

**LANDSCAPE PROFILE**

**THE 'SUPER' SUPER**

It rains when it shouldn't. Equipment breaks down. Club members complain. The modern golf course superintendent faces problems from every direction.

by Jerry Roche, editor

**W**eather, turf and personnel: take your choice.

They're all problems today's golf course superintendent solves every day—or, at the very least, on a regular basis. They're three reasons why today's golf course "super" must be a "super" planner, organizer and executor.

The results of an exclusive WEEDS TREES & TURF survey reveal that unexpected weather conditions are the biggest thorns in the side of today's superintendents. When asked about "problem tasks" which they encounter, "coping with the weather" was listed on the reports of 56.5% of the respondents. And when asked about the challenges they face as individuals, a good portion cited weather problems.

"My greatest challenge is trying to maintain proper playing conditions under adverse weather conditions," wrote one respondent. Many of the

written comments came from superintendents of transition zone courses.

Personnel/labor was the most popular response to an open-ended (fill-in) question about the biggest maintenance problem. That is, employees—for one reason or another—simply are not doing their job well enough to suit many superintendents. Another question listed various problems supers might have; though "personnel" was not on the list, it received the most write-in votes.

"Managing people is the greatest challenge I face, be they summer workers or the club champion," noted one superintendent. "The turf can be managed with a proper budget, but people take a whole lot more."

Another agreed: "Dealing with both the people above you and the people below you is important. The

weather plays an important role in our job, but is a constant that can be dealt with. But working with people makes for an interesting profession."

And another: "My biggest problem is keeping the staff motivated. Toward the end of summer, everyone is 'grassed out:' sick of mowing, working on, and looking at grass. You really have to work to keep the crew motivated and create job enthusiasm."

**Other problems**

Other most-cited daily problems superintendents confront are, in order of importance: old equipment going bad, drainage (water) problems, too much traffic from golf spikes and golf cars, and irrigation system maintenance.

One super wrote: "My greatest challenge is convincing the golfing public that the spiked shoes they've been wearing for so many years are as detrimental to the greens as vandalism from carts, traffic, etc."

And the growing trend toward golf car rental doesn't help. According to the survey, 83.6% of the courses report an increase in golf car rental. Just 3.0% report decreases.

Superintendents' most difficult "problem tasks," after weather, are: turf maintenance (cited on 42.0% of the questionnaires), hazard maintenance (27.5%), dealing with members (26.1%), budget problems (21.7%), and tree/shrub maintenance (20.3%).

**A profile**


The 69 superintendents responding to the questionnaire have an average of 10.6 years experience, and have been at their current course an average of 9.7 years. Most (26.5%) come from the Midwest, followed by the Northeast (20.6%).

Most of the respondents work for private courses (47.8%), but nearly as many (43.5%) work for public courses. Just 8.7% identify themselves as working for daily fee or resort courses.

Almost three-quarters (73.9%) of the courses in the survey are 18 holes, 13.0% nine-hole, 5.8% are 27-hole, 4.3% are 36-hole, and 2.9% are more than 36 holes.

Courses are busier, too. They average 960 rounds per week: public courses 1,305 and private 657. Those figures represent an increase of 40%

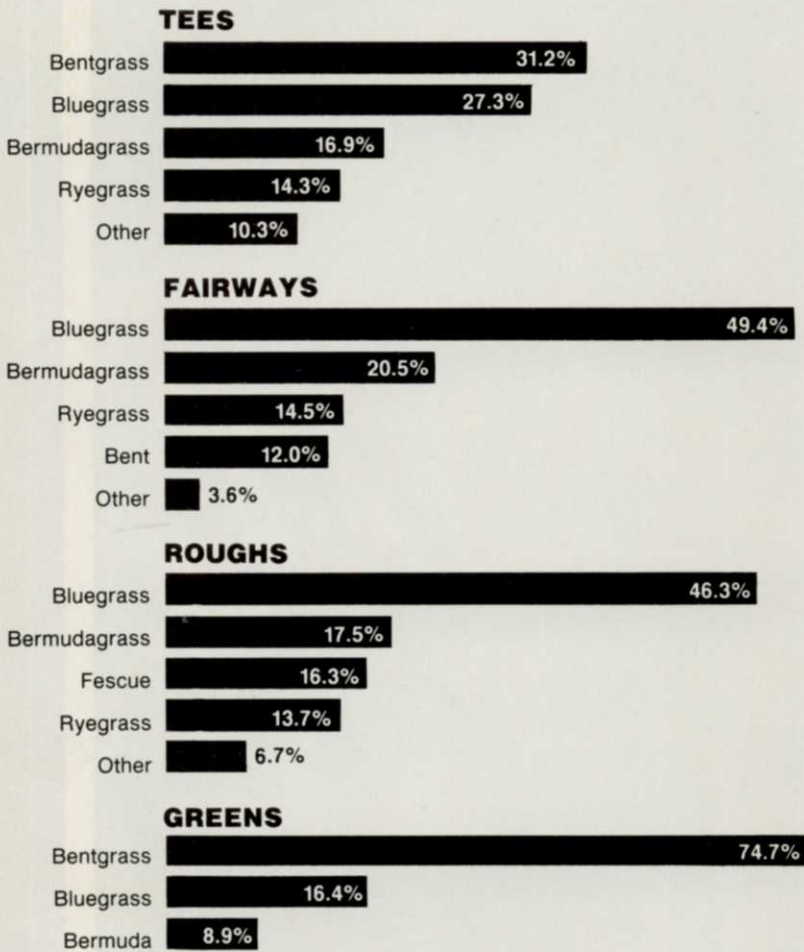
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**WT&T SURVEY AVERAGES**

