

Russell Vandehey, superintendent of the Oregon Golf Club, plays a key role in monitoring bluebird activity.

On the Oregon Trail

Golf and the environment meet up in the great Northwest

STORY AND PHOTOGRAPHS
BY LARRY AYLWARD
EDITOR IN CHIEF

Allan Clemans took me on a road trip I'll never forget. The executive director of the Oregon Golf Course Superintendents Association escorted me on a two-day tour last August of four golf courses in Oregon, beginning in the Portland area and ending near Bend in the central part of the state.

Clemans took me to courses that are doing some cool environmental initiatives as part of their maintenance programs. We must have put 1,000 miles on Clemans' sports car during the adventure. Hence, I'm grateful to him for providing me with some outstanding stories to tell about golf and the environment in the great Northwest. So, here goes:

A bluebird special

They should call Russell Vandehey "the bird man." Make that — the "Western Bluebird man."

Vandehey, superintendent of the Oregon Golf Club in West Linn, is helping to revive the Western Bluebird population in the state's Northern Willamette Valley by participating in the state's Western Bluebird Habitat Improvement Project.

In 1993, representatives of the nonprofit Prescott Bluebird Recovery Project (PBRP) heard the Oregon Golf Club might be a perfect area for a nesting site. So they visited the club and surveyed the land.

"They liked the open meadow of the golf course and that it was a good feeding habitat," Vandehey says.

Vandehey also explains that Western Bluebirds prefer an elevation range between 600 feet and 900 feet. The Oregon Golf Club happens to fit that range perfectly.

PBRP representatives worked with the club to hang bluebird houses to attract the critters for nesting. The plan has worked splendidly. The birds came, mated and have stuck around for 15 years.

"We expanded the program to the point that we now have 35 bluebird houses out on the golf course," says Vandehey, who began at the club in 1995.

Bluebirds do not occupy most of the houses, however. Native swallows take up the majority. In fact, only about two houses are inhabited by Western Bluebirds. But that's enough to help revive the population.

According to the PBRP, the decline of the Western Bluebird in the Northern Willamette Valley is partly due to the loss of natural nesting cavities, including dead trees and snags. The Western Bluebird is listed as a "sensitive species" by the Oregon Department of Fish & Wildlife.

"[The bird] is a cavity dweller, and it likes to live in old tree stumps and snags," Vandehey says.

Hence, the Oregon Golf Club is dotted with dead trees and snags, which Vandehey has let stand for nesting purposes.

"I can show you all the trees that died 10 years ago," he says. "Now they're soft from the woodpeckers pecking at them, and there are cavity dwellers living in them."

Because the birdhouses require upkeep, they have become part of the golf course maintenance program. The birdhouses are cleaned before each golf season. Vandehey and his crew also wax the ceilings inside the birdhouses, which keeps yellow jackets and wasps from invading them.

But the most time-consuming job facing Vandehey and the crew is monitoring the birdhouses. They do this in the spring when the bluebirds inhabit the houses and begin to mate.

"We have formal check-off sheets," Vandehey says. "We keep records of when nesting starts and when birds lay eggs."

At this point, Vandehey notifies the PBRP to report the activity. Then PBRP representatives monitor the hatchings and set up catch boxes to secure the adult birds.

