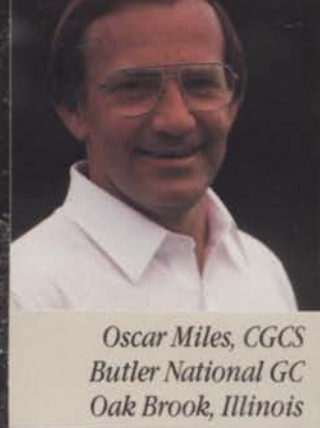


*Two years after the  
Salt Creek flood,  
Butler's fairways  
look terrific!*



Oscar Miles, CGCS  
Butler National GC  
Oak Brook, Illinois

*Seventh fairway during the Western Open, 1989.*

## Penneagle and Oscar Miles make Butler National GC 'picture perfect' again!

"Before the 1987 Western Open, Butler National was primed and trimmed to perfection for its date with the pros and television cameras" says Oscar Miles, "then 9½ inches of rain drenched the course. The resulting flood deposited tons of silt that dried and destroyed the grass beneath.

"After the cleanup that required thousands of manhours, high pressure hoses, squeegees and helicopters for drying; the process of reseeding began.

"Based on Penneagle's excellent performance before the flood, I chose to reseed with this bentgrass. After two years, the new stand appears better than before. With our time-proven maintenance program, we mow our fairways at 7/16" and have a good working layer of Penneagle with virtually no thatch.



*After two years, Penneagle produces a good working layer with no thatch buildup.*

"In preparing for the 1989 Western Open, we compared the course to a Van Gogh painting, and the crew's efforts were to enhance the work of art by meticulous touchup on the frame. The result was a 'picture perfect' course that caused the players and announcers to rave.

"Now if I could only get the announcers and writers to call 'Penneagle' by name ... you can't plant *just any* bentgrass and expect it to perform like Penneagle."



*Seventh fairway before the rain delayed 1987 Western Open.*

Oregon Certified PVP 7900008  
Penneagle is one of the 'Penn Pals'



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# LANDSCAPE MANAGEMENT



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by Larry Kassell

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# REMEMBER THE Roundup<sup>®</sup>




Along  
sidewalks  
and  
paved areas

Around  
tree bases

For edging  
along  
pond banks





For edging  
around  
parking lots

Around  
buildings and  
other  
structures

Under  
benches

Now's the time to Remember ROUNDUP® herbicide for all kinds of jobs around parks and recreational areas. Remember that ROUNDUP controls a broad spectrum of weeds roots-and-all. ROUNDUP is faster to use than mechanical trimmers and there's no need to retreat. That means you'll save time and labor.

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## How much of my money do you want?

What would you say if I told you that I would be willing to pay you more than you want to be paid? You'd jump at the chance, right?

Green Industry, you're not jumping. Not yet, anyway.

If I were Mr. Middle Income, my household would be pulling down a tidy annual sum, even though both my wife and I would have to hold down separate jobs. And, because of those demands, we'd have little time to spend with each other and with the kids. So we'd be looking for shortcuts in our day-to-day lives.

We'd hire a "domestic engineer" to vacuum every week. We'd have the local pizza joint deliver dinner once or twice a week. When the carpets got dirty or we detected the presence of an abominable insect somewhere inside our beloved walls, we'd call the appropriate specialists.

We'd maintain this philosophy so we could spend evenings, Saturdays, Sundays and holidays as a family. We'd play "Trivial Pursuit" after dinner; we'd watch "Indiana Jones" movies together; we'd take weekend excursions, especially during the summer.

And do you know what? We might not even realize what we'd be paying our lawn specialists. Whatever it was, we'd think, it was certainly worth it. Our lawn would be neat, trim, devoid of weeds—the envy of our neighbors. And all we'd have to worry about would be turning the sprinklers off and on.

Well, friends, many of your own customers are Mr. (or Ms.) Middle Incomes. They're people you're mighty interested in keeping. And how do you do that?

Number one, most important of all: you're going to have to pay your employees better wages because they're your direct pipeline to those valued customers. We're talking pretty hefty raises, too, for basically unskilled labor.

And, upon hearing this nasty bit of news, the first thing you say to yourself is, "I can't afford it!"

But you can. You can afford to compete with the McDonalds' of the world for that unskilled labor. You can afford to pay your line-level help \$10 or \$15 an hour.

Do you know why? Because of all the Mr. and Ms. Middle Incomes out there. People who value their time more than their money, to a point. (Don't let your costs climb over what a second income might be able to afford.)

