

BRIEFS



TURF RESOURCE LIT OFFERED

ROLLING MEADOWS, Ill. — The Turf Resource Center has released informational four-color brochures about turfgrass sod. Turf Installation Guide demonstrates a four-step process for quick turfgrass sod installation — from measuring and ordering sod to soil preparation and future maintenance. Self-Scoring Method: How To Establish a Lawn compares sod versus seed and hydroseeding, including a checklist to evaluate the importance of each factor and which method best suits specific needs. They are available by sending a self-addressed stamped envelope to the center at 1855-A Hicks Road, Rolling Meadows, Ill. 60008.

ARIZONA PESTICIDE USE SURVEYED

The pesticide coordinator's office at the University of Arizona, in cooperation with the Cactus and Pine Golf Course Superintendents Association of Arizona, is conducting a pesticide use survey on Arizona golf courses. The office is attempting to determine, from



these confidential surveys, such information as pesticide use patterns, management strategies and integrated pest management (IPM) practices. The survey was expected to be distributed in January.

HODGE TAKES CHARGE IN MAINE

PORTLAND, Maine — Jim Hodge of Val Halla Golf Course in Falmouth was elected president, heading a new slate of officers for the Maine Golf Course Superintendents Association, and declared his role will be "that of a communicator" within the organization. Hodge, who replaced Pat Lewis of Portland CC, is joined by Vice President Norm Hevey of Dutch Elm GC in Biddeford and Secretary/Treasurer Dave Child. John Laprey of York Golf & Tennis Club in Cape Neddick was elected to a three-year term to the board of directors. Saying he will be available to discuss concerns and answer questions, Hodge said: "I want to keep all members informed of what's going on in their association."

PA TOURNEYS RAISE \$19,000

The Pennsylvania Turfgrass Council grossed \$19,000 at two golf tournaments in October to benefit research, teaching and extension at Penn State University. Sewickley Heights Golf Club in the Pittsburgh area and Chester Valley Golf Club outside Philadelphia hosted the tournaments. Forty-six sponsors and 240 players took part.



A job that's never done

Mark Leslie photo

Terry Buchen, rear, checks out another new drain at Double Eagle.

Drainage, drainage, drainage...

By **MARK LESLIE**

If only superintendents were rice farmers. Then they could applaud rainstorms and not worry about drainage. Insufficient drainage is the plight of superintendents everywhere, whether their course is brand spanking new or was built with horse and scraper.

"There's never enough drainage," said Bob Mitchell, superintendent at The Greenbriar in White Sulphur Springs, W.Va. "We have installed miles and miles of drainage in my 21 years here and we still have not done enough."

"If you install five miles of drainage on a golf course, you're going to need another five miles of it over time," said Larry Rogers of Larry Rogers Design in Lakewood, Colo., who has installed irrigation systems in hundreds of golf facilities.

"By use, you find out more areas that need more drain-

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Supers to designers: Stop! Look! Listen!

By **PETER BLAIS**

Not only should architects strive to bring superintendents aboard as early as possible in the construction process, they need to listen to them once they are there.

Those were the overriding concerns of superintendents at courses opened in the past year. The superintendents were queried in a *Golf Course News* survey asking them to rate the job done by architects at their courses.

At Collier's Reserve in Naples, Fla., superintendent Tim Hiers worked closely with architects Art Hills and Mike Dasher on the course design and particularly the maintenance area.

"I believe they left here with a better understanding for what makes a well-designed maintenance complex than when they came in," said superintendent Tim Hiers.

"Most architects don't give a lot of thought to the need for a maintenance complex that maximizes human performance, is aesthetically pleasing and has the functional ability to service the golf course. It would help them to work closely with an experienced superintendent and listen to his input."

The same goes for the irrigation system, according to Brad

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A HISTORY

It's a golf world after all

By **JIM CONNOLLY**

There exist numerous historical accounts on the game of golf from every perspective and point of view. Authors of different persuasions write about "Golf And The Golf Club," "Golf And The Golf Ball," "Golf and the Rules," "Golf's Great Players," ad infinitum, each offering their opinions depending upon point of view.

This following account addresses golf and golf course turfgrass maintenance and how the condition of the putting green influences the game.

Changes in maintenance have influenced other areas of the golf course as well, not just putting greens. However, the putting green is the "heart" of the game and very sensitive to change.

Other developments that have had a profound effect upon the game include development of a more lively golf ball, steel shafts instead of hickory, graphite shafts instead of steel, better athletes (a debatable subject), and increased technology in the area of equipment, player training, etc. Discussions of such subjects are plentiful and often very spirited.

