

## Walking the talk at Widow's Walk GC

Superintendent Jeff Carlson pushes all the environmental hot buttons - and wins

#### By MARK LESLIE

SCITUATE, Mass. - The Shakespearean student in him might look at this job as A Midsummer Night's Dream. The analyst in him might view it as an opportunity to fill a spreadsheet with figures. But the superintendent in Jeff Carlson views his position at Widow's Walk Golf Course here as "professionally satisfying," bringing



"very high satisfaction as a golf course and grow-in superintendent and very, very high satisfaction when you add its restoration aspect." The "restoration"

Jeff Carlson

to which Carlson refers is creating a living golf course from a "dead" piece of ground: a former gravel pit and dump site littered with cement blocks, old refrigerators and other assorted ugliness. The course, municipally owned Widow's Walk, has gained more public attention than almost any in the country because it will serve as a working laboratory to discover the impact of a golf course on wetlands, wildlife and habitat.

and Scituate Conservation Commission have been heavily involved in this recla-

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NI-THE



No, this is not sod, which needs repair every couple of years. It's shag carpet.

Used carpet for permanent 'sod-wall' bunkers? Good trade

#### By MARK LESLIE

SCITUATE, Mass. - Some inventions seem to be just laying around under a bush waiting to be discovered by an innovative mind. Such was the case of the "sodwall bunker kit in waiting" - Dr. Michael Hurdzan's answer to a standard, old-time stackwall bunker.

Fresh from a trip to Scotland, the home of sod-wall bunkers, Hurdzan was walking the property of what would become Widow's Walk Golf Course here - an abandoned gravel site. "He's walking along and finds this ugly carpet under a bush, and all kinds of light bulbs go off with him, and him alone," recalled Widow's Walk superintendent Jeff

Carlson.

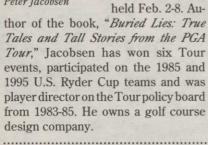
Voila! The idea of the "carpet-wall bunker" was born.

"Maybe this will change the face of American golf a little bit," Hurdzan said. "It will add spice to a linksy golf course."

"As an alternative to sod, I can't think of a better one," said Carlson. "It has the potential to really stay in the industry."

"You had to have the right client to try it," Hurdzan said. "This was the perfect opportunity because of the experimental side of the project. Now that it's done it will be a much easier sell.

"I think sodwall bunkers add such a distinct flavor to a golf course that you Continued on page 22



Peter Iacobsen

BRIEFS

SOD BUYING NUMBERS UP

least 4.9 million households in the

United States anticipate buying turfgrass sod this year. That is a 36-

percent increase from 1996 and far

outstrips the 1995 figure of 1.9 million.

The survey also reported that in 1996

U.S. households purchased \$426.2

million in turfgrass sod - \$188.6 of

which was professionally installed.

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JACOBSEN KEYNOTING FOR GCSAA

eran Peter Jacobsen will keynote the

Opening Session, Feb. 4, of the 69th

ANAHEIM, Calif. - PGA Tour vet-

International Golf

Course Confer-

ence and Show

here. The annual

event, sponsored

by the Golf Course

Superintendents

Association of

America, will be

A recent Gallup poll revealed that at

#### **IPM SEMINAR SCHEDULED**

PHOENIX — The major concepts of a sound Integrated Pest Management program will be presented by Dr. Karl Danneberger of Ohio State University here Sept. 3. Presented by the Cactus and Pine Golf Course Superintendents Association and Golf Course Superintendents Association of America, the seminar will focus on managing turfgrass under environmental stress as well as pest management and pesticide resistance. Advanced registration is required. People may call 800-472-7878 for more information.

#### GA. SETS FIELD DAY, TURF CONFERENCE

GRIFFIN, Ga. - Two Georgia turf events have been scheduled. Georgia's Turfgrass Field Day has been set for Aug. 27 here. It will feature tours of the research plots, discussions of turfgrass breeding and research and an exhibit area of turf equipment. Meanwhile, the Georgia Turfgrass Association's 28th annual Turfgrass Conference and Show will be held Dec. 9-11, emphasizing sports and commercial turf management, golf turf issues, turf breeding, landscape and ornamentals. For information, people should contact Douglas Moody at 770-975-4123.

# Talkin' Trash

Keeping control of golf course trash in a clean and efficient manner, is accomplished with this ramp up to a trash bin.

By TERRY BUCHEN

LAS VEGAS - One of the best ways to handle golf course maintenance trash is demonstrated at the new TPC at The Canyons here. The maintenance complex, guided by Kim Byran Wood, features a ramp as the key to collection.

