



Lubben Farm

June 2023

*The Match Made in Heaven project seeks to understand the state of the art of livestock and crop integration on farms in the Upper Mississippi River Basin. This is one of six profiles of farmers who have honed their craft and successfully built livestock and crop integration systems on their farms. We hope you enjoy getting to know them!*

### **Summary/Key Points:**

- 1,800 acres in two parcels; 1,650 working acres, 80 acres of woodland, and about 30 acres of wetlands.
- 240 cow/calf pairs and an additional 100 head of replacement heifers
- The system includes a beef cow/calf operation, beef feedlot, and grain operation.
- Graze a paddock for one day, rest an average of 21 days. The stocking density is approximately 50,000 lbs/ac/day. 200 cows get about 5 acres/day to graze and are moved the next day.

### **Description of Family and Operation**

Lubben's White Oak Farm consists of a total of 1800 acres in two tracts of farmland. Of this total, 1,650 acres are considered working acres. The non-working portions are 80 acres of woodland and about 30 acres of wetlands. The original farm is north of town and is well suited to grazing and beef production. This is where the perennial pastures are set up in addition to cropland. The soil types there are at risk for erosion and considered low Corn Suitability Rating (CSR), and some of the land needs to be in permanent cover. Lubbens have found the best way to utilize the forage produced on that portion of land is with a beef cow/calf operation. The larger portion of the farm operation is located on better ground and is used for cropping.

Lubben's White Oak Farm is a story of successful longevity, financial stability and family farm sustainability. Dave's ancestors established the farm over 100 years ago. Today it is a true family farm, with Dave, his daughter and son-in-law all part of the operation. Cropping and livestock operate as a system of complementary enterprises that fit the physical attributes of the farm's location. Because of this diversification, White Oak Farm is able to be profitable and environmentally sustainable.

## Why and How of Livestock & Crop Integration

The beef cow herd provides the weaned animals for the on-farm feedlot, which then provides manure for about 160 acres of the cropping operation each year. The manure from the feedlot is mechanically spread. The farm is able to supply most of the forage and grain needed for the beef enterprise. Corn harvested as grain is fed to the feedlot animals. The farm produces about 600 baleage bales, 200 dry bales, 300 tons of haylage and 600 tons of silage per year, which can vary depending on weather. Dave has found that making baleage is an excellent way to make hay, preserve quality, and have storage included with the bale. He does not store dry hay outside due to the large amount of losses to rain damage, which can exceed 20% of the dry matter harvested.

Pastures receive spring applied urea for a nitrogen boost, at a rate of 50 lbs/acre. Up to 240 cow/calf pairs plus an additional 100 head of replacement heifers are grazed during the growing season, in two age groups. Lubbens use a management intensive approach to pastures. Their target stocking density is about 50,000 lbs of cattle per acre for 24 hours, with about 21 days of rest for pastures in between grazing days. This intensive stocking keeps the pastures fairly uniform and short following a grazing period. If some of the pastures get a little too mature and some of the grass heads out, it is sometimes necessary to clip pastures. This helps in maintaining the quality of forage for the next grazing period and also aids in weed control, especially thistles.

### **12 main pastures subdivided into a total of 50 paddocks**

- Start about April 25
- 4 to 5 cycles through system
- Determined by grass height
- 1<sup>st</sup> Cycle – 6 ac / 200 cows / one day
- 3-week rest period
- 2<sup>nd</sup> Cycle – 4 ac / 200 cows / one day
- 4-week rest period
- 3<sup>rd</sup> Cycle – 4 ac / 200 cows / one day
- 4 to 5-week rest period
- 4<sup>th</sup> Cycle – 4, up to 6 ac / 200 cows / one day
- 4 to 5 - week rest period
- 5<sup>th</sup> Cycle weather permitting –  
4-6 ac / 200 cows / one day



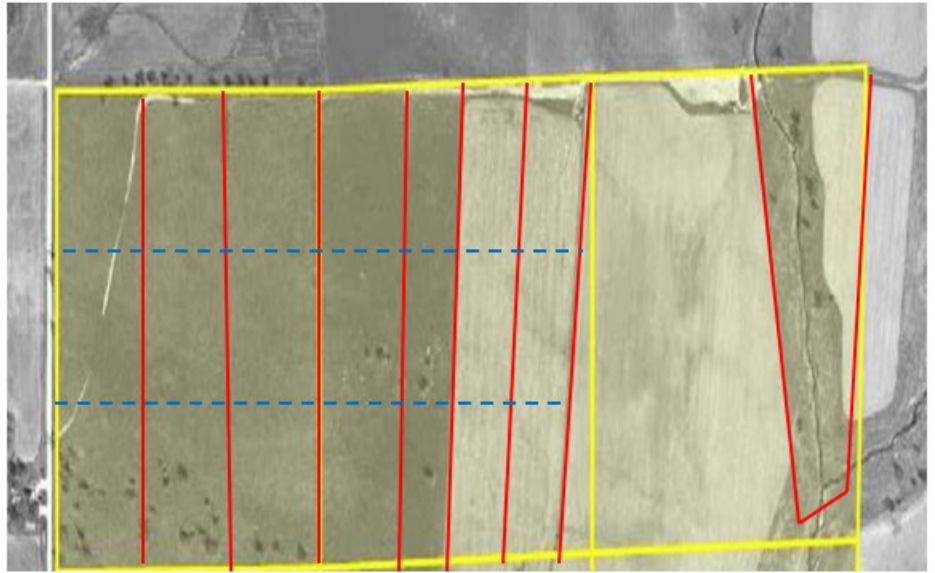
*Managed grazing makes a big difference in streambank vegetation and water quality.*

