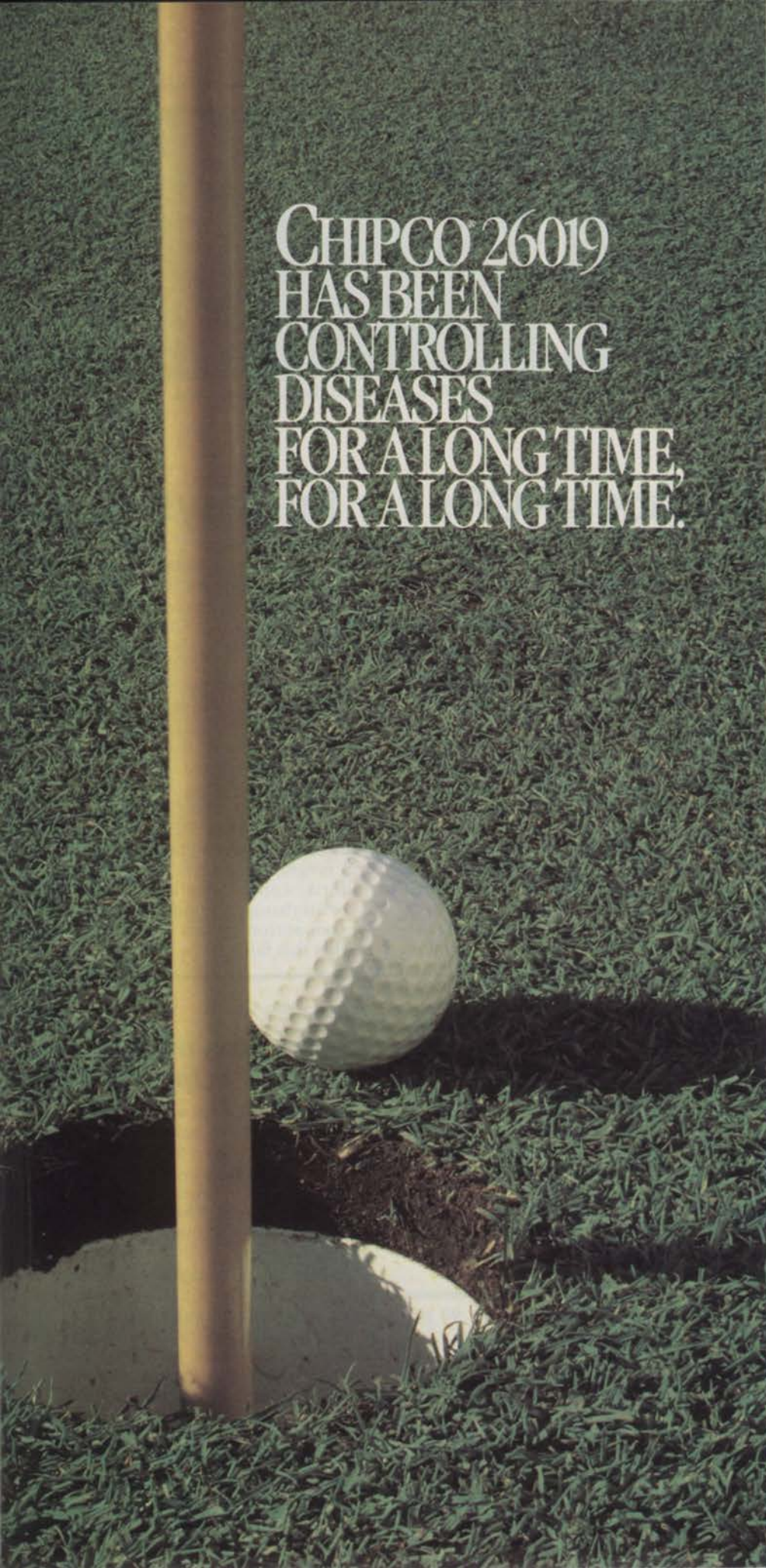
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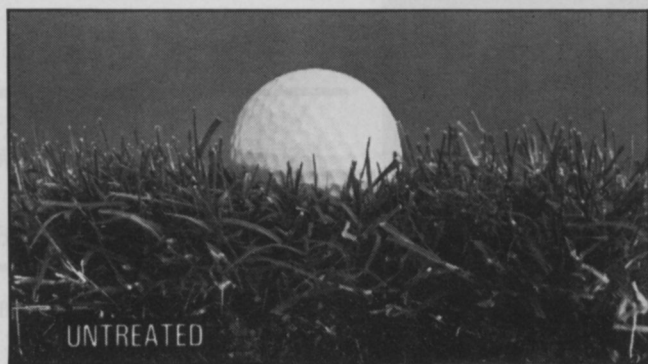
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Playability of turf using Turfgrass Growth Regulator (right), as opposed to untreated (left), is improved.

