



Skeeter Lewis (r) checks the 14th green with H. L. Bird, a Twin Oaks member who is something of a turf fancier.

## How Lewis Battles Blight in Missouri's **GRAVEYARD LATITUDE**

*Pulling Twin Oaks' greens through  
in dreadful summer of '63 was a  
feat that has been acclaimed by  
two specialists on putting plots*

By **JOE DOAN**

**J.** B. (Skeeter) Lewis has been a turfman for nearly 30 years. Like 99 and 44/100 per cent of the men who have made green - and fairway-tending their life's work, Lewis never was exactly overwhelmed with kind words as to the condition of his putting plots until late last summer when praise suddenly came from two rather widely separate sources. One was the best known golfer of the last decade and possibly of all time; the other was an agronomist who hardly needs to be introduced.

The golfer was Arnold Palmer. After playing an exhibition at Lewis' Twin Oaks CC in Springfield, Mo., Palmer made it a point to look up Skeeter and tell him: "I can't remember of ever having played on better greens than you have here."

The agronomist was Fred V. Grau, who after travelling extensively in the Midwest last summer, said in September: "Skeeter Lewis has done an unbelievably fine job of bringing the Twin Oaks greens through the summer heat. A fellow is lucky just to keep turf where he is located, let alone bring it along as beautifully as he has."

A glance at the map will show that Twin Oaks is located in what is regarded as a July and August graveyard latitude.

Even at night temperatures don't usually drop below 85 or 90 degrees during these two months and, more often than not, the high noon humidity reading is in the 90-95 per cent range. Helminthosporium, dollarspot, brownpatch, pythium and a few other diseases can drive a fellow to drink whatever fungicide he hasn't already sprayed.

### **Heavy Summer Treatment**

Lewis treats his greens with insecticides and fungicides at least 10 or 12 times a year. Beginning on approximately June 15, the most important date on the maintenance calendar so far as he is concerned, he applies both Cal Chlor (1 oz. per 1,000 sq. ft.) and Kromad (1½ ozs. per 1,000 sq. ft.) from every 9 to 15 days through mid-September. Chlordane is applied once a month through the summer at a rate of 1 lb. per 1,000 sq. ft.

To put Twin Oaks' complete greens maintenance program in perspective, here is a summary of the various treatments Lewis makes:

The fertilization program is started in mid-March, weather permitting, with a 20 to 25 lb. per 1,000 sq. ft. application of Milorganite. Then, through the summer, the turf is taken off of Milorganite, with iron and potash, both applied at a rate of 1 lb. per 1,000 sq. ft. seven times

between June 15 and Sept. 15, being substituted. Ammonium nitrate, at approximately 1 lb. per 1,000, also is applied during this period to give the turf an occasional quick pickup.

#### Light on Phosphate

Phosphate applications are minimized since they are incorporated with the fertilizers. If they are made at all they are kept on the extreme light side. In the fall, 30 to 40 lbs. of Milorganite are again applied. Application is started around mid-September and continued for a month until the treatment has been completed. If temperatures run above the 85 degree mark in mid-September, Lewis delays starting the fall fertilization schedule until they drop. If they are, say in the low 80s, initial applications are light with the buildup proceeding as the weather starts to cool. Cyclone seeders are used in distributing the fertilizer.

Last fall, Lewis carried out an experiment by applying ureaform to his No. 14 green at the rate of 10 lbs. per 1,000 sq. ft. Application was made around the middle of September and within a week or so, the normally apple green color of the C-7 putting surface deepened and assumed, in Skeeter's estimation, "the finest tone I've ever seen on any of my greens."

The color held through October in spite of the drought conditions that prevailed in the fall in southern Missouri. "This was an interesting experiment," says the Twin Oaks turfmaster. "I'm going to make a study of the green, keep records on its performance and discuss its reaction with other supts. I'm anxious to see how it comes through the winter."

#### Winter Protection

To protect his greens against the ravages of winter, which usually aren't nearly as severe as they are only about 100 miles or so north, Lewis applies 1 1/4 ozs. per 1,000 sq. ft. of Cal Chlor to prevent snowmold, and 3 ozs. of Kromad to offset winterkill. These applications are made in mid-November.

