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.htlm. 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 everyday. 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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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 provide 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.

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

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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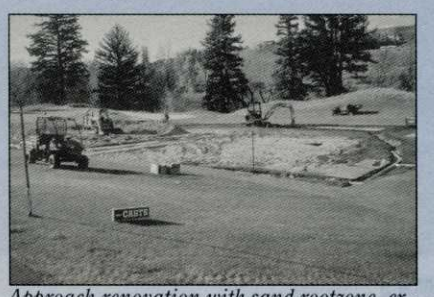
New construction and management techniques needed for approach areas

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.



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

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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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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TPI alternatives

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successes in the field.

BENEFITS OF MINERAL SILICA

For years, rice and sugarcane farmers have used water-soluble silica, a byproduct of phosphate fertilizer mining, to fight fungal disease and promote growth. Now its effects are also being studied on turfgrass, with funding from the International Turf Producers Foundation (ITPF).

Paul Grose, general manager of King Ranch Inc. in Belle Glade, Fla., has participated in the University of Florida's ITPF-supported silica/turfgrass trial studies for the past year and a half. While it's still too early to report definitive results, Grose said he has seen improvement in root system density.

"We used silica on our sugarcane for many years and had dramatic results," said Grose. "So when the University of Florida approached us about trying it with our turfgrass, we were interested."

According to Lawrence Datnoff, Ph.D., the University of Florida plant pathology professor who oversees the study, most soils contain considerable quantities of silica. However, overplanting can reduce the levels that are naturally available to plants. Datnoff has found that spraying turfgrass with soluble silica reduces incidents of Pyricularia grisea, or gray leaf spot. Other research has found it to be effective against pythium blight, dollar spot, brown patch disease and powdery mildew.

"Right now, traditional fungicides are considered the best method available for managing these diseases," said Datnoff. "But silica, as a complementary solution, potentially offers another disease management option for turfgrass producers and maintenance crews."

MINERAL, HERBAL AND LIVE BIOLOGICAL TREATMENTS

In addition to the silica studies, researchers are testing the effectiveness of sulfur, manganese, iron and other mineral products against pests and disease. Scientists also are studying the health benefits to turfgrass of herbal remedies such as salicylic acid and the bacteria Xanthomonas.

Live biological remedies like the bacteria pseudomonas have been shown to suppress a variety of turfgrass diseases. And beneficial nematodes (microscopic worms of the phylum Nematoda) are being used to parasitically control insect pests, such as grubs, mole crickets and caterpillars.

TIMING IS CRUCIAL

For the past three years, Myron Kuenzi of Kuenzi Turf & Nursery of Salem, Ore., has used a yeast starter containing the beneficial fungus Trichodermia to combat the fungal disease helminthosporium. Kuenzi says he has experienced "modest" success by spraying it on turf in the early stages of growth.

"The timing of the application is exceedingly important," he said. "You need to be aware of the life cycle that you're working with. If it's too early or too late, there's no benefit."

Most researchers and producers familiar with alternative treatments agree that timing is crucial, and that these products work best if applied preventively. And as is the case with traditional pesticides, these alternative remedies should never take the place of good maintenance practices.

"I always tell my customers, that's the most important part of disease management," Grose said. "Sod producers are doing all they can to deliver the healthiest product possible, but after the grass is installed, the customer can avoid most fungal problems by maintaining turf properly." ■

Douglas H. Fender is executive director of Turfgrass Producers International, a not-for-profit association of turfgrass sod and seed producers, equipment manufacturers and suppliers, and various individuals involved in education and/or research.