Jackson Country Club, Carbondale, Ill., gets a fairway facelift using new Southern Illinois University seeding technology.

by Jerry Roche, editor

Brice Gordon took one look at Jackson Country Club’s golf course and shook his head.

His early enthusiasm tempered, he now wasn’t sure whether he wanted the superintendent’s job that he was interviewing for. Jackson’s bermudagrass fairways, destroyed by a frigid winter, needed work.

“They were real honest about the shape of the course when they brought me here for the job interview,” Gordon remembers. “The thing that impressed me was the willingness to help and the enthusiasm of the greens committee.”

Gordon took the job. And, despite a limited budget, the greens committee voted to improve the course.

Jackson is a typical transition zone course located midway between Carbondale and Murphysboro in the middle of southern Illinois’ sprawling corn belt.

“One winter it can be like summer, and the next year the cold weather can nail you,” says Gordon. “Nobody knows what the weather is going to do.”

In the transition zone, Kentucky bluegrass and/or perennial ryegrass can be used, but must be cut high (1 to 1½ inches) to survive summer’s heat and humidity. Bermudagrass turns off-color in the fall and faces the danger of winter kill.

Dr. Herbert Portz, familiar with the course because of the research he’d done there, suggested a fairway facelift with zoysiagrass. Zoysia is both winter hardy and drought tolerant. Mike Dozier, a graduate student of Dr. Portz’s at Southern Illinois University, also joined the team.

“We originally proposed doing two or three fairways,” remembers Dr. Portz. “Mike was a super-salesman, though, and the greens committee said they wanted to go all the way.”

They decided against Meyer zoysia. Too expensive. Instead they would go with Korean common zoysia. And, not wanting to close the course down for a lengthy period.

Taking it easy on one of the zoysiagrass fairways at Jackson Country Club are, left to right: Mike Dozier, Brice Gordon and Steve Glodo.
they would use a new early-establishment seeding process which Dozier was working on. (Normally, proprietary zoysiagrass like Meyer is established in one of four ways: plugging, strip sodding, row planting or hydrostolonizing. Strip sodding is the most common for golf courses, but expensive. Jackson didn’t have that money to spend.)

The big test
Using 70,000 square feet of fairways as a test, workmen killed the existing turf with glyphosate. On April 26, 1984, down went new seed and water. The workers created a greenhouse micro-climate by covering the seed with clear plastic.

“Zoysiagrass takes a temperature of 90 degrees to germinate, and we don’t get that kind of weather until June around here,” Dozier notes. “But that’s the dry season. By using the clear polyethylene cover, we get a six-to-eight-week head start. We left the plastic on for two weeks.”

Twenty five volunteers stretched $4,000 worth of plastic into place. Temperatures under the plastic at times soared to 140 degrees, but the seed germinated.

“We got 80 to 90 percent coverage in nine to 10 weeks with the plastic,” says Dozier. “Without the plastic, it probably would have taken a year or more for that kind of coverage.”

Using other zoysia establishment procedures, 100 percent cover takes three to five years. The Jackson Country Club people hope for 100 percent cover by the end of next year. Problems surfaced however.

“Execution of the seeding on 12 acres was not as good as it had been on the research plots,” notes Dr. Portz. “That’s simply one of those things you have to watch out for.

‘For clubs on low budgets in the transition zone, this is the way to go.’
—Gordon

“One of the problems was that some seed didn’t get in contact with the soil because there was so much dead matter left. You have to go over it two or three times with a verticutter or Fuerst harrow. They rushed it when they did the first nine, but will correct that on the other nine.”

Greens chairman Steve Glodo says “the course was never taken out of play and the price was much less expensive.”

Even though Korean common zoysia seed is about $18 a pound because it is hand-harvested in Korea, the total price of the first nine-hole project was less than $25,000, compared to the $75,000 to strip sod Meyer zoysia. “For clubs on low budgets in the transition zone, this is the way to go,” says Gordon.

A long-term solution
“We think this is a long-term solution,” Gordon continues. “We don’t know what diseases or insects will get to the grass, but we have high hopes. It’s not the perfect answer, but it looks good.” The final nine holes will be seeded with zoysia next year.

Dozier was asked why no one has ever tried this before.

“First, Korean common is not a fine enough textured grass for tournament courses, but it’s okay for courses like Jackson,” he noted. “Second, nobody thought you could work with plastic on such a big scale.”

Korean common zoysia is not as dense or tall-growing as Meyer, but neither is thatch as much of a problem. It’s also slower to establish, but the plastic solved that problem.

Gordon keeps it mowed at ¾-inch on the fairways and 1¼ inches in the roughs.

“We’ve not had any complaints from the members,” Glodo says. “When we had the bermuda, we had been playing off something from June to September. And when the golfers saw what the end product could be from the test plots, we didn’t get a lot of flack.”

The 12th fairway, the left half of which was seeded last summer and the right half which was seeded in June, 1984.