

Cushman manufacturing core harvester

The new Cushman Core Harvester will pick up aeration cores mechanically from golf course greens.

The Harvester mounts on a 3-wheel or 4-wheel Cushman Turf-Truckster vehicle equipped with a hydraulic system and short box or flatbed with sides and tailgate.

The vehicle must have an auxiliary gear box ratio of 3.2:1, but older Turf-Truckster models may be converted to the higher ratio.

The Harvester sweeps up cores from the turf surface with two 45-inch steel blades, set at a 60-degree angle. The soil cores are "funneled" to the-center, carried up a chain elevator and dumped onto an 8-inch rubber belt cross conveyor, which dumps them into the vehicle's box.

When the box is full, the operator shuts off the Harvester with a simple "push-pull" hydraulic control, raises the core-gathering blades with an over-center hand lever, and drives the load of cores to the dump site.

The core-gathering blades cover a 55-inch-wide swath. On flat courses, the operator can make passes back and forth across the green, raising the blades to turn. If the green has sloped sides, the core-gathering blades can be offset to right or left so the operator can pick up cores with a circular driving pattern.

Contact the Sales Department, OMC Lincoln, P. O. Box 82409, Lincoln, Neb. 68501 (800) 228-4444. Circle No 232



NEW PRODUCTS

Nu-Mulch restores faded color

A new spray-on product that restores color to old, faded mulch is available from Lesco, Inc.

One application of Nu-Mulch keeps old mulch looking fresh and new for at least two months.

This new colorant is environmentally safe, inert and non-toxic to plants.

Formulated as a concentrate to

be mixed with water, Nu-Mulch is spray-applied with either a hand-held backpack or larger-gallonage sprayer.

One gallon will spray 150 to 300 square feet of mulch.

Contact Sally M. Lee, Lesco, Inc., 20005 Lake Road, Rocky River, Ohio 44116; (216) 333-9250. Circle No 252

BEFORE YOU BUY JUST ANY BENTGRASS, GO BY THE BOOK.



Phone 1-800-547-0255 today for your complimentary copy of the Penn Pals catalogue. You'll see why Penncross, Penneagle, PennLinks and Pennway blend set the standard for bentgrass on golf courses.

Tee-2-Green Corp.

PO Box 250, Hubbard, OR 97032

FAX 503-981-5626

1-800-547-0255

For Free information Circle No 146



Greensmaster cut is uniform

Because of its unique 11-blade design, the Toro Co.'s new walk greensmower known as the Greensmaster 1000 is said to combine superior grass-catching capability and more uniform quality of cut.

The smaller clip — .16 inch — makes for a smooth green. A new "loop" handle design creates maximum operator comfort and keeps necessary weight on the front of the mower, allowing more even tracking across the green.

Contact The Toro Co., Commercial Products Division, 8111 Lyndale Avenue South, Minneapolis, Minn. 55420. Circle No 233

In the April issue the photos of the Toro Greensmaster 3000-D and Ransomes gang mower were inadvertently swapped.

Greens Plugger is a self-propelled aerator

The Classen Model 455 Greens Plugger is a new self-propelled aerator designed especially for golf greens.

According to Larry Classen, firm marketing director, the unique design provides durable performance with electric lift to eliminate possible greens damage because of leaky hydraulic connections.

Classen's Model 455 Greens Plugger is a new self-propelled aerator designed

especially for golf greens.

The Greens Plugger has a 24-inch operating width and a capacity of 14,000 square feet per hour with standard 2 3/8-by 2-inch patterns at 3-inch depth.

Powered by an 8-horsepower, four-cycle Honda overhead valve engine, it also features sealed roller, bronze and ball bearings for low maintenance and trouble-free operation.



Contact Classen Mfg. Inc.,
1403 Pine Industrial Road,

Norfolk, Neb. 68701. (402)
371-2294. Circle No 247

Alarm system adapted for golf courses

An innovative Golf PROtector system developed by Federal Signal offers wide area warning and communications coverage that can be adapted to any golf course.

A key feature is an omnidirectional siren with both alarm and public address capabilities.

It provides a way of notifying everyone on the course of urgent, life-threatening situations such as lightning, tornadoes and other weather dangers, and environmental hazards, including pollution, flood waters and extreme temperatures.

It also serves for such needs as alert to effluent irrigation, chemical application or other maintenance operations; shotgun tournament starts and special announcements.

The system incorporates emergency stations that allows golfers to react fast in course emergencies and communicate to the clubhouse or other control center locations.

Help can be summoned immediately in the event of medical emergencies.

