BY BOB SELIGMAN

getting started

THE ENVIRONMENT, SOIL, FERTILITY AND PRODUCTS IMPACT THE ESTABLISHMENT OF TURFGRASS MANAGEMENT PROGRAMS

Setting up a comprehensive turfgrass management program at a new golf course might seem simple at first glance, at least to the uninitiated eye.

Put down soil, toss grass seed on top, let a good sprinkler system do its thing, and voila! Instant fairways, rough and putting greens.

If only it were that easy. Putting together a turfgrass management program requires a list full of requirements. It's comprehensive.

One deals with the desires of golf course owners and architects; issues involving soil, fertilizer, water, mowing and aerification; not to mention budgets. Superintendents must prepare for environmental conditions and variations, as well as determining what kinds of grasses are best suited for the course during play and the off-season.

And that's just the beginning. Once a program is in place, superintendents have to be able to plan for and make short-term and long-term adjustments.

"You cannot grow grass on cement like many people think they can," says Joe Voss, owner and president of Marco Island, Fla.-based Joe Voss Consulting and Design. "You need to get your soils up to meet the specifications and to grow the grass you're trying to grow."

At 3 Creek Ranch (above), the turfgrass management program is influenced by the Teton Range, a nearby fly-fishing area and a housing community. Photo: Dan Tolson

At The Club at Flying Horse (opposite page), superintendent Dan Hawkins found out what products were and weren't needed during the grow-in. Photo: The Club at Flying Horse

FERTILIZATION'S IMPORTANCE

But before the first blade ever rises out of the soil, one has to consider the important issue of initiating a turfgrass management program during the design phase of building a new course or during grow-in – but there doesn't seem to be a clear consensus about when to start.

"You usually do it during the design period because you want input from the architect and the owner about what they want for grass," says Voss, the former golf course manager for Liberty National Golf Club in Jersey City, N.J. "There's so many different varieties of bentgrass. First, you have to find out what they want and what their budget is going to be, which is key. How much will they spend on construction? How much drainage you have? What's your water quality? That determines your turf program from the actual construction and the preplant through the grow-in and the maintenance."

Fertilization is key for a grow-in to start well, Voss says.

"You might have limited water or limited quality water, but you need to be up to speed on what you're going to use for your preplan and your grow-in," he says.

ENVIRONMENTAL CONSIDERATIONS

Mike Etchemendy, director of facilities operations at 3 Creek Ranch in Jackson Hole, Wyo., also started his program during the design phase. The emphasis was on the environment, which includes the nearby Teton Range and a private fly-fishing area within the adjacent private housing community. Etchemendy started out with an

When establishing the turfgrass management program at 3 Creek Ranch, director of facilities operations Mike Etchemendy used an environmental consultant who developed a natural resource management plan, which models fertilizer and pesticide use after weather conditions. Photo: Dan Tolson

environmental consultant who developed a natural resource management plan.

"It basically models fertilizer use, chemical use and pesticide use with weather conditions in this area," he says. "We have three spring creeks where the runoff water could enter during a storm. We modeled all chemicals that could be used here against thunderstorms and rain events that have happened here during the past 30 years. This model told us what kind of potential pollutants we could have entering our spring creeks from the golf course and the residential community. We eliminated anything that could potentially harm or pollute the spring creeks. That told us what kind of fertilizers we could use, what nitrogen sources could pollute the spring creeks and any fungicides that could enter the spring creeks. We worked backwards from there."

TESTING THE SOIL

But not everyone favors putting the pieces of the puzzle of a comprehensive turfgrass management program together during the design phase. At The Club at Flying Horse in Colorado Springs, Colo., golf course superintendent Dan Hawkins says by testing the soil during the grow-in, he knew what additional amendments were needed such as gypsum and potassium. As a result, management was able to move the money set aside for preplant fertilization and use a portion of it for additional amendments such as gypsum and potassium. This was done before the grow-in, during the construction time frame.

"Those products would have been amended by the construction company on the golf course prior to seeding," Hawkins says. "Once we take over the hole from the construction company, then we begin growing in whatever hole it is."

During grow-in, Hawkins found what products were and weren't needed, which also saved money.

"At the time, we were doing this particular job, and I hadn't decided what we were going to use for our greens program," Hawkins says. "The fertigation system allowed us to get some nitrogen out during the watering of the greens, as well as the rest of the golf course, so we were

getting a nitrogen component that allowed us to see what kind of growth we were getting. We could dial back on our foliar program rather than saying ahead of time that we knew exactly how the bentgrass was going to grow. We could see what the grass was looking like on the greens, and instead of using one product, we were going ahead with a different product because we were getting better growth than we thought."

MAKING ADJUSTMENTS

Being flexible is part of developing a successful turfgrass management program. As Hawkins admits, there's much adjusting on the fly depending on what's happening. At Liberty National, for example, capping material had an extremely high salt index, so an intensive program was needed to regulate the pH level and add nutrients while eliminating the salts. The importing of high salt soil was halted eventually.

Even with making adjustments, not every aspect of a successful program is initiated at the beginning. Some take place several years later. One potential change is with products. New ones are made better and cheaper than their predecessors. As a result, Hawkins says he'll probably use his fertigation system more extensively because there are more better-blended products available.

