## **Building A Dairy From An Impossible Dream**

By Raylene Nickel

While reared as a city kid in Peshtigo, Wisconsin, Andrew (Drew) Votis learned just enough about farming to know that he wanted grass-based dairying to be his career and way of life. But he well recognized his lack of practical experience.

After graduating from the University of Wisconsin-Green Bay with a degree in biology and environmental sciences, he began searching for ways to gain experience in grass-based dairying. Seeking a real-world learning environment, he made phone calls, wrote e-mails and asked questions.

His search soon led to the Dairy Grazing Apprenticeship (DGA). The fully accredited, national two-year program gives beginners the chance to gain experience while working as paid employees for established grass-based dairy producers – Mentor Dairy Graziers – who mentor the development of managerial skills in Dairy GRazing Apprentices.

Drew applied for a position on a dairy farm and was soon matched with Mentor Dairy Graziers Jim and Tammy Schreiner, Athens, Wisconsin. Two years later, on Dec. 31, 2013, Drew completed his DGA Apprenticeship with the Schreiners.

By midsummer of 2015 the grass-based dairy farm of 26-year-old Drew and his wife, Ashley, was already in full swing. Operating on a farm just seven miles down the road from the Schreiners, the young couple now own a herd of 43 cows. They rent the farm's milking facilities and pasture.

"I was very nervous in the beginning, but we made it through the first winter; now I feel a lot better," says Drew. "Milk prices went way down after we started milking. But that just made us get more efficient."

Learning the finer points of efficient grass-based dairy production was a benefit from Drew's work with the Schreiners. Yet his own willingness to pay attention and study the hallmarks of efficiency have played to his advantage as well.

From the very start of his search for a meaningful career path Drew put his aptitude for watchfulness to work. When the end of his college years drew near, pressing the need for a career choice, he thought often of his enduring interest in farming, despite the passing of time. It was back in high school that his interest first surfaced.



**Mentor Grazier** Jim and Tammy Schreiner

**Apprentice**Drew Votis

**Location** Athens, WI



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"I really enjoyed spending time on the dairy farms where my two best friends lived," he says. "Then, after I started dating Ashley in high school, I was able to help her grandpa with his cows."

Later, as a college student, Drew's coursework exposed him to the basic concepts of livestock grazing. With his farming interest further fueled, Drew applied for and completed an internship on an organic farm.

"I loved it!" he says. "The entire next semester I thought about ways I might get into grazing. I tried to figure out how I could make a good living from the grazing of livestock. I was most interested in doing some kind of polyculture, involving the grass-based raising of different kinds of animals in symbiotic ways."

But because such systems are highly individualistic, their economic performance runs a broad, unpredictable gamut.

"I began to think that milking cows might be better for raising a family – from an economic perspective," he says. "But I'd always been told that it was impossible to start because of the need for a large amount of start-up capital." Thus began Drew's studious search for the information and experiences that would unveil the answers to his questions.

Discovering the opportunities available through the DGA was pivotal to his career search. Completing an Apprenticeship under the mentorship of the Schreiners equipped Drew with the knowledge and experiences he would need to eventually test his fledgling management expertise on his own dairy operation.

While observing how knowledge and experience feed the process of making strategic, whole-farm management decisions, Drew learned subtle but critical lessons. "I tried to help him understand my reasoning behind day-to-day decisions," says Jim Schreiner.

When apprentices and other beginning farmers like Drew invest the effort in learning the rationale behind daily management practices, they dramatically increase the odds of making good decisions in their own operations.

"A lack of experience is the biggest risk facing beginning farmers; you could inherit a million dollars, and without management skill and experience you could still lose the farm," says grazing-based dairy farmer Joe Tomandl, III co-founder and executive director of DGA.

"We encourage DGA participants to go into the program with the idea that they're really going to dive into their job and learn something – it's much more than just a job," he says. "While working with an established farmer, they have the chance to see what it could be like to be the one paying the bills. If you're going to run your own farm, you need to be very engaged in what's going on."

Engagement leads to critical observations that can help managers sidestep expensive mistakes. "So often, it's the little things – little oversights – that beginning farmers don't take into account, that can make a real difference financially," says Joe. "On a dairy operation, details related to time management, facility management and milk quality all add up, presenting areas where costly mistakes can be made."

Drew paid close attention to the management steps needed to build the efficient production system he saw working so smoothly in Jim's operation.

"I learned a lot from Jim," says Drew. "Along with so many other things, I learned how to produce a good amount of high-quality milk without too many inputs. I'm doing my best to model my whole system after his, which is both practical and profitable. He doesn't use an input unless it's going to return a high margin of profit."

## **Building an Efficient Production System**

Drew and Ashley follow these guiding practices as they build a whole-farm production system they intend to be both practical and profitable over the long term:

*Invest wisely and manage debt.* "We're trying to figure out how to make good investments," says Drew. "We are tending to invest in things that gain value over time. We have invested in cows, and we hope to eventually invest in land."

They presently rent a farmstead with 40 acres of pasture. The farmstead has a swing-six parlor, a loose-housing barn and an outdoor, cement-surfaced feeding strip. They rent the farm from Brad Zettler, a neighboring organic dairy farmer and grazier. "We really appreciate the help and advice he has given us," says Drew.

The young couple bought a home in the nearby town of Bern after Ashley acquired a position in Edgar as an elementary teacher. Drew commutes the seven miles to their dairy.

Managing debt by building equity in cattle slowly was a principle Drew learned firsthand while working with the Schreiners. During Drew's Apprenticeship, he had the opportunity to buy every third heifer calf that was born. The purchase price of each heifer was deducted from Drew's wages.

