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CIRCLE NO. 114

Designs on Golf

■ ARCHITECTURE

This year, we watched golf officially shift from a sport of multiple dimensions — course management, shot-making, length, finesse and creativity — to a one-dimensional emphasis on power. Tennis shifted to a power-centric sport several years ago. Those who still watch the lackluster pro tennis circuits know that powerful serves dominate. Points seem to end when someone just happens to hit a winner. There's no strategy and no finesse.

Except for golf's PGA Championship, this year's Majors were painful to watch. The game today is all about power and less about all-around skill. Experience, thought and creativity are out. Boring power is in.

Greg Norman recently addressed the shift: "The fact that most up-and-coming players don't have multidimensional games is not necessarily their own faults," he said. "We as course designers, developers and keepers of the game need to take responsibility for bringing the need for multidimensional play back to the sport."

But then Norman contradicted his wisdom by touting Muirfield's ultranarrow fairway setup for the 2002 Open Championship as a return toward multidimensional golf. "Like at most other championship venues, the rough surrounding each fairway made players think of the consequences of spraying the ball off the tee," he said.

There is nothing more one-dimensional or dull than designs arranged to reward the straightest possible avenue to the hole. What's next? Laying a rope down the center and adding bonus points for closest to the center line?

Architecture is no longer able to challenge players with strategic questions or provide multidimensional golf that allows a short hitter on his game to compete with a powerful player. Why? The problem starts with a fear of low scores. The marketing gurus keep telling us how the players are in better physical condition. We hear that they're more skilled than ever. While they can be all things magnificent, they're not allowed to shoot lower scores for some mysterious reason.

So to preserve dignity in the face of complacent equipment regulation, Major championship course setup takes on extreme and one-dimensional measures to keep scoring in check. Unfortunately, this setup mentality filters down

Stretching the Rubber Band 'Til ...

BY GEOFF SHACKELFORD



THE GAME TODAY IS

ALL ABOUT POWER

AND LESS ABOUT

ALL-AROUND SKILL.

THOUGHT AND

CREATIVITY ARE OUT.

BORING POWER IS IN

to everyday golf faster than we'd like to admit.

Old-time architect Max Behr worried about the shift from strategic, wide courses to the restrictive, tightrope setup mentality. He said: "Owing to the stress today placed upon competition in golf, golf architecture has come to be rationalized. The old road which seemed to wander with no intent or purpose has now become a well-posted concrete highway. Every inducement is offered to step upon the accelerator as long as one can keep the car of skill from slipping into the rough."

We watched players step on the accelerator this summer, where longer setups narrowed the fairways. So players simply swung harder, opting for the shortest iron into greens regardless of the height of grass below their ball. It wasn't exciting to watch. Many in the golf business are probably getting tired of hearing how their courses need new back tees or narrower fairway contours.

A reduced-flight ball would give everyone a great excuse to widen out fairways and return architecture to its role of separating good play from just OK golf. Reasonable width, combined with driving distances proportionate to the design, would bring strategic hazards back into play. Players might even use both sides of a fairway. There would be a reward for accuracy and well-timed aggressiveness.

But change won't happen anytime soon. There's too much money at stake. Some of golf's governing stiffs would have to acknowledge that they resorted to goofy course setups and expensive redesigns to mask rulemaking complacency.

So superintendents need to get out their paint guns, call their local contractors and make room in their budgets. Looks like we're going to keep stretching this rubber band until it breaks.

Contributing Editor Geoff Shackelford can be reached at geoffshac@aol.com

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Flat on Your Back

BY ROBIN SUTTELL



COMSTOCK

Back pain and injuries are common in the industry, and you may be at risk for them. Here's how you can avoid them

The gene pool gave Doug Sweeney a bad back. Common sense keeps him active at work and at home.

Sweeney, assistant superintendent at Grand Island Municipal GC in Grand Island, Neb., was born with six lower lumbar vertebrae, one more than normal. So were his brothers and his two children.

