

GOLF & ATHLETIC TURF

COVER STORY, CONTINUED

The future of golf: methane gas, competition?

Here is how forward-thinking superintendents are solving these and other problems.

■ According to the National Golf Foundation, many of the golf course projects now under development in the U.S. are for public/municipal courses (see cover story, page 8). This will undoubtedly create a big problem in the golf maintenance industry, according to **Ken Schwark**, superintendent at Tony Lema Golf Complex. The club is located in San Leandro, Calif., just minutes away from Moscone Center where the GCSAA is holding its annual conference and show later this month.

"There are going to be more munys (municipally-owned courses) built in the future, but they're going to be on landfills and there will be methane gas problems, I guarantee you," says Schwark. At the Tony Lema Complex, it's taking a rash of money to solve the problem: \$2 million is being dumped into retrofitting a methane gas mitigation system, along with installing new irrigation on 13 of the course's 18 regulation holes.

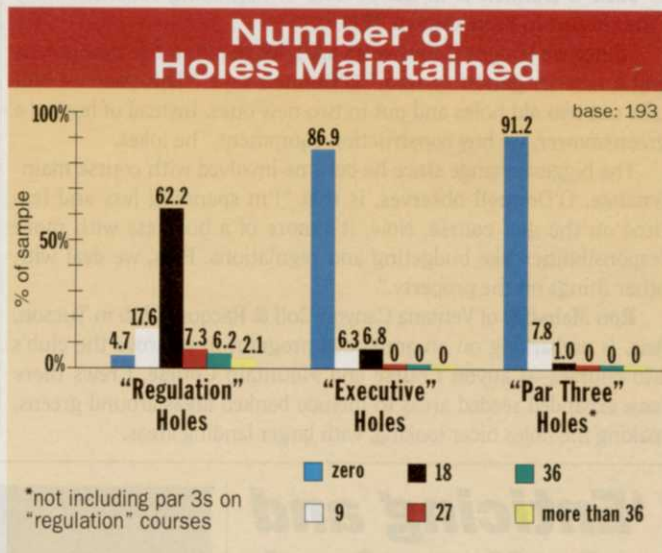
Because 85,000 people ran through Schwark's course last year, he needs to stay on the "cutting edge" of technology, he says. Most recent development is the use of microbes tailored to solve specific problems.

"We've got 700 parts per million of salt in the water coming out of our irrigation well, so our greens start 'tweaking' on us in August or September," Schwark observes. "But we've started sending out microbes through the sprinkler system every night, and our greens are now challenging Pebble Beach's greens."

Microbes are available, Schwark says, to help alleviate potential pythium and anthracnose disease pressure, to control thatch build-up, and to buffer the turf plants against salt damage.

"Our salt levels are still high, but the microbes make it so the plant can't take the salt up, and as a result our greens look great," Schwark notes.

Elsewhere across the U.S., golf courses both private and public are undergoing constant renovation. Like at Edelweiss Chalet Country Club in New Glarus, Wis.



Most Common Maintenance Practices

(by % of respondents)

Mowing	.99.0%	Sodding	.89.0%
Turf fertilization	.99.0%	Tree pruning	.88.5%
Disease control	.98.4%	Dethatching	.86.9%
Aeration	.97.9%	Overseeding	.81.2%
Topdressing	.96.9%		
Seeding	.94.2%	Tree insect/disease control	.47.6%
Insect control	.94.2%	Pond/lake aeration	.44.0%
Bunker maintenance	.89.0%		

base: 191

• least common •

"I was hired to upgrade the condition of this course last June," superintendent **Richard Bentel** says. "I had a mandate to define the fairways and bring up the green speed."

The original problem? Competition for golfers, as many courses face. In Bentel's area south of Madison, many nine-hole courses are adding a second nine so that they will be able to compete for

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the same clientele as Edelweiss Chalet.

"I've got the greens committee spending \$8,000 this season on our fairways, so I expect to see a big improvement," Bentel concludes.

Chuck Colton says that Belle Terre Country Club in Laplace, La., about 20 miles east of New Orleans got more play than ever last year—by design. The club is actively seeking more public play during the week, so it lowered its green fees. Also, the area had less rain (about 50 inches) than in the two previous years (about 100 inches each year), allowing people to get onto the course more often.

