PINEY WOODS FARM Buron and Sara Lanier



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Piney Woods Farm is located in the township of Burgaw in Pender County, North Carolina indicated by the red star.

SECTION 1:

Piney Woods Farm is a diversified farm operation run by Buron and Sara Lanier in Burgaw, North Carolina. In addition to a cow/calf and backgrounding operation, the Lanier's grow peaches, raise donkeys, own the local hardware store, and sell forage seeds. The total farm acreage is currently just over 400 acres in both rented and owned land, with primarily Aycock soils. The farm currently runs about 150 cows and 6 bulls. The fall born calves are sold preconditioned through retained ownership at feedlots or as part of the Coastal Carolina Cattle Alliance, which sells truckloads of calves by video auction. Additionally, grass finished freezer beef is also sold off of the farm to local restaurants, colleges, hardware store customers, and neighbors. Piney Woods Farm is an excellent example of a diversified family operation always striving for excellence.

Buron and Sara met while in school at North Carolina State University. Buron, who studied biological and agricultural engineering, and Sara, who studied accounting, were not encouraged to pursue farming as a career after college. Both grew up on tobacco farms, and the future of the crop was wavering. However, their strong roots in agriculture played into their decision to continue serving that community. After graduating in 1987, the two expanded the family hardware business and added equipment rental, which is still currently in operation. After Buron's father retired from tobacco farming, he was left with large acreage that was rented out for row crops. Buron saw this as an opportunity to begin farming again and 11 years ago, began buying this acreage piece by piece to put in livestock production. This farm transition happened slowly over time, as Buron and Sara were determined to follow their dream without putting themselves in a financial hole. Buron's family had previously owned some cattle, but it was never a primary focus of the operation.

In 2005, the Lanier's purchased the first 60 acres of farmland and began working with local resources to determine how best to lay out the farm and pick forages for a high production cow/calf operation. The Lanier's have strong character and believe in doing things correctly from the beginning: very few actions are taken on their farm without serious forethought, research, and consultation from trusted experts. Fences, water, and even forage selection was done with careful regard to its impact on the land, water, and livestock. They worked with the Soil and Water Conservation District to convert the cropland to pastureland and in 2007, 30 cows were grazing a mix of Kentucky 31 tall fescue and coastal bermudagrass on the farm. All streams, ponds, and riparian areas were fenced out to maintain water quality by keeping animals out and maintaining strips of buffer areas. All pastures were subdivided to allow for a rotation schedule to ensure proper rest.



Figure 1 Heifers graze a winter annual mixture of spring oats, triticale, and ryegrass



Figure 2. Mature cows graze a novel endophyte fescue. After 6 years of efforts, the farm is now KY-31 free.

SECTION 2:

Buron began getting heavily involved with any organization he could soon after the farms transition to livestock so that he and Sara could manage their operation more effectively. Through working with Dr. Jim Green, the forage extension specialist at the time, attending Forage and Grasslands council events, and Cattlemen's meetings, the Lanier's began to hear about strip grazing, native warm season grasses, and the endophyte infected tall fescue. To improve the performance of their cattle, Buron and Sara began rotating their cattle between pastures. This rotation was enhanced after working with the Amazing Grazing team at NC State University when Dr. Matt Poore taught the Lanier's how to strip graze stockpiled tall fescue. Strip grazing had previously been difficult for the couple, who often kept wire wrapped around a pine tree stick. This cooperative workshop gave Buron and Sara their first two reels. They proudly note they now have about 13. The benefit of cattle performance, increased grass utilization, and improved cattle demeanor keep the Lanier's utilizing strip grazing all year round. Portable water systems are used to keep water moving with the herd. This increases nutrient distribution allows for more uniform grazing.

Since learning about the endophyte in KY-31 tall fescue, the goal of the operation has shifted from cattle genetic improvement to forage improvement. The last 6 years have been spent renovating pasture from KY-31 toxic fescue to a variety of novel endophyte fescues, cool and warm season- annuals, native warm-season grasses, and legumes. Both Max Q and Martin II novel endophyte fescues are stockpiled each fall in order to reduce the amount of hay fed during winter. After several years of fine tuning, Buron has decided that to support his herd through the winter, he'll need to stockpile 1 acre of fescue for each cow/calf pair. To help accomplish a more even distribution of growth throughout the year, a variety of winter and summer annuals are planted. Diversity serves many purposes in this operation. Not only does it add variety to growth patterns and nutritive value, this diversity also improves soil health. Their recognition of a need to change their forage base is enough to put Sara and Buron Lanier ahead of many cattlemen, but their innovation doesn't stop there.



Figure 3. Strip grazing under the pine trees is of great importance to Piney Woods Farms sustainability.