<b>Type of Course</b>		<b>Daily fee</b> ... 5.8%	
Public	... 43.5%	Resort	... 2.9%
Private	... 47.8%		
<b>Number of holes</b>			
Nine	.....	13.0%	
Eighteen	.....	73.9%	
Twenty-seven	.....	5.8%	
Thirty-six	.....	4.3%	
More than 36	.....	3.0%	
<b>Length a superintendent</b> .....		10.6 years	
<b>Length at current course</b> .....		9.7 years	
<b>Geographical distribution</b>			
Northeast	.....	20.6%	
Southeast	.....	16.2%	
Midwest	.....	26.5%	
Southwest	.....	8.8%	
Plains/Mountains	.....	16.2%	
Far West	.....	11.7%	
<b>Average number of rounds/week</b> .....		960	
<b>Average maintenance budget</b>			
1985	.....	\$235,270	
Projected 1986	.....	\$253,790	
<b>Average crew size</b>			
Full-time, year-round	.....	5.6	
Full-time, peak season	.....	10.4	

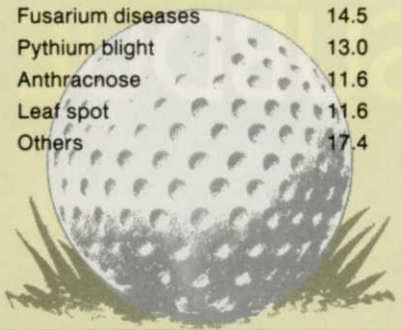
**MOST COMMON TURFGRASSES OF GOLF COURSES**



**PROBLEM DISEASES OF GOLF TURF**

(69 responses)

Disease	% respondents
Dollar spot	71.0
Brown patch	56.5
Snow molds	21.7
Fusarium diseases	14.5
Pythium blight	13.0
Anthracoze	11.6
Leaf spot	11.6
Others	17.4



over 1984 figures (reported by the National Golf Foundation and the Golf Course Superintendents Association of America), and might be slightly high, but are nonetheless indicative of a trend toward increased play.

Average maintenance budget of the courses surveyed was \$235,270 in 1985 with a projected average of \$253,790 in 1986, an increase of 7.9%. The smallest budget was \$12,000, the largest \$900,000 (the latter expects a \$1.1 million budget in 1986).

Maintenance crews average 5.6 full-timers with 10.4 in peak season. Largest crew reported is 26.

Two-thirds of the respondents say their budget for herbicides is expected to increase in 1986; 62.9% say their budget for fertilizer will increase while 61.2% say their

budget for fungicides will be higher. But just 52.5% say that their insecticide budget will increase, indicating a recent trend toward a more controlled use of insecticides.

The sample of superintendents who responded to the WT&T survey are joiners: 83.8% belong to a local superintendent's association and an additional 67.6% belong to the Golf Course Superintendents Association of America. USGA Green Section membership is 35.3%. And 84.8% of the respondents have membership dues (in at least one organization) paid by the club.

**On the pulse**

It appears, from the results of the survey, that golf course

*Superintendents are joiners: 83.8% belong to a local superintendents association, 67.6% to the GCSAA, 35.3% to the USGA.*

superintendents have their finger on the pulse of the industry. When asked what challenges the industry itself faces, their answers match the problem areas most often cited by the GCSAA:

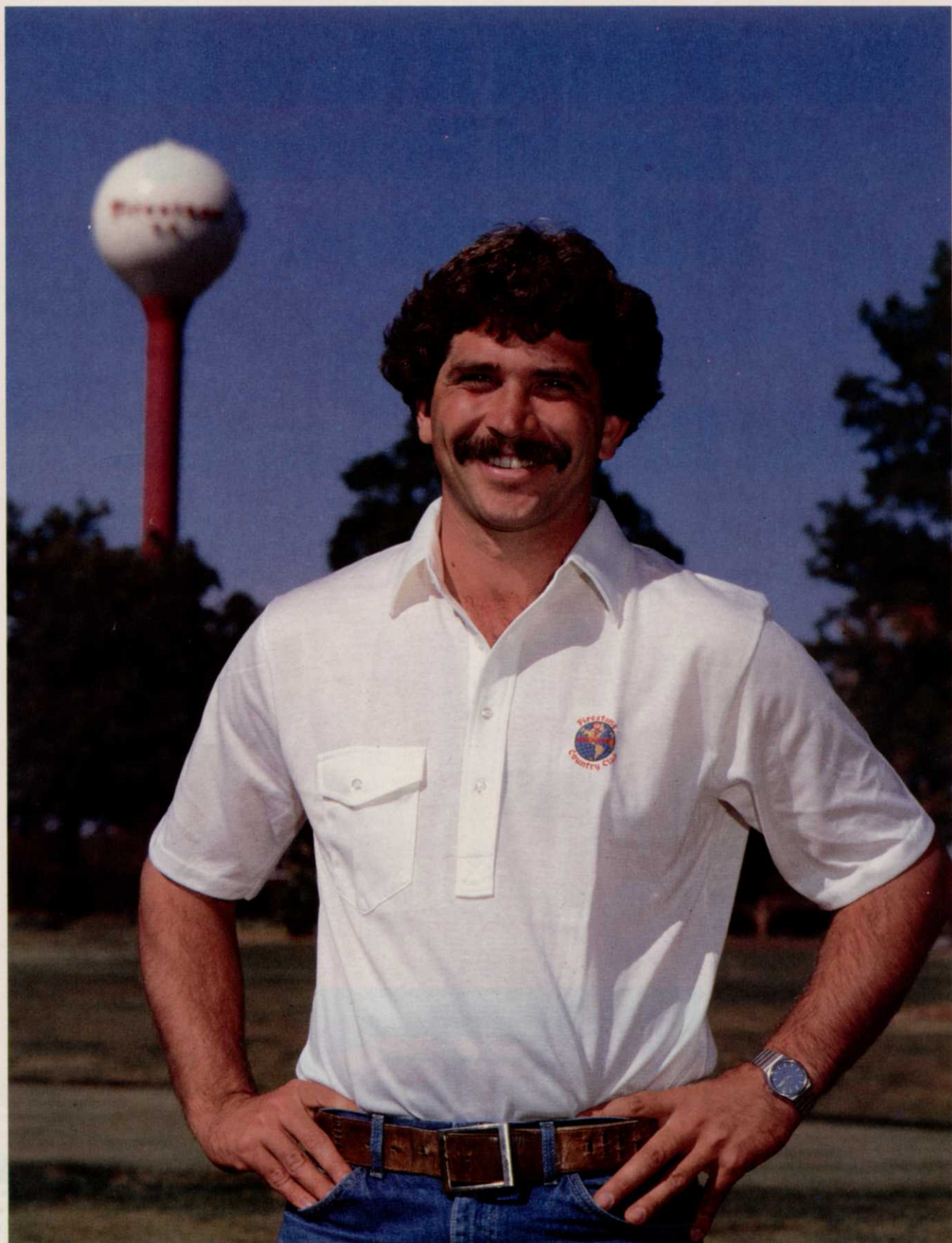
- rising maintenance costs,
- water availability,
- pesticide use,
- public relations,
- problems created by increased play,
- legislation not in the best interests of the industry, and
- turf research.

