

Intercropping: ‘Something changes when the focus is on making money from the intercrop’

Continued from Page 1

“The largest and best plots of land are already planted,” he said.

Intercropping doesn’t seem especially prevalent in any one part of the Willamette Valley, where most hazelnuts are grown, and likely depends more on the expertise and equipment of the farmer, McDaniel said.

“It seems pretty random based on the grower and the operation of the grower,” he said. “It’s more of a personal choice of the farmer.”

While seed crops are most popular, there are still some unexpected crops found growing among hazelnut rows, including Christmas trees, nursery stock, hay, strawberries and hemp. Typically, farmers already have experience with these crops before trying to grow them within orchards.

Christmas trees

“We’re a Christmas tree farm at the root, where we come from. The hazelnuts are a new crop,” said Gustavo Guerrero, whose family has intercropped about 60 acres of Christmas trees with hazelnuts near McMinnville, Ore. “It sticks to the roots we’ve had as farmers in this area.”

Usually, farmers remove the intercrop after the orchard’s fourth year but the Guerreros plan to leave the Christmas trees in place for five to six years.

They’ve used rakes to sweep up hazelnuts by hand as the trees begin producing nuts, which is highly labor-intensive, Guerrero said. They’ve broken even on the nut harvest, but the practice is worthwhile given the strong demand and prices for Christmas trees.

Due to the tight spacing, harvesting the Christmas trees is also more difficult because they can’t immediately be stacked in a trailer, he said.

“We’ve had to hand-drag the trees out of the field, which takes a little more time. But overall the conflict is minimal. It’s manageable,” Guerrero said. “We would definitely plant them again with Christmas trees. Farming is really a game of chance. You learn from that experience, which will help you in future endeavors.”

Nursery stock

Bruce Ernst, a nursery operator near St. Paul, likewise swept hazelnuts by hand in an 33-acre orchard planted with nursery stock, but doesn’t regret intercropping despite the added effort. The revenue generated by the boxwoods, which are now being dug up, was financially defensible.

“I got some good value off that land,” Ernst said. “It was worth the extra trouble.”

Ernst was reluctant to reduce his nursery production, particularly since



Bruce Ernst examines boxwoods that are intercropped in his hazelnut orchard near St. Paul, Ore.



Gustavo Guerrero examines Christmas trees that are intercropped at his family’s hazelnut orchard near McMinnville, Ore.



Perry Lucas examines hazelnut trees that are intercropped with orchard grass grown for hay at his farm near Gervais, Ore.

intercropping didn’t prevent mechanical fertilizing and pruning with a tractor between hazelnut rows.

“Those boxwoods don’t get that tall, so you can go in right over the top of them,” he said. “We never really missed a beat.”

While high in value, nursery stock wouldn’t always be a rational choice for intercropping, however.

Ernst is in a unique situation because he already

had a customer base, so he wasn’t planting on speculation.

“I had a market for the boxwood. Otherwise, if I was a regular hazelnut farmer, it wouldn’t work out,” he said.

Orchard grass hay

Perry Lucas of Gervais, Ore., similarly has buyers available for his orchard grass hay, which he intercropped with hazelnuts but also grows in fields beyond

his orchards.

The farm relies on a self-propelled haybine that Lucas bought especially to fit between tree rows, but which he uses on open fields as well.

“We’ve got the equipment and the people who buy the hay, so it’s easy to sell,” he said.

Grass seed requires machinery that’s too large for his orchards, which don’t have the space to easily maneuver a combine, Lucas said.

“We’ve got a county road that we’d have to turn around on with a lot of traffic,” he said.

‘Tractor blight’

Operating hay machinery between hazelnut rows does occasionally cause a tree to succumb to “tractor blight” but the problem hasn’t been serious enough to discourage intercropping, Lucas said.

Usually, a damaged tree doesn’t have to be replaced with a new one, though surrounding trees must be pruned to allow it to regrow, he said. “The suckers will come up and you’ll get a tree.”

Irrigation key

Decades ago, Lucas

intercropped hazelnuts with wheat but found it doesn’t align as well with his orchards in terms of irrigation.

Irrigating the trees in the height of summer would cause wheat kernal to germinate. Waiting to irrigate the trees until after the wheat was harvested wouldn’t do them much good, Lucas said.

Suspending irrigation before the wheat harvest didn’t kill or seriously hurt his trees, but it didn’t help the orchard, either, he said. “It took longer to establish.”

Orchard grass, on the other hand, can be irrigated with overhead sprinklers after the first cutting in May or June and after it’s harvested in late August, Lucas said. The hazelnut trees need that water to grow healthy roots in their early years.

Farmers who have installed drip lines in their orchards can continue irrigating the trees even while seed crops are allowed to dry out, while Christmas trees and nursery stock can be watered at the same time.

Irrigation is a particularly important consideration when intercropping because vegetation between hazelnut rows will compete with the trees, said Nik Wiman, an orchard crops specialist with Oregon State University Extension.

“If you choose to intercrop, you want to ensure you have enough irrigation to account for the moisture the intercrop is taking from the soil,” Wiman said. “The early years of growth are super important for setting up the orchard. The trees really need to be the focus.”

