This Small Farm Succeeds The Organic Way

he traditional approach to profit in the modern dairy industry is to coax the most milk from each cow by intensively managing her every need, specifically her nutritional requirements, and then to accept the current commodity price for that milk. Oak Grove Dairy in Marshall, Virginia, has taken a different approach that relies heavily on the traditional strengths of the Ayrshire cow to develop a profitable enterprise in the dairy industry. Their plan of producing and selling cheese and butter in a small affluent marketing area includes organic production and low input farming that consumers can follow from start to finish on one location. The operation is the brainchild of owner Katherine McLeod, who has a particular interest in organic and environmentally friendly farming. The six hundred acre farm in northern Virginia is owned by McLeod and run by farm manager Ryan Hagenston, herd manager Joe Witscher and cheese maker Ross Gagnon. "We don't want this to be some sort of exclusive hobby," McLeod recently told the Washington Post. "We would very much like to show that organic farming can also be economically successful." Oak Grove will be making their records available through cooperation with Virginia Tech in order to set an example that other aspiring small-scale organic farmers can follow. In addition to the herd of Ayrshire cows, Oak Grove is home to a flock of Horned Dorset sheep and Tamworth hogs. As Gagnon puts it, "We are less devoted to the organic, 'back to the earth' concept and more focused on showing that a quality, handcrafted product can be produced and marketed in a profitable way."

The current herd consists of all young cows, as it was assembled through purchases of open and bred heifers from a variety of Ayrshire herds. Joe Witscher has nothing but compliments when asked about the supportive Ayrshire people that helped to put the herd together. After the farm staff "just started calling farms we saw in the Ayrshire Digest", Oak Grove soon received assistance from several people. Neil Kittle, who purchased about 60% of the herd in Canada for Oak Grove, gave the farm a great base to build on by ensuring that there were sound genetics behind the animals he sent down to Virginia. Palmyra Farm in Maryland and the Ohio Ayrshire Sales were the other primary sources for the first groups of purchased animals. The first cows freshened in December 2001. The backgrounds of these animals quickly became apparent, as confinement-raised animals were slower to adapt to the extensive grazing required at Oak Grove. As the first Oak Grove-raised heifers calve this fall, Witscher is seeing a marked improvement in daily milk due to their conditioning for a pasture based ration as heifers.

There are 68 cows passing through the single four Westphalia parlor twice a day presently, although expectations are for 90 head by spring. The herd is on official DHI test and is averaging about 8,000 pounds of milk per cow with 4.4% fat and 3.8% protein. The fat test drops to 4.0% in the summer, while protein will drop to around 3.1%. The cows must harvest their own feed during the warmer months of the year and are fed hay made on the farm during the colder months. Each cow gets just 2-3 pounds of organically raised rolled corn per day to help maintain energy needed for reproduction. No other supplements or forages are fed. Witscher estimates that the body condition score of the herd averages 2.5, a little on the thin side, but adequate. The top cows in the herd will make records of 14,000 - 15,000pounds of milk. The herd is given access to fresh pasture after each milking when grasses are lush and will inhabit one paddock for about five days as pasture growth slows in the summer and fall. Mycotoxins are a problem in the long fescues that dominate the pastures of the farm at this point, further inhibiting production. The long-term goal at Oak Grove is to develop the pastures using native grasses, legumes and clovers that will yield higher returns, a process that will be trial and error each growing season.

While many grazing operations find that seasonal calving maximizes returns from the peak grazing season, Oak Grove, on the other hand, feels that in order to maintain consistent production of their products throughout the year, there must be a consistent supply of milk. Oak Grove is producing a finished product that increases in demand during the holiday season, a time when most seasonal dairymen are shutting down for a few months. The market for high quality butter for cooking and specialty cheeses increases sharply in the fall and winter months. Witscher does try to calve out a group of cows in the early spring and in the early fall as he prefers to work with large, uniform groups of heifers.