Contact Federal Signal Corp., 2645 Federal Signal Drive, University Park, Ill. 60466; (800-548-7229). Circle No 245

TIME OUT

...for Turf-Seed's new Turfin' II

guide to the proper grass for popular sports.



Full 8 1/2 x 11 size, four color printing.



All sports turf managers and superintendents will want to read this comprehensive guide to turfgrass varieties for athletic field, playground and golf course use. This volume is sprinkled with sports trivia and history, diagrams of playing areas and comparisons of natural turf with artificial surfaces. So, order your copy *today*...then grab a bag of warm popcorn or peanuts and settle in for entertaining, enlightening and straightforward sports turf talk.

TURF-SEED

PO Box 250 • Hubbard, OR 97032 • 1-800-247-6910
503-981-9571 • FAX 503-981-5626 TWX 510-590-0957
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Turftech designed for soil structure

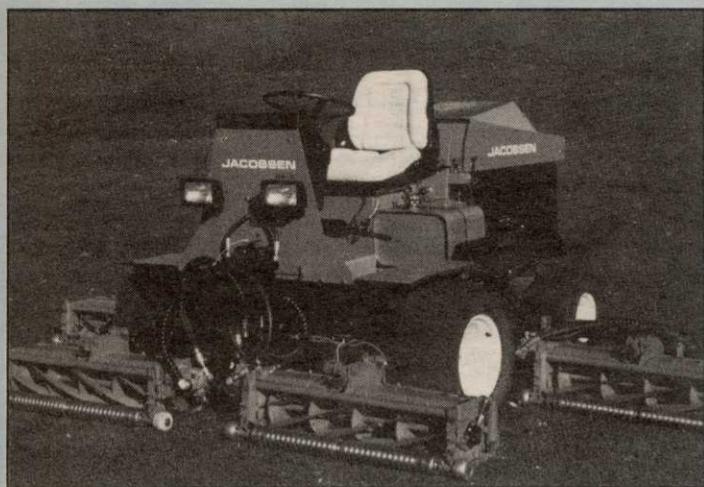
Soil Technologies Corp. of Fairfield, Iowa, has released Turftech, a biological application designed to increase naturally soil aggregation and improve soil structure.

Turftech is composed of soil-borne, single-celled plants packaged as a wettable powder. When spray-applied, these grow on the soil surface and produce unmanipulated plant residues (bio-polymers) beneficial to the soil without interfering with grass growth.

One of these residues is polysaccharide, a complex sugar. The sugars are capable of bonding individual soil particles and forming a soil aggregate.

Increasing soil aggregation creates additional pore space, allowing air and water to move into the soil more easily. By increasing pore space, Turftech helps compacted soils to drain. Grass is healthier and less prone to disease.

Contact Soil Technologies Corp., P. O. Box 1415, Fairfield, Iowa 52556. (515) 472-3963. Circle No 266



Jacobsen's HM-11

Jacobsen introduces new mowers

Jacobsen has introduced several new mowers.

Its H-15 mower has seven hydraulically driven reels. Suitable for golf courses, parks and other large areas, it features out-front mowing and a 15-foot cutting width.

Front and rear wheels are steered through turns to eliminate streaking and marking on fine turf. Reels have bi-directional pivoting, to follow ground contours closely.

Reels are held by a patented

hold-down system to prevent bouncing and skipping in high speed mowing.

The HM-11 4WD five-gang mower features four-wheel drive for improved traction, a convenient electro-hydraulic reel lift control for easier cross-cutting, and state-of-the-art electronic instrumentation that informs the operator of critical machine functions. The HM-11 has an 11-foot cutting width.

The LF-100 out-front five-gang reel mower may be ordered with

on-demand four-wheel drive, for fairways with steep hills.

It cuts a 100-inch swath at speeds up to 5 mph. Of heavy duty design, it has extremely low ground pressure for less soil compaction and healthier turf.

Full-floating reels follow ground contours closely, and pivot through turns to eliminate scuffing of turf on the clean-up pass.

Contact Jacobsen Division of Textron Inc., 1721 Packard Ave., Racine, Wis. 53403; (414) 637-6711. Circle No 231

New perennial ryegrasses marketed

Saturn and Omega II are among perennial ryegrasses recently introduced by Performance Seeds.

Saturn reportedly was ranked first in overall quality among 65 varieties tested in USDA's National Perennial Ryegrass Test at 22 locations across the United States and in British Columbia.

Saturn is said to be a natural for winter overseeding of golf course tees, greens and fairways in areas where warm-season grasses go dormant for several months.

An upright, dense growth permits cleaner mowing and truer putts, Performance says.

Denser and leafier Omega II is said to maintain rich color throughout the seasons, even in low fertility areas, and resists above-ground feeding insects.