Normally, the extra vertebrae don't cause too many problems. In Sweeney's case, however, one didn't mature completely, leaving him with chronic pain in his hips and lower back.

"If you have never had back problems, I envy you," Sweeney says. "When your back goes out, you're helpless."

Sweeney, an almost 19-year veteran of the golf course industry, has spent a lifetime managing his condition. He regularly visits chiropractors and keeps up with therapeutic exercises. His efforts have paid off.

While his back does go out from time to time thanks to heredity, Sweeney has never been seriously injured on the job because he's vigilant about taking care of his back when lifting, pushing and even climbing on and off equipment.

"He's always reminding the other employees about back safety," says John Hadwick, Grand Island's certified superintendent.

Preventing back injuries is a major workplace safety challenge for superintendents and their staffs. A U.S. Department of Labor report reveals that in 2000 nearly 600,000 injuries — one-third of all work injuries — stemmed from repetitive motions or sprains and strains.

"Musculoskeletal conditions have reached epidemic proportions, costing the United States

\$254 billion annually,” says St. Louis-based orthopedic surgeon, Richard Gelberman, past president of the American Academy of Orthopedic Surgeons (AAOS).

No industry is immune, particularly in ones where physical labor makes up a key part of a worker's daily tasks.

At any given moment at any golf course across the country, chances are a worker is doing something on the job that puts his back in peril. Even simple lifting done improperly can take a worker out for weeks.

Ask Don Dodson, superintendent at Lakeview Golf Resort and Spa in Morgantown, W.Va. This past spring, a back injury affected his work force during a crucial time in the golfing season.

“I had a guy planting 1-gallon landscape containers, and he strained some muscles in his back,” Dodson recalls. “He was out for six weeks. Who would have thought a guy would have injured his back planting a 1-gallon container of perennials?”

Even the most innocuous tasks can cause a back injury, experts say. It all comes down to the way you lift something, how much you are lifting it and how frequently you are lifting it.

According to the AAOS you are at greatest risk for back pain if:

- Your job requires frequent bending and lifting.

- You must twist your body when lifting and carrying an object.

- You must lift and carry in a hurry.

- You are overweight.

- You do not exercise regularly or do not engage in recreational activities.

- You smoke.

But even if you don't fall into any of these categories, you can still fall prey to a back injury. Say you have a heavy piece of machinery or an extra-large, bulky bag of fertilizer to lift. Will you ask someone on your team for help? Chances are, you won't: You don't want to look like a sissy.

That's bad thinking, experts say. You might look like a he-man, but you could find yourself flat on your back for a month. It's hard to believe, but lifting even a lightweight, but awkwardly shaped object by yourself can throw your back out of whack.

“Don't take things for granted,” Sweeney warns. “Just because you feel great today and

Continued on page 46

The Right and Wrong Ways of Lifting and Moving

Most back injuries result from poor lifting techniques. There are right ways and wrong ways to lift objects. The right way will keep you productive on the job. The wrong way could immobilize you on your back for a month or more.

Faced with several lost-time back injuries in different departments, the human resources department at Lakeview Golf Resort and Spa in Morgantown, W.Va., created a safe lifting list of tips for its staff:

Safe lifting begins before you pick up the load

- Choose the flattest, straightest and clearest route, even if it is a little longer.
- Don't move any object that might cause you to trip.
- Look for places where you can stop and rest.
- Make sure that the unloading area is clear.
- Make sure the weight is stable and distributed evenly.
- Make sure there's nothing sharp or abrasive sticking out of the load.

Safe lifting techniques

- Bend with the knees rather than with your back.
- Stand close to the load.
- Grip it firmly with your hands, not just your fingers.
- Bring the load close to your body for more power and less strain.
- Let your legs do the work.
- Make sure you can see.
- Don't twist your body.