Here's the real secret. Pay your employees more now, before you lose the good ones to competitors; pay them now, before the personnel crunch hits the industry. You can either horde the good ones now, or wait in line three years from now.

All you have to do is ask your customers for a little more money.

**Jerry Roche, executive editor**

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	Omega II
	Remington
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	Alliance blend
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Improved hard fescue	Aurora
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Improved Sheeps fescue	Bighorn
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	Fortress
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	Bonanza
	Eldorado
	Monarch
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# Finally, A High Capacity Mower That Doesn't Handle Like One

For too long, high-capacity mowers have left a lot to be desired. But now all that has changed. Presenting the revolutionary new Groundsmaster® 580-D with an 80 hp turbo-diesel engine. The first large-scale rotary mower that combines the productivity of a 16-foot machine with the handling ease of a smaller mower.



Operating the 580-D is incredibly easy. Only Toro provides an adjustable tilt steering wheel and column. All controls are at the operator's fingertips, even cruise control.

Transport is easy too. An exclusive rotating hinge lowers the outboard cutting units behind the operator for a clear view to the side and rear. A balanced design allows you a stable 20 mph transport speed because the weight of the outboard cutting units is rotated to the rear.



Digital read-outs display vital engine/machine functions at the touch of a button.

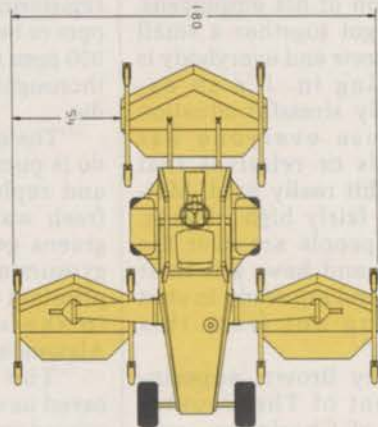
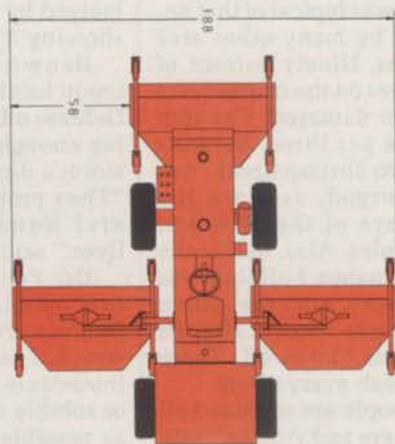
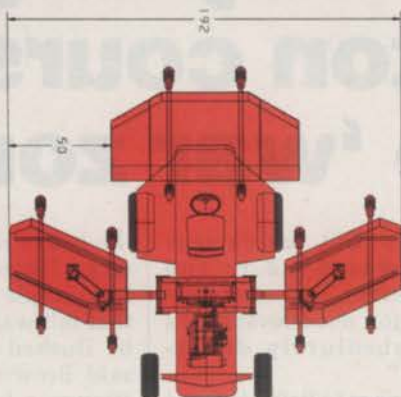
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# Capacity Mower That Like A School Bus.



Toro's outboard cutting units also include an exclusive break-away protection feature. Should the operator misjudge distance, the wings will pivot away from the object that has been hit.



The 580-D's wide stance and short wheelbase give it maneuverability and stability. A short 76" wheelbase lets you turn an 18" uncut circle without braking. And Toro's exclusive swept-forward wing design keeps the tips of the outboard cutting units in line with the front drive wheels improving operator control and visibility.

For even more versatility, the 580-D includes these accessories: an 8-foot front broom attachment, a roll over protection system, a canopy, a cab and a road light package.

If you've been sacrificing ease of operation for high capacity, it's time you saw the revolutionary machine that gives you both: the new Groundsmaster 580-D from Toro. Call your local Toro distributor to see the Groundsmaster 580-D or contact Toro at the address below. You'll see firsthand how productive and versatile large-scale turf mowing can be.

**TORO**

The Professionals  
That Keep You Cutting.

Another Toro exclusive allows you to raise one or both of the outboard cutting units inside the traction unit width. The 580-D can then trim between objects less than 8 feet apart with the 92" Triflex® cutting unit.



## LANDSCAPE MANAGEMENT

### GOLF

# After visit by Hugo, Charleston courses look like 'war zone'

CHARLESTON, S.C. — A week after Hurricane Hugo tore into the South Carolina coast, golf course superintendents expressed awe over its destructive power, and thanks that the death and damage toll was not what it could have been.

Up to 90 percent of the trees were gone on many South Carolina courses. Salt water intrusion, downed power and telephone lines, damaged or destroyed buildings and courses strewn with debris were the major problems faced by superintendents.

