**Great Expectations**

Turf meets business training in new curriculum at Kansas State University

**International Report**

Sri Lanka? Oman? Golf is booming in disparate places around the globe

**FOES NO LONGER: GAUNT & MARNOCCH LTD.**

Jonathan Gaunt (right) and Steve Marnoch, two of England’s youngest golf course architects, have decided to join forces. Their mission: To become bigger players in the global golf course design market. See Q&A page 45.

**COURSE MAINTENANCE**

Canada’s Meyer sets high goals

Prepping Royal Birkdale for the Open

Shop Talk: Using overhead space

**COURSE DEVELOPMENT**

Rulewich starts solo signature

Armchair architects eye Mackenzie Prize

Rees Jones, Redstone team in Texas

**COURSE MANAGEMENT**

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Club Corp. International’s Henner speaks out

**SUPPLIER BUSINESS**

Textron/Ransomes: The dust settles

It’s a greens roller roller coaster

Plant Health Care, Griffin align

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**Poa annua control finally within sight**

**By Mark Leslie**

SAN DIEGO — A control for annual bluegrass, or *poa annua*, has been the desire of the golf course industry for at least half a century. Now it appears one has arrived, and the bonus is that it is a natural bacteria.

"If this works as well as it appears, it’s huge [for the industry]. I’m excited," said Dr. Joe Vargas of Michigan State University about the bacteria *Xanthomonas campestris*. "When I got into this business in the 1950s we were talking about how to get rid of *poa annua*. Here we are, 40 years later, talking about how to get rid of *poa*. And the market is almost nationwide."

Acutely selective, *Xanthomonas campestris* kills only *poa annua*, not

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**Purdue embarks on 5-year course research project**

**By Mark Leslie**

WEST LAFAYETTE, Ind. — With the help of course architect Pete Dye, multiple donors and a group of students who built it, Purdue University on June 27 will open a golf course that will produce a major five-year study on the effects of golf maintenance on ground and surface water.

Pointing out that environmentalists criticize past corporate-funded studies as biased, Dye said: "What Purdue produces should be the most unbiased report, simply because there is no reason to be biased. Good or bad, no one can argue

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**Greece: Will 30 courses in 3 years be possible?**

**By Trevor Ledger**

ATHENS, Greece — The Greek Government has made a startling commitment to golf course development with its stated intention of having 30 new golf courses built in its beautiful country over the next three years.

As the rest of Europe (on the whole) leaped into the golf course stratosphere — 43.9 percent increase in courses since 1990 — Greece has bucked the trend by actually losing one of its five courses and leaving the country with only four.

This looks all set to change.

The Hellenic Tourism Office (EOT) hosted a meeting at Wentworth last July for golf course architects, holiday companies and tourism specialists in order to out-
Unbiased research the key at Purdue

Continued from page 1 the findings."

All the money to build the new Kampen Golf Course and fund the research came from private sources, not golf associations or the chemical industry. "I was very much concerned that it not be company funds," Dye said. "We did this with Clemson University at the Ocean Course at Kiawah [in South Carolina], but Kiawah was already a pristine piece of ground, so how were we going to clean it up?

"Plus, a lot of the money for the monitoring [at Kiawah] came from the USGA, PGA, PGA Tour and chemical companies. That was a mistake."

Also, Purdue's study will be three years longer than Clemson's. And Dye feels it may extend beyond that since "all the heads of the different university schools are starting to get enthusiastic."

Another, major advantage the Purdue study will have over Kiawah, Dye said, is that it is cleaning up water pouring onto the course from "all over Hell's half-acre" — a four-lane highway, parking lots, housing, filling stations, etc.

Piping was installed to catch the water and move it into three sets of wetlands to be filtered. From there, the water goes into a retaining pond which, when filled, empties into an irrigation pond.

"We created 30 acres of marsh," Dye said. "We are improving the water that comes from the streets."

The Heritage Group of Indianapolis, one of the largest toxic-waste cleanup companies in the country, is donating its services and Purdue students and faculty are performing the water monitoring.

Dr. Zac Reicher, who is overseeing the water monitoring, said this and two related tests could have major implications for future construction of developments around the country.

Noting similar studies set up to measure runoff from a nearby Walmart parking lot and at a dairy farm, he said, "We think we will be able to use golf courses and created wetlands to handle runoff from subdivisions, commercial sites and agriculture."

Tests on Kampen Golf Course will be taken immediately off the highway, at the far end of the fairway over which the runoff will travel, and at the outlet of the bog. Beyond the pesticides and fertilizers used on the golf course, tests will look for a wide range of materials such as road salt, anti-freeze, petroleum-based products, household chemicals and even raw sewage.

