DOUG HAWES DOES NEW STUDY OF THE ICE THREAT TO ZOYSIA FAIRWAYS

With Meyer zoysia being installed more frequently in the Mid-Atlantic region, there should be considerable interest in a new study by Dr. Douglas Hawes into ice sheet damage last winter to zoysia fairways on seven Kansas City area courses. Reduced to its essentials, Doug's article emphasizes that certain conditions predisposed some zoysia to severe setback or even loss, while other zoysia survived quite well despite all the courses in question being under a 2-inch ice sheet for 45 or more days.

What were the factors that allowed some zoysia to come through those rigorous winter conditions nearly unscathed? First, the zoysia that came through the best was newly established and free of thatch, situated in full sun on a slope facing south or west and with good internal drainage. It had not been treated with Balan every year for the last five, and it was free from winter traffic in the weeks before the ice came and after it melted.

Conversely, zoysia in shade, with northern exposure and poor drainage was weaker in winter because it had stored less food as a result of less sunlight having been received. Golf car traffic was a definite contributing factor, with the most heavily played courses suffering the most damage. In areas of concentrated car traffic, zoysia kill was more complete than in less traveled spots.

Amount of thatch was also a factor but less consistently so, in that it was more prevalent in areas that were killed more completely than other factors would account for. Prolonged use of Balan (benefin) to control crabgrass and goosegrass, for five years or more, resulted in zoysia that came through in poorer condition than grass under other, similar circumstances except for the herbicide. Previous research has shown that Balan tends to reduce the winter hardiness of Bermuda and zoysia.

As to prevention of future zoysia losses, one possible (though improbable) approach would be to remove golf cars from fairways for the period January through May. In bad years, cars could even be kept off fairways until the end of May. For fairways where ice or snow accumulation has been a problem over the years, putting two cups of powdered graphite in three gallons of water and spraying the frozen cover with a backpack sprayer will blacken up to 5,000 sq. feet to get faster melt (providing some sunlight is getting through).

Dr. Hawes also suggests using a pre-emergent other than Balan, perhaps a Ronstar-Betasan combination. Aerification can help to control thatch, in late June or early July for zoysia, by making three or more passes with the aerifier and dragging a piece of chainlink fence or other device to break up cores. Letting the soil from the cores work back into the turf will assist in thatch decomposition. The tendency to create summer weed problems as a result may be offset by a second, smaller application of pre-emerge, or by application of one of the methyl arsonate postemerge crabgrass herbicides 10 days after aerification.