First in a series

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Breeders close to solving *Poa annua* puzzle

By **DAVID M. ROSE**

Poa annua, an invasive annual bluegrass, is a perennial headache for course managers in marine climates all over the world. Strategies for eradicating *Poa annua* exist, but they're labor-intensive and not always successful. Now researchers expect to provide superintendents with a new weapon in the battle against this invasive weed. Their solution? Better *Poa annua*.

"Our goal is to develop perennial *Poa annua* cultivars for golf course use," said Dr. Donald White, leader of the *Poa annua* breeding project at the University of Minnesota. White said perennial varieties may be available commercially by 1998.

"These perennial *Poas* will have improved color, texture, and vigor" when compared to naturalized varieties, White said, adding he hopes they will outperform bentgrass in areas where *Poa annua* thrives.



Mark Leslie photo

Cypress Point Golf Club, on California's Monterey Peninsula, has the perfect climate for *Poa annua*.

As the name suggests, most naturally occurring varieties of *Poa annua* have an annual life cycle, seeding heavily in the spring and dying off in the summer

months. Because of their heavy seed production, they infest weak spots on bentgrass greens and quickly take over.

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Every year, without fail, drainage should be added somewhere

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age," said course architect Jan Beljan of Fazio Golf Course Designers, Inc. in Jupiter, Fla. "It's like work around your house. You build a house and think you're all done. But you're not done, you're never done."

Maintenance equipment and golf cars can create ruts and "when you've created ruts you've created an impounding area," she said. "Then you have compaction and you have to add drainage."

Then there's the turf itself. "Once you get a good, established turf that people are playing on, it gets tight enough on top that water is hindered as far as its ability to go through the soil," Mitchell said. "So it is easy to see it laying on top in wet areas. The same half-inch of rain that last year went right through the ground, this year will stand on top for awhile before it soaks in."

"Everything is tied into water management, i.e. drainage," said

Terry Buchen, superintendent at Double Eagle Club in Galena, Ohio. "It's the most important thing we do. Grass must not be too wet or too dry. You can have a \$50 million irrigation system, but if you don't have drainage, it's not going to be right."

Then why not install enough drainage to begin with?

"Undoubtedly, when a course is built, architects will give some consideration to drainage," Mitchell said. "But when it

comes to nickels and dimes, something has to suffer. And, unfortunately, it's drainage."

Referring to Greenbriar's croquet courts, where he installed drainage tiles in 15-foot and 12-foot centers, Mitchell said: "But we don't do those things on tees and fairways. If you ask, 'Can we afford it?' you have to analyze what it costs you to have the course wet — how many times you have to reseed, how many ruts you make in the ground

when carts go over wet areas... "So I don't know that we can afford to put drainage on fairways on 12-, or 15-, or 20-foot centers like we do on greens. But certainly we can afford to do a lot more than is being done, and offset that cost by what we would otherwise pay in rectifying the problems."

A major factor in the problem of drainage is that nobody really knows what is happening beneath the surface of a golf course — or in your own backyard.

"We have no science where anyone can figure it out," said Jim Kirchdorfer, president of Irrigation Supply Co. and of the Golf Course Builders Association of America. "A lot of the time the original topographical maps for golf courses aren't correct... Plus, you're dealing with nature. You're changing the flow of water and where it pockets and settles, and you're putting grass on it... It might be different soils, irrigation patterns, water from a subdivision.

"You move soil and water bleeds out of a different area."

"Springs come up, plates shift," agreed Rogers. "Your soil structures are changing when you do massive dirt movement. Then you apply irrigation and you have the complexity of the soil makeup itself. You're going to have some change. It's not uncommon that you will ultimately double whatever the engineer has planned for drainage when the course is constructed..."

"Mountains are a whole new breed. You can easily triple it there."

Ultimately, said Mitchell, "No matter how much drainage you put in, you're still going to be short-sighted in some places. You could analyze the soil type, and couple that with the elevation changes, and by that someone who really knows drainage might be able to put a good system in a new golf course. It's possible. But I don't think it is being done."

Drainage tips

Continued from previous page and trace where your drains are."

- Find out where existing drainage is and if it is feasible to tie into the main lines. If elevation is such that water will not drain, the superintendent may have to run electricity out and install sump pumps.

- Install still wells, digging pits and filling them with gravel for the water to drain to.

- Add channel drains to areas compacted by vehicles entering and exiting cart paths.

- Use the oval-shaped ADS. Grass above a drain tile often turns brown because the soil drains so well. This pipe requires a narrower cut. Instead of a 6-inch trench, this elongated pipe requires only a 3- or 4-inch trench and therefore less grass to grow over it.

- Use lighter-weight equipment, which doesn't cause as much harm.

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