Lancaster County, PA is well known as the largest dairy county east of the Mississippi being home to over 90,000 dairy cows. It is also known as the Garden Spot of America for its fertile soils. Land in Lancaster County is expensive and due to both the fertile soils and the high cost of its farmland, typical Lancaster County dairy farms are 40 cows and 40 acres or 100 cows and 100 acres. Many of these farms are producing all their forages (and buying only their grain and some dry hay) on these productive acreages. One other interesting aspect of these farms compared to the upper Midwest is that the farms have no room for road ditches or wasted space, the corn is planted right to the edge of the road!

Kurvin Zimmerman once lived and as a matter of fact grew up in that area. When it came time for Kurvin to start farming on his own, the opportunities seemed more inviting in SW Wisconsin and even though his farm was expensive by Wisconsin standards at the time, it was far more affordable than SE Pennsylvania ground. Today, 8 years later, Kurvin finds himself in a situation that many Midwest farmers find themselves in and that is as land prices and rents go up along with purchased feed costs, that it is just too expensive to have the equipment and still have to buy feed. About three years ago, Tim Huffman a private nutritionist entered the scene. Tim had already been working with dairymen who converted away from typical Wisconsin dairy cow diets centered only on pure alfalfa and corn silage and realized that feed needed to be growing on every acre year around.

Tim’s first foray away from alfalfa and corn silage was because a particular farm he was advising had trouble maintaining alfalfa stands for longer than one or two years. This led Tim toward cool season grasses and double cropping triticale and either shorter season corns or summer annuals such as sorghum-sudans and forage sorghums. The single enabling feature of modern triticale and sorghum is the high digestibility of these crops. In the case of the Alta® sorghum bmr Gene 6, a natural genetic trait has changed sorghums from low quality heifer feed to one of the most efficient (pounds of feed fed vs. pounds of milk produced) silages available. Likewise, Trical® Forage Triticales give dairymen a better chance to harvest this wide-leafed, late heading small grain in the flag leaf stage. Horror stories abound about small grains heading out during the time it takes to hook up the discbine!

The second key to these crops is their high yield when double cropped as a rotation. The combination of the triticale and a sorghum even in the upper Midwest provides competitive yields over corn silage by itself, but with higher protein levels. Triticale silage was fed as haylage to the Zimmerman cows in 2012 that was 20% Crude Protein with higher bypass protein than any alfalfa and with corn silage-like energy due to its NDF-d of 70%!

Tim and Kurvin committed to covering every acre with a growing forage crop throughout the year. This is the only way to eliminate or lessen purchased forage for Kurvin’s livestock load.

The result is that Kurvin offered his 86 tillable acres plus six acres of pasture as a test and research farm for Tim’s forage-related research. A set of axle scales was installed plus a Ration Tracker computer program so that every load harvested and every load fed is recorded for Tim’s research purposes. All weather events are also recorded and then loaded on Tim’s computer by a weather station. Kurvin’s 80 cows and 80 heifers are also part of the program. The herd is at 25,000 RHA with a 3.64%F and 3.04%P on 2X. MUN levels are at a nitrogen saving 7.8. No rBST is used and the cows stay on as high a forage diet as they can and maintain the 85-90#’s of milk. In 2012, the farm had 100 varieties of corn (from about 10 different companies and the entire Masters Choice lineup including all of the MC experimental varieties. They also had 20 individual and mixes of winter forage crops plus 8 summer annuals including bmr Gene 6 sorghum-sudans, sudan hybrids and forage sorghum. Alfalfa/grass plots will be added in 2013, but currently every alfalfa field is interseeded with cool season grasses. The reason for this again is to add both yield and quality (or energy) to the alfalfa stemming from its higher digestibility.

An interesting note on the small grain silages was that they intended to be fed to the heifers, but as soon as this was tried, it was obvious that the quality was too hogh and the feed was redirected to the milk cows. The sorghum silages also are appeared headed for the milk cows for the same reasons.

So what has been the result of this collaboration of Kurvin and Tim. A big result is that even during the debilitating drought of 2012, Kurvin was able achieve by far the closest to feeding his cows and heifers off his own land since he has been in Wisconsin. He harvested 12 acres of corn for grain and purchased the rest of his grain needs. The other purchases was the dry hay bought for the young stock since the small grain silages got diverted to the milk cows. The distance between Lancaster, PA and Lancaster, WI (a town close to Kurvin’s Livingston, WI home is much greater than the 900 miles). However, Kurvin is proving that Lancaster (PA) farming can be accomplished in Wisconsin