OUT OF THE MUCK

Renovation project in Florida addresses poor soil
By Mark Leslie

Talk golf in Orlando, Fla., and discussion eventually involves Interlachen Country Club, a 760-acre private facility nestled in Winter Park, known for its amenities and personalized service. The club has been dedicated to members, most recently by enhancing its tennis and fitness center, providing complimentary beverages on the golf course and adding massage services. This commitment and exemplary staff led to the club's recognition as one of only 200 Platinum Clubs of America by Club Leader's Forum.

More astonishing is that Interlachen achieved these honors while overcoming the pitfall of crummy soil. Muck, that is. Muck that was 20-, sometimes 30-feet deep. Since Interlachen was built in 1985, the Joe Lee-designed golf course has attracted such well-known golfers as PGA Tour pro Larry Rinker and amateur players Dave Bozelle, Randy Elliott and Michael Wilson.

But it's also been plagued with agronomic and playability woes. And that's what Lakeland, Fla.-based Steve Smyers Golf Course Architects, course builder Country Club Services and superintendent Stuart Leventhal, CGCS, tackled this spring and summer during a considerable \$3.4-million renovation project. "When that soil dries, it's as hard as concrete, and when it's wet, it's like quicksand," Smyers says.

Leventhal, who was on site when Lee first designed the course, says Lee had to build elevated greens because no one knew how much they were going to settle.

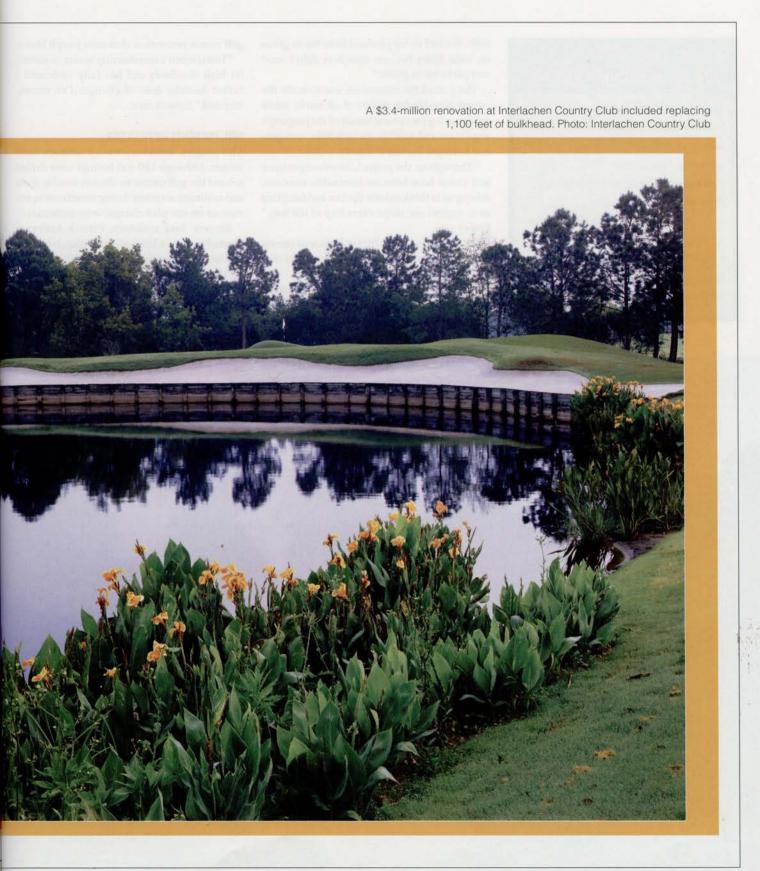
"One hole fell 12 feet," says Leventhal, who has helped transform Interlachen into an Audubon Cooperative Sanctuary. "There was 40 feet of peat there ... we had to pump water out of the fairways. It was horrible land to work on. It wasn't a wetland but a nasty piece of property. Muck would catch fire during the hot season. A fire truck is still here. Firefighters came out to put out a fire, and the truck sank down into it – never to leave."

So when the golf course was built, the construction company dug down below the muck to find enough sand to spread a layer on top of the muck around the entire property. Crews dug out 50 acres of lakes, some as deep as 40 feet, to mine enough fill for the job.

Nevertheless, the club had to close down the course at certain times of the year since then.

"It was a mess," Leventhal says. "We couldn't even get a cart through the fourth





COURSE RENOVATIONS

AT A GLANCE Interlachen Country Club

Location: Winter Park, Fla.

Type of project: Renovation

- Cost: \$3.4 million
- Start date: April 2, 2007

Finish date: Sprigging, July 30, 2007 Open date: November 1, 2007

Architecture firm: Steve Smyers Golf Course

Architects

Original architect: Joe Lee

Builder: Country Club Services

Superintendent: Stuart Leventhal, CGCS

hole. We had to lay plywood from tee to green on some holes because members didn't want cart paths tee to green."

The goal of the renovation was to make the course playable for golfers of all levels, while accentuating the natural beauty of the property's vegetation and wildlife on each hole, says general manager Donald P. Emery, CCM.

