Profits are the goal of any business model and mine is no exception. My plan assumes that available natural resources are efficiently utilized in a responsible manner. I have chosen to implement that plan by producing, managing and marketing our forage resources by utilizing Management Intensive Grazing (MIG.)

We are in the service business. That is, we produce replacement dairy heifers for a group of Michigan dairies. We use these heifers to harvest our forages and to maintain the fertility of their pastures. We strive to maximize the number of days per year that these heifers graze and thereby minimize the days that stored feeds are required.

The first step in managing these heifers is to provide for their nutrition twelve months per year. I start by designing a forage sequence which provides for each month of the year. At greenup in March, I plan to use cool season perennial grasses such as fescue and orchardgrass with the addition of red and ladino clover. I strive to use as many perennials as possible to avoid the expense of yearly planting required for annual crops. These cool season grasses and clovers provide all of our needs during late March, April, May and early June.

When hot weather begins to affect the yield and quality of these cool season grasses, we rotate to alfalfa/orchardgrass. Alfalfa is a deep rooted plant and has the ability to withstand hot and dry conditions as well as any forage available. There are summer annuals, including corn that will help fill nutritional needs during the dog days of summer, but we try to utilize alfalfa to the greatest extent possible.

While alfalfa meets many of our forage requirements, it needs a rest—to restore nutrient stores—between the middle of September and dormancy. I have been utilizing corn to fill this six week period when alfalfa is not available. After we have finished grazing this corn, we can graze the alfalfa again beginning about November 1.

As our weather cools in September, our cool season grasses begin to grow again. We plan to utilize fescue, particularly, in two ways. We graze some of it during September and October. Other fescue pastures are marked to stockpile. We ensure that we graze these in late July and then apply nitrogen fertilizer early in August. With timely rains, this stockpiled fescue will reach its maximum quality and quantity during late fall and early winter. The endophyte problems associated with fescue are negligible.
during December and January. By producing this stockpiled fescue, we can extend our grazing season well into January.

Other options for winter grazing are cereal crops such as wheat, rye and oats. Annual ryegrass also makes very good winter forage. When planted in August, these will produce winter and early spring grazing. Turnips are also an option.

When we have exhausted all of our pasture forage, we feed alfalfa/orchardgrass silage which we wrapped the previous May. We have found that producing dry hay in early May is nearly impossible due to the damp, cool weather. On the other hand, we can bale high moisture forage the day after cutting. Since the alfalfa is still damp, leaf retention is higher and feed quality is far greater.

Since the majority of red clover production occurs during the first two years, I renovate my cool season grass pastures every other year. The method I use is commonly called frost seeding. I have found that if I graze those fescue pastures which I intend to renovate close enough so that I can see some bare spots of soil, I can broadcast red and ladino clover seed in February with great results. The key is to have those pastures grazed closely enough to see bare patches of soil. Allowing livestock access to those pastures can help insure soil seed contact through their hoof action.

Being able to control when and where our heifers graze is an important part of grazing management. Both fencing and water are the two basic requirements. We rely primarily on high tensile charged wire to accomplish this. I use 20 joule chargers powered by 110 volt service. Since there are few 110 volt outlets across the farm, I keep the chargers under cover at a barn and extend a high tensile wire throughout the farm. These wires are referred to by our County Extension Agent, Dan Grigson as “extension cords.” They have been placed on the back side of existing woven wire fences or in some cases on fiberglass offsets. With reliable electric power throughout the farm, we can connect temporary polywire fencing wherever we desire.

By creating smaller paddocks, we can achieve greater forage utilization. But every paddock requires a water source. We provided water access across the farm by burying 2” PVC pipe with couplers located in plastic meter boxes. These buried lines withstand freezing and can provide water year around. I have developed portable water tubs which allow a small amount of water to run during freezing weather. This prevents the water from freezing and allows us to continue to graze wherever we want during cold weather.

While we rely on forage for a great portion of our heifer’s nutrient needs, we do use soyhull pellets as a supplemental feed. We feed four pounds of these pellets per head per day in troughs out in the pasture. We topdress 2 ounces of a custom mineral, which includes rumensin, over the top of the soyhulls. By doing so, I am certain to get the correct amount of mineral into each heifer every day. We move these troughs from paddock to paddock when we move the heifers. In a number of pastures, especially the ones that we are likely to use during winter, we have constructed feeding pads. These
are areas of gravel placed over geotextile fabric. This gives us an area to place our feed troughs out of the mud. Providing all weather access to these feeding pads is important, also.

Beyond the nutritional reasons for providing supplemental feed, there are other advantages of daily feeding. When we feed each day, we are able to see all of our heifers, count them and train them. We train them to come when we call (and feed them.) This is very useful when it is time to move them to other paddocks or to the corral. Our daily presence allows the heifers to become comfortable around humans and leads to reduced stress for heifers and humans alike. Well designed corrals and handling facilities help to minimize stress when our heifers are being processed.

Top production requires a minimum of stress for our heifers. Our daily goal is to provide an environment where each heifer is comfortable and not subjected to undue stress. This environment reduces the stress on humans as well.

My goals as a grazing manager are to:

- Minimize the number of days per year that stored feeds are needed, by extending the grazing season
- Increase forage production
- Increase forage quality
- Increase forage utilization
- Decrease stress on heifers and people

In summary:

- Forage is the natural resource in our temperate and humid climate.
- Grazing livestock is nature’s way of utilizing forage.
- Grazing livestock is a way of adding value to our forage.
- As grazing managers, our job is to keep an adequate quantity of high quality forage in front of our livestock.
- Profits will accrue if the above points are satisfied.