SURVIVING THE SUMMER FROM HELL
THE MOST BRUTAL CONDITIONS IN DECADES TESTED SUPERINTENDENTS — AND THEY PASSED WITH FLYING COLORS. HERE ARE SOME IDEAS ABOUT HOW THEY DID IT. By Frank Andorka

For superintendents around the country, Summer 2010 will go down as the summer where they couldn’t make a single mistake. A wet spring gave way to heat and humidity unseen in some parts of the country for nearly 40 years.

Summer tested most superintendents no matter where they were, but this was also a summer where superintendents proved their worth to golfers. Only through careful management were superintendents able to avoid losing turf on a grand scale.

“We had two sets of superintendents this summer,” says Ty McClellan, agronomist for the USGA Green Section’s Mid-Continent Region. “Everyone lost some grass at some point this summer, but there were those who didn’t lose it on a grand scale and those who did. There are certainly other underlying factors at play that predispose some golf courses to damage every year, but one of the main differences between superintendents was the management practices they used – or didn’t use. Knowing when to back off certain practices was key.”

ESTABLISH HEALTHY CONDITIONS. McClellan says successful superintendents created healthy growing conditions for the turf long before this summer. In addition to greens being properly designed and constructed with excellent drainage, he ticks off a list of three practices he considers crucial to achieving the goal:

- Good thatch management;
- Ensuring proper sunlight exposure throughout the day; and
- Providing sufficient airflow.

Eric Bickel, superintendent of Hallbrook Golf Course in Leawood, Kan., who labels 2010 as the most difficult summer he’s seen in his 15 years at the course, lost turf in high traffic areas, but nothing catastrophic. He attributes his success in managing the turf to the decisions made by his membership and the dedication of his crew. “Thanks to understanding members, we’ve been able to do pretty intensive aerification on the greens,” he says. “We had 33 inches of rain from April to July – the most since 1893 – and then we had the heat. You weren’t going to be able to grow turf unless you got significant air into the root zones.”

Bickel changed his normal maintenance practices from wetting agents to soil penetrants to battle hydrophobic soils. The course also invested heavily in fans to get the water off the greens more efficiently. “We were afraid that wetting agents would have kept the surface too wet, and the penetrants ended up working well,” he says.

Mother Nature had set up Kansas golf courses for failure this year by giving them two incredibly mild years in 2008 and 2009, which encouraged Poa annua and Poa trivialis growth in the roughs. When the heat came back with a vengeance this year, the Poas couldn’t handle it.

The hollow, rotted trunk of a tree as seen after limb removal.
Like Bickel, Matt Shaffer, superintendent at Merion Golf Club in Ardmore, Pa., works at a facility where golfers understand better what it takes to grow turf in tough conditions. But even he says superintendents are always at the mercy of the weather, and that clubs have to understand what they can do to help.

"Give your superintendent good drainage for his greens, and regrass the greens before methyl bromide is taken away by the Environmental Protection Agency (EPA)," he says. "Even if you give them perfect support, there's a chance things will go badly. So much of this job is the luck of the draw.

"We're a big club with lots of resources, but for some smaller clubs where it's just the superintendent and his assistant, these were killer conditions," he says. "Hand-watering under these conditions is a must."

PHYSICAL MANAGEMENT. Chris Thuer, CGCS, of Bear Slide Golf Course in Cicero, Ind., was more than prepared for the summer because of changes he'd been making over the past several years. "We came through the summer really well," he says. "We'd backed down our mowing a couple of years ago on areas other than greens, so we could mow normally this year."

He watered more often than others because Bear Slide pulls its water from a well, which means the water is cooler than the ambient air. Using well water helped keep the turf at ideal temperatures for growth. Thuer also maintained his fungicide applications every two weeks, which worked perfectly under the exceedingly rainy conditions this year.

Solid-tine aeration played an important role in helping Dan Dinelli, CGCS of North Shore Country Club in Glenview, Ill., nurse his turf through the 18th hottest and wettest summer the Chicago area had ever had. The conditions compromised root growth and first-year fretting

FIRST-YEAR FRETTLING

The heat and humidity experienced across the country stressed out superintendents as they tried to keep their turf alive under unfavorable conditions. You probably had that experience yourself. But it kept you up at night.

Now imagine you're a first-year superintendent at one of the most prestigious golf courses in your area. Not only are you a first-year superintendent, but you're a first-year superintendent who is replacing a literal living legend who had tended your turf for more than 40 years. Think you might worry a bit more than most?

"It was a brutal summer - there were a lot of sleepless nights," says Edward Smith, superintendent of Canterbury Golf Club in Shaker Heights, Ohio. "I woke up every morning - and I mean seven days a week - wondering what new challenge the day would bring."

Smith took over Canterbury, one of the Cleveland area's most storied courses, from turf legend superintendent Terry Bonar last year. He can laugh about it now, sitting in his modest office on the course grounds. But when the spring started off wet and then the brutal heat and humidity of this year's Cleveland summer set in, Smith had his days where he wondered what else could possibly go wrong.

