

### **BRIEFS**



#### SOD BUYING NUMBERS UP

A recent Gallup poll revealed that at least 4.9 million households in the United States anticipate buying turfgrass sod this year. That is a 36percent 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.

#### ..... JACOBSEN KEYNOTING FOR GCSAA

ANAHEIM, Calif. - PGA Tour veteran Peter Jacobsen will keynote the Opening Session, Feb. 4, of the 69th



International Golf Course Conference and Show here. The annual event, sponsored by the Golf Course Superintendents Association of America, will be held Feb. 2-8. Au-

thor of the book, "Buried Lies: True Tales and Tall Stories from the PGA Tour," Jacobsen has won six Tour events, participated on the 1985 and 1995 U.S. Ryder Cup teams and was player director on the Tour policy board from 1983-85. He owns a golf course design company.

### ...... 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.

# 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" 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.

The Massachusetts Audubon Society and Scituate Conservation Commission have been heavily involved in this recla-

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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

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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

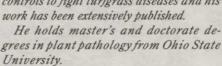
with surrounding walls that are 12 inches thick - all with reinforcing rods (rebar), Wood said.

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

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## 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





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

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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 re-

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

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## Q&A: Nelson spells out progress of research into biological controls

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targeted pythium and brown patch. The problem is that something can work well in the lab, but fail in the field. It's hard to maintain these materials at high enough populations on the golf course because of competition with other organisms and fluctuations in the environment. This summer we're studying the effects of weekly or bi-monthly applications, hoping that increasing the application frequency increases effectiveness. We're also comparing the difference in daytime and night-time applications. Since we know many innoculants are UV sensitive, nighttime applications could prove more effective.

GCN: What can you tell us about your USGA-funded research on the non-target effects of fungicides?

EN: We're in the second year of our three-year funding. The idea is to see if there is any decrease in [positive] microbial activity from using fungicides. In most cases, so far, we've seen that microbial activity has actually increased with fungicide applications. We think fungicides may serve as a food source for microorganisms. Fungicides could also cause subtle qualitative changes that inhibit some species of bacteria while encouraging others to increase. Fungicide treatments can be combined with biologicals in a meaningful way. That also means biologicals can be used to reduce fungicide applications.

GCN: Tell us about your work with seed treatments.

EN: Pythium is a major limiting factor in seedling establishment, especially for bentgrass. As a result, superintendents tend to seed bentgrass at heavy application rates. They could use more reasonable rates if we could protect the seeds from pythium. With higher seeding rates we also see increases in dollar spot.

We're testing both biological and chemical seed treatments along with different seeding rates. We're finding we can get thicker bentgrass stands at lower application rates.

We're in the midst of a threeyear study and hope to get USGA funding. Right now the New York Department of Agriculture's IPM program is providing funding.

It also appears that if you can keep pythium out of a new bentgrass stand early, you increase long-term control of pythium root rot, a common problem in the Northeast.

We're looking at other pathogens that slow seedling establishment, such as fusarium. No one's really looked at the effect that has on the roots of mature plants.

GCN: What other research do you have underway?

EN: We're looking at whether long-term compost applications to perennial ryegrass increases the turf's ability to suppress disease. We want to know what a suppressive community looks like.

GCN: Does the USGA do a good job allocating its research funds?

EN: Like anything, there could

always be improvements. But historically, the USGA has funded some great work. In the past, the USGA has felt the need to spread its funding around geographically. I'd prefer to see them prioritize the importance of the work being proposed, rather than worrying about spreading the money around the

country.

GCN: What do you see as the most exciting areas in the future?

EN: The whole biological arena is growing exponentially. Superintendents will be inundated with products over the next five to 10 years. New formulation and delivery technolo-

gies will make them as effective as chemicals. We're already starting to see 100-percent control with biologicals in areas with low disease pressure.

I have no idea about the economics involved. There are increased labor and fuel costs using biologicals. Courses will have to absorb those.

