

*Lower level roof and walls of small addition to right of club entrance, above, matches the older building around it. Below right shows exterior of new dining room. New bay window and wall blend into old structure.*

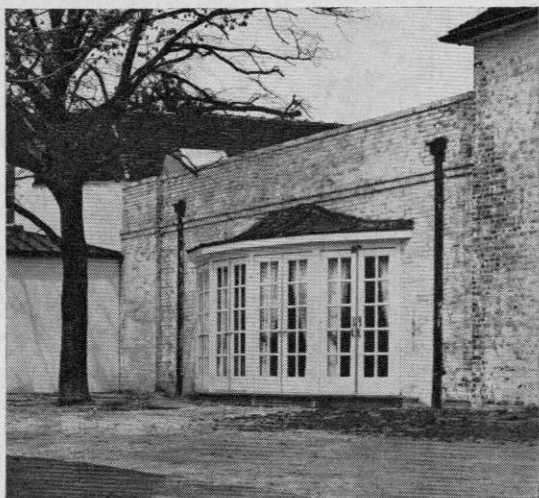
with no two succeeding holes alike in length or shot values . . . each having its own personality."

Course maintenance is under the able supervision of the greens superintendent, David Parson.

The club also has three outdoor tennis courts, and one indoor court. There is also a fine, olympic-size outdoor swimming pool and cabana.

Perhaps the most remarkable achievement at Mill River is that the budget of \$2 million( which included purchase of the property), prepared in 1963, proved valid within \$150,000. This is especially noteworthy considering the amount of work involved in the conversion of the house to clubhouse use and extensive additions.

This phase of the project was very much a team effort. Bill Roach and the club building committee worked closely with the architects, Bentel & Bentel, of Locust Valley, L. I., N. Y., and the interior designers, Howard Williams Associates of New York City. Also very much in the picture was the club manager, Bob Stanley, who joined the club before the clubhouse plans had reached the drawing board stage.



"One of the biggest mistakes you can make on a project such as this is to neglect to hire a club manager before work commences," says Roach. "Moreover, Bob had unique qualifications for the job."

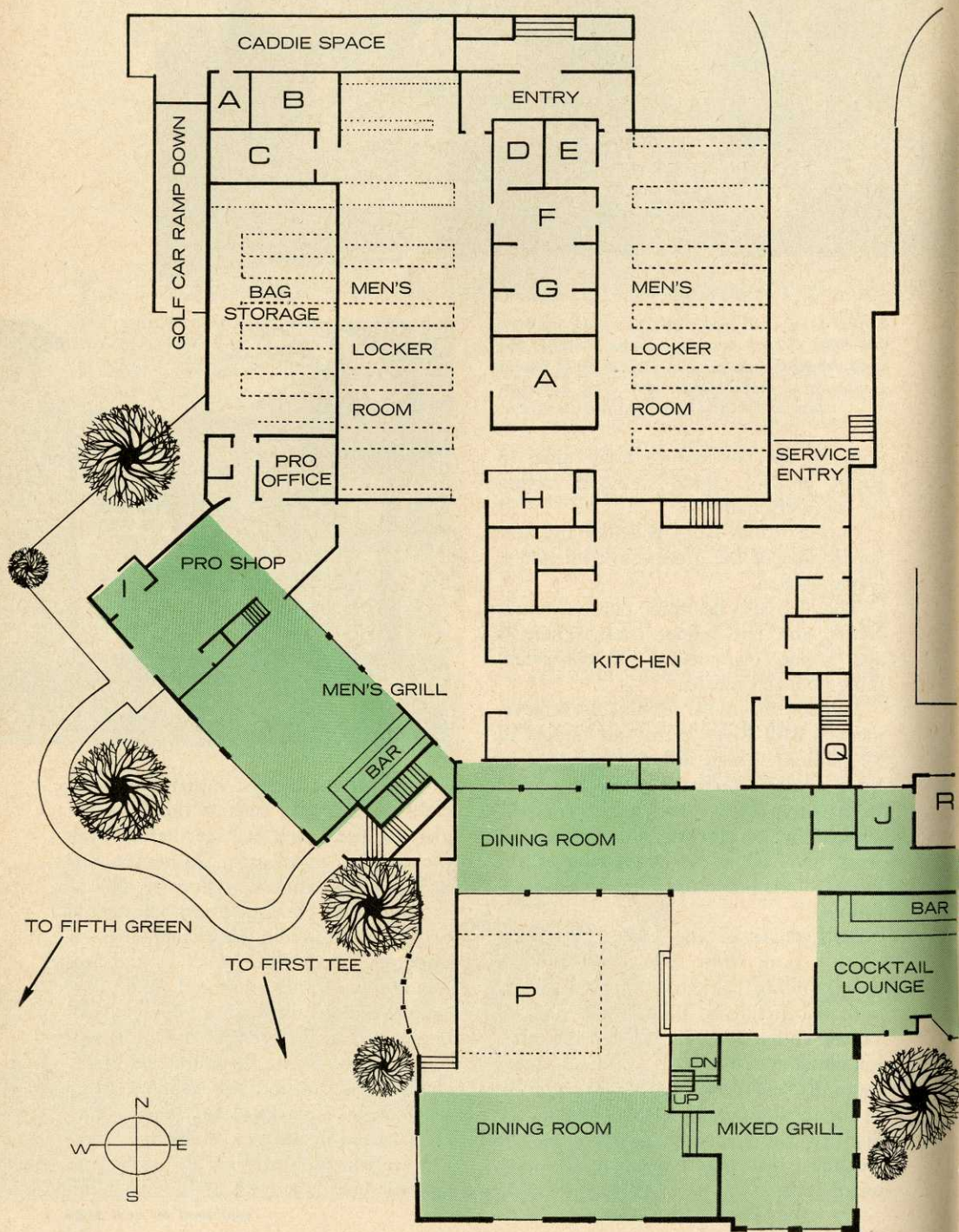
Stanley had previously been manager at two clubs that built new clubhouses — Engineers Club, Roslyn, L. I., and Seaway CC, Hewlet Harbor, L. I.