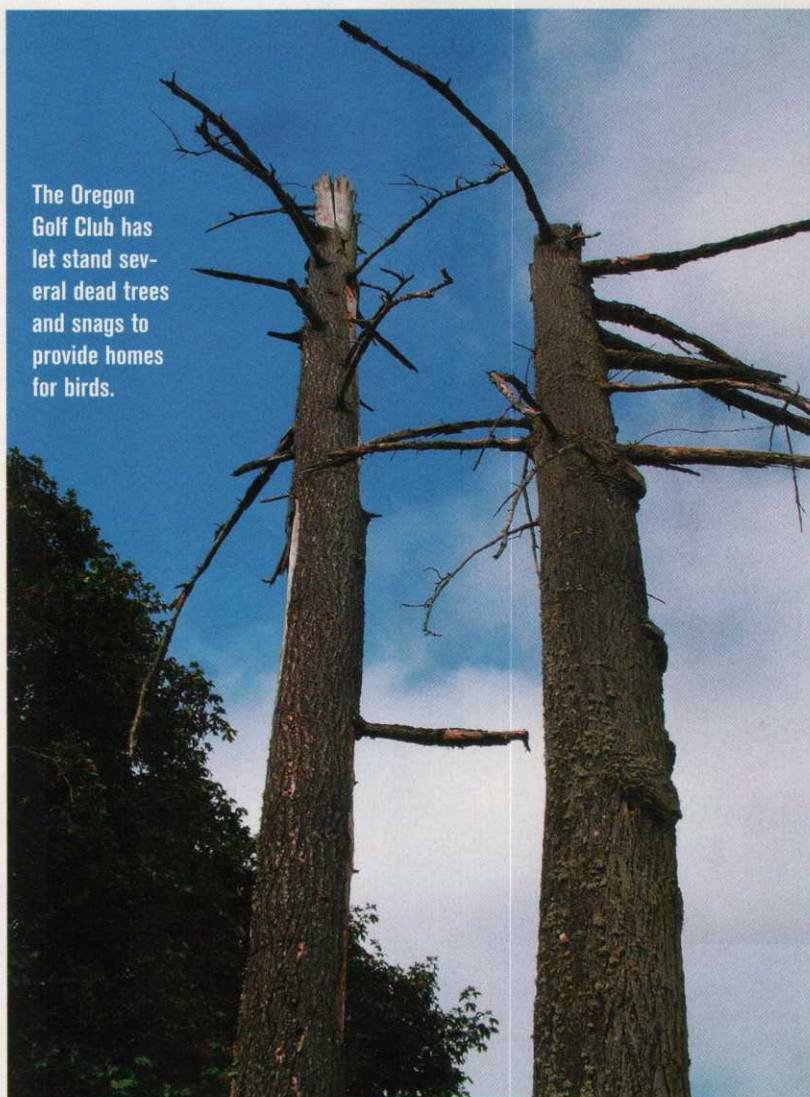
"They check the bands on the adult birds' legs to see where the adults are from," Vandehey says. "They also band the baby birds' legs so they can track them throughout the state."

Vandehey, who talks about Western Bluebirds like an expert, has enjoyed playing a part to help revive the species.

"I didn't know much about bluebirds when I got here," he says, "but this sure has been fun."

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The Oregon Golf Club has let stand several dead trees and snags to provide homes for birds.



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Do Oregon Superintendents Face More Scrutiny?

By Larry Aylward, Editor in Chief

Oregon has majestic mountains, flush-green forests, a captivating coastline and tranquil streams.

Oh yeah, Oregon also has its share of environmentalists, each of whom would plant his right hiking boot in a person's behind if that person elected to befoul such a spectacular setting.

Hence, the feeling among golf course superintendents in Oregon and other parts of the Northwest is that it's more challenging to tend turf there than in other states, where the term "green" is not as ingrained in people's thinking as in the Beaver State.

Just ask Russell Vandehey, superintendent of the Oregon Golf Club in Portland, who says golf course superintendents are scrutinized more in Oregon because of its residents' intense environmental mindset.

"You do feel like you're being watched,"

says Vandehey, who has won several Environmental Leaders in Golf Awards from the Golf Course Superintendents Association of America and its local affiliates in his 11-year career at the course. "And you're aware of it. You have to be on your toes all the time."

Vandehey says members often ask him and his crew members, "What are you spraying?"

Vandehey and his crew gladly answer the questions. Vandehey says he has a full-disclosure policy and doesn't want to hide anything from the club's 500 members. He lets them know results of water tests, among other things.

"We don't run and hide, and I think they appreciate that," he says.