Lewis, who supervised construction of Twin Oaks in 1956 to the plans of Floyd Farley, topdresses as often as five times a year if weather permits. He feels that it is impossible to give a green anything like a pool-table finish if this operation isn't carried out at least four times in a season. His topdressing mixture includes two parts of sand and one of both peat and soil and is applied in March, April and May and again in September and



Palm Springs (Calif.), often first when it comes to golf, has the only club in the country with its own fire engine. It's Bermuda Dunes CC. Bill Cook (l), Riverside country supervisor, Ernie Dunlevie (center), co-owner of the club, and Truman Holland, a state forest ranger, are shown with the pumper.

October. Approximately 30 days after the May topdressing and again in the fall, the Twin Oaks greens are brushed. "We hold off on the brushing," says Lewis, "until the topdressing has healed."

"Many supts. don't brush their greens," Skeeter remarks. "I don't think the topdressing job is completed until you do. Brushing helps to cut down on mat and thatch and to stimulate new growth."

#### Irrigation On Overtime

Rainfall in the Springfield area normally amounts to from eight to ten inches from June through October, but in 1963 less than four inches were recorded in this period. It was necessary to not only water every night but to considerably lengthen the time the sprinklers were kept in operation during these months. Normally, Lewis prefers to start watering shortly after sundown and to complete the job in the early morning hours because it gives the greens sufficient time to drain before play is started for the day. Scalding, too, is prevented by following a schedule of this kind. During the daylight hours the combination of 90 degree temperatures and 90 per cent humidity may require light hand watering as often as three times daily. Due to the extreme drought conditions that prevailed last summer the irrigation situation at Twin Oaks turned out to be a real nightmare, according to Lewis. The man hours required for irrigation and the cost of water completely disrupted the budget.

Twin Oaks' greens are mowed on Tuesdays, Thursdays and Saturdays through the summer at a height of 1/4 inch. Prior

*(Continued on page 108)*

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## Graveyard Latitude

(Continued from page 48)

to about June 25th they are mowed at 3/16 inches four times a week. In the fall the cut is made at 3/16 three times a week, usually until mid-November. Mowing is alternated from four directions. Cups are changed six times a week during the summer. Four of these changes come on Saturdays and Sundays when something like 500 rounds are played during the two days.

### Favorite Tool

Probably as important as any operation in the Twin Oaks scheme is the aerification program. Every green is power spiked on Mondays from May through September. The power spiker probably is Lewis' favorite tool. "You can't hope to keep greens reasonably soft if you don't use it often," he observes. "And your fertilizer and disease prevention treatments aren't effective if you don't provide a way for the materials used in them to be worked into the soil."

All of Twin Oaks' greens cover a 7,000 to 9,000 square foot area. As far as is known, the club was the first in Missouri to plant its greens to C-7. Their composition is 70 per cent sand, 20 per cent sawdust and 10 per cent soil. Skeeter Lewis candidly admits that he was dubious of incorporating the unfamiliar sawdust in them when they were being built.

"I had never worked with it before," he says. "I was afraid that the soil would be too acid." But Lewis learned how to counteract this in pretty much of a hurry. In the first year the greens were in play he poured 100 lbs. of lime per 1,000 sq. ft. into them — at 10 lbs. per application. The putting surfaces certainly weren't the pride of Twin Oaks that first year, but thereafter they came around in a hurry.

"When we got the pH reading up to around 6.5," Lewis recalls, "we were in good shape."

### Three Tests A Year

That first year taught Skeeter that there is no test like a soil test. Now he has them made three times a year, often sending samples to as many as three different testing stations at the same time so that the margin for error is reduced. "I shouldn't be revealing this," Lewis says, smiling. "The people who make the tests for me will think I don't trust them. But a couple fellows who are well known in the turf business say they don't see why

a supt. shouldn't double check on soil tests and compare their results."

The Twin Oaks greenmaster goes on to explain that the first thing a supt. should do when he is in trouble is get soil samples and have them tested. There is little or no use in calling in a consultant, he adds, if soil tests made within the last year aren't available for the consultant to check.

Being the first club in Missouri to plant C-7, Twin Oaks has done much to propagate its growth and use. Several years ago, Lewis established a nursery for growing the strain and since that time he has supplied courses in Arkansas, Oklahoma and Kansas, as well as Missouri, with stolons to plant their greens. Since the nursery is maintained by the Twin Oaks grounds dept., proceeds of C-7 sales go to the club. They average about \$1,500 a year.