Jaguar, a turf-type tall fescue, is said to provide a finer, more attractive leaf with a moderately low-growing habit and greener good looks.

Contact Performance Seeds, Garfield Williamson, Inc., Fairfield, N.J. 07006; (201) 882-7755. Circle No 253

Putting hole color renewed

Hole-In-White offers a fast, efficient method of coloring the inside of the putting hole.

A steel device is positioned over a freshly cut hole and the can of turf whitener slides into position on the tool gimbal.

The spray nozzle is activated by pressing down on the can and turning to uniformly color the hole.

Advantages include a more visible target, play speedup and less flagstick use.

Contact Hole-In-White, Amity Station, P. O. Box 3839, Woodbridge, Conn. 06525; (203) 393-3909. Circle No 248

Ransomes has robotic welder

A robotic welder trade-named the Multistation Weld Cell is the latest product of Ransomes Inc.

The welder is said to produce repetitive welds with unmatched consistency.

Contact Mark Foree, Ransomes, Inc., Johnson Creek, Wis. 53038; (414) 699-2000. Circle No 256

NEW! TORO "4.0"

Makes Network 8000 better than ever!



(And who else but TORO could offer you concatenation!?)

When TORO created the first fully automatic, ET-driven, computerized control system (Network 8000), it took irrigation control a giant step forward. Now, with perfection of the new "4.0" software package, Toro takes another step ahead of the rest, and you enjoy these four important new advantages:

1 Flow Control

The central schedules all irrigation in conformance with the user-specified order of watering, while maintaining sprinkler flow demand within the maximum efficiency range of the pump station, resulting in the lowest cost-per-gallon. Flow control is retained even if communications are "cut" or the central is "out," because all of the flow control data is downloaded daily to the satellites.

2 Concatenation

Satellite programs are run in the most efficient order. This means they run in the grouping order specified by the user, with minimum total elapsed time and without gaps. In other words, they are linked together. For each program, Toro 4.0 automatically searches for the longest program running time in the next group and schedules it to follow immediately upon completion of the shortest running time of the preceding group for perfect linkage—or concatenation.

3 Sequential Multi-Manual

This feature provides an additional method for programming stations at satellites. Irrigation programs continue as before but now you have the flexibility to program groups of these same satellite stations in a multi-manual format, for such non-irrigation purposes as removing frost or cooling the turf. With this feature, you can assign any station at a satellite to a sequence group (maximum of 6 to a group), and there are enough sequence groups to allow all stations to be assigned. The run time (common to all groups) may be set from 1 to 30 minutes. In cold climates, this lets you lengthen the playing day.

4 Remote Activation of Central System through Satellites

Up to 15 specified functions stored in the central may be initiated for the whole system from any one satellite on the golf course. You can cancel a program, call up rainholds, go into multi-manual—any or all of 15 such special situation programs, from any satellite, without returning to the central. It gives you quick-fix problem-solving capability from the field.



Excellence in Irrigation®

The Toro Company

Irrigation Division
Dept. GCN-589, P.O. Box 489
Riverside, CA 92502

Grinding wheel made modular

Mowing Machine Ltd's Base Leader has a new modular design concept. This means that the machine can be upgraded to "Auto" or "Supreme" Leader specifications at any time.

The Base Leader has a powerful 1.1-kilowatt grinding wheel motor capable of grinding cylinders in or out of frame.

Contact Mowing Machine Maintenance Ltd, Wet Moor Lane, Wath-upon-Deerne, Rotherham S63 7LR, England; (0709) 873436. Circle No 268



New Ryan aerator's spacing is variable

A new riding aerator, the Ryan GA 30, has been introduced by OMC Lincoln.

The GA 30 features variable core spacing from 2.5 by 1 inches to 2.5 by 5 inches. The operator can vary the spacing with a hand lever while aerating.

The throttle, choke and ignition switch also are hand-operated, while vehicle speed, brakes and lift control for the

aerating head are controlled by foot pedals.

The GA 30 features hydrostatic drive. When aerating greens, the operator can lift the tines, turn around at transport speed, and be back on the green aerating in minimum time.

Transport speed is 6 mph.

Write Ryan Sales Department, OMC Lincoln, P. O. Box 82409, Lincoln, Neb., 68501; (800) 228-4444. Circle No 235

Kubota hails new engine

Kubota believes that, in introducing the ACTV system engine OC60, it has achieved the ideal small diesel engine.

The Kubota-developed "Advanced Cooling Three Vortex" (ACTV) system cools the swirl chamber with oil, and the cylinder with air.

The combustion chamber is an I.D.I. type with a swirl chamber system, Kubota's "Three Vortex Combustion System" (TVCS).

