

N.Y. Audubon certification is a bona fide money-saver

Natural cultural practices help keep the Oregon Golf Club one of the sharpest in the Pacific Northwest—if not the entire country.

by Jerry Roche
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■ Oregon Golf Club superintendent John Anderson points at a particularly steep wooded area adjacent to a short fairway. That's where he was almost killed, he says.

"We've had some close calls," the veteran superintendent admits. "One day, while I was trying to mow that fairway, the tractor started slipping down the hill and I had to jump off it real quick. I watched it roll down the slope and hit a tree at the bottom."

The tractor was destroyed, but Anderson survived with just a few scratches. "Mowing is a definite problem, even though I've got some very skilled workers," he still admits. "Everything we have now is traction-assisted four-wheel drive."

This is the price of maintaining a natural, wooded golf course. But it's a price that Anderson—and other superintendents like him—gladly pay because it pays off itself in the end.

Four years ago, pro golfer Peter Jacobsen chose choice land from the 600 acres that the late Tasimano Ohno owned, here in the hills of West Linn, Ore., overlooking Portland. His design is stunning.

"He is still our director of golf, and he sets the tone and philosophy for the whole club," Anderson observes. "When he designed the course, he left it as natural as possible. There was less earth moved on



Though it looks natural, this is a man-made stream that weaves its way through Oregon Country Club, the 18th course to earn complete New York Audubon Society Cooperative Sanctuary certification.

the golf course than there was to build the clubhouse. The course looks like it's been here forever, and it's only three years old."

The Oregon Golf Club was the 18th golf course to be certified in the New York Audubon Society's Cooperative Sanctuary Program.

"The year the course opened, I spent \$45,000 on turf chemicals," Anderson remembers. "The hardest thing for me to do was not grab the sprayer and to get out

of that mode. You have to accept some damage and let the disease run its course. Last year, we spent just \$580 on turf chemicals. Being in the Audubon program has saved us a tremendous amount of money."

Indeed, there has not been a fungicide application on the course for 16 months. The difference, Anderson relates, comes from light foliar applications of $\frac{1}{4}$ lb. of nitrogen and $\frac{1}{4}$ lb. of potassium plus iron.

"I can't believe it myself," he notes. "Our helminthosporium (leaf spot) disappeared as soon as we made the foliar application, and it was the same situation for our patch diseases."

Besides cutting back on pesticides, the Oregon Golf Club is cooperating with the district park department to build a nature trail along a local park that abuts the course. Prior to construction, the local Nature Conservancy is lending a hand by conducting a flora/fauna audit.

The club is also building numerous bluebird houses. "It's very rewarding," says Anderson. "It feels like you're giving something back to the environment. With the Audubon program, you're forced to do and document all the good things you should be doing anyway."

When an article about the club appeared in a local magazine, "I got a lot of calls from people who want to get involved or do the same things on their own property," Anderson remembers.

Many of the problems that most golf courses experience are headed off by using good cultural practices and the right plant in the right spot.

"We use Bardot colonial bentgrass on the fairways because it's less aggressive and a lower thatch producer," says Anderson. "Our soil is low pH, so there's not any microbial activity to decompose our thatch. And I'm keeping the *Poa annua* out by using good cultural practices."

"Our most important cultural practice is light, frequent topdressing every two

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weeks. It controls thatch, smooths and speeds the surface, and improves water percolation."

The course has Pennlinks greens and tees. Greens are mowed at $\frac{1}{8}$ -inch, tees at $\frac{1}{4}$ -inch and fairways at $\frac{1}{2}$ - to $\frac{3}{8}$ -inch or slightly more.

"I also personally change the cups every morning," says Anderson. "It's a good way for me to monitor the greens. The best pair of eyes on the golf course are mine. I can see things long before they happen, while the dew is still on the greens."

People like pro golfers Ben Crenshaw and Phil Mikkelsen, and Larry Gilhooley of the USGA Green Section say the club's surfaces are "as good or better than any playing surfaces (greens) they've ever seen," Anderson contends.

Another part of his secret is a competent and proud staff of 22 people in the summer and 11 in the winter. Key employees are assistant super Bruce Brown, head mechanic Sam Simonson, horticulturist Dave Phipps and head irrigation specialist Gil Goldsberry.

Brown was with Anderson at Portland Golf Club. Simonson is simply known as the best mechanic in the Northwest, for both his inventiveness and his prior experience as a superintendent. Phipps has won awards for maintaining the clubhouse landscape, which is brightly colored by hundreds of roses, the late owner's favorite



Anderson: Spots trouble long before it has a chance to happen.

flower. (The course itself has 3,000 roses on the 12th hole.)

Average age of the 400 members who

play 25,000 rounds per year is around 40. Members include Terry Porter, Buck Williams and P.J. Carlissimo of the NBA's Portland Trailblazers. The day LM visited the course, former NFL quarterback Neil Lomax, another member, was having his annual golf "shootout," and Charles Barkley of the NBA's Phoenix Suns was among the participants.

"We have a very family oriented membership," Anderson observes. "But a lot of our members haven't been country club members before, so education is a key. A lot of them don't know golf etiquette. Our assistant golf pro and I did a video for the men's and women's associations last year. We also distribute a club newsletter, and we had a demonstration where we showed the associations how to repair divots."

Yet Anderson considers himself very lucky. "Peter and David Jacobsen are the Greens Committee, so political hassles don't exist. It's like being on vacation, not having those political problems.

"If ever there was a dream job, this is my own personal dream job."

Beware leaking underground storage tanks, says expert

■ "A good number of the underground storage tanks in this country are leaking," says Purdue University's Dr. Ron Turco, "and you may run into a situation where you have to [pay to] clean up the environment."

The types of liquids that are likely to leak from underground storage tanks on golf courses include gasoline, heating oil and kerosene. They, along with airplane fuels, are commonly referred to as LNAPLs (light non-aqueous phase liquids).

"The real problem is when they contaminate aquifers," Turco notes. "LNAPLs float right on top of the aquifer."

A tank leakage will introduce chemicals

into aquifers at very high levels—parts per hundred—and the subsurface area cannot clean itself.

There are four ways to clean up aquifers contaminated by leaking underground storage tanks—and none is cheap, Turco is quick to point out.

1) Bio-remediation is a process in which biological (especially microbial) catalysts act on pollutants, thereby eliminating contamination. Of the four, it is the most cost-effective means of aquifer decontamination.

2) Bio-venting is when air is pumped through the contaminated soil zone to the

aquifer. This process stimulates bio-degradation of the pollutant.

3) Air sparging is the same as bio-venting, except the air is blown right into the aquifer

instead of into the saturated soil zone.

4) Soil vacuum (vapor) extraction uses the bio-venting process in reverse to actually recover the contaminating product.

"Now, scientists are combining bio-venting and vapor extraction to more efficiently remove contaminants from aquifers," Turco notes.

The point? If your golf course includes underground storage tanks for fuels or other LNAPLs, make sure it is not leaking. It costs far less to have it removed and replaced than it would to clean up a contaminated environment.