Bear Creek Sheep Station showcases sustainability, good management practices

By Peggy Coffeen
Dairy/Livestock Editor

Gently rolling verdant hillsides and a picturesque 1890s red barn create an idyllic setting for Bear Creek Sheep Station. Beyond its beauty, this 80-acre parcel provides a wealth of natural resources that Bob and Penny Leder use to raise a sustainable, grass-based flock of 90 ewes and commercial feeder lambs.

The Leders began raising sheep 25 years ago at their farm located near Bear Creek, just a few miles south of Clintonville. A large animal veterinarian by trade, Bob has extensive knowledge of animal science and husbandry. Since the beginning, their goal has been to raise lamb and wool in an agriculturally sustainable way by using conservation methods and practicing good land stewardship. With that in mind, the Leders converted their highly erodible land from row crops to rotation pastures.

To improve profitability and maximize their major feed source, the Leders synchronize lambing with the grass growing season. This means that April is a busy month for lambing as ewes will return to pasture by early May with their lambs at their side. According to Bob, timing the new growth of grass with fresh ewes ultimately decreases the lactation cost for ewes and increases the lambing rate, resulting in more lambs with reduced cost of production.

To further maximize their flock's potential, the Leders have focused on careful genetic selection. The milking and mothering characteristics of breeds like Dorset and East Friesian are desired for replacement ewes, while rotating in black-faced breeds like Oxford, Hampshire and Shropshire provide growth and muscle. The South African also been introduced to offer benefits in size and growth as well as wool quality.

The Leders have also introduced the Booroola F+ gene into their breeding program. This gene promotes prolificacy, which means that it makes multiple births a highly heritable trait. The result of their meticulous attention to selecting for their desired traits is larger litter sizes coupled with good milk production and mothering skills. This has been a critical factor in helping the Leders achieve their goal of weaning 200 percent of the lamb crop. After weaning, the feeder lambs are sold in late summer or early fall. They are also finding a marketing opportunity for ewe lambs as other sheep breeders as far as Pennsylvania and Ohio seek the Leders' breeding stock. Again, increasing the litter size and lambing rate has enabled them to both raise their own flock replacements and sell additional offspring.

Lambing larger litters requires careful management and attention during lambing season. To prepare ewes for lambing, they are vaccinated four weeks pre-lambing with a CDT vaccine to prevent overeating disease and tetanus. In the following weeks, ewes are sheared so that their udders and back ends are more easily observed for signs of birthing. Sheared ewes also take up less room in the barn. Then, the ewes are grouped according to lambing date and nutritional needs. Large litter ewes are offered up to 1.5 pounds of whole grain barley daily, while the main flock receives .5 pounds, or less for late-lambers.

In order to best accommodate ewes during lambing, the Leders have configured both group and individual pens in their barn. A stock of wooden gates that can be easily set nected with aluminum rods or twine provides the flexibility needed to create individual pens, or lambing jugs, among the larger groups. The individual stalls are important for imprinting and bonding the mother with her babies. They also utilize a few horse box stalls in the barn as a special needs area for ewes and lambs that require extra attention or for those that had quadruplets.

According to Bob, getting ewes and lambs off to the right start begins before the lamb hits the ground. During the five weeks of the lambing season, Bob and Penny take their turns checking ewes throughout the night at 10 p.m., 2 a.m. and 5 a.m. The purpose of this schedule, he said, is not only for assisting with difficult births, but also to prevent mismothering. If a couple of ewes lamb at the same time, they may interfere with each other's lambs or try to steal them.

Lambs are processed soon after birth. Bob optimizes to band lambs after they have received a full feeding of colostrum and before their first bowel movement. To reduce pain, he applies a local anesthetic in a ring around the banded area. Lambs then receive small plastic ear tags for identification on the farm, and they receive an official tag prior to being sold. Because tags are small and difficult to read, the Leders have developed another system to aid if quickly referencing their flock. They use an aerosol spray to paint numbers on the backs of the mother and her babies. Each family has the same number, which indicates the order in which she lambed. They also color-code the numbers to coincide with litter size. For example, green is used for a single birth, red for twins, blue for triplets and orange for quadruplets. Because some of the ewes have a

