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makes them more available to the plant and improves fertilization efficiency.”

Kurtz notes that increased use of reclaimed water has led to more salt problems, particularly on push-up greens. Increased salt adversely affects nutrition uptake and places grass under additional stress. On native greens, he suggests aerification through the spring and into the summer with a lot of leaching.

“If you’re doing the leaching, your best grass comes out of the aerification holes,” he says. “The areas between the holes tend to be a yellowish color because you didn’t leach the salts there as much as where the holes are. The grass will come up green in the holes, so you need to get in there and spike or lightly verticut, and then leach the green again. Then you have to put an even distribution of fertilizer on to match everything. If the grass grows from the aerification holes, you will get a bumpy green. You have to try to stimulate the areas between the aerification holes.”

Heckman has experimented with recycling grass clippings and found that superintendents can cut fertilizer rates in half when clippings are left behind.

“You have a better color turf with half the nitrogen with Kentucky bluegrass,” he says. “It also reduces the weed population. This would be helpful for any turf manager trying to go toward organics. The down side is you have to mow more frequently. But some of the mowers coming on the market today are better at recycling clippings, so you don’t see as much residue. The other thing you can do to minimize clippings is use a controlledReleased fertilizer.”

Fertilization frequency

White recommends fertilizers be applied at least annually and every six months on new turfgrass. The heaviest applications should be in the fall.

With bentgrass greens during Texas summers, spoon-feeding small amounts of nitrogen at frequent intervals — as little as one-sixteenth of a pound per 1,000 square feet every week —

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Continued from page 62

seems the way to go. During more optimal growth periods, a half-pound per 1,000 square feet once a month seems a better strategy.

“In the summer, you don’t want to be over-stimulating [with too much fertilizer] because of disease,” Kurtz agrees. “A good fall application or two is always helpful. Spring applications can be helpful and then cut back in the summer.”

Danneberger cautions against overrelying on certain practices.

“People have taken a good practice, like foliar feeding or spoon-feeding during a stress period, and turned it into their entire program,” he says. “That’s not a good idea. Many have gone to spoon-feeding light rates frequently in the summer. Exactly how much of that nutrient is being taken up in those low amounts is always an interesting question. Sometimes there’s a response, and sometimes there isn’t.”

**Fertilizer formulations**

Most superintendents use combinations of liquid and granular applications.

“In expansive areas, like fairways and roughs, granular applications would be more cost effective,” White says. “Liquid fertilizers are usually done on greens when you’re trying to spoon-feed with micronutrients.”

In the fall and late spring, Danneberger recommends granular, slow-release and liquid fertilizers at high rates with adequate nitrogen levels. During summer, when superintendents are concerned about too much growth and how it affects ball speed, adding small amounts of nitrogen through spoon-feeding or foliar applications works well.

“It’s tough to put granular down on a green with the right dispersion patterns to deliver extremely low rates,” Danneberger concludes. “So they [superintendents] are almost tied into a liquid application. If it were up to me, I’d like to see granular applications during non-stress times and liquid/foliar/spoon-feeding during stress times.”

Blais is a free-lance writer from North Yarmouth, Maine.

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Running the Show

We — the editors of Golfdom — hurried to as many seminars and press conferences as we could to bring you this comprehensive report on the GCSAA Conference and Show.

BY GOLFDOM STAFF

Editor’s note: The GCSAA Conference and Show was held Feb. 9-14 in and around the San Diego Convention Center. The weather was great — not that Golfdom staffers got to enjoy it. We were inside most of the time, usually in the confines of the vast San Diego Convention Center. So much for SoCal’s laid-back tradition — we hustled and bustled for four days, not getting any time to spend poolside. Well, as they say in Hollywood, the city further north of San Diego, on with the show — coverage, that is.

No low carbs for turf

Forget about putting turf on the low-carbohydrate Atkins diet. That’s the advice from Jack Fry, professor of horticulture and turfgrass management at Kansas State University.

