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Ring around the collar

Three case studies to keep you from tearing up your green collars.

By Katie Tuttle

Greens collars and edges easily get banged up from turning, loading and unloading machinery, and just everyday operation. Once they're damaged, it can be difficult to get them back in solid shape. Whether you're fixing the problem, or just preventing it, here are a few case studies featuring tips and tricks from industry pros to help you make sure your greens look as perfect as possible.

No room for error

Muirfield Village Golf Club

Dublin, Ohio

Paul B. Latshaw – director of grounds operations

18-hole, regulation-length course

Private Non-Equity golf course

72 par – 7,221 yards – 145 slope

By design, the bunkers at Muirfield Village Golf Club in Dublin, Ohio are very close to the putting surfaces. This is done for both strategy and difficulty. Because of this, there is not a lot of room to maneuver a push mower and make turns, thus causing significant damage to the greens. When Superintendent Paul Latshaw arrived at Muirfield, the collars were in pretty bad shape.

"The program started from day one," he says. The first thing they tried was carpets for the mowers to turn on. The next thing they tried was using a very thin sheet of luan plywood, but it deteriorated quickly when wet, making it not ideal. Now they use a mat similar to the mats now produced by Precision. The mats are 1/8 of an inch and can be stored on racks they built onto their mowers. This allows for easy transportation and saves the time it would take to load and unload the mats every day. The mats help reduce the amount of abrasion that happens on the surfaces when the large machinery is turned and, as of now, it seems to be working.

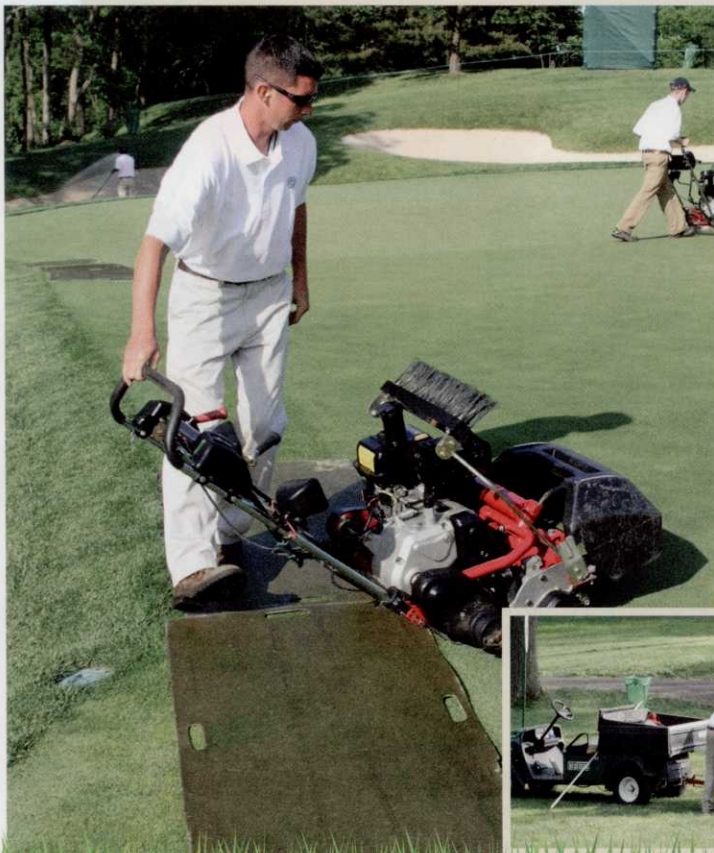
"The program's working," Latshaw says, although it does add extra time to the maintenance crew's daily routine. "It probably adds 45 minutes to the greens routes," he adds. However, the time it saves by preventing the damage makes up for it. "If we didn't use the [mats], our collars would be dead."

Along with the mats, Muirfield's staff also hand rolls their greens so they're able to stop just short of the collars and avoid more mechanical damage.

"During a tournament you might be triple cutting in the morning and turning on the collar even with mats down, but then with mowing two times at night and rolling, collars get beat to death," Latshaw says.