Key to the system is an 8inch-thick concrete ramp,

Quick and easy clean-up at Canyons with surrounding walls that

are 12 inches thick - all with reinforcing rods (rebar), Wood said.

An overhead, colored decorative wall, which shields the employees' parking lot view of the trash re-Continued on page 18

## Inroads in 'biologicals' research, Nelson reports

Dr. Eric Nelson has been an associate professor of plant pathology at Cornell University in Ithaca, N.Y. since 1993. He has done extensive work with biological controls to fight turfgrass diseases and his work has been extensively published.

He holds master's and doctorate degrees in plant pathology from Ohio State University.



Golf Course News: What type of work are you doing on biological controls?

Eric Nelson: We have two approaches. The first is the addition of organic amendments that provide a food source for beneficial microorganisms. The amendments enhance the microorganisms' activity and control pathogens. We've replaced peat moss with compost in top dressing and seen up to 90 percent disease control with the compost amendment. Most of the control has been in foliar pathogens such as dollar spot, brown patch and

gray snow mold. We've also seen control of pythium root

#### See related story, page 1

rot, which is interesting because it isn't a foliar problem. We've tried all types of composts: animal manure, yard waste, industrial sludges. Poultry manures and some sludges have worked very well. Brewery sludges have been very effective, having a sustainable supply with predictable results.

The second approach is specialized microbial innoculants. That involves spraying bacteria, fungi or actinomycetes (bacteria that grow like fungus) on turf to control disease. We've Continued on page 16



The Massachusetts Audubon Society

## **Carlson walking the talk**

#### Continued from page 13

mation project and Carlson acknowledges the spotlight will continue to be on him and his course. He and Terry Bastion of the ecological design firm Waterflowers in North Reading are already monitoring all sorts of environmental data on this course; and local bird watchers are often on the property at 5 a.m.

"The day we got the job and saw the site, I knew it was a rare opportunity," Carlson said. "You don't get a lot of opportunities in your life, and one of them is to have a great site to work with ... I like to do selective clearing, and the site lends itself to interesting decisions: save this, move that. I thought it presented a lot of challenges that fit in with where I felt I was going personally.

"I had construction and growin experience, and I like to experiment. It fit, in that sense," he added. "I don't know where it will go. But it certainly received a lot more attention than I had thought."

The attention is not only because the land is close by the Atlantic Ocean, but also town officials consented with course architect Michael Hurdzan to experiment with the greens construction. Six greens were built to U.S. Golf Association specifications, six by the all-sand California Method and six with soil. Some of the root-zone mixes included Profile and other amendments. And all the greens were built so that Bastion could gauge chemicals from run-off and leaching.

"We've already put together a spreadsheet and will enter information like water use, fertilization and pesticide application," Carlson said. "We also do visual observations about how the turf is responding to traffic, etc. By the end of the year we will have a chart covering Year One and grow-in.

"Will we be able to draw conclusions? Certainly on water use. It looks like it will be a lot less. But I want to put a hard number on these percentages. I think they will catch a lot of people by surprise."

While Carlson said installing the variety of greens was "an attempt for a search for pure knowledge" for the golf industry, many of the conclusions from the findings will have to be tempered. "For instance, these soil greens look good but it's very high sand content and so soil, even in another part of Massachusetts, might be unacceptable.

"It will be interesting to see how California greens fare versus USGA greens. Anybody building a golf course on Long Island, Cape Cod, the coast of Massachusetts, any of these sandy areas ought to have their soil tested and give serious thought to using native soil. We may be able to give them an answer in a year or two about how good that really is."

Meanwhile, soil amendments, for one thing, are proving their worth, he said. "They make the texture of the soil much softer and, if they don't compact as

#### much, that's good."

This is all a long way from where a young Jeff Carlson thought he was headed when he earned a bachelor's degree in English literature, with a concentration on Shakespeare from Drew University in Madison, N.J. The Connecticut high schooler had played golf and worked summers on a course on Cape Cod, but a career in the field wasn't on his mind.

