

New TURFLON'D FIRST LINE OF DEFENSE.

New TURFLON* D herbicide. Here's a postemergence herbicide for broadleaf weeds. It's been thoroughly tested by the major universities in the Bluegrass Belt and proven under Experimental Use Permit

(E.U.P.) on hundreds of lawns.

It works. It will reduce callbacks. It will make you money!

Here's why: TURFLON D will get the early season weeds including the tough ones like veronica spp. along with dandelions and other easier-to-kill weeds. A later application gives outstanding control of wild violets, ground ivy, spurge, oxalis and others.

TURFLON D wide-spectrum control works to your advantage when it comes to customer satisfaction. You'll make more money because you'll reduce callbacks, customer cancellations and probably save

Stops the
broadleaf invasion...
...even tough weeds
like veronica,
ground ivy, oxalis,
wild violet, spurge.
New
cost-efficient
weed fighter!

a round or two of herbicide application.

TURFLON D herbicide is a combination of triclopyr and 2,4-D that will control both the tough and standard weed species without injuring established cool-season

turf such as tall fescue, bluegrass and perennial ryegrass. It is a low-volatile ester formulation designed especially for professional applications.

And it offers reduced potential for offtarget injury because of low volatility and little movement in the soil.

Now there's cost-efficient broadleaf control you can count on. TURFLON D herbicide...your first line of defense...for better weed control! For more information, contact your chemical distributor or write: The Dow Chemical Company, 9001 Bldg, Midland, Michigan 48640.



*Trademark of The Dow Chemical Company

Circle No. 106 on Reader Inquiry Card

WEDSTRESSURF

The Magazine of Landscape and Golf Course Management Since 1962

18 A Breed Apart
There's no such person
as a "typical" athletic field
manager. That is one finding of
WT&T's survey of athletic field
managers across the country.
There's a lot more to athletic
field maintenance than keeping
the grass green.



22 Good Luck Charm for the Pros

Tiger Stadium and Wrigley Field have had their share of pennantwinning teams. Meet the men responsible for the turf at two of the country's baseball shrines.

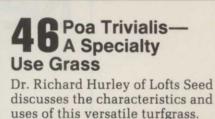


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Notre Dame and Penn State athletic field managers know what it takes to keep two of the premier college fields in top condition. They also know what it takes to keep traditions alive.

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Most prep field managers agree natural turf is best—for both safety and playability.







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WT&T's annual guide to the articles that filled our pages this past year and the authors who wrote them. A useful year-round reference.

COVER PHOTO by Jerry Hogevell, Art Department, Salem, Oregon.

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BEFORE WE DEVELOPED THESE

Nobody knows the troubles we've seen. Our Northrup King turf specialists and researchers have hoofed through salt problems, soil compaction, disease, starved turf, baked turf, cleated-to-shreds turf, and dormant winter turf—all depressing sights. But it was a road well worth our travels.

The result is a complete line of Medalist®

turfgrass formulas that meet the demands of the professional turf manager.

If you've been staring down at a turf problem, look up your solution here.

And if you think it's a turf problem we haven't seen, just let us know.

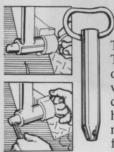
Our business is putting your problems behind us.

MEDALIST TURF PRODUCT	MAJOR AREAS OF USE	SPECIAL FEATURES
Athletic Pro and Athletic Pro II	For athletic turf.	Well suited for new seeding or overseeding. Fast establishing, traffic tolerant, rapid recovery. Both provide good footing.
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Landscape Pro Mix	School grounds, cemeteries, golf course roughs, home lawns.	Establishes fast. Adapts to broad range of conditions and management levels. Low to moderate fertility needs.
Overseeder II Mix	Fairways, tees, athletic fields.	Rapid germination and establishment. Withstands heavy traffic and resists diseases. Penetrates compacted soils.
Medalist North Mix	Fairways, tees, cart paths, wear areas.	Quality turf for high traffic areas. Clean mowing and disease resistant.
Premium Sod Blend	Commercial sod production.	Exceptional dark green color. Tolerates light shade. Superior disease resistance. Rapid sod producer.
Renovator Pro Mix	Problem solver for heavy traffic areas (athletic fields, golf tees, and fairways).	Penetrates compacted soils and combats <i>Poa annua</i> . Adaptable to most geographic regions.
Medalist Brand Overseeding Products	Winter overseeding of dormant bermudagrass.	Establishes rapidly and evenly. Tolerates traffic while providing a superior putting surface. Smooth spring transition.

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WHAT MAKES THE CUSHMAN TURF-CARE SYSTEM WORTH THE INVESTMENT:

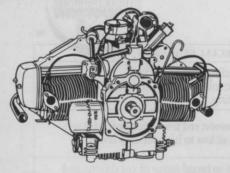
Aerating, hauling, dumping, spraying, seeding, spreading and top dressing — one vehicle does the work of a fleet of machines.