A third technique Muirfield uses to prevent greens damage is to overseed with a little perennial ryegrass.

"It doesn't look as great but it's able to withstand the mechanical stresses more," Latshaw says.



Sandy Solution



Cedar Ridge Country Club

Broken Arrow, Okla.

Mike Wooten, superintendent

18-hole, regulation-length course

Private equity golf course

71 par – 7,290 yards – 138 slope

In the heat of the Oklahoma summer, Cedar Ridge Country Club, located in the city of Broken Arrow, sees wear and tear from the mowers on the edges of the greens. Because the course greens are bentgrass with Bermuda grass collars, the collars don't see as much damage as other courses might see, but the edges still cause a problem. To deal with this, the club uses a 3-foot drop fertilizer spreader and fills it with sand. After putting down a heavy cover of sand on the edges of the greens, they broom it weekly to keep the edges and the paths around the area looking tidy. They also try to keep the mowers from bumping the sand when they mow around the edges to avoid any further damage.

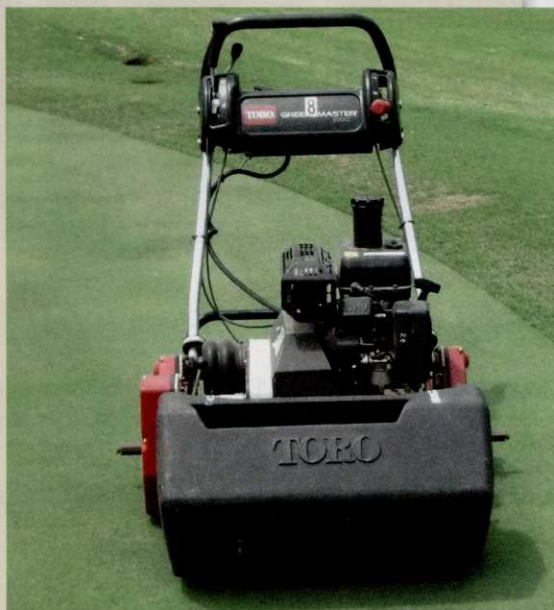
The idea of using the sand came from seeing the damage to the greens from mowing. When they would mow, it would destroy the edges, and they knew they had to firm them up to prevent that from continuously happening. The sand was a good way to do so.

Before deciding on the sand, Cedar Ridge tried to move the cleanup grass one width of a walking greens mower, and then mow at a different height to have a little bentgrass collar. It worked reasonably well, but Mike Wooten, the superintendent at Cedar Ridge, believes the sand works better. And while he knows there are probably better ways to prevent damage than laying down the sand, those ways would be too disruptive to play during the summer months when the course is the busiest.

"Aerification and filling holes with sand would be exceptional, but too disruptive on bentgrass," he says.

Another thing they do to prevent damage is use a dull side-walk edger to edge the interface between the Bermudagrass green and bentgrass collar. The reason for the dull blade is that it does a cleaner job and doesn't destroy the Bermudagrass like a sharpened blade would.

"We had used a sharp [edger] before," Wooten says. "It was a little bit of tearing and we just went with it. We found that the dull one doesn't do the tearing. It just cuts the Bermuda runners off."



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Close to perfect

Collar damage at Maryland's Four Stream Golf Club wasn't a prominent problem until 2009, when the staff used a turbine blower to blow excess topdressing sand onto the collars after aeration. The problem occurred when a heavy rain worked the sand into the canopy and it couldn't be removed. When it hit early June and the temperature started rising, the damage appeared.

"[The] damage started showing up once it got hot in early June," says Tom Harshberger, Four Stream's superintendent.

Because the collars had such large, thinned out areas, they decided to

overseed with P. Ryegrass and bentgrass, as well as spray extra plant growth supplements such as Gibberellic acid. This solved the problem until they decided they wanted to remove the P. Ryegrass. Four Stream decided to deal with the problem until fall of 2011 and spring of 2012. The club sodded the worst areas and then selectively killed the ryegrass with Corsair.

Since then, the collars have improved. To keep them high quality, the club now makes the crew turn the mowers on plastic mats from mid-May through early September.