The Oak Grove team approaches the selection of genetics for the herd with enthusiasm, working to increase their knowledge of bloodlines in the breed and striving to select sires from cows that they feel could be successful in a grazing operation. The primary selection emphasis is on fat and protein levels and feet and leg improvement. Breeding almost 100% AI, they have used sires such as Lot, Cornelius, Brendan and a variety of young sires, with a particular preference for bulls from farms in the Mid-At-

lantic region. As generations pass at the farm, Joe Witscher feels that the cows that are successful in this type of operation will make their mark and those that can't will be weeded out. He feels that time and genetics will yield a "Southeast Grazing" Ayrshire that will appeal to grazers throughout the south. Oak Grove is committed to registering all their Ayrshires and have registered the few grades acquired during their startup in the ABA's Genetic Recovery program.

Organic farming presents a unique set of challenges for the staff and cows at Oak Grove. Reliance on pasture and hay as the primary feeds lessens the reliance on costly organic proteins, but simple health issues can be daunting problems without antibiotics to rely on. Anything above a mild case of mastitis can result in a cow leaving the herd. Udder health and cleanliness are paramount in the milking parlor while the loose housing and low production levels help keep mastitis incidence to a bare minimum. Hairy Foot Warts, which seem to plague every expansion in the dairy industry, cannot even be easily treated with drugs on a conventional dairy, and are therefore grounds for culling at Oak Grove to avoid an outbreak in the herd. No Lutalyse or GNRH can be used, so reproductive management becomes more of a concern in this herd. The big advantage of the high forage diet and lower production levels is the near absence of Ketosis, Milk Fever and Displaced Abomasums (DA's) in the herd. In fact, Witscher reports one case of Milk Fever as the lone metabolic disorder in the herd's history. The biggest health concern by far, he says, is keeping the herd's feet sound so they can get out to graze every day. A case of laminitis or an abscess can keep a cow in the loafing shed and out of the pasture for a day or more. Fly problems during the hot summer months are difficult to deal with organically, although Oak Grove has had just one case of pink eye. This is an impressive record for the southeast and one the herd vet attributes to the hardy Ayrshire cattle.

The Ayrshire breed was the choice of the management team at Oak Grove for a variety of reasons. Joe Witscher has worked with many breeds of dairy cows, on several more conventional operations. He says that the Ayrshire is ideal for the Oak Grove production scheme due to her moderate frame size and hardiness. He estimates that the herd averages 900 to 1,100 pounds mature body weight. Witscher states that the cow's ability to graze and withstand the heat of the Virginia summer is a decided advantage over other breeds. He reports that the cows are mellow and have been great to work withsince their arrival on the farm through-

out 2001. The higher components found in Ayrshire milk were a further attraction and Ross Gagnon, the cheese maker, prefers the whiter milk, and resulting products, over the more yellow color achieved from the milk of other high-component breeds. He feels consumers prefer this clean white product over the lightly colored product he might otherwise achieve (dark yellow\orange cheese products are the result of dyes used in many cheeses today).

The end result of this operation is the premium cheese and butter that is produced at the farm's brand new processing facility. With the cheese averaging about \$25/pound and the butter \$20/pound, Witscher estimates a \$40/cwt milk price. The products are currently sold at The Farm Store in Plains, Virginia, and at Dean & Deluca in Georgetown, ensuring Oak Grove an elite clientele that appreciates the added value and traditional craftsmanship that go into the products. Future plans call for a small farm store on-site. The cheeses currently consist of a long-aged farmhouse Cheddar and a Ricotta cheese. Butter and Ricotta sales have been brisk. Limited quantities of the aged cheese have been sold, but a steady supply won't come until March or April as the first large batches of cheese made here mature. Gagnon is quick to point out that the premium price tags put on his products are not inflated just because they are organic and farm-made, rather, they reflect the extra work, effort and manpower that goes into making this premium product. He feels safe in the knowledge that Oak Grove's customers appreciate the history and craftsmanship that is put into each product. The Tamworth hogs are fed the whey, a byproduct of the cheese making enterprise as Oak Grove endeavors to be as efficient as possible. The farm will also be marketing lamb and pork products produced on the farm.

The goal of Oak Grove is to provide an example of how a small farm can be successful in today's rapidly expanding dairy industry and to communicate their success to other family farmers that are interested in adding value to their farms. The Ayrshire cow is part of that success and has found a niche at Oak Grove Dairy.