Two-person lifting techniques

(use this method when the object in question poses a threat of injury)

- Put one person in charge of saying when and where to move.
- Lift and rise at the same time.
- Keep the load at the same level while carrying it.
- Move smoothly together.
- Unload at the same time.

Other lifting hints

- Warm up before you lift.
- Try to break a large load into several smaller ones.
- Wear safety shoes with reinforced toes and non-skid soles.
- Wear tight-fitting gloves to protect your hands and get a better grip.
- Avoid loose clothing that could get in your way.
- Try to load and unload at waist height.
- Don't overdo it. Know your limitations and get help if necessary.

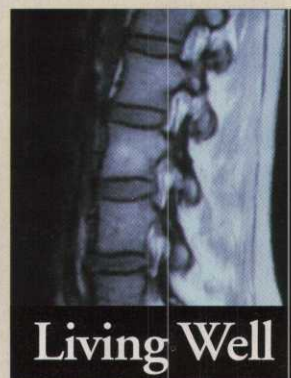
You might have to improvise a bit to find the best, safest method that suits you, medical experts say. Don't do something that feels unnatural, cautions Dr. Andrew Haig, associate professor of Physical Medicine and Rehabilitation and Surgery at the University of Michigan.

“While it is true that some types of movement can strain or aggravate your back, that knowledge is often misinterpreted,” Haig says. “What the medical community now understands is that it is often better to tell our patients to do what feels right. Too often, people stiffen up and force their bodies to move unnaturally in an effort to be correct.”

Haig says trying too hard to be “correct” sometimes can override a natural sense of what is physically comfortable. This, too, can result in injury.

“Sometimes the best advice we can give is as simple as, ‘Do what feels right, and if it hurts, don't do it,’” he says.

— Robin Suttell



Living Well

PART 3 BACK INJURIES

DIGITAL STOCK

Flat on Your Back

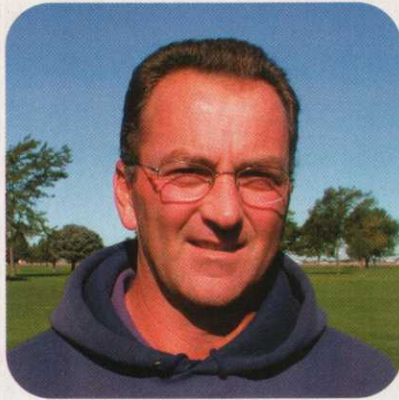
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think you can pick up something without help, it doesn't mean that you should."

Education, prevention and common sense go a long way to keeping a maintenance staff healthy and on the job. The GCSAA offers a number of safety training materials that include information on back injury prevention. Also check with your course's human resources department, if it has one. It likely can provide training materials, too.

The HR department at Lakeview takes worker health and safety seriously, particularly after several members of the resort's housekeeping staff were felled with work-related, lost-time back injuries. Dodson said department heads received a guide on proper lifting techniques to circulate among their staff members.

The two-person lift technique has become a common sight in the grounds department, particularly because the



Doug Sweeney, who has battled back problems his entire life, is vigilant about taking care of his back when lifting, pushing and climbing on and off equipment.

maintenance team has to lift numerous heavy and awkward items.

"You get frustrated because you see two and three guys doing jobs, but it's better for safety reasons," says Dodson, who has made a point of stressing the importance of good lifting techniques to his team.

At Grand Island Municipal GC, Hadwick and Sweeney oversee a number of senior citizen workers, who range in age from 63 to nearly 80 years old. These senior employees knew from day one that lifting was not in their job description.

"We go out of our way to make sure they don't have to do the lifting or even get on and off the mowers repeatedly," Hadwick says. "On our staff, we make a joke: 'Let's not make the old guy do the physical labor.'"

The approach works.

"We haven't had any serious problems," Hadwick says. "We're pretty much on top of it. We work it out so the younger guys can do that stuff. In our jobs, we have to do a lot of lifting. We have to get things done. You can't avoid it completely." ■

Suttell is a Cleveland-based free-lance writer.