"The collar region around a green is the area that receives the most traffic on any golf course," says Harshberger. "Also this is one part of the golf course where, if it's not close to perfect, it can affect playability."

Harshberger links the damage of the club's collars directly



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to the use of the turbine blowers, and he says there are probably other superintendents out there doing the same thing. Then, when they notice the damage, they are misdiagnosing it.



"I think other courses have run into collar damage that has been self made but blame it on other factors," he says. "And this may only be a problem in areas that experience intense summer heat and stress. If it's not hot, the sand should not create much of a problem. But when it gets hot the sand is very abrasive on the leaf blades and helps create more unwanted stress on the plants."

What Four Stream found to work best with preventing collar damage was mowing higher. Ever since they have increased the height of the mowers when going around the collars, they have looked great. They also keep any triplexes away from the greens so they have their collar/approach mower mow six passes around each green. This keeps the larger mowers away from the collars. **GCI**

Four Stream Golf Club

Beallsville, Maryland

Tom Harshberger – Superintendent

18-hole, regulation-length course

Private non-equity golf course

71 par – 7,100 yards – 138 slope

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Jeffrey D. Brauer is a veteran golf course architect responsible for more than 50 new courses and more than 100 renovations. A member and past president of the American Society of Golf Course Architects, he is president of Jeffrey D. Brauer/GolfScapes in Arlington, Texas. Reach him at jeff@jeffreymbrauer.com.

CREATIVITY IN MEETING BUDGETS

Back in January 2009, I wrote a column called “Noninvasive procedures,” which focused on the importance of retaining a contractor who “works clean” in renovations to reduce cost. These days, it’s just as important to retain an architect who understands the concept of minimally invasive design to get the lowest cost project, while not sacrificing design quality that golfers see as the final result.

There are design benefits to comprehensive master planning/renovation approach and starting with a clean slate. If you replace everything, you gain design, construction and maintenance consistency, which is always a goal in renovation.

However, the reality since the re-

to do a \$4-\$8 million renovation project for about \$2.5-\$3.6 million.

One strategy lies in specifying “second level” components, like buying last year’s hot driver at a discount. Regretfully, seeing how well superintendents work around, shall we say “vintage” infrastructure, often defeats the arguments for updating everything to the most modern standards.

Another tack is straddling the delicate balance of keeping recent, but somewhat questionable improvements in place, while making them work with the new design, rather than wantonly “blowing it up” for a better design. You can do more and better changes by starting with a clean slate, but every square foot of disturbed area requires earthwork, drainage, irriga-

good-as-built plans, a lot of detailed design work and a careful contractor, we can grade slightly for drainage without hitting irrigation lines. Not ideal, but it’s possible.

Last year we minimized turfing and costs by only re-grassing the fairways and rough where grades changed. However, the dramatic change to new turf is noticeable, at least initially, but it will heal and we made budget.

There is an old saying that it’s easy to build a hard course, but hard to build an easy one. It’s also easy to build a great course with an unlimited budget, but hard to build a great renovation on a limited budget. Some see minimalism as a style, but true minimalism is doing as little as possible to the course, while making it look as if it was all you needed to do.

That requires the architect’s secret weapon – creativity – which is severely tested when the need exceeds the budget. Creativity isn’t just about artistry. It’s also in selecting, designing and blending features just the right way for a successful project. Very few have the creativity or vision to pull it off, while the best architects regularly “make it look easy.” An architect isn’t an unnecessary expense, but rather, the main driver of effective cost savings that don’t sacrifice budget, function, or good design.

Good architects accept low budgets, without accepting limited quality and results. Believing “necessity is the mother of invention,” they don’t just eliminate to control cost, they integrate, and gladly take the challenge of doing more with less to make it even better. Find “that guy” and you should have a successful renovation. **GC**

Creativity isn’t all about artistry. Creativity is also in selecting, designing and blending features in just the right way for a successful project.

cent recession is that when courses do renovate, their budgets are squeezed. The price for “blow-up” renovations continues to rise, with a total redo cost in the \$4-\$8 million range.

