

## Melanie Harrison, Harrison's Homegrown

When Melanie Harrison tells about their farming operation, you can't help but see this dairy enterprise as an evolving adventure. With a blend of knowledge and commitment, smart planning, good instincts and a dash of luck, Melanie and her husband Patrick have implemented improvements and expansion while keeping the focus on their priorities: managing cows, producing good feed and improving the land.



The Harrisons were renting a farm in Lancaster County, Pennsylvania, where they kept their cows in a conventional tie stall barn and purchased their feed. In 2008 they bought a farm in Addison and moved 80 cows to their new home in Vermont. The farm included approximately 85 acres with about half of this tillable.

Prior to the Harrisons' purchase, the previous owner's cows were long gone and the land was rented by neighboring farmers. Little was being done to replenish the land, and the Harrisons found the soils to be severely depleted, with fine fescue and other native plants dominating. As Melanie creatively puts it, the farm was "organic by neglect." The fine fescue had to be tilled out, and they used cover cropping as part of their effort to convert what was growing there to more desirable feed crops. They found that quack grass really wants to grow here, along with other native species that readily take over.

In 2009 they bought the neighboring 130-acre farm which had been farmed conventionally. The other big change in 2009 was a big drop in the milk price. But the price for organic milk was much better and the market was expanding. The Harrisons started looking for a way into the organic market. In 2011 they started the conversion to organic and began shipping to Organic Valley in November of 2012. Melanie said that the best thing they could have done for stability of the farm was converting to the organic market.

The Harrisons continued to look forward and make changes. In 2015 they added to the freestall barn. At that time, Organic Valley needed more milk to satisfy some large national contracts, so they weren't deducting anything from the milk checks for producing over the farm's established base. But the Harrisons knew that could change, so they applied to Organic Valley to increase their base to make sure the additional milk from their expansion would be included. They have worked closely with NRCS for assistance building laneways and other projects. They also sold development rights to Vermont Land Trust and used that financial infusion to pay down their mortgage.



With time and labor always at a premium, the Harrisons have instituted some practices that have increased efficiency, decreased labor, or both, and with the added benefit of improvements to animal comfort, health and well-being. The herd calves seasonally, spring and fall, with about 2/3 of the herd calving in fall. Organic Valley wants year-round milk and the Harrisons' herd provides this, but the price is better in winter. Out of season, no time is needed to check for cows in heat, and when calving is done, there is no more time spent with freshening animals here and there during the summer when there are pressing priorities in the fields, or in the midst of



winter when there are the constant challenges from the severe weather conditions. Using their “Perfect Udder Bag Pasteurizer™,” Melanie makes sure she always has colostrum on hand.

They also converted the old stanchion barn into a loose housing calf-rearing facility with a bedded pack and raise the calves with nurse cows. They bed with hay from land that is too wet to produce most desirable species or allow for early enough harvest to make it good feed, but it makes an excellent dry, clean pack. The bedded pack area opens to a barnyard. Hay is always available in round bales and the cows receive the same TMR that is fed to the milking herd.



When first born, the calves go into pens with a nurse cow and a small number of calves where they are observed closely to make sure they are all feeding, to allow for some bonding with the nurse cow and to make sure all are off to a good start. Then the whole group is moved to the larger loose housing. Melanie has observed that the calves grow very well on this management system, and since adopting this calf-rearing method they have virtually eliminated coccidiosis, scours, pneumonia and other health problems. There is no frantic bawling of hungry calves, and no one has to lug around heavy buckets of milk, deal with milk replacers, cleaning milk pails or any of the other routine chores that are required when calves are raised segregated from cows. The ratio of calves to nurse cows is approximately 25 calves to 7 cows.



The freestall barn is bright and airy, and there are mattresses in the stalls. In winter the cows are bedded with shavings, but in summer the cows are out in pasture so much that the shavings were blowing into the alleys, so they switch to bedding with sand in summer. There are sprinklers over the feed bunks and large fans to keep the summer heat from getting too stifling. Despite the extreme heat we experienced last summer, the cows were kept in the barn during the hot days and they dropped very little production.

The Harrisons have a few part-time employees, and they have found that this minimizes gaps in coverage. If something comes up for someone who is scheduled, one of the other employees is likely to be available for that shift.

When asked about what she sees as the biggest risks to their enterprise, Melanie noted that at the top of the list is the price of milk and access to markets. While this is the most immediate threat, the greatest long-term concern is the impact of climate change, which is already posing challenges in putting up high quality forages as well as being able to spread manure when and where it is needed to maintain fertility according to their NMP while protecting soil and water quality. Weather events are now typified by extremes in both severity and duration. To moderate the adverse effects, the Harrisons are constantly employing practices that will enhance the land’s resiliency, focusing their efforts on soil health. They use

cover crops to keep the soil covered, follow their nutrient management plan to maximize application of manure, and work to increase organic matter and the fertility of the soils. They manage pastures to maximize grazing which also adds more manure to the pastures, reduces labor, and contributes to healthier animals and land.

Reality is that it is more expensive to farm in the Northeast than in many other regions of the country. Melanie notes that no matter how much time the animals spend on pasture, significant infrastructure is still needed due to the Vermont climate. The Harrisons built a new heifer barn a couple years ago, and they are now starting a new barnyard project that will expand the existing barnyard area and provide increased access for cows and heifers from both barns. The design has been engineered to allow them to capture manure and runoff so this will provide more nutrients available for targeted applications while protecting nearby waterways.

Regarding participation in USDA risk management programs like crop insurance and disaster assistance, Melanie explained that from what she knows about the programs available, they didn't seem like a good fit for their operation. She also indicated that she wasn't sure how to connect with an insurance agent, being aware of only one in her area. They did sign the farm up for MPP-Dairy when it was re-released last year with changes to the program, but she was not familiar with the other dairy production and revenue programs available.

The Harrisons brought 80 cows from Pennsylvania to Vermont and are now milking 160. Their facilities are efficient, the feed they produce is high quality, and the soil is greatly improved under their conscientious care. So, once the new barnyard project is complete, what will they do for their next innovation?



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