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do the work of a
half dozen
machines—at a
fraction of the cost.

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The Cushman Turf-Truckster™ is now equipped with a new 22-hp gas engine.

It gives you the power to haul a full load uphill, without straining. It maintains a sure, steady speed while you're spraying or spreading.

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Because you have two types of turf to aerate, Cushman makes two aerator attachments for your Turf-Truckster.

The Greensaver® is ideal for greens and other delicate areas . . . while the Quick Aerator makes short work of big jobs (it covers a 46" swath).

Both can be equipped with interchangeable coring or deepslicing tines.

Control of the Contro

THE SPREADERS.

Two choices here, too. The 700-lb. capacity Vicon Spreader with a 45' swath. Or the Spreader/Seeder with a 300-lb. capacity. Both give you smooth, uniform spreading because application rates are controlled by the Turf-Truckster's ground speed governor.



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Again, you have a choice! Our Short Box is a high quality dump box . . . and our Flatbed/Box converts from flatbed carrier to dump box just by adding the bolton sides and tailgate. Both can be hydraulically dumped right from the driver's seat.

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Choose the capacity you need . . . our big 150-gallon sprayer or 100-gallon model. Both give you uniform spraying controlled by the Turf-Truckster's ground speed governor.

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NEWS/TRENDS

by Bruce F. Shank, executive editor

Trimec becomes a commodity

Broadleaf weed control in turf may never be quite the same now that Trimec's patent has expired. What was a leading proprietary postemergence turf herbicide is now a commodity.

This will tend to push the price of 'Trimec-type' compounds down as new formulators jump into the market. It will also narrow the price difference between 2,4-D and more effective 'Trimec-type' compounds. Those sacrificing quality for price in the past may now start using the 'new Trimecs'.

Trimec is really a loose term referring to a premixed formulation of 2,4-D, propionic acid, and dicamba (Banvel). PBI Gordon, Mallinckrodt, and others with formerly patented 'Trimec-type' compounds, stressed better compatibility due to their formulating processes.

Lesco, United Agri Products, and others already have new three- and four-way products on the market for the coming weed season.

Turf growth regulators resurface

For years we've heard speeches at turf conferences on growth regulators for turf, but nothing developed. That could change in the near future.

Growth regulators for fine turf basically bombed for various reasons until recent studies showed the extra benefit of Poa annua seedhead suppression with 3M's Embark and Elanco's Cutless and Rubigan (a fungicide).

This newfound acceptance for fine turf has refueled the demand for utility turf growth regulators. Highway and parks department bean counters have pegged equipment mowing costs as three times greater than chemical mowing. What is more, highway people are sharing their experience now since the creation of the National Roadside Vegetation Management Association(NRVMA). Information that once spread slowly is now spreading like a brush fire.

Monsanto has announced it should have a label for its new Limit by next spring. ICI has a growth regulator in its bag of potential tricks. And 3M and Elanco products are already on the market. This time we are likely to see growth regulators stick and be accepted as a daily tool for both turf and ornamental care.

Sports turf volcano rumbles

The success of regional sports turf conferences has put a head of steam behind a national sports field movement. College and major high school athletic directors are starting to copy professional fields. They are asking a lot of questions about athletic turf management. Fortunately, years of hocus-pocus and secrecy are fading away under the pressure of intense stadium use. Expect BIG changes in the next two years.

WT&T

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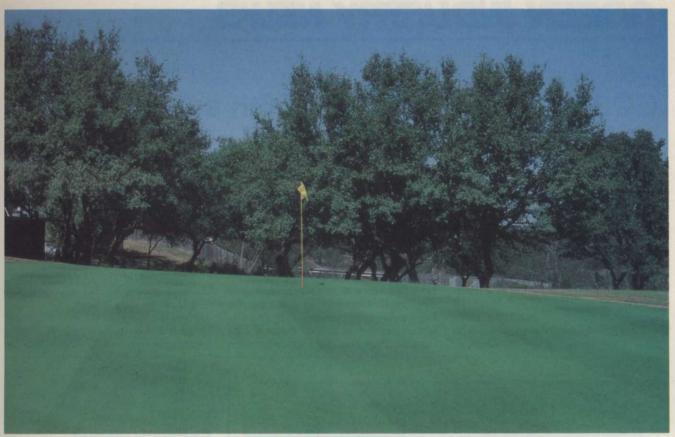
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One of the first domestic varieties granted a Plant Variety Protection Act Certificate, Sabre is a dark green, fine-bladed turf grass that creates an absolutely superb green when overseeded on dormant turf such as Bermuda.