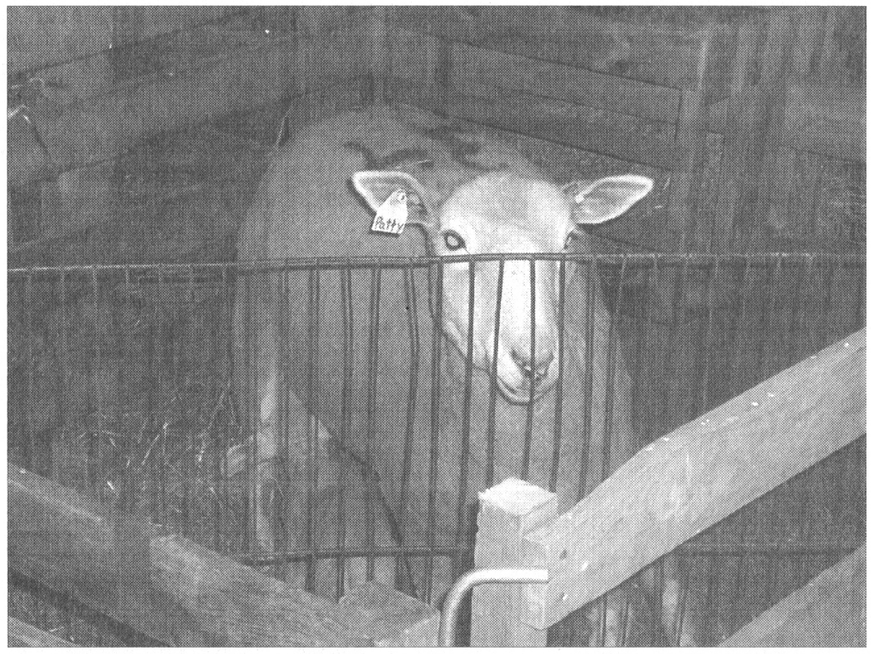

Photo by Peggy Coffeen

To help in identifying this ewe's family, the Leders have marked her and her lambs with a number to signify that she was the 34th ewe to lamb this season. As part of their color-coded method, the blue color indicates that she had triplets.

number is painted on the back of their neck instead of across their back. These numbers stay on half way through the summer, Bob said, and they make managing the herd much easier.

After lambing, Bob and Penny monitor the ewes and their lambs before moving them from the jugs to the mixing pens which group around a dozen ewes. Older ewes may only stay in the jug for a day, while younger ewes may require four to five days to bond. They also watch closely to make sure weaker lambs do not get pushed back by stronger ones. The more vigorous lambs are allowed to feed, and then a wire panel is used to separate them within the pen while the other lambs nurse. This builds the confidence of the weaker lambs, and Penny noted that because the stronger lamb is still kept in the same jug and the mother can see and smell it, they have found success with this practice.

With the large litter size that has been bred into their flock, the Leders may decide that one ewe cannot handle all of her babies. In a process called grafting, they take a lamb from a large litter and give it to a single-litter ewe. To increase the rate of acceptance, Bob explained that they may use a slime graft to trick the ewe into thinking that a baby is hers. This is done by covering the lamb with the other ewe's birthing fluids. Timing is key, he said, because this method is most successful prior to the lamb being licked off.

Another method of grafting the Leders use is stanchion grafting. They constructed plywood stanchions that fit in the jugs. These stanchions hold the ewe in place and give her access to feed and water while the lambs nurse. It may take two days to a week for the ewe to accept the lamb, but Penny said they have had around an 80 percent success rate with this grafting process.

Bonding the mother with her babies, whether they are her natural-born or have been grafted from another litter, is imperative in setting up the lambs for success. Bonding among the family unit has to be tight, Penny said. The ewe needs to know which babies are hers before being turned out to graze. Once on pasture, bonding will never get better.

No doubt, the Leders have become renowned leaders in the commercial grass-fed lamb business over the past 25 years. Penny noted that there is a growing interest in raising sheep, citing the increase in the price of lamb, growing world demand for protein and the emergence of local ethnic markets that prefer lamb. For people interested in starting their own flock, she recommends first looking at what resources are available. Some may have the land, buildings and human resources for lambing, while others may be better suited for purchasing feeder lambs and finishing them for market. Careful management and proper animal care remain key in a profitable sheep enterprise.