

NEW



NET WEIGHT
25 LBS.
11.35 kg

PENNEAGLE
CREEPING
BENTGRASS

TEE 2 GREEN CORP. TEE 2 GREEN CORP.

PENN

ALL-PURPOSE BENTGRASS

FROM

**18 Years of
Research...5 Years
of Testing...**

DEVELOPED BY

DR. JOSEPH M.

DUICH

**PENN STATE
UNIVERSITY**



Penneagle is a new seeded creeping bentgrass developed from a program beginning with 156 vegetatively propagated bents, then paired to 21. These were turf-tested in combinations of three for crossing for turf performance. In addition, component testing was carried out in seven states.

The end result was a four-parent variety, giving Penneagle a broad genetic base to perform under various climatic conditions. More than a ton of Penneagle seed has been distributed for testing in the United States and Canada prior to its formal release by Pennsylvania State University.

WORLDWIDE DISTRIBUTOR

TEE2GREENCORP.



1212 WEST EIGHTH STREET
KANSAS CITY, MISSOURI 64101
916/842-7825

Circle 101 on free information card

TEE-2-GREEN

**At Last! One
Grass That is
Designed to
Cover Your
Entire Course...
Tees, Fairways,
and Greens!**



Hole #6 on the 4th nine at Congressional Country Club, Bethesda, Maryland had tees and greens seeded to Penneagle in September of 1977. Penneagle green was opened for play in June of 1978.

When a new grass is developed with the extensive research and testing that has gone into Penneagle Creeping Bentgrass it has these selected attributes of a great golf course grass. We say it's great for the entire course from tee to green. Penneagle is one grass that makes course management easier through mowing schedules, watering schedules and fertilizing schedules.

PENNEAGLE:

1. Has a broad genetic base for greater climatic adaptability.
2. Is not overly aggressive, but competitive with *Poa annua*.
3. Has tight, more upright growth characteristics.
4. Is finer leaved than most creeping bents.
5. Has excellent putting and playing qualities.
6. Was bred for disease resistance.

Available This Fall
In Limited Quantities

**CREEPING
BENTGRASS**



PENNEAGLE

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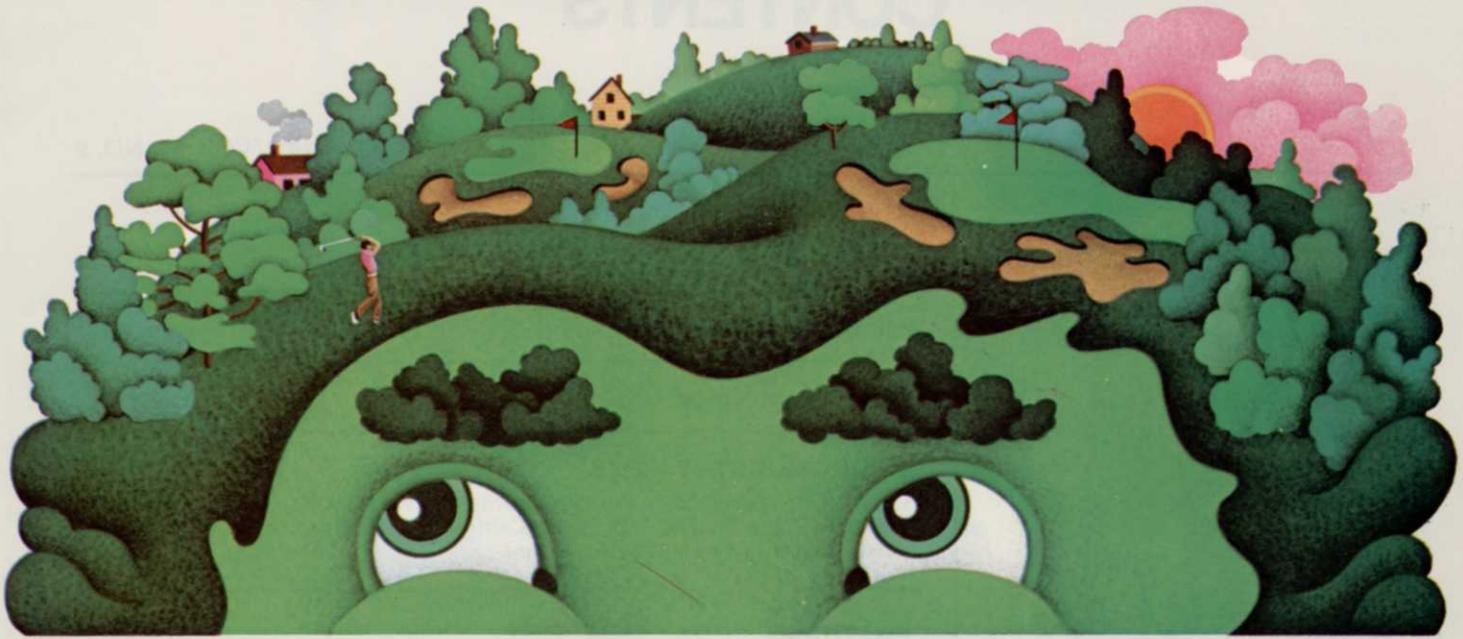
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Roundup®. There's no better grooming aid for unruly turf.

