

Lecture 3

CATTLE NUTRITION

Cattle are natural grazers. They possess remarkable ability to digest plant carbohydrates that are generally indigestible to most other mammals. It is natural then to assume that grazing is the best way to supply a nutrient-dense diet to growing cattle. Cattle would consume crop residues and forages and contribute manure to the soil. The widespread use of synthetic, soluble fertilizers and other agrochemicals emerged in the 20th century. These materials, coupled with plant breeding technology and larger machinery for more efficient tillage and harvesting, led to high corn yields and cheap corn prices. Crop residues became part of main feedstuffs for grazing animals

Pasture and Appropriate Animals for Sustained Cattle Production

Matching the right animal or plant with the appropriate environment is a wise management decisions that leads to healthy animals and a productive and successful farming system. Maternal traits, milking ability with early maturity and tenderness are three important traits because a cow must calve on pasture and raise a thrifty cow that lays down fat quickly. Qualities to be selected for in animals including herd bulls are:

1. Dual purpose breed types (for beef)
2. medium frame
3. End weight 408-499kg
4. Age at slaughter 16 to 24 months (for beef)
5. Early maturing
6. Low maintenance requirements
7. High milk protein and butterfat (for dairy)

Cattle require consistent source of protein, energy, minerals, vitamins and water to maintain productivity and health. Producer can determine an overall picture of the nutritional status of the herd by:

- Using body condition scores
- Assessing pasture condition
- Soil and plant tissue testing to determine mineral and nutrient content (with subsequent appropriate supplementation)