

# The Role of Liquid Soil Aerator on Turf Recovery in Areas Afflicted with Spring Dead Spot Disease

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## Question

Does the application of Liquid Soil Aerator on turf afflicted with Spring Dead Spot (SDS) accelerate turf recovery during the growing season?

## Purpose

To compare and determine the effectiveness of Liquid Soil Aerator on areas afflicted with SDS, versus standard fertilizer practices without Liquid Soil Aerator application.

## Test Site

All Star Sports Complex is a nationally recognized Boys Baseball Complex. Each year starting the week of the 4th of July, there are three consecutive Little League World Series Tournaments, each lasting for one week. Before and after the tournaments, constant use of the fields impact the turf, thereby creating a huge challenge for turf maintenance. The Turf Manager maintains a large staff of workers to constantly maintain all of the fields.

The Turf Manager was very interested in trying Liquid Soil Aerator to help maintain turf quality throughout the heavy use season. In particular interest, because of the increased challenge of the SDS affliction, he wanted to see if Liquid Soil Aerator could expedite turf recovery in the affected areas. It is crucial for the complex to provide high quality playing areas in light of the large national tournaments.

Two baseball outfields (Tifway Bermuda) affected by SDS were selected for the test. Each field had moderate SDS affliction, with afflicted spots ranging from 12" up to 30" across. The unaffected areas are in very good condition as far as turf quality, due to excellent cultural practice. The outfield of Field 6 was used as the treated site, and the adjacent outfield of Field 7 the untreated site.

## Control

All fields were mowed and irrigated on a consistent, equal basis. Fertilization was applied by TruGreen ChemLawn throughout the growing season.

## Application

On May 13, 2001 Liquid Soil Aerator was applied at the dilution rate of 2oz Liquid Soil Aerator per 1 gallon of water at a coverage rate of 4oz Liquid Soil Aerator per 1000 square feet to Field 6, applied by TruGreen Chemlawn. Irrigation of 1/4" immediately followed the Liquid Soil Aerator application.

## Results

On June 13th, 2001 a visual inspection of Field 6 and Field 7 demonstrated a remarkable difference in SDS recovery. All of the visible affected areas were 95-100% recovered on Field 6. The affected turf on Field 7 was recovering, however at a much slower rate. Approximately 50-75% of the afflicted areas on Field 7 have recovered. The Turf Manager made a decision to go ahead and treat Field 7, Field 1, and all of the infields to enhance turf quality before the three large tournaments.

On July 2, 2001 a visual inspection of Field 6 indicated a full recovery from SDS. Field 7 demonstrated a 90-95% recovery on this date.

## Conclusion

No claim is made that Liquid Soil Aerator will cure or prevent SDS, however the application of Liquid Soil Aerator on afflicted turf areas can speed up the recovery process during the growing season. Further tests are planned to examine if Liquid Soil Aerator can help prevent re-occurrence of SDS.