PRODUCTS

O.M. Scott introduces PGRs for fairways

The first PGRs for fine turf have been released by O.M. Scott & Sons, Marysville, Ohio.

Both are named ProTurf Turf Growth Regulator Plus Fertilizer (30-3-10). One is formulated for loam and clay soils, and one is for use in sandy soils.

"We're doing something that no one's been able to accomplish yet," notes Jim Fetters, marketing manager for professional products. "It isn't the answer to everything, but it's exciting."

The product has been tested in six states as PP-333. Its technical name is paclobutrazol, and it previously received labels for other agricultural uses.

The main benefit of Turf Growth Regulator Plus Fertilizer is that it will

improve playability on hybrid bermudagrass fairways. But it also improves turf density, slows growth by about 65 percent for 6 to 8 weeks, enhances greening for up to 12 weeks, reduces scalping potential and reduces clippings by about 75 percent.

"This product is recommended mainly on Tifway bermudagrass, not Tifgreen or Tifdwarf," notes Dr. Milt Kageyama, manager of research and development. "It can also be used to reduce mowing by two-thirds on St. Augustinegrass, although Floratam and Roselawn are not as responsive."

The label says the product must be used on well-maintained, established hybrid bermudagrass fairways and St. Augustinegrass areas that are on regular fertilizer programs, actively growing and have filled in following

any winter damage.

Is this product a money-saver?

"We're going to let the individual superintendent figure out how much he's saving," says Dr. Kageyama. "But it looks like there's substantial savings."

According to Fetter, the new PGRs are now available in limited markets. They will be expanded more broadly through the South in the spring of 1987. And they are just the beginning.

Scott's this spring also received EPA label approval for ProTurf Fairway Fertilizer with TGR for poa annua control on bentgrass, bluegrass and ryegrass fairways. According to editorial communications manager Dave Slaybaugh, the growth regulator for cool-season grasses will be on the market this fall.

LANDSCAPE

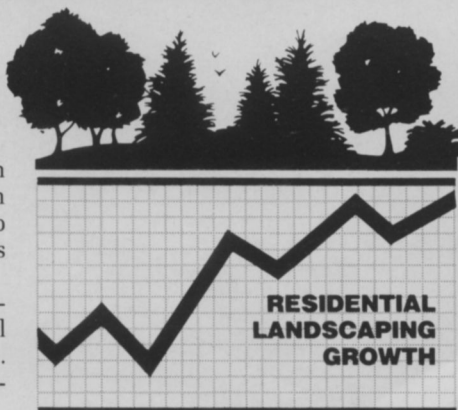
Survey: residential landscaping grows

Residential landscaping has shown stronger growth than landscaping in the commercial sector, according to the National Landscape Association's 11th annual economic survey.

Commercial renovation, residential renovation and new commercial landscaping also have improved. Those responding to the survey expect continued growth.

Predictions for 1986 sales showed that 49 percent see an increase in new residential landscaping; 46 percent say it will remain the same; 5 percent predict a decrease.

For new commercial landscaping, 41 percent forecast an increase, while 15 percent see numbers falling. More than half the respondents, 53 percent, believe no change will occur in resi-



dential renovation, although 40 percent see an upswing.

A high 61 percent see no change in commercial renovation. Only 27 percent look forward to an increase.

The survey also determined changes in business. Nationally, business increased 26.1 percent from 1984 to 1985, and is predicted to increase 16.8 percent from 1985 to 1986.

PESTICIDES

Stauffer wins right to register sulfosate

Stauffer Chemical Co. will apparently get the go-ahead to have its registration application for sulfosate processed, following a district court ruling. Sulfosate is Stauffer's glyphosate, a non-selective herbicide registered by Monsanto Chemical Co. and sold as Roundup.

