

FINISHING 100% GRASS-FED LIVESTOCK IN THE DEEP SNOW COUNTRY

I'm involved on a daily basis with the burgeoning gourmet grass-fed beef movement. We help our producers raise cattle that are tender and flavorful, without antibiotics, hormones or other pesticides and we do this in the upper Midwest where it is cold, dark and snowy almost half the year. Is that smart? You tell me.

Our cattle finish somewhere between 16-22 months of age, have moderately-marbled flesh and grade high-select to choice on the USDA (corn-fed) grading systems. Our producers can raise 800-1000 pounds of this quality beef per acre in this bioregion and sell it for at least a dollar a pound, year in and year out.

If you are interested, I'll tell you the main highlights of what we do that makes this highly profitable farming work. Here is the summation for fattening beef cattle to finish: we need to provide high brix forages to animals that possess what we call "grass genetics" and we need to make sure, via good management, that there are no feed gaps all year long. Simple, huh?

OK, here we go, the TOP TEN main tenets of what we do:

1) HIGH BRIX FORAGES- We avoid low energy (carbohydrate) forages, those that usually have high levels of what Jerry Brunetti calls "funny protein" (NPN). You could write many books about this, Allan Nation and others have. Getting the sugar levels high enough in the forages gives you the firepower of concentrates. It's how we avoid the need for the almighty starch found in all that grain in the feedlot. Protein is not usually a limiting factor where we are in the upper Midwest but when it is, fixing the soil is, once again, the answer. A low brix reading tells you one thing...something is missing. It doesn't tell you what, but it's a start. This is where true soil testing and tissue testing comes in so you'll need a good lab for that. It's the best money you will ever spend. One of the best ways to get high brix forage fast, is foliar feeding. Doug Gunnink is one of the main resources we use to augment our FF skills. Many people teach this vital skill. Also, the use of compost and compost tea is rapidly becoming de rigueur to our world. We like the tea brewers and extractors made by Sabino Cortez of Erath Earth. Now over half of our stored forages are put up wet, usually in bags, as baleage or haylage and we like the option. Again, it's all about saving nutrients. When you need sugar now, we use molasses lick tubs such as those made by DAKOTA ORGANIC or CYRSTALYX (HUBBARD FEEDS). If you need a good refractometer to measure your own brix, send me an e-mail, I have a very good source of meters at a very good price.

2) We need to prevent the STRESS OF HEAT LOSS. This is where the hedgerow comes in, especially since we virtually eschew barns completely. Shelter from the wind is most critical. Since much of our stored forages are wrapped or bagged now, we line up these or the round bales into very effective wind breaks. Some aspect of shelter is required for maximum winter gains.

3) **ADEQUATE WATER** when the temperature plunges below freezing is a challenge. While bison do very well eating snow, and even penetrating deep snow to forage, we don't expect cattle to do this. This is one of the main factors we use to determine which paddocks will be used to winter cattle. We can bury lines, we can use tank heaters or a combination of these. Many producers make a water truck to haul fresh water daily but the layout and needs of the ranch will dictate the details. Cattle that do not drink adequate water, for what ever reason, will not have proper rumen function, and will therefore not maintain proper gains.

4) **MUD** is very expensive in the livestock business. We avoid it whenever possible. Animals with foot rot, liver flukes or other water-borne diseases are the bane of production plus muddy conditions destroy pastureland. Clever use of winter feeding or "sacrifice" paddocks can go far to protect from mud. Pugging from feet can break up impacted soil and has some limited value in odd situations, but the timing of spring release onto new pasture must be well planned.

5) **WINTER PARASITES** include the usual suspects, mainly worms, ringworm (a fungus) and lice. Well-mineralized cattle, whether through the forages, supplementation or both, do not get parasites. To my mind, there is never a case where poisons need to be used. In addition to mineralization (see wickslivestock.com for a full line of the mineral mixes we use) we have the fast-acting tools of food-grade diatomaceous earth, plain old Basic-H (from Shaklee), and Agri-Dynamics full line of botanical worming products. Culling of all livestock that remain heavily-parasitized is an essential aspect of holistic management.