In between these jobs Stanley built homes to his own design in Florida and was manager during reconstruction of the clubhouse, barns and stables at the Blind Brook Polo Club, Purchase, New York.

In planning the new clubhouse, there were certain problems that had to be considered. Just how much of the old build-

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# Ground floor plan Mill River Club, Inc.





## Blending the Old

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ing could be utilized, and what additions would be necessary.

The four-car garage of the south wing was converted into the pro shop and part of the men's grill. The former summer room became the mixed grill, the former dining room, part of the cocktail lounge, the former sitting room, the multi-purpose room, and the former living room became the club lounge.

The second story was converted into offices and the ladies' locker rooms. These were the former bedrooms.

The ladies' locker rooms have a fine view of the course. "Another touch," says Roach, "is that the girls enjoy a more intimate, chatty atmosphere in this succession of small rooms than in the more regular open style of men's locker rooms."

Downstairs, there was still the problem of adequate dining space. The solution was to build between the wings of the original building (See floor-plan on page 22.) Thus, the new dining room did not alter the facade facing the course.

Outside, it is impossible to detect where the two wings ended and where the

addition begins. A fine bay window was put into the west wall of the dining room. The new wall was carefully treated so that, today, it blends perfectly into the older brick on both sides.

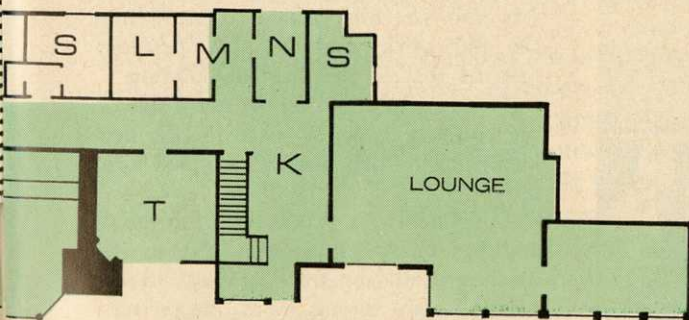
The new dining room can accommodate 225 people with dining room seating and can be enlarged to seat 350, banquet style. "This is sufficient," says Bill Roach, "for any crowd which we may have for any of our formal or informal social occasions, except on three or four occasions during the year, when a few members might be disappointed for failure to make early reservations."

"Thus, we preserved an intimate atmosphere at all times in our dining facilities, irrespective of the usage being made, we have a maximum facility for 95 per cent of the usages, we have a convenient, efficient area to service and we saved lots of money in construction costs, maintenance and operation by the elimination of dead space. We also managed to solve the problem of the rare overflow by use of our auxiliary rooms, such as the summer room (mixed grill) and men's grill."

