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UNITED STATES OF MINNESOTA

**Alton G. Hanson
Dairy Producer
Pine City, Minnesota**

In 1997 we will have 64 cows consisting of 49 Holsteins and 15 Jerseys, grazing on 50 acres of grass-legume pastures. Our dairy herd is bred all for spring calving (seasonal herd). My wife Marilyn and myself presently handle all labor needs. Milking is done in a 32 stall barn that we use as a stall barn-flat barn concept using automatic takeoffs.

Management Intensive Grazing (MIG) has been a profitable management tool that has allowed us to stay in the dairy business and expand cow numbers without the big capital costs associated with expansion. A dairy producer that adopts MIG now has to become a grass farmer. As a grass farmer you need to become a keen observer of what this management practice is doing and continually plan on your next management decisions.

Two key areas in this management practice are:

- 1) Management of Grass
- 2) Feeding the Dairy Cow on Grass

The single most important management practice of this system is establishing and controlling the growth of grass-legume pastures. Our basic goal is to grow a cheap high quality forage for the dairy cow. On our farm, we converted older hay fields and existing pasture. We have over seeded (broadcast) orchard grass, red and white clover over these pastures. Our goal here is to have 2/3 plant population as grass - 1/3 clover. This will yield a 20+ % crude protein and 150 RFV forage costing us about \$30/ton to raise. Harvesting costs are very low as the dairy cow is feeding herself and spreading manure.

To achieve a high quality forage, a grazer needs to have a paddock system with proper fencing and available water so the dairy cow does not leave the paddock. We move our cows to new grass every 12 hours using portable fencing within a paddock. Size of area to be grazed is based upon pounds of forage needed to feed 64 cows for 12 hours.

With timely movement of cows, a grazer allows grass growth to be 8-10 inches tall for optimum quantity that will still have high quality. By moving cows every 12 hours, they consume about 50% of available forage leaving 50% residue for a more rapid regrowth. The management key here as a grazer is to always have a feed available budget so you know how much forage you have 30 days from now in the event of dry weather.

Feeding the dairy cow on grass is a science that a grazer needs to learn by experience. There are two management approaches to this. One is to feed low amounts of grain to that cow and take whatever milk production there is. Or, can we feed that cow to produce more milk? A grazer needs to determine his most profitable approach to this management practice.

On our dairy farm, we have experimented with both levels of feeding. We have found it to be profitable to feed for more milk production with cows grazing grass-legume pastures. The quality of grass is very important. A grazer needs to know that there is enough forage dry matter available and the quality of that forage. Supplementing grass forage with a combination of corn, oats and barley grain mix gives us several sources of energy. Soy hulls in the grain mix and 7# dry hay per cow per day help establish a fiber mat in the rumen. We observe closely how cows are eating grass forage and grain and manure drops to determine how good the overall ration is working. The bottom line is profitable milk production.

Management Intensive Grazing requires a lot of mental thinking by the dairy producer. Forage growth vary with the species of grass or legume you are growing. Fertility varies with each paddock along with soil type. Managing grass growth properly will determine available forage during dry weather.