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WINTERKILL

A note to golfers about this winter and its impact.

This was a tough winter for most turfgrass managers. The discussions surrounding winterkill in both cool- and to a lesser extent warm-season turfgrasses was prominent throughout the industry. Many shared their stories of death and destruction while others were happy to be able to post images of healthy greens.

Winterkill on annual bluegrass putting greens was rampant on many courses throughout the mid-Atlantic and Northern US. Even our research plots at the Valentine Turfgrass Center were pretty much a total loss. Thankfully, I didn't have any ongoing research in these areas and we hope to have them back to full capacity by the time our anthracnose trials begin in June.

The bad part about our death and destruction is that we had originally thought that we made it through with minor problems. We did exactly what we preached to all of you out there and pulled samples from various areas, placed them in a greenhouse and waited to see if anything survived. Surprisingly, we observed pretty good recovery in nearly all samples that we pulled in early March.

Unfortunately, the winter didn't want to let go and the damage had yet to be done. Despite what appeared to be relatively unharmed in March, April thaws and refreezes coupled with prolonged periods of cold weather put the final nail in the coffin. We ended up with 100 percent death. It was like an episode of Game of Thrones when Ned Stark was about to be freed only to have his head chopped off. So much hope killed with one swing of the sword.

Just like us, many of you who thought that you made it through the season in decent shape didn't come up

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with a contingency plan to deal with the death. This means unexpected increases in labor and budget to get the turf back in playing conditions. It also means delayed openings, reduced rounds and decreased income for the club. Based on this, members will be pushing to get things back to normal.

For those superintendents that had to deal with (or are dealing with) dead turf, there will be nothing normal about this season. While overseeding and resodding may have taken place and the putting surfaces now look like they are in prime condition, they're likely far from it.

If you were one of the fortunate ones who got the go ahead to resod with creeping bentgrass, you will probably be in the best spot. However,

you will still be dealing with very young and relatively shallow rooted turfgrass as we head into the summer.

For those that did what we did in our research plots and simply poked as many holes as possible to allow the existing Poa seed to germinate, you may be in for a struggle. These young seedlings have about 1-2 months to become as healthy as possible before the summer stress wallops its punch. There's a reason we don't open a golf course 2 months after seeding.

So what do the members and golfers need to know?

They need to know that this was one hell of a winter and you're not alone in your struggles. They need to realize that there's a reason the course (KAMINSKI continues on page 62)



that then influences some growth metric.

But I am not convinced that colorants grow roots. There is more work to be done to better understand how the use of pigment colorants applied to a plant leaf surface influence all the ways a plant could respond.

THE MAJORITY OF RESPONDENTS INDICATED THEY WILL CONTINUE TO USE COLORANTS AS A TURF MANAGEMENT TOOL. WHAT CAN WE EXPECT TO SEE IN THE COMING YEARS?

We see today that colorants do have a place in the bigger picture of turfgrass management practices by golf course superintendents. Their current uses have expanded considerably in these recent years, largely driven by economic forces. Where there was once much skepticism and avoidance, there is now general acceptance of these pigment colorants as a result of early-adopters looking for new ways to not only solve turfgrass management problems, but to maintain and even enhance the game experience by their golfing clientele. I would say the place of colorants and how they may be used in more innovative ways will depend on where they fit as a component that superintendents use to create the kind of golf experience that draws greater participation and enjoyment of the game by future generations. **GCI**

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down the street didn't lose turf and you did. They need to realize that there's a real difference between the creeping bentgrass greens on the neighboring course and the annual bluegrass on yours. They need to realize that the hybrid Bermudagrass they thought was a bulletproof choice on their greens may be challenged in a winter like this.

They need to know that it's not your fault that one of the greens on your course died while another didn't. They need to understand that variation in drainage or shade on golf course surfaces as well as microclimates from one green to the next can have a tremendous impact on plant health and survival.

They need to understand that preventive maintenance practices help to reduce

improve irrigation scheduling. They can perform preventive maintenance, such as cleaning out controllers, exercising gate valves, tightening grounding clamps, replacing and leveling valve boxes, and cleaning and painting the pump house and pump station.

Above all else, patience is necessary to provide these services. Troubleshooting a strict sequence and customer service as the irrigation technician is always out among the members and players making repairs.

Of course, being mechanical oriented and not being afraid to get dirty doesn't hurt, either. Wire tracking and fault finding is a necessary skill, but unfortunately it is one only perfected with experience. With new technologies – such as integrated decoder type systems and the use of HDPE pipe – more skills and training are needed because these systems use more sophisticated equipment.

Most superintendents determine the watering schedule and have the irrigation central control system in their office. However, in some cases, the irrigation technician may be watering or implementing the schedule. Usually the technician maintains the irrigation system central controller database. As we have discussed in this space before, it is es-

sential to have an accurate database. The irrigation technician is best positioned to ensure that the correct sprinkler, nozzle and arc that they have serviced in the field are reflected in the database. By performing audits, they can also use the data collected to fine tune precipitation rates and runtimes.

Unfortunately, good irrigation technicians are hard to find and they are beginning to earn higher salaries. There is no real training program other than experience. Much like a spray technician, if you can identify someone on your staff with the right skillset you can train them on irrigation repair and send them to electrical troubleshooting or auditing classes.

Irrigation technicians can be well worth the cost especially if you have an aging irrigation system that has continual problems as they are less expensive than a new system.

If you have the budget to hire or the available staff, an irrigation technician will improve the operation and lengthen the life of your irrigation system. It should also provide for better playing conditions as the irrigation system will cause less issues on the course and have improved uniformity when compared to an irrigation system only maintained and/or repaired when necessary. **GCI**

the possibility of these dramatic events, but that even the best laid plans are sometimes not enough.

Hopefully one thing that will come out of a winter like this one is that clubs will start to realize the potential negative impacts of a harsh winter (similar to harsh summer) and allow for modifications. These may include converting from annual bluegrass to creeping bentgrass or installing internal drainage to improve water movement. Each case is different and the only person who knows what best for the course is the individual superintendent managing the course.

The bottom line is that the members and golfers out there need to realize a few things.

- The death experienced this winter was unavoidable
- Recovery is going to cost money and take time
- Reconditioned greens will struggle this year, especially in the summer
- The superintendent's recommendations to improve the overall growing conditions of the turf (e.g., internal drainage, tree removal, etc.) should be taken into serious consideration

Although the golfers will likely feel angry and upset about the conditions and/or delays in course opening, I can assure you that the superintendent and their staff will be feeling 10 times the pressure and stress. Believe me, they hate losing turf more than you. **GCI**