A small addition was made to the west of the main entrance to make space for a reception office. The new wall outside

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COURTYARD



Color tint shows location of original building.

### KEY TO OTHER AREAS

- A—Toilet
- B—Massage
- C—Quiet Room
- D—Sauna
- E—Barber
- F—Drying Area
- G—Showers
- H—Attendant
- I—Caddie Master
- J—Lounge
- K—Lobby
- L—Coats
- M—Reception
- N—Entry
- P—Dance Floor
- Q—Stair to Teenage Room
- R—Ladies
- S—Men
- T—Multi-Purpose Room



*New dining room addition is shown above. It can accommodate 225 people with dining room seating, can be enlarged to seat 350, banquet style. By specifying structural steel for dining room, club can add a second floor over it at a later date. At left is men's grill.*



## Blending the Old

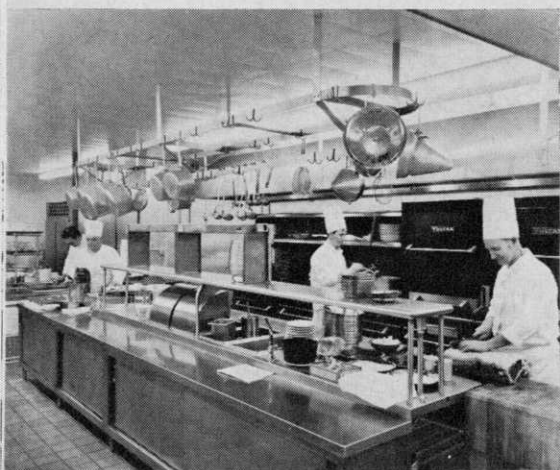
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was also carefully treated to blend into the old brick, and its roof perfectly matches that of the original building.

The main addition on the north side of the building provided space for the new kitchen. This Bob Stanley designed himself.

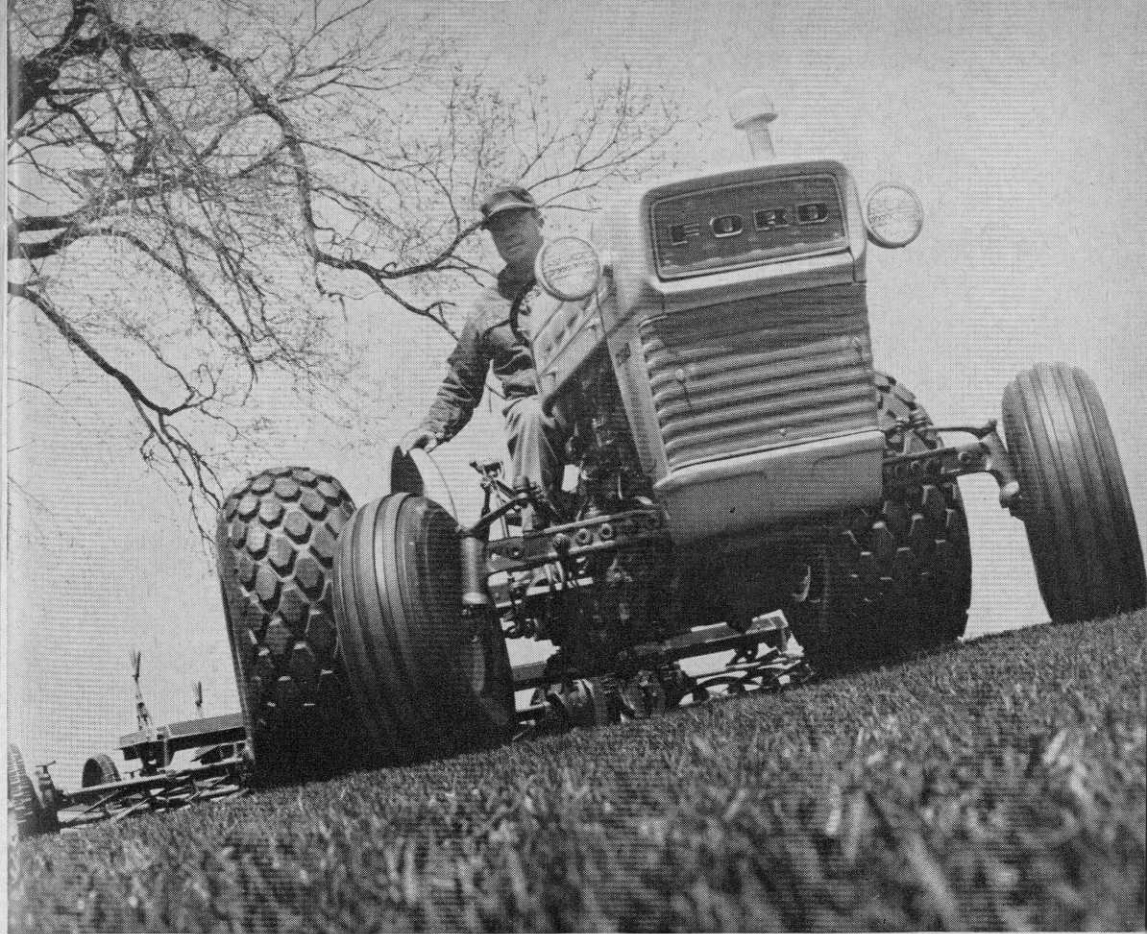
The kitchen is 2,000 sq. ft. over-all and has entrances on the west to the men's grill and on the south side to service the main dining room, the terraces, and the cocktail lounge. "My chief concern as regards the location of the kitchen," says Stanley, "was to have it placed as close as possible to all areas where food would be served. The interior design of the club kitchen was chief-

