

# GRAZING SUCCESS STORIES

GRASS ROOTS: 21ST CENTURY PERSCRIBED GRAZING

## CAR WOOD FARM

Changing production methods to increase profitability

### Overall Description of the Farm

Car Wood Farm, established in 1909 by the Carothers family, is a 120-acre beef operation based in Boiling Springs, Cumberland County. The current owner, Charles Carothers, moved to his grandfather's farm in 1973. Four years later, Charles and his wife Shyrl

purchased the farm and began raising beef.

Charles Carothers III and his two sons, Charles IV, and Corey represent the 4th and 5th generation to work the farm. In the late 1990s, they started experimenting with developing pasture land in an effort to begin to transition their farm to a grazing operation. Several years later, they had all of their animals on pasture and began working on rotation. Charles and his two sons all contribute to the labor and management of the farm. All have full-time jobs off of the farm, and there are no hired workers.



### Philosophy/Goals of the Farm

Car Wood Farm strives to provide the highest quality stress-free living environment for the animals while also providing the community a view of a clean and beautiful farm to enjoy and share. Their goal is to give their

customers healthy, nutritious, and tasty food that they know is produced safely and sustainably.

### The Grazing Operation

The Carothers have a cow/calf and finished beef operation. They own approximately 44 breeding stock, along with 35 feeder cattle. Black Angus, Charlotee and Simmental cattle are used for breeding, They also have Herefords, Belgium Blues and White Parks in

## IMPACT TO THE FARM'S COSTS

*The Carothers found that they save on overall expenses and time. Because they have reduced their need to haul manure or use equipment to harvest hay and crops they have far lower fuel costs.*

the herd. They started raising their animals on grass by fencing 5 acres. When they secured funding from Grass Roots, NRCS and the conservation district, they added 42 acres of pasture.

When old pastures develop weed issues or other problems, the Carothers conduct pasture renovation by cycling the herd out of pasture for a short 3-year crop rotation of corn and beans. They also use a versatile layout, which allows them to expand or contract the size of their paddocks in response to the amount of grass available. The animals are on grass from approximately April 15 to November 15. In the fall, they are typically brought into the barn and switched to a diet of hay- and corn-based feed for a period of 90 to 150 days. The Carothers find that this final switch in diet provides the right amount of marbling in the meat to ensure the desired flavor, but allows for the low fat content produced by their diet of legumes and fescue

grasses to be maintained. Car Wood Farm direct-markets their beef, and also utilizes their website to develop new sales and communicate with customers.

#### **Transition to Increased Reliance on Grazing**

Through their grazing operation, animal health has improved. They find the pasture is good for calving and there are fewer respiratory issues among the cattle. They have focused on improving water access in the winter, and currently use heaters to keep water flowing in cold conditions.

The Carothers have found that they save on overall expenses because they have reduced their need to haul manure or use equipment for hay and crop harvest and so have far lower fuel costs.

The Carothers have enjoyed experimenting with different elements of their operation,

starting with converting from a confinement to pasture. They also fine-tuned the right balance of grass and corn in the beef cattle's diet to get the best flavor in their meat and are experimenting with different combinations of breeds to discover appropriate breeds for their needs.

With the expansion of pasture, 100% of the cattle's nutrition, as gauged through a visual assessment of each cow, is derived from grazing during the growing season.

#### **Future Plans**

The Carothers plan to add chickens and hogs to their operation so that they can offer a variety of meat to their customers. They would also like to experiment marketing boxes of beef, which are smaller than a quarter pound and more attractive to consumers.

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## GEISINGER FARM

### Description of the Farm

In July 2008, Justin Geisinger and his wife Doreen moved to their current location in Chambersburg, Franklin County, on land owned by Doreen's parents, Roger and Agnes Meyers. Initially, they did a very small amount of grazing on this land. The fields on the farm were in poor condition from tillage, only 10-15% of the pasture was suitable for grazing. They also found that having 40 cows on a 120 acre plot of land left a deficit of manure for fertility. Justin decided to return the cows to confinement while he restored the land and planted crops.

In April 2010, fences were installed, and the cows were put on pasture. In June 2011, Justin turned the stall barn into a swing-style milking parlor.