The courses that sustained the most damage are those within a 75-mile radius of Charleston Harbor, especially those on the neighboring islands to the north. The Sept. 21 storm slammed into South Carolina there and moved inland to Columbia, where it turned north toward Charlotte, N.C. It left behind a wide swath of destruction that may cost \$3 billion to repair.

"It looks like a war zone," said Tom Cannon, superintendent of Patriots Points Links, an 18-hole, 7,100-yard public course right on Charleston Harbor. "I was in the Vietnam War and I've seen a lot of devastation there. I've also had a couple of brushes with hur-

ricanes. But the damage that was done to the Charleston area was awesome and unbelievable. It's just absolutely devastating."

Damage to Patriots Point Links was typical of that endured by many other area courses. Ninety percent of the trees on the course were gone or damaged. The 16th hole, a par three that juts out into Shrimp Creek, was submerged, as were the fairways of the 17th and 18th holes. Also, half of the maintenance building was destroyed and the pump house was flooded after its roof was blown off. There was trash everywhere.

"People are scattered all over here and yonder," said Cannon of his employees. "I've got together a small base crew and everybody is pitching in. It's an extremely stressful situation because everyone has friends or relatives that were hit really hard. Morale is fairly high, though. Most people are over the shock and have grit their teeth and are ready to start digging out from this storm."

Tony Brown, superintendent of The Country Club of Charleston, said that his course may have been spared severe salt-water damage because of

the heavy rains before and after Hugo. "There has been ample opportunity for that salt water to run off or be flushed into the soil," said Brown. "It's kind of strange; a lot of areas submerged by salt water aren't showing a lot of damage."

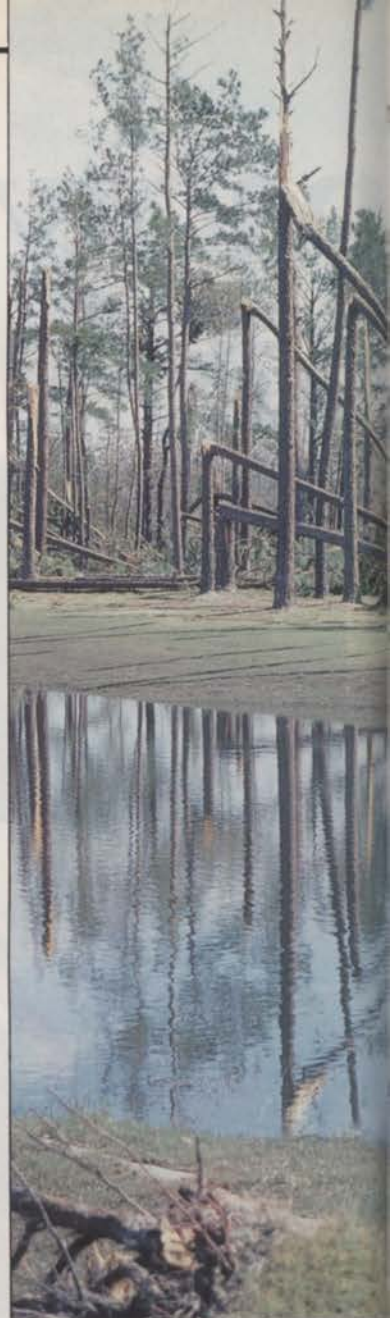
Brown and Cannon credit local media and Civil Defense officials for providing enough warning of the storm's direction and fury. "They probably saved several hundred thousand lives," said Brown.

Dr. Paul Alexander, a turf specialist at Horry-Georgetown Tech in Conway, S.C., urged area superintendents to run a salinity or soluble salts test as soon as possible. Bermudagrass registering more than 1,500 ppm or bentgrass more than 950 ppm need to be flushed thoroughly or the grass will die.

"The only thing you can do is pump those areas out and replenish them with fresh water. On tees and greens get out there with gypsum and make that application to tie up the salts in the soil," observed Alexander.

"The big thing that saved us was that the storm moved so rapidly we didn't get the anticipated rainfall of 10 to 15 inches."

Dr. Tim Bowyer of



Numerous evergreen trees like these at the Oaks Plantation Athletic & Country Club were sheared off at mid-trunk by the damaging winds of Hurricane Hugo.

Southern Turf Nurseries sent a letter to superintendents. "Salts may be leached from the profile through the application of gypsum," he wrote. "Regular ag gypsum can be applied at the rate of 1-2 tons per acre. This will provide little negative effect on soil pH while at the same time freeing sodium from the sodium profile and replacing it with calcium."

The president of Car-