# Price spikes often prompt manufacturers to pull back on frozen blueberry purchases

BERRIES from Page 1

"Not only were we quite short, but the percentage that went fresh was large,' Cook said.

Prices for "individually quick frozen" blueberries received by processors jumped from about 85 cents per pound to \$1.20 per pound, though they've since settled at about \$1.10 per pound, he said.

Price spikes often prompt food manufacturers to pull back on frozen blueberry purchases, but the recent increase isn't likely to have a severe impact, he said.

"It's not outrageously priced, so I don't think you'll see a massive fallout in demand," Cook said.

New blueberry plantings will inevitably cause production to rise over the long term, but growers are increasingly geared toward the fresh market, he said.

"Almost nobody designs a farm around processed," he said.

Reduced frozen blueberry inventories may also boost prices for next year's crop, said John Shelford, strategic adviser to the Naturipe Farms food company. If buyers consume frozen blueberries at the same rate as last year, cold storage inventories of the crop will fall to 100 million pounds before next harvest, he said.

"If we see that, it will be a price increase," Shelford said. "Do I think we can do that? Yes. Do I think it's a slam dunk? No.'

Cold storage inventories of frozen blackberries have decreased 18 percent since last autumn, from 38.7 million pounds to 31.6 million pounds, according to USDA. Processors have seen a price increase - from less than 90 cents per pounds to about \$1.10 per pound - but it's lower than expected in light of lower production, said Dave Dunn, general manager of the Willamette Valley Fruit Co.

"The crop was way down but the price isn't very good," he said. "People were expecting more than that, I think."

A cold, wet spring generally sup-

pressed yields of blackberries, which had already suffered from winter cold damage, said Tom Peerbolt, a crop consultant.

"It's been a very unsettling year for berry crops across the board," he said.

Demand for frozen blackberries has been tepid because food manufacturers are sourcing them from Mexico rather than the U.S., which has prevented prices from rising more sharply, Dunn said.

"The low production we've had this year has not turned into a high price year, which is historically what would happen," said Ken Van Dyke, a Cornelius, Ore., farmer and board member of the Oregon Raspberry and Blackberry Commission.

Chile has large amounts of leftover frozen blackberries and is likely motivated to sell them quickly to make room in freezers for the next crop, which is harvested in January, Van Dyke said.

Weak prices for blackberries are convincing some farmers to shift into more attractive crops, such as hazelnuts, he said. "The margins just haven't been strong enough to keep the interest of a lot of growers."

Competition from South American countries, where labor costs are much lower, poses a long-term threat to U.S. berry production unless trade policies are changed, said Mike Townsend, a grower and processor near Fairview, Ore.

# Fastest pickers make equivalent of \$50 per hour on piece-rate in apples

#### WORRIES from Page 1

president of the Washington State Tree Fruit Association.

At stake is Washington's biggest agricultural sector. The state's apple industry alone is a \$2.4 billion per year business. When cherries and pears are added, the state's tree fruit industry tops \$3 billion.

The array of challenges includes a whiff of unionization efforts in orchards. The Food Safety Modernization Act requires costly testing of irrigation water in orchards and greater sanitation in packing houses. Growers incur added costs dealing with surprise audits by the U.S. Department of Labor and occasional Immigration and Customs Enforcement raids looking for illegal immigrants. Congress has made little progress toward immigration reform to address the labor shortage, which is only expected to worsen. And there's uncertainty about renegotiations of the North American Free Trade Agreement between the U.S. and Washington's top apple export markets of Mexico and Canada.

## Changes already

Small companies and growers already find it more difficult to survive, and larger companies are combining efforts to find more volume and efficiencies

Gold Digger Apples Inc., a small tree fruit cooperative in Oroville on the U.S.-Canadian border, filed for bankruptcy in 2016. Its packing and storage facilities were bought and are now operated by Gebbers Farms of Brewster and Chelan



A "pickers wanted" sign at Grant Road and Kentucky Avenue in East Wenatchee, Wash., on Aug. 28 is indicative of the tight labor market.



A new 479,000-square-foot, highly automated fruit storage and shipping center is under construction at Stemilt Growers, Wenatchee, Wash., on Oct. 13. The facility will be able to store almost 1 million boxes of fruit and ship them with few workers needed.

He foresees more tree planting and more marketing consolidation among independent companies.

"Cost concerns are a big deal all right," said Bob Mast, president of Columbia Marketing International in Wenatchee.

"It cost \$30,000 an acre to plant a new orchard a few years ago, now it's \$60,000. We're watching all the regulations coming at us. We want to be compliant, but if they don't make improvements and make sense, we definitely will challenge those," Mast said.

Wage Rate, if he hires H-2A-visa foreign guestworkers. He can also pay them piece-rate, which usually equates to about \$20 per hour for good pickers. The fastest pickers are highly skilled and have been known to make the equivalent of \$50 per hour on piece-rate in apples and \$70 per hour in cherries.