"The industry must find a way to provide golfers with the best possible conditions, but not overprice the product," wrote one respondent. "In other words, get back to basics."

Another noted: "Money and water are our greatest challenges, because in some areas we are running out of both."

So, clearly, the successful golf course superintendent must be more—much more—than just a devoted horticulturist or agronomist. He must be a "super"-man. **WT&T**

## LANDSCAPE PROFILE



Brian Mabie, Firestone Country Club superintendent.

# COMING BACK

Thanks to super efforts by Firestone super Brian Mabie and crew, famed Firestone Country Club is primed for better days and the challenge from fresh-faced newcomers.

by Ken Kuhajda, managing editor

**T**hey don't manufacture a single passenger car tire in Akron, Ohio, the "Rubber Capital of the World."

The factories have all moved from the rust belt to sunnier places. Gone is the prosperity of yesteryear. Gone is a part of the population.

But there's good news. The "Big Three" rubber companies—Goodyear, Goodrich, and Firestone—maintain their corporate offices in Akron. The city is making a gradual transition to a service-oriented economy.

And the area's many quality golf courses are still thriving.

Perhaps the best of the lot is the famed Firestone Country Club, just south of Akron. Along with rubber and the Goodyear blimp, Firestone is most associated with this northeast Ohio city.

Although Firestone has lost some of its luster—300 elms were devastated by Dutch Elm disease in the late 1960s and the greens have suffered in recent years—it remains one of the country's most famous courses.

Firestone has had its share of bad breaks. The latest—a case of bacterial wilt in the summer of 1984—has been handled smoothly. Firestone is on the comeback trail.

Brian Mabie was aware that the famed South Course's greens had the disease when he took the superintendent's job in June of 1985.

He had to control by bactericide through the annual NEC World Series of Golf (held Aug. 22-25), and then worry about replacing all 18 greens.

The Penn State grad never doubted that he was up to the task.

### Respect but not awe

Mabie spent five years at neighboring Silver Lake Country Club before joining Firestone. Silver Lake is a fine local course, but without Firestone's reputation.

(Interestingly, Silver Lake also had a bacterial wilt outbreak the summer of 1985.)

Although Mabie downplays the transition ("It's Firestone but the turf doesn't know the difference. It'll die just the same."), he realizes he's jumped to the big time.

He was recommended by several Silver Lake members who also belonged to Firestone. They liked his work. So did Firestone general manager Don Padgett II, who hired Mabie after three interviews.

"He was the right guy at the right time. He's enthusiastic and has the technical knowledge," says Padgett. "We're highly pleased with him."

### A long history

Prestigious Firestone hosted its first of three PGA Championship Tournaments in 1960, when little Brian was five-years-old. That was the beginning of big-time golf in Akron. The American Golf Classic (with its field of four) began the next year, followed by the World Series of Golf in 1976.

Intimidating? Not for Mabie. Not even maintaining a course with greens crumbling under the weight of bacteria wilt.

His consistent personality is perfect for the conditions he faces at Firestone. He admits to occasional moodiness but most times, remains calm. The ups-and-downs of grooming a diseased course didn't break his spirit.

At least not outwardly. "I'm 30 outside but 56 inside," he confesses.

With curly moustache and weathered good looks, he could pass for a soap opera star, though he projects modesty to an outsider.

He has a "gee-whiz" attitude to the attention he gets as Firestone's superintendent. After all, turf is turf, no matter if it lays at Firestone Country Club.

During the height of greens

replacement last fall, Mabie was putting in 14-hour days, six to seven days a week. One Saturday night he finally found the time to take his wife, Terry, to dinner.

He fell asleep at the table. "At least I took her out," he says with an air of accomplishment.

For a time, he was married to the South Course, replacing the diseased *Nimisia bentgrass* with the ever-popular *Penncross*. At the same time other subtle changes were made.

Firestone, designed by Robert Trent Jones and built in the 1920s, looks its age: parallel fairways, repetitious bunkering, poor drainage, poor spectator vantage points.

Mabie and crew altered some correctable flaws hoping to modernize the course without losing its distinguishable characteristics.

During the 1986 World Series of Golf, pros will still wail away at the 7,100-yard course. The fairways are still parallel. The course is still long. Break out the low irons.

But it's a good bet the winning 14-under-par total posted by 1985 World Series of Golf champ Roger Maltbie won't be duplicated in 1986.

The soft greens that made for such low scores will be gone in 1986.

However, making the course tougher isn't the goal of the facelift, says Mabie. "We really have given up on toughening the course for the pros. If they've got the skills to post low scores, then let them do it," he says.

Rather, the subtle changes have brought the course up to USGA specs, improved drainage, and enhanced spectator space. (See related story.) The result may make things a tad more difficult for the tanned boys of summer.

"It will be interesting to hear what they say this year about the changes we've made," says Mabie.