MAINTENANCE

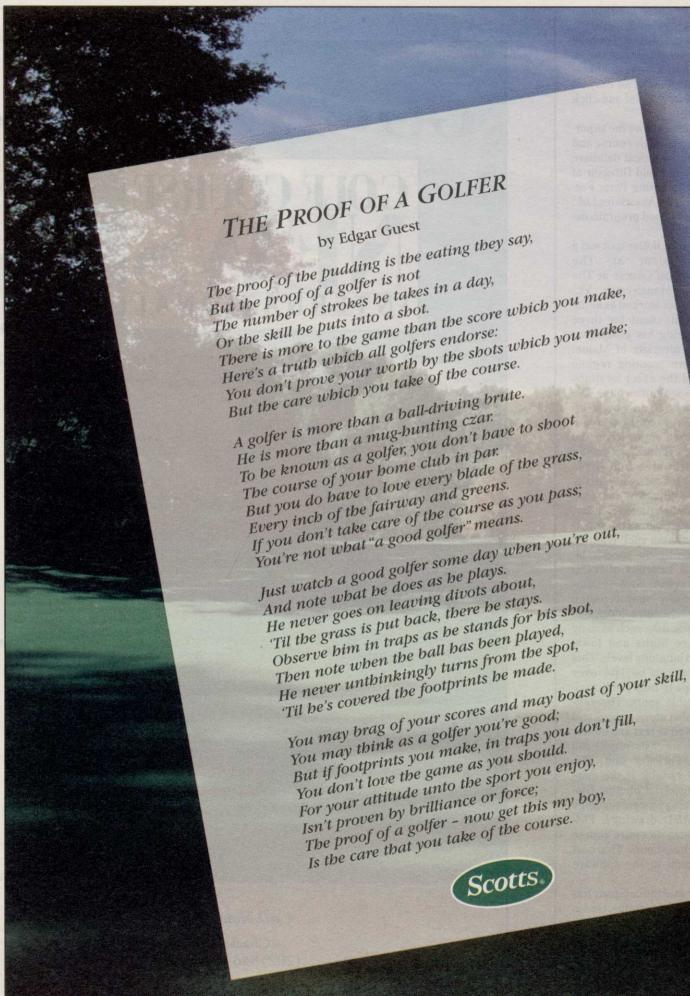
Nevertheless, he stayed on at

the nine-hole Brewster Golf Course, was promoted to assistant a year afterwards, and head superintendent five years later.

"I was eager and cheap," he recalled. His rise up the ladder came when he obtained an associate's degree in turfgrass management from the University of Massachusetts' Stockbridge School and got a job with Corcoran Jennison Hospitality in 1985 during construction of Ocean Edge in Brewster. "It was a great opportunity," he said.

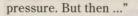
He earned his certified golf course superintendent status and when Scituate hired Corcoran Jennison to operate Widow's Walk, Carlson was given the opportunity many of his colleagues would have relished.

"There are things I'm anxious about," he said. "But, the task in general, no. I'm really looking Continued on next page





forward to it. In a situation like this you're able to try different things. Sometimes, in the world of golf course superintending there is so much pressure to have an 'Augusta National' green that the world gets flat in terms of trying new ideas. So this is a great forum for new ideas. In that sense, there isn't so much



But then comes the realization that this course does not just have a green or two that are troublesome and must be treated differently; it has "so many things going on from green to green that they are very different," he said. "They mow differently. Their water use and response to fertilizer is different. There is a lot to take into account. With such a simple thing as cup-chang-



ing you have to carry around three different buckets because you've got soil for one bucket, 100-percent sand for another and USGA for another ... Those kinds of things you never even think are going to happen, do happen."

One concern facing Carlson is managing carts on the creeping fescue fairways. "The fescue is tolerant of drought as long as you're not driving carts or walking over it," he said. "It responds in the same way as if you were to drive over it when there is frost on the ground; it gets burnt. I've been spending a lot of time trying to manage the entrance and exit areas on the fairways. If there is a sprinkler nearby I make sure there is enough coverage to keep it from drying out. I'm upgrading nozzle sizes on those heads. If I don't have a choice, then I'm trying to direct carts in one direction and lose that one area rather than a whole general area."

Also, Carlson is experimenting with his G-1 greens.

"I can't believe how little water these greens use," he said. "This course is on 100-percent sand base and a lot of these greens are sand greens. I'm watering less than 50 percent of what I would normally use on a green."

Being as dense as it is and with excellent recovery and disease resistance, G-1 might be a good grass to combat *poa annua*, he said. "With this low-water regimen, *poa* couldn't get in," he added.

Meanwhile, the water source for the course is an old town water well abandoned because its levels of calcium, magnesium and sodium went beyond the acceptable drinking-water standards. They were fine, however, for turfgrass, and are constantly monitored to detect any salt-water intrusion.

...

Working with conservationists, Carlson said, has been an education. One aspect of that education is clearing the land.

"There's a lot of plant material you can't just cut down," he said. "You're picking around and leaving bayberry and mowing down some fescues rather than removing them. Because it was an abandoned gravel mine, you can't get through some rough areas. It's all weedwhacker and bush rotary stuff and there are rocks everywhere.

"I don't think you'll ever see this course cleared to the extent of others. And that's one of the things Audubon wants: areas uninhabitable by a human."

Carlson is continuing to place bluebird and purple martin boxes and monitoring the species migrating through this site, which is in a migratory pattern.