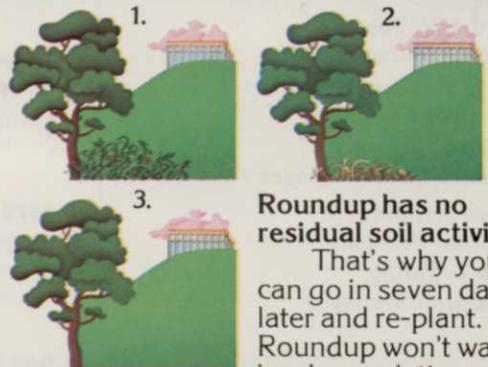


Roundup® belongs in your turf renovation program.

Renovation of a weedy fairway, sod farm or other grassy area used to be a laborious and time-consuming chore, but not any more.

Not with Roundup® herbicide by Monsanto. Because one application of Roundup will control many annual and perennial weeds, yet allow you to proceed with tillage and planting operations as soon as seven days later.

Roundup also makes sense wherever treatments for grounds maintenance are called for. One man with Roundup in a backpack sprayer can replace many of the herbicides and frequent repeat treatments that are often necessary.



Roundup has no residual soil activity.

That's why you can go in seven days later and re-plant. Roundup won't wash, leach or volatilize from the treated area to injure desirable vegetation. Naturally, normal precautions should be observed to avoid spray drift.

Roundup gets to the root of the problem.

Including many of your toughest vegetation problems, like: bluegrass, bermudagrass, quackgrass, bindweed, johnsongrass, fescue and vaseygrass.

Can you afford to let another season go by without Roundup in your turf renovation and grounds maintenance programs? Your local chemical dealer is the one to see for your supply of Roundup herbicide.



"Translocation" is the key.

Roundup is applied to the weed foliage, absorbed through the leaf surface, and "translocated" throughout the entire plant. In this way, Roundup destroys the entire weed, including the roots or rhizomes.



There's never been a herbicide like this before.

Monsanto

ALWAYS READ AND CAREFULLY FOLLOW THE LABEL DIRECTIONS FOR ROUNDUP HERBICIDE. Roundup® is a registered trademark of Monsanto Company, St. Louis, Mo. © Monsanto Company, 1978.

R178-04

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VIEWPOINT

Bruce F. Shank, Editor

Most directories are for the advertiser. In this issue we have tried to provide a directory for the reader.

For the first time Weeds Trees & Turf contains a list of both equipment and chemical distributors in the U.S. and Canada. After all, the majority of you buy from dealers and distributors, not manufacturers. After each dealer is a list of brands he carries. So, at least in theory, you can locate the dealer listings for your state, look through for dealers near you and the brands they carry. You may discover that there are more dealers in your area than you previously thought. A little competition between dealers might save you some money.

