overseeded, but not in the spring and summer months.

(2) Our play in the summer months was increasing and we wanted to give our players better greens all year round.

(3) The drainage was poor due to the underlying muck soil and low spots developed as the muck settled.

(4) We could not keep consistent ball roll between the Tifgreen 328 and Tifdwarf greens.

We felt that we had nine greens that needed to be improved. Six had "328" surfaces and three were already Tifdwarf, but needed help.

Since we are a public golf course, we decided we would only do one green a year to minimize the impact to our players. We have completed eight greens so far with only one of the "328" greens to go.

After deciding which green we would do first, a temporary green was cut-in and trained on a high and dry spot in the fairway. We made it about 2,500 square feet because we figured we would be using it about three months. The players didn't seem to mind playing one temporary green when they saw the changes we were making to improve the hole.

The only additional equipment we needed for the project was a trencher for the drain lines. We did rent a small dump truck to use on a couple of greens, but our bridges wouldn't handle the weight so we did the bulk of our hauling of greens mix and gravel with our two trucksters, a Jacobsen T-2000 and a EZ-Go GXT 1500 with dump beds. They could haul about 1/3 of a yard at a time. We were able to place some of the materials on nearby empty lots, but it still was a lot of hauling.

The old putting surface sod was cut, stripped and hauled away. Then we trenched in a herringbone pattern drain field with a "smile" drain along the front edge of the putting surface. On the muckbased greens we used choker sand to help drainage and stabilize low areas in the profile. Most greens were already too low so none were cored out. Rather, we built them up and added fill to tie into the slope contour and sodded the banks.

Some of the greens were kept about the same size, but if we felt it too small, we

added mix to make more pin locations. The shaping was done by myself and the crew with a tractor and box blade attachment. Then we went over it with a sand pro till we were satisfied with the look.

Sprinklers were moved if necessary and the soil was watered and packed. Fumigation was done by an outside contractor and the plastic tarp removed a few days later. Then each green was sprigged with Tifdwarf at the rate of 30 bushels per thousand square feet. We grew them in for at least eight weeks unless weather or timing pushed back our opening date.

The problem with doing one green a year was there was no guarantee we would get the same Tifdwarf the next year, but it was an improvement over what we had. Some mutation and contamination has occurred and we have tried to plug some of it out and stay ahead of it as best we can.

For the most part, the crew enjoyed the challenge of the project while still maintaining the golf course for play. Some of the flymow and edging work got put on hold for a little longer than we would have liked, but overall the golf course was kept maintained pretty well.

Tees

The rebuilding of our tee tops has been another continuing project. Some of the tees built in 1968 had become "crowned" from top dressing over the years. They were also too small to handle the wear from our steadily increasing play.

The areas around the tees to be improved were shot with a transit to see how large we could make them. The sod was stripped and stacked nearby to be replaced after we finished the alterations. We used the tractor with box blade to level, widen and extend each tee as needed. We packed the soil and shot it again with the transit to make sure it was level. Then we replaced the sod, rolled it, top dressed it and opened it for play.

Drainage

During the wet summer we had two or three years ago, some of other pushed-up greens that had no drainage began to have problems. We decided to solve the problem by installing a drain field without rebuilding the entire green. Again, we cut a temporary green but this time only for a day. We cut a herringbone pattern on the green with a sod cutter and saved the sod. Then we brought in plywood to lay along the sod cuts for the rented trencher to ride on.

The plywood made cleaning up the dirt easier and protected the green from being rutted. The pipe and gravel were installed in the trenches and the top of the drain field was kept at least 8 inches below the surface so they wouldn't interfere with future cup setting. An air vent was installed in the drainpipe where it extended into the collar to aid in better drainage flow. Greensmix was used to fill top 8 inches of the trenches and watered and packed. The sod was laid back down as it had come out and then packed.

The green was back open as soon as we were done that day. Some settling did occur, and those areas were hand topdressed as needed. We have done five greens this way so far.

Whether rebuilding greens, tees or adding drainage, everything we do helps make Winter Pines a little better golf course for everyone to play and enjoy.

Pine Tree Golf Club The Restoration of a Dick Wilson Classic

In 1961 Dick Wilson created a great masterpiece, the Pine Tree Golf Club, in Boynton Beach. The course quickly gained a national reputation by being honored in the Top Ten of Golf Digest's top 100 courses in the country. The course, virtually untouched since 1961, has consistently held that honor.

This summer, architect Ron Forse, who recently successfully restored Indian Creek in Miami, will bring back Wilson's design at Pine Tree. Working from photos commissioned by Ben Hogan, greens that have risen two feet from 36 years of top dressing will be lowered and enlarged to the original specifications.

The goal is to have a rebirth of the superb layout crafted by Wilson in 1961.

Hogan's desire to have photos made of every tee shot and approach shot on the course is a testament to the caliber of course Wilson designed. Hogan reportedly called it "one of the finest courses in the world."

Arnold Palmer and Dow Finsterwald applied for conventional memberships to the club after playing it. Wilson was also the original designer of the Bay Hill Club in Orlando.

Forse of Forse Design, Inc. of Hopwood, Pa. is an avid restorationist. He even teaches a GCSAA course on classic courses and master architects. His reputation for attention to detail was a key factor in his selection for the project.

Forse says," The beauty of what Wilson created and still remains, is very rare. This course and the photo documentation should remain as a historical monument to one of golf's greatest architects."

Bulldozers, backhoes, front end loaders and four dump trucks with turf tires have been rebuilding the greens, bunkers and lakes with amazing delicacy and minimal sound. Under the intense study of Forse, it is obvious that the intent of all concerned is to pull off something historic and spectacular. Construction has been moving along at a good pace and the reopening is tentatively planned for Nov. 1.

From bentgrass to bermuda and beyond

BY JOEL JACKSON, CGCS

In the mid 1980s, the Isleworth Country Club in Windermere was one a few courses in Florida built with pure bentgrass greens. The others were Golden Eagle in Tallahassee, The Plantation at Ponte Vedra in Ponte Vedra Beach, and Loxahatchee in Jupiter. As of last year, all of those courses have converted to Tifdwarf bermudagrass greens except the Plantation course, which still doggedly pursues the holy grail.

Since I had the challenge of managing Isleworth's greens from 1988 to 1991 during the bentgrass years, I was interested in finding out from superintendent Buck Buckner exactly how the conversion took place, and what other changes the club had made. Buckner, who already had a great reputation for his good greens at the nearby Orange Tree C. C., came on board in 1993 to oversee the conversion.

"The first decision - to replace the bentgrass and rebuild the greens to USGA specifications --- was a no brainer," said Buckner. "Having bentgrass in Central Florida is a wonderful dream, but just isn't realistic! As you experienced it, Joel, you could have great bentgrass for six to eight months depending on the weather.

"When it got warm and humid, it could get ugly. The club wanted to make sure we had the best possible playing surfaces all year round, so switching to Tifdwarf was the obvious choice."

"The second decision was harder. Af-