A district court judge denied Monsanto's requests for a preliminary injunction and declaratory relief. The judge concluded, according to an EPA in-house memo, that Monsanto had not demonstrated that it would be "irreparably harmed...and the interests of Stauffer outweighed the harms alleged by Monsanto."

As the August WEEDS TREES & TURF went to press, Monsanto had not appealed the decision.

U.S. EPA finalizes rules for small quantity generators

The U.S. Environmental Protection Agency has finalized rules according to the Resource Conservation and Recovery Act (RCRA) for small quantity (hazardous waste) generators (SQGs).

According to the Federal Register, SQGs must now, by law, comply with the following rules:

- "determine whether their wastes are hazardous;
- "obtain an EPA identification number;
- "store hazardous waste on-site for no more than 180 or 270 days in compliance with specially modified

storage standards (unless they comply with the full regulations for hazardous waste management facilities);

- "offer their waste only to transporters and facilities with an EPA identification number;

● "comply with applicable Department of Transportation requirements for shipping wastes off-site;

- "use a multi-part 'round-trip' Uniform Hazardous Waste Manifest to accompany waste to its final destination; and

● "maintain copies of manifests for three years."



The Cushman Eagle was warmly received by dealers at Cushman's national dealer conference in June.

TURF VEHICLES

OMC Lincoln has high hopes for new Eagle

OMC Lincoln hopes to be flying high with its Cushman Eagle, a new line of utility vehicles designed for turf and industrial applications.

"This is the largest and most important product introduction that Cushman has had in a decade," says Frank McDonald, Cushman Division director of marketing.

Orders were taken at June's annual dealer conference in June, and deliv-

eries should begin in September.

Cushman will be marketing the Eagle 550 and Eagle 551 to golf course superintendents, parks and recreation managers, and other landscape management personnel.

"We have engineered the Cushman Eagle line from the ground up," says Dan Hedglin, OMC Lincoln sales manager. "These new units fill a need for true multi-purpose vehicles which specific markets told us they were looking for."

Hedglin says Cushman performed an extensive dealer survey beginning in December 1983, asking what buyers wanted in a utility vehicle. The results, he says, were considered in designing the Eagle.

The Cushman Eagle 550 and Eagle 551 are targeted exclusively for turf applications. Features of the 550 include: polyurethane body panels; an 8.5-hp, four-cycle Kawasaki engine; 1,200 lbs. payload; and rack and pinion steering.

"The Cushman Eagle incorporates a lot of innovative features that are not available on any other product on the market today," says Hedglin.

SOD

Warren's Turf relocates sod farm

Warren's Turf Professionals recently moved its Southern California area sod production farm from Perris to Winchester, Calif.

The new farm, located about halfway between Los Angeles and San Diego in rural California, features more than 300 acres of bluegrass, fescue,

bermudagrass, St. Augustinegrass, and other turf types.

Warren's held an open house in May to mark the official opening. Guests viewed field demonstrations such as sod harvesting, irrigation, sod netting, and seed bed preparation.



GOLF

MacGregor develops 'Cayman' golf ball

MacGregor Golf Co. has developed a special ball for short-course golf, dubbed the "Cayman" ball because it was designed to be used on Jack Nicklaus's famous short course on Grand Cayman Island (see WT&T, May, 1985).

"The most obvious difference is appearance," says Larry Cadorniga, who designed the ball. "Instead of having dimples, like the regular ball, the Cayman has pimples. This improves stability in windy conditions, which would otherwise cause problems for the light ball."

The ball is made of foamed Surlyn ionomer resin, made only by Du Pont. It limits drives to about 130 yards or so.

"When struck, one side of the ball flattens for an instant," says Cadorniga. "It then regains its form as the ball takes off because of the resiliency of Surlyn."

LANDSCAPING

How much value does nice yard add to home?

Homes in the \$122,000 range with trees growing on the lot sold for about \$5,700 more than those with lots that had been cleared, says a Texas A&M University study.

The research involved 85 homes around Atlanta, Ga.

According to another study, this one by the American Association of Nurserymen, a nice-looking yard increases property value up to 30%, with an average of about 12%.

One of the studies in the AAN's files was conducted by a U.S. Forest Service employee, who showed photos of identical homes with and without attractive yards to real estate authorities. They claimed selling prices would be 12% higher for the well-landscaped homes.