### A fine support staff

Sitting in his office exchanging playful banter with workers, Mabie comes across as just another Cushman driver. That "I'm-just-one-of-the-boys" attitude seems to work for the young superintendent.

His workers seem to have a genuine like for their boss. He respects their work.

"You can't get too involved in telling people what to do," says Mabie. "The people here have experience and expertise. They

understand a lot about their jobs. I don't need to watch people work—I critique when the job's finished."

In a short time, Mabie has established a solid communication line with Padgett, his immediate superior. They speak daily.

Club Corporation of America, Firestone's owner/operator, was generous with budget support in combating the bacterial wilt, says Mabie. "They understand the business—they're aware that if you have a pythium outbreak, you're going to have to spend money."

While the South Course chewed a chunk of the yearly budget, the less-famous and younger North Course, built in the late 60s, saw more action. It's long and features a more modern layout, says Mabie, adding that he has no personal favorite. "They're both perfect," he says with an ornery grin.

He utilizes identical maintenance procedures on both courses. He has no magic formula.

His first year at Firestone, with the exception of fighting the wilt, has gone smoothly. The weather was

good; rain was not a problem. "I like everything about the job. I haven't found a bad point yet," says Mabie.

When he runs into a problem, he enjoys the luxury of discussing alternatives with experienced assistant superintendents.

Jim Skelton, former head superintendent who resigned last spring, has stayed on as assistant super. Roy Conner is North Course super while Jerry Turner heads the South Course.

Their advice is invaluable, says Mabie.

### The future

GCSAA member Mabie says keeping in touch with the rapidly changing world of golf course maintenance is vital.

He sees his breed as a sort of guinea pig. "We don't have 10 years of research to go on. Some of the things we're doing are not time-tested," he says.

"Our industry is moving so fast and so many of the programs are untested, but you've got to keep yourself updated," he adds.

"Some of the studies look really promising in the laboratory, but when you try them on the course you find out if they really work."

At Firestone, Mabie has just two short-term fears: equipment age and quality of the irrigation system.

On equipment: "We've got a lot and it's in good shape, but we're getting some fatigue problems like cracked welds. But if it's fixable, Randall Pope (Firestone head mechanic) can fix it."

On irrigation: "Our irrigation system is adequate, but not where I want it to be." Look for an upgrading soon, he says.

At least during Mabie's tenure: he plans to stay at Firestone a long time. Unless he doesn't answer what he says is his biggest challenge: readying the South Course for next year's World Series of Golf.

"I better have it ready or somebody else is going to be doing it."

Mabie just may bring famed Firestone back to where it used to be. **WT&T**



Firestone didn't waste any time in battling the wilt. Left, number 18 just after all greens were removed in September. A month later, greens were mowed. That's number 10 at right.

## CLEANING UP FIRESTONE CC'S WAR ZONE

Back in September, Firestone Country Club's South Course looked like a war zone. Mounds of dirt, craters, and brown turf (superintendent Brian Mabie turned off the irrigation system when work began immediately after last year's tourney) violated the South Course.

But by this spring, all will be a memory, provided Mother Nature smiles. By early June, the 300 or so members will be back on the course, encountering several minor changes.

The greens now have a drainage system. Several greens were resloped and number 17's contour was severely altered. Tifton, Ga., resident and greens shaper emeritus Ernest Jones was called in for the job.

Jones brought the greens to specs suggested by Golforce Inc., a Jack Nicklaus company. Golforce architect Tom Pearson spent several days at Firestone consulting with Mabie and suggesting workable improvements.

Mabie has great respect for Pearson. "It was a tough thing Tom did—we've tried to improve the course without losing the characteristics that make it Firestone," he says.

Number 5, previously a 234-yard par three, now measures 200 yards, a more realistic distance for a par three, says Mabie.

Both the pond and fairway at number 16 (625-yard, par five), the famed "Monster," are broader. The wider fairway, says Mabie, is a realistic solution to a minor problem. The old fairway was too narrow, he says.

The finishing hole, number 18 (464-yard par four), has a new green measuring half of what it was, providing more spectator space.

The "new" South Course provides improved spectator vantage points also. Spectator mounds add to what was previously a poor course to watch a golf tournament.

From those mounds, fans can view a general rebunkering throughout the course.

—Ken Kuhajda

Top, workers install drainage pipes on the South Course. Below, contractor Jim Zinni (left) and greens shaper Ernest Jones.



# **GOLF'S KEEPER OF LEGENDS**

Walter Woods maintains ancient St. Andrews as a continuing challenge for today's golfer. He does it with style.

by Ron Hall, associate editor



St. Andrews greenkeeper Walter Woods on one of the courses's huge greens.

Walter Woods breathes the salty air of two worlds.

He's greenkeeper of St. Andrews. Golf entrusts him (and it has for the past 11 years) with the double-edged task of preserving its most sacred turf and, simultaneously, meeting the demands of today's game. Golf is believed to 900 years old here. Yet, more than 40,000 rounds are played annually on some of this same wavey duneland.

His challenge: to preserve the very character of Scottish golf.

"How else are we able to measure the records of golfers of 100 years ago against the golfers of today?" he asks.

This job assumes almost religious overtones with the ghost of Old Tom Morris, hole-cutter in hand, prowling the Old Course. How else characterize a course with the "Valley of Sin" or "Hell Bunker?" Legend has it that St. Regulus spirited the relics of St. Andrews from a Greek island to these shores in 763. Hence the name of this city of 11,000.

## **A part of history**

Greenkeeper Woods works under the weight of this history. Enjoyably too.

This ruddy-faced Scot has a penchant for lively conversation and, its reported, aged malt whiskey, the kind that's found here and few other places in the world. The smooth island whiskey that warms a soul in the dank gloaming. He's a colorful, handsome man, wispy haired, his eyes a steel gray.

American friends smile at the remembrance of a tipsy and grinning Woods, kilts and all, trundled into a waiting taxi last February in Washington D.C. This to admiring whistles of passerbys after an evening of trading stories at the GCSAA Conference.

