

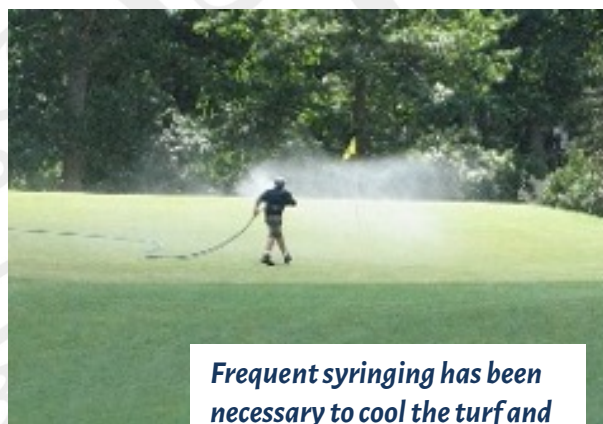


Summer Heat Is Hitting Turf Hard

By Adam Moeller, agronomist, Northeast Region

July 28, 2011

The recent heat wave has caused turf decline across the region. Although multiple daily 100+ degree temperatures have been enough to cause turf loss, the night temperatures of high 70's and low 80's have been the most damaging. With these night-time temperatures, physiological decline and disease pressure have been extremely high.



Frequent syringing has been necessary to cool the turf and combat the extreme heat.

The best way to keep grass alive in this heat is to do as much as possible to keep the turf cool. Syringing greens, tees, and fairways throughout the day and even into the early evening hours has been a necessity at most facilities. Oscillating fans have been a huge help in aiding plant cooling and soil drying. For those without fans, the use of rented industrial fans or portable blowers has been helpful in increasing air movement, which can make the difference in turf survival or death.

Many golfers would think rain would be a welcomed sight for golf courses that suffer from the oppressive heat. Actually, heavy rain, combined with hot weather, can cause severe turf loss in poorly draining sites. Essentially, turf roots can't keep up with their cooling needs, and wilt develops even though the soils are moist. Frequent syringing, even if the soils are wet, is necessary to keep grass alive in this scenario. Venting aeration is beneficial in helping to dry saturated soils and minimize turf loss.

Localized dry spots also have been commonly seen, especially where automatic irrigation coverage and uniformity are poor, and hand-watering is not available due to labor constraints. Venting aeration, hand-watering, and wetting agent usage are helpful in battling localized dry spot. Turf suffering from drought stress is likely to be dormant (off-color/brown) until rainfall and cooler weather develops. Dormant turf should not be heavily trafficked, as this could cause severe turf loss. Note: *Poa annua* doesn't go dormant; if it's brown, it's probably dead, and overseeding will be necessary.

Disease issues have been very common, with *Pythium*, brown patch, summer patch, and anthracnose causing turf loss on many areas of the golf course. Plant-

parasitic nematodes have also been reported. If root decline has occurred more rapidly than usual, check for nematode populations.



At many golf courses, the use of portable blowers has been necessary to improve air movement until oscillating fans can be installed.

At this point, the best way to keep grass alive is to use defensive management practices that focus entirely on minimizing environmental and mechanical stress and less on overall playability. For most, this means slower green speeds, which are always better than dead greens.

USGA agronomists can provide insightful and invaluable information involving all areas of golf course maintenance to maximize turf health, playability, and efficiency.

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