Money-Making Ideas To Boost Farm Income "Cowcohol" Vodka Made From Creamery's Leftover Whey

Good cows. Good cheese. Good milk vodka. All are part of the formula for success at TMK Farm/TMK Creamery in Canby, Ore.

If you've never heard of milk vodka, you aren't alone. Todd Koch, who handles the 700 acres of crops, beef cattle, and marketing for the Oregon family operation, learned about it through an article last year.

"Oregon State University was fermenting and distilling whey," he says. "We've got plenty of whey so we decided to make use of it."

Koch contacted Jason Greenwood of Divine Distillers, to make and label Cowcohol for TMK Farm/TMK Creamery. It took some time to figure out because whey is more challenging to break down and requires special yeast.

"From the cheese vat to the fermenter to the distiller, it takes about 16 days to make vodka from whey," Koch says, explaining that vodka from whey is high quality but has a low yield - about 2 or 2 1/2 percent (vs. 10 to 12 percent for grains). "It's crystal clear, and the feedback we get is that it's smooth and tastes great when served neat. It is caramelly with a sweet finish."

By the end of 2019, Cowcohol was on the market. It didn't take long for demand to create a backorder list. The farm's new product brings in additional income and much more.

"It also gives us a lot of visibility and an opportunity for customers to connect with what happens on a farm," he says, noting that it's also good for sales of the cheese which is also produced on the farm.

"We are all first generation farmers," Koch says, who started with a registered heifer he purchased in 1987 as part of a 4-H project. He and his brother focused on building a herd with good genetic seed stock, and they sold milk to a cooperative for 23 years before their sister joined them in 2017 to make cheese and open the on-farm creamery.

"We sent cheese to the World Cheese competition in Italy and won a silver medal with garlic dill cheddar curds. That's a feather in my sister's hat," Koch says.

Cowcohol milk vodka appears to be another winner.



Daniel Johnson grows hazelnuts commercially, selling the nuts for seed. He also sells seedlings. Photos show hazelnuts on the tree (left) and freshly harvested.

Hazelnuts Thrive On North Dakota Farm

Daniel Johnson is growing bigger and better hazelnuts in North Dakota. As a result, his business is growing, too. The only commercial hazelnut grower in the state, he has spent the past 40 years improving his plants. His nuts have come a long way since he picked up some wild ones in Roseau County, Minn. in 1978.

"I asked what the little, fuzzy balls were and was told they were wild hazelnuts," recalls Johnson. "I brought them home and planted them. When I started, I couldn't sell any. The past 2 years I've had no problem selling a couple hundred plants."

In 1998, he crossed his hazelnuts with some from Badgersett Farm (Vol. 26, No. 6). Still later he added genetics from other hazelnut breeders, including Norman Erickson (Vol. 33, No. 5). Progress wasn't easy, notes Johnson.

"We have heavy clay soil with a high pH," says Johnson. "Our original plants didn't do well, but now we have 4 varieties that really perform."

Johnson sells most of his hazelnuts in North Dakota. He has sold to a couple of people in Minnesota and Wisconsin willing to make the drive and pick up 100 at a time.

"About 90 percent of my customers have heard about hazelnuts by word of mouth and want to grow some for their own use in their backyard," says Johnson. "I've also given some to North Dakota State University to try at their Carrington, N. Dak. research farm."

Johnson cites pests as his biggest challenge. Squirrels usually start on the nuts at the end of August. Johnson applies hot pepper spray to discourage them.

This past year, they started eating them

in June," says Johnson. "Weevils are another pest, as well as blue jays, raccoons and turkeys. They all like hazelnuts."

This past winter he had mice girdle some bushes, while rabbits came in and mowed back quite a few. "We had 3 ft. of snow, and the rabbits ate the new wood that flowers in the spring on a bunch of 4-year-old plants," says Johnson. "They took off everything above the snow line."

Johnson concentrates on plant sales, since selling the hazelnut meats or hazelnut products requires a certified kitchen. "People want cracked nuts, not nuts in the shell," he says.