*continued on page 56*



*Integrated departments of new kitchen allow operation in winter with minimum staff.*





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# Bringing back a beat-up course

Although the budget is small, hard work revived this Iowa publinx.

By JOE DOAN

A man who leases a beaten-up course and revives golf in a section where it has been allowed to wane invariably does so at a cost high in hard work, sacrifice and investment. And the gamble is more risky than usual.

Charles Wiele was aware of these things in 1954 when he leased Flint Hills CC in Burlington, Iowa. Except for a period between 1940 and 1946, when he worked as a toolmaker and labor relations man in a war plant, Wiele (pronounced Wheelie) had a 25-year background in the golf business. He previously built courses as well as maintained them, and he had seen a few go back to wherever abandoned golf courses go.

Even though Flint Hills was nothing more than a tangle of weeds when he first looked at it 13 years ago, he was sure he could bring it back. Daily fee players in and around Burlington are glad he felt that way; otherwise they'd still be traveling afar to play golf—and, probably, not on courses that are as well maintained as Flint Hills.

In making his decision, Wiele had these things to consider: He would be giving up a comfortable pro-superintendent-manager position at Mt. Pleasant (Iowa) CC; Flint Hills hadn't been played in 12 or 13 years; it was hard to find the greens for the silver crabgrass that had muscled in on the bent; 500 years (that's correct) of erosion had washed away all semblance of good top-

soil and left a gravelly residue known as white oak clay; the small clubhouse was in a sad state of disrepair (its now an equipment shed); there were only nine holes at the course; as well as a few other discouraging aspects.

A less courageous man would have hurried back down the road that winds up to the bluff above the Mississippi River on which Flint Hills is located without making an offer to gamble on the property.

But not Charlie Wiele. He had wanted to own or be in complete charge of a golf course practically since the day in the late 1920's when he had gone to work at Westwood CC, in St. Louis, for Al Linklogel.

Buying an established layout was out of the question, but leasing a down-at-the-traps course and bringing it back was something he could do.

Since he had about \$12,000 to invest and three times that amount in know-how and inclination to work hard, he

*Frame clubhouse, built in 1961, measures 40 feet wide and 70 feet long. It has knotty pine walls and the ceiling is of hemlock. Rafters were salvaged from an old barn.*





*A well-stocked pro shop occupies the majority of the clubhouse opposite the restaurant.*

was willing to make a 30-year lease agreement with the improvements he was to make reverting with the property to the City of Burlington at the expiration of the lease.

Altogether, Wiele figures he has put \$75,000 into Flint Hills since he took it over. Half of it has gone to improving the original nine holes and building a second. The remainder went into a new modern clubhouse.

The frame clubhouse, built in 1961, is 40 feet wide, 72 feet long and has a gable roof. The knotty pine walls are stained bamboo blond and the ceiling is of hemlock. The rafters and crosspieces were salvaged from a barn.

A restaurant is located at one end of the clubhouse, and a pro shop at the other, with small locker rooms occupying the front section of the building.