### **Beef Cattle Production Targets:**

63% of calves born in the first 21 days of calving season  
90% of calves born in the first 42 days of calving season  
90% of cows bred calve  
90% of calves born are weaned  
< 5 hours of labor/cow/year  
2 acres of pasture/cow-calf unit/year  
50,000 lbs/acre stocking density  
\$10/AUM pasture cost annually  
\$50 cost per ton of forage produced on a dry hay basis

## Benefits of Integrating Livestock & Crops

Adopting management intensive grazing (MIG) has generated multiple benefits for the Lubben operation. First, it has improved and increased yield and quality of the forage produced. This has increased forage supply at no additional cost to produce it, while reducing the need for stored feed and therefore reducing the cost of feeding. Ultimately, this reduces the cost per pound of gain for the animals. Second, MIG has improved the body condition of the cows in the herd. This has two side benefits: increased milk production and improved reproduction. Third, rotational



*Blocks of pasture are laid out in fenced strips, and then daily are cross-fenced for the daily allotment.*

grazing has shown a surprising benefit to streambank stabilization and water quality. Grazing streambank areas only once a month and then allowing for regrowth has resulted in vegetation recovery that can greatly reduce soil erosion. We used to think that fencing animals out of a riparian area was the best management practice. Fencing cattle out was better than continuously grazing a streambank; but with controlled grazing management, we can actually increase the cover and stability of a streambank.

Cover crops, especially fall-planted cereal rye, provide additional forage in early spring for cows and calves. There are some limitations to grazing cover crops in the Lubben operation due to the fact that most of the cropping acres are located some distance from the main livestock location and grazing pastures. Cover crops offer excellent ground cover after harvest of corn silage and improve soil health, which adds triple bottom line benefits: environmental benefits of reduced soil erosion, improved water infiltration, and less runoff; economic benefits of long-term soil retention and early-spring grazing; and a quality-of-life benefit from the personal satisfaction of managing a highly functional integrated crop and livestock system.

### Keys to Success

Lubben's White Oak Farm keeps a lot of detailed records, both of the finances overall and also the individual farm enterprises. The farm crops are treated as separate enterprises for corn, soybeans and hay. The livestock portion is divided into cow/calf and feedlot enterprises. Income and expense details are tracked for each enterprise, and labor is allocated within enterprises. Having good information about each enterprise allows them to make better decisions for the farm as a whole.

Many small businesses go out of business, including farms. This is especially true for new farms. Experience, persistence, history, and learning are valuable partners in a life-long journey in the cattle business. There are definite advantages to having a multi-generational farm operation on the same farm. Years of experience with fields and soil, as well as weather patterns, is very valuable. Experiencing and learning from mistakes and

successes gives you a greater likelihood of making a better decision when the next challenge comes along. People who are new to farming and don't have that built-in multi-generational resource should build a team of mentors and resource people with that kind of experience of the area to help them succeed.

## What Can Others Learn & Apply



- Keep good records, compare to your goals and to industry benchmarks. Excel at what you do in all phases.
- Find experienced mentors and resource people to help you make good decisions.
- Do the best you can at grazing management to help keep your cost of gain low.
- Adapt the system to the farm, adapt the farm to the system.
- Enjoy what you do and know that you are doing good things. It is hard to put a value on that!

*Rest and rotation of a pasture increases overall production of forage, allows for increased carrying capacity of a paddock or pasture; thereby increasing productivity of the farm.*

*Match Made in Heaven: Livestock + Crops is a project of the Midwest Perennial Forage Working Group, which is part of Green Lands Blue Waters. Improving soil health and water quality in tandem with farm resilience and profitability is the cornerstone of our work. See our [Integrating Livestock and Crops infographic](#) for more about farm and community benefits from livestock and grazing!*



This material is based upon work that is supported by the National Institute of Food and Agriculture, U.S. Department of Agriculture, under agreement number 2021-38640-34714 Am 3 through the North Central Region SARE program under project number LNC21-453. USDA is an equal opportunity employer and service provider. Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the view of the U.S. Department of Agriculture.

Green Lands Blue Waters and partners are conducting essential research, improving the genetics of old and new crops, translating knowledge into Continuous Living Cover farming systems, developing new extension and outreach capacity, working in farm fields, shaping policy, building profitable markets for new crops, and changing the narrative around what's possible through agriculture. The value of Continuous Living Cover farming comes in yields and profits, but also in improved soil health, cleaner water, new economic opportunities, diverse agricultural communities, more wildlife, reduced risk, and resiliency in the face of a changing climate.

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