Called to help supervise construction of a course in Japan this past year, Woods insisted the bunkers be deep and dangerous. "They want to play world class golf, then they'd better play on world class courses," he bites off with a mischievous smile.

Firing up another of his endless cigarettes, he looks you in the eyes with his square-jawed grin, and talks St. Andrews. His aging land rover grunts through soaked swale, up gorse-covered boils. This is linksland golf.

A sodden afternoon. Reach up

## LANDSCAPE PROFILE

and grab a chunk of the sagging sky the color of a dirty ceiling. The only stirring, in addition to a solitary wind-surfer plying the sweeping breakers of nearby St. Andrews Bay, are knots of American golfers determined to meet tee-off times.

The destination, one of St. Andrews' unique double greens. There are seven on the Old Course. The largest, containing the 5th and 13th holes, is an acre.

"We double cut these in the evening and once in the morning for an Open," Woods says. "The boys've got blisters on their feet, I'll tell you." A triplex can mow this 5,555-square yard monster in a half hour. It takes a pair of workmen, pushing 20-inch mowers,  $\frac{3}{4}$  hour each.

The greens are mowed just three times weekly for non-tournament play.

### A battle of grasses

These giant greens, found only at St. Andrews, are not Woods' biggest challenge. That's preserving the nature of a turf surface that often calls for low driving shots under sea winds, hoping the shot approaches the greens on a roll. The fairways are hard, but not as hard as they were. Woods sees it as a battle of grasses.

"We must control the spread of competing grasses," he explains. Inland grasses must not be allowed to dominate the fescue-bentgrass character of St. Andrews. "These courses must remain in seaside links condition."

This means rigorous aeration each winter, minimum levels of fertilizer and infrequent irrigation each summer.

Woods enlists nature's help also. "The more sand I use with a high salt content in it, the more beneficial it is to me. I don't worry about the salt in the beach sand. The only grass it affects is poa (annua)."

The secret of St. Andrews' greens? Alternate layers of sand and seaweed. Says Woods: "One time I used to do it with soil, seaweed, and sand. But the soil brings in weeds."

Change, however, is inevitable. Even at St. Andrews. But it's monitored by a Links Management Committee made up of representatives of the town council and the Royal & Ancient Golf Club. This committee directs Woods in the care of the one 9-hole and four 18-hole (the Old, New, Jubilee, and Eden) courses at the site.

Irrigation came to tees and greens at the Old Course 20 years ago, to the fairways in 1977. "They just couldn't play golf under those conditions," Woods says.

"It's our intentions within the next two or three years to irrigate the other courses as well. We'll be doing everything wall to wall," he explains. "Sometimes we can get terrible droughts in the summer."

Major fairway renovations are under way on the Jubilee Course, also, the first major changes on that course which opened in 1897, the year of Queen Victoria's Diamond Jubilee.

Woods and his men refurbished two fairways this summer. Nine others get work this summer. Jubilee suffered devastating compaction during World War II as an army equipment parking lot.

### The 'perfect' green

Of note, Woods considers the 8th green of the Jubilee his "perfect" green. "The hungrier I keep it, the better it gets," he says.

Two mechanics and 23 other grounds personnel help Woods. Summer sees the addition of 10 additional men. Some, including Americans, see it as an excellent training ground.

Says Woods, "I'm putting young lads out to be head keepers all over," an indication of the open-door policy which remains here in the Kingdom of Fife. "Interviews, that's one thing I don't refuse to do," he adds.

The ghosts of golf's rich heritage surround this genial Scot. It's a safe bet they're smiling at the way he keeps their memories alive for today's player. **WT&T**



Today's golfer still finds challenge on these ancient seaside links at St. Andrews.

## St. Andrews: golf's cursed shrine

by Ron Hall, associate editor

Delicious orneriness lolls in a crooked swath of linksland off Scotland's wind-swept North Sea.

Golf's home. St. Andrews. The "auld grey toun." Time-stained buildings. Sand. It all began here more than 900 years

ago on this sloping tip off the Fife Peninsula.

"The most important work we do is keeping the course as it has been for hundreds of years," says greenkeeper Walter Woods. "Our biggest fear is





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keeping the courses from turning inland." That means preserving St. Andrews "in seaside links condition," a delicate balance of fescues and bentgrasses.

That's a task at this cantankerous stretch of greensward. It's this cussed wind-whipped sand and grass that's also its glory.

In the beginning.

Take a long stretch of sand. Let the gales play it until it's an incomprehensible pattern of swales and low sweeping dunes. And cover the whole with a rich cover of turf, whin, and heather. No trees.

Now you've got something. Oh, don't forget the sheep. Let 'em wander where they will. When that wind blows though you'll find 'em huddled behind a rise. Not likely you'll be able to grow much there. Bunkers they'll be.

This sandy linksland abandoned by a retreating sea attracted strikers of the ball as early as 1100 A.D. This is the Old Course. They've been playing golf here ever since. Disregard a 1457 edict by the Scots Parliament forbidding golf and demanding archery practice. The Scots did.

But, sure, some things have changed. The game itself changed in the 15th century when Scots started hitting the ball to holes and not objects. The ball? It evolved in 1600 to the feather-stuffed "featherie", again in 1848 to the gutta percha, and finally to today's dimpled compression.

And wooden ships filled with rock were sunk as a barrier to the sea. Captured sand allowed the manmade shaping of the New Course in 1895. Ever-increasing numbers of golfers justified construction of the Jubilee Course on even more recently claimed dunes, and finally the flat Eden Course came into play in 1912.

They're all part of St. Andrews, but the Old Course remains. Change there is so uncommon as to be marked in centuries.

In 1764 the Old Course was reduced from 22 holes ("the number of shots in a bottle of whiskey," says a proud local) to 18. The doubling of the size of the greens in 1832 speeded play. It was about this time also that fairways on the Old Course grew to their present size.

Previously, they'd been narrow, no more than 40 yards wide.