Flint Hills is maintained on a low but not necessarily parsimonious budget. One reason for this is that Wiele realized when he took over the course that he would have to put his profits into improvements for perhaps as long as 10 years. Considering the 30-year lease, he didn't have too much time to make money for himself. So, the only thing to do was keep as much of the maintenance costs as economical as was possible.

He did this by revamping the original nine in such a way that practically all maintenance can be done by machine.

When he built the second nine, the same plan was followed.

Mowing operations were made as simple as possible. Fairways are mowed twice a week, early and late midweek, to a height of one inch. Since the tees are not elevated, the fairway gangs can sweep right over them. The greens are constructed in such a way that the fairway mowers can go right up to the aprons which are six to eight feet wide and are mowed from one-half to five-eighths of an inch with a greens mower kept at this adjustment constantly.

Greens are mowed daily, including Saturdays and sometimes Sundays, to a height of one-quarter inch for the entire season.

Slopes on the old nine that were hard to mow have been reduced or leveled, and the new side was built to give a rolling effect rather than one that dips.

There are 10 sand traps presently on the course. Lips are low, only six to seven inches high, with sand three to five inches below the ground level. Wiele estimates that it costs from \$300 to \$500 per year to keep a trap clean, edged properly, raked and filled with fresh sand. Two of these traps will be

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Photos by Leonard Kamsler



*The restaurant is located on the other end of the clubhouse and is operated by Mrs. Wiele.*





*Fairways at Flint Hills CC, are kept broad and sweeping to allow for low budget maintenance.*

## Bringing Back

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eliminated this year, to further speed play.

When he put in ponds on the course to back up his deep well, he built them with steep slopes to curtail weeds. Some trees have been removed in a few spots to make rough areas more accessible to mowing equipment.

The Burlington superintendent feels that when maintenance is done almost exclusively by machinery, a good deal of time should be devoted to keeping machinery in optimum running condition.

"I have seen mowers at other courses that are only two or three years old that don't operate as well as one I have had for seven or eight years," Wiele says. "Oil, grease and simple adjustments and repairs would have saved these machines from deteriorating as quickly as they have. You can save hundreds, even thousands of dollars every year simply by taking good care of your equipment."

Wiele's inventiveness is an asset. One of his brain children, the Wiele Roller, can be used for verti-cutting as well as rolling and is produced by a large turf

equipment manufacturing company.

Wiele operates Flint Hills on a maintenance budget of \$15,000 a year (including labor), plus 10 per cent for equipment replacement. He employs only two full-time men and one part-time man to work on the course. That means that he has to take an occasional turn on the tractor as well as oversee the entire clubhouse operation.

Up to March 1966, when Don Lindsey, the assistant pro, joined the club, he also gave hundreds of golf lessons per year. In addition to this, he has also designed and built five nine-hole courses in southeast Iowa since coming to Burlington. Anything less than a 16-hour day, seven-day week for Charlie, from April through October amounts to stealing precious time.

When he took over at Flint Hills, the greens were so heavily infested with silver crab that two years were required to control this pesty strain and bring back the original Washington bent.

The first year, Wiele used an arsenical practically to the tolerance limit and, while he got rid of the crabgrass by the



end of summer, little bent came through. Fortunately, fee players were so happy that someone had come along to resurrect the dormant course, they didn't object to putting on bare greens.

The second year, a total of 10 pounds per 1,000 of calcium arsenate effected 95 per cent control of the crabgrass. Wiele, meanwhile, had been fertilizing heavily and the bent came back. Identical control and feeding methods were used the third year and the Washington bloomed.

In 1959, when the second nine was built, Charlie was able to cannibalize the front nine for 600 bushels of stolens to plant the new greens on the back nine.

There are about 85,000 square feet of putting turf at Flint Hills, including the two practice greens. The mixture for new putting surfaces consisted of sand, peat and soil in a 1-1-1 proportion. It took about a day and a half to prepare each green mixture. Then it was sterilized with Vapam, watered heavily, but not stolonized for another five weeks.

Greens on the new nine, planted in September, were ready for play the following Decoration Day, mainly because Wiele put an extra charge or two of fertilizer into the white oak soil.

Only hillside greens at the Burlington club are tiled; this, to cut down seepage. Wiele doesn't believe in tiling flat greens because it only accelerates the run-off of



*From left to right: Charles Wiele, owner, his wife Lucille, and his daughter, Charlene.*

water and fertilizer, which should be circulating through the root system.