A rapid germinating variety, Sabre is a perfect overseeding companion for the turf-type ryegrasses and fine fescues. In an overseeding mixture Sabre has the additional advantage of reducing the seeding rate by as much as 50%.

Normal overseeding rate for either the turf-type ryegrasses or fine fescues is 35-40 lbs. per 1,000 square feet.

However, the seeding rate of either a ryegrass or fine fescue overseeding mixture which includes per 1,000 square feet.

An extremely shade tolerant grass, Sabre is an ideal component in an overseeding mixture because it will disappear very rapidly when the hot weather arrives, thus clearing the way for the emerging Bermuda grass to come on.

You can also count on Sabre to be free of Poa annua.



SABRE-add it to your overseeding mixture 20% Sabre (by weight) can be reduced to 18 lbs. and you'll be amazed at the beauty you have created. (Sabre · P.V.P. No. 7700104)



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GREEN INDUSTRY NEWS

ASSOCIATION

GCSAA to honor Ford at 56th annual show

Former President of the United States Gerald R. Ford is to receive one of golf's most prestigious awards at a dinner February 12 in Washington D.C.

The Golf Course Superintendents Association of America (GCSAA) is to present President Ford with the Old Tom Morris Award during the International Golf Course Conference and Show slated for February 5-13 at the Sheraton Washington Hotel.

"The award is presented to an individual who has helped to further the welfare of the game with the same dedication and zeal demonstrated by Old Tom Morris," James W. Timmer-

man, president of GCSAA, says.

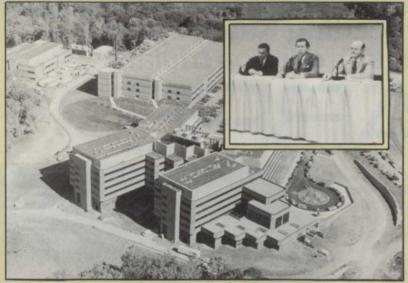
Golfing great Arnold Palmer and entertainer Bob Hope are previous recipients of the award, named in memory of Old Tom Morris, a four-time winner of the British Open Championships between 1861 and 1867, and generally credited with boosting the popularity of the game worldwide as player, greenkeeper, club and ball maker, and golf course architect.

President Ford brought international attention to golf while serving as President. Since leaving office he has been a frequent participant in charitable golfing events, as well as sponsoring his own charitable golf tournament, the Jerry Ford Invitational Golf Tournament.

The 56th annual conference will feature more than 20 seminar courses and over 100 professional presentations by researchers, businessmen and golf course superintendents from all over the world. The number of companies expected to feature their products and services at the equipment and trade show should exceed 250.

The name of the conference was changed from International Turfgrass Conference and Show to "better explain the focus" of the annual event, GCSAA Executive Director John M. Schilling notes.

Monsanto makes commitment to future



Nicholas Reding, executive V.P., Richard Mahoney, President, and CEO, Dr. Howard Schneiderman, Sr. V.P. of Research and Development.

Monsanto made a major statement about the future of the chemical industry in October when it dedicated a \$150 million research and development center in St. Louis County, MO.

Monsanto President Richard Mahoney told a collection of distinguished guests at the ribbon-cutting ceremony more than 1,200 scientists will use this research center to focus on the future needs of agriculture, human and animal health and electronic controls.

Central to the research are advances in biotechnology and total control plant growth chambers which can simulate conditions of any geographic location. The company's sleuths have already found dramatic keys to nitrogen-fixing bacteria for plant roots and hormones produced by the human heart.

What took 15 years to figure out in the field can be done in months in the special growth chambers and laboratories.

Mahoney said the company will have its new growth regulator on the market within the coming year.

INDUSTRY

Fertilizer market strong through summer

U.S. fertilizer markets, both domestic and export, remained strong this summer, the Fertilizer Institute reports.

Domestic disappearance (sales plus conversions to other products) increased by 19 percent over the same period of 1983 while exports of finished products jumped by 62 percent, with major increases in each of the nitrogen, phosphate, and potash product groups.

The Institute says production for finished products increased 36 percent this summer with U.S. potash production more than twice last year's level.

"We've certainly had one of the better earlier fall seasons than we've had in several years," William C. White of the Institute told WT&T.

Imports increased 27 percent over 1983. Muriate of potash constituted 60 percent of the total, and anhydrous ammonia 22 percent, the report, reflecting information provided by producers, notes.

ATHLETIC FIELDS

Royals favor grass but won't get it

Members of the Kansas City Royals professional baseball team prefer natural turf, but they're not going to get it. A poll late in the 1984 season by

Annual Percentage Rate



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4-wheel drive, as well as a wide selection of implements.

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Nothing like it on earth.

