



Farm Management System

Annual Cycle – Following the Seasons

We follow the traditional northern California sheep management cycle of breeding in the fall, lambing in the spring, and weaning and shearing in early summer. Most sheep are seasonally polyestrous, which means they come into heat in the fall when the days begin to get shorter. By breeding in the fall, we do not have to employ any additional methods or hormones to get the ewes bred. We do supplement the ewes with grain starting about 3 weeks before breeding, as this boost of nutrition increases the probability that the ewes will be successfully impregnated. Ewes are given their annual vaccinations and then put in with the ram around late September.

We breed so that lambs will start arriving in mid to late February. This timing corresponds perfectly to the greatly increased pasture grass growth that occurs in the spring. Ewes nursing lambs have a high nutrition demand that can be easily met by the spring grass growth that occurs particularly from March to May. Lambs also start eating grass within a few days of birth, so they can learn how to graze alongside the ewes while still nursing. We lamb on pasture, but if the weather is cold, windy, and/or rainy, newborn and young lambs are put in a lambing shed with their moms to protect them from the elements for a day or two. This helps ensure the lambs receive adequate colostrum, remain warm, and have the best chance to survive and thrive.

Our goal is to wean the lambs and shear the ewes on the same day – around late May. We want to get the ewes sheared before the hot summer weather arrives. We hire a professional shearer, as this job requires a specific set of skills. The sheep are sheared in a pattern so that the fleece comes off in one piece, which is desirable for then processing the wool into roving, yarn, or other wool products. We then separate the ewes from the lambs and give the lambs their booster shots. The ewes are transported to a property with dry grass; this helps them to more quickly stop lactating, which helps prevent mastitis. The lambs are put on irrigated pasture so they can keep growing.

Pasture irrigation season ends in mid-October, but there is typically grass available for about another month. We monitor the lambs for adequate backfat and muscle, to ensure they are of the right conformation to produce a quality meat product. In November, the lambs are custom harvested at Superior Farms in Dixon or by a local butcher.

Sheep Health & Welfare

- We believe strongly in providing our sheep happy and healthy lives. We have a high standard of animal welfare, and prioritize an annual preventative health care regiment, along with providing adequate nutrition through pasture and supplements. We consistently monitor the flock for any signs of sickness or discomfort, and work with our vet as needed to alleviate those issues as quickly as possible.
- Our sheep are vaccinated annually. They are given anthelmintics (wormers) and antibiotics only as needed to treat any sickness that impairs their well-being. We follow label standards of withdrawal periods, to ensure that no animals processed into meat that will have residues.
- We strategically vaccinate the ewes in September just before they are bred. By doing this, the lambs also receive the benefit of the vaccine antibodies (passive immunity) through the ewes' colostrum after they are born.

Pasture-Based Grazing Management & Natural Resources Stewardship

We use a pasture-based system, which allows:

- sheep to exhibit their natural grazing behavior,
- promotes overall sheep and flock health (especially parasite control)
- natural vegetation management – fuels reduction, weed control, brush control
- Sheep dropping manure and trampling vegetation helps incorporate nutrients back into the soil
- We utilize rotational grazing to ensure that no areas are overgrazed, and to better maximize pasture growth throughout the season. During the primary grazing season, we typically move the flock to a new paddock every 3 days. This rotation also helps to manage the flock's parasite load. (Internal parasites exist in every flock, and must be managed through various methods to keep the level low enough so as to not impact overall sheep health).
- We don't apply any synthetic chemicals or fertilizer to our pastures.
- We utilize grazing to control weeds, brush, and blackberries.
- We utilize grazing to reduce vegetation, which minimizes the risk of fire.

Coexist with Wildlife

- We utilize portable electric net fences, which are moved as the sheep rotate through a series of paddocks. This allows the rest of the property to be fully accessible to the variety of wildlife that move through our area. In addition, the netted fences are easy for wildlife to navigate through or over. (of course this means we have to make sure the fence stays up to keep the sheep in!)
- We use multiple non-lethal predator control tools, which focus on deterrence:
 - Electric fence
 - Guardian animals
 - We also utilize strategically-placed lights around areas where the animals bed down, to deter predators.
 - We lamb in paddocks right next to the house, that have the least risk of predator traffic. This also allows us to easily monitor the ewes and lambs, and to provide assistance if needed.

Pasture Establishment

The Millertown property was purchased in Fall 2015, and was extensively covered in starthistle that had been mowed for many years by the previous landowner. In the fall, right before the first good rain, we used a tractor with a no-till drill to plant ryegrass and a "sodbuster" mix (triticale, mustard, bell beans, biomster peas, and vetch). The goal was to grow pasture plants that would start outcompeting the starthistle and building the soil organic matter. The no-till drill creates multiple shallow furrows, drops in the seeds, and covers it back with a shallow layer of soil. The advantage of the no-till drill in this situation is to minimize soil disturbance so as to not bring the multiple years of starthistle seed to the surface. The pasture established good vegetative cover throughout the winter and early spring.

In March 2016 we again utilized the no-till drill to plant an irrigated pasture mix (Flecha Tall Fescue, Gala Brome, Harvester Orchardgrass, Picadilly Perennial Ryegrass (Diploid), Ladino Clover, Broadleaf Trefoil and Red Clover). Irrigation was established in April, so as the spring rains stopped, the pasture could continue to be irrigated. When the sheep arrived in the summer, we began utilizing rotational grazing to maximize pasture production, soil health, and animal health.