SHORT CUTS

LET'S GET IT STRAIGHT...Our May "Short Cuts" column contained a few words about the popular Rockhound grooming tool. While the piece was accurate, it may have been misleading. Gary Erholm, president of K.E.M. Enterprises in Tacoma, Wash., assures us that his company still prospers. As we wrote in May, the Melroe Co. (Bobcat owners) purchased both patent and manufacturing rights to the Rockhound. Melroe is the exclusive manufacturer. However, the Rockhound is still available through K.E.M. dealers. It's also available as the Landscape Rake through Bobcat dealers.

QUOTE OF THE MONTH..."Professionalism requires that we look no farther than inside our own hearts and souls." (Lauren Lanphear, Forest City Tree Protection Co., South Euclid, Ohio)

AND THE WINNER IS...Michael Duchemin of Haverhill, Mass. won a tool chest and cabinet from John Deere when his name was drawn at the Deere booth on the last day of the 1986 Landscape Exposition in Valley Forge, Pa. The prize retails at \$379.95. Dan Brier and Daniel Gundacker of Deere's Consumer Products Division, Syracuse, N.Y., are still trying to figure out how to send it to him.

WEIRD WEATHER...Unusually warm spring weather this year has changed buying patterns in the green industry. "Spring didn't come, it was just here," says Rudd McGary of All-Green Management Associates, Columbus, Ohio. "We've talked to 20 or 30 landscape and lawn care companies, and their stream of money is coming in differently this year because of the warm February and March weather. There was some delayed buying. As a matter of fact, everything dealing with agriculture is off-pattern—not necessarily bad—just off-pattern."

GOOD READIN'...A handbook on troubleshooting and maintaining landscape irrigation systems is available from The Idea Bank. The book has step-by-step guidelines and how-to illustrations for employees. It includes information on how to repair faulty wiring and how to recognize poor control valves. To receive the manual, send \$16 to Richard Lambert, The Idea Bank, 1000 East Apache Blvd., Suite #211, Tempe, AZ, 85281, or call (800) 621-1136 or (602) 829-1233 in Arizona.

SUPER SUPERINTENDENT...Armen Suny, superintendent at Castle Pines, Col., has been named "Superintendent of the Year" by Seed Research of Oregon, Inc. Suny won the title for his work at Cherry Hills, site of the 1985 PGA Championship. He used improved turf-type perennial ryegrasses for completion of tees, fairways, and roughs where bluegrasses are traditionally used. On his fairways he planted a mixture of creeping bentgrasses to show that genetic diversity is just as important in bentgrasses as in other species.

PARKS

New Yorkers want park system upgraded

For the first time ever, police patrol has not been ranked the number one concern of New York City's 59 community boards.

Park maintenance has, according to a report in the *New York Times*.

"It indicates a feeling among people that money spent on parks brings visible results in neighborhood improvement," park commissioner Henry Stern told the *Times*.

The budget for New York's Department of Parks and Recreation has grown from \$124 million in 1984 to \$165 million in 1986; employees have increased from 3,900 to 4,919. In the last two years, 290 city parks have been improved, and major repairs are scheduled for 200 more this year.

TURF

Spartan gets its certificate number

Spartan hard fescue has received a plant variety protection certificate number, according to Dr. Jerry Pepin, director of research for Pickseed West Inc.

Spartan is a leafy, persistent, turf-type hard fescue. It has cold tolerance and produces attractive, dense, low growing, fine textured turf.

"It's best used as low-management type turf," Pepin tells WEEDS TREES AND TURF. "If you live in the northern states and don't want to water or fertilize, but still want to have a nice lawn, you'd use Spartan."

Besides working well in northern states, Pepin says Spartan will work better in the transition zone than chewing and creeping fine fescues.

Pepin stresses the biggest advantage of Spartan is its heat and drought tolerance.

SPORTS TURF

Changes in sport mean management changes

Changes in sport itself have precipitated changes in sports turf management, according to David Frey, field supervisor for Cleveland (Ohio) Stadium.

"In the 1950s, football games were nothing but mudbaths," Frey told a group of reporters who were guests of Ford Tractor at the stadium this spring. "Then Astro Turf came along, and there was more concern about the appearance of sports fields."

Another consideration that has