In 2015, the state Supreme Court ruled in Demetrio v. Sahourly will likely work slower, and a grower will have to hire more workers to get the same amount of work done, he said.

'The solution is not to add more workers but maximize productivity. Slowing down and adding people is not a good longterm solution, especially when workers are not found able and willing to do it," DeVaney said.

He and others fear that if piece-rate pay goes south so will the fast pickers - to California, Florida or other states with fruits and vegetables where piece-rate pay still exists.

Grower costs will also increase if they have to start paying overtime, but the case against the state's agricultural overtime exemption does not appear to be very strong legally, he said.

Many agricultural functions

cultural employers at the conference.

Developments at Sakuma Bros. berry farm, in Burlington, led to the unionization of the farm's 500 workers by Familias Unidas por la Justicia in 2016, a local independent farmworker union formed in 2013.

Familias Unidas and Columbia Legal Services were both involved this year in labor disputes at Sarbanand blueberry farm in Sumas following the death of an H-2A worker, apparently from pre-existing conditions, and later complaints about an abusive supervisor at W&L Orchards, in Quincy, owned by Larson Fruit Co., in Selah

Keith Larson, president of Larson Fruit, declined comment on the validity of the complaints but said he was happy to address concerns and get people working again. A supervisor was reassigned, he said.

Familias Unidas "certainly is trying to organize the workforce and informally represent a lot of workers," DeVaney said. It's something the tree fruit industry is watching, he said.

"Most employers know you want to treat workers well to retain them. No one thinks they can successfully recruit if they abuse them," DeVaney said.

The bigger problem, he said, is no one wants to be short workers when labor is scarce.

Unions often bargain for fixed hourly wages, eliminating piece-rate pay that many growers and workers like, he said.

'That's a main concern. Farms have to be flexible given changing weather and perishable crops. An employer can lose flexibility with a union

ers. Its pruning and harvest assist platform, called Bandit Xpress, also replaces ladders for 35 percent more efficiency in picking apples. The company sold 450 Bandit Xpress platforms from 2013 through 2016 and is building 275 this year. The company will double its manufacturing capacity next year. The self-propelled platforms sell for \$63,000 aniece.

Companies in California and Israel are working toward the commercialization of robotic apple pickers within the next year or two. Neither has set suggested retail prices.

Improvements in computerized, optical fruit defect sorters and sizers and robotic palletizers are eliminating more packing house jobs in new packing lines that cost tens of millions of dollars each.

Growers, Stemilt of Wenatchee, is building what will likely be the largest and most advanced automated packed fruit storage and shipping centers in the state. The 479,000-square-foot facility will be able to store almost 1 million packed boxes of fruit. The Automated Storage and Retrieval System — known by the initials ASRS — involves movement, storage and retrieval for shipping of packed boxes of tree fruit with robotic cranes and automated dollies and computerized tracking for efficient flow.

In 2013, several cold storage industry organizations estimated an ASRS system saves \$2.7 million per year for a plant with 18 workers for each of three shifts and each employee costing about \$50,000 in wag-

ruit Cooperative of Chelan.

Earlier this year, Smith & Nelson, the last packing house in Tonasket, 17 miles south of Oroville, ceased packing but is still growing and storing fruit. The packing line needed sanitation upgrades to comply with new FSMA requirements. Owner Scott Smith said several factors went into the decision, including the lack of a next generation able to carry on.

Auvil Fruit Co. in Orondo and McDougall & Sons in Wenatchee have both expanded in recent years, saying "it's go bigger or get out," and that they need more volume to survive.

Washington Fruit & Produce Co., Yakima, and several other large companies also have been expanding acreage and replanting old orchards in higher densities for more volume.

Chelan Fresh Marketing, in Chelan, earlier this year announced the addition of Borton Fruit, of Yakima, and Columbia Valley Fruit, of Union Gap, to its already large marketing portfolio. It gives the company greater volume, particularly in organic fruit, to stay competitive and provide retailers with the service they expect, said Tom Riggan, general manager.

## **Piece-rate pay**

Perhaps the biggest challenge is to piece-rate pay, a cornerstone of agricultural labor economics. The piece-rate pay lawsuit implies workers were not being given due wages when they actually were, DeVaney said.

The implication that someone is doing something wrong was alarming and offensive to a lot of growers," he said.

Growers like piece-rate pay, which is based on the amount of fruit picked versus hourly pay because it provides an incentive for pickers to work quickly. It's a useful tool when a grower needs to get fruit picked in a hurry because of weather, fruit maturity or some other variable, DeVaney said. Pickers also like it because they can make a lot more money, he said.

Washington state's minimum wage is \$11 per hour. But a grower has to pay all of his workers a minimum of \$13.38 per hour, the Adverse Effect kuma Bros. Farms that piecerate workers had to be paid separately for rest breaks. Growers had considered rest breaks to be part of piece-rate pay and many pickers worked right through rest breaks.

