Zebra mussel menace threatens South

By MARK LESLIE

GAINESVILLE, Fla. — The South-east is bracing for what scientists feel is the imminent invasion of the zebra mussel — a menace that has plagued the Great Lakes area since arriving in the ballast of a ship from Europe nine years ago. Already, the clamlike shellfish have invaded golf courses in Illinois, Minnesota and New York, and shut down water-management and power companies. So minute in their veliger, (the larval form, which is 70 microns or larger), zebra mussels swim right through conventional water filters. They have been found to two feet thick on the intake of a water system.

"All of us from North Carolina on down the coast are trying to set up preventive programs," said Marion Clarke of the Sea Grant Extension Program at the University of Florida in Gainesville. "Northern Florida will be the first vulnerable area because our waters are cooler longer. They (zebra mussels) are becoming more tolerant of warm water and are developing immunities to salinity.

Golf course superintendents should be most concerned if they draw from open water, Clarke said, adding: "Zebras get into the irrigation system and clog up their sprinkler heads and pipes. You can be (closed) down weeks doing chlorination treatments and scraping and blowing out pipes. "It is very labor-intensive. You intensively chlorinate the pipes, let it sit and then pressure-blowout the pipes; then keep chlorine in there to kill whatever larvae survives."

The Great Lakes area has spent millions of dollars combating zebras. Indeed, if not money then at least fear.

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Dead-air green's gift: Life to the industry's turfgrasses of the future

By MARK LESLIE

DULUTH, Ga. — Dead air oftentimes means dead grass. But Georgia superintendents and researchers hope the "dead-air green" they built at Atlanta Athletic Club (AAC) here will help produce turfgrasses that survive regardless of air movement.

"I think we'll wind up with better year-round conditions on the putting greens," said AAC Director of Golf Courses and Grounds Ken Mangum. "The more information we have, the better decisions we can make."

The Georgians built almost a worst-case scenario when they constructed this 9,000-square-foot green. Trees edge two sides of the putting surface and eight to nine-foot-high mounds enclose it on all sides. Cut to a height of 9 1/2 inches, it is being maintained like the other greens on the golf course — even to the extent of double-mowing and rolling during the state amateur tournament in July, Mangum said.

"It was done mainly to research performance," said Dr. Gil Landry of the University of Georgia. "That's the number-one question for all golf course superintendents. The feeling is, if we can get a grass that will survive that stress it will survive other locations on a golf course."

The dead-air green at Atlanta Athletic Club is divided into 5-by-10-foot plots for 28 cultivars and five blends of turfgrass.

Mechanics tune up 1st nat'l conclave

By MARK LESLIE

COBBLESKILL, N.Y. — The fledgling Golf Course Mechanics Association (GCMA) is gaining momentum in numbers and now plans its first Mechanics School, a five-day program hosted by State University of New York at Cobblekill, Jan. 8-12.

"Hopefully, it will be yearly," said GCMA Vice President Brian Allford of Dedham (Mass.) Country and Polo Club. "It will stay on a regional level for the time being. If (GCMA) really gets rolling, perhaps 10 years from now, we might have a one-week national conference."

The $685 course, consisting of eight half-day sessions, will instruct members on the ins and outs of products made by Jacobsen, Toro, Cushman, Ryan, Ransomes, John Deere, Troy-Bilt, Melroe-Bobcat, Kawasaki, Honda, Briggs & Stratton, Tecumseh/Peerless, Rainbird, Buckner, Neary, Foley and many others, according to organizers.

Open to GCMA members only, the sessions are structures such that the SUNY-Cobblekill instructors determine at what experience level classes will begin and cover. Instructors may also look to students' experience to help the class. Sessions will include repair welding, diesel engine fundamentals, electrical systems diagnosis, hydraulic system diagnosis, carburetion and gas engines, grinding reel mowers, irrigation system repair and sprayer calibration maintenance.

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University research finds 'dramatic' results using porous ceramics

BY MARK LESLIE
IOWA CITY, Iowa — Advocates of porous ceramics in root-zone mixes feel a University of Missouri study confirms their stance.

"We found pretty dramatic pictures" when top dressing dry spots with ceramics compared to straight sand, said Dr. David Minner, an Iowa State University professor who conducted studies on Profile Porous Ceramic Soil Modifier while at the University of Missouri.

Minner was commissioned for the study by Applied Industrial Materials Corp. (AIMCOR), which manufactures Profile. He said he also discovered lower temperatures both on the surface and in the top three inches of the soil, and higher infiltration rates than sand-peat mix.

"With one summer's worth of preliminary data, Minner pointed particularly to results of research on dry spots. He used a 25-by-25-foot section of a Research Center putting green that — though built to U.S. Golf Association recommendations — required "extra syringing and was problematic." Maintaining six replications of 2- by-2-foot plots, Minner core aerified them and top dressed them either with sand or Profile.

"As the dry-spot areas started to develop," he said, "there were many more of them in the sand [top-dressed] areas, as opposed to Profile areas. We saw two keys: You had to continue syringing, or hand-watering; and it made your hand-watering program much more effective. The water was pulled down into the soil profile and held there for later use.

"During a three-week dry-down phase in August, we hand-syringed, treating them just like a superintendent would — coming them once or twice a day."

Meanwhile, Minner also reported temperature relief where ceramics were top dressed into the soil profile. "The plots were wilting less, and there were lower temperatures in the surface and the soil to three inches deep," he said.

"We were seeing surface canopy temperatures as much as 20 degrees cooler. You can expect that you have a plant that’s wilted as opposed to one that is not wilted. The plots with Profile would not wilt as much. The ones with sand would wilt quite readily. Soil temperatures were 1 to 3 degrees cooler, mostly. But on some days it was as much as 7 degrees cooler."

Now that he has moved to Iowa State, Minner said he will construct some plots this fall to continue the study.

Mechanics set education conclave

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SUNY Cobleskill agricultural engineering instructor Larry Van Der Valk actually approached GCMA founder and President Steve Lucas of Weston, Mass., about conducting a school and began planning curriculum in March.

Teaching sessions like this are badly needed, Alford said, because "it’s getting so specialized and the equipment is getting more and more complex. A good course in electronics is a must now. No more is it simple automotive mechanics. You’re getting into computerization. And it isn’t stopping. I predict it’s just the beginning of computerization on this machinery."

Since the association was formed two years ago, its membership has grown to approximately 300.

"Our membership now spans Massachusetts, New Hampshire, Maine, Connecticut, Rhode Island and New York," Alford said. "We’ve been in contact with other associations, particularly Florida, and in Colorado. Eventually it will be nationwide. It’s in growing pains right now."

More information is available from Alford at 617-245-6092. Golf Course News welcomes news from all mechanics associations.