Alan Nielson, certified superintendent of Royal Oaks Country Club, located near Portland across the Columbia River in Van-

couver, Wash., says it makes sense that people who live in the Northwest are more environmentally conscious than in other regions of the country.

"It's why people live here ... because they appreciate that kind of thing," Nielson says.

Paying extra heed to salmon protection and water cleanliness is not a bad thing from a golf course maintenance perspective, Nielson is quick to point out. However, it makes things more challenging for golf courses when it comes to applying pesticides and other chemicals.

"There have been more and more hoops for us to jump through," Nielson says. Tree removal, for example, is not the routine issue it would be at courses not located in such an environmentally sensitive area. Every time Nielson wants to cut down a tree, he has to secure a removal permit from the town's government. ■

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Bird watchin' ... on TV

Remember the monkey-cam from the "Late Night with David Letterman Show?" It was a live camera strapped to a chimp's back. It was innovative, and it was a hit.

The same can be said of the bird-cam in operation at Royal Oaks Country Club near Portland, just across the Columbia River in Vancouver, Wash. The club's members love it. The bird-cam has added a distinct element of nature to the club.

The bird-cam was the brainchild of a Royal Oaks member, who serves on the club's environmental committee, says Alan Nielsen, certified superintendent of the club. His idea was to put a small camera in a nesting box to record a bird's growth from hatching to fledgling.

The club purchased a wireless infrared camera, and Nielsen's crew installed it in the nesting box about 100 yards from the clubhouse. The camera is equipped with a transmitter and receiver, which was spliced into the irrigation system's electric line for power. Another receiver was plugged into the inlets on a 13-inch television monitor in



the clubhouse near the lounge so members could watch the activity.

A pair of swallows arrived shortly after the camera was installed in the spring of 2005. It made for great reality TV until the

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A staffer at the Royal Oaks Country Club performs a maintenance check on the bird-cam.

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birds left in July. "The members really got into it," Nielsen says.

They watched the birds lay legs, and they witnessed the baby birds being born. Then they watched the adult birds feed their young.

This spring marks the bird-cam's fourth year. Nielson and his crew have tweaked a few things to improve the focus of the camera and the clarity of the live stream.

The bird-cam has caused a bit of a fuss in the clubhouse among some bridge-playing women.

"Some of the women were getting upset with the bird-cam because it was distracting their partners from playing cards," Nielsen jokes. "It's hard to play bridge and watch the bird-cam at the same."

The bird-cam cost about \$500, but a price can't be put on the goodwill it has created among members — not to mention the positive environmental story it has become.

While Royal Oaks only has one bird-cam, it has about 28 nesting boxes throughout the golf course. Twenty-two of the boxes were used last year, amounting to about 90 fledglings, mostly swallows with a few chickadees.

"That's quite an impact of birds to put back in the environment," Nielsen says.

Dave Freitag stands next to inverters in the maintenance facility at The Club at Pronghorn. The energy collected by the solar panels is routed to the inverters, which transform it into electricity.

The sun also powers

The Oregon sun powers the lightbulb glowing in Dave Freitag's office at The Club at Pronghorn. The sun also powers the air conditioner, which kicks on with a rush of cool air while the 28-year-old superintendent waxes about the maintenance staff's commitment to environmental integrity at the five-year-old club near Bend. A big part of that commitment is the use of solar power. Three of the four facilities that constitute the club's maintenance complex are equipped with solar panels on their roofs. Freitag, who was named director of agronomy of the club's two 18-hole courses last May, likes that Pronghorn is on the forefront when it comes to energy efficiency.

"We can draw a lot of power off the solar panels," Freitag says. "Everything in the maintenance facility — from the microwave to the lights — is powered by solar."

About 25 electric utility vehicles and golf cars located on the premise are also recharged with solar. The maintenance complex uses some power from the local electric company, but that bill rarely

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tops \$140 a month. "If we didn't have the solar panels, the electric bill would be huge ... just huge," Freitag says.

