



Superintendent Jerry Palmer, Chula Vista Municipal Golf Course, Chula Vista, Calif.

## When these sprinklers were turned on, a new era began

Jerry Palmer is one of the first to have total control of his watering system.

When he put in new sprinklers at Chula Vista Municipal Golf Course, he put in Buckner's new CP-2 Dual Central Programmer. It makes all previous central controllers seem like crude prototypes.

Because the CP-2 Dual Central Programmer is so sophisticated, it doesn't require expensive conventional field controllers. The less expensive, less complex FC-10 Field Controllers, along with the CP-2, give him complete control of the system from his "doghouse," but cost less than a conventional automatic system would have. He doesn't have to make the rounds of remote automatic sprinkler controllers, except for inspection. So he'll save time and labor costs as well.

The revolutionary Buckner CP-2 Dual Central Programmer incorporates two independent sets of controls which operate up to 30 Field Controllers each. Palmer can operate it 'automatically, semi-automatically, or manually with 14-day programming and adjustable station timing.

On frosty or dewy mornings, he'll be able to syringe the greens in 20 minutes. In about an hour, he can syringe the entire course — it's ready for play. The syringe cycle of



A Division of General Sprinkler Corporation 909 W. Nielsen Ave., P.O. Box 232, Fresno, CA 93708 the CP-2 is infinitely variable, 1.7 to 5.0 minutes, and overrides all timing programmed in Field Controllers.

What if it starts to rain? With the "omit" switch, Palmer can stop all sprinkling, whether the CP-2 is on programmed irrigation or the syringe cycle. All Field Controllers will automatically return to "off."

Learn more about how the amazing CP-2 Dual Central Programmer can give you total control of your watering.

Call your Buckner distributor or send in this coupon, and we'll arrange a demonstration.

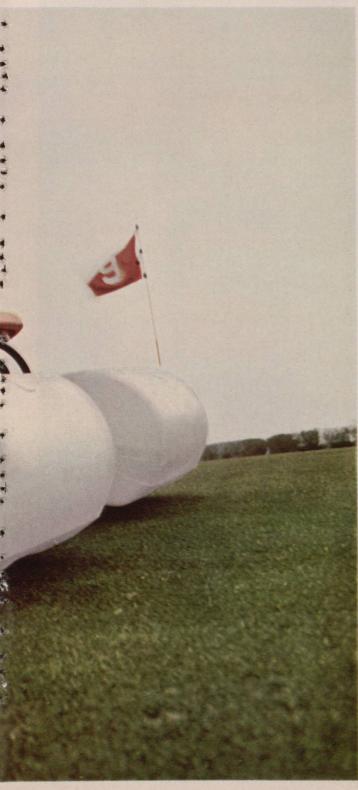
DUCKNED Carlables Co		
BUCKNER Sprinkler C P.O. Box 232	.0.	
Fresno, California 9370	08	
Here's my name and p stration of the CP-2 Du		
Name	Maria San	
Club		
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Toro helps you

# Take Better



# Care.



## New Greensmaster 3 outperforms 4 men.



Here's the kindest cut of all, as well as the fastest. The new Greensmaster 3 gives you the best of both worlds, by delivering 18 ribbon-cut greens in about 3½ hours, and

paying for itself in a single season.

Ribbon-cut greens don't just happen. We take care to build them into the machine. The cutting units are free floating, with ground-level pull points. Grass baskets are mounted on the frame, instead of the reels. Oversize tires reduce compaction, prevent damage to turf. The drive is fully hydraulic. Cutting heights start at 1/8 inch, are adjustable with a micrometric, positive lock system, up to 7/8 inch (for collars and tees).

The Greensmaster 3 saves time because of simplified operator controls . . . simple pull-knobs to change cutting height . . . single foot control to raise or lower cutting units, with simultaneous engage-disengage . . . a mere 15 inch turning radius inside a 58-inch cut width . . . and a transport speed of 7 mph.

It doesn't make sense to give up one thing you want in order to have another. So the new Greensmaster 3 is a solution instead of a compromise.

We take care, so you can take better care of things.





### You've seen greens mowers

### So now meet the first greens management system

The Hahn/West Point Tournament is the *only* greensmower with features that satisfy literally everyone involved in the game of golf—chairman, superintendent, operator, *and* golfer. It is absolutely the most versatile greens care unit available today.

Want proof? See the Tournament for yourself at the GCSAA Show in Denver, February 9-12...or write directly to us.