"The golf industry – the turf side of it – is a changing science," Voss says. "Things get bigger, better, faster, stronger. That's inevitable. We've gotten into all this new gene research. You might change what you're doing halfway through the construction." **GCI**

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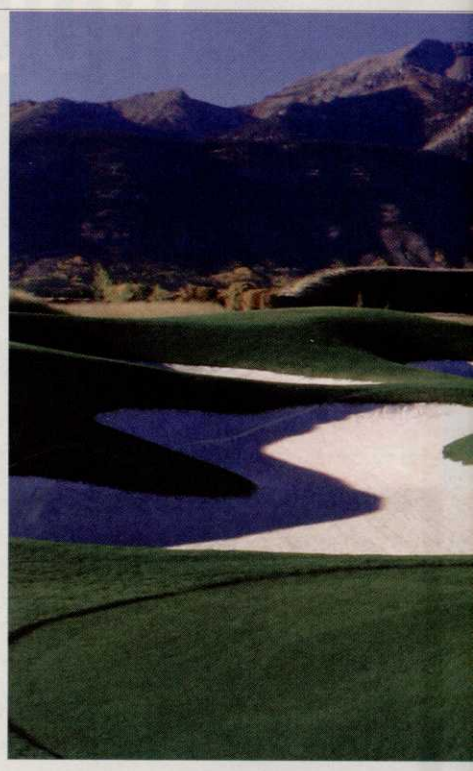

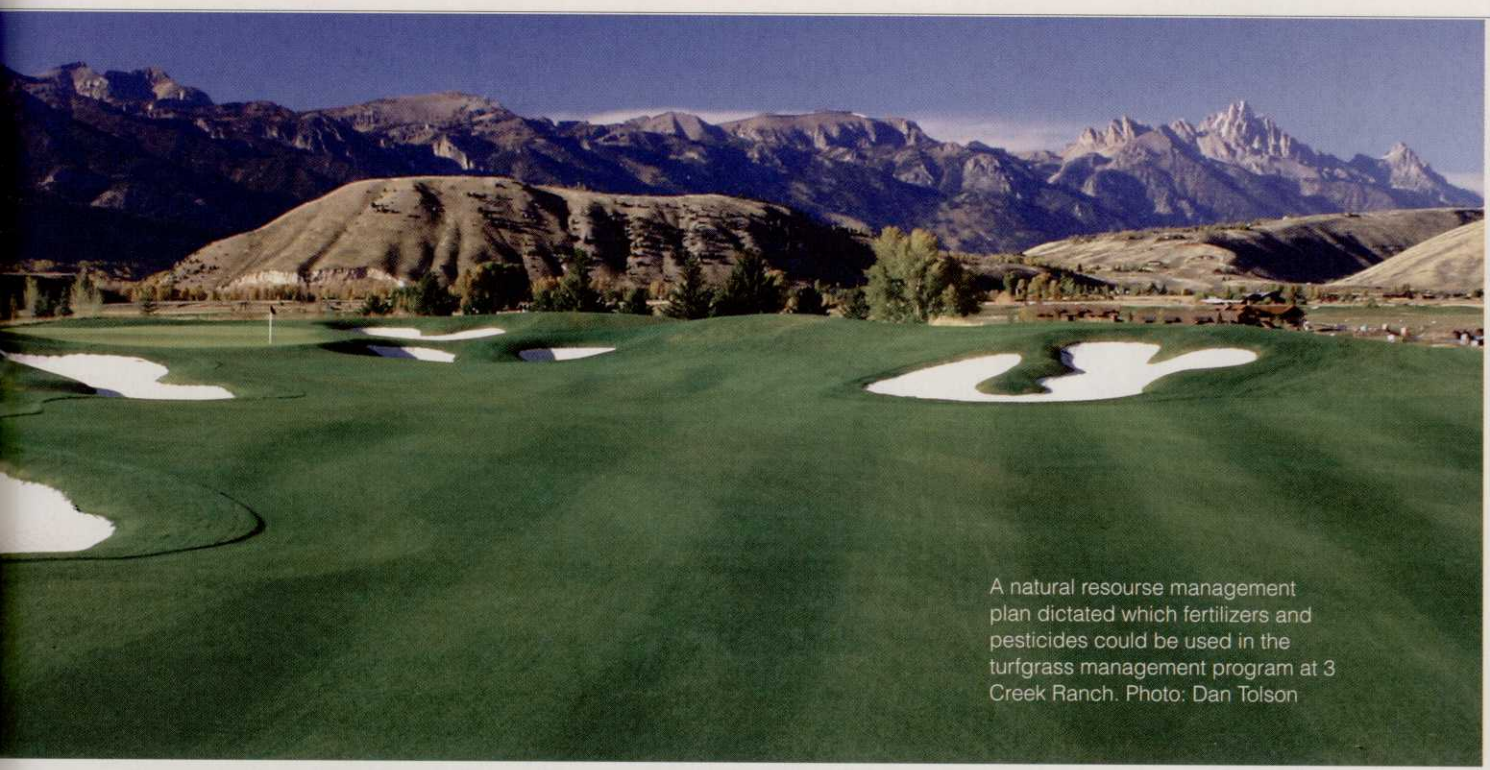

A natural resourse management plan dictated which fertilizers and pesticides could be used in the turfgrass management program at 3 Creek Ranch. Photo: Dan Tolson