Justin and his father-in-law handle the manual work of the farm, while Doreen milks the cows four times a week. Justin handles all of the grass management and bookkeeping. The Geisingers and Meyers all have part-time off-farm jobs.

### Philosophy/Goals of the Farm

The Geisingers try to farm using as close to organic methods as possible. Justin would also like to eventually eliminate grain feed, but feels this would require raising a different breed of cattle.

### The Grazing Operation

The Geisingers raise Holsteins and Jerseys with a few cross breeds of Holsteins and Jerseys that were purchased from other operations. Their herd currently includes 98 dairy cows and one bull. The calves are kept in group housing and are weaned after 8 weeks, at which point they are sent to another farm where they are raised almost entirely on pasture. In the winter, the calves are returned, and Justin takes care of the entire herd. This arrangement allows Justin to feed grass to all of the animals year-round.

WISHES HE HAD DEVELOPED A GRAZING SYSTEM SOONER

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*Justin said he wishes he had known about the viability and successful models of grazing in 2001 when he first began farming.*



In the summer, the cows are on grass between 6 PM and 4 AM. During the daytime, the cows have access to the pasture, but generally stay in the barn and eat hay. In the spring and fall, the cows are on grass continuously, with the exception of the time spent in the milking parlor. The fields are divided into temporary paddocks, which are determined by the nutritional needs of the cows. There is a free stall barn used for extreme conditions, such as excessive mud.

The Geisinger-Meyers operation farms 120 acres, 103 of which are owned by the two families.

#### **Business Details**

The revenue generated from animal product revenues in 2011 was \$304,000 and will be similar for 2012. The Geisingers also sell a small amount of beef, accounting for about 2% of the farm's income, though this part of the operation is growing.

Animal health is gauged by milk production, protein and milk fat composition, quality of manure, and condition of the cows' bodies, including weight loss and gain. Grass health is gauged through forage and soil testing.

#### **Transition to Increased**

##### **Reliance on Grazing**

Using farm income, Justin began building a fencing system and above-ground water system for half of the farm. In 2010, a perimeter fence was installed using grant money from Grass Roots. The following year, stream crossings, lanes, internal fences, and an underground water system for the other half of the farm were installed with funding through NRCS.

About 40% of the animals' nutrition is derived from grazing, with the remainder coming from grain. In 2011, Justin began using a dietary supplement for his herd which has reduced time needed for mixing a ration.

When they began grazing their pastures included alfalfa, with orchard grass and clover. Eventually, Justin started planting other varieties of grass, including rye, timothy, red and white clover, and fescue. Turnips were also planted to naturally till the soil and improve its fertility.

The transition to grazing, has decreased the farm's fuel and labor needs. For example, prior to establishing the grazing operation, two or more hours were needed daily for scraping the stalls.

Veterinary costs have never been an issue for Justin, although "cow maintenance" has. With transitioning to pasture, hoof trimming costs have dropped significantly because cows are moving around the field, instead of standing in their own manure in confinement.

Justin wishes he had known about the viability and successful models of grazing in 2001 when he first began farming. Mentors from NRCS, the conservation district, and Extension along with other grazers have offered a strong support system for the Geisingers' increased reliance on grazing. A grazing group specifically set up for new farmers was especially important in helping Justin begin his enterprise.

#### **Future Plans**

Justin would like to eventually eliminate grain use. In order to do this, he feels that he needs to transition the herd to a breed more suitable for grazing than Holsteins. He plans to start introducing Jerseys into the operation, which he would crossbreed with the Holsteins. Later, he would like to bring in Norwegian Reds in order to produce smaller animals, and crossbreed them with the existing herd.

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## NATURE'S NOOK FARM

Farming with Nature and improving the bottom line

### Description of Nature's

#### Nook Farm

Don Leatherman purchased Nature's Nook farm in Newville, Cumberland County, in 1964. Beginning as a dairy operation, Don began raising beef cattle in 1992. For the first four or five years, the cattle were raised in confinement. He began to gradually transition the farm to a pasture-based system and over the past 10 years. The first fences were installed on 15 acres in 2003, additional fencing and supporting practices have been slowly added over the next ten years.



Don's daughter Lori and her husband Dennis help with making hay, while Don's wife Lois handles the bookkeeping. Don handles all other duties related to the overall farm operation. He receives help from Lori when needed and does not have any hired workers.

