USGA_® REGIONAL UPDATE



Winter Moisture Management

By John Daniels, agronomist, Central Region

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As the first month of 2017 comes to a close, many areas throughout the Central Region are dealing with <u>abnormally dry conditions</u> and periods of warm weather. Although it may not be the first thing that comes to mind, the combination of dry weather and warm temperatures can create a recipe for winter injury.

Desiccation – i.e., the drying out of plant cells – is a concern for both cooland warm-season turfgrass species that can occur when snow or rain accumulation is minimal. While dormant or semidormant turfgrass requires less water than actively growing turf during peak growing months, it still needs some moisture to survive. Without adequate moisture the crowns of even dormant turf can become dehydrated to the point that plants die.

Areas especially prone to winter desiccation include elevated sites that are







exposed to winter winds and sites comprised of soils with limited waterholding capacity, such as sandy or hydrophobic soils. Although hydrophobic soil conditions are typically associated with the heat of summer, the conditions that cause water repellency can occur throughout the year. As such, the periodic application of wetting agents during winter may be warranted to avoid localized dry spots.

Frequently monitoring soil moisture during winter is strongly encouraged to help prevent desiccation damage. However, detecting drought stress with the naked eye can be nearly impossible if turf goes off-color during the winter months, , so it is important to use moisture meters. Once a dry area has been identified, irrigate the area to replenish sufficient moisture without causing puddles of water that may freeze. Ideally, apply water on a sunny day when temperatures are well above freezing.

Another low-cost measure shown to protect against winter desiccation is applying sand topdressing. A moderate to heavy application of topdressing sand at the onset of winter helps shield plant crowns from harmful weather and accelerates spring green up. However, don't get too carried away because excess sand will quickly dull recently sharpened mower blades in the spring.

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Information on the USGA's Course Consulting Service

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