A tale of two turfs

Scotland’s native fescues a tough test

By Doug Sanders

The Links at Spanish Bay opened for play in January, 1988, and was immediately acclaimed as a marvel of modern golf architecture. At time when course design seemed bent on building outlandishly difficult, contrived courses, the intent at Spanish Bay was to create a course true to the origins of the game, both in links style and grass type.

Spanish Bay is the product of a three-man design team: architect Robert Trent Jones Jr., Professional Golfers Association player Tom Watson and former U.S. Golf Association President Sandy Tatum. While approaching the project from different perspectives, all agreed there was a certain charm to the old style of golf one way or another.

They key to recreating the Scottish experience was the decision to use fescue grasses on the golf course.

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Zosyia tee to green? Shute intends to make it work in New Jersey

By Hal Phillips

BAMBERG, N.J. — Tom Shute didn’t buy the farm; far from it.

Truth is, he sort of inherited an abandoned zosyia farm, and now he plans to build a nine-hole course using the yield from his newest agricultural windfall.

Zosyia fairways, zosyia tees, even zosyia greens.

"It’s something different," said Shute. "You talk to superintendents about this and they say ‘It can’t be done.’" That makes it interesting for me.

Besides, with zosyia, you don’t have to use as many fungicides, herbicides and pesticides, things of that nature. And zosyia doesn’t need as much water. Environmentally, it’s a good idea.

There’s more... Shute has never designed, built or maintained a golf course before. He’s worked in landscaping and studied horticulture at college. He even owned his own seed machines for a while. But fate intervened and sent him down his current path.

“Of a friend of mine, his mother owned this zosyia grass farm," he explained. "They had let it go because it wasn’t a popular turf. The first time my friend showed it to me I said, ‘That hay field out there?’ "

“That hay field turned out to be Meyer Z-52 zosyia.

“After that, a bunch of my buddies decided we should build our own golf course,” he said.

Shute has two silent partners, but it’s mainly his baby. An environmental impact study is underway at the 52-acre south-Jersey site. And according to Shute, the Barnegat’s own fathers have supported the appropriate zoning change. "The permit is just around the corner," he said.

Shute isn’t complete novice when it comes to turf maintenance. He grew up on a farm and worked at several golf courses in his younger days. He’s also been conducting his own research, attending various turf shows and consulting with area superintendents.

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Rumors of methyl bromide ban set aside

By Terry Buchen

Contending that methyl bromide causes depletion of the earth’s stratospheric ozone layer, the California-based National Resources Defense Council last December petitioned the EPA under the Clean Air Act to take the chemical off the market and stop further production immediately.

Response to this environmental group’s charge was sharp.

"Rumors that methyl bromide has been banned and that there is a timetable to phase it out in the next few years are totally false," declared turfgrass industry leader Carroll McLawhorn.

McLawhorn is vice president and director of Hendrickson & Dail, Inc., major supplier of methyl bromide, with corporate offices in Greenville, N.C.

McLawhorn is prominent in the Methyl Bromide Working Group, comprising industry personnel who manufacture and apply nationwide what they view as a valuable chemical.

"Our first object is to insure that methyl bromide will not be placed on any phaseout list," said McLawhorn. "My company will help provide an in-depth study if the EPA asks for it.

"Up to 90 percent of methyl bromide found in the stratosphere comes from naturally occurring chemicals that are in algae in the oceans of the world," McLawhorn pointed out. "All man-made methyl bromide manufactured worldwide in one year could easily fit on a mid-sized ship capable of holding 60,000 tons of material. There is no proof that methyl bromide is a potential ozone depletor.

"Other soil sterilants are not as effective, and superintendents, architects, builders and owners have used methyl bromide for more than 40 years. Turf experts feel that what would happen without this pesticide could be devasting.

Superintendents have renovated their greens when they were infested with the bacterial wilt causing Toronto C-15 Decline in the 1980s. Architects and builders frequently fumigate new greens prior to grassing, making sure they are completely sterile. And greens renovation has been made more successful when superintendents fumigate, whether or not they strip the sod, prior to totally killing you annua on older greens.

An odorless, tasteless gas, methyl bromide has a fragrance added for safety reasons when injected, then is covered with a plastic tarp. This is the one pesticide that can provide instant sterilization of the soil. After 48 hours, the tarp is removed to let the soil breathe for 48 hours. Planting of any crop then can commence.

"There are no alternative chemicals in place of methyl bromide. If there were, we certainly would be using them," McLawhorn said. "It is the product of choice.

Other soil sterilants are not as effective, McLawhorn said. Different products would have to be used, and their residual action would prohibit grassing of any given area for weeks or even months. Methyl bromide is the only chemical that totally sterilizes the soil instead of using nematicides, insecticides, herbicides, fungicides, and other products during renovation or new construction.

Jeff Hill, Midwest representative for Hendrick and Dail’s office in Frankfurt, Ky., has been working closely with superintendents in a 13-state region on their renovation projects.

Hill stressed, "We provide the utmost safety precautions during the fumigation process, whether for the superintendents’ staff or the homeowner/member living on one of the fairways. We post warnings signs with a golf course development, store methyl bromide in steel containers and have the property licenses needed, as it is restricted use pesticide that a homeowner can’t purchase, and the chemical is a toxic, potent pesticide."
All-zoysia idea wins support

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Zoysia goes dormant during winter. Shute has tried overseeding with Jamestown fescue and various rough bluegrasses. The results have been good, he said, "But in this stuff is experimental," he added.

