

BRIEFS



ROSS AWARD PRESENTED

BLOOMFIELD, Conn. — The Donald Ross Society has presented its first scholarship grant to Benny Bennett Jr. of Creedmoor, N.C., a senior at North Carolina State. Bennett, an agronomy and turf sciences student, received a check for \$2,500 from Scholarship Committee Chairmen Arthur Langan of Manlius, N.Y., and the Honorable P. Richard Thomas of Meadville, Pa.

RESEARCH UNVEILED IN VIRGINIA

BLACKSBURG, Va. — The Virginia Tech Turf and Landscape Field Days will reveal the latest turfgrass and landscape

research on Sept. 21-23 at the university and Blacksburg Marriott. Wednesday's agenda includes tours of the Extension's research plot and a demonstration tour that begins at the campus's Lane Stadium. Studies are being done in a number of areas including biostimulants, growth regulators, late fertilization of Bermudagrass, fungicide synergism, pre-emergent herbicides and biotechnology. For information call Virginia Cooperative Extension, 426 Smyth Hall, Blacksburg 24061; 703-231-9736.



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INLAND NORTHWEST SHOW ANNOUNCED

SPOKANE, Wash. — The Inland Empire Association of Golf Course Superintendents expects more than 30 companies and scores of superintendents to take part in its 7th Annual Inland Northwest Turf and Landscape Trade Show on Jan. 27, 1994 at the Spokane Interstate Fairgrounds. All proceeds from the event will benefit turfgrass research and education, according to IEGCSA. More information is available from Julie Boyce at the IEGCSA, 1708 N. Lee St., Spokane 99207; 509-534-4161.

TATE HONORED IN MICHIGAN

SOUTH LYON, Mich. — The Golf Association of Michigan presented C.E. "Tuck" Tate its 6th Annual Distinguished Service Award at its Club Representatives Day activities at Walnut Creek Country Club here on Aug. 23. The honor is the highest given by GAM, recognizing Tate's "many years of selfless service to the golf and turfgrass industry in Michigan." The award was also presented to the late Ray Maguire, long-time pro at Birmingham Country Club. Tate was a founder of the Michigan Turfgrass Foundation at Michigan State University and endowed a scholarship fund for turfgrass students. He was presented the Distinguished Service Award of the Golf Course Superintendents Association of America in 1992.



C.E. "Tuck" Tate



Dr. Ron Kendall, left, and graduate student Thomas Rainwater check a birdhouse at the Ocean Course at Kiawah Island.

Clemson scientists' study looks at Kiawah as 'total ecosystem'

By PETER BLAIS

CHARLESTON, S.C. — Clemson University researchers are expected to publish initial findings in January on the environmental impact of the Ocean Course at Kiawah Island.

The three-year study of the seaside layout, a living laboratory designed to be environmentally friendly and the site of the 1992 Ryder Cup, should provide scientifically based information on the effects of golf course construction and maintenance on plants, animals and water quality.

"We're looking at the golf course as a total ecosystem. We're taking apart the various components of a golf course and seeing how they respond to pesticides, fertilizers and other stresses," said Ron Kendall, director of Clemson's Institute of Wildlife and Environmental Toxicology.

Kendall will be the study's lead author. He is overseeing the efforts of the five faculty members and seven graduate students assigned to the project.

Continued on page 17

Beware, be protected

Killer bees invade Arizona, Texas; California next?

Africanized Honey Bees (AHB), which have killed 900 people in South America and 48 in Mexico, have migrated into 50 Texas counties and now have been discovered in Arizona.

The bees are especially sensitive to the noise of outdoor power equipment, and reportedly have been sent into attack frenzies by the sound.

U.S. Department of Agriculture research geneticist Anita Collins, of the Bee Research Lab in Weslaco, Texas, said attacks in that state have involved "a lot of lawn mowers." The lawn and landscape industry is one of the most vulnerable to attack from the bee which can detect vibrations of man and animals walking 100 to 150 feet away.

Experts say the AHBs preferred feeding material, warm-season plants, is abundant in places like Phoenix, Tucson, San Diego, Los Angeles and San Francisco. University of Arizona entomologist David Langston said the bee will migrate along riparian areas and predicted they will move along the Central Arizona Project Canal into the Phoenix area.

The bees, which have migrated northward about 300 miles a year since escaping from an experiment in Brazil years ago, will nest in nearly any cavity in the ground or in trees or around buildings.

Compared to European honey bees, AHB colonies have 10 times the number of guard bees who protect them. A University of Miami botany student in Costa Rica died from 8,000 stings in a 1986 attack.

