#### Feedlot Management

#### **Feeding Programs**

# Feeding Systems

- Hand Feeding
  - Low Investment
  - High Labor
  - Limited Capacity

# Feeding Systems

- Self-Feeders
  - Low Labor Input
  - Ration Limitation
  - Reduced performance
  - Limited control over intake

# Feeding Systems

- Feedlots
- Mixed bunk delivered rations
  Economies of Scale
- Benefits
  - Cattle Performance
  - Wide choice of ingredients, processing methods, supplements
  - Flexibility

# **Cattle Feeding Alternatives**

- Preconditioning
- Backgrounding
- Wintering
- Replacement Heifer Development
- Finishing
- Cull Cows and Bulls

- Bull Development
- Drylot Cow-Calf
- Single Calf Heifer
- Dairy heifer development

#### Performance

- Dry Matter Intake
- Days on Feed
- Average Daily Gain (ADG)
  (Final Wt-Initial Wt) / Days on Feed
- Cost of Gain
  - Total Cost per head / Total lbs gained
- Feed Cost of Gain
  - Feed Cost per head / Total lbs gained
- Feed Efficiency

- Lbs of feed per pound of gain

#### **Cattle Descriptions**

- Calf-Feds vs. Yearlings
- Short vs. Long Yearlings
- Grass
- Green vs. Soggy
- Warmed Up

#### **Cattle Descriptions**

- Eared
- Bullers
- Stags
- Heiferettes
- Put-together
- Company vs. Customer

### Health

- Chronic or Realizer
- Hospital or Sick Pen
- Pen Deads
  - Respiratory
  - Digestive
- Pen Rider
- Proccessing

# **Cattle Feeding Basics**

- Ruminant Digestion
  - Normally consume forages
  - Digestive system is designed to: Graze Ruminate
- This pattern is not conducive to managing high grain diets

- Meal eaters (feedlot) vs. Nibblers (grazing)

#### Acidosis

- Acute vs subacute
- Results from over consumption or too rapid of consumption of grain (starch)
- One of the most costly problems
  - Feedlots loss in performance
  - Packer abscessed livers

#### Liver Abscesses



#### Healthy Liver

#### Infected Liver



- Philosophy the feedlot manager uses to determine amount of feed to offer
  - Slick or Clean Bunk
  - Limit or Program Feeding



- Maximize animal performance
- Minimize digestive disorders
- Keep animals eating a consistent amount of feed

If feed is always in the bunk, you only have a labor intensive self-feeder



Dry Matter Intake	ADG	Feed:Gain
-------------------	-----	-----------

Lot A	20.24	3.78	5.35
Lot B	19.73	2.07	9.53

- Intake
  - Increase by 10% = \$11.25/hd
  - Decrease by 10% = -\$15.25/hd
- Feed Efficiency
  - Improve by 10% = +\$19.33/hd
  - Loss of 10% = \$26.33/hd

#### Feed Additives

- Ionophore- antibiotic which enhances feed efficiency by altering ruminal fermentation
  - Rumensin
  - Bovatec
- Feed additive antibiotic
  - Tylan

# **Growing Period**

- Similar objective to backgrounding
- Higher fiber and roughage diets
- 2 lb/d
- 50-70% Grain and 30-50% Fiber
- 90 days or till 650-850 lbs
- Less days on feed than backgrounding

# Finishing

- Feed to slaughter weight
- Goals
  - Optimize carcass merit
  - Maximize performance
- 3-3.5 lb/day
- Use step-up diets to acclimate cattle to high grain diets
- Usually 85-100% concentrate

# Finishing

- Managing High Concentrate diets to avoid Metabolic Disorders
  - Ionophores
  - Bunk Management
  - Roughage Level
  - Particle Size
- 100-180 days

### **Implant Considerations**

- Dosage
- Duration
- Calories being consumed
- Implanting procedure
- Type of hormone
  - Progesterone/estradiol
  - Testosterone/Trenbolone acetate (TBA)

- Not all cattle fit all systems
- Start with the end in mind
  - Expected Slaughter Weight
    - 550-950 lbs Carcass weight
  - Expected or Desire Carcass Composition
    - YG, QG

- Calf Feds
  - Typically works best with Exotic and Exotic-Cross cattle
  - On feed for 150-200 days
  - Calves go directly on feed at weaning
  - Delays result in heavy weight carcasses

- Backgrounding Systems
  - Various rates of gain
  - Various cattle types
- Backgrounding fits:
  - Later born, lighter Exotic, and Exotic-Cross cattle
  - High growth British cattle

- Yearling Systems
  - Winter at slower rates of gain
  - Prepare cattle for pasture
  - Avoid getting cattle too 'fleshy'
    - Reduced rate of gain on pasture
  - British and British-Cross Cattle

#### Calf Feds vs. Yearlings

	Calf-Fed	Yearling
Final Weight	1103	1199
Days on Feed	207	108
ADG	2.78	3.39
Feed/Gain	6.19	7.33
Cost of Gain	\$51.59	\$52.48
Breakeven	\$75.16	\$74.06

# Yearlings vs. Calves

- Yearlings
  - Less medical attention
  - Less days on feed
  - More availability year round
- Calves
  - Better feed conversion
  - Greater potential for profit