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Belflower Farm - CRAFT Tour

Katie and Jeff Belflower

www.belflowerfarm.com

see website for contact info, pictures, and more information

We purchased our farm in late 2014 and spent most of 2015 remodeling our home and installing fence and water infrastructure for livestock. Cattle and sheep arrived during the winter of 2015/2016. At about the same time our son Henry was born in September 2016, Jeff's parents purchased an adjoining farm (not a coincidence). Currently, we are managing about 75 acres of fenced pasture and 30 acres of forest/gardens/homesteads. This includes one small leased pasture nearby.

We have about 30 cows and 30 sheep. Breeds were chosen based on adaptation to our climate, fescue pastures, and management. We are big fans of South Poll cattle (see brochure).

About 70 percent of our meat is sold at the Charlotte Farmer's market and 30 percent is sold directly from the farm or in bulk to local families. Almost half of our farm income comes from breeding stock and live animal sales to other farmers.

A list of everything the livestock consume other than pasture plants:

- Fertrell and Redmond mineral products (OMRI listed)
- North American Kelp and Wick's Livestock Nutrition Apple Cider Vinegar in early summer to help prevent pinkeye and control flies
- Non-organic hay for winter feeding from local farmers from fields that were not sprayed, and preferably from fields where chicken litter was used rather than synthetic fertilizer
- Well water: We have about 7,000 feet of underground pressurized pipes that supply 16 freeze-proof permanent watering facilities (see grazing records) with clean well water
- Organic alfalfa pellets from Tractor Supply are used sparingly to help move livestock when handling or loading

We have never wormed or vaccinated and have provided almost no veterinary care.

Our main focus is the management and continuous improvement of our pastures through rotational grazing. Long-term rotational grazing management with rest periods allowing full-recovery of pasture plants between grazing events can provide a myriad of benefits including increased organic matter, rainfall absorption, species diversity, and forage production, as well as improved mineral and nutrient cycles. A 1% increase in organic matter over 1 acre sequesters the equivalent of 36 tons of Carbon Dioxide and allows the soil to absorb 20,000 more gallons of water. Studies have shown that rotationally grazing cattle can take degraded southeastern soils from less than 1% organic matter to close to 5% in less than 20 years. Our pastures started out at less than 0.5%; we are making slow progress and are excited about what our organic matter levels might be in 20 years.

We do not farm full-time. Katie stays very busy keeping Henry well-fed and out of trouble and still finds time to help farm and garden and manage most of the marketing and record-keeping for the farm. After leaving USDA-NRCS in 2018, Jeff works from home and offers civil engineering services and stream restoration and livestock water supply system installation.

More written thoughts = less public speaking!:

- The ability to withstand drought will be key to our future. We received NCDA cost-share to build a pond and a WNC AgOptions grant to install 1,000 feet of underground 3” PVC pipe with risers that hook up to a K-Line irrigation system (see handout) that can water our gardens and some of our pastures. We plan to expand this system by adding an electric pump and installing more underground pipe and risers.
- Food producing silvopasture! Our friends at A Way of Life Farm have gotten us excited about planting trees (mainly persimmons, pecans, and honey locust) in our pastures. Pecans and honey locust will fix nitrogen, honey locust trees produce nutritious seed pods for cows and sheep, and all three will add shade to facilitate rotational grazing. Additional interior fencing will be required to protect seedlings from livestock.
- Endophyte infected fescue grass is pretty neat. The endophyte is an internal fungus that has a symbiotic relationship with fescue and delivers many of the miraculous benefits we know fungi can provide to crops (no compost tea required!). Unfortunately, this endophyte produces a compound that is harmful to cows and other ruminants. The negative impacts are most severe in the piedmont region. We saw the damage firsthand when we started out with Angus and Hereford cattle and had a bunch of limping cows that would not get pregnant or stay bred. This problem motivated Teddy Gentry to begin creating the South Poll breed in the 1980s, and now you can find many 20-year-old South Polls on his farm that have had a calf every year. Most southeastern extension departments are advocating that you spray endophyte infected pastures and replant with other types of grass. Would it not make more sense to develop a cattle herd that thrives on the productive pastures that we already have? We want lots of diversity, but do not mind having endophyte infected fescue as our most predominant species.

Resources:

- <https://subscribe.whiteoakpastures.com/life-cycle-assessment/>
- <http://www.polyfacefarms.com/resources/>
- <https://www.stockmangrassfarmer.com/index.php>
- <http://greenpasturesfarm.net/>
- <https://southpoll.com/>
- <https://cefs.ncsu.edu/extension-and-outreach/amazing-grazing/>
- <https://cefs.ncsu.edu/food-system-initiatives/nc-choices/>