While a low-carbohydrate diet will work well for some people, who can eat meat, plants need to have an avenue to make food. That avenue is carbon dioxide, which the plants turn into carbohydrates, Fry said.

Fry delivered a full-day seminar on plant physiology that covered all kinds of turf management situations — from heat to cold, from baking sun to shade, and from drought to damp.

“Mowing has an impact on all of these stress situations,” Fry told superintendents.

One take-home message: Raise the mowing height up and avoid the problem of putting greater stress on the plant’s ability to produce beneficial carbohydrates.

“Even raising the mower as little as one-thirty-second of an inch on bentgrass greens will make a difference in the plant’s ability to produce carbohydrates,” Fry said.

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Did you see GCSAA CEO Steve Mona on TV? Syngenta TV, that is. The Syngenta Turf Network broadcast live interviews at its booth during the show. Viewers could watch telecasts of the broadcasts on TVs positioned on the other side of the company’s booth.
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Get their opinions

David Davies, certified superintendent of the Palo Alto (Calif.) Municipal Golf Course, says superintendents should make use of all communication streams before making budget decisions. Davies spoke during the Innovative Superintendent Session II.

Superintendents should talk to the pro shop and maintenance staffs to hear what golfers are talking about, Davies said. "In a perfect world, superintendents should talk to the pro shop and maintenance staffs to hear what golfers are talking about," Davies said. "That will help superintendents put their budgetary priorities in order.

"Let everyone know that you want to hear what they're hearing," Davies said. "In a perfect world, superintendents would get a chance to talk to all the golfers, but you can't. So you need to make use of all channels of communication available."

Habla Espanol

"In a Hispanic culture, what you say may not be seen as so important. What you do may have more meaning." Thomas R. Maloney told attendees of the Managing a Multicultural Workforce seminar.

Maloney is senior extension association in the Department of Applied Economics and Management at Cornell University. He is also co-author (with Robert A. Milligan) of Human Resource Management for Golf Course Superintendents (John Wiley & Sons, 1996).

Maloney said studies show that 30 percent of superintendents have less than six years of multicultural management experience, despite the fact that the vast majority have to deal with local work forces and immigrant Hispanic work forces.

Maloney said successful supervisors have learned to understand cultural differences and have developed strategies that value those differences. In addition, Maloney said effective supervisors find a way to overcome the language barrier, either by learning Spanish themselves, providing English-language education to employees or identifying a "go-to" person on the crew who acts as interpreter and intermediary.

On a related topic, Alan Hess, certified superintendent of Augusta Pines Golf Club in Spring, Texas, told a group of his colleagues that they should learn how to speak Spanish to enhance their careers.

"If you can develop a core vocabulary, it will help you communicate better with your crew members," Hess said. "If you all work together, you can create better cross-cultural understanding. You can help them learn English, and they can help you learn Spanish."

About your irrigation system...

Why would a superintendent want to renovate his irrigation system? Let Larry Spain, a field training manager for The Toro Co., count the ways. Spain spoke as part of the seminar, Water Woes: New Solutions for Golf Courses.

The reasons a superintendent would want to consider an irrigation renovation include the high costs to maintain current irrigation systems, increased operational efficiencies and improved playability on golf courses.

Increased competition among courses could also lead a superintendent to perform an irrigation upgrade to get a leg up on the competition, Spain said. A course could differentiate itself with an irrigation upgrade because fewer courses are being built, fewer rounds are being played and green fees are being lowered, he added.

"Customers are looking for good conditions," he said. "Avid golfers say the reason they play [certain] courses is because of their conditions."

China, here comes Hills

Architect Arthur Hills said it's always been his dream to build a course in China. During the show, Hills...
announced he found a partner in the country to help him realize it.

Hills and his Toledo, Ohio-based firm, Arthur Hills/Steve Forrest & Associates, announced plans to build the course after finding the right partner in the Xin Dong Yang Group.