AHBs are nomadic and swarm much more often than other types, so they may appear in areas where they have never been seen before. Experts recommend:

- Checking for bees before trimming

Continued on page 12



Awash in rubble and silt, Stagg Hill Golf Course in Manhattan, Kan., took a hard hit from flood waters.

'Drenched' turns to 'underwater' for some Midwestern courses

By PAT FINLEN, CGCS

QUIVIRA LAKE, Kan. — Kansas City Country Club was preparing for the Trans-Mississippi Golf Tournament on July 10, but course superintendent Loren Breedlove had bigger worries that morning.

Brush Creek, which runs through the course grounds, had come out of its banks after 10 inches of rain. The course lost two bridges; four greens were under water; and most sand traps were washed out to the point that drain tile was sticking up out of the bunkers. With the practice round scheduled for Monday the 12th, the crew spent the next three days repairing the course.

Drain tile was put back in bunkers and sand was replaced. Greens were hosed off to remove silt and bridge repairs were made. The practice round had to be canceled, but the rest of the tournament went off without a hitch, except for the occasional rains and extreme humidity.

This was a relatively happy ending to what has been a miserably wet 13 months — the last six of 1992 and the first seven of 1993. In

Pat Finlen is head superintendent at Quivira Lakes Country Club in Quivira Lakes, Kan. He is also editor of Heart Beat, the official publication of the Heart of America GCSA.

portions of the Kansas City metro area, rainfall for '92 totaled 50 inches—34 falling in the last six months. For the first seven months of 1993, the same region has received more than 45 inches of rain — normal precipitation is around 35 inches per year.

Maintenance crews routinely shoveled sand back into bunkers once a week, sometimes twice. If the sun did shine, it didn't last long. By early summer it was routine for most courses to mow until dark on those days when it wasn't raining.

The inordinate amount of rainfall in Kansas City had left its mark by midsummer. From June 27 until July 30, more than 20 inches of rain fell. It was not uncommon to get up to an inch per day. With temperatures around 80-85 and humidity extremely high, cool season grasses were at the brink of major disease outbreaks. (Courses in the Kansas City area use a combination of cool- and warm-season grasses. Ryegrass and zoysiagrass are predominant on fairways and tees, while most courses have cool-season roughs.)

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The rains continued throughout Kansas and Missouri during the month of July.

Continued on page 14

Kiawah report due in Jan.

Continued from page 11

The Monsanto Agricultural Co., U.S. Golf Association and Professional Golf Association of America provided funding for the \$400,000 study.

The Ocean Course was a logical site because architect Pete Dye designed the facility—which incorporates extensive wetland areas—with the environment in mind.

For example, Dye installed an underground drainage system consisting of 14 miles of drain tiles that recycle irrigation and rain water. He created 22 acres of new wetlands and hundreds of sand dunes that were stabilized with plantings of sea oats and American beach grass.

"The sea oats are doing very well and providing a habitat for many animals. It's an example of how golf courses can not only protect the environment, but also enhance it," Kendall said.

The Ocean Course, one of four at the Kiawah complex, is also home to alligators, deer, mink, sea turtles, and many species of birds and fish. The research team began inventorying plant and animal life in 1991.

"Birds feed on fish in the marshes and insects that inhabit the fairways," Kendall noted. "We're doing reproduction and chemical exposure studies.

"We've captured hundreds of birds, taken blood samples and washed off their feet to test for chemical residues. We've banded them and even put radio monitors on a few to track their movements on and off the fairways."

The research team has also studied the effect of course operations on surface and ground water quality, pesticide and fertilizer movement, photoplankton and algae growth and aquatic macrophytes (submerged plant material).

The goal is to provide a model, scientific approach for protecting the environment while achieving a superior playing surface, Kendall said. Golf courses are in a unique position to protect and enhance the environment because they frequently

