

One Man's Experience Harvesting Small Plot Wheat

When Leroy Keim planted a 7 by 75-ft. plot of old fashioned Red Fife wheat, he decided to harvest it all by hand.

"I had a 5-lb. bag of Red Fife seed in the freezer for a couple of years, and I was anxious to see if they would still germinate," says Keim, who described his experience in detail in the Winter 2018 issue of *Farming* magazine (www.farmingmagazine.net; ph 330 674-1892).

Keim tilled the ground in the fall of 2017 and broadcast the seed by hand. To his surprise, most of it germinated and grew 6 in. tall by the time the ground froze.

When spring came, the wheat took off again. At harvest, it was 3 ft. tall. Keim recalls sharpening his Austrian sickle, grabbing stalks by the handful, and leaving them in piles to be tied into bundles. When gathering them for bundles, he tied them with twisted stalks.

For hand threshing, Keim tried flails, both long handled and short, striking untied bundles laying on a tarp. Not satisfied, he tried a plastic water pipe, which worked better. It took him about 4 days to work through the grain.

"The method was far from perfect, and I believe I lost 20 percent of the crop," says Keim.

Keim then sifted the chaff and grain in front of a window fan set at high speed. It took some time, but did the job.

Keim tripled his plot size in the fall of 2018. He broadcast the wheat using a hand crank seeder, harrowing with a spike-toothed harrow.

At harvest, Keim used a horse-drawn

mower to cut the wheat. "I would mow one swath at a time and then gather the grain so the horse didn't walk across it," says the 70-year-old Keim.

Instead of tying off bundles with straw, Keim built a tying box. The 1 by 3-ft. box has 3 slots in the sides for twine to be laid for different length straw.

"You make sure the straw ends are even at the bottom of the box and use the twine about 3/4 of the way up the length of the straw to make the bundle," says Keim. "It's a simple way to do a small plot. You can do a quarter acre fairly well."

Not eager to thresh the wheat by hand again, Keim downloaded small thresher plans from the internet. Essentially his mini thresher is a box with a central shaft and chains to flail the grain. Bundles of grain stalks are put in the box and the top closed, or the stalks are fed in through a hole in the side. Keim runs it off his subcompact tractor.

"It ran too fast, even at idle, but it worked," says Keim. "I still had to winnow grain with the fan."

Keim is again upgrading for next year's harvest. He is going back to a small Keystone thresher, similar to one he once owned. The antique, hand-feed thresher was originally made to replace flailing. Eventually a separator with straw walker, shakers and a fan were added.

"You could buy just the cylinder or the separator, or both, and put them together," says Keim. "Mine is both, with a conveyor to move the straw into a pile."

Keim grinds the wheat, as well as rye and Cox Prolific, an old variety of corn, on a



Leroy Keim used a horse-drawn mower to cut wheat he planted with a hand crank seeder the previous fall.



Keim's small home-built thresher is belt-driven off his subcompact tractor. Bundles of grain are put in the box and the top closed, then a shaft with chains flails the grain.



small stone mill. He shares his grain with his landlady, who does a lot of baking. He has a limited amount of Red Fife seed for sale.

"I'm selling it for \$10 per pound," says Keim, who recommends small plot production. "I like growing small plots of

grain. The journey from seed to harvest to table is a satisfying one."

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Greg and Cheryl Haskett make use of surplus goat milk by turning it into ice cream. "It tastes great and lets people enjoy dairy without the side effects cow milk can cause," they say.

Goat Milk Ice Cream

Ask people to try ice cream made from goat milk and they may hesitate, but if you tell them about some of the flavors - such as "Wine & Dark Chocolate" and "Coffee & Craft Brew" - they might be intrigued.

"Goat milk ice cream tastes great and lets more people enjoy dairy without the side effects cow milk can sometimes cause," says Cheryl Haskett, who started selling Udderly Ridiculous ice cream this year with her husband, Greg.

The couple milks 1,200 goats on their Bright, Ontario, farm and needed to find new ways to make use of a growing surplus of goat milk. They took entrepreneur and ice cream-making courses, and Cheryl experimented with flavors and recipes before introducing Udderly Ridiculous premium ice cream in March. A few other companies use goat milk, but the Hasketts' niche is using an artisanal process and fresh products, sourced as locally as possible. The milk comes from the Hasketts' goats as well as other producers' goats in their cooperative, and the ice cream is made and packaged at a certified facility.

With higher nutrient levels than cow's



milk (including potassium, Vitamin A and B6, protein, iron and calcium), goat milk has a similar texture but significantly less casein, which can be a major allergen for some people.

"People tell us they love it and that they haven't been able to eat real ice cream for years," says Cheryl.

She drives a refrigerated van to food shows in southern Ontario and sells to a number of stores in the region. Udderly Ridiculous comes in six flavors: Wine & Dark Chocolate, Coffee & Craft Brew, Vanilla Bean Lavender, Lemon Cream, Peachy Mango Tango and Spiced Pumpkin. At \$8.49 to \$10 per pint, customers are often foodies who care about quality ingredients.

Haskett credits mentors for guiding them through the process and notes that marketing and raising capital are challenging. The goal is to sell their ice cream throughout Canada next year.

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Atlantic Salmon Farmed In Indiana

A seafood production facility in Indiana is hoping to produce more than 2.6 million lbs. of Atlantic salmon a year. AquaBounty Technologies, which has already produced and sold the product in Canada, says there's huge potential for raising salmon in the U.S. because about 90 percent of Atlantic salmon is currently imported and wild salmon production is plateauing.

The plant's production manager, Peter Boyer, says the proprietary AquAdvantage® salmon they're raising will look and taste exactly like Atlantic salmon that's imported. The breed has been genetically modified so the salmon grow year-around, not just in the spring and summer like conventional salmon. Approved for use by the FDA in 2015, the fish grow twice as fast as native Atlantic salmon while requiring 25 percent less food. The fish reach market size in 18 to 20 months compared to 3 years with regular salmon. The company says it's identical to Atlantic salmon with the exception of one gene.

While critics abound when the letters GMO appear, Aqua Bounty isn't deterred. Their production will be a tiny fraction of the U.S. salmon supply and they know from research that many people aren't concerned if they're eating genetically modified food.

Aqua Bounty's Director of Corporate Communications Dave Conley says, "Our product is absolutely safe. Our facility uses a recirculating water filtration system that minimizes water use. We can deliver fresh fish within a 500-mile radius with a carbon footprint that's 25 percent smaller than salmon that's imported from Norway or Chile. And because our fish aren't exposed to pathogens or parasites in the environment, we don't have to treat them with antibiotics



AquaBounty Technologies raises Atlantic salmon as a crop at their sea food production facility in Indiana. The fish reach market size in 18 to 20 mos. Photos show grow-out tanks (top) and early rearing tanks.



or chermotherapeutants. There's no danger of mercury or microplastics in the fish, so consumers can eat at much as they want."

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