To compensate the Schreiners for the feed costs of these cattle, Drew paid a dollar a day per head. By the time Drew and Ashley started their dairy, the heifers they had purchased from the Schreiners' herd numbered 14. Most of these freshened after the Votises began milking on their own.

After finding a farm to rent, the Votises expanded the herd to a size providing a more economically viable scale of production. They purchased 18 dairy cows from a neighboring producer who was retiring. They also bought from the neighbor a small line of equipment including tractors and haying equipment. "We want to keep our line of machinery simple because as much as possible, we want to limit investments in equipment," says Drew.

The haying machinery lets Drew emulate Jim's practice of containing the cost of purchased feed by putting up his own hay and being as self-sufficient as possible. Drew puts up hay for his cattle as high-moisture baleage harvested from neighbors' fields. He pays a per-bale rate for the forage.

To finance the relatively modest purchases of cattle and equipment, Drew applied for and received a low-interest beginning farmer loan from the USDA Farm Service Agency. The equity the young couple had already built in cattle helped them qualify for the loan.

**Provide cost-effective feed for cattle.** To operate efficiently, Drew models Jim's practice of feeding cows high-quality feeds as affordably as possible. Forage is the cornerstone of the ration.

"The key is to feed highly nutritious feeds cheaply," says Drew. "Grazing is a big part of that because pasture is reasonably priced."

During the grazing season 50 percent of the dry matter in the ration comes from pasture forages, and 25 percent comes from corn silage. The remaining 25 percent comes from concentrates, with the cows receiving 16 pounds per head per day of a ration comprising half ground corn and half a mixture of soybean meal, roasted beans, distillers grain and mineral. In winter, Drew feeds the same mix but replaces the pasture with high-quality baleage.

Pasture forages vary by paddock. Intermediate ryegrass and white clover comprise much of the plant population. A recent broadcasting of Italian ryegrass further diversifies this planting. "The rest of the farm grows canary grass, June grass, and white clover," says Drew. "The June grass makes a sod that holds together really well. I don't have to worry about tearing it up or making ruts when I spread manure on the pasture."

The 40 acres of pasture is crossfenced into four paddocks. "A lane runs down the middle of the 40 acres, and there are two paddocks on each side," says Drew. "I use polywire to crossfence within the paddocks and adjust the grazing area to growing conditions. It takes 21 to 28 days to get around the whole farm in one grazing rotation."

Drew plans for his grazing season to extend from early May through early November.

*Manage for a healthful level of production.* Maintaining excellent cow health is a critical and cost-effective goal in Drew's feeding system. By feeding primarily high-quality forages he intends for cows to produce well but not so much that their metabolic systems are stressed. Like Jim, he thus hopes to avoid costly metabolic disorders like milk fever and ketosis.

"During the time I spent with Jim, he rarely had a sick cow in a herd of 70 cows," says Drew. "During the entire two years I was there, he had just two cows with milk fever and barely a handful with ketosis. At every other dairy I've come into contact with it seemed like nearly every cow was in danger of getting milk fever at freshening.

"Jim's cows have no calving difficulties either, and he very rarely has sick calves," says Drew. "It's extremely rare to lose a calf at his place. It's my goal, too, not to lose a calf after it's been born alive."

*Maintain low-cost overwintering facilities.* Overwintering cows in a loose-housing barn lets Drew keep investment in housing to a minimum while increasing cow comfort and soil organic matter levels on his farm.

"I bed cows with hay or sawdust, and the pack gives off heat," he says. "The cows eat outside at the feed strip, so they are not manuring as much on the clean bedding. I like the bedded pack as long as bedding can be found for a cheap price. It's a nice way to bring in a carbon source from off farm, compost it into a fertile product and then spread it onto my pastures. I think improving the organic matter on our farm ground is very important.

"The bedded pack is also excellent for cow comfort," he adds. "They can get up easily; they express heats well, and when managed right, it keeps mastitis pathogens to a minimum."

The outdoor, cement-based feeding strip provides an efficient way to reduce waste. The cement strip is 100 feet in length with a metal pipe running down the center. Drew feeds corn silage and ground feed below the pipe, which keeps cattle from trampling on the feed and soiling it with manure.

"Because of grazing in summer and wintering on a bedded pack, I believe our cows are going to last a long time," says Drew. "We have some older cows that are doing really well."

Learning the finer points of grass-based management from Jim and Tammy has given Drew and Ashley solid ground to find their own footing.

"We couldn't have done this by ourselves," says Drew. "To get started in dairying you have to have a lot of good help and a lot of good advice. You have to pay attention and don't think you know everything. Learn as much as you can so that you're prepared when it's time for you to make your own decisions."

Perhaps more than any other one thing, it's that observing and learning of the fine art of multifaceted decision making that will make or break a beginning farmer's chances of shaping a viable livelihood from a grass-based dairy or any farm or ranch enterprise. Mentors play a pivotal role in this learning.

"The person who pays the bills and owns and ultimately runs the business needs to help employees and apprentices understand the thought processes behind daily decision," says Joe Tomandl. "Take time to show them why you feed what you're feeding, for instance; why you move the cattle to certain paddocks, and how you go about deciding how much grass to allocate for a grazing period.

"We're hoping to create from our employees future farm operators and farm owners," he adds. "Rather than specializing in one area of the operation as they might if they worked at a large dairy, they're learning to be big-picture people, managing cows, calves, grass and facilities in one package."

Drew and Ashley Votis deeply appreciate such lessons learned from Jim and Tammy Schreiner. The learning has opened doors to the life they had from the outset hoped they'd find on a grass-based dairy farm. This has gained even more importance with the birth of their daughter, Amelia, in August of 2015.

"Ashley and Amelia come out to the farm every day to help me," says Drew. "There aren't a lot of jobs like this, where you can have your family with you while you work."