"If you can think of a challenge - disease, insect or just plain turf stress - I'm pretty sure I dealt with it this summer," Smith says. "We had to spray for pythium five times in July and four times in August, which is highly unusual. We had to hand-water like crazy to keep the turf from burning up, but not too much. We had to manage this turf more this year than I've ever had to do before in my 20 years here."

Then just as Smith and his crew started to breathe a much-needed sigh of relief, he lost many of his seasonal workers as college fall semesters started.

"Colleges are starting earlier and earlier these days, and that cost me some excellent crew members when I needed them most," Smith says. "It's not as if you're doing any less work, but now you've just got fewer people with which to do it."

The final blow came at the beginning of September when a freakish micro thunderstorm blew right down the middle of his course and took out a host of old trees. But even then, Smith didn't look to the heavens and curse his luck.

"Luckily, I have a general manager who understands that without the golf course, none of us have jobs, so he pretty much gives me a lot of room to do what I have to do to keep the course in good shape," Smith says. "We'll just take our lessons from this year and learn them so we're in even better shape next year in case this kind of summer returns."

Green damage at Canterbury Golf Club.
When the heat is on from the weather, the best superintendents must communicate effectively with their golfers.

Eric Bickel, superintendent of Hallbrook Golf Course in Leawood, Kan., put together a special presentation for the green committee and went into detail about how the weather conditions were having an impact on the way he managed the turf - and how that would affect conditions. "I had to communicate more intensely with the golfers than I ever have before," Bickel says. "You have to look at it from the golfers’ perspective - they’re paying to play golf with certain conditions. You have to explain to him what that may be nearly impossible. They are usually understanding if you take the time to explain it."

Dan Dinelli, CGCS of North Shore Country Club in Northbrook, Ill., took his golfer communication to a new level of sophistication this year. In the past, he had done text-based email communications, but he found golfers didn’t pay them much attention. Last year, he decided to take pictures and email them with captions explaining what he was showing. This elicited positive feedback.

This year, Dinelli bought himself a flip video camera and sent hotlinks to people of video showing exactly what his team was doing and explaining why.

"That was incredibly successful," Dinelli says. "There’s nothing like face-to-face communications, but using video is an incredibly effective tool. I highly recommend it."

TOP: Spring rains made many courses look like duck ponds - literally. ABOVE: Dan Dinelli, CGCS of North Shore Country Club in Northbrook, Ill. had his crew use pumps and fans to help dry the surfaces. Anything to help get the water off the turf as quickly as possible because NSCC is very flat with poorly drained clay soils.
favored high disease pressure.

Dinelli solid-tined his greens three times per month and twice on fairways to encourage healthy gas exchanges within the soil. "No one got much time off this summer," he says. "Fortunately, I have a seasoned team that looks on being challenged as energizing."

PEOPLE POWER. For many, it became a bal-}

ancing act to keep his crew from getting overworked. Dinelli recommends superintendents hire complementary personalities - and lead by example. "It's taxing, and it's a round-the-clock job," Dinelli says. "Every morning we were addressing situations, and no one could allow his guard down. I'm fortunate to work with some amazing people, including my cousin Jerry who basically grew up here with me."

Thuer's people started at 5:30 a.m. and voluntarily didn't take lunch so they could leave the course before the heat of the day really hit. He also encouraged his team to take more frequent water breaks, and to get to the shade so they didn't succumb to the heat.

No matter how you survived the summer, every superintendent should gather their team together and do a final audit of the year. "It's the perfect opportunity to review what worked and what didn't," McClellan says. "Deficiencies are revealed in summers like 2010, so earmark areas for improvement. If you take time to do this step, you will be able to improve long-term maintenance plans for the course - and be better prepared no matter what the seasons throw at you."

Ty McClellan, agronomist in the USGA Green Section's Mid-Continent Region, says this summer's conditions challenged superintendents from across most regions of the country. It was so bad, in fact, that many of the Green Section's agronomists collaborated on a series of email alert pieces for superintendents to use with golfers to educate them on what this summer's heat and humidity meant for the art of golf course maintenance. "It's not often that we all collaborate with similar issues facing our respective regions at the same time," McClellan wrote in an email. "In the case of Summer 2010, however, many regions and most of our weekly updates have been dedicated to summer survival strategies."

The USGA used all of the latest technologies in their arsenal to communicate with superintendents and golfers - podcasts from agronomists in each region, a timely note from Jim Snow, National Director of the USGA Green Section, and photo and video collections to show superintendents the different kinds of damage their colleagues were experiencing around the country.

For a full list of USGA Green Section Record articles, regional updates and webcasts to see the innovative collaboration of the country's top agronomists, go to turfweb.lib.msu.edu/starweb/USGAS/servlet.starweb.