# MAINTENANCE

BRIEFS



## BORAX ON WARPATH

CINCINNATI, Ohio - Turfgrass as well as agronomic issues will be addressed at the annual meetings here of the American Society of Agronomy, Crop Science Society of America and Soil Science Society of America, Nov. 7-12. For instance, research out of Iowa State University shows that 20 Mule Team Borax is the weapon to use against ground ivy, known as creeping Charlie, the scourge of mature, shaded turfareas. The meetings will be held at the Cincinnati Convention Center. More information is available from the societies at 677 South Segoe Road, Madison, Wis. 53711; 608-273-8080.

# AGRISCIENCE, BIOTECHNOLOGY STUDIED

MADISON, Wis. - The U.S. Department of Education has awarded a \$456,780 grant to the National FFA Foundation to partially fund a study entitled Voluntary National Skills Standards



Agriscience/ Biotechnology. The 18month study, to be matched by the education, industrial and labor communities, will determine the skills employees will need in agriscience/ biotechnology occupations. The goal is to develop voluntary educational

for Com-

petency in

## ..... **TGIF LISTING ARCHITECTS**

standards in these fields which will lead

to a better-prepared workforce.

TGIF (Turfgrass Information File), the industry's largest single source of turfgrass information, has created a new listing containing members of the American Society of Golf Course Architects (ASGCA). Information from TGIF is available in hard copy or via a modem, and can be searched by author name, subject, etc. For additional information about TGIF, or the architects' directory, contact Nancy Donati, Medinah Country Club, Medinah Road, Medinah, Ill. 60157-9653; 708-773-1700, ext. 254, or Peter Cookingham.

# ...... **RECYCLING PESTICIDE CONTAINERS**

COLUMBUS, Ohio - Ohio State University instituted a pesticide container recycling program at its Turfgrass Research Field Day here Aug. 17. Superintendents could drop off their clean, empty pesticide containers, which Grower Service Co. will grind, granulating them for further processing. Eventually, they will be made into new containers or be put to other safe uses. The program was supported by OSU Extension, the Ohio Department of Agriculture and Ohio AgriBusiness Association.

# Are the season getting longer?

Superintendents in the transition zones say 'Yes

# By MARK LESLIE

laying seasons are getting longer in some areas of the countr causing turfgrass damage of which many superintendents are not even aware.

"We have no winters," superintendent Russell Bateman said matter-of-factly of the five Baltimore Municipal Golf Courses.

"On Thanksgiving weekend at the end of November if you have days anywhere near 50 degrees, this place is packed," said Bill Neus of the semi-private Hobbits Glen Golf Course in Baltimore, president of the Mid-Atlantic Association of Golf Course Superintendents. "When I got into this business, after Labor Day

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'Ten years ago we had 40,000 rounds a year. Now we're at 55,000.'

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- Bill Neus

play just died. That's not even part of the equation any more.

"Ten years ago we had 40,000 rounds a year. Now we're at 55,000. On a mild winter weekend day we'll do 150 to 200

rounds of golf. And public courses will do more.'

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Play has gradually gone deeper into the winter and started earlier in the spring. The resulting problems are many

"One major problem is that damage caused by winter play doesn't show until the heat stress of summer, and many superintendents don't associate it with using the course in the winter," said Jim Snow, national director of the U.S. Golf

Continued on page 18

# Stone gets personal Honors tests grasses in pursuit of the best

# By PETER BLAIS

OOLTEWAH, Tenn. - Under stressful conditions in southeastern Tennessee, many new bentgrass varieties far outperform Penncross, according to a Chattanooga-area superintendent conducting his own scientific field trials.

"You couldn't twist my arm far enough to make me seed a new course with Penncross," said David Stone, head superintendent at The Honors Course.

Stone's assertion is based on two years of rigorous testing at his own facility. Stone's studies, in fact, remind United States Golf Association agronomist Pat O'Brien of the days when course managers routinely maintained their own test nurseries. There they grew many vegetatively propogated varieties of bentgrass to determine which performed best in their specific locale.

That practice started to disappear in the late 1950s with the appearance of Penncross, the Green Section's Southeastern Region turf expert said. Released in 1955, Penncross soon became the preferred bentgrass seed for golf course greens.

"It's the leading creeping bentgrass in the world today," said Tee-2-Green President Bill Rose, whose company produces Penncross. "In some climates it's still the best."

With the abundance of new bentgrass varieties introduced in Continued on page 15



# Yount honored in Florida

The Florida Turfgrass Association (FTGA) has honored Executive Director Bob Yount, center, with its Wreath of Grass Award, given annually to a member who demonstrates commitment and hard work toward the association's goals. Charles Campbell of DowElanco Specialty Products presented the award, citing Yount's integrity and accomplishments over the years. The head of the FTGA since 1988, Young was chairman of the 1987 Nestle Invitational Golf Tournament, general chairman of the 1991 USGA Junior Amateur Championship, and the board of directors for the Butler Chain of Lakes Conservation Association from 1982-84. Yount is flanked by his wife Phyllis and son Bobby Jr.