Does all this work mean more manpower on his maintenance staff?

"Right now it stacks up about the same," Carlson said. "It's perhaps one person more than my other places. But I wouldn't consider it more than 5 percent more labor-intensive. For instance, these greens are so drought-tolerant that you don't spend time syringing. But, we are hand-mowing them and that's more labor-intensive."

All this environmental work, he said, "feels right."

"It feels right doing this stuff with the Audubon and reclaiming this ugly site and seeing the positive reaction from townspeople," he said. "You feel you really are improving something forever."

And what does the future hold in store for this Shakespearean student-turned-superintendent?

"I'd like to do more courses like this," Carlson said. "I'd love an opportunity to do it again on a similar type of site: coastal. It would be interesting."



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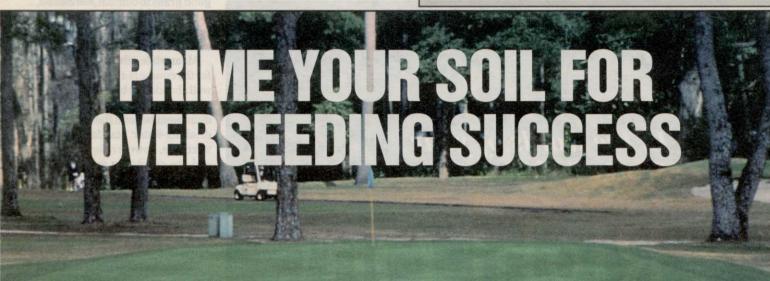
### Correspondence courses developed

Two turfgrass management correspondence courses have been developed by Dr. Keith Karnok of the University of Georgia's (UGA) Crop and Soil Sciences Department.

One course is patterned after the intermediate turfgrass management course taught by Karnok. The other, Principles of Turfgrass Management, was developed in cooperation between UGA's Continuing Education and the Professional Lawn Care Association of America. The Golf Course Superintendents Association of America has reviewed both courses and will award three CEUs toward recertification for each course completed. More information is available from calling 800-325-2090 or 706-542-1756.

#### IGM OPENS REGIONAL OFFICES

LAKELAND, Fla. — To improve the level of service to its southwest and central Florida golf course clients, International Golf Management, Inc. (IGM) has opened a pair of regional offices in Ft. Myers and Tavares. "Our regional offices will enable us to provide existing clients with a higher level of service and will be an asset in securing new business in the rapidly developing southwest and central Florida markets which we view as tremendous growth areas for our business," said Scott Zakany, vice president and general manager. Located at 1419 Courtney Dr., the Ft. Myers office houses John Carlin, Southwest Florida regional manager. The Tavares office, located at 1617 East Alfred St., houses Jim Wells, Central Florida regional manager.



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#### 'Carpet-wall' bunkers built Continued from page 13

can't replace any other way. The problem is maintenance. They have to be replaced every three to five years. You can't get anybody in North America to do it. I'm sure that, early on, sodwall bunkers were common here because of the Scottish influence. But at some point they died out, probably because of maintenance factors."

After experimenting with 6foot and then 3-foot lengths of carpet, Carlson settled on short pieces, which can be built into "a little curvy wall kind of like a brick wall."

The carpet is flexible and can be turned a bit like sod for rounded bunker faces, he said.

Between each layer of carpet Carlson's crews spread 1/4 to 1/ 2 inch of soil and then seeded it. "We wanted the grass to grow and fill in. The seed buries its roots into the next carpet and gives it some structure."

Carlson recommended carpet that is not quite deep-pile shag, because it has to have body. Earth-tone colors like brown, beige and green are good, he

It's labor-intensive to build, but it is to build a stackwall bunker, too. And these will never have to be rebuilt.' Jeff Carlson

said, because it tends more quickly to look like dirt quicker.

"Superintendents, given this idea, will fine-tune it and make it even better," he said. "It's laborintensive to build, but it is to build a stackwall bunker, too. And these will never have to be rebuilt."

Meanwhile, a local carpet installer gleefully dropped off his carpet remnants for Carlson initially. "Now I'm getting carpet from everywhere."

Hurdzan acknowledged that he for years had searched for ways to build cost-effective sodwall bunkers.

"I've tried all sorts of things to built them: zoysia, old grass, young grass, stuff with a lot of thatch, painting the sod with lacquer so it wouldn't decay, things to try to slow down the decay of bacterium," he said. "But I concluded that organic matter decays, and so I've tried to come up with an inorganic source.

"I thought the conveyor belt might be the way to go, but it's hard to find and really might not have quite that look. I thought of old fire hose. Then I saw this carpet, and I thought there is carpet everywhere and it will last forever. I'd love to use it in future courses."