Managing Turf for Maximum Root Growth:

Are You Making Your Job More Difficult by Not Getting to the 'Roots' of Many Turf Management Problems?

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Each week throughout the growing season, the Turfgrass Diagnostic Clinic at the University of Rhode Island, directed by Professor Noel Jackson, receives dozens of turf samples from all over the United States. While most of these samples evidence problems of disease, there are many afflicted with either nematodes or insects, and some show symptoms of environmental stress disorders. Most of these samples have one characteristic in common: a badly damaged root system. It almost appears that turf does not exhibit symptoms, which a turf manager can recognize as a problem, until its roots are compromised. The putrid condition of, and foul odors often emanating from, the roots of afflicted turf provide ample evidence that healthy turf depends upon vigorous roots.

Figure 1. Source - sink relationships among organs of a turfgrass plant being exposed to carbon-14 labeled CO₂.