

Longaberger Golf Club earns Audubon certification

Course uses storage tanks to filter runoff water

BY JOEL JOYNER

NASHPORT, Ohio — The Longaberger Golf Club, located here some 45 miles east of Columbus, has become the first course in the state and one of 22 courses nationwide to earn certification as an Audubon International Signature Sanctuary.

"The golf club staff has been focused on meeting the certification standards for more than four years," said Tami Longaberger, president and CEO of the Longaberger Co. that manufactures handcrafted baskets.

The property covers 550 acres of which, including native grass areas, some 175 to 200 acres are maintained, according to superintendent Mark Rawlins.

Dealing with drainage issues at the course was one of the biggest challenges. "The course is fairly hilly, and part of the certification program is being careful of where you route the drain tiles," said Rawlins. "There were seven locations on the course, five greens and two sets of tees, where we had no option but to run drainage into a stream or pond."

500-GALLON SEPTIC TANKS

After discussing the situation with Dr. Bud Smart, who works with Audubon In-

ternational, Rawlins discovered that a course in Arkansas used storage tanks to filter runoff water.

The course also has a wash-water system



Mark Rawlins and Nancy Richardson, director of the signature program, view the stream on hole 11 on the day of the final environmental audit.

that uses charcoal filters to help recycle water that has been used to rinse off maintenance equipment. "What we ended up doing was installing these 500-gallon septic tanks with a dividing wall in it with a small hole at the bottom of the wall," said Rawlins. "On the one side, we placed gravel and charcoal so that the water would have to filter through it before entering a body of water."

The seven tanks are placed two to three

feet below ground level, and grates above the tanks allow access for inspections and to take water samples. "The water put into our ponds and streams is better than the water coming onto the course," Rawlins said.

The course also uses organic fertilizers like Nature Safe and Roots products to reduce leaching and runoff. "We've also established no spray zones around our ponds, streams and wetlands," said Rawlins. "As far as pesticide and fungicides, we do a lot of scouting and go curative as much as possible.

"Some things like dollar spot you almost have to go preventive," he said. "But we wait until we actually see spots before we spray our fairways. Dollar spot is always a nagging problem for us. Fortunately, we have L-93 on our greens which is pretty resistant."

WILDLIFE

Several deer and an abundance of Redtail hawks share the property. "We have two young hawks that we watched mature and leave their nest," Rawlins said. "They're still hanging around."

The Ohio Department of Natural Resources visited the site and documented wildlife prior to construction. As far as environmental impact, Rawlins believes it has been positive. "We're attracting more wildlife," he said. "We put two ponds on the

property which attracts mallard ducks, wood ducks and a variety of waterfowl."

The course currently sports 35 bluebird nesting boxes. "In the last couple of years, we've had close to a 100 bluebirds fledged on the property," said Rawlins. A member of the maintenance staff built about 25 of the bird houses.

LOOK, THINK AND DO CLUB



Looking out across pond on the 8th hole

Longaberger sponsors the Look, Think and Do club that encourages children to visit various properties owned by the company to search for insects, birds and other wildlife.

"The golf course is one area they visit," Rawlins said. "We give them a tour, and one group of kids were out here the day we saw the two baby hawks leave their nest."

"We've also had Cub Scouts out on the course, and this spring they monitored our bluebird houses for us," he added.

Guidelines help beat effluent odds

By HAL KILPATRICK

In recent years, the use of effluent water for golf course irrigation has become the rule more than the exception. Five years ago, the use of effluent affected only about 30 percent of the golf course irrigation systems we designed. This year, nearly 90 percent were required to make use of effluent.

For many golf course projects, the reason for using this water is clear, but the understanding of how to implement its use

is an entirely different matter.

The biggest mistake that I see golf course personnel make is entering into an agreement with the effluent provider before there is a full understanding of the course's irrigation requirements. This can create a serious problem between supply and demand, particularly for a new golf course project.

To help navigate through the process, it's wise to consider a few guidelines.

- Use experienced professionals —

First, courses should involve an irrigation design firm before you negotiate your agreement with the effluent provider. Since this water will be used for irrigation, courses will need an experienced professional to evaluate the needs of the irrigation system and determine the best way to receive and store the effluent.

- Insist on random testing — In my experience, effluent providers will test the water at a set time when they know all of the parameters are in the acceptable ranges. This does not necessarily insure the water quality that you will receive. If your pro-



A storage tank keeps a ready supply of effluent.


vider will not agree to random testing, at least insist on the test being done just prior to the delivery of the water. This information should be provided daily to the course superintendent. The main water quality concerns courses will be looking at are biological and agricultural.

The main biological concern with effluent is the treatment level. The level for irrigation use should be at least "secondary." This is usually considered "IQ" or irrigation quality water and is considered safe. The most advanced treatment is "tertiary." This follows many of the same treatment processes as drinking or "potable" water. Superintendents should be most concerned about sodium and carbonate levels because they affect turf growth, soil structure and soil pH.


- Delivery and storage options — Effluent is supplied in several different ways. The most common is the gradual delivery of water over a 24-hour period. This water is stored in a lake or a tank located on the golf course. On average, the effluent supply rate is generally half of the gallons-per-minute (gpm) rate that the irrigation pump station discharges at full capacity.

Storing the effluent in a lake on site is preferred. This will create a buffer between the daily irrigation water and the typically lower effluent supply rate. Also, this will give the staff the ability to evaluate the water quality and address any problems before you distribute the water throughout the course.

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