This century, irrigation was introduced to the course, tees and greens in 1964, fairways in '77.

Sheep don't graze on the links. Towns folk don't bleach their linen along the fairways anymore, but the Old Course retains its stubborn personality.

"We went past some acreage that was so raggedy and beat up that I was surprised to see what looked like a fairway amongst the weeds," Sam Snead once said of St. Andrews. "Down home we wouldn't plant cow beets on land like that. Until you play it, St. Andrews looks like the sort of real estate you couldn't give away."

Today's golfer can be surprised by St. Andrews' appearance. It's only because golf courses are designed, built, and manicured with such precision now. Prior to 1800, golf courses weren't constructed. They were discovered. Then they were played on.

Golf's popularity spread anyway, first into neighboring England and Ireland, finally worldwide. Even so, rulemakers continued to look to St. Andrews for guidance and inspiration.

That guidance comes from St. Andrews Royal and Ancient Golf Club, not the first club (that honor goes to the Honourable Company of Edinburgh Golfers), but the best known. The R. and A. dates from 1754 when 22 noblemen and gentlemen joined as the Society of St. Andrews Golfers. Today membership in the R. and A. numbers 1800, about a third of them overseas.

Said the late Bobby Jones, the most beloved American to have played St. Andrews and well known in the R. and A.: "I began to see her as a wise old lady, whimsically tolerant of my impatience, but all the while ready to reveal to me the secrets of her complex being, if I would only take the trouble to study and to learn."

Jones knew St. Andrews well. In 1930 he put together his unequalled "Grand Slam." One leg, the "Amateur" was played on the Old Course, and that a few years after a frustrated and embittered Jones stalked off the same course in midround. □

# DO-IT-YOURSELF IRRIGATION SYSTEMS

Maple Bluff's Tom Harrison improved his course 100 percent with an irrigation system combining Rain Bird valves and heads with Toro controls. He designed it himself.

by Jerry Roche, editor



Maple Bluff's par three, 11th hole.

**B**urly Tom Harrison, golf course superintendent at Maple Bluff Country Club in Madison, Wis., is the consummate do-it-yourselfer.

Harrison, his course in dire need of a new irrigation system a couple years ago, designed his own. Combining Rain Bird valves and heads with Toro VT3 and IBM PC controls, he replaced the old center-roll, quick-coupler system.

It worked.

The new system doubled the beauty and health of his course.

"Why did I hybrid the irrigation system?" Harrison rhetorically asks. "Because, when someone puts a package system together, it doesn't necessarily mean that all the components are the best."

Harrison, whose only turfgrass education has been on his hands and knees trying to figure out what makes grass grow best, didn't design the new irrigation system by himself. He enlisted the help of literally hundreds of friends and consultants. He had to. The system cost \$293,000, and even exclusive country clubs don't like to dump that much money out the window.

"We had people from California finding out we were spending that kind of money and breathing down our necks," Harrison remembers. "But I wanted to get people from this region because it's much easier to get replacement parts and service."

He initiated inquiries in August, 1983. Eleven months later—the day before Independence Day, 1984—the system was operational.

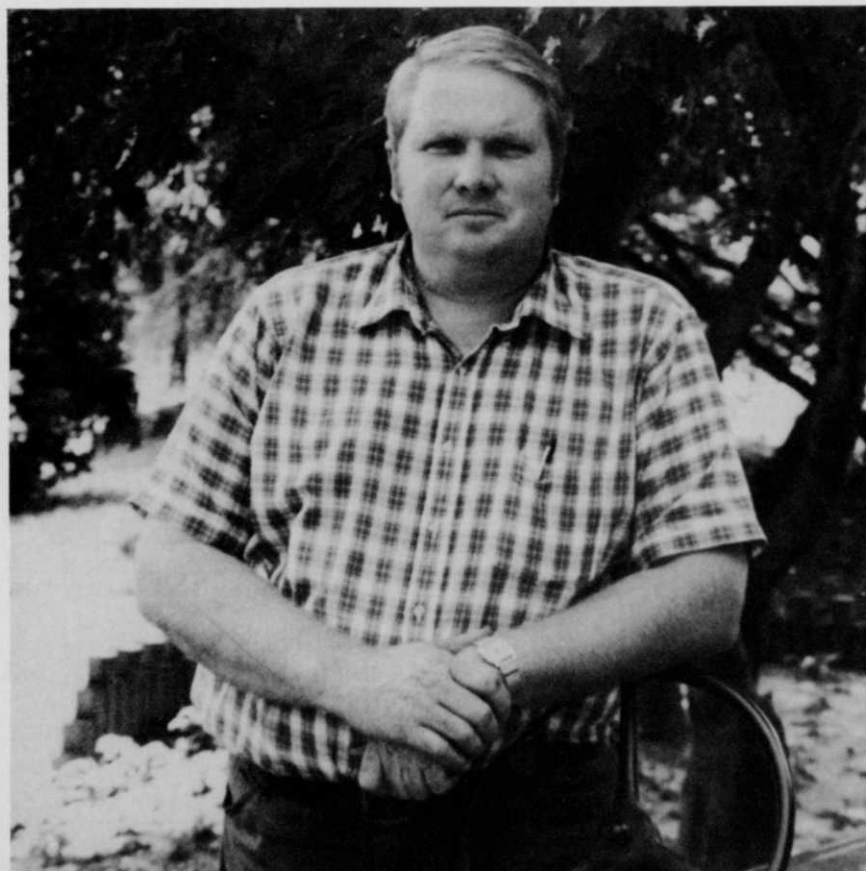
"First, you have to look around at what works and what doesn't work with other people," he notes.

Harrison's initial design was first approved by Peter Beaves of Midwest Irrigation, Dubuque, Iowa.

"I didn't put the job out to bid," Harrison says. "I investigated to see what the going rate was. Then I hired Midwest, the premier irrigation contractor in the country. It wasn't worth trying to go with a low-baller."