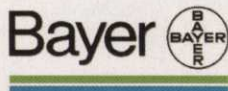
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The screenshot shows the TurfGrass Trends website interface. At the top, there's a navigation bar with links like HOME, CURRENT ISSUE, ARCHIVE, EDITORS, AD RATES, and SUBSCRIBE. Below that, a search bar is visible. The main content area features an article titled "A Practical Research Journal" with a sub-headline "Search for Resistant Oleria Alternative for the Future". The article text discusses a breeding program at the University of Georgia-Golfen. To the right of the article is a sidebar with logos for Bayer, Andersons Golf Products, Scotts, and Jacobsen. At the bottom of the sidebar, there's a "NEED TO KNOW" section with various links.

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Real-Life Solutions

■ DEALING WITH MOISTURE, TEMPERATURE PROBLEMS ON GREENS

Getting Creative Around the Greens

Air machines help superintendents solve moisture and temperature woes

BY SHANE SHARP

Golfers love traditional holes with greens tucked away in shady groves.

But for superintendents, such tranquil settings can spell trouble when it comes to turf maintenance.

Thick stands of trees coupled with dense underbrush can limit the airflow and sunlight reaching a green. As a result, the putting surface often suffers from excess moisture, with symptoms ranging from



spotty, inconsistent growth to complete turf loss.

Golf courses frequently rely on labor-intensive solutions to combat moisture and temperature problems on greens. Superintendents and their crews cut down trees, clear out underbrush and frequently aerify to increase sunlight and airflow.

The problems

The 14th hole at the Tournament Players Club at River Highlands, outside of Hartford, Conn., is one of those holes that drives golfers to their cameras — and superintendents to early graves. The 413-yard, par 4 drops 60 feet downhill to a green that's stashed in a small hollow, surrounded by trees on three sides.

The 14th had experienced moisture and temperature

problems since a major rerouting of the course in 1989 left it enveloped by a shady dale with just enough airflow to dry Andre Agassi's hair. The course is home to the PGA Tour's Greater Hartford Open, as well as a cadre of maintenance-conscious members. Hence, superintendent Tom DeGrandi is expected to have the challenging hole and the entire layout in championship condition throughout the playing season.

Ballantyne Golf Resort in Charlotte, N.C. is the one of the only full-fledged golf resorts between Pinehurst and Asheville, and is among the highest priced daily-fee courses in the Charlotte area. Because of the region's benign climate, superintendent Paul Stroman is expected to have Ballantyne's bentgrass greens

The 14th green at the TPC at River Highlands had experienced moisture and temperature problems until a Soil Air Technology Unit was installed.

in top condition year-round.

The course's precariously hilly terrain and the resulting green complexes meant 13 of the course's 18 putting surfaces were holding excess moisture in the upper portion of the greens. Subsequently, excessive algae and black layer were beginning to cut off the breathing of the turf's root system.

The solution

DeGrandi and Stroman sought Soil Air Technology, a Connecticut-based construction and engineering firm, to help them with their problem greens. Soil Air Technology

Continued on page 48

Problem

Two courses, one in Connecticut and one in North Carolina, experienced temperature and moisture problems with their greens.

Solution

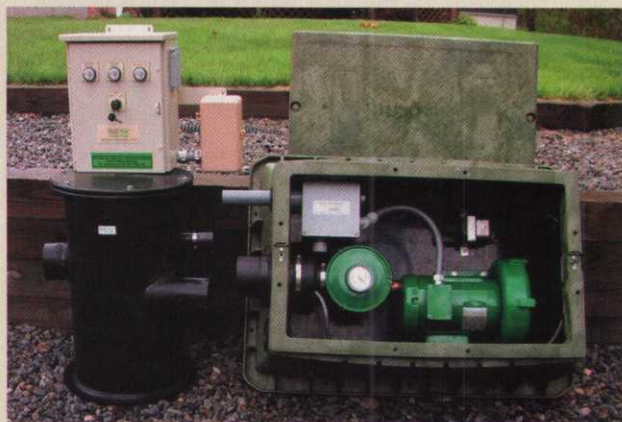
Install machines to push and pull air through greens and their root systems, thus improving the health and playability of the putting surfaces and saving hours in manual labor.