Wiman said the “long tradition” of growing cover crops in orchards benefits soil health by improving organic matter and water infiltration while reducing erosion.

When farmers decide to intercrop to generate revenue, however, Wiman urges caution. Many hazelnut growers intercrop success-



Mateusz Perkowski/Capital Press
Jimmy Lee grows grass seed and other crops that are intercropped at his hazelnut orchards near Lebanon, Ore.

fully, but the practice does tend to narrow the margin for error.

“Something changes when the focus is on making money from the intercrop,” Wiman said.

Pest problems

Mice and voles are a serious threat to hazelnut orchards, since can they go from feeding on the intercrop to feeding on tree bark, said Jimmy Lee, a farmer near Lebanon, Ore. Baits can mitigate the problem but extensive infestations may warrant eliminating the intercrop.

“Be extremely sharp on voles or mice. I’ve had mice kill quite a few — girdle some trees,” he said. “If something happens, you’ve got to remember your hazelnut trees are your primary crop.”

Lee said he prefers growing perennial grass and clover crops between hazelnut rows, which require fewer field operations than the spinach seed and cabbage seed he’s grown in the past.

Though these specialty seed crops offered attractive prices, they had to be re-planted each year, unlike perennial crops that last through the orchard’s early years, he said.

“It’s a hassle and if you have to work the ground 15 feet at a time, it’s a lot of costs,” Lee said, referring to the 15-foot intercrop rows.

To make intercropping pencil out, farmers should have enough acreage of both hazelnuts and the other crop to justify owning specialized equipment, he said. Open fields are more efficient to manage with larger tractors, implements and combines that won’t fit between orchard rows.

“Everything has to be small,” he said. “As the trees get bigger and bigger, everything gets tighter and tighter.”

With about 560 acres of hazelnut orchards, Lee figured he “might as well harvest some income” from between the hazelnut rows to offset costs, especially since he was familiar with seed crops.

However, the practice wouldn’t be practical for a small dedicated hazelnut producer, who’d have a hard time rationalizing the equipment costs, he said. “I wouldn’t say it’s for everybody.”

FFA: ‘I feel like there’s been a lot of built-up energy’

Continued from Page 1

annual state convention when the first COVID-19 restrictions were announced. All public gatherings were banned to prevent the spread of the virus, forcing the cancellation of the convention a week before it was scheduled to begin.

Oregon FFA leaders moved quickly to pivot to a virtual convention in 2020, then again in 2021. While not ideal, the format still allowed members to compete in events, attend workshops and elect new officers.

Kendall Castrow, a senior at Redmond High School, said she is excited to be coming out of the pandemic and reuniting with her fellow FFA members from across the state.



Kendall Castrow



Phil Ward

“I feel like there’s been a lot of built-up energy,” Castrow said. “Everybody gets to kind of release that energy and just be themselves.”

Bush, the Tillamook FFA adviser, said this year was his 15th state convention as either a teacher or student. It was at here, Bush said, that he met his best friend and the future best man at his wedding. It was also here that he decided he wanted to become an agriculture teacher in his hometown.

“The kids learn stuff here they can take home,” Bush said. “Perhaps most importantly, they learn who they are.”

Gary Walls, a senior from Ione, met Saturday morning with Corrina Smith and Dakota Anderson, both sophomores from Elgin. Walls, who joined FFA in seventh grade, had just earned his State Degree, the highest award a state FFA association can bestow on its members.

The friends said they remember feeling disappointed when the state convention was canceled in 2020. Now it was time to celebrate.

“You can feel all the positivity and great emotions in-person,” Walls said.

“I’m really a people per-

son,” Anderson added. “I like to meet new people.”

Phil Ward, Oregon FFA CEO, said this year they eclipsed 14,000 total members statewide — the most in the state organization’s history.

Ward said for the majority of these students this was their first in-person state convention. “They’re seeing it for the first time with fresh eyes,” he said. “It’s been fun to watch.”

Though Ward said he is proud of Oregon FFA for how it has responded to the pandemic, there is simply no substitute for being together in person.

“It just reminds me of what FFA is all about,” he said. “This is an organization that builds potential in young people.”

Drought: Below-average spring temperatures are most likely in PNW

Continued from Page 1

temperatures, NOAA predicted.

Across the Lower 48, 61% is in drought, the most since 2013. NOAA forecasts that drought will expand in Kansas and the Texas Gulf Coast, as well as Arizona.

Below-average spring temperatures are most likely in the Pacific Northwest. The greatest chances for above-average temperatures are in the Southern Rockies and Southern Plains.

Below-average precipitation is forecast for portions of the Central

Great Basin, Southwest, Central and Southern Rockies, and Central and Southern Plains, eastward to the Central Gulf Coast.

Above-average precipitation is most likely in parts of the Great Lakes, Ohio Valley and mid-Atlantic regions.

Drought gripped the nine Western states last spring. The drought covered less territory, 73%, but was more severe, with 23% of the region in “exceptional drought.” This year, the spring begins with 3% of the West in exceptional drought.