Too often the role of the distributor in the Green Industry is underplayed. The distributor is the advisor on product use, the person who repairs your equipment, helps you obtain financing for some large purchases, and recommends changes to the manufacturer. A product won't succeed on the market if distributors don't like it.

Our list is a first stab at organizing a list of dis-

tributors of all Green Industry products and making it available as one collection to the industry. The list could double in size for next year's Buyer's Guide.

We encourage distributors to contact Weeds Trees & Turf so that we can list them next year. The companies listed in this issue were provided by cooperating manufacturers who realize the distributor is their strength in the field. Distributors who aren't listed may recommend to their manufacturers that a list be provided next year.

Our December issue will profile the distributor. We will strive to show dealer costs, mark-ups, repair problems, customer services, and the situation of being in the middle, between manufacturer and user. If the distributor you buy from is an example of how it should be done, please write to me with his name and background. We must pick three or four out of the thousands in the U.S. and Canada for featuring. We'd like you to pick the best ones for us.

The SPYDER®

THE SPYDER — A material handler that offers unequalled performance, low maintenance and operating costs. Over 300 are currently being used by SOD producers across the U.S.A., Canada and England.

COMPARE this user proven material handler with other methods of job site unloading and the bottom line will show you that **THERE IS NO BETTER WAY!!**

Ask your friends. If they say they don't like the Spyder, they've probably never tried one.

IT ARRIVES WITH THE LOAD, UNLOADS ITSELF . . . THEN UNLOADS THE LOAD!



For more information on the Spyder, call or write:

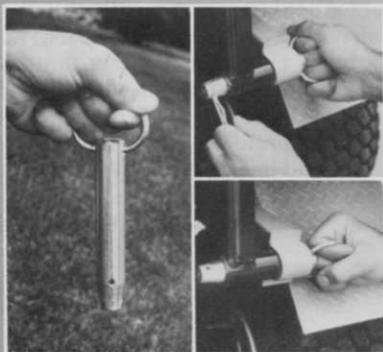
MIKE WHITT — SALES MANAGER
 Foxcroft Development
 5402 Edgewood Road
 Crystal Lake, Illinois 60014
 (815) 459-3351

Cushman Turf. Everything

Cushman Turf has developed an easy system to help you save as much as 35% in equipment investment. A system that saves you time with built-in job flexibility. A system that does everything but mow.

The Cushman Turf-Care System includes equipment for aerating, dumping, hauling, top dressing, spiking, fertilizing, spraying, seeding and spreading. The attachments utilize the unique pin-disconnect system.

In addition, all our turf care equipment is designed to be totally compatible with our 3- and 4-wheel pin-disconnect Turf-Trucksters.



PULL PINS. The pull pin advantage of the 18-hp Cushman Turf-Truckster means fast on/off movement of all attachments; it's the secret of the Cushman Turf-Care System's versatility.

1 QUICK AERATOR. The Cushman Quick Aerator is designed to slice greens quickly during the hot, dry periods.

Just attach the Quick Aerator to the Turf-Truckster with three pull pins. The hydraulic system and dump kit on the Turf-Truckster allow you to lift and lower the Quick Aerator on the go from your seat. So movement from green to green is simple and fast.

Three types of tines are available: slicing, coring (two sizes) and open spoon.

2 SHORT DUMP BOX & FLATBED/BOX. The short box or the flatbed/box is capable of hauling up to 1,000 lb. payloads.* A manual hydraulic dumping system is available, and either box is mounted quickly using only two pull pins. 18-hp pin-disconnect Turf-Trucksters can be equipped with powered hydraulic dumping. By adding the PTO and hydraulic packages you can dump hydraulically without leaving your seat with either 18-hp Turf-Truckster. Just push a lever.

*Rating for vehicle equipped with 9.50-8 rear tires.

