

First totally SubAir course doing well in Indiana

By JOHN TORSIELLO

NEWBURGH, Ind. — Victoria National Country Club here has won numerous plaudits since opening in May 1999, including a coveted "Best New Private Course" ranking from *Golf Digest* magazine for 1999.

Mike Schaefer, sales manager for SubAir of Deep River, Conn., likes to think his company had something to do with that designation.

Victoria National was the first course in the world to have all its putting surfaces, 20 of them (including two practice greens) installed with in-ground SubAir systems. While a number of courses have installed the system on "trouble" greens or employ SubAir's portable systems, Victoria National constituted the company's most ambitious project to date.

Schaefer said his company is installing its in-ground units on every green at the Leopard Creek Country Club currently under construction in South Africa.

The SubAir in-ground system — which includes a 7.5-horsepower generator, fans and controls in a unit measuring 6-by-4 feet — is enclosed in a "vault" at each green at Victoria National.

The system can be used for several

purposes. It can create two-way airflow through the green by either pushing or pulling air through the root zone to purge harmful gases, such as carbon dioxide, methane and hydrogen sulfide, which gradually build up in the root zone and inhibit root growth and plant health. By using the system to create higher oxygen concentrations, organic matter buildup and thatch accumulation can also be prevented through the increased decomposition by soil microbes.

The SubAir system can be used to draw excess water off the putting surfaces, down through and away from the root zone by using the vacuum port of the SubAir blower. By controlling soil moisture, the system can prevent the occurrence of surface algae.

In addition, SubAir systems can move ambient air through the more temperate gravel and subsoil surrounding drainage pipes located below the surface of greens, allowing a more moderate root-zone temperature.

The SubAir systems are designed to be used on greens built according to U.S. Golf Association specifications, and are hooked into below-ground drainage pipes.

This allows the greens to be kept cooler

in the blazing heat of summer and warmer in winter, the latter factor effectively extending the growing season.

Dale Minck, a certified golf course superintendent and superintendent at Victoria National, said the decision to install the SubAir system was made early in the planning stages for the course.

"It gets nasty during the winter, and summers are hot and humid here," he said. "We wanted to attempt to incorporate everything possible to help the golf course be in excellent condition at all times and use every tool available to us. What we are hoping to do with the system is provide consistent quality on each putting surface."

Minck has used the system extensively to remove excess moisture and to promote healthy root growth on Victoria National's bentgrass greens. It helped attain quick grass growth on many of the greens during construction.

"We used the systems a lot this past summer and they worked well," Minck said. "Our goal is to some day host a U.S. Open and this is a great tool to have."

Minck said the cost of installing 20 in-ground SubAir systems was significant. "We figured around \$600,000," he said, "but if you take out the cost of electrical service installed throughout the course, which we probably would have done eventually anyway, it was around \$300,000."

Installing the SubAir systems added about a day's work to the construction of each green, he added.

SubAir systems are used on a number of professional and college athletic playing fields, such as Safeco Field in Seattle, Busch Stadium in St. Louis, and the University of Colorado. The six-year-old company has also installed the system at several professional soccer fields in England.

The firm employs 12 people.

"The reception we have received has been tremendous. Our portable systems



A SubAir vault unit partially backfilled.

have been very popular for trouble greens," said Schaefer.

One of the aesthetic advantages of the in-ground SubAir systems is that they cannot be heard during operation, a plus for golfers trying to line up tricky 4-footers. Also, controls can be remotely located for easy operation.

SubAir's portable units are designed for greens up to 12,000 square feet in size and range from 7.5 to 25 horsepower. They are available in gas, diesel and electric motors. The system is mounted on a trailer and accessories include a portable water separator, an airflow silencer and quick-connect tees for hooking up to existing drain lines.

Schaefer said his company is developing a hybrid system that will combine the designs of both the portable and in-ground systems.

"We are thinking of larger, localized units that would be located in something like a pumphouse, with the system servicing a number of greens rather than have a vault at each one," he said.

SubAir, Soil Air dispute in courts

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that. The president of Soil Air Technology is David A. Potts, who once headed up SubAir, then left the company to form Soil Air with other investors. Ferris Industries and SubAir Inc. allege in their November 1998 suit that Potts broke a number of laws, including misappropriation of SubAir's intellectual property regarding trademark, design, manufacture, advertising and distribution of its SubAir system; breach of contract and fiduciary duty; and even using SubAir Inc. accounts to pay for services that eventually would benefit his new company.

Potts, in turn, claims in his February 2000 suit that "SubAir has infringed and continues to infringe Soil Air's '909 Patent by making, using, selling and offering for sale, subsurface soil remediation systems and component devices embodying the patented invention..."

And he adds that he had developed the gas-soil analysis device before being hired by Ferris and SubAir Inc.. Indeed, "They hired me because I had that invention," Potts said.

Ferris and SubAir Inc. are seeking injunctive relief and damages from Soil Air Technology, Potts, patent attorney Charles Nessler and several investors. Potts is seeking damages for patent infringement and attorneys' fees.

Discovery in the SubAir suit against Potts is supposed to close by June 30, after which motions and trial will be scheduled. Meanwhile, the case management plan meeting for Potts' suit is scheduled for June 5 and that trial date could be 18 months later.

"I anticipate the first case [SubAir suit] should be resolved at the trial level by the fall," said attorney Theodore Araujo, whose firm — Brown, Pinnisi & Michaels of Syracuse — is representing Ferris and SubAir Inc.

However, the two cases could be joined because the subject matter is very close and they are both assigned to the same judge.

"I hope that happens," said Potts, bemoaning the lengthy course proceedings which have been delayed in part because he did not get his method pat-

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