



## BRIEFS

### MANGUM ADDS GREENKEEPING RESOURCE TO WEB SITE

GREENSBORO, N.C. — Writer and golf instructor Geoff Mangum has added a Greenkeeping resource page to The Putting Zone Web site, <http://puttingzone.com/gk.html>. The electronic library of articles available on the database covers everything from golf course construction and irrigation to turfgrass maintenance and seasonal course conditions. A resource section of the page also provides links to organizations, universities, journals and weather information.



### ENVIRONMENTAL GOLF GAINS SEVENTH NORTHEAST CONTRACT

CALABASAS, Calif. — Environmental Golf has signed a multi-year partnership with the private Glenwood Country Club in Old Bridge, N.J. The agreement provides the outsourcing company with seven golf courses in its Northeast portfolio and brings the company's total to 39 contracts nationwide. The 18-hole Glenwood facility was designed by Hal Purdy in 1969. Situated in central New Jersey, the course features bluegrass and ryegrass tees, fairways and roughs and bentgrass greens.

### WIENECKE JOINS GREEN SECTION

SANTA ANA, Calif. — Agronomist David Wienecke has joined the USGA Green Section staff here at the Southwest Region office. Replacing Mike Huck, who left in June, Wienecke will be responsible for making turf advisory service visits throughout Arizona, California, Utah, Colorado and Nevada. Wienecke has a M.S. degree in Horticulture from Oregon State University, specializing in turfgrass science. He first started in the golf industry as an irrigation technician before taking on assistant superintendent and superintendent positions. His most recent work involved consulting golf courses in Integrated Pest Management and certification in the Audubon Cooperative Sanctuary Program while working as an assistant superintendent at Oswego Lake Country Club in Lake Oswego, Ore.

## Superintendents innovate to save time and money on course

By JOEL JOYNER

DULUTH, Ga. — Faced with smaller budgets and staffs and managing increased workloads with fewer resources, golf course superintendents are turning to innovative ideas to survive economic fallout. Superintendents Mark Hoban and Sam Orozco know that saving time and money in a golf course maintenance program helps to create a more efficient operation and could potentially save jobs.

### HOBAN MODIFIES GOLF CARS

At the Standard Club in Duluth, Ga., Hoban has modified used electric golf cars into utility vehicles.

"We have electric golf cars that we've converted to utility vehicles," he said. "We build a deck on the back of them so that all our greensmowers are easily loaded on and off. We can get a fleet of six used electric cars and convert them for the price of one new utility vehicle."

The club trades in golf cars every three years, then Hoban buys the used cars back for \$1,500 to \$1,700 and converts them versus buying a new gas powered utility vehicle for \$9,000 to \$12,000. Hoban keeps the converted golf cars for three years before he trades them in for another set of used cars.

"I've found that golf cars will last for six to seven years before any major maintenance repairs are required," explained Hoban. "After that time you begin running into problems like worn out bearings. So we trade them out before any real maintenance problems develop."

### EFFICIENT OPERATION

The electric cars are able to handle the load and help to make a more efficient operation. "The cars are already loaded with the mowers each morning and the

crew is out on the course within minutes. It's easier than finding a utility vehicle, getting a trailer to hook up to it, and arguing about who has what," said Hoban.

The cars are only stopping at four or five greens at a time so there isn't any wear and tear before they are headed back to the shop and recharged for the next day, according to Hoban. "It's a big savings with small benefits included," he said. "There's a windshield so that the operator doesn't get a cold wind in the face during the winter and a place for coffee. We really load the cars up."

"There's a place for a whipping pole and backpack blower," he continued. "There's a map for which greens an operator is supposed to do. Each car is assigned so that the same mower goes to the same holes every day. So if there's a problem with the equipment, we know which operator was on-hand running it on a given day."

Hoban has reduced his fleet to 21 vehicles, including the six electric cars with mowers on them, as well as decreased maintenance required to keep the gas powered vehicles operating. "The constant stops and starts with the gas powered vehicles left us with several repair problems in the long run," he explained.

Hoban learned of the idea when one of his assistants saw it done at the Athens (Ga.) Country Club. "We discussed it for a few years, then I sent my mechanic, Herb Zeihm, to the club to check it out," said Hoban. "We ended up using a modified version to meet our own needs."

### OROZCO FINISHES FACILITY

Superintendent Sam Orozco, at the Palo Duro Creek Golf Club in Nogales, Ariz., took on the role of general contractor after finances started drying up during

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## New construction and management techniques needed for approach areas

By KEVIN ROSS

While greens, tees and bunkers receive the bulk of construction and maintenance dollars, green approach areas are beginning to become an equally important playing surface.

