

# feeding frenzy



Your fall fertilizing program has a direct impact on spring turf. Superintendents share their strategies that get their turf fed and in top condition.

BY RICHARD SKELLY

**H**ow does one best approach fall fertilization after an extremely dry and hot summer? No doubt this issue is on the minds of many superintendents around the Southwest and Midwest. All experts GCI talked to agreed fertilizer with higher levels of potassium and phosphorous is the way to go, but when you're talking 30 to 60 acres of coverage, that can get downright expensive.

Most every superintendent knows the importance of keeping good logbooks and records of how much was applied to the turf

on what dates and how, but what do you do after a weather season like this one, marked by the most extensive drought and excessive heat since the Dustbowl of the 1930s?

Tim Nielson, the superintendent at Creekmoor Golf Club in Raymore, Missouri, not far from Kansas City, says in his 10 years of being a superintendent, he's never witnessed such a dry spring and summer. Creekmoor is an 18-hole semi private facility built in 2006 that opened in 2007. Nielsen has zoysia fairways and bent grass tees and greens.

"I haven't seen anything like



have a large lake to draw water from and our irrigation system is fairly state-of-the-art; the coverage is pretty good.”

Despite the extreme weather around Kansas City and other parts of the southwest and Midwest – notably Arizona, New Mexico, Utah, Colorado, Texas, Iowa, Nebraska, Kansas, Missouri and parts of other states – Nielsen says he’s not changing his fall fertilizing routine.

“I typically go for the second week of September every year. This year, I’m not going to change anything. The temps look like they’ll be in the low to mid-80s so I’m not too concerned with that,” he says, adding that Creekmoor’s irrigation system will provide the water for the fertilizer to take, “but obviously, if this drought continues into the fall and winter, it doesn’t bode well for next spring.”

At Creekmoor, Nielsen reports his roughs thinned out a bit in the heat, but that’s about all he lost. He’ll have to do some over-seeding there.

“I can tell you what I should have done, considering how dry it was,” Nielsen continues, “it seems to me like the drought started well before 2012. It was dry last fall, and it was dry in the spring and this spring when we were trenching a line, digging down three feet, I noticed it was super dry, and realized right then and there I should have been using more water in the spring.”

“If there is one tip I can offer about fall fertilizing, it’s that if you are seeding, you need to put down a high phosphorus fertilizer and be sure you maintain your soil moisture,” Nielsen says.

Assuming the worst case scenario, that his area of Missouri is in for a dry fall and winter, Nielsen says he will “look to water deeper into the profile in the spring and make sure I build up the moisture there.”



If you are seeding, Creekmoor GC superintendent Tim Nielsen recommends a high phosphorus fertilizer and maintaining adequate soil moisture.

Brad Gray, the superintendent at Mission Hills Country Club in Kansas City, Mo. has been in a superintendent role for 12 years. He oversees a classic walking course that was designed and built by Tom Bendelow in 1914. Mission Hills was redesigned by Keith Foster in 2006. Bendelow also designed Medinah Country Club, site of this year’s Ryder Cup matches.

“This has been a terribly hot and dry summer,” Gray says, “but what’s unusual about it is it’s always kind of hot and humid in Kansas City. But this year it’s been hot and dry, almost like New Mexico or Arizona.”

Gray has bentgrass greens, zoysia grass tees and fairways. The roughs at Mission Hills are fescue and bluegrass blended with *Poa annua*.

“Right now we’re out there aerifying and over seeding the roughs. Then we’ll fertilize on schedule the second week in September,” Gray explains.

“We came through the summer the best we’ve ever had as far as maintaining cool season turf grass. We’re in a drought, yet I’m on city water, so anything we use we buy and we’ve had no restrictions on our water use. We had all the water we needed, but that came with pretty high water bills.”

The lack of rain put extra stress on approaches to and from cart paths, Gray says, so in those places he did some extra application of phosphides and some foliar “at the in and out places next to our cart paths.”

Pressed for advice to other drought-hassled supers, Gray

says: “Raise your mowing heights, if possible. That’s a way to save money and if you do have access to the water, maybe just try to cool the plant through the day, giving it quick spritzes from the irrigation system.”

Gray says the men and women on his maintenance team do their mowing in the morning and spent afternoons syringing and otherwise irrigating certain stressed areas at Mission Hills.

What if there is no relief in sight, and an equally dry winter is expected?

“I won’t alter my plan next spring,” Gray says.

“Every super should be tweaking their management and maintenance practices all the time, there might be a few things I tweak but it won’t be much different in the spring.”





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— CHARLES “BUD” WHITE

Charles “Bud” White at the USGA’s regional office in Dallas, says superintendents with warmer weather Bermuda and zoysia grasses need to go with a more phosphorus and potassium in late summer and early fall to help these grasses have better winter tolerance.

“When Bermuda grass goes dormant in the fall, it’s much more susceptible to winter kill, so the fertility plan should be geared toward trying to offset the chance of winter kill affecting the grass too much. That should be the focus for people who use warm season grasses, or the golf courses primarily in the South,” White explains.

“With bent grasses we advise a similar scenario, a little more phosphorus and little more potassium for the same reasons of trying to establish root growth and rebuilding a healthier plant,” White adds.

In Dallas, Sept. 4 was the area’s 31st day of 100 degree plus temperatures, White says, noting “normal” for Dallas is 18 days per year of 100 degree plus temps. Last year, Dallas had a record-setting 71 days of 100 plus temperatures, “and this year,



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we’ve had another hot summer, not quite as bad as last year, but almost equally as dry.”

White says the drought area as he understands it includes all of Texas, Louisiana, Arkansas, Oklahoma, New Mexico, Colorado, Nebraska, Iowa, Kansas, Missouri and Tennessee, “and this year it was very difficult, it even went on into the Carolinas and Georgia.”

“Hopefully, where possible, the superintendents are using irrigation in conjunction with their fertilization programs. Once there is rainfall, eventually the whole turf grass plant is much better hydrated,” White says.

“It’s going to take several inches of rain to get the soil back to where it was, and in some places in the drought states there’s been several inches,” he adds. “That’s why we recom-

mend potassium and phosphorus to rebuild a strong root and rhizome system.”

Dr. Richard White, a professor of Turfgrass Physiology and Management at Texas A&M University in nearby College Station, Texas, says a good time for supers with cool season grasses to fertilize is once there’s a break in the hot and dry weather.

“The challenge is some of your superintendents are dealing with warm season grasses and some are dealing with cool season grasses,” says White.

“My recommendation is as long as hot dry conditions of summer have moderated, that’s when you should look to fertilize. If you can, wait for somewhat cooler fall temperatures.” GCI

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