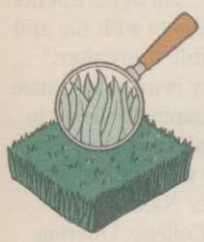
BRIEFS

ROSS AWARD PRESENTED

BLOOMFIELD, Conn. — The Donald Ross Society has presented its first scholarship grant toBenny 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, preemergent herbicides and biotechnology. For information call Virginia Cooperative Extension, 426 Smyth Hall, Blacksburg 24061; 703-231-9736.



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 Distin-guished 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, longtime 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.

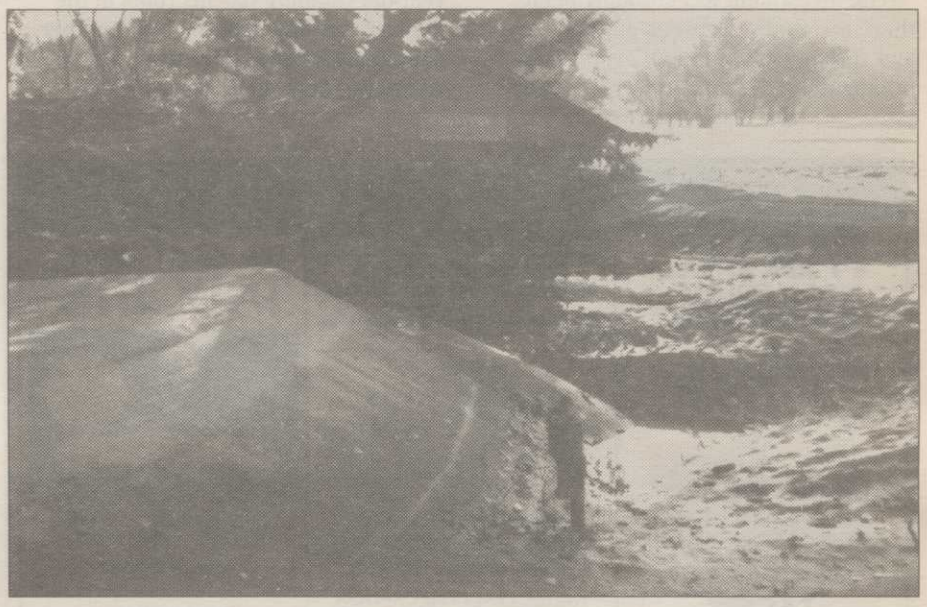
The bees, which have migrated northward about 300 miles a year since escaping from an experiment in Brazil years ago, will nest in nearly any cavity in the ground or in trees or around buildings.

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 then other types, so they may appear in areas where they have never bee 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 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.)

• • •

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

Continued on page 14

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.

Surviving the flood

Continued from page 11

However, on July 16, the Army Corps of Engineers started to release large quantities of water from the bloated Milford and Tuttle Creek reservoirs, both of which drain watersheds that cover large portions of Kansas, southern Nebraska and eastern Colorado. This was the start of what became the worst flooding of the Kansas and Missouri river basins since 1951.

Most courses in Kansas City suffered minor damage from the general flooding, but one — Stagg Hill Golf Course in Manhattan, Kan. — suffered heavy damage from these water releases. Stagg Hill lies in the Kansas River flood plain and, early this May, the course was partially flooded from the constant rains. It recovered but once the water releases started, Stagg Hill was inundated. The entire track, except two holes, lay under 10 feet of water at various times.

The fairways and tees at Stagg Hill consist of a combination of Bermudagrass, zoysiagrass and bluegrass — all have been lost from the flood. All but four greens were lost. Portions of the golf course are still buried under six feet of mud and sand. On some holes, only the tops of ballwashers can be seen. Course superintendent Dave McComas has had to cope with five feet of water in the maintenance building, as well as no power or telephone service.

Estimates for just removing the mud and sand are running as high as $600,000. With such a large fee just to remove the debris, course officials do not think they will be able to reopen without some type of federal or state aid. Insurance for the course covers only the structures and equipment. Until an answer comes on whether they will qualify for federal aid, the course remains in limbo.

• • •

Problems in Kansas City and surrounding areas were compounded when the rains quit. Most turf had not hardened off from the spring-time conditions. With very little sunshine in the spring and early summer, and saturated soil conditions, the root system of most grasses was very accustomed to surviving in the top two inches of the soil profile. Once the sun did come out, the heat came with it. With temperatures in the low- to mid-90s, disease pressure was at a level unseen in Kansas City for quite some time.

Many courses that survived the flooding and saturated soil conditions then developed problems on their greens and other cool-season turfgrasses — because of the transition from spring in July to summer in July. Diseases such as anthracnose on bentgrass (a rarity in this area) surfaced, as well as summer patch and Phytophthora. Pythium and brown patch were common. Brown patch has been our constant companion since May, with control and recovery extremely hard due the constant rainfall and humidity.

The only bright spot during the whole summer has been for those with zoysiagrass tees and fairways. Zoysia has done extremely well and has, no doubt, convinced a few superintendents to convert to zoysia.

Many courses have already started their fall aerification and seeding. The quantities of seed used this year will far outpace the amount used the two previous years.

New Mexico water research under way

LAS CRUCES, N.M. — Scientists with New Mexico State University's Agricultural Experiment Station are discovering how much water Bermudagrass needs to grow in the state's soil by using a custom-built electronic irrigation system.

James McCrimmon, NMSU turfgrass management scientist, is testing 15 Bermudagrass cultivars on 45 plots at Fabian Garcia Science Center.

"We have sprinkler heads that pop up about four inches, so their low trajectory should prevent some of the spray drift caused by wind," McCrimmon said.

Each plot in the system measures four square meters. More than 6,000 feet of electrical wiring run with underground water pipes to control each sprinkler head, and the entire system is run by an advanced irrigation control box.

"For example, we can water one plot at a different time and duration than another simply by programming the system," McCrimmon said.

That option allows researchers to test the cultivars under a variety of simulated rainfall conditions. The study also measures the cultivars' density, color, dormancy period and cold and drought tolerance.

"In the long run, you can save water with this type of system, and conservation is what we're striving for," McCrimmon said.