Turfgrass management

The choice is yours

PROJECT TIMELINES, CLIMATE AND COST DETERMINE TURFGRASS SELECTION

by JOHN

hen members of Oak Hill Country Club in Omaha, Neb., approved a renovation project TORSIELLO for nine of their 18 holes, golf course super-

intendent Dan Maddox went into action. He set in motion a master plan that called for growing sod he and his staff would use to resurface several acres of fairway and tee boxes. The result of Maddox's efforts was a \$200,000 savings and a new playing surface members rave about.

We didn't have the window to go with seeding the areas that were being redone, so we were forced to go with sod," he says. "To truck sod in would have cost about \$1 a square foot. Do that on four to fives areas of fairway and tees, and the cost goes through the roof."

Maddox did his homework. When he knew renovations were possible, he grew

Tips for turfgrass selection

- Gather as much information as possible. Think big picture and long term.
- Understand the climate and weather conditions that affect the golf course and what it will mean for proper turf growth and maintenance.
- Find out what grasses have been successful at nearby courses or in areas of the country with similar climates and growing seasons.
- · Consult with as many experts as possible golf course architects, seed and turf distributors, agronomists and golf course superintendents.
- Plot test different grasses to get an indication of how well the grass will perform.
- · Weigh the pros and cons of sod versus seed.
- When sodding a portion of a course, make sure the imported grass is pure, and purchase it from one source to avoid contamination of existing turf or new grass.

Source: GCN research

one acre of L93 bentgrass on the property to determine if the strain could withstand the sometimes-harsh climate of Omaha - and if members thought the turf was suitable.

"It was an excellent choice because the bentgrass is disease and heat resistant and it has great upright growth," he says. "It has received the highest grades in national trials. And the members went out there, hit off it and liked the way it felt."

Maddox used four acres of the club's practice area to grow the L93 used for the renovation. He also contracted with a local nursery to grow 12 acres of bluegrass for the rough areas that were resodded.

Additionally, the turf on the greens was killed to make the switch to A4 bentgrass, which provides a consistent putting surface that can maintain its speed daily, according to Maddox.

Of course, not every superintendent has the luxury of available land and a 14-person staff that Maddox had when undertaking such a project.

"It took a lot of coordination, timing and planning," he says. "We even had a 20,000square-foot nursery where we grew A4 for a worst case scenario if the sod didn't take. You have to have the room to be able to do something like this on a big scale."

Deciding what works best

The project at Oak Hill might be out of the ordinary because most course owners and architects opt for the more traditional process of seeding fairways, tee boxes and roughs when building new courses or renovating existing ones. The choice of grasses used in the process is vital and a decision usually is reached by a consensus of those involved in the project.

"We rely on an architect to help us in the selection of grasses for a course," says Al Martell, vice president of golf properties for Castle and Cooke, which is overseeing the construction of nine new holes at the Saddle Creek Resort in Copperopolis, Calif. "There will be input from myself, the superintendent, the general manager and probably the consulting firm we use. It will be done by committee and after much research."

Agronomists also are used when selecting turfgrass for a project.

"Almost every golf course architect I know will consult with an agronomist when developing specifications for grassing a new or renovated course," says Jim Connolly, a consulting agronomist who has worked with Pete Dye and Palmer Course Design and in the Asian market. "Every owner will consult with somebody he considers an expert in the field.

Twenty years ago an architect had a list of grasses he used in his last project and he selected from that," he adds. "Now, while the species used on courses have remained about the same, the strains change every 12 months, or so it seems."

Kevin Atkinson, a golf course architect with and partner of Phelps-Atkinson Golf Design in Evergreen, Colo., still relies on his own track record with certain grasses, as well as input from industry professionals, to determine what grasses will work best for a particular grow-in.

"I lean on seed suppliers for information about the different and new varieties of grasses and what would work best in the climate the course is in," he says. "Everyone is probably going to push their own seed, so I get two or three opinions. We rely heavily on the superintendent who needs to have a comfort level with the type of grass he'll be managing. Some superintendents will have had success growing certain types of bentgrass fairways and others say it takes too much water and that 'this isn't the place for that type of bent.' Usually, it's a compromise of some sort.

Golf is my passion, so when I'm out playing I'm looking at everything under the moon," Atkinson adds. "I look at the quality of the turfgrass, the color, how well it recovers from ball marks. It's all knowledge that I put into the bank when it comes to the next project."

When renovating a course - when downtime means revenue loss or unhappy members - it's crucial to get the course back in playing condition as quickly as possible. That's why the PGA Golf Club at PGA Village in Port St. Lucie, Fla., decided to use Champion ultradwarf Bermudagrass when it renovated the greens last year at PGA Country Club, one of four layouts at the facility. Champion also is being used on green renovations on the club's North and South courses this year.

