

'I NEED A DRINK!'

Many superintendents could be uttering that phrase in the not-too-distant future. But it's not water they'll be drinking.

Water continues to create problems in the golf course market, problems that could drive some superintendents to drink. But they won't be drinking water; that will be in too short a supply for a large portion of the country.

Some areas are facing the problem now. States on the eastern seaboard faced shortages this past summer, and New Jersey actually banned some water use. But the Southwest is where most of the trouble will hit.

Bob Randquist, superintendent at Southern Hills Country Club in Tulsa, Okla., says his course has a steady water supply. But, he adds, a number of other courses in the area could be without one soon. "Water is at a premium right now."

Like Randquist, Tom Athey does not face a problem at Fremont Country Club in Omaha, Neb. He is hooked into the municipal water system, where his water bills and supply have remained stable. But courses outside the area relying on their own wells or aquifers will soon be left high and dry.

Something, Randquist notes, must be done. He believes most clubs are

willing to spend the money to research alternative sources of water, such as effluent or recycled water. Nothing has yet been organized, though the industry has been discussing the problem for some time (see *WEEDS TREES & TURF*, Jan. 1986, p. 82).

Dennis Orsborn, a golf community developer, says water management programs will be a big part of the conservation effort in the future. His company, Sunrise of Palm Springs, has been installing computerized irrigation systems that use pumps with a variable frequency drive motor. The system is more efficient, providing the exact amount of water and pressure desired.

He says of the situation in the Southwest: "It's going to get worse, not better." Orsborn adds that parts of Arizona and Southern California are required to use effluent water.

Randquist notes there is potential for widespread use of effluent, though "we need a better understanding of its content."

Dick Herr, superintendent of Jupiter Hills Country Club in Jupiter, Fla., has been using recycled water for some time with no problems. But,

he says, his area has only a three- to four-year supply. For him, recycled water is only a stop-gap solution.

Randquist understands this problem and is calling for research to develop longer-term effluent supplies, as well as alternative sources. Some of these alternatives include hybrid turf grasses more resistant to drought conditions.

Jon Scott, golf and grounds director at Grand Traverse Resort in Michigan, expects some offerings soon—possibly a variety of bentgrass. He also notes that water management programs can take some of the heat out of the drought.

The problem is convincing golfers that the browner looking turf they're playing on is still of high quality, though maybe not as high as previously. "There could be a trade-off in quality," Scott admits.

However, research costs money.

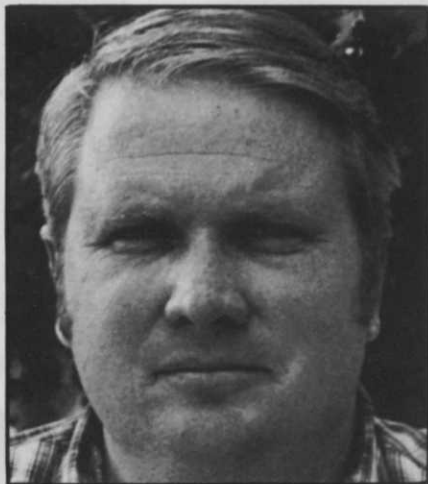
Randquist hopes that a superfund can be created by the GCSAA and the USGA. But he admits that the possibility of help other than advice from courses in the North (where often the problem is too much water) is unlikely. Until the North feels the thirst, he says, the rest of the country should experience only a trickle down effect.

The black death

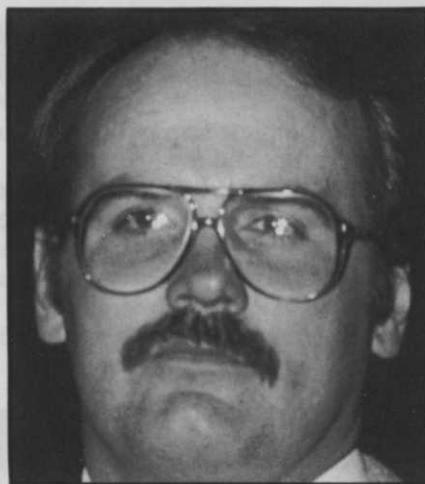
Ironically, this water shortage could save courses from another, potentially more serious problem: anaerobic black layer.

