# Spring Dead Spot

By Elliott L. Dowling, agronomist, Northeast Region | May 5, 2017

*A severe outbreak of spring dead spot can significantly impact playing conditions.*

Spring dead spot (SDS) is the most damaging disease of bermudagrass in the northern transition zone. This disease has also been problematic on zoysiagrass in recent years. The climate in this area is not warm throughout the year, making warm-season grasses vulnerable to damage from SDS. One of three fungal pathogens in the Ophiosphaerella genus causes SDS. In the eastern United States, *O. korrae* is the most prevalent.

**Cultural Control** – There is a lack of understanding related to cultural control of SDS. However, promoting a dense and healthy root system is the first step in reducing severe damage from this disease. We know that SDS infections occur most readily in turf with excessive thatch. Regular core aeration and verticutting will remove thatch, promoting a healthy root system and removing infection centers.

**Chemical Control** – Active turf growth in late fall is often a precursor to SDS. Limiting or eliminating nitrogen applications once turf's natural growth rate slows in late summer or early fall will help control this disease. Fungicide applications can reduce SDS but they are

not a failsafe and in many instances these applications achieve inconsistent results. Fungicide application timing is critical. Two sequential applications in the fall are ideal, with the applications spaced approximately 21-28 days apart. Research indicates that the best time to make these applications is when soil temperatures reach 70 degrees Fahrenheit at a 2-inch depth.

**Recovery** – Each spring, USGA agronomists assist golf courses with developing a recovery plan when SDS outbreaks occur. The affected grass is dead, so the focus is on promoting turf health around the infection centers. Regular fertilizer applications and grooming will accelerate growth of the healthy plants and help them fill the voids left by the disease. Promoting growth with cultural practices is important, but in many cases time and warm temperatures are the key ingredients for recovery. Until turf around the affected area begins active growth, recovery will not occur.

Spring dead spot is a widespread problem in Virginia, West Virginia and Maryland. The recent prolonged autumns have likely extended the window of SDS infection beyond the efficacy of normal fungicide applications, which may be why many courses are reporting increased challenges with this disease. Maintaining healthy turf is critical to reducing SDS infections and accelerating recovery if an outbreak does occur. Do not rely solely on chemical controls to manage this disease. Fungicides can help, but the results are inconsistent from year to year and seldom are fungicides 100-percent effective. To successfully manage SDS issues, superintendents must commit to a multi-year program of promoting turf health through cultivation, proper fertility and well-timed fungicide applications.

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