At the same time, bankers have gotten far more conservative/realistic in the business projections. While most renovations will still garner increased revenues as before, the increases are much lower than a decade ago. Now, based on recent real experience, it is hard for any reasonably attentive banker to project large revenue increases if neighboring courses are still discounting – or closed altogether. It’s all about the payback, and most studies don’t justify a \$4-\$8 million expenditure as easily as they might have a decade ago. Something around \$2-\$3 million is more typical. So, clubs, owners and golf course architects are back to the familiar territory of trying

tion replacement and re-seeding or sodding, increasing costs.

Some recent challenges have included working around a 3-year-old cart path system that is in good shape, but in bad locations, too near fairways and containing hairpin turns. My preferred option was to start over, and install 30,000 L.F. of cart path where it made more sense. But, at \$24 per L.F., and \$720,000, replacing much of that perfectly good path seemed wasteful, so we tweaked the plans to save about $\frac{2}{3}$ of the original path within the new design. I cringe at a few locations left over, and may eventually use the old architects trick of bribing a bulldozer operator to “accidentally” take out a few, using contingency funds to rebuild them.

On another project, we are trying to drain flat fairways without damaging the 5-year-old irrigation system. With

To read Jeff’s 2009 column “Noninvasive procedures,” enter bit.ly/11FkTVp into your web browser.

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Small ideas, big changes

By Bob Lohmann

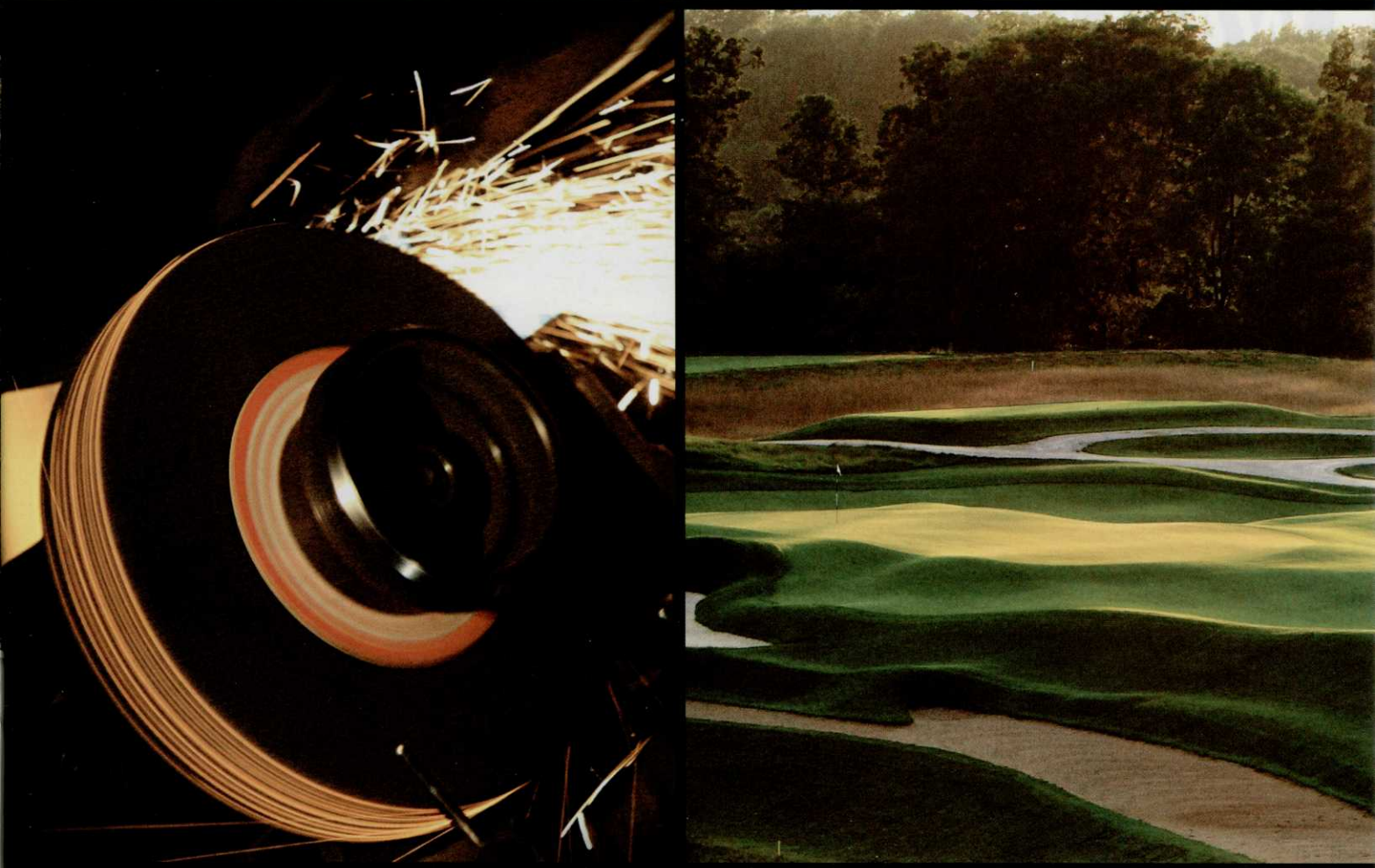
If your aging greens need an upgrade, small changes can be an effective, cost-conscious alternative to a full-scale renovation project