3 QUICK SPIKER. Attach the Cushman Quick Spiker to a Turf-Truckster equipped with PTO, hydraulic system and dump kit with just three pull pins. Spike a 57-inch swath, even over undulating greens, with the two precise spiking gangs. Nothing to tow. Nothing to load or unload. Spike 18 greens in less than 2½ hours.

4 TRAILING SPIKER. Attach the Cushman Trailing-Type Wheeled Spiker and you'll get the same results as with the Quick Spiker, except the Trailing-Type Spiker is controlled by a pull rope to raise and lower while operating.



but mowing.

5 SPRAYER. The PTO package with extension shaft makes the 18-hp Turf-Truckster ready to spray greens the easy accurate way.

The Turf-Truckster transmission and built-in variable speed governor assure a uniform ground speed, even over varying terrain. And an accurate metered spray means proper application and less chemical waste.

The complete optional spray package includes: 100-gallon capacity tank, high-flow nylon strainer, jet agitator for mixing, high-pressure handgun (which sprays up to 40 feet), rear sprayer boom, centrifugal pumping system for boom or handgun spraying.

5

6 TOP DRESSER. The chassis-mounted top dresser, driven by the PTO of the Turf-Truckster, eliminates the need for self-powered units and time-consuming walking.

The moving bed and rotating brush operate at a controlled speed to disperse top-dressing materials and direct them downward in a 31½-inch swath. The engine/ground speed governor keeps your spreading rate constant.

7 SPREADER/SEEDER. The Cushman Cyclone Spreader/Seeder can be rear mounted on either the 3- or 4-wheel 18-hp Cushman Turf-Truckster, and it's controlled by the Cushman PTO extension shaft. Depending on the material, this spreader can broadcast over an area up to 40 feet wide.

In addition, the Cyclone Spreader/Seeder mounts on either the short box or flatbed/box and the driver controls all operation from his seat.

8 GREENSAVER (DRUM AERATOR). The Cushman Greensaver™ is the efficient low-cost way to aerate greens and tees. Attach the Greensaver to your Turf-Truckster (equipped with a hydraulic system and dump kit) with 3 quick-release pull pins.

Add weight trays and sand to the Greensaver attachment and you're ready to aerate up to 10 times faster than walk-type units. And the Greensaver collects the cores while you aerate, if desired.

Get a free demonstration of the complete Cushman Turf-Care System from your Cushman dealer. Or, write direct for complete information.

7

6

8

**CUSHMAN
TURF-CARE
EQUIPMENT**

QMC-Lincoln
a Division of
Outboard Marine Corporation

P. O. Box 82409 3313 Cushman Drive Lincoln, NE 68501

GREEN INDUSTRY NEWS

RECLAMATION

ALCA eyes prospects

About 100 ALCA members attending the group's revegetation and erosion control symposium August 1-3 in Denver were told to look to small coal companies, the Texas Department of Transportation and other government agencies for future revegetation work.

Jim Brown from North American Coal Corp. Bismarck, N.C. office told the contractors that their biggest source of potential business is coal companies without reclamation staffs. "They may set up consortiums to get the work done more cheaply. But they must have it to survive," Brown said.

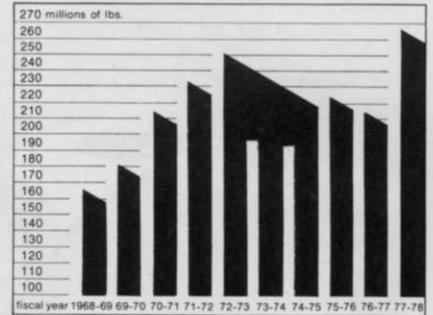
Texas will continue its road programs in the next few years, and Paul Northcut from the Department of Transportation promised work for

contractors during that time. "Most of the highway districts are understaffed, so the percentage of landscape contracting will increase substantially in the next few years. I suspect it will increase 100 percent at least in the next five years," Northcut said.