Freitag points to the inverters in the maintenance facility. The energy collected by solar panels is routed to the inverters, which transforms it into electricity.

It costs about \$1.8 million to construct the solar power system for the maintenance complex. Freitag says the club took a low-interest loan to pay for it. "But it will pay for itself in the long term," he adds.

Freitag is not sure how a solar-powered operation would work at a golf course in a region where there is less sunshine, such as farther west toward the coast.

"It might not be such a good idea on the coast, but we get so much sun here that we take advantage of it," he says.

Freitag says the maintenance staff is doing its environmental duty by using solar power to reduce greenhouse gas emissions that promote global warming. As a superintendent, Freitag says it's "always good" to be ahead of the curve when it comes to technology, especially when it's helping to preserve the environment.

"You'd rather be leading than following," he says. "You're like a guinea pig when you try something like this.

But if it works and it's viable, more people are going to start using it. That can't be a bad thing."

Let it flow

Once upon a time, in the timber town of Prineville, Ore., there was a wastewater problem. In the late 1980s it was discovered the central Oregon city was inadequately treating its wastewater and discharging contaminants, including chlorine and phosphorus, into the nearby Crooked River.

This was not a good thing, considering that many tourists are attracted to the scenic area with its ridges and canyons for its outdoor recreation, such as fishing in the Crooked River. Because Prineville didn't have the money to upgrade its wastewater treatment facility, the town's leaders had a 10-gallon-hat-sized problem on their hands.

But it was a golf course to the rescue. Prineville's leaders decided to build a golf course to get rid of the town's wastewater. The Environmental Protection Agency went along with the plan, and Meadow Lakes Golf Course was constructed and opened in 1993.

The turf at Meadow Lakes appears as green as the grass on most any other golf course. There's no shortage of water

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Assistant superintendent Steve Reynolds says the extra nitrogen in the effluent has allowed the course to reduce fertilization to a single application on fairways and roughs.

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for irrigation. The course's irrigation system runs six hours to eight hours a night and spreads about 3,000 gallons of water a minute on the course, according to Steve Reynolds, the course's assistant superintendent.

"This has been a great thing for the city," Reynolds says.

The water-treatment plant is located about a half mile away. Solids and some salts are removed from the water by filtering before the water is dispersed to the irrigation pond.

While water bills are skyrocketing at some golf courses, Meadow Lakes only has to pay the cost of the electric to pump the effluent water.

However, getting rid of the wastewater can be challenging for a few reasons. For starters, there's a time crunch. The state's Department of Environmental Quality requires the course to irrigate the level-two effluent strictly at night when nobody is playing.

While the effluent water is not a health hazard, the course does not want golfers to come in contact with it for sanitary reasons. Signs around the course advise golfers to wash their hands after playing.

Having more than enough water to irrigate has impacted maintenance practices, Reynolds says.

"We're mowing more because we're watering more," he explains. "Effluent

The Meadow Lakes are actually 10 ponds with impermeable membranes that were built to contain overflow effluent water.

water has more nitrogen, which makes the grass grow faster. We have to stay on top of it, or it can get away from us easily. We're mowing fairways every day to keep from having a lot of clippings lying around."

Because of the extra nitrogen in the effluent, Reynolds says the course has been able to reduce fertilization to a single application on fairways and roughs annually. The reduction in fertilization also means less chance the fertilizer could end up in the river.

The trout-laden Crooked River running through the course is pristine and clean, Reynolds says. Extensive native vegetation, a buffer zone extending 50 feet in some areas, surrounds the river.

"It's what was here before the golf course was here — tall grass and willows," Reynolds says.

Regarding the course's name, the Meadow Lakes are actually 10 ponds with impermeable membranes that were built to contain overflow effluent water.

"They're fairly shallow, and they evaporate quickly," Reynolds says. "They're also great hazards, but players are advised to refrain from retrieving their balls from them." ■

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