Farmworker advocates and attorneys involved in that case took the next step by finding workers to sue Dovex Fruit Co., of Wenatchee, over the practice of not paying piecerate workers separately for meetings and for travel time between orchards. The advocates call that "down time" or "nonproductive time." Dovex contends those activities are included in piece-rate pay because they are supportive of the work and that the law allows growers and workers to agree to those terms.

Plaintiffs not only want it paid separately, but calculated hourly instead of weekly. That, DeVaney said, becomes a "logistical impossibility." Administrative rules and previous court decisions have approved weekly calculations, but if hourly calculations are imposed it very likely will end piece-rate pay, he said.

That, in turn, increases costs because workers paid are exempt from state-required overtime pay because the work is seasonal and temporary and may require longer workdays but for short periods, DeVaney said. It allows flexibility for a grower caught by unexpected variables such as weather.

#### Unionization

Growers and packers worry unionization will increase costs and reduce their flexibility in handling labor needs. Years ago, attempts were made at unionizing packing houses but they were unsuccessful because workers decided they might be giving up opportunities to make more money at the cost of paying union dues, DeVaney said.

More recently, Washington Fruit & Produce, in Yakima, and Douglas Fruit Co., in Pasco, staved off unionization efforts by listening to workers, Brendan Monahan, a Yakima labor attorney, said at a labor conference last winter.

"Why would employees want to pay a portion of their paychecks to a union when they can get things addressed with you?" Timothy Bernasek, a Portland agricultural attorney, asked a couple hundred agricontract. Agriculture is a highly uncertain environment, not a shift-based manufacturing environment," he said.

"Unions use political and legal means to get rules and regulations put in that meet their goals. They don't have the interest of an industry at heart," said Desmond O'Rourke, a retired Washington State University agricultural economist and apple analyst.

Familias Unidas could not be reached for comment.

#### Mechanization costs

An unintended consequence of unionization and more government regulations is they push employers to seek greater mechanization at the expense of jobs, DeVaney said.

"If you drive the cost of labor up too fast, you provide incentive for automation," he said. "It's not a threat but a rational response."

Tree fruit cultivation and harvest is labor-intensive, but more growers are turning to pruning machines called hedgers, run off the sides of tractors to reduce the hand pruning of fruit trees

Automated Ag Systems, in Moses Lake, builds hedg-

es, benefits and training

New conventional storage costs about \$115 per square foot and ASRS systems about \$170 per square foot, according to cold storage organizations. Stemilt won't say how much it's spending on the system, but using those estimates it's likely to be \$80 million or more.

## Worries intensify

Washington growers have long dominated U.S. apple production and are increasingly recognized worldwide for their high-quality apples. But they're not the lowest-cost producers, DeVaney said.

"We've always produced quality and people pay for quality but they won't necessarily pay an unlimited amount," he said.

"We can't have a price shock that puts us out of the running. The industry is very concerned about a sudden policy change or court decision that drastically changes the landscape," he said.

The industry is giving a \$32 million endowment to Washington State University over eight years for research to remain a high-quality and efficient tree fruit producer, DeVaney said.

# Modeling system depicts basin in 160,000 polygons allowing researchers to layer in variables

#### WATER from Page 1

Efforts to use more of the water stored in reservoirs behind 13 dams in the basin will be limited by the expense of pumping it. That is, it might not be worth the cost unless the water is going to high-value crops such as nurseries or perhaps vineyards.

The Willamette Water 2100 project involved six years of work by 30 researchers in a variety of specialties. The idea was to create a computer modeling system that could project the impact

of climate, population, urban growth and other factors on water supply and demand. The result is a case study of an important and relatively large river basin – the Willamette is 186 miles long, the 19th largest river in the U.S., and flows through an area in which 70 percent of Oregon's population lives.

The work could be useful to make projections in other river basins, "Especially ones with less water," said Bill Jaeger, an OSU applied economics professor and a lead author on the project.

The modeling system de-

picts the basin in 160,000 polygons that allowed researchers to layer in variables such as existing water rights, crop choices, soil types, precipitation and temperature. Jaeger said he doesn't know of another study in the world that's allowed such modeling detail.

The work yielded some surprises, he said.

Researchers realized early on that the state inventory of irrigation water rights and the amount of irrigated acreage didn't match up. In any given year, about one-third of the water rights weren't used for various reasons, Jaeger said.

In addition, some large water rights exist on paper but haven't been exercised for years. For example, Willamette Valley lumber mills often had water rights they used to float logs in canals or ponds, but the mills have since closed or use other methods of moving timber.

Cities are major water users and the model projects that the municipal water rights they rely on may reach capacity in 30 years for the Portland area and in 60 years for Salem.