Jim Lincoln, of Southwest Hydro-Mulchers Distributing Co. in Dallas, Texas, also reminded members to look for work at various government agencies.

He suggested the U.S. Forest Service, the Army Corps of Engineers, U.S. Soil Conservation Service, local flood control districts and river and port authorities.

The show was capped by an exhibit in the Marriott Hotel and a field trip to revegetated areas in the Rocky Mountains.



Ryegrass seed hit record levels for the 1977-78 fiscal year according to the Oregon Ryegrass Commission. The record crop for both annual and perennial ryegrass was due in part to increased demand for ryegrass seed brought about by introduction of new ryegrass cultivars. The record of 268 million lbs. upsets the previous 1972-73 record of 251 million lbs.

PESTICIDES

Experimental sprayer avoids handling risks

A system to eliminate dangerous pesticide handling is being developed by agricultural engineer Donald L. Reichard and technicians D. L. Collins and P. T. Keck, stationed at the Ohio Agricultural Research and Development Center (OARDC).

"On our sprayer, all liquid flows are controlled from the control panel by the operator," Reichard says. "Metering pumps draw the chemicals from their containers, at rates proportional to travel speed, and mix them with water in a small mixing chamber on the way to the sprayer nozzles."

As well as eliminating the pouring operations, the system also does away with disposal of left-over tank mixtures. And the operator can flush the containers from the control panel, Reichard adds.

The sprayer development is only

part of the scientists' overall federal research effort to improve the efficiency and safety of chemical pesticide application equipment.

NURSERY

IRS offers chance to switch accounting

A recently issued policy by the Internal Revenue Service provides nurserymen with one chance to switch from accrual to cash accounting to solve a problem with inventory taxes.

Previously, the nurserymen had been grouped with farmers in a ruling which requires farmers doing less than \$1 million per year to use accrual accounting for crop inventory.

The opportunity to switch to cash accounting is a one-time offer which must be filed for the first taxable year beginning on or after Jan. 1, 1978.

RECLAMATION

Prairie hay mulches also provide seed

Prairie hay is showing promise as a mulch for revegetation of strip mined lands, according to range scientist Ronald E. Ries. The hay could be a feasible alternative now that Public Law 9587, passed in 1977, requires mulching as part of the reclamation effort.

Dr. Ries, stationed at USDA's Northern Great Plains Research Center in Mandan, ND, harvested prairie hay at five monthly intervals, beginning June 1, and applied the hay as a mulch to seed flats in the greenhouse at a rate equal to 3000 pounds per acre. The flats contained topsoil similar to that normally returned to strip mined areas.

Hay harvested October 1 contained the most viable seed, Ries said, and the most common seedling was the native perennial broadleaf herb, cutleaf goldenweed.

Ries is expanding the project to

Turf
The shot heard 'round the world:

Yorktown II

Turf-Type Perennial Ryegrass

SO GOOD IT'S REVOLUTIONARY!

Revolutionary because: Yorktown II rated the best in summer performance (heat tolerance) in tests conducted at Rutgers University under the direction of Dr. R. Funk. . .yet rated number one in fall and winter performance as well. The "all-year long" ryegrass.

Revolutionary because: Yorktown II rated number one in turf quality in tests conducted at the Beltsville Agricultural Research Center under the direction of Jack Murray.

Revolutionary because: Yorktown II ". . .was the only variety to produce acceptable turfgrass quality without the use of fungicides" based on a 1-year trial at Beltsville, Md. More disease resistant.

Revolutionary because: Yorktown II proved number one in overall

turf quality. . .including appearance, density, mowing quality and disease resistance in two separate testings conducted at Rutgers University against 33 and 39 other ryegrass varieties.

Add to these new test results the qualities you've come to expect from using Yorktown. . .good color, fast germination, great seedling vigor, neat mowability and a great compatibility with varieties like Jamestown fescue for use in southern overseeding programs. No wonder YORKTOWN II is so good. . .

It's Revolutionary

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From the producers of Baron Kentucky Bluegrass.

