



"The Newspaper That Cares About Rural Life"

# Farm Country

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The Country Today **SECTION**

## Almost perfect

Northwest Washington dairy farmers enjoy cow-friendly climate but are challenged by raspberry growers' competition for land



*Editor's note: The Country Today Regional Editor Heidi Clausen recently spent five days near Lynden, Wash., on vacation to attend the national Gathering of the Orange Allis-Chalmers show as part of her family's business.*

**L**YNDEN, Wash. — Literally a stone's throw from British Columbia in the far northwestern corner of Washington State lies Vander Haak Dairy.

With its moderate climate and typically ample rainfall, this is an almost perfect place to milk cows.

"We don't get real cold, we don't get real hot. It's good cow weather," said Steve Vander Haak, who milks 500 cows just off the Guide Meridian Road near Lynden.

Mother Nature is on their side, and the dairy industry in Washington's agriculturally diverse Whatcom County remains strong, with many large herds and successful, smaller grazing operations.

Whatcom County's dairy industry ranks second in the state and 29th in the U.S.

But this area also is among the best-suited places on earth for raspberry production, which offers dairy producers strong competition for farmland.

Good raspberry ground sells for at least \$20,000 per acre, said Vander Haak, 38. Land is getting harder and harder to come by for dairy producers hoping to grow their own feed.

"You can't dairy farm it for that, and you have to look at it as an investment," he said. "Not all the ground is worth it."

### All about berries

Washington accounts for almost 95 percent of the nation's total red raspberry production, according to Whatcom County Farm Friends' website. In 2012, more than 90 percent of the state's red raspberries were grown in Whatcom County.

Whatcom County raises the biggest per-capita crop of red raspberries in the world, with 99 growers harvesting 7,200 acres.

The county also has about 100 dairy operations — down from some 1,200 in the 1950s, according to Kevin Tevelde of Lynden, a former dairy farmer who now does custom cropping.

Tevelde said area dairy farmers have been hurt by a lack of affordable, available cropland coupled with skyrocketing feed prices.

The dairy industries in Washington and Wisconsin



are more similar than they used to be, according to Vander Haak, who says the average dairy in Whatcom County has about 500 cows.

"The bigger dairies are built pretty much the same as they are here," he said, "but (Wisconsin farmers) can grow more of their own crops."

### Digester has delivered

Vander Haak wants to honor the heritage of the farm established by his grandfather in 1945, but he also keeps one eye focused at all times on the future.

"I grew up in (the dairy industry). I enjoy it," he said.



Vander Haak Dairy's milking facility is 1.5 miles away from the heifer and dry cow barns and digester.



Vander Haak Dairy was the first in the state to install an anaerobic digester, which uses the dairy's manure along with food waste, such as that from berry producers and milk plant wastewater.

Each day, trucks deliver food waste that used to go to sewer plants and landfills to the farm, which receives a tipping fee, Vander Haak said.

He added a digester nine years ago as a way to diversify the business and improve nutrient management. It's run separately from the dairy so he can better track its performance.

"It's been profitable. It's done everything they said it would," Vander Haak said. "The food waste has really helped. It runs 24/7. The tank is always full."

Designed by Chilton, Wis.-based DVO, the digester has a million-gallon capacity and is near Vander Haak's heifer and dry cow barns, about 1.5 miles from his milking facility.

Before installing the digester, Vander Haak first visited several operating digesters in Wisconsin.

His digester has been under the scrutiny of Washington State University researchers since he put it in, and it has served as a model for others. There are now more than a half-dozen digesters in the state, he said.

As manure enters the digester, it is heated to about 100 degrees, using heat generated by the digester's engine.

"We're trying to mimic the cow's stomach," Vander Haak said, adding that the digester functions as a mostly self-contained unit. "It pretty much takes care of itself."

Anaerobic bacteria feed on the manure and, when they die off, they produce methane gas, which is collected in the top 2 feet of the tank, he said. The gas goes into the digester building to be converted

into electricity that's sold to Puget Sound Energy.

The dairy's manure powers about 400 area homes, said Vander Haak, who purchases back from the power company the power he needs to run his farm.

"We can bump up our gas production," he said.

Over the years, the digester has mostly required just routine maintenance, which is done by the local installer, he said.

But some tweaks have been made to keep up with technology: The engine was upgraded to be more efficient and powerful, and updates have been made to the computerized controls. The engine will send him a text message if there's a problem.

"The overall design hasn't changed," he said.

Manure solids are separated and stored in a nearby shed as recycled bedding for the dairy herd. Vander Haak sees this as a major benefit, as he saves about \$1,000 a month on bedding vs. buying shavings or sawdust.

"We use it coming right off the separator," he said.

Liquid manure flows to a lagoon for storage until it's pumped to fields, although WSU researchers are experimenting with ways to remove the nitrogen and make ammonium sulfate fertilizer to spread

on Vander Haak's fields.

Vander Haak said this should be less costly to haul to his more distant fields than alternative fertilizers.

"It's going good so far," he said. "The concept is working."

### Corn goes to silage

Vander Haak Dairy runs about 500 crop acres of mostly rented ground, with the furthest fields about five miles away. Rent ranges from \$200 to \$240 an acre.

Because there's not enough heat here for corn to mature for grain production, all the Vander Haaks' corn goes into silage. They buy some grain and alfalfa hay out of eastern Washington.

With ever-rising feed costs, Vander Haak works closely with his nutritionist to determine the best deals for his herd's total mixed ration.

"It's a balance," he said.

Vander Haak's herd is milked three times a day in a double-12 parallel parlor and averages about 80 pounds of milk per cow per day. The farm has 10 employees.

Milk is shipped to Darigold in Lynden to be made into powdered milk. Darigold operates several plants across the Northwest.

Like many other area producers, Vander Haak is incorporating more Jersey genetics into his mostly



Holstein herd as a way to capitalize on strong component prices. Jerseys make up about a fifth of his milking string.

Some producers are milking a mix of Holsteins and Jerseys, while a few are going to all Jerseys.

While there was a strong market for Canadian Holsteins in the U.S. about a decade ago, he said, he often sells heifers across the border.

"At times, there's a good market for cattle up there," he said. "It depends on the quota."

As for his own operation, Vander Haak expects to be milking more cows down the road.

"I can see us getting bigger over time. Nothing drastic, but slow growth," he said.



Above left: A truck delivered food waste to go through the dairy farm's anaerobic digester, which runs around the clock. Center: Vander Haak Dairy was the first in the state to add an anaerobic digester. The system has been in operation for nine years. Right: Dried manure solids are recycled as cow bedding.

Story and photos by Heidi Clausen



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