### Philosophy/Goals of the Farm

Watershed protection, ecosystem conservation and environmental stewardship are the primary goals of Nature's Nook farm. These goals are addressed through a number of conservation efforts including the installation of contours and pasture renovation using wheat instead of corn as a transition crop. Additionally, the Leatherman farm includes 6.9 acres of enrolled CREP land.

Soil protection is a goal of the farm and is addressed through consistent grass cover. Keeping the fenced cows out of the stream has improved the water quality. Overall Don is taking a more holistic and sustainable approach to farming; as Don says, it's" more than just cows eating grass."

## TAKING AN ECOSYSTEM APPROACH TO FARMING

*Don Leatherman believes that overall stewardship of the farm has improved through taking a more holistic and sustainable approach to farming; as Don says, it's," more than just cows eating grass."*

## The Grazing Operation

Livestock on the Leatherman farm include 21 brood cows, 21 calves, 13 adult goats, 5 baby goats, 1 Billy goat and companion, and occasional chickens. There are 2 goats in confinement, and 6 dairy heifers grazed on a neighbor's land.

The Leathermans use about 31 acres for grazing. They have 21 acres on their farm, ½ acre on Lori's land, and 9.5 leased acres, of which 3.5 are devoted to grazing their dairy heifers. There are 9 primary paddocks, along with one sacrifice paddock for extreme weather conditions.

The animals are grazed from April 15 through December 15. He takes the cattle off pasture when the ground is too wet. Mob grazing occurs for 2 -3 days for each paddock: The animals graze intensively from 8-10 inches of starting grass height, and remain until it is down to 3 inches. In the winter, the animals consume bailed hay, and are never grain fed.

## Business Details

The sale of feeders and custom heifer raising both represent 25% of Don's farm income, respectively. He also grows about 70 acres of alfalfa hay, generating another 50% of his overall income.

Since 2009, the herd size and number of animals sold have both increased. The revenue generated from animal product sales has also increased, though Don feels that this has more to do with the market than his practices, particularly the increase in the price of beef. He points out that the benefits of grazing are often hard to measure in terms of direct financial gain.

## Transition to Increased Reliance on Grazing

Through funds raised from Grass Roots and NRCS, an underground water line and frost-free hydrants were installed.

Don has used less fuel since grazing, though he believes his overall fuel costs have not changed due to inflation.

Nature's Nook has always had very low veterinary costs, with the exception of 2012 due to an outbreak of pinkeye. This aside, he believes his veterinary expenses have decreased, though not dramatically.

The health of the cows and grass is gauged by observation. In the cows, special attention is paid to weight gain and loss, and that they seem generally "happy and healthy." For the grass, overall health and growth rate is observed closely.

To learn strategies to increase his operation's reliance on grazing, Don has read grazing-related publications and attended conferences on the subject. He has also used the expertise of farmers and other mentors, such as NRCS, the conservation district, and extension office. He is still discovering how to maintain grass health, and finds it especially helpful to discuss tactics with other farmers.



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## SNOOK FARM

On the road to becoming "full time farmers"

### Description of the Farm

Paula and Jerry Snook's land has been in the family since the 1930's. They are the 3rd generation to operate the McClure, Snyder County-based farm. It was a dairy farm until 2002, with the dairy cows kept primarily in confinement and most of the farmland used for crops. Between 2002 and 2009, the Snook family did not raise any livestock. Starting in 2009, the farm became a cow/calf operation, with the animals sold as feeders. They grew corn silage, purchasing the rest of the feed needed for the animals, and using 20 acres of ground as a holding pasture. With funding from the Grass Roots Program, NRCS and the conservation district the Snooks began the process of developing pastures for their cattle.



Both Paula and Jerry work off of the farm, with Paula managing most of the farm's business. They do not have any hired workers.

### Philosophy/Goals of the Farm

The Snook's goal is to become "stay-at-home" farmers.

### The Grazing Operation

The Snooks have approximately 160 cattle. The breed make-up is 75% Angus, 15% Hereford, and 10% Limousin. The cattle are on grass from approximately May to November, depending on the amount of grass available. They have 15 paddocks on the 170 acres, and generally rotate their animals every five to seven days.