The project is expected to be a 36-hole course a few miles from Shanghai, China, that will also include residential development, said John Mai, principal partner of the Xin Dong Yang Group. The partners expect to finish the project in either 2006 or 2007.

“We want to make this project the best golf course in China,” Mai said. “We’re looking forward to working with Arthur Hills and his partners to achieve that goal.”

**Behind “bad” water**

Many superintendents report “bad water” in their irrigation. However, Clark Throssell, director of research for the GCSAA, advises against lumping problems as “poor water” or “bad water.”

“Get away from generalities. Get to the root of why the water is bad, then formulate a solution to the problem,” he advised superintendents at a session on irrigation water quality.

Throssell and David Kopec, an extension specialist with the University of Arizona, told of four situations where acidification may be helpful in solving a water (or soil) quality problem:

- Water with high residual sodium carbonate (RSC) might benefit from a sulfur burner or acid injection system to neutralize the carbonates and bicarbonate in the water. This will lower RSC and makes water safe to use without risk of damaging soil structure.
- Water with high sodium-absorption rates (SAR) can be treated by adding sulfur to the soil. The irrigation system is used to distribute the sulfur contained in the irrigation water, but the SAR of the water itself is not lowered.
- Prevent calcite formation, Throssell advised. Calcite is crystallized calcium carbonate — white deposits that decrease water infiltration. Lowering the pH of irrigation water below 7 by using a sulfur or acid-injection system will help prevent calcite buildup. While a problem in arid areas, calcium formation rarely happens in places with natural rainfall since rainfall is naturally acidic, Throssell noted.
- Water with a low or zero RSC and high bicarbonate content would benefit from acidification of the water to help lower soil pH and maintain it at an acceptable level. This typically is a problem in areas with less than 20 inches rainfall per year where irrigation is used intensively for six months a year, sodium levels are moderate to high, and the soil is fine-textured.

**Feherty: The Funniest Man to Walk a Fairway Since Bob Hope**

We have a greenkeeper at a tiny Irish golf club to thank for David Feherty. The former Tour journeyman turned CBS commentator said it was the keeper of his father’s club in Bangor, Northern Ireland, who gave him a couple of cut-down clubs and sent him on a path that would lead to 10 European Tour victories, a Ryder Cup spot and now, a place in America’s heart as the funniest man to walk a fairway since Bob Hope.

Feherty, the author of *A Nasty Bit of Rough*, wowed a crowd estimated at more than 1,000 at Syngenta’s Green Carpet Preview with a rapid-fire series of observations and jokes. Make sure to read these with Feherty’s Irish brogue in your mind:

**On Tiger Woods:** “Of the 10 greatest shots I’ve ever seen hit, Tiger’s hit 15.”

**On his career:** “I never had the desire to be No. 1. I’m just way too lazy.”

**On golf course designers:** “I hate all the (blanks). There are sheep that have designed better golf courses than some of them out there.”

**On famously deliberate player Bernhard Langer:** “He’s so slow he could take an hour and a half to watch 60 Minutes.”

**On Annika Sorenstam’s venture on the Men’s Tour:** “I don’t think there’s been another athlete since Jesse Owens in 1936 (at the Berlin Olympics) who deliberately put themselves under that kind of pressure.”

**On course conditioning:** “Golf courses are works of art now. There’s been an extraordinary revolution in turf care.”

**On superintendents:** “You do an extraordinary job.”

— Pat Jones, Publisher

**Continued on page 68**

At the University of Kansas, told superintendents how to plan to deal with the press during a crisis before one comes up at their courses — or it might be too late.

Utsler said superintendents should cultivate good relationships with reporters, take responsibility when something goes wrong and don’t hide from problems.

Those simple steps can mean the difference between a positive story about how you’re dealing with the crisis and a negative story about how the problem happened in the first place, he said.

