## USGA<sub>®</sub> REGIONAL UPDATE



## Salt, Heat And Drought Are Poor Companions

By Bud White, regional director, Mid-Continent Region

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Water management and moisture checking are sometimes confusing topics. The total mat or organic accumulation layer on a high sand green can range from ½" to 4" deep, depending on the age of the green. Often, hot spot checkers only test moisture in this zone. It is actually the 1" to 1½" immediately below the organic accumulation zone that can be a problem.



In high sand greens, the moisture from 1 ½" below the organic layer can be drawn out by the organic layer through wick action. Remember, salts wick with the water as well. This is why LDS can occur when moisture seems adequate in the organic mat layer. When temperatures become extreme, wilt can occur in a matter of hours with salt accumulations present. Moreover, this can occur in high and low areas at the same time.

Moisture checks must be in this underlying zone as well prevent more rapid root dieback and salt accumulations. Watering times, even light cycles, should be adjusted to add moisture to this layer and not just the organic or mat layer. If this layer does not receive moisture from irrigation, dry patches and wilt will occur, even though moisture seems to be present in the organic zone by the touch and visual inspection. Hand watering is the key component to balancing water in all areas of the green. As a side note to golfers: hand watering greens will never be eliminated by a new irrigation system! The success of moisture management is largely dependent on understanding the dynamics of water in the root zone.



Take your hand watering personnel out to LDS areas and observe this layered drying with a profiler instead of just a soil probe. It will give them a much clearer understanding of the mechanics of such a critical job.

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Information on the USGA's Course Consulting Service

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