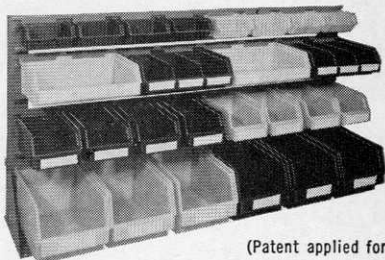
### Compensation Enough

Although recognition of his outstanding ability as a course supt. perhaps was delayed, Skeeter Lewis isn't the kind of a fellow who is going to borrow any shoulders to cry on. "We're in an unspectacular business," he says, "and so it's taken for granted that we don't get very many compliments for whatever good work we do. Anyway, I think most members get so wrapped up playing golf that they don't pay much attention to the condition of the fairways and greens. Actually, I have had quite a few of them go out of their way to tell me how good the course looks. And" Lewis smiles, "they keep renewing my contract every year."

Skeeter, incidentally, was very much impressed by Arnold Palmer's knowledge of turf. "We had a 15-minute conversation," Lewis recalls, "and Arnie casually tossed some terms at me that made me wonder if he hasn't mixed some fungicides and mowed a few greens in his day. He thought our greens were a little on the slow or soft side, but he accepted my explanation that they couldn't be cut below 3/16 inches because of the hot and humid August weather. As it was, we lowered the blade 1/16 of an inch for him. But Palmer didn't have any real kicks. He shot a 61. That was three strokes lower than the old record."

Skeeter Lewis who pushes the ball around in pretty fair shape himself — he shoots in the 70s — has to play well in self defense. His brother, Charles II, is the pro at Little Rock CC; another brother, Paul, is pro-supt. at a Little Rock

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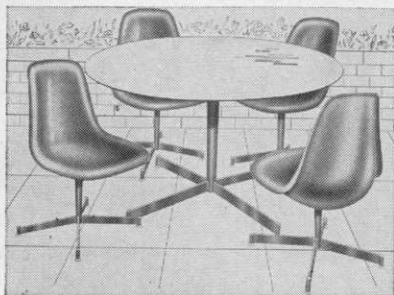
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munity course; and his nephew, Charles III, is the fellow who knocked Jack Nicklaus out of the 1960 National Amateur at Algonquin in St. Louis, as you may recall. Then, too, there is Skeeter's son, Jim, Jr., supt. at the Ft. Leonard Wood course in Waynesville, Mo., the last four years, who plays a very good game. So, when the Lewises get together for their annual golf joust, the rivalry is almost as intense as when the celebrated Cupit clan has its annual showdown.

**PGA Winter Tournaments**

- Jan. 3-6—Los Angeles Open, Rancho Muni \$50,000
- 9-12—San Diego Open, Rancho Bernardo \$30,000
- 16-19—Bing Crosby National Pro-Am, Pebble Beach, Calif. \$40,500
- 23-26—Lucky International, Harding Park, San Francisco \$50,000
- Jan. 30-Feb. 2—Palm Springs (Calif.) Classic \$50,000
- Feb. 6-9—Phoenix Open, Phoenix CC \$50,000
- 6-9—Panama Open, Panama GC \$11,000
- 13-16—Tucson Open, 49'ers CC \$30,000
- 13-16—Maracaibo Open, Maracaibo (Ven.) CC \$10,000
- 20-23—Caracas Open, Valle Arriba \$11,000
- Feb. 27-Mar. 1—Greater New Orleans Open, Lakewood CC \$50,000
- 27-Mar. 1—Los Lagartos International, Bogota, Col. \$11,000
- Mar. 5-8—Pensacola Open, Pensacola, Fla. \$30,000
- 5-8—Puerto Rico Open, Dorado Hilton Hotel & CC \$9,000
- 12-15—St. Petersburg Open, Lakewood CC \$25,000
- 19-22—Doral Open, Doral CC, Miami \$50,000
- 26-29—Azalea Open, Cape Fear CC, Wilmington, N.C. \$20,000
- Apr. 2-5—Greater Greensboro (N. C.) Open, Sedgefield CC \$35,000
- 9-12—Masters, Augusta National \$20,000 (minimum)

**Open on Color Film**

Available for rental from the USGA, 40 E. 38th St., New York 16, is the 16 mm. sound and color film of the 1963 Open at Brookline. It includes round-by-round action plus the playoff and still flashbacks of the 1913 event in which Francis Ouimet defeated Harry Vardon and Ted Ray. Showing time is 39 minutes.