"Throughout the project, Steve's experience and vision have been an invaluable resource, driving us to think outside the box and tempting us to expand our scope every step of the way," Emery says.

"We feel the end product will place us among the top golf courses for years to come," says club president Leonard Habas.

"The club's unique, natural setting and routing was a wonderful canvas to create a course we can all be proud of," says club vice president and golf course renovation chairman Joseph Meier.

"Interlachen's membership wants to sustain its high standards and has fully embraced a rather healthy dose of changes I've recommended," Smyers says.

SOIL PRESENTS DIFFICULTIES

The project, however, wasn't without challenges. Although 180 soil borings were drilled around the golf course to identify trouble spots and minimize surprises during construction, numerous on-site plan changes were necessary.

Smyers' lead architect, Patrick Andrews, wanted to place a bunker in one spot, but muck and tree stumps prevented that.

"On the 11th island hole, we wanted to go out two feet past the old wall and keep the soil from eroding, but it was too deep," Leventhal says. "We had to replace 1,100 feet of bulkheads.

The golf course had been plagued with agronomic and playability woes because it was built on poor soil. Photo: Interlachen Country Club It was difficult to marry the old and new. We have cut-and-fill plans, but we had to rework them on the fly."

Country Club Services had to be careful building the golf course features without getting down into the bad soil because the good soil was just on top.

"We had to cap the bad soil with two feet or more of good soil for enough separation," says Robby Farina, vice president of Country Club Services. "Of course, every time it rained the site got extra soft and difficult to move around."

Smyers says he hasn't changed Lee's core routing but is expanding the too-tight landing areas considerably by removing bunkers and altering tee placements.

"There wasn't a lot of room to hit the ball, even for the better golfers," he says. "We've made it a strategic and more interesting course to play."

Smyers also is enlarging the greens so they average 6,000 square feet, transforming the 13th hole from a par-5 to a par-4 and the 18th from a par-4 to par-5.

The original digging of the lakes necessitated by the muck ended up contributing to a better golf course design, Smyers says.

"Some 22 years later, those big lakes, combined with the strong forest edge and no homes, create a wonderful landscape setting," he says.

DRAINAGE IMPROVEMENTS

Five years ago, Leventhal oversaw a massive drainage renovation on the fourth hole, and since then, drain lines have been installed on the front side of the golf course. While correcting the drainage proved a stopgap, the timing soon became right to shut down the course and complete the entire 18 holes in time to reopen November 1.

Leventhal was excited to install a new irrigation system and drain lines that worked well drying the seventh hole. Expensive but effective, the club chose uses a patented siphon basin.

"To ensure we solve the drainage problems,

To ensure drainage problems were solved, drain lines were installed every 15 feet through the fairways. Photo: Interlachen Country Club

"It wasn't a wetland but a nasty piece of property. Muck would catch fire during the hot season." - STUART LEVENTHAL, CGCS

we're putting drain lines in every 15 feet through the fairways," Leventhal says. "These drain lines will draw off the subsurface and keep the course playable."

However, the siphon drain system made it tough to install new drainage and maintain the integrity of the design, Farina says.

"The siphon system was installed on nine holes prior to starting, and they installed the others while we were under construction," he says. "We were dealing with a lot of existing drainage that we had to work around."

The club and Smyers also chose to replace the existing Tifdwarf Bermudagrass with Jones Dwarf Bermudagrass on the greens and Tifway 419 elsewhere.

"We sodded all of the disturbed areas with the exception of tee tops and putting surfaces, which were sprigged," Farina says. "Then we planted grass on the putting greens and No. 13 tee."

ENVIRONMENTALLY FRIENDLY

One thing that's not changing is Interlachen's devotion to the environment and relationship with Audubon International. Leventhal's accomplishments with wildlife on the golf course have been recognized, but he deflects most of the credit, citing an idea that led him to tap into the environmental enthusiasm of college students in the area.

Eight years ago Leventhal contacted the University of Central Florida in Orlando and Rollins College in Winter Park, looking for interns with an interest in the environment.

"We wanted to do everything for wildlife inventory, and we got a lot of help from them," he says. "They wanted 20 hours a week, and ever since then, I've had students. One girl's concentration was reptiles, so she put out tree-frog hotels and conducted fish and oxygen-level studies. One student was into butterflies and built a but-



terfly garden, which we're enlarging. Another was into birds, and we added birdhouses and concentrated in that area for a while."

Eventually, the renovation will transform about six acres of turf into native grasses and wildflowers.

CONTINUOUS IMPROVEMENT

In all, the renovation project went fairly well, Farina says.

"It's always difficult when you do a renova-

tion where you're not tearing up the entire golf course," he says. "There are tense moments around existing drainage and irrigation. It can be trying for the guys on site. Patrick was out there almost continuously, so that helped quite a bit. It started out well with the weather, but the last few weeks, we had a lot of rain."

Yet working on this project won't be the end of the relationship between Interlachen and Smyers. The architect plans to constantly work to improve the golf course by adding landscaping and perhaps tweaking the design as years pass.

"Members are excited about it," Leventhal says. "Their enthusiasm for what we're doing on the course and their anticipation for our opening in November has pushed us to try to give them the best golf course in Florida." **GCI**

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