### Business Details

The feeders are about a year old when sold. At the time of this interview, the Snooks had sold 130 feeders during 2012 and

**COST  
SAVINGS  
ARE  
EVIDENT**

*The Snooks are seeing significant monetary savings from reduced fuel use. They are no longer using equipment as often to wrap feed or mow.*

hope to sell the rest by the end of the year. The revenue pays for the costs of the operation aside from land.

### **Transition to Increased Reliance on Grazing**

Paula feels that the transition to an increased reliance on grazing has gone very well.

Through funding from Grass Roots and other sources, they installed fencing, as well as an underground water system and troughs. These systems save time by eliminating the need to haul feed and water to the animals.

Previous to having a grazing operation, they were feeding the cattle between 12 and 14 bales of hay each day, and spent much of their time moving feed to the animals.

Because the animals are no longer spending all of their time in the same spot, the grazing operation has reduced the amount of time spent dealing with manure and mud.

The cattle derive 100% of their nutrition from grazing for five to six months of the year. The Snooks use animal appearance to judge if animal nutrition is adequate. If an animal is not looking well, the Snooks may supplement their grazing with grain. Winter feed includes hay, corn silage and baleage. The hay and some of the baleage is grown on their farm, with the corn silage and the rest of the baleage produced on acres they rent.

The Snooks are seeing significant monetary savings from reduced fuel use as they have reduced the need for wrapping the feed and mowing. They are also very pleased with the results of adding an adequate watering system in the paddocks. This saves time that had previously been devoted to hauling water.

### **Future Plans**

The Snooks' goal is to become full-time farmers, they believe building their herd will help them realize this goal. Additionally, they would like to install a feeding pad for the winter, but they have not yet found the funds for this project.



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## VARNER FARM

### Overall Description of the Farm

The Varner family, through Dean Varner's parents, acquired their farm in Three Springs, Huntingdon County in the 1940s. Originally a dairy operation, the farm transitioned to beef in 1983. At that time, the Verners cropped the fields and generally kept the cattle in one pasture. That practice led to a need to manage the resulting manure.



Both Dean and Karen Varner worked full-time off of the farm as teachers until their retirement several years ago. They have not hired any outside farm labor.

### Philosophy/Goals of the Farm

The Verners' goal is to break even. They keep the farm for recreation and enjoyment, and would like to increase the length of time during the year that the animals graze.

### Description of the Grazing Operation

The Verners currently own 28 head of cattle, including 9 cows, 10 heifers, 4 steers, and 5 bulls. The breeds in the herd include Hereford, Simmental, and a mix of the two. They also have one Hereford breeding bull on loan. The animals are kept in a sacrifice lot until April, and are then moved onto grass until November.

The Verners farm 57 acres, 20 of which they lease. They have 12 paddocks for grazing.

### Business Details

The Verners sell less than 10 animals each year. The annual net revenue from the animal product sales is approximately \$4,000.

### Transition to Increased Reliance on Grazing

Previous to the Grass Roots funding, the Verners kept their beef in confinement. Grass Roots provided funding for fencing, and NRCS provided funding for a watering system, allowing the

## FINDING MORE TIME IN THEIR DAY

*Dean and Karen have both noticed several positive impacts to increasing their reliance on grazing, including saving time because they do not need to fix equipment, move feed, or haul manure as often, and because they've been being able to decrease hay production.*

Varners to convert to a grazing operation. They now grow less feed, and haul less manure.

Dean estimates that over the course of a year, an average of 54% of the animals' nutrition is derived from grazing. From June through September, 100% of the animals' nutrition is derived from pasture, with less during the spring and fall months, and none during the winter.

Dean and Karen have both noticed several positive impacts,

including saving time because they do not need to fix equipment, move feed, or haul manure as often, and in being able to decrease hay production. Dean has particularly enjoyed the experience of converting some of the farm from cropping to grazing, particularly the reduced need to use equipment.

Without the funds from Grass Roots, the Varners feel they could not have developed the paddocks for the pastures, and

therefore would not have been able to run a grazing operation.

#### **Future Plans**

The Varners really enjoy grazing their animals. Because the grazing operation decreases the amount of time and labor needed for each animal, they plan to expand their operation by adding more acreage and cows.