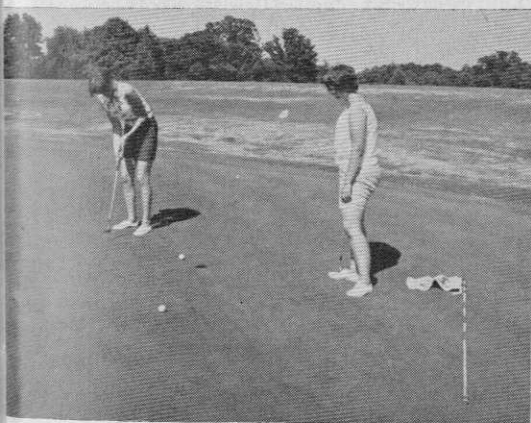
It is for this reason that Charlie waters greens only twice a week. He feels that watering is overdone at many courses simply because greens so often have too elaborate tile systems that carry moisture from the subsurface too quickly. They must be watered every day so that the roots can catch a little moisture on the fly. "It's a little like pouring water into a funnel," Wiele stated.

A 4,000-square foot green at the club receives about 4,400 gallons of water a week through the irrigation system under normal summertime conditions. About a quart of Aqua-Gro per green is used every month in the summer to aid water penetration. (Incidentally, about 85 per cent of maintenance material purchased is for the greens.)

The main source of water is a 190-foot well that Wiele drilled several years ago after having a geological survey made. Ten greens are watered simultaneously from a system that was fed through two five h.p. lift and pressure pumps. These pumps were replaced recently by two seven-and-a-half h.p. three-phase units.

Ureaform is the only nitrogen fertilizer used at Flint Hills. In a low budget situation, this slow-release product saves a lot of labor cost, thus justifying its high per-ton cost. Charlie states that the results from using this chemical show a very even rate of growth throughout the season on the greens. This is proved by the fact that weight of clippings remains constant after each mowing all season.

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*Back nine greens were stolonized with stolons cannibalized from the front nine greens.*



*Ponds, which were built to back a deep well, also add to aesthetic value of the course.*

## Bringing Back

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A total of 20 pounds per 1,000 square feet of ureaform is applied during the year. Six-pound applications are made in both spring and fall, and two four-pound treatments are applied in the summer. Potash is applied with spring aerifying and topdressing with a 3-9-27 commercial fertilizer which Charlie purchases locally. (Aerifying is also done in the fall.) The cores are not removed but are mixed with calcine clay (400 pounds per green) and are dragged in. The clay is added only in the spring.

A profile of a green on the back nine shows that the top one-and-one half inch is composed of calcine clay and topdressing. It is underlaid by a 1-1-1 mixture to a depth of two inches. Under this is the white oak clay bed.

On the fairways, Charlie has used Kentucky blue grass, except for some draws that he has seeded with tall fescue since these are subject to erosion when the blue grass goes dormant during hot, dry, periods of the year.

There is no fairway irrigation and only spot fertilization, as needed, on the fairways. Tees, however, are extensively fertilized. Water is laid on to all greens and some tees through the use of hose and movable sprinklers.

Wiele never has had any serious disease problems even though summertime humidity in this locale often becomes excessive. He applies Thiram and cadmium in the spring and fall at the rate of one

half an ounce per 1,000 and keeps the greens on a light Thiram diet throughout the summer. Brown-spot and dollar-spot are about the only diseases that ever have been detected.

Even though the course is located on a well exposed bluff, snowmold or winterkill has never caused much trouble. Wiele believes this is because he holds off an Cal-Chlor treatments until convinced that cold weather has definitely arrived.

Part of the reason that Wiele has been able to make a go of the club is that his wife, Lucille, has helped run the club restaurant and pro shop. Their daughter, Charlene, who graduated from the University of Iowa last month, also has worked summers at the Burlington club in recent years.

He also believes in having a fast moving course. He feels that in order to achieve this "make the course longer."

Obviously, maintaining a course of 6,600 yards on a \$15,000 maintenance budget won't provide the lushest club, but don't be deceived by this. No less an authority than Eliot C. Roberts, Iowa State University's agronomist, who regularly rides the state's golf circuit, says, "Charlie Wiele has done amazing things with his course. As for his low budget operation, it isn't so much stretching the dollar as knowing what to do with it. Golfers in places like Burlington are lucky to have fellows like Wiele around."

Charlie's reaction? "Give them good greens, and they'll forgive you the rest." •