"Peter gave me a computerized printout of all the courses he's done in the last 20 years, and one of them was Augusta National. That was good enough for me."

Harrison's design then went into the computer of an irrigation consultant, who was paid \$2,000 to find any flaws. Finally, Harrison went to Reinders Brothers distributors, who agreed to put the



**Tom Harrison, club superintendent, Maple Bluff County Club.**

design through another computer in exchange for purchasing equipment from them.

"We ended up with four opinions," Harrison says. "Except for the size of the pipe—I had sized pipe bigger than it needed to be—there wasn't a single thing we changed."

Club members supported Harrison.

"The members don't expect poor business decisions or anything that isn't done right," Harrison observes. "Money is one of the hurdles that is easy to get over, compared to that. The members didn't see in the cost one big figure to pay a landscape architect, but I assured them that I had the best contractor and the best price. That's the way we do everything here."

Harrison and his staff designed and erected the pump building in January, 1984. L.W. Allen installed the three-pump systems capable of delivering 1,400 gallons per minute.

"Everything we did was geared toward saving energy," says Harrison. "We even put time-of-day use meters on the electrical system to get the cheapest rates."

In March, 1984, pipe went underground and pumps installed. Four months later, Harrison turned on the system.

"The biggest problem was that—when we started—we didn't put strainers on the pumps and they got clogged with a couple small bullheads," recalls Harrison.

But things are running perfectly today.

"We've had probably a 100 percent improvement in the course," the superintendent observes. "There is no more overwatering, there aren't any dry areas, and water usage is about 60 percent of what it was. The members are just delighted because there was no downtime."

"A dry year like this will bring out the bad in the system. We haven't had any problems."

Harrison received much of the experience necessary to tackle this job as a part-timer at Madison's Nakoma Golf Course. He then enlisted in the Navy and became a Seabee engineer.

"But I didn't like the indoor part of engineering," Harrison observes. "As a student working at Nakoma, I realized

I liked being outdoors better."

He started at Maple Bluff in 1967, became its superintendent in 1976.

During the 1970s, Maple Bluff hosted the Women's Western Open and the state amateur tournament. In 1987, it entertains the state amateur again. One state event is held there each year.

Harrison has four full-timers on his staff: two assistants and two mechanics. Five additional persons are hired in the spring; and from June 1 to September 1, the staff numbers 16. Besides the golf course, Harrison's crew maintains tennis courts, a pool, and the entire country club grounds.

Problems are minimal.

"The people working for me are a piece of cake because they're good kids who are tickled to have a job," says Harrison. "And the members aren't a problem compared to most clubs. They're understanding."

"The course itself isn't too much of a problem. Fairway management is now on a strictly preventative basis. We don't waste material. We're very, very picky. From being on the course, I know the cycles of problems."

"But I don't like surprises, and Mother Nature is always throwing them at you. It's the one thing that's hardest to deal with," he says.

There is another problem, too: "probably the biggest one is my own inner drive to survive a summer without losing any more grass than what's on my desktop," he says.

This same trait helped get the Wisconsin Turfgrass Association formed on Oct. 11, 1980. Harrison was one of 11 founding fathers, and is the current president. The organization donated \$30,000 to turf research last year.

"We're trying to create an awareness of turf at the University of Wisconsin," Harrison notes. "Turf research in Wisconsin was headed down the tubes before we got started. We're succeeding and getting a great reception from the ag department."

It probably helps that one of Maple Bluff's members is football Hall of Famer Elroy "Crazylegs" Hirsch, Wisconsin's athletic director. Not that help is needed: visitors to the course are often amazed at how beautiful turf can be.

It's truly a green monument to Tom Harrison, do-it-yourselfer extraordinaire. **WT&T**

# A TULSA TREASURE

You don't need to be an engineer to figure out that Southern Hills is a top-flight golf course.

by Ken Kuhajda, managing editor

**W**ith a degree in metallurgical engineering and a reserved seat in law school, you'd expect Bob Randquist to be fighting traffic to get to his big-city high-rise for work each morning.

Or at least be a member of the wool suit, oxford shirt, silk tie, and loafer gang. Or at least drive a BMW.

However, Randquist doesn't fit into a nice, neatly-wrapped category.

an engineering career was out.

Bob Randquist stayed home, eschewing job offers in Houston and St. Louis, to work at Trosper.

Once an Oklahoman, always an Oklahoman.

"I've certainly never regretted it," says the 35-year-old. "Three years after I started at Trosper, I was accepted into law school (at OU) but didn't attend."

*'Being a player and involved in the maintenance end, I see things that I didn't see before. It makes it hard for me to concentrate.'*

—Randquist

He's not doing what you would expect someone of his age and education to do. He chooses turf over concrete, Cushmans over BMWs, open space over office space.

You can find him 12 months a year at prestigious Southern Hills Country Club in Tulsa, Okla., studying turf instead of metals.

He's been Southern Hills superintendent since December, 1979, directing a crew of 14 in preparation for events like the PGA Championship in 1982.

## His big decision

While a student at the University of Oklahoma, Randquist worked for several golf courses during summer months, developing a fondness for the work.

"After I graduated, I had the chance to take a job as assistant superintendent with Trosper Park Golf Course in Oklahoma City," he says.

There was a good chance for advancement, which made the offer even more appealing. Strike one.

His degree in engineering meant he would probably have to move from his beloved Oklahoma to the big city. Strike two.

Wife LaVada still had another year of college at OU. Strike three:

By that time, he bled green, raptured by golf courses.

"I love the work, I love the game of golf," says the former 1-handicapper, now a 6. "I'm glad to be involved with it. I guess my only regret is the fact that I don't get to play enough."

When he does play, he sees things differently. "Being a player and involved in the maintenance end, I see things that I didn't see before. It makes it hard for me to concentrate while some guys can shut it out. I'm not one of them."

While golfing, he spends more time looking over a stress area than planning his approach. But he still enjoys playing—he holds his own against club members.

## The course

Whether working or playing, Randquist enjoys the outdoors.