### HAHN/WEST POINT

Dept. G-171, 1625 N. Garvin Street EVANSVILLE, INDIANA 47717 Check these Tournament Triplex features:

- Precision greens cutting reels
- All reels up front
- Variable speed control
- Multiple height-of-cut presets for collar mowing
- · Front-steering maneuverability
- · Reliable flexible cable drive system
- · Smooth hydrostatic drive
- · Individual lifts on each mower reel
- Automatic reel shutoff
- Ultra-quick removal of mowers and accessory units
- Precision triplex Verti-Cut reels
- · Vibrating spiker reels
- Precision heavy-duty tee mowers
- · Quick-couple gravity-dump trailer
- All-weather protective cab

### A revolutionary break-thru

## Eliminate fairway Poa annua and improve turf color and texture by inhibiting poa seedhead production and retarding foliar growth. Prevent poa from planting next year's crop. Retard poa leaf development to

encourage upright growth

and reduce matting.
RESULT: More open turf
—ideal to help the turf

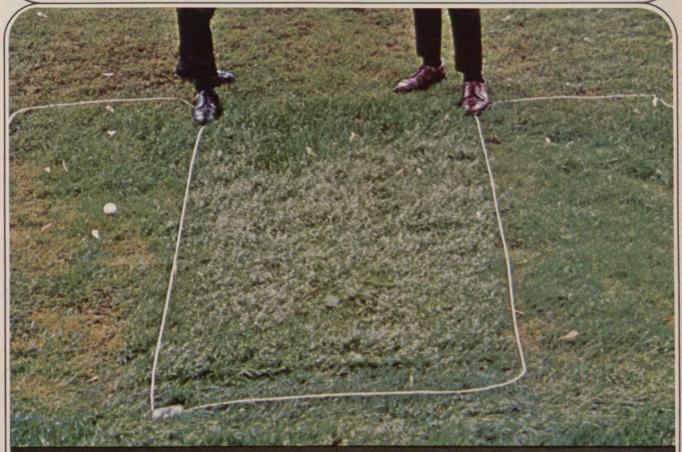
spread of desirable grasses. Use on fairways which are mostly Poa annua, yet lose no turf cover due to chemical action, at recommended rates. Leaves no phytotoxic residues in soil. Overseed with perennial grasses immediately, with confidence of exceptional germination and

PO-SAN also eliminates clover and dandelion, and retards other broadleaf weeds. One treatment provides 30 to 45 day control.

Mallinckrodt

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Growth Retardant for Post-Emergence Control of FAIRWAY POA ANNUA!



#### RESULTS OF AN INDIANA EXPERIMENT STATION TEST

PLOT AT LEFT was treated with PO-SAN at 2½ times recommended rate. Poa annua is severely retarded, but bluegrass remains green and vigorous. PLOT AT CENTER was "check" plot, not treated with PO-SAN. Poa annua, profusely covered with seedheads, has completely crowded out bluegrass.

PLOT AT RIGHT was treated with PO-SAN at the recommended rate. The turf is green and growing, but the Poa annua is retarded and not producing seed-heads — bluegrass is "taking

Tee
Console
with portable stand
Durable
Low-maintenance
3 color combinations



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For example, the Standard Portable Tee Console.

No other product made can match this combination of function, beauty and durability. Where other tee accessory groups look clumsy and haphazard, this Console actually adds to the well-kept appearance of your tee. The Standard Console is portable, highly durable and practically maintenance-free.

And, as part of our color coordinated tee ensemble, the Console is available in Yellow and White, Red and White, and Olive Green and White.

Need any more reasons to try Standard? Just write us for a complete catalog and any other additional information you'd like.



### Standard Manufacturing Company

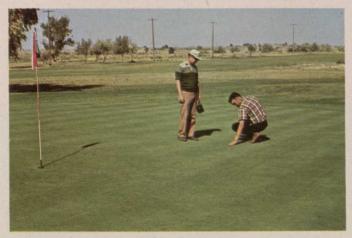
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Phone 319/266-2638

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# PROOF

### We'll Overseed One Green To PROVE The Merits



Putting Green quality Penncross at Richland, Washington Sham-na-pum course. "I'm very happy with Penncross," said Forest Bishop, Course Superintendent.



Tee and Fairway quality Penncross is doing great on this shaded tee at Salem Golf Course, Salem, Oregon, where holding grass had been a problem.

### Look for this tag...

PUTTING GREEN QUALITY
OREGON
CERTIFIED
PENNCROSS BENTGRASS

Penncross Bentgrass
was developed for
putting green
surfaces.
When you
have Penncross greens, you
have the very best!

The Grass Designed for Golfers

### of PENNCROSS

Once you have tried Penncross Bentgrass on your greens, you will be sold on the merits of this grass designed for golfers.

So . . . the Penncross Bentgrass Growers Association will send you a one (1) lb. bag of putting green quality, "that's the very best" Penncross to overseed your first green. One pound will cover most small greens or a portion of a large one at the rate of 1,000 sq. ft. per one-half pound.

We are sure it's enough to see for yourself the hybrid vigor, the outstanding color and disease resistance of this famous golf green grass.

