

BRIEFS



N.C. TURF SCHOLARSHIPS AWARDED

Seven North Carolina turf students have been awarded scholarships from the Turfgrass Council of North Carolina for the 1996-97 school year. Re-



ceiving scholarships totaling \$2,500 were North Carolina State University students Christopher

Connors and David Bradley. Peter Joe and Thomas Allen Riggan Jr. were chosen from Brunswick Community College. Henry Wayne Caddell, William Daniels III and Thomas David Minowicz were chosen from Catawba Valley Community College. They are all in the final year of their education.

UMASS SCHOOL TARGETS IPM

MARLBORO, Mass. — The University of Massachusetts Extension Service will conduct its Green School in January and February, providing training in horticulture fundamentals and their relationship to environmental quality. Integrated Pest Management will be the curriculum foundation. Classes will be conducted on various Tuesdays and Fridays at Royal Plaza Hotel & Trade Center. Students must apply by Dec. 1. Call Kathleen Carroll at 413-545-0895.

MID-AM 'ADVANCEMENT' SEMINAR

CHICAGO — The Mid-America Horticultural Trade Show will present a management seminar, "Habits for Enhancing Personal and Professional Effectiveness," Jan. 17, here at the Navy Pier. The seminar is aimed at executives, top- and middle-level management personnel, and key employees who may be moving toward positions of greater responsibility. The seminar registration fee is \$20. For more information, call 847-526-2010.

SUMMER JOBS TO BE LISTED

CARLISLE, Pa. — Ferrell's Jobs In Horticulture (FJIH), a twice-monthly newspaper, has announced a new service for employers who seek summer workers and job seekers looking for summer positions. Publisher Jack Ferrell said an insert will be included in the 2nd issue each month from December until April. It will list employers offering summer employment. For information, write Summer Employment Insert, 8 Terri Dr., Carlisle, Pa. 17013-9295; or call 1-800-428-2474.



Jack Ferrell

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MECHANICS' CORNER

Inform uninformed of winter chores

By GLENN PETERS

In the years that I have worked as a golf course equipment technician, people always ask me: "What do you do all winter?" This is the question I am asked most frequently, both by people who play the game and those who seem to think that there couldn't be very much to do once the temperature drops and the snow flies.

What follows is a brief synopsis of what happens at the Sunset Ridge Country Club maintenance facility during the winter months.

First and foremost, I prioritize what equipment will be worked on and in what order. Once this is done, the work begins with a visual inspection of each machine for obvious problems and, then, a thorough pressure washing is done. Hoods, fenders and body panels are removed to clear any accumulation of grass and dirt.

The most important aspect of our maintenance program, which affects

NEW COLUMN

This is the first of a new column, Mechanics' Corner, dealing with innovations in golf course equipment mechanical work. The following article appeared in the Sunset Ridge Country Club (Northbrook, Ill.) newsletter to inform members that the well-conditioned course they enjoyed during the summer was due, in large part, to the work done during the winter, according to Equipment Manager Glenn Peters.

both course playability and condition, is the sharpening of the cutting units.

All cutting units, from greens to rough, are sharpened during winter maintenance. Oil changes, lubrication, tune-ups and overhauls are performed at this time as well. As the maintenance on each piece of equipment is completed, it is inspected again and then waxed. Waxing of turf equip-

Continued on page 19



Some of the damage caused by vandals at Bretwood Golf Course in Keene, N.H.

Courses battle plague of vandals

By MARCIA PASSOS DUFFY

KEENE, N.H. — Early one morning this September at Bretwood Golf Course here, Thomas Barrett saw something that would cause any superintendent's heart to sink: scarred greens.

Joy riders had stolen golf cars during the night and had spun "doughnuts" on the 9th and 10th greens at Bretwood's 36-hole public golf course. One golf car was in the Ashuelot River; another had a broken axle.

"It was frustrating... We work so hard all year long to keep the greens looking good," said Barrett, who is part of the 30-year-old family-run business.

Two mornings later, the vandals were caught — red-handed — doing more damage. Keene police arrested five people, including two juvenile girls, on the golf course. But the damage they left behind totaled about \$1,800 to the golf cars and about \$7,000 to the greens.

Barrett's story is not unusual. Many golf club owners and superintendents have their courses vandalized at least once a season.

"Vandalism to golf courses has been around as long as golf courses have been around," said Bruce Williams, president of the Golf Course Superintendents Association of America and superintendent at Bob O'Link Golf Club, an 18-hole private club in Highland Park, Ill.

Like other superintendents, Williams, who has worked at Bob O'Link for 20 years, has his own horror stories to tell. "People have poured gasoline on greens and tried to light it on fire... They've driven cars on the course and knocked over trees. People steal flags and signs. Our halfway house was burned to the ground. Once our

Continued from page 26



SUPER — BY DESIGN

BRAINERD, Minn. — The Classic, an 18-hole championship golf course created at Madden's on Gull Lake in Brainerd, Minn., was designed by Madden's long-time superintendent Scott Hoffmann. See story, page 28.