Like other courses in his area of the country, Colton is overseeding bermudagrass with *Poa trivialis*, "because the seeds are so small compared to ryegrass. And once it comes up, you can mow it a bit shorter, and it lays down better, allowing less resistance to the ball."

Jack O'Donnell is in the process of upgrading venerable Tory Pines Resort in Franconia, N.H.

"Since we bought it (five years ago), we've put in five new greens and a new irrigation system," O'Donnell says. "This year we will take out two old holes and put in two new ones. Instead of buying a greensmower, we buy construction equipment," he jokes.

The biggest change since he became involved with course maintenance, O'Donnell observes, is that "I'm spending less and less time on the golf course. Now, it's more of a business with more responsibilities like budgeting and regulations. Plus, we deal with other things on the property."

Ron Mahaffey of Ventana Canyon Golf & Racquet Club in Tucson, Ariz. is embarking on an ambitious program to improve the club's two courses—Canyon Course and Mountain Course. Crews there have expanded seeded areas to include banked areas around greens, making the holes nicer looking, with larger landing areas.

"Our biggest challenge was that we rebuilt two greens and resurfaced eight others on the Mountain Course," Mahaffey observes. "And this summer we're going to regrass 18 more greens."

Mahaffey is battling *Poa annua* with ProGrass and getting nice results. "If you can stop the poa from seeding on the fairways, it makes it easier to keep your greens poa-free, too," he says. "You don't have people tracking seed onto them."

Kurt Kammann of The Country Club Inc. says his is one of just a few courses in Tennessee that didn't suffer much winter kill last season. Some courses lost 50-80% of their bermudagrass, he says: "We had a lot of cold weather in Morristown, but there wasn't much snow coverage."

Kammann thinks that players are after high stimp meter ratings on greens, and The Country Club is known for its fast greens. But he's more interested in providing true putting surfaces. "You try to get the greens to where everybody likes them, but that's one of the hardest things to do," he notes.

Sean O'Brian of Alta Sierra Golf and Country Club in Grass Valley, Calif., also had problems with the weather. At his club, which is located one hour west of Lake Tahoe, they had 15½ inches of rain in 15 days in January.

"This has been a much wetter winter than we're used to," O'Brian notes. "We hadn't been able to mow the fairways for close to a month." January 19th was the first day they allowed play in that 15-day period.

Because the course contains a lot of *Poa annua* in the fairways and was hit hard by anthracnose, the crews finally drill-seeded a ryegrass blend and aerified the fairways. But the budget is tight, and "one pass with a drill seeder isn't going to solve all of the problems."

—Jerry Roche, Ron Hall

'Enticing and challenging'

That's what it's like in California, on the cutting edge of environmental and legislative issues.

■ David A. Bergstrom, superintendent at two high-profile California golf courses, says his colleagues must continue to get "picky" on little maintenance details like edging on bunkers and cart paths, and sprucing up plant beds.

"Though my staff and I appreciate compliments, it's the suggestions—especially those about how we can improve—that matter most," Bergstrom says.

He oversees maintenance of the TPC Stadium Course and the Jack Nicklaus Resort Course at PGA West in La Quinta, Calif. In December, the Nicklaus course was site of the John Deere Team Championship Tournament (at which 30 other superintendents got an "up close



David Bergstrom is using IPM techniques to adjust practices to avoid problems on the course.

and personal" look at the course) and the Wendy's Three Tour Challenge and Diners Club Matches (with live television coverage of both).

"TV coverage allows us to showcase the course to the general public and to thousands of potential players," says Bergstrom. "People watch the pros play a hole and want to see how well they can

play it. The course has to look both enticing and challenging.

"All golf courses are under scrutiny these days, and California is on the cutting edge of environmental and legislative issues. Our regulations are the toughest in the country, and probably the forecast of things to come for other states."

During the seven years Bergstrom been with the two courses, restrictions on water and chemical use have become more stringent, and paperwork requirements have increased enormously.

"Our well system is tapped into underground aquifers and we have access to a canal system that draws water from the Colorado River," he notes. "Because the water district has expressed concern about the aquifer recharge rate here in the lower end of the valley, we're decreasing our well

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