Figure 4 A variety of annuals are planted across the farm each season to fill forage gaps in perennial production.

SECTION 3:

Buron's father had placed 80 acres of land in the federal CRP program and, when Buron purchased his first 60 acres, this CRP contract was expiring. He had land full of 12 and 15- year old pine trees with no clear plan of what to do with them. Loblolly pines of this size were not yet profitable to harvest for timber and the pine straw market for these particular needles is sparse. Inspired by his childhood chore of mowing the grass in the pine forests, Buron decided to sow fescue under 3 acres of timber to graze. After seeing the success they had with this model, the Lanier's took the step to develop silvopasture under all the pines, which is just over 100 acres. They began this extensive process by feeding hay in areas they planned to sow grasses. This gave the cattle the opportunity to thin the scrub trees and underbrush, while increasing the nutrient density of the soil. Following a winter of mindful hay feeding, the Lanier's did a small thinning, followed by tedious branch removal and seed bed preparation. After liming, planting could finally begin. Most of the acreage was sown in novel endophyte fescues, but after some fine tuning, the majority of the silvopasture acreage is now in an annual rotation of crabgrass and ryegrass.

Buron noted that the time when his livestock needed the shade the most, the grass he had planted was not heavily productive, thus the move to a summer annual/winter annual rotation. Access to the shade during the summer has been critical keeping cattle productive, and the protection from trees also keeps his grasses protected from the stark heats of the summer and delays frost damage in the winter. The favorable conditions of calving under the trees in the summer has improved the profitability of Piney Woods Farm. Due to the reduced temperatures, the calving season has been moved up several weeks, thus allowing more time for weight gain before they are sold through the Alliance. Silvopasture management comes with its share of challenges that the Lanier's are continually learning to navigate. The pines are periodically thinned to increase light penetration to the forage, and the needle littler is burned every few years. Forage selection has been an ongoing experiment, and the current novel endophyte fescue stands are thinning, so they are currently working with specialists across the south to determine what to plant next. The primary idea behind silvopasture management is the balance between timber and livestock production. In years past, the pines were only due for thinning; however, 2018 began a year of complete harvest. Realizing the importance of the pine plantations on their farm, Buron and Sara have developed a 5 year plan. Every 5 years, they will do a final harvest of their older pines and plant equal acreage in new pines. This keeps their silvopasture acreage stable and fits the true image of silvopasture management. Information about silvopasture management is not as readily available as others due to its uncommon nature, so Piney Woods Farm has served as a pioneer farm for many producers.

In the fall of 2018, the farm was severely damaged by Hurricane Florence. They received 38" of rain in 48 hours, had a moderate number of trees fall from heavy winds, and lost many fences due to flooding. During this time of stress and uncertainty, Buron and Sara looked past their personal challenges and immediately began helping the community. They were paramount in the distribution of supplies to other livestock producers in the area. It wasn't until the dust settled that Buron and Sara began to evaluate the damage their farm sustained. The vast majority of the forages did not survive the flooding. It was difficult for them both to see their hard work over the last decade lost, but it wasn't long before the two of them had a long thought out plan for the future. A variety of winter annuals have been planted in most of the fields to provide grazing for the cows and reduce further erosion potential. Flood tolerant perennials have been selected for the fields that saw the most water during the storm and will be established in the spring. They will sow more fescue on the higher grounds so they can get back to the routine that has worked so well for them. At any point during this difficult situation they

could have easily given up, but that's not who they are. They put others needs before their own and move forward with the same long-term mindset they always have.

There is no doubt that Buron and Sara Lanier are excellent, mindful managers. They are continually making adjustments to their operation for the betterment of their cattle and the environment. They have a true mindset of value, always thinking about how their decisions will impact the next generation and not just the today or tomorrow vision. However, what really sets this family farm apart from others is their willingness to collaborate. Since the start of the farm, they have hosted many field days and workshops, welcomed other producers and visitors for tours, and serve as leaders in the community. They understand the struggles of farming and are always working towards increasing their education and creating opportunities for others in their community to learn. Buron served as the NC Forage and Grasslands president in 2016, and the family is very active in Farm Bureau. Their work with the local cattlemen's association, the NRCS, Soil and Water, along with groups like "Feast Down East" and the Coastal Carolina Cattle Alliance keeps them active in the community and gives them the opportunity to serve as leaders in forage improvement, soil health, and grazing management. This couple is the embodiment of leadership and stewardship award.



Figure 5 Bulls graze summer annuals planted in the pines. The Lanier's have served as pioneers for forage selection and management in silvopasture systems, experimenting with at least 6 different species.



Figure 6 Burning is a critical practice in silvopasture, serving to reduce needle litter competition with forages.