6) **GLANDULAR FUNCTION** of the animals is a special field of study that has been mastered by bovine geneticist Gerald Fry. By examining the whorls and color patterns on the coat he can teach us how to evaluate the glandular function within. These endocrine glands, such as the thyroid, adrenal, ovary and thymus run the body, account for fertility, metabolism, and immune function. Once again, minerals and good nutrition take us from dysfunction to optimal production.

7) **MOLD**, mostly that within stored forages, is a silent thief in the night, robbing health from the herd, and robbing wealth from the rancher. Some molds kill outright, but the "stealth molds" such as *Fusarium* in moldy forages sap immune strength, sap fertility and drain the body of health and vitality. Prevention is ideal and always to be strived for, but if we suspect mold we get to work fast with detoxifiers such as DESERT DYNA-MIN from A-D, a montmorillonite clay noted to absorb maximum toxins including mold. Kelp, seasalt and other nutrients do their part to detoxify as well. We also recommend the use of apple cider vinegar either on the forages or in the water tank to assist in detoxification and rumen remediation.

8) At Thousand Hills Cattle Company we stress **RECORD KEEPING** as the main means to track the journey into profitability. We recommend a good bookkeeping system to monitor soil tests, forage tests, brix testing and livestock notes. All our producers are required to have a cattle scale and to weigh the cattle at least every 90 days. This will

enable us to calculate our Average Daily Gains more accurately. It's a Report Card. Good producers will strive for a minimum of 1.75-2# of ADG in the winter months.

9) Well, at some point we always need to talk about SELECTING THE RIGHT BREED. In our business we refer to this as "Grass Genetics". The kind of cattle that do well in our climate are usually the English breeds of beef cattle, which is fortunate since these are the breeds that also make for a tender and delicious steak. We prefer smaller cattle with lots of muscling and fine bones, again mostly for eating quality but also for good winter survival and gains. While it's not necessary for every producer to raise shaggy old Scottish Highland Cattle, the closer animals are to our indigenous bovines, the bison, the better. We like cattle that develop a thick, rich and healthy coat, animals that can move and forage well and that are smart enough to root around in snow, seek shelter in ice storms and bitter cold and those who can nurture their young in early spring. Spending 2 hours with Gearld Fry, before you buy your cattle, can save you many thousands and many a heartache.

10) Coming out of winter and ADJUSTING THE RUMEN TO LUSH SPRING GREENS is always critical. This is where, if we have it at all, and it is preventable, bloating may rear it's ugly head. Going back in your pile of SGF magazines will give you several good reviews we have written about eliminating bloat forever and it's highly recommended to have your prevention plan in hand. Sloppy manure to excess is practically like throwing dollar bills around the pasture. When spring comes we want to make the fastest adaptation to green grass possible. Learning to do it right pays good dividends.

So, there it is, the basics. When should you start? My advice is NOW. We will have the kind of winter-feeding success that we create. That creation process always begins long before the first snowflake. Fattening cattle to finish is the goal, but taking care of the entire herd is even more important. Everything I've said can have an application in a cow-calf herd or for the so-called "dry cows" in a grass-fed dairy. There is nothing more holistic than prevention.

William G. Winter, DVM is a free-lance journalist, teacher and consultant. He is primarily interested in awakening the world to the human health benefits as well as the environmental bonus that comes from raising grass-fed livestock using sustainable practices and the magic of holistic herd health. He is also the herd health consultant for producers of livestock for Thousand Hills Cattle Company and lives in Minnesota where the grass grows green and lush, and all the producers children eat right and are therefore above average. Contact him with your concerns, grand concepts, and rave compliments at holistic@visi.com or www.willwinter.com.