There is no debate that the most important area on a golf course is the green surface. During a round of golf, anywhere from 35 to 50 percent of the strokes played per golfer are on the green surface.

When it comes to construction, greens are the most complex of areas to build behind tees and bunkers. In maintenance costs, tees are

second only to greens in per unit area of expense. But should teeing areas be considered that important?

While 18 shots during a round are played from tees, none of those shots land or react off those surfaces. You never hear golfers complaining, "I can't get any roll on these tees." Tees are the only area of the golf course not receiving golf shots.

### APPROACHES AND PLAYABILITY

Many architects, builders and superintendents are beginning to rank approach areas above tees. Why? Because the approach area is highly

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Approach renovation with sand rootzone, extensive drainage, and independent irrigation may become the standard.

## Sod producers explore pest-free alternatives

By Douglas H. Fender

ROLLING MEADOWS, Ill. — In the ongoing war against insect pests, fungal diseases and other threats to turf health, many turfgrass sod producers are exploring nontraditional treatment options to promote vigorous, pest-free crops, according to members of Turfgrass Producers International (TPI).

In their continuous effort to pro-



Two images of St. Augustinegrass, grown under the same conditions with gray leaf spot, show improvements (left) where the turf was amended with silica.

vide those who buy and maintain turfgrass sod with the highest-quality product possible, turf growers and researchers are testing a variety of inexpensive alternative treatments, including mineral, herbal and live biological products.

While these alternatives don't replace effective traditional pesticides, turf industry professionals are starting to recognize the value of such materials, reporting important

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## Maple Leaf Golf Club achieves certification

PORT CHARLOTTE, Fla. — The Maple Leaf Golf Club, maintained by International Golf Maintenance, has achieved certification in the Audubon Cooperative Sanctuary Program (ACSP).

Located here along the west coast of Florida, between Sarasota and Fort Myers, the Maple Leaf facility joined the program in July of 1998 and now has become the 53rd golf course in Florida and the 340th course in the world to reach the challenging designation.

"We preformed a bird inventory, completed water quality testing and built bird houses throughout the property," said superintendent Aaron Warstler. "We also mapped natural habitat and chemical usage areas."

Water comes into play on almost every hole. "My team went all out to achieve this designation," Warstler said. "In the process, we discovered that our course is home to hawks, eagles, ospreys, great

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## MAINTENANCE

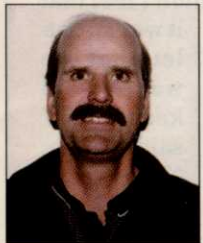
### Ross approaches

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involved in the playability of the hole, so how the ball reacts off this surface is critical. As the USGA green became the standard method of construction, along came firmer green surfaces. With firmer green surfaces, golfers have been forced to play the ball into the approach area and bounce/roll the ball onto the green surface.

In recent years, many golf course superintendents have adopted green-style management programs on approaches, such as: walk mowing, aerifying and topdressing.

This shift of green style programs to approaches has produced excellent turfgrass conditions. However, this maintenance cannot guarantee excellent playability. The biggest factors contributing to this are the growing medium, drainage, and irrigation. Generally, approach areas are constructed with typical topsoil medium, minimal if any drainage, and irrigation coverage from some other area (like fairways).



Kevin Ross

#### NEW CONSTRUCTION METHODS

The solution to this problem would be to consider approaches as the next modified area. Construction using USGA rootzone, independent irrigation set-up, and herringbone type drainage could offer extensive benefits. The foremost benefit of this construction would be the ability to control the moisture. This would solve the main complaint over a present softer/wetter area where ball reaction is minimal and unpredictable. From a playability standpoint, approaches that have

*'Not only would this offer great playability, but it would also offer the potential for growing very fine turfgrass.'*

— Kevin Ross

a high sand mix can offer the benefit of a firmer surface, unlike soil based approaches. Firm approach surfaces can offer the golfer the option of a bump-and-run shot with more predictability. Sand mix can also be graded much easier, thereby producing a very even and smooth contour. This smooth surface would then be able to offer a superior, tight cut.

While there are many different ways to achieve this, one construction method could be to construct an approach cavity six inches lower than final grade. Within the cavity, drainage could be installed dictated by the final grade contours using four-inch drainpipe and enveloped with peastone. A six-inch depth of rootzone and independent irrigation would complete the approach construction. Not only would this offer great playability, but would also offer the potential for growing very fine turfgrass. Since approaches make up an average of two acres on an 18-hole course, this method would not significantly add to construction costs. ■

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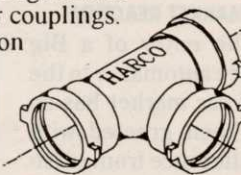
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