“If you work on building a level of trust with your local reporters, you may be able to mitigate some of the potentially damaging coverage when a crisis comes up,” Utsler said. “It’s when the reporters don’t...”
Running the Show

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know who you are or think you're hiding something that you can get into trouble.”

“Help them win”

Ken Blanchard, chief spiritual officer of the Ken Blanchard Cos., a management and leadership training and consulting firm, gave an uplifting speech to superintendents Friday during the show’s general session. Blanchard, described as “insightful” and “compassionate” in his biography, basically told superintendents that the secret to success is to adhere to the good ol’ Golden Rule.

Superintendents need to treat the people they come in contact with—from players and members to their crew members—with respect and dignity.

Blanchard said superintendents shouldn’t just stop with satisfying customers. “You want to blow them away,” he said. “You want to create memories.”

Regarding their workers, Blanchard said superintendents should help them “win” at their jobs.

“Every few days, he would put a roller into the back of a utility vehicle and make a couple of passes around the course where the golfers could see him,” Engelke said. “Then he’d take the roller back to the shop and put it away—without ever using it once.”

Engelke smiled at the group. “He never got questions about rolling again,” Engelke said. “The membership never knew the difference.”

Engelke used the anecdote to illustrate a larger point—superintendents are often asked to perform tasks by golfers that don’t make agronomic sense. He said superintendents need to be creative in finding ways to deal with those demands so they don’t destroy turf.

—Frank H. Andorka Jr.,
Managing Editor
It’s your job to help them win,” he said. “Because if they win, you win, and the whole department wins.

“You need to let your [workers] know that their work is important — it’s not gardening,” Blanchard adds. “You want to treat your people in a way that makes them excited about what they want to do.”

Superintendents shouldn’t try to catch their workers doing tasks wrong on golf courses, Blanchard said.

“The key to developing your staff is to catch them doing something right,” he added, and then let them know about the good things they’re doing with positive remarks.

The bottom line, Blanchard stressed, is that everybody needs encouragement.

“How many of you are sick and tired of the praises you receive at your courses?” Blanchard asked with a smile. Audience members, of course, chuckled, signifying a collective “no.”

The next frontier?

Sean Hoolehan, certified superintendent of Wildhorse Resort Golf Course in Pendleton, Ore., told a group of superintendents that Native American reservations may be the next frontier in golf course development.

Hoolehan, who was moderating a panel called Demystifying Golf Course Management and Development in Indian Country, said there are 542 Native American tribes in the United States, but fewer than 50 of them have golf courses.

Many tribes are looking to diversify the economies, and those who have dabbled in casino gambling are looking for something to spur the next wave of development and employment, he said.

The Native American gambling industry currently brings $14.5 billion in revenue to the tribes who have built casinos on their land, and they’re looking for a good investment to spend it on, according to Hoolehan.

“There’s a lot of interest in the Native American commu

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“Community in the golf course industry,” Hoolehan said. “They have the money [from gaming revenues] and the land. It’s a great opportunity for developers in a slumping market.”

Got salt?

When most superintendents do a soil test, they take out a core, tear the top off and box what’s left to send to the lab.

But that traditional method won’t work if the superintendents are checking for the salt content of their soil, said Milt Engelke, turfgrass professor at Texas A&M Turf Research Program, at his Bentgrass Management and Root Zone Maintenance seminar.

Engelke said superintendents who remove the top layer of turf and soil from their samples would never find salt because it usually rises to the top.

“If you’re hoping not to find a salt problem, that’s the way to do it,” Engelke said. “Of course, that won’t be an accurate representation of what’s actually going on.”

Engelke also said superintendents should treat a salt problem with a calcium treatment to make the salts water soluble again. If the soil pH is below neutral (7 or lower), then Engelke recommended using a calcium carbonate product to deal with the salts.

On the rare occasion superintendents find a salt problem in an acid soil, he suggested superintendents treat it with a calcium sulfate product.

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