Real-Life Solutions

Continued from page 47

designs and manufactures systems that connect to the main drainage lines of golf greens. These machines are able to push and pull air through greens and their roots systems, thus improving the health and playability of the putting surfaces and saving hours of manual labor. Units are available in a variety of models and can be either stationary or portable, depending on a course's specific needs.

DeGrandi says he considered a variety of options to bring the 14th green up to par with its 17 true-rolling siblings. But after a few years, it was obvious traditional treatments weren't working. Soil Air Technology approached DeGrandi in 1999 about installing one of its Model 110V



The Soil Air Technology units increase the amount of oxygen to greens to help them drain better.

VPC-T units free of charge as a demonstration project, and DeGrandi jumped at the opportunity.

"The quickest, cheapest option would have been to do it with just the tree removal and create wind channels, but we chose to do everything at the same time to correct the situation as quickly as possi-

ble," DeGrandi says. "The Soil Air Technology unit was a long-term solution to a recurring problem."

The unit was installed on the 14th green prior to the Greater Hartford Open. The submerged, stationary model was so quiet the players didn't even know it was running. Two weeks after its installation, the green's roots were deeper and the putting surface was firmer.

Today, the unit runs up to six hours a day and members hardly notice. DeGrandi, however, is quick to say that superintendents who consider using Soil Air Technology units should approach their problems from a variety of angles.

"Any good superintendent is going to look at a combi-

nation of things to make an improvement," he says. "We also installed a fan on that green to dry it out. But what we were hoping to get from the device was to increase the amount of oxygen in the green so it would drain better, and we've gotten that."

In the summer months, the unit is used primarily to



The GTS-RG portable unit is easily transferred between holes.

pull air through the green. In the early spring and late fall, it's used to push air up into the green to melt the morning frost. "Mainly, we just want to create airflow through the green, and this is the optimal way to do it," DeGrandi says.

To combat Ballantyne's problem, Stroman and his staff purchased Soil Air Technology's GTS-RG portable gasoline engine-powered system a year after the course opened in 1998. The unit, which cost \$12,000, is easily transferred between holes. Stroman also installed hookups on the remaining five greens in case problems developed down the road.

"We wanted a good portable unit," Stroman says. "If we didn't have it, we'd have to increase the aeration in the greens by way of spiking and small-tine aeration. We are a resort course, and we're a popular local course, so we didn't want to disturb play that much. Anyone that knows Charlotte golf knows it's a very competitive market for daily-fee golf."

Unlike the submerged unit at TPC River Highlands, the portable model does generate enough noise to disturb

golfers, and Stroman says this limits its use. The Ballantyne crew typically runs the unit early in the morning, or during the middle of the day in the summer when few golfers are on the course.

The outlook

Free handout or not, DeGrandi says he would have opted for the Soil Air Technology unit. "Based on its theory, I would have paid for it anyway," he says of the Model 110V VPC-T unit, which costs \$7,500.

At Ballantyne, Stroman says his crew will continue to use the portable Soil Air Technology unit because of its spectrum of benefits.

"The main benefit of the unit is that we are able to control the moisture in the greens," Stroman says. "We pull air through the green for soil moisture and temperature control. But the other benefit is that you are changing the air combinations in your greens. If you have a high concentration of carbon dioxide, you can get more oxygen in the green." ■

Sharp is a free-lance writer from Charlotte, N.C.

Black Monday

BY DALE MORRISON

It began as a typical day, but whatever could go wrong did go wrong. It was one of the longest days of my life, but I'm here to tell you that I survived

NIow that the summer is gone, it's time to start clearing the course of leaves, and blowing out the irrigation system. It's also a good time for reflection.