# **USGA** reports on nationwide university research

Turfgrass safer than farmland, research studies confirm

## By MARK LESLIE

Major university studies around the country are verifying the belief that turfgrass is a vast improvement to agricultural land in pesticide and fertilizer leaching, and researchers are even comparing differences between grasses in runoff studies.

The U.S. Golf Association Green Section's newly released annual Environmental Research Summary notes these findings along with many others in its review of USGA-funded research projects. The booklet reports results after the second year of the three-year studies.

Objectives of the overall project are to understand the effect of turfgrass pest management and fertilization on water quality and the environment; evaluate valid alternative methods of pest control to be used in integrated turf management systems; and determine





# From staff reports

Ten years and \$5 million after it was undertaken, new and better grasses that survive on less water and lower maintenance have been developed through the Turfgrass Research Program initiated in 1982 by the U.S. Golf Association (USGA) Green Section and Golf Course Superintendents

Association of America. So the USGA Executive Committee has committed its support for another five years, according to Jim Snow, Green Section national director.

Some 40 research projects improved knowledge about wateruse rates of various turfgrasses and how these grasses react to moisture stress; introduced new grasses that use less water and pesticides; and forwarded understanding of maintenance practices. Snow said: "Through the efforts of the individual turfgrass

scientists and their support staff, many significant Continued on page 22



# MAINTENANCE

Honors Club searches out best cultivars

#### Continued from page 13

the past few years, O'Brien believes many superintendents would benefit from establishing their own test nurseries to see what performs best in their specific area.

Stone decided to develop a test nursery after the hot, wet summer of 1991 left his Penncross greens fighting for survival.

"They weren't performing up to their normal standards," Stone recalled. "The nursery green thinned out very badly. We thought this would be a good time to take a look at some of the new bentgrasses that were supposed to outperform Penncross."

Stone contacted a number of seed companies. They provided him with 27 different bentgrass varieties, which he planted in 3by-5-foot plots at the rate of one pound per square foot.

With the help of University of Tennessee Professor Tom Samples, Stone developed two test areas. One was in the shady (bentgrass' worst enemy) former nursery and the second in a more favorable sunny site.

To discover which varieties performed best under all conditions, Stone subjected both areas to extraordinary stresses, including daily 9/64-inch mowing, rolling and overwatering.

"I was always disappointed in university trials," Stone explained of the additional measures. "They do their best. But they just don't have the resources to mow every day or perform the maintenance practices golf courses do."

O'Brien agreed. The Green Section agronomist works out of the University of Georgia Experiment Station in Griffin, which is conducting bentgrass trials of its own.

"They just don't have the staff here to mow at that height every day," O'Brien said. "And none of the plots test for shade tolerance." Rose also criticized existing

seed trials.

"The National Turf Trials really aren't a fair evaluation," he said. "They should be better and I understand they will be this year. That's why we tested Pennlinks (another Tee-2-Green product) on actual golf courses."

Stone and Sample evaluated the samples for visual appearance and texture throughout 1992 and 1993. They paid particular attention to density measurements during the hottest months of July and August, when differences are most significant.

What surprised them most was Penncross' poor showing compared to newer grasses.

"So many varieties performed better that Penncross," Stone said. "It did so poorly, in fact, we wondered if the seed might have come from old fields. It didn't even do as well as the Penncross that is already on our greens."

Added O'Brien: "It's interesting to note that the Penncross on the course is doing very well. If you have an excellent superintendent, like Dave, who does a top-notch

job on his course, then existing Penncross greens are still very good. But when you put Penncross under daily stress like low cutting, rolling and shade — it doesn't perform as well as some of the newer varieties."

Rose said Penncross performs best on high-wear areas, like tees and landing areas. Pennlinks is better for greens and Penneagle for fairways, he added.

A variety called Crenshaw has been the top performer, Stone said. Lofts Seed Co. holds the

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# - David Stone

rights to Crenshaw, which was developed by Dr. Milt Engelke at Texas A & M University. "It's a fine-textured, dark-green grass that recovers fast and is extremely dense," Stone said.

"Dave told me to try to pick out the Crenshaw plots," O'Brien recalled. "I walked to them immediately. There were four plots and I was 4-for-4. It stood up extremely well to all stresses."

But there is no perfect grass. Even Crenshaw had weaknesses. "[Left untreated] It was one of the worst for dollar spot and had a lot of brown patch when we didn't treat it," Stone said. "But it always grew denser than the others if we sprayed it and knocked the disease out."

Other strong performers, Stone reported, were Johnson Seed Co.'s 18th Green ("It had no brown patch and excellent heat tolerance, but was the worst for dollar spot.") and Seed Research of Oregon's SR 10/20 ("It's similar to Crenshaw, but doesn't perform quite as well in the shade.").

Stone plans to maintain the test nurseries into the foreseeable future. He will use Round-Up to kill off some of the poorerperforming varieties and replant newer strains next spring.

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\*As reported by the Center for Golf Course Management, a subsidiary of the Golf Course Superintendents Association of America.



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