"Honestly," Reicher said, "after that stuff goes through the wetland, I don't think we will see much coming out. The turf and bog will filter it out."

He said he expects early indications by October, the end of this growing season.

Meanwhile, golf course superintendent Jim Scott is eager to see results from a number of other studies on the golf course.

"We have a lot of things in the fire," he said. "I welcome any department in the university to use these courses. Let's get it back into research for the kids. Let's learn."

 Already, people are involved from Purdue's entomology, botany, plant pathology, forestry, turfgrass, agronomy and building construction departments.

Among the work are: • a cultivar trial site for the U.S. Golf Association (Purdue is one of 16 facilities across the country testing bentgrasses and Bermudagrasses on putting greens); • turfgrass disease trials; • turfgrass insect trials; • a half-dozen trials on how to best plant bare-rooted trees; • a bentgrass establishment trial; • monitoring of amphibians in the wetlands; and • a study documenting how a wetland matures, how the plant and animal populations change and how they affect the filtering potential.

Continued on next page

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Don't cut overhead, add it

By TERRY BUCHEN

WILLIAMSBURG, Va. — The ceiling has suddenly become a new frontier of usable space in golf course turf-care centers. It perhaps began with overhead electric/hydraulic hoists, which are capable of lifting a 9,000-pound maintenance vehicle high enough for an equipment technician to clearly walk underneath, are being used at more and more maintenance shops.

Aiming for more efficiency, many superintendents and equipment managers have put their heads together using time-motion studies to avoid wasted time.

Among new "overhead" additions are:
• drop-cord electric lights mounted on a retractable, spring-loaded hose-type reel; it is easily accessible and can be retracted upwards when a job is complete;
• retractable air hoses, pneumatic grease guns, electric extension cords and oil dispensers mounted overhead in convenient hose-type reels, which are reasonably priced and built reasonably well.

These types of accessory are often found in the 10-minute quick oil change facilities that have become popular. And with good reason. Mounting them overhead does wonders for finding much-needed space and using it properly, at the same time making room on the walls and floors for other shop tools and implements.
In the meantime, Purdue and the community are getting a big-league golf course, according to Dye. The school had two 18-hole courses, the North and the South — the South Course being "a nice old course" but the North sitting unplayed.

The North was completely torn down, 50 acres was added to it, the Forestry Department planted 6,800 trees, and the result is a track worthy of intercollegiate events, according to Dye.

"It's as strong as rope," he said of Kampen. "It's on a great piece of land and it's one of the very best I've ever built."

And the students get a lot of the credit.

"Those kids had a tremendous input," Dye said. "They were following right behind me. Kids who had never been on a golf course, half of them. Boy, they worked. They didn't know the difference between Tuesday afternoon and Sunday morning."

"I've always built everything I've done," he added. "When I saw all those kids I thought maybe I had bitten off more than I could chew. But they did well. They ran the equipment, the trenchers and put in the greens. They did 80 percent of the work."

Working from April to September, turfgrass and agriculture majors were joined by computer and law students. "It was first-come, first-hired," said Scott.

"From the first shovel turned to last seed dropped, we've done it all," said Scott of his crew and the students.

"It was a nice situation for the kids to combine book knowledge with practical knowledge. Building a golf course by hand was worth at least five years of book work: to learn how to build a green, a tee, to shape a fairway, to run dozers, scrapers, backhoes. The kids learned it all."

With Dye's one-dollar design fee, three major individual donations, the students' labor, and a number of big-ticket gifts-in-kind from various businesses and contractors, the university realized $8.5 million, Scott said. "We used no state or university moneys," he added.

And if the school can persuade area companies to rent the course for 15 days a year, they should be able to keep green fees to $15 for students and $25 for faculty.

While this work was going on at Kampen, irrigation was installed on the old South Course, now renamed Ackerman Hills, which Dye said is an excellent track. And another 10 acres were added to the old practice area, stretching it to encompass an area 600 by 1,200 feet.

The entire facility has been re-named Birck Boilermaker Golf Complex in honor of donors Mike and Kay Birck of Chicago. The Kampen course was named in memory of the late Emerson Kampen, whose family donated to the project; and Ackerman Hills is named in honor of Jim and Lois Ackerman, donors who also own Prairie View Golf Course.

Dye said his overtures to help Purdue were spurred on by anti-golf comments by radio broadcaster Paul Harvey.

The golf course industry, long at odds with Harvey and his comments claiming it harms wildlife and people, will have the final say in the environmental debate, Dye feels. "He just got me stinking mad, claiming everybody is dying from cancer on golf courses."

Beyond that, "It was really fun," Dye said. "It makes you have faith in life. Things will keep on going."

Purdue University superintendent Jim Scott, left, and course architect Pete Dye.

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