The common denominator in the problem, which is becoming more widespread nationally, is water—too much of it. Black layer has forced Scott to replace a number of greens at the Grand Traverse course.

No cure has yet been discovered. Some stop-gap solutions have been used to control and isolate (but not



Tom Harrison: spikeless shoes



Tom Athey: hooked on muny water



Bob Randquist: calling for research

In 1986, what were your expected expenditures for:

Chemicals, supplies	% sample purchasing	Average per purchaser	Projection to WTT readership
Turfseed	82.3	\$2,590	\$20.3 million
Sod	31.6	2,010	6.1 million
Dry-applied turf fertilizer	86.1	8,480	69.6 million
Liquid applied turf fertilizer	46.8	1,490	6.7 million
Tree fertilizer	25.3	464	1.1 million
Soil Amendments	38.0	1,430	5.2 million
Adjuvant spreaders	30.4	368	1.1 million
Wetting agents	62.0	554	3.3 million
Pre-emergence herbicides	64.6	3,240	19.9 million
Post-emergence herbicides	69.6	1,770	11.7 million
Aquatic herbicides	39.2	526	2.0 million
Fungicides	83.5	6,850	54.6 million
Insecticides for turf	79.7	2,320	17.6 million
Insecticides for trees/ornamentals	32.9	612	1.9 million
Growth regulators	34.2	293	1.0 million
Equipment			
Golf cars/gas: # owned	49.4	26.1	123,000
expenditures	32.9	\$5,730	\$18.0 million
Golf cars/electric: # owned	45.6	31.1	135,000
expenditures	21.5	\$9,210	\$18.9 million
Utility/ATVs: # owned	78.5	4.3	32,000
expenditures	49.4	\$2,670	\$12.6 million
Sweepers: # owned	41.8	1.2	4,590
expenditures	17.7	\$334	\$201,000
Irrigation pumps: # owned	89.9	2.4	20,600
expenditures	46.8	\$1,990	\$8.9 million
Sprinklers: # owned	83.5	361	2.87 million
expenditures	57.0	\$1,940	\$10.6 million
Electronic irrigation controls: # owned	53.2	20.3	103,000
expenditures	27.8	\$1,790	\$4.74 million
Walk-behind mowers rotary: # owned	89.9	3.8	32,200
expenditures	54.4	\$336	\$1.74 million
Walk-behind mowers reel: # owned	58.2	4.3	23,300
expenditures	31.6	\$2,170	\$6.54 million
Riding mowers rotary: # owned	69.6	1.8	11,700
expenditures	34.2	\$2,870	\$9.34 million
Riding mowers reel: # owned	81.0	4.3	33,500
expenditures	51.9	\$5,890	\$29.1 million
Tractor drawn gangs: # owned	82.3	2.4	18,700
expenditures	39.2	\$2,840	\$10.6 million
Spreaders: # owned	89.9	2.6	22,400
expenditures	29.1	\$282	\$784,000
Soil aerifiers/corers: # owned	87.3	2.1	7,360
expenditures	46.8	\$1,140	\$5.1 million
Sprayers: # owned	88.6	1.8	15,600
expenditures	41.8	\$354	\$1.4 million
Line trimmers: # owned	73.4	2.8	19,300
expenditures	44.3	\$171	\$721,000
Chain saws: # owned	84.8	2.0	16,300
expenditures	43.0	\$215	\$881,000
Plant materials	59.5	\$2,070	\$11.8 million

LANDSCAPE PROFILE

get rid of) patches of the layer, which has so far been limited to bentgrass greens. Weekly aeration and fertilizing, along with application of hydrogen sulfite, seem to somewhat contain small patches. But a cure is obviously needed before the problem becomes epidemic.

Good and bad

Despite some problems, golf course use is still on the rise, with most private clubs having to put prospective members on a waiting list.