The combination of ACTV and TVCS allows OC60 to minimize noise level. Furthermore, the viscosity of lubrication oil around the combustion chamber absorbs and controls noise to the level of water-cooled engines.

Contact Kubota, Ltd., 2-47, Shikitsuhigashi 1-chome, Naniwaku, Osaka, Japan. Circle No 234

Low-angle nozzles fit all

Weather-matic announces availability of the 400 Designer Series and low-angle nozzles for commercial and residential spraying applications.

The 400 Series fits all Weather-matic 30-Series Sprinkler Bodies (32P, 35P, 36P, 37P and the 95P shrub adapter).

The 100-Series low-angle shrub heads are compatible with 400-Series nozzles and may be used for ground cover and shrub applications.

Contact Weather-matic, Box 180205, Dallas, Texas 75218; (214) 278-6131. Circle No 251

Andersons testing greens fertilizers

The Andersons are test marketing Tee Time homogenous greens fertilizers 20-2-10 and 9-3-18.

A 50-pound bag of 20-2-10 treats 10,000 square feet, while a 50-pound bag of 9-3-18 treats 8,900 square feet.

Both products are designed for use on closely mowed golf course greens. All slow-release nitrogen is derived from Nitroform, the premium source of water insoluble nitrogen.

The 20-2-10 and 9-3-18 are homogenous products for quick wash down and uniformity of response.

Contact the Andersons, Lawn Fertilizer Division, P. O. Box 119, Maumee, Ohio 43537; 1-800-225-ANDY (2639). Circle No 263

Fine Fescue Defined

What are Fine Fescues and why are they so important to turf managers?

Our Fescue turfgrasses are part of most every park, golf course, industrial campus, athletic field, condominium commons and home lawn from the transition zone, Northward.

But, many people are not aware of that. Perhaps we are the most overlooked turfgrass in existence.

We feel that Fine Fescues are the best turf investment a grounds manager can make. And, we'd like to point out *why*.

Fine Fescues are *real* grass. And, as with all living things, there is give and take. Sure, our Fescues take water and some maintenance, but they are better *givers*. Our natural grass turns noxious gases into oxygen and is a natural air conditioner for turf users.

We feel that while artificial turf has its place on locker room floors, it has no business where *real* people work, play and relax. Our grass is just *naturally* more refreshing.

Our Chewings (*Festuca rubra commutata*) and creeping red (*Festuca rubra rubra*) Fescues are rather unique when compared with other turfgrass species. Although they have most of the features of other cool season grasses, Fescues have several distinct benefits worth noting.

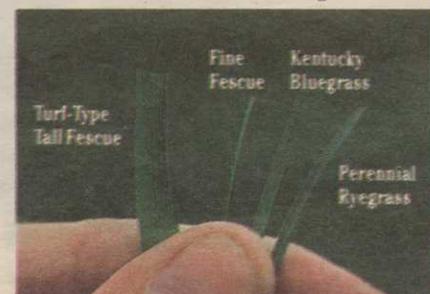
Fine Fescues are low maintenance. Our varieties require less fertilizer and water than other species. That's a big *plus* at today's water, fertilizer and manpower prices.

Fine Fescues fare well around trees. It seems our grass doesn't need as much sunlight, water and nutrients as other turfgrass species. Because Fescues don't compete with trees for these important elements, they're called *shade grass*. Our Fescues don't creep into flower beds, nor crowd out other species in a mixture.

And, because they're Oregon grown, our Fescues germinate, adapt and perform better than imported types.

You'd expect to pay a fortune for such a turfgrass, but Fescues are quite reasonable

Why don't Fescues cost a great deal? Fine Fescues have been around a long time and



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have been changed very little. Why mess with a good thing? While other former "pasture" species are coming closer to looking like our old standard; receiving notoriety for their "improvements" and enjoy the price increases associated with the word "new," our Fescues have continued what they do best... support the up-and-comers. But then, Fine Fescues were meant to be stepped on.

Fine Fescues are Ideal for Recreation, Sports and Leisure

Not only do Fine Fescues excel alone or in perennial ryegrass/Kentucky bluegrass mixtures on horizontal playing surfaces; Fescues are excellent for low maintenance areas like berms, roadside banks, ski slopes and hilly spots that don't retain moisture. So, you see, Fescues are ideal all-around grasses for *all around* your recreation and sports facility. Their low maintenance requirements offer *turf managers* a chance for a little more leisure... and there's nothing wrong with that.

For a series of nine tech sheets on Oregon grown Chewings and creeping red Fescues, call or write:



Oregon Fine Fescue Commission

2140 Turner Road SE
Salem, OR 97302
503/585-1157