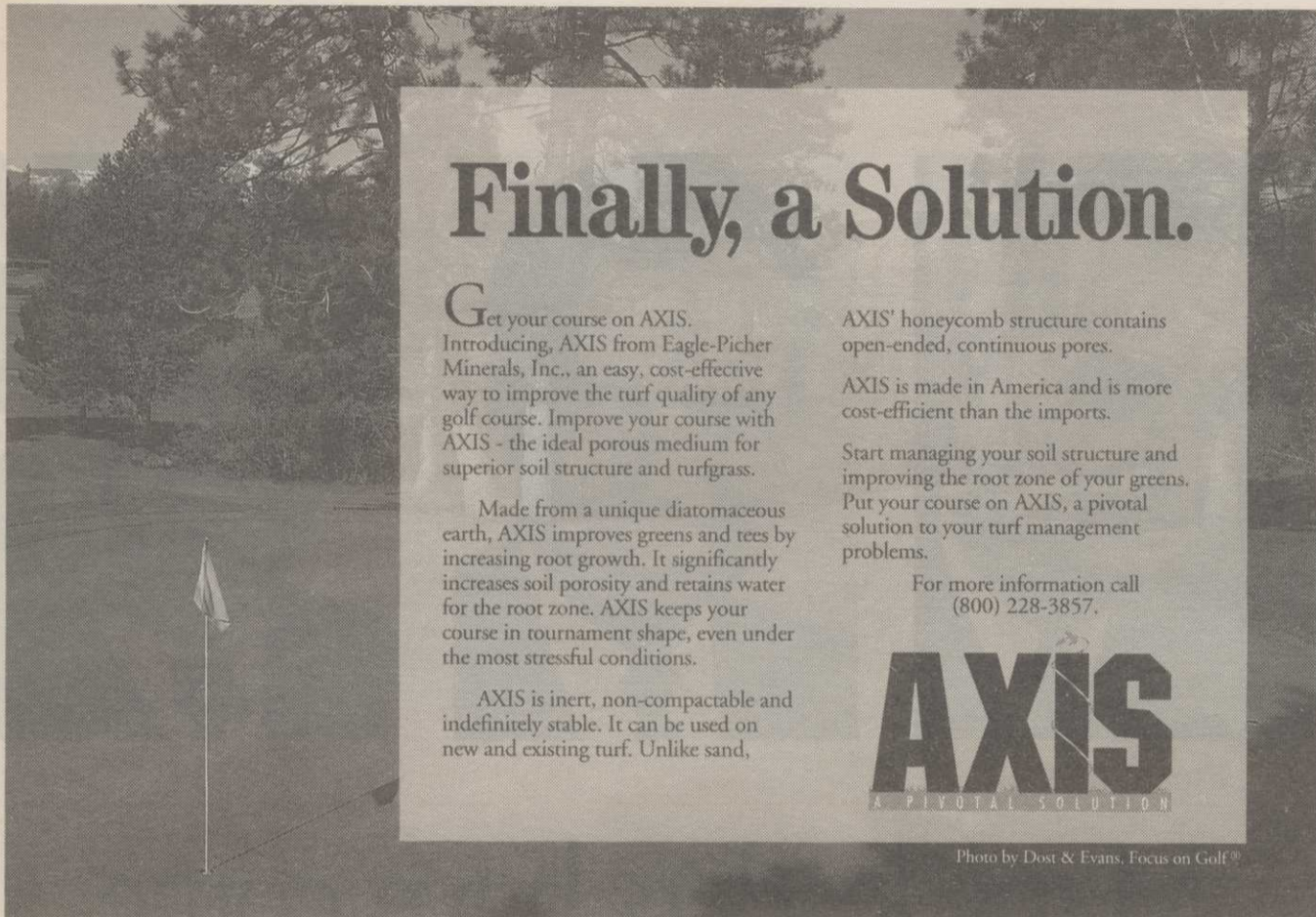
interact with sensitive environmental areas, he added.

"We think people will perceive golf courses differently in the future. They will hopefully come to realize that they should live in better cooperation with course superintendents," predicted the Clemson researcher, adding that head superintendent George Frye and his crew have been extremely cooperative.

"Why should golf courses be viewed as a means of just gobbling up large tracts of land when environmentalists can instead work with the superintendent to provide natural areas that provide more interaction with plants and wildlife?"

In addition to January's initial report, the graduate students will present some of the team's findings at the Society of Environmental Toxicology and Chemicals annual meeting this fall in Houston.

"The students have been living at the golf course. Some have expressed interest in golf industry careers because of this project," Kendall noted.



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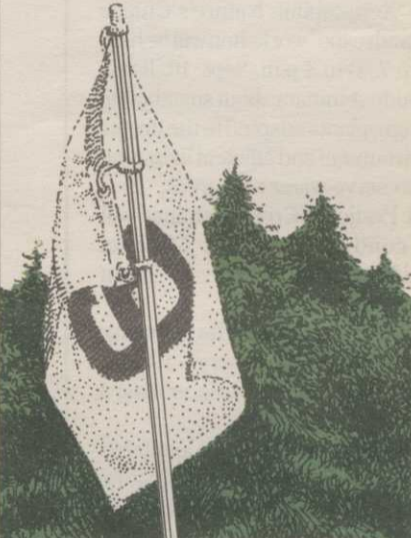
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