This has its downside. Increased traffic means more work for supers.

Spike marks on greens and tees have been a problem at some courses because of traffic. To aid the greens' recovery, Randquist has been aerifying the greens at Southern Hills more frequently.

Lower cut and slower growth have not helped the recovery process either. Tom Harrison of Maple Bluffs Country Club in Madison, Wis., has been trying to convince his members that a slightly

higher cut, slower green, would be beneficial to the course. Unfortunately, he says, golfers prefer faster greens.

Harrison hopes that the spikeless shoe market will pick up. He has been encouraging club members to purchase the less-damaging shoe, and says of the spiked variety, "I'll be tickled the day they're gone."

Jon Scott believes that many courses being built now and in the future will take on a more practical shape: adequate-sized greens, tees and fairways, but not excessive. "I see a more manageable course, less extravagant," he says. He adds, however, that there will always be a niche for the extravagant course.

Dennis Orsborn concurs. "Our heyday is over. We must become as well educated as we can, and keep up with changing technologies as best we can. This is a business, and we must treat it like a business."

Points of interest

Increased traffic should also provide some good sales for equipment manufacturers, especially of aerifiers. Golf course managers who read *WEEDS TREES & TURF* reportedly spent more than \$5 million on them last year (see chart).

Golf courses also have provided 75 percent of all expenditures on

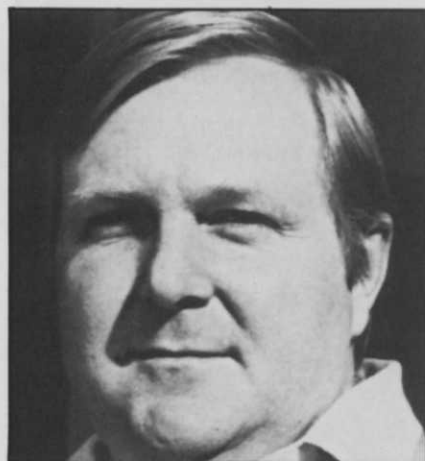
walk-behind reel mowers (\$6.5 million worth) and nearly 70 percent of riding reel mowers (\$29 million). Golf courses have provided about half of the industry's expenditures on tractor drawn gangs (more than \$10 million).

As always, fungicides occupied a good portion of golf course expenditures this year.

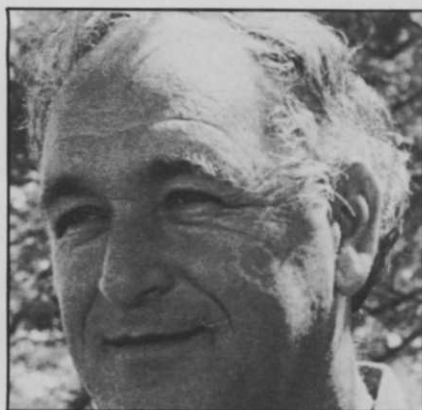
Superintendents who read *WEEDS TREES & TURF* spent around \$56.4 million on them in 1986. All other readers of *WT&T* spent \$25.2 million. Finally, supers laid out a good amount of cash for plant materials last year, nearly \$12 million worth overall. **WT&T**



Dennis Osborne: our heyday is over



Jon Scott: less extravagant courses



Dick Herr: finds stop-gap solution

THE COMEBACK

Three years ago, cows grazed at Castlewoods Country Club in Jackson, Miss. Now the course is among the area's finest and improving quickly.

Three years ago, Castlewoods Country Club resembled a cow pasture instead of a golf course. Today, it's the site of the Mississippi Golf Association four-ball state tournament.

Castlewoods, no longer ridiculed as Jackson's worst golf course, is much nearer the top of that list and continuing its climb. You can thank the new owners for deciding to put

up the money needed for nurturing a quality course.

And then there's Stanley Reedy, a soft-spoken, 26-year-old native Mississippian, who has served as superintendent since October, 1983.

He's the guy who took the beater course and shaped it into an effective advertising tool for the surrounding housing development.

No big deal, says Reedy with