

## Dairies

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to have a permit. Since Ecology maintains that pollutants seep from manure lagoons and could reach groundwater, almost every dairy may be subject to the permit.

Costs will vary depending on the size of the dairy. The Ecology's permit writer, Jon Jennings, said the single biggest cost will be one-time lagoon assessments. Ecology estimates an inspection by an engineer will cost \$7,400.

In the economic assessment, Ecology assumed each dairy has one lagoon. Some

dairies, however, multiple lagoons, a fact that likely will cause Ecology to revise its analysis, the agency's special assistant on water policy, Kelly Susewind said.

Jennings said the biggest ongoing costs will be soil sampling and the permit fee.

The Dairy Nutrient Management Act administered by the state Department of Agriculture already requires dairies to test fields in the fall to check nitrate levels. Ecology proposes to require more tests in the spring and at greater depths.

A yearly CAFO permit would cost producers 50 cents per animal unit (a cow and

calf), up to \$1,670 in 2017.

Washington State Dairy Federation policy director Jay Gordon criticized Ecology for not attempting to estimate how much money farmers will lose because of new restrictions on fertilizing with manure.

In some cases, farmers would be prohibited from applying manure within 100 feet of waterways, according to Ecology's proposal.

The value of lost crop production would likely be many times higher than the expenses cited in Ecology's analysis, Gordon said.

"We're very disappointed in the economic impact

statement," he said.

According to Ecology's analysis, losses due to buffers would be "site specific and cannot be estimated with any level of reliability."

Susewind said Ecology intends to allow farmers to use commercial fertilizer in areas where manure will be prohibited.

He said the agency may try to roughly estimate the economic costs of buffers. He said the impact would likely be fertilizer costs, rather than lost crops.

Gordon also criticized Ecology for dismissing new record-keeping costs as "minimal."

The proposal makes numerous references to records that farmers must keep and present to Ecology on demand.

"To say it's 'minimal' and move on is flippant," Gordon said. "The word lazy comes to mind."

Jennings said the Dairy Nutrient Management Act already requires farmers to keep some of the records.

Ecology will have two public hearings on its proposal next week:

- Tuesday, July 26, 6 p.m., Whatcom Community College, Heiner Theater, 237 W. Kellogg Road, Bellingham.
- Thursday, July 28, 6 p.m.,

Yakima Convention Center, Room B. 10 North Eighth St., Yakima.

The public comment period ends Aug. 17. If Ecology makes significant changes to its proposal, it would have to hold a new public comment period.

Environmental groups have complained Ecology's proposal won't require dairies to line lagoons with synthetic material to prevent manure seeping out. The dairy industry disputes Ecology's assertion that even lagoons designed to Natural Resources and Conservation Service standards leak.

## Hazelnuts

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Statistics Service reported that hazelnut acreage and production were flat, a disease was devastating hazelnut trees, and prices were stagnant.

However, a series of "God moments" turned the industry around, Birkemeier said.

The biggest breakthrough came in 2009, when OSU's Mehlenbacher released several cultivars resistant to eastern filbert blight, bringing new hope to growers. The fungal disease had showed up in Oregon in 1973 and eventually infected a large portion of the state's hazelnut orchards, sending the industry into gradual decline.

As the resistant trees began to replace those that were susceptible to EFB, other events further boosted the industry.

Ferrero U.S.A. expanded its production of Nutella, a hazelnut-and-chocolate spread especially popular among young consumers. Ferrero already operated a plant in Ontario, Canada, and in 2012 built another in Mexico to meet the growing demand, with Oregon the closest hazelnut provider.

Two years later, a major freeze wiped out one-third of Turkey's hazelnut crop. The nation provides 70 percent of the world's hazelnuts. With that production decline, several countries — particularly China — turned to Oregon to meet their demand.

The result: 15,000 acres of hazelnut trees have been planted since 2009.

### Planting costs

The cost of a new hazelnut orchard depends on the density of the planting, whether outside contractors do the work and the price of the drip irrigation system.

OSU Orchard Crops Extension Specialist Nik Wiman said hazelnut trees cost an average of \$7 to \$8 each. Some growers plant orchards in a single-density configuration — 108 trees per acre. Contracting someone to plant the orchard adds about \$1 per tree to the cost, he said.

Some growers plant double-density orchards — 216 trees per acre, which costs an average of \$1,620. Wiman said planting those orchards is more costly upfront but yields significantly higher returns sooner.

A single-density orchard begins producing hazelnuts — about 75 pounds per acre — in the third year. Production will typically increase each year until an orchard reaches full production — about 2,800 pounds per acre — by the 12th year, according to OSU.

A double-density orchard's production is twice that of the single-density orchard until the 10th year, when every other tree is removed to provide adequate spacing for the mature trees.

Oregon Hazelnut Commission Administrator Meredith Nagley said the nuts are popular with the state's 650 growers because they produce long-term yields, are sustainable and don't require many



Courtesy of Willamette Hazelnut Growers

An employee at Willamette Hazelnut Growers harvests fallen hazelnuts from a mature orchard. Willamette Hazelnut Growers is both a grower and processor of hazelnuts.



Courtesy of Willamette Hazelnut

Willamette Hazelnut Growers constructed a metal bin that can hold approximately 20 times more hazelnuts than traditional harvesting equipment can transport. Before the bin, growers transported nuts in large boxes. The processing company made the bin to assist new bulk growers who have not invested in infrastructure to transport their crop to processors.

inputs once they are planted and start yielding nuts.

### A grower's view

Leroy and Barney Kropf first planted 35 acres of hazelnuts on their Linn County, Ore., grass seed farm in 2009. As of this year, their hazelnut orchard has grown to 300 acres, and Barney Kropf said they plan to add 30 acres a year.