We can all agree the prevailing economic climate has changed the way we do business. Rounds were back up in 2012, which is a great sign that things are beginning to recover, but the National Golf Foundation reported there were some 150 course closures in 2012, while only a handful of new courses opened for play. This is the new reality, and it has prevailed for almost a decade now. It's on all of us – superintendents, architects, contractors and golfers themselves – to continue the adjustments.

Much of those adjustments have been tough, as we struggle to maintain older golf courses with smaller maintenance budgets and shrunken capital expense allocations.

But there has been one overriding silver lining: When forced to do more with less, professionals get creative. They question the status quo and shed new light on practices we once considered “perfected.”

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Greens renovation, including the hauling off of rough sod on the course.

The best example of this dynamic is greens renovation. Ten years ago, we in the golf industry embraced greens renovation almost as a matter of course. When greens failed to meet expectations, we often rebuilt them because a) there was plenty of money around, b) we had to keep up with the Joneses, especially the new Joneses on the block, and c) renovation was simply something superintendents wanted, and architects delivered.

Today, that situation has been turned on its head. I actually get the impression that some superintendents are afraid to call architects now, if the greens in their charge are failing or seriously underperforming. They're afraid we're going to come in there and recommend a full-on green reconstruction program they cannot afford!

Well, any architect with that sort of attitude – that full-blown renovation is the answer to everything – has lost touch with reality. And the fact is, several important alternatives to greens reconstruction have emerged in the last several years. Each one depends on an accurate diagnosis of the problem, of course. And that generally requires several sets of eyes, in addition to your own.

All obvious biases aside, I suggest you start with your course architect. If you don't have one, you can go to the American Society of Golf Course Architects web site to access a comprehensive list of those working in your region. Fact is, architects get around; they see dozens of courses each year with problem greens, and they're often a party to fixing those problems. Architects are a resource just like your fellow superintendents, Green Section agronomists and certain vendors are resources. Put them to work as your brain trust.

That said, let's look at a few ways traditional

greens renovation has been reconsidered in the recent past by superintendents and architects alike. If your greens aren't doing the job, you have more options than you may have thought.

POOR PERFORMANCE. A large percentage of problem putting surfaces are "underperforming" because they're not draining properly. Ten years ago, that would have meant a greens reconstruction project, but we've learned we don't necessarily have to go there.

Key points

- Many superintendents are challenged with overseeing older courses with smaller maintenance budgets and shrunken capital expense allocations.
- The perception is superintendents may hesitate to consult with an architect about problems with their aging greens, fearing a recommendation for a costly, full-reconstruction project.
- Several important alternatives to greens reconstruction have emerged in the last several years.
- A number of options exist for superintendents to address greens problems.
- Ultimately, pricing will vary depending on location, material availability, and the results of testing, which will indicate material depths.