Defense Against Disease

BIZARRE WEATHER PATTERNS
MADE DIAGNOSING SUMMER
DISEASES DIFFICULT. HERE'S
WHAT THE USGA AND OTHERS
SAW THIS YEAR

By Frank H. Andorka Jr.,
Managing Editor

No one can quite explain the bizarre weather patterns across the country this year. It's almost as if something has gone wrong with the seasonal clock, making it particularly difficult this year to figure out which diseases might strike your course.

Still, the members of the USGA Green Section staff and others have been diligently trying to help superintendents diagnose and do battle with problems as they cropped up. Here's what they saw this summer:

Northeast Region – The USGA agronomists in the Northeast said the heat and humidity caused dollar spot to appear on several courses, but they assured regional superintendents that the rumors of fungicide resistance were greatly exaggerated.

“Disease pressure was extremely high,” says Dave Oatis, the USGA's Northeast Green Section director.

Dollar spot has attacked golf courses in several regions.

"Under these conditions, no fungicide held up as long as it would have under more moderate conditions."

Anthracnose also posed considerable problems for superintendents in the Northeast, and summer patch plagued golf courses in the area. Oatis said syringing those areas helped, but superintendents must not overwater. “Good water management is critical at this point of the season,” he says.

Mid-Atlantic Region – Stan Zontek, director of the USGA's Mid-Atlantic region, said he saw a resurgence in take-all patch.

“I saw two courses (vs. none last year) suffering from the disease,”

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Business briefs

Scotts, Monsanto get go ahead
In a victory for The Scotts Co. and Monsanto, the Oregon Department of Agriculture has approved an 11,000-acre control area in central Oregon where 400 acres of the two companies' Roundup Ready Creeping Bentgrass will be grown. The joint project has been criticized by area bentgrass growers who are concerned about cross-contamination.

The decision followed public hearings last November and in June. The new variety is enhanced through biotechnology to tolerate Roundup Pro herbicide, which will allow invasive weeds to be controlled without harming the bentgrass.

The research will lead to full production if approval is gained by the U.S. Department of Agriculture. Approval could come in either the fall of 2003 or the spring of 2004. Planting within the new control area is expected to begin this fall.

“Superintendents have been forced to co-manage both Poa and bentgrass,” said Don Suttner, regional technical development manager at Monsanto. “That often means frequent chemical applications to control insects, weeds and disease. Because Poa requires more irrigation, they’ve had to water more often, too. Eliminating Poa reduces many of the other inputs superintendents need to worry about.”

Environmental Golf joins venture
Calabasas, Calif-based Environmental Golf, a subsidiary of Environmental Industries, formed a joint venture with environmental consultant, golf course agronomist and certified superintendent Ted Horton, of THC Consulting. Horton will partner with Environmental Golf to share expertise on environmental stewardship, indigenous landscaping and habitat protection

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Off The Fringe

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Zontek says. “One course was new, so this disease was expected to be more common. The other course was older, so it was a surprise. It could have been the drought.

“The older club was irrigating with high pH water, and take-all patch is aggravated by a high pH,” Zontek says. “My thought was that with no rainfall, the bicarbonates and salts were building up in the thatch and making the disease worse.”

Darin Bevard, a USGA agronomist in the Mid-Atlantic region, said superintendents used strobilurin fungicides, sterol inhibitors or benzimidazole chemistries to suppress the disease.

On Poa annua greens, summer patch and anthracnose were serious problems, but the latter was causing the most headaches for superintendents, Bevard says.

“Folks treated the diseases with everything imaginable with mixed results,” Bevard says. “Anthracnose led to regrassing with creeping bentgrass in our area, with more courses planning to regrass in the near future. Although bentgrass is also susceptible to anthracnose, it’s not as severe in our region.”

Bevard noted dollar spot continued to be a problem, but that it caused more damage than in the past.

“We see heavy pitting almost overnight from dollar spot,” Bevard said. “It may have been the result of the more intense maintenance used on fine-turf areas. Standard controls still provided suppression, but the residual control was not as long. The worst dollar spot I saw was on turfgrass with lots of thatch and low nitrogen fertility.”

North-Central Region — Lee Miller, manager of turfgrass research and interactive turf coordinator for the Chicago District Golf Association, said the most significant disease in the Midwest was dollar spot. It caused a lot of turf loss in the Chicago area and consumed much of superintendents’ fungicide budgets.

“We also saw take-all patch hit area golf courses pretty hard because of the unrelenting heat we’ve experienced this summer,” Miller says. “It’s hard to control, but superintendents tried their best.”

Miller also noted that the hot,

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humid conditions caused an upswing in pythium blight. "You couldn't have created better conditions for pythium than those we experienced this summer," he said.

Southeast Region — Pat O'Brien, director of the USGA's Southeast Division, said the most common disease seen on bentgrass greens in his region was fairy ring. He says superintendents in his area used Heritage and ProStar, along with wetting agents, to combat the problem.

He added that anthracnose was present in his area, but it's more a leaf disease in his region. Superintendents used Heritage, Cleary's 3336 and Daconil to treat it. O'Brien also suggested raising the mowing heights and venting the turf. He also saw a resurgence in dollar spot.

"This was a real nuisance [this summer]," O'Brien said. "Contact fungicides helped superintendents keep the problem under control."

As for bermudagrass greens, O'Brien said he saw bermudagrass decline and spring dead spot in addition to fairy ring and dollar spot.

Southwest Region — Patrick Gross, USGA director, says record high temperatures, combined with effective early spring applications of fungicides, limited the amount of disease he saw in his region.

"We saw a few minor infestations of fairy ring and yellow patch, but we avoided anthracnose and summer patch for the most part," Gross says. "Many superintendents implemented good programs earlier this year for leaching greens and preventative disease control that helped keep these diseases at bay. I have to credit our superintendents with excellent planning. Now they need to manage their water carefully so they don't run into problems later."

Northwest Region — USGA agronomist Matt Nelson said summer patch was diagnosed at some locations in the Rockies where previously it was thought the disease did not exist. He said some golf courses in his area saw some cool-season brown patch, but that it was mostly a curiosity.

"We're more likely to see snow molds, fairy ring and anthracnose in this area," Nelson says.