Kansas City Times writer Tracey Ringolsby, revealed 23 Royals favor grass, two prefer the artificial surface, and one player doesn't care. Royals Stadium has had an artificial playing surface since its opening in 1973.

Despite the survey results, the Royals management is planning to install a new artificial surface in Royals Stadium prior to next baseball season. The proposed surface, with a four-year guarantee to be softer than grass, will feature slits for better drainage.

Natural turf is somewhat of a luxury for members of the Royals who jogged on a strip of carefully maintained grass behind the centerfield fence for their pre-game warm-ups rather than run on the harder artificial surface this past season.

INDUSTRY

Toro earnings rise to five year high

The Minneapolis-based Toro Company reports its strongest year-end earnings in five years.

Net earnings for the year ended July 27, increased from \$572,000 the year before to \$8.3 million, while per share earnings improved from a negative 19 cents to 98 cents.

"We experienced solid growth in most of our major product lines," Kendrick B. Melrose, president and chief executive officer, says. Demand for Toro's irrigation products led the advance, while professional turf equipment recorded "strong growth."

Melrose cites new product introductions, improved economic conditions, aggressive marketing actions, and favorable weather as reasons for the upturn. Other factors include better management of assets and strong expense controls which resulted in a significant reduction in the company's total debt.

The company's biggest challenges in 1985 will be in its walk power mower segment and in the strength of the U.S. dollar against foreign currencies.

Melrose says he expects 1985 sales and earnings to show improvements over the previous year.

RESEARCH

Ohio prof says trees heal better in spring

Trees damaged in the spring have a better chance of healing, Dr. Curt Leben says.

The reason? Dr. Leben theorizes

high internal water content of trunks in the spring promotes healing and reduces the formation of discolored wood associated with wounds.

Dr. Leben, professor of plant pathology at the Ohio State University Agricultural Research and Development Center, purposely wounded 93 red maple trees with a chain saw. After two seasons he analyzed the wounds, discolored wood above and below the woods, and the amount of callus tissue the trees manufactured.

He discovered that fall wounds heal poorly and the discolored wood volume was greater than on trees wounded in the spring. The amount of discolored wood is important because it may eventually become decayed. Water content in the fall is lower, Dr. Leben reports, and this apparently results in poor healing.

ASSOCIATION

APPA buys building, moves to Alexandria

At last count 120 national associations were headquartered in Alexandria, VA. Add one more, the Association of Physical Plant Administrators of Universities and Colleges (APPA).

The APPA, with 1,200 members, recently purchased a new building at 1446 Duke Street and relocated its international headquarters there.

Knapp says his association made the move to lower operational costs, and because of access and quality of life. The new address for APPA is 1446 Duke St., Alexandria, VA, 22314, (703) 684-1446.

TURFGRASS

Cornell turfgrass research gets aid

Turfgrass research at Cornell University received a sizable chunk of cash from the New York State Turfgrass Association (NYSTA) this past year.

Contributions from 28 businesses and associations to NYSTA for research being conducted by A. Martin Petrovic, Richard Smiley, and Normal Hummel exceeded \$28,000, 40 percent more than the previous year. The money is being used in a broad-range study of turfgrass including fine cultivar evaluations, compaction studies, effect of herbicides, nontarget effects of fungicides on the environment, and the funding of a graduate student who is helping in the research.

CHEMICALS

NY pro-pesticide council is formed

Leaders from industries concerned with the safe use of pesticides came together in a broad-based council in New York State recently.

The fledgling New York State Pesticide Users Council (NYSPUC) is fully operational, according to its president, Jeffrey T. Duflo, marketing manager of Duflo Spray-Chemical Inc., New Bremen, NY. The organization hopes to put a representative in the state capitol soon.

"We believe in regulations that make things better, safer and cleaner, but that are sane, rational and workable," Duflo notes. "We intend to fight for the rights of the professionals who daily use federal and state approved pesticides correctly and safely."

James Taylor, owner of Taylor Tree Surgery, Inc., Walden, NY, is vice president of the group, Robert J. Mungari of the state department of agriculture and markets its secretarytreasurer.

"We intend to promote a favorable climate between NYSPUC, its member organizations and appropriate governmental bodies, agencies and officials," Duflo says. "The intent is to provide input on the potential impact of legislation and regulations from the experience of the professionals in the business."

The membership of NYSPUC is to be made up of trade associations, formulators, distributors and jobbers, dealers, re-sellers, commercial and certified applicators.

NYSPUC hopes to represent associations with a combined membership approaching 40,000. "With this kind of a group we can accomplish more than all of the smaller, individual associations can separately," Duflo adds.



Officers and members of the Board of Directors of the NYPSUC include left, front row, President Jeff Duflo, Vice President Jim Taylor and Secretary-Treasurer Bob Mungari.