He suggests they are missing out on a good thing, noting that his wife uses them in everything from ice cream and granola to cookies, a homemade nut spread and candy.

Johnson sells nuts for seed at \$13 per pound. Seedlings are priced according to their age with 6 to 8-in. yearlings selling for \$5 each. Two-year-olds sell for \$10, and 3-year-olds sell for \$15.

"Most hazelnuts start producing at 3 to 4 years and will produce 2 lbs. of nuts by age 5," says Johnson. "They increase in production to 20 to 25 lbs. at about 20 years of age and then start backing off."

Johnson plans to start about 350 plants this year and set out about 80 one-year-old plants. "I have cloned plants that are one-year-old and will produce nuts next year. They are priced at \$35."

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"We'll grow the herd some, but we'll never be huge," Koch says about their 20-cow dairy. "We could partner with other creameries for more whey.

"I think milk vodka will be good for the dairy industry because it reaches new people. The cows have been the real heroes of our story. They create a resource that is pretty amazing. And as an industry we need to do a better job of reconnecting with consumers," Todd Koch makes Cowcohol vodka from leftover whey produced at his on-farm creamery. "It's smooth and tastes great - caramelly with a sweet finish."

he says.

TMK Farms does that by inviting people to their farm to see the cows and how the cheese is made. Check out the website for details.

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Nebraska Couple Grows Irrigated Peppermint

Every August there's a unique aroma around the Fitts farm in the Nebraska panhandle, not far from Scottsbluff. That's when Dan Fitts and his wife Becky are harvesting 33 acres of peppermint and processing it into valuable oil that eventually makes its way into toothpaste and other consumer products.

"We acquired this operation from the fellow who started it on land he'd rented from us, and so far it's working quite well," says Becky. "It's a good companion crop to the sugar beets, dry edible beans, and corn on our farm."

Becky Fitts explains that peppermint isn't grown from seeds like other crops they raise. "It's a high input crop that's grown from roots that come from a nursery. Roots cost about \$7,000 for one acre, and then we expand one acre to 10 by transplanting the roots. There's also the cost for 300 lbs. of N fertilizer per acre per year plus weed control. On the plus side, a new stand should last at least 7 years if it's well taken care of," she adds.

Nitrogen is applied during the growing season with the water used in flood irrigation. "If the plants get dry they stop growing and set seeds, which we don't want to happen," says Dan, noting that the oil is in the leaves. The other big hazards are hail, which can decimate the growing plants, and a big rainstorm in August that might wash oil off the leaves.

"We get hail around here somewhere every year, and the peppermint is high risk because we won't be able to get insurance coverage until next year. We need 4 years of crop proof to file for insurance," Dan says.

Peppermint is harvested like a forage crop.

They swath it during dry weather in mid-August, let it cure for a day or so, then chop it with a forage harvester and blow it into enclosed wagons called mint tubs. Steam is injected into the sealed tubs to produce mint vapor, which is collected from the top of the tubs and piped back to a home-built still mounted on a semi-trailer. Becky says they use about 500 gals. of diesel a day, producing steam for the tubs and moving it back to the still through condensers and separators. In the final step, oil floats to the top and is siphoned off into 55-gal. galvanized drums. The remaining 'sludge' in the tubs is composted and spread back on fields as fertilizer.

"Our crop is producing about 80 to 85 lbs. of oil per acre," says Dan, "and we'd like to improve that up to 100 or more, which is what farmers are getting in Idaho." Oil prices fluctuate, and Becky says a 55 gal. drum in the spring of 2020 would bring about \$7,000.

Dan says one unique aspect of peppermint is that once oil is placed in the stainless drums, it stores well and doesn't age. The family sells their production to Labeemint, a processor in Nampa, Idaho that producess mint flavoring for toothpaste manufacturers. "It's a management intensive crop where we strive for the highest quality oil through careful fertility and timely harvesting," Fitts says. They hope to expand their acres once they're able to insure the crop.

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Peppermint is chopped and blown into sealed wagons. Steam is injected into them to produce mint vapor, which is piped to a processor that separates the oil from water. Oil is then siphoned off into 55-gal. drums.