"We aerified and verticut the putting surfaces multiple times to beat up the organic material, and then removed about 80 percent of the matter on the greens at the country club last year," says Bud Taylor, director of golf. "We finally sprayed the greens to kill them off and then put on a thick layer of topdressing after seeding with the Champion ultradwarf. In eight weeks, we had perfect putting surfaces; and what we did had a cost factor that was miniscule compared to the traditional way of going in, coring the greens and starting all over."

Because Champion is dense, tight grass, it's highly manageable for the club's needs, Taylor says.

"It's as close to bentgrass without being there," he says. "We can have the greens at a nine or 9.5 on the Stimpmeter or take them to 10 or 11 for a tournament in 14 days. We didn't have that ability or consistency with the old greens."

Like Oak Hill, A4 bentgrass was an ideal selection for the greens at the recently opened Lederach Golf Club in Harleysville, Pa., according to Anthony Cianci, vice president of mid-Atlantic operations for Billy Casper Golf, the management company that operates Lederach.

"We've gotten great root depth with A4," he says. "It likes to be cut low as opposed to some of the more traditional bentgrasses that will stress if they're cut too low. With A4, we can trim the greens down to micro-inches, and the putting surfaces can be superfast. Comparatively, older strains allow you to take the blades down to perhaps only an eighth of an inch."

The sod choice

An area's climate is always a consideration when selecting seed for grow-ins on new and renovated courses.

"We get triple-digit temperatures in the summer, but it cools off at night with rain during the winter months, so that's why

Management of the PGA Golf Club in Port St. Lucie, Fla., chose Champion ultradwarf Bermudagrass when it renovated the greens last year. Photo: PGA of America

turfgrass management



After much research, a committee will choose the turfgrass for the new nine holes being built at Saddle Creek Resort.

we have to be careful what bentgrasses we choose," Martell says about Saddle Creek, which is located 1,000 feet high in the foothills of the Sierra Nevada mountain range.

In some areas, grass grows from mid-April to the end of September, and other areas, especially those with elevation, have a much shorter growing season, Atkinson says.

That's when using sod becomes an option. Trucking in sod is more expensive, but it might be necessary if the climate or the project timeline doesn't allow for a suitable grow-in period.

"We had to do a little of both, seeding and sodding, when we redid the course for this season," says Jon Wood, general manager of the 108-year-old Waterville Valley (N.H.) Golf Course. "All the greens and tees were sodded, and the fairway areas were either sodded or hydroseeded. Because we wanted to make them playable this year – the project was started last October – we had to use a lot of sod. We are fairly high in the mountains, and winters tend to come sooner and last longer."

Another reason to use sod instead of seed is financial. While it might initially cost more, sodding can be beneficial.

"I'm working on a project where we're sodding 70 acres of fairways, rough and tees for a new private club," Atkinson says. "The biggest reason for doing this is to get the course open sooner and get the cash register going quicker. When the owner took into consideration the cost of labor, fixing erosion, fertilizing and the time sitting around waiting for the grass to grow, he saw it was a wash.

"This might also work for a high-end, daily-fee course that's charging \$100 or more a round," he adds. "If the owners can get the course open six months earlier by sodding, it might be the wise choice. If you're charging \$40 or \$50 a round it probably doesn't make sense."

Another scenario in which sodding might be more effective than seeding is when a developer attempts to sell building lots around a golf course and wants the course open for use as advertising to entice buyers.

Some developers combine growing grass on a majority of the course with sodding areas around greens and portions of the fairway that are susceptible to washouts. When sodding portions of a course, it's recommended to make sure the imported grass is pure and purchase it from one source to avoid contamination of existing turf or new grass.

Potential pitfalls

With progress and technological advances in turfgrass come potential pitfalls. For example, it's imperative for owners and superintendents to think long-term when selecting fairway grasses, Connolly says.

"One of the biggest issues today is the desire to have a fairway in which the grass can be mowed to a quarter of an inch to provide the optimum playing surface," he says. "You can do some cool things to the golf ball on a fairway like that, but people need to be aware of the increased maintenance needed having a bentgrass variety that can be cut that short. You almost have to manage those fairways like you do the greens, with more topdressing and pesticide use.

"If it rains a lot, you topdress maybe three times a year when you should do it 10 times a year," he adds. "You start to get excessive thatch production in cooler climates where the thatch can't decompose as rapidly, and you start having problems."

Overall, it seems one can't go wrong gathering as much information as possible about grass types, new strains and the affect climates can have on turf growth and management, which usually means consulting an agronomist. GCN

John Torsiello is a freelance writer based in Torrington, Conn. He can be reached at jtorsiello@megahits.com.



Those involved with selecting a type of bentgrass for the new nine holes being built at Saddle Creek are considering the climate of the Sierra Nevada Mountain range.