Available through all Lofts divisions and leading seed houses.



Lofts Pedigreed Seed, Inc.
Bound Brook, N.J. 08805 / (201) 356-8700

Subcontractor is liable for site safety

If a subcontractor does not protest safety violations to the contractor, he can be held responsible for those violations by the Occupational Safety and Health Administration, according to a recent ruling by OSHA's Review Commission. The Association of Landscape Contractors recommends that subcontracting landscape contractors complain in writing to the contractor whether or not the safety violations are serious ones.

ALCA to establish student chapters

Student organizations at accredited two- and four-year colleges with a curriculum in landscape contracting or related horticultural field may affiliate with ALCA according to a recent ruling by the ALCA Board of Directors. The group must have an advisor who is an affiliate member of ALCA and contain four or more students. Dues will be set by the Board of Directors.

Southern California turf expo approaches

One of the largest turfgrass and landscape shows in the Southwest is coming up Oct. 18, the Southern California Turfgrass/Landscape Equipment and Materials Educational Exposition in Costa Mesa, California. More than 4,000 landscape contractors, golf course superintendents, nurserymen, and other grounds managers are expected each day at the two-day show.

The exposition was started in 1960 to combine numerous industry events into one centralized show with exhibits and educational sessions. Interested persons should contact the Southern California Turfgrass Council at 213-798-1715.

Conwed opens new fiber mulch plant

Hickory, North Carolina will be the site of a new wood fiber mulch plant to produce Conwed Hydro Mulch products used in hydraulic mulching for turf establishment. Construction is scheduled to begin in mid-1978 with production beginning in early 1979.

Demand for Conwed's Hydro Mulch product has reached the point where production at the Cloquet, MN facility is nearing capacity, according to F. T. Weyerhaeuser, president. The North Carolina site was selected to meet the increasing demand and to better serve the growing market in the eastern United States.

Mississippi degree attracts out-of-staters

Nearly a third of the students in the Mississippi State University Landscape Contracting Program are from out of state says program advisor Robert A. Callaway. A fourth come from outside the South he adds.

MSU offers a four-year program which includes on-the-job time, agricultural mechanics, botany, land surveying, soils, basic drawing, design, architectural graphics, plant materials, accounting, business law, landscape construction, and finance.

Callaway says the demand for graduates exceeds the supply. The contracting program is a part of the landscape architecture department at MSU. Persons interested in the program should contact Callaway at P.O. Drawer MQ, Mississippi State, MS 39762.

field plots in them to collect more information. He hopes to more accurately predict the number of viable seeds and the plant species mixtures of the prairie hay mulch in relation to harvest times, weather conditions and the range sites.

AQUATIC WEEDS

"Natural" herbicide may be possible

Government and university scientists are going to study the toxic compounds released by spikerush, an aquatic weed sometimes used to control larger, more troublesome weeds growing in irrigation canals. If the joint project of the University of California, Davis, and the USDA is successful, development of a "natural" aquatic herbicide may be possible.

Scientists will try to isolate, identify, and synthesize the toxic compounds produced by spikerush, under a one-year \$35,000 cooperative agreement.

The project is under the direction of Floyd M. Ashton, plant physiologist at U.C., Davis. Peter A. Frank, Science and Education Administration plant physiologist, will coordinate the studies for the USDA.

HORTICULTURE

Solar energy, rocks to heat greenhouses

Scientists at the North Carolina Agricultural Experiment Station, under a cooperative agreement with the USDA, will develop a rock-bed heat storage system they hope will eventually supply as much as 50 percent of the heat needs of greenhouses.

The rock-bed will store excess heat from the sun-heated greenhouse that will then be available for use at night or during cloudy weather to maintain a desirable temperature for plants in the greenhouse.

The one-year \$32,455 project is being funded by the Department of Energy, administered by USDA's Science and Education Administration, and is part of government efforts to conserve fossil fuels by finding ways to use solar energy. D. H. Willits will be the principal investigator.