Q & A Engelke: Continuing Texas A&M's pioneering character

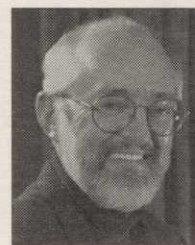
Golf Course News: Could you review your recent work with new strains of creeping bentgrass, both those that have been released and those we can expect to see in the future?

Milt Engelke: The Texas A&M bentgrass breeding program was initiated in 1985 with support from the United States Golf Association and Bentgrass Research, Inc. (Fort Worth), with the primary emphasis of targeting physiological mechanisms of heat tolerance and superior disease resistance within creeping bentgrasses.

Management practices center on the lack of heat tolerance, which is partly due to the lack of root persistence during stress periods. The root is obviously im-

Continued on page 18

Dr. Milt Engelke is project manager of the Turfgrass Breeding, Genetics and Management Program at Texas A&M University, where his major emphasis is developing turfgrass for the arid and semi-arid regions of the South and Southwest. He released Prairie buffalograss in 1989 (the first turf-type buffalograss), three strains of creeping bentgrass (Cato, Crenshaw and Mariner) and four strains of zoysiagrass (Palisades, Crowne, Cavalier and Diamond). Engelke earned his PhD in plant breeding from the University of Wisconsin/Madison in 1974 and received the Golf Course Superintendents Association of America Distinguished Service Award in 1994.



Dr. Milt Engelke

Q&E: Engelke

Continued from page 17

portant for maintaining an effective transpirational cooling system within the plant. Plants with strong roots are more competitive during stress periods and require less irrigation. Minimizing irrigation reduces disease incidence. Texas A&M's Dr. Phil Colbaugh is also identifying sources of resistance to pythium, rhizoctonia and dollar spot resistance.

Cato and Crenshaw creeping bentgrasses were the initial releases (1993) from the joint USGA/Bentgrass Research, Inc./Texas A&M program. The disease tolerance in both is more indirect. Left unchecked, they can be severely damaged. Fortunately, disease development is considerably slowed, allowing for a more pro-active rather than reactive management approach. Cato appears highly tolerant of dollar spot whereas Crenshaw appears susceptible to the problem.

Mariner creeping bentgrass was recently released (1996) and licensed to Pick Seed West. It is recognized for its superior salt tolerance. Mariner is a direct reselection from Seaside with substantial improvements in turf quality, heat tolerance and general overall performance and the salt tolerance of Seaside.

Future releases will target improvements in disease resistance while maintaining a concerted effort in physiological stress tolerance and turf-quality improvements. The Syn92 series features direct and indirect high-temperature tolerance, turfgrass quality, mowability, density of stand and persistence as well as resistance to Pythium and Rhizoctomia. Future varieties will include Imperial and Century from E.F. Burlingham, and Backspin by TMI/Scotts. The Syn96 series is in the field and under initial seed increase. New varieties are being developed specifically for dollar spot resistance, with continued improvements in growth, texture and genetic color.

We have been asked to improve density. Although important for a few elite golf courses, our objectives remain to develop grasses with lower maintenance along with better tolerance of poor water quality, temperature extremes and diseases.

GCN: Could you review your recent work with new strains of zoysiagrass, both those that have been released and those we can expect to see in the future? Why did Diamond rate so low in the 1995 NTEP trials?

ME: Zoysiagrasses are expensive, slow to recuperate and generally under-utilized. On the plus side, they have low water demands, minimal fertility requirements, few disease and/or insect problems, and superior cold hardiness. The goal has been to develop a turf which is faster to reproduce, recovers from injury,

withstands traffic, and competes under all conditions.

Recently released grasses range from extremely fine-textured, highly rhizomatous varieties such as Diamond, to a more coarse-textured, open grass such as Crowne and Palisades. Diamond has done poorly in NTEP trials, revealing certain biological features of the grass. First, Diamond generally lacks the winter hardiness to survive in

many areas where trials were conducted. Second, Diamond is the most diminutive of the four, and consequently has an optimum mowing height between 0.25-0.50 inches. NTEP trials are a beauty contest for performance at a 1.5-2.0-inch mowing heights. Diminutive types such as Diamond will do rather poorly at these heights. In contrast, Cavalier, Crowne and Palisades tolerate higher

cuts, have good winter hardiness and other strengths that test well in trials.

GCN: Universities and seed suppliers seem to be competing with one another to introduce new strains of grass seed. Is this healthy for the turf industry?

ME: In the late 1970s and early 1980s, the golf industry had a single bentgrass variety, the first turf-type tall fescue was just being released (1978) and turfgrass

managers had little choice when selecting grasses. The real question is how many different varieties can the market bear for a given species? How many bentgrasses are needed? One certainly wasn't enough. Are 30 too many? Probably, especially considering the size of the market. But the free enterprise system will likely reduce that number in the near future.