"We were expecting to expand but not this fast at all," Kropf said.

He said the grass seed business is unpredictable and hazelnuts are the opposite, which makes them a good complementary crop.

OSU Extension's Wiman said he expects a lot of growers in the southern Willamette Valley to also start growing hazelnuts, following the lead of growers in the northern valley, where they are most popular.

### Processor demand

Kropf said one of the most attractive things about grow-

ing hazelnuts is the high demand from processors.

At Willamette Hazelnut Growers in Newberg, Ore., CFO and Sales Manager Michael Severeid said the rapidly growing industry has put pressure on processors to obtain supply and has created competition for the nuts.

According to the USDA noncitrus fruits and nuts summary published this month, Oregon hazelnuts sold for an average of \$1.34 per pound in 2013, and prices peaked in 2014 at \$1.80 per pound after the frost in Turkey. In 2015, the average price per pound was \$1.40.

"There's a lot of competition with the processors to get supply and meet demands," Severeid said. "The opposite is true for growers. Everyone wants your business."

To attract new growers, Severeid said Willamette Hazelnut helps them be more successful. One effort is a giant metal bin that can carry up to 20 times more

hazelnuts than typical harvest bins.

Severeid said Willamette Hazelnut built the bin for growers to make it easier and more cost-effective for them to handle their crops.

Severeid sees even more room for expansion in the North American market.

"Our problem has always been an inadequate supply for export," Severeid said. "We never have a problem selling what we can produce."

### Working together

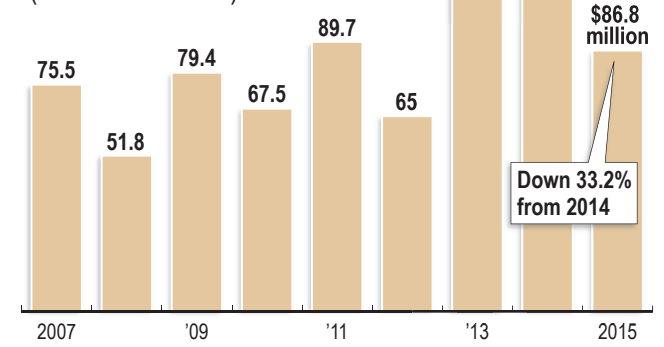
New and veteran growers don't only get support from processors. The hazelnut commission's Nagley said the industry is one of the most collaborative and supportive she has ever seen.

Mehlenbacher said that's because the annual hazelnut production is easily sold, which in turn encourages growers to work together.

OSU also plays a big role. Beyond creating the filbert blight-resistant cultivars,

### Oregon hazelnuts by value of production

(Millions of dollars)

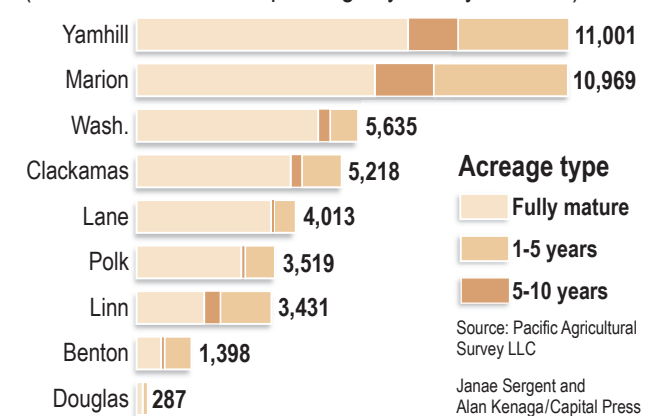


Source: USDA NASS

Alan Kenaga/Capital Press

### Oregon hazelnut counties, 2015

(Mature trees and new plantings by county, in acres)



OSU Extension Service researches new hazelnut cultivars and provides resources to growers.

OSU Extension is split into four areas: breeding and genetics, insect and pest management, plant pathology and cultural practices.

OSU Extension's Wiman works in cultural practices, researching the physiological needs of the trees and serving as a resource for growers.

"My job is to empower growers and investigate the needs of the trees," Wiman said.

Birkemeier also stressed the importance of the strong relationship between OSU and growers.

In 2010, OSU and Oregon hazelnut growers established the Hazelnut Variety Committee and agreed to pay royalties for cultivars created by OSU

in return for exclusive rights to new cultivars. When OSU releases a new cultivar, no overseas growers can buy it for three years.

"Hazelnut people are the example of how to behave, support new people and support research," Mehlenbacher said. "We're the little guys in the world. We have to work together to be successful."

With more acres going into production every year, growers and processors see a bright future for the hazelnut industry.

Having been in the hazelnut industry his whole life as a grower and a nurseryman, Birkemeier said he is excited.

"It's so rewarding to see an industry go through all of that struggling for 30 years and to all of a sudden see this huge resurgence in hazelnuts," Birkemeier said.

## Monument

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He said if a monument is created, a completely new set of rules would have to be drawn up for it and that

unknown is concerning to ranchers.

"It's very, very upsetting for the industry because we don't know what we're going to get," he said.

Malheur County is Oregon's No. 1 cattle produc-

ing county with about \$134 million in farmgate receipts annually.

Livestock sales yards in Idaho and Oregon recently donated \$17,300 to the OBSC to support its campaign to oppose a national

monument.

Producers Livestock Marketing Association donated \$11,600 it raised during cattle auctions in June in Vale, Ore., and Treasure Valley Livestock donated \$5,700.

Opponents of the national monument proposal worry that having 40 percent of the county's land designated as a national monument would restrict grazing and access to these lands and harm the local economy.

The national monument proposal "is a huge concern over here," said Paul Skeen, president of the Malheur County Onion Growers Association. "That's why we voted 93 percent 'no' on it."