### **Changing to Penncross**

- Overseed when verticutting or aerating and before top dressing, use ½ pound per 1,000 square feet.
- 2. Germinates in 8 to 12 days, develops deep root system, competes with poa annua.
- Maintain play while Penncross develops a better playing surface.
- 4. Save on chemical maintenance.

#### WRITE TODAY

### PENNCROSS BENTGRASS GROWERS ASSOCIATION

4491 Liberty Road S. Salem, Oregon 97302

OK . . . Send me a one (1) pound sample and I will give it a try.

NAME\_\_\_\_\_STREET\_\_\_\_\_\_STATE\_\_\_\_\_ZIP\_\_\_\_
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accepted for industrial uses.
Choose from six body styles,
cabs and other options to match
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today from your Harley-Davidson dealer... the place to go for fast, dependable service, too. And be sure to look closely at our brand new high strength industrial bumper (not shown). It's tough. Or write: Manager, Commercial Car Division, AMF J HARLEY-DAVIDSON, 3700 West Juneau Avenue, Milwaukee, Wisconsin 53201.

#### Beard continued from page 30

less injury than when the plants were completely submerged. In one case, elongated Penncross creeping bent-grass stolons survived for an entire growing season while floating in water with only the leaves extending above the surface.

Comments: It is not uncommon to establish golf courses, recreational areas and parks on low-lying flood plains adjacent to rivers. As a result, turfs on these areas are periodically subjected to flooding. These investigations indicate that the professional turfman can minimize flooding damage through the use of certain cultural practices.

It is evident from this study that a substantial range in submersion tolerance exists among the commonly used cool season turfgrasses. Bentgrass or Kentucky bluegrass are definitely preferred to red fescue or annual bluegrass. They also have a greater recuperative potential from surviving vegetative plant parts. In addition, it is obvious that certain creeping bentgrasses and Kentucky bluegrasses can survive submersion for a relatively long period of time provided that higher water temperatures are avoided. The occurrence of high water temperatures is less likely to occur where flooding involves a continuous flow of water across a turf area rather than shallow, stagnant pools. The latter problem can be avoided by insuring rapid removal of surface water accumulations by proper surface contouring or the use of slit trenches or surface drains connected to an adequate subsurface tile system. If shallow, stagnant pools of water develop on greens, the water should be removed by a squeegee-type device before the water temperature becomes excessively high.

The increase in water temperature to lethal levels is most likely to occur in small, shallow pools during periods of high light intensity and high air temperatures. Injury to turfs resulting from this condition is referred to as scald. This term may be somewhat misleading because scald injury can occur at water temperatures considerably below the boiling point of 212° F.

This paper is devoted to only one phase of flooding. That is, the direct effect of submersion on the turf. However, one must remember that turfgrass damage by flooding can (Continued on page 42)

ect f.



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## Dedoes Turf Maintenance System

COMPARED with other Aerator, SLICER and ROLLER UNITS

	ROLLER UNITS									
IMPORTANT FEATURES AND ADVANTAGES		DEDOES		BRAND X			BRAND Y			
		SLICER	ROLLER	AERATOR	SLICER	ROLLER	AERATOR	SLICER	ROLLER	
Conversion unit allows instant interchanging of aerator, slicer or roller	V	$\checkmark$	$\checkmark$							
Utilizes standard hydraulic system of the tractor	√.	<b>V</b>	<b>V</b>							
Utilizes tractor weight as down force	~	$\checkmark$	<b>√</b>							
Can be raised or lowered instantly for driveways and transporting	~	$\checkmark$	<b>√</b>	V	<b>√</b>	~				
Aerator removes 180 plugs per revolution (against 96 and 120 plugs)	~						~			
Aerator passes plugs completely through pluggers. Distributes evenly	~									
Aerator plugger and slicer made of special tempered steel	V	$\checkmark$								
Plugger makes hole 3" deep	V			$\checkmark$						
Pivot action so it will not tear up turf	V									
Unit weighs less than 300 lbs.	V	<b>V</b>	<b>V</b>							
Plugs 180 holes per revolution	~						V			
Installed and changed in minutes	V	<b>V</b>	<b>V</b>							
Slicer has heat-treated blades		<b>V</b>								
Needs no ballast yet produces over 2,000 lbs. down force	~	<b>V</b>	~							
Covers an 18-hole golf course in 8 hours			<b>V</b>							
Guaranteed for one year against all mechanical defects	V	V	V				19			

See Dedoes Turf Maintenance System at the 42nd International GCSAA Turfgrass Conference & Show, Feb. 7, 1971, Denver. Booth No's. A55 and B20

Unquestionably the best equipment of its type. It's more efficient, faster, more durable, does a better job at less cost.

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Toro's Vari-Time\* Control System has set the standard.

We've been leaders in sprinkler head design for years. The first Valve-In-Head, the first sealed gear drive, the first 2-speed heads for fairways and greens. A few reasons great championship courses are choosing Toro.

Our equipment costs about the same as other brands cost.

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