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PREEMERGENCE TURF HERBICIDES

Evaluating preemergence turf herbicides can be like comparing apples and oranges. True, all of them control weeds. (To some degree, at least.) But a closer look reveals big differences. When you consider all the products on the market, you'll find:

- A lot of them focus on low price.
- That's usually because they don't have much else to offer.

Mechanics' Corner: Educate the masses

Continued from page 17

program does not sound time-consuming, it is.

It takes me and four other men helping to complete the work in time for the upcoming golf season. So, as the 1996 golf season approaches, the membership at Sunset Ridge Country Club can be sure that the maintenance facility will be ready, even if the weather isn't.

Although this maintenance

program does not sound time-consuming, it is. It takes me and four other men helping to complete the work in time for the upcoming golf season. So, as the 1996 golf season approaches, the membership at Sunset Ridge Country Club can be sure that the maintenance facility will be ready, even if the weather isn't.

MALOY JOINS GREEN SECTION MID-CONTINENT REGION

Brian Maloy, the construction superintendent during a recent renovation of Great Southwest Golf Course in Grand Prairie, Texas, has joined the U.S. Golf Association Green Section as an agronomist. He will work with Mid-Continent Region Director Paul Vermeulen, who left an agronomist's post in the Western Region to succeed Jim Moore. Moore is director of the newly created Construction Education Program. A superintendent for 10 years, Maloy worked at Indian Creek Golf Course in Carillon, Texas, and Oakridge Country Club in Garland, Texas. He holds bachelor's degrees in agronomy and horticulture and a master's in horticulture from Iowa State University.

Q&A: Engelke

Continued from previous page

One problem is, we don't retire old varieties. We just add more. Competition is healthy and ultimately provides greater choice, a real plus for the consumer as long as the consumer is properly informed.

The USGA initiated Green Section Research in 1982 and began intensely funding breeding programs. With the exception of Penn State, little effort had been made in golf turf development. Efforts by the University of Arizona, University of Rhode Island and Washington State University yielded improved bentgrasses — SR1020, Providence and Putter, respectively. Most of the breeding effort in creeping bentgrass was an aside to the primary mission of their programs and consequently very little support was available for timely or rapid advancement.

GCN: Where can we expect to see the greatest advances in turfgrass research in the next 10 to 20 years?

ME: Biotechnology will play an even more important role in the development and advancement of new turfgrasses, although it will be somewhat hampered in the short term due to restrictions on the exchange of genes and germplasm resources. In the long term, we will be able to transfer desirable genes across plant species to accelerate the development process. The turf industry will likely face many challenges due to the self-interest of selected user groups. We have already seen major efforts to restrict turf use in many Southern cities because of the perception turf consumes too much water. Educational efforts are needed to promote turf as the "glue" that unites the environment and helps keep it intact.

GCN: Do the golf-related associations do a good job of allocating their research dollars?

ME: The USGA, GCSAA and similar organizations have funded research for decades, mostly in small grants to numerous individuals and institutions. Unfortunately, most of these dollars were only supplemental or generally of a minor nature, meaning a significant piece of research was seldom accomplished. With the advent of the USGA Green Section research effort, the number of grants were significantly reduced. However, the level of funding substantially increased, enabling serious research efforts be put forth in fewer but significant areas.

The initial emphasis targeted breeding (which requires a long-term effort with significant funding) along with understanding the physiological development and performance of grasses under stress conditions. The shift in attitude enabled the industry to substantially improve varieties and management strategies because funding was consolidated into significant and continually accountable grants.

S. DIMENSION®



Dimension® turf herbicide, on the other hand, gives you real value. Dimension offers premium performance, along with extra benefits that make your job easier. Here are a few reasons why Dimension stands out from the competition:

- Dimension provides unmatched crabgrass control.
- It controls crabgrass all season long—without breakthroughs.
- Dimension also handles goosegrass, oxalis and spurge.
- Fall applications help you manage unwanted *Poa annua*, as well as crabgrass and other weeds.
- Altogether, Dimension takes care of more than 20 tough weeds.
- Dimension works before or after crabgrass appears, extending your application window.
- It's *completely non-staining*—all you see is great-looking turf.
- You can stretch the long-lasting control of Dimension *even further* with split applications.
- Dimension works at low use rates.
- It's labeled for lawn care and golf course uses.
- Dimension offers the application flexibility of sprayable EC or granular fertilizer formulations.
- You can overseed just three months after application.
- And you can always count on exceptional turf safety.

To find out more about the benefits of Dimension, see your local Rohm and Haas distributor.



Weed control beyond compare.

ALWAYS READ AND FOLLOW LABEL DIRECTIONS FOR DIMENSION TURF HERBICIDE.



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