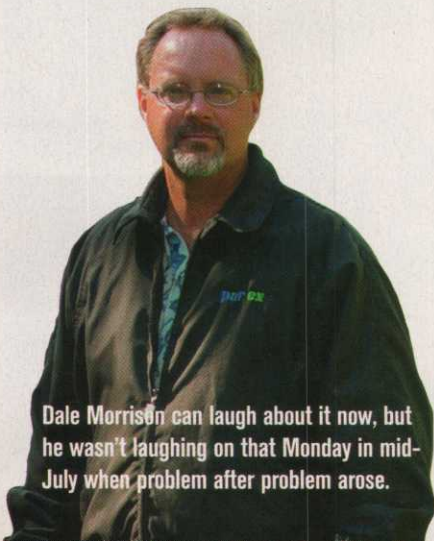
Looking back at my first season as superintendent at Trappers Turn GC, a 27-hole course in central Wisconsin, I feel quite satisfied and proud. My crew made many improvements, tackled unforeseen obstacles and upgraded the quality of the course in general. The season was an overall success.

However, nothing came easily. One day in particular comes to mind. It was a day that seemed to never end. I refer to it as "Black Monday."

It was a dewy morning in mid-July. The day began at 4:45 a.m. with a heavy fog. Back in the shop, it appeared to be the start of a typical day. I had the normal little headaches that go along with getting everyone out on their first tasks. We had equipment problems and some communication hang-ups because my crew consists of Hispanic- and Polish-speaking laborers. Finally, with everyone on their way, I walked out of the shop and to my surprise there it was — the mighty dollar spot. It was everywhere, resembling a fresh dusting of snow on a November morning. But this was July.

I jumped on my cart and peeled out to take a closer look at the severity of the invasion. The fungus was everywhere except the greens, tees and fairways. Remaining calm, cool and collected, I went ahead to the

Continued on page 50



Dale Morrison can laugh about it now, but he wasn't laughing on that Monday in mid-July when problem after problem arose.

Black Monday

Continued from page 49

clubhouse to talk to the assistant general manager about the day's play and to get some much-needed coffee. Little did I know what other surprises the day held for me, or I might have chosen something stronger than coffee.

At roughly 6:05 a.m., following another short go-around on the course, I pulled up to the maintenance shop. As I walked toward my office, I noticed water on the floor just outside the door. Naturally, I followed the water to its source, which was the toilet, and it was overflowing. After applying some quick intervention and chanting a few choice words, I got the water to stop. I proceeded to get the mop and clean up the mess.

As I was putting the mop and bucket away, I saw my fairway operator, Joe, looking quite troubled. I said, "What's up?" (I recalled that this was only his second time mowing fairways.)

"I just got done mowing No. 1 and No. 5, and I can't get the units to come up," Joe said.

I said, "Let's go look." As we drove out to

the area, I was thinking the worst. When we arrived, I saw that the worst had happened: A hydraulic hose had burst and oil-stripped two fairways at mowing direction six-12. With a few additional turns in front of the green, along with two clean-up laps, I could only imagine what the grass would look like in a few days. What was I to say? I took a deep breath and began counting backward from 100 to regain my composure. Then I said, "Joe, at least your lines are getting straighter." (We fondly refer to him as "Joe Slick" now.)

When I got back to the shop, it dawned on me that the mechanic was away for a motorcycle rally until Thursday. I radioed the assistant and told him of the latest challenge. Then I headed off to a neighboring course 10 minutes away to borrow some product that would assist the oil-soaked grass in its recovery.

I returned 30 minutes later, and was greeted by the rough mower operator, Jim.

"I got the tractor up against a tree," Jim said.

"Let's go take a look," I said. On the way out to the area, I was thinking to myself, "How

After Black Monday, Joe Scully, who mows fairways at Trappers Turn, was referred to affectionately as "Joe Slick."