Shute has worked closely with noted zoysia researcher Dr. M.C. Engelke at Texas A&M University, Dallas campus. But his most practical contact has been Richard Marion, program manager/superintendent at White Oak Golf Club in Silver Springs, Md. The greens at White Oak are zoysia—have been for more than 30 years.

"That's right, they're zoysia," said Marion with a chuckle. "And at this time of the year, they're pretty ugly."

White Oak doesn't sport your average greens—but then White Oak is not your average golf club. Its proper name is The Military and Civilian Golf Course at The Naval Surface Warfare Center, White Oak Laboratory. A large course personnel are volunteers. Marion, who's been at White Oak for six years, is a mechanical engineer working on naval weapons systems. Marion admits the zoysia greens are "a little slower than what most people want to putt on." But the advantages outweigh the disadvantages, he said.

"Since 1957, we have never had to replace any of its nine greens, said Marion. Spots have been replaced, but only because of mower abuse.

"It's also a lot less expensive because you're not as concerned with the things that tend to attack bentgrass," Marion explained. "You're not throwing around a lot of pesticides. It's durable and low-maintenance.

"And in hot weather, you don't worry about it. If it's 100 degrees outside, the zoysia loves it."

Shute and Marion both cited low-maintenance as zoysia's major advantage. Marion cuts the greens twice a week during non-growing season and three weekly during the prime growing season, May to Sept. 1.

Spanish Bay's fescue experiment termed a success

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"We decided to use fescue for a number of reasons," said Don Knott, project manager for the Robert Trent Jones Jr. Design Group. "First of all, fescue is the native grass of Scottish courses and our main goal was to create that feeling. Secondly, fescue is a hardy grass that can be maintained with less fertilizer than bentgrass."

The decision to go with fescue required a considerable selling job by the chief proponent, Robert Trent Jones Jr. His first task was to convince partners Watson and Tatum, then Pebble Beach Co., that fescue would be a viable choice on the Monterey Peninsula. Jones contacted Dr. Richard Hurley, director of research with Lotts Seed Co. and an authority on fescue.

"The Monterey Peninsula holds the proper type of climate to support the growth of fescue," Hurley explained. "Fescue is hardy and can withstand moderate temperatures. But it thrives in areas with cool nights."

"It was also important that fescue was used to recreate the old-style golf course. Fescue is the predominant natural grass in Scotland. When the game was brought to this country, the Scottish professionals and course designers brought fescue with them and used it on many of the early golf courses in this century."

"After World War II, course architects began to use different grasses, especially bent, and the use of fescue decreases. In recent years, the use of zoysia because of maintenance cost considerations has increased 100 percent."

The decision to use fescue became all-inclusive. Not only were the fairways planted in 100 percent fescue, but the greens were a mixture of 80 percent fescue and 20 percent bent. This produced a firm, hard playing surface that provides good, tight lies in the fairways and brings imaginative bump-and-run shots into play.

Yet questions remained. Is fescue practical on American courses, especially bent, and the use of fescue dominates on American courses? Could a viable maintenance program be created? Is it an infinitely more interesting and fun game played the old way."

"I would say the real key to our success with the fescue has been developing a strong fertility program," Pifferini said. "We have our soils tested regularly and can key on adding minor trace elements to the soil to develop the proper balance."

"The fairways have performed admirably, while the greens have been true and consistent. Since its opening, the fairways have been mowed at 1/2 to 3 inches in the rough, and the fescue-bent mixed greens have been cut at 3/16 of an inch."

"The only drawback has emerged in the winter, when the fescue goes dormant. During this period, the fescue greens take on a thin appearance and don't hold up well to heavy traffic. In response, Pifferini started a winter, bentgrass overseeding program. The idea is to bring greens up to a 3000 mct of bent and fescue, providing better year-round consistency."

"In terms of the overall concept at Spanish Bay, the fescue has been a great success," said Hurley.

The maintenance crew—headed at first by Carl Rygg and recently by Jess Pifferini—began at base one, as the predominant greens used at other Pebble Beach courses are bentgrass. Fescue cannot recuperate as quickly as bentgrass because it's not a runner like bent. When a divot is taken, its replacement is critical.

But the plus side to fescue is its toughness in adverse situations. Further, it's been tried heavily watering or fertilization to thrive.

"We're in our sixth year of drought here in Monterey, but it has not affected us at Spanish Bay, as it has at other courses," said Pifferini. "After we planted, we experimented with different levels of watering and fertilization. Now that the turf has matured, we have continually decreased the amount of water we use. In fact, we are using half as much water last year."

Because of the drought, Pifferini has been under water restrictions, as have all courses.

But he's used only 10 percent of his water allotment. He has also cut his fertilizer program to a minimum, using only 50 percent of that used at Pebble Beach Golf Links, for example.

What Pifferini saves in water and fertilization time, he pours back into extensive hand work on the course. Replacing divots, reseeding divot holes and hand watering are some of the small items that are easier to fit into his budget. The strict controls of chemical and water applications around the environmentally sensitive parts of the course require much hand labor."

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The most difficult challenge may be selling it to the American golfer. With its beige appearance, fescue flies in the face of the lush, green look. Golfers need to understand that Spanish Bay is different, unique—in short, a throwback.

"What we created at Spanish Bay is a course that is closer to the way the game originated—that is, a running game on the ground.""Tatum explained. "Somewhere along the line, American golf architects turned the game into an airborne target game where you fly your ball to a pin and stop it."

"This course demands that you bump and run shots into the greens in certain situations. I feel it is an infinitely more interesting and fun game played the old way."