"What appeals to me about this business is that you get to see the results of your work," he says.

He also gets spiritual fulfillment. "I really have a deep sense of appreciation that I have the chance to do what I do. It's a chance for me to be a steward in part of God's creation."

His piece of God's creation is located in south Tulsa, nestled

among the rolling hills of northeast Oklahoma.

It's truly a fine course, one requiring both strength and finesse to score. Well-known in golf circles, Southern Hills has hosted two U.S. Opens (1958, 1977), two PGA Championships (1970, 1982), the U.S. Amateur (1965), and U.S. Women's Amateur (1946). *Golf Digest* ranks it 11th among U.S. courses.

It's not a long course (6,862 yards, par 70 at tournament time), it's not visually intimidating, but it can eat you quickly.

At tournament time, any shot in the rough (a mix of common bermuda, bluegrass, and ryegrass) almost assures the golfer of a bogey. The tight fairways are easy to miss.

At times, you can hit the fairway but not a particular spot and end up with a bogey.

The course's 3,500 trees come into play frequently. Despite its serene appearance, Southern Hills can spell disaster for those off their game.

Some say the first three holes (all par fours) are the key to winning a championship at Southern Hills. Numbers 1, 2, and 3 (447, 459, and 406 yards, respectively) call for accuracy right out of the shoot. An errant shot and even a pro is looking at a six.

Numbers 4 through 7 are considered fairly easy holes for the pro, perhaps a break for what lies ahead.

Hole number 8, a 215-yard par three, features a tight fairway, sloping green, and three strategically placed traps. Accuracy off the tee is paramount to solving this hole.

Numbers 9 through 11 allow the golfer a brief rest before tackling perhaps the course's most famous hole.

Number 12: 445-yards, par four.

Both Ben Hogan and Arnold Palmer picked number 12, a dog-leg left, as one of the country's top par fours. A tee shot has to dissect a group of trees and land on the right side of the fairway for a long iron approach to the well-guarded green. Three deep traps and a pond add to the challenge.

When and if the golfer makes it past 12, he's faced with the course's longest par four, number 13 (465 yards, a 537-yard par five for members), a par three with six bunkers, and number 15, a par four, slight dog-leg left with three traps



The Southern Hills Country Club clubhouse in Tulsa, Okla.



This is what the golfer sees as climbs toward the 18th green.

tightly surrounding the green.

Sixteen is a birdie hole, a 569-yard par five, that typically plays downwind.

Number 17, the course's shortest par four (354 yards), requires a perfect tee shot for an approach to a shallow, hard-to-hold green.

The finishing hole, a 434-yard par four, is a severe right dog-leg, where an idyllic tee shot is required to reach the plateau green.

The smallish greens average just 4,800 square feet. Southern Hills is no picnic for both pros and 900 members, who average 30,000 rounds yearly on the 175 acres.

### Public relations

Randquist, on a tour of the course, knows most faces he passes. That's intentional. "I eat lunch with them every day, which I feel is a real positive public relations move," he says.

His monthly meetings with the greens committee run smoothly, he says, provided he's done his homework.

"I give a report that highlights the major things we did, the projects we're working on," he says. "I give a future report where I break things down into 30-day, 60-day, and 90-day projects. As long as I give reports

*'I love the work, I love the game of golf... I guess my only regret is the fact that I don't get to play enough. (But) being a player and involved in the maintenance end, I see things that I didn't see before. It makes it hard for me to concentrate.'*

—Randquist

and stay organized, the meetings go smoothly."

As long as the club thrives, Randquist is in an enviable position. He has carte blanche over purchase of equipment and supplies, hiring and firing, and employees' wages.

He has a crew of 14 with two assistant superintendents: John Babe and Scott Mendenhall. Jim Lucius is the club pro.

### Quiet efficiency

The 1982 PGA official program offers this description of Randquist: "quiet efficiency."

It's an apt account of the reserved Oklahoman with the gentle eyes and mild disposition.

He knows the game, he knows every inch of Southern Hills, he

knows his capabilities.

His programs work well but you'd never see him pat himself on the back. The members, who hired him in December of 1979, do plenty of that.

He reseeded all greens in September, 1984, with Penncross bentgrass and little fanfare. He's nurtured those greens through the intense heat of an Oklahoma summer.

He has the course playable 12 months a year despite the unpredictability of an Oklahoma winter.

Southern Hills continues as one of the country's top courses under his superintendency. Not bad for a guy with a degree in metallurgical engineering. **WT&T**

## A super's view on golf: then, now, tomorrow

Bob Randquist, superintendent at Southern Hills Country Club, Tulsa, Okla., has 16 years experience on golf courses. In that time, he has developed ideas on many topics. Here's a nutshell report:

**Wages:** "My feeling about my crew is that I want to pay them enough to keep the ones I want to keep."

**Chemicals and supplies:** "We buy in January and February to take advantage of the discounts. With the financial position of our club, we're fortunate to be able to do that."

**GCSAA:** "The real core of information for anyone in the turf business. GCSAA has always been in the forefront with its research. The meetings are a great chance to meet people, share and exchange ideas, find out the latest thing on the market."

**Agronomy degrees for superintendents:** "It's more important that people in the business have a degree in something. It shows they've handled the work. But not



**Bob Randquist, Southern Hills club superintendent.**

having a turf degree has never hampered me."

**His job:** "It would be real difficult to leave here. One of things that attracted me was the fact that since Southern Hills was built (1935, with Perry Maxwell as architect), it's only had five superintendents and the one before me was here only two years. That shows stability."

**Enjoy most about job:** "No question—being outside."

**Enjoy least about job:** "The variability of golfers. We try to walk that line where we make the majority of the players happy."

**Biggest challenge:** "Getting maximum production from employees: doing it economically but doing it first class."

**Another challenge:** "Making the general golfing public aware of our efforts and our role in the game. We've got to do a better job. The golfing public has no idea of how important a superintendent is."

—Ken Kuhajda