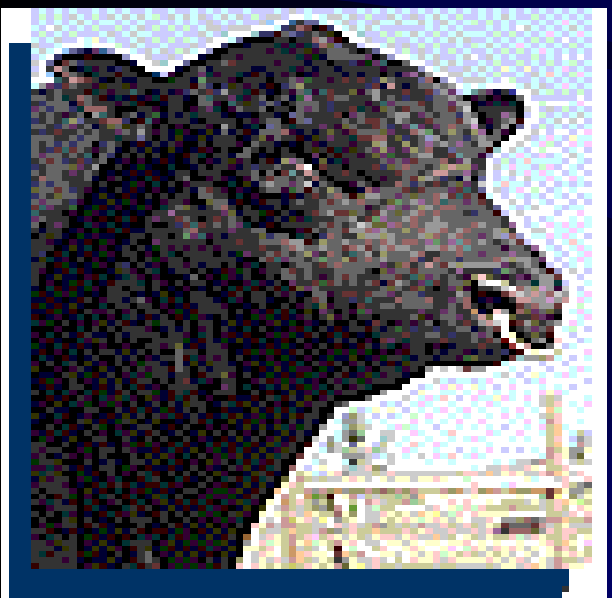
10ième
Journée Bovine
4 juin 2004



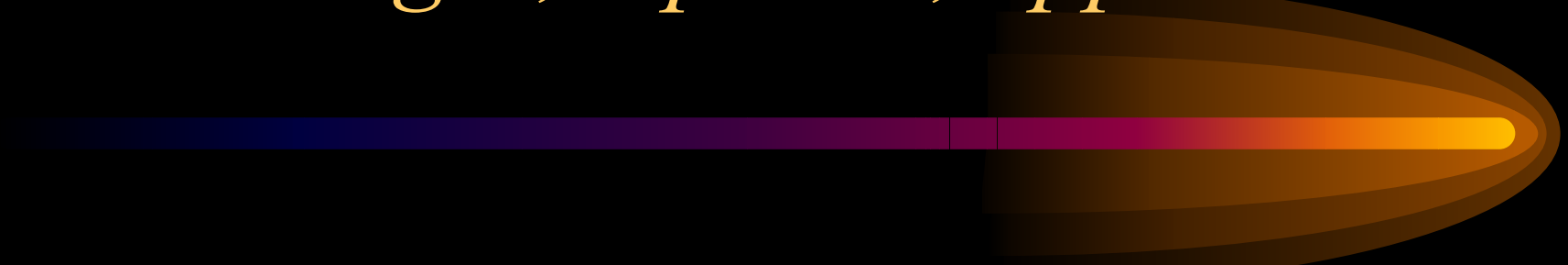
Une présentation de:

LABORATOIRE G.M.F. inc.

1-800-363-1339

450-796-4772

Stocker Calves Challenges, Options,Opportunities



An Ontario Veterinarian's Observations

By: Dr. Martin Misener DVM
Linwood Veterinary Services

Stocker Calves

- by definition are beef animals weaned from the cow and not traditionally speaking backgrounded

Challenges

- choosing the right cattle
- time of year
- disease challenges

Choosing the right cattle

- maximize individual farm strengths
- minimize individual farm weaknesses

Water Guidelines

Requirements	Unit	Cows and bred	Calves to 500lb	Feeders to 750lbs	Feeders to 1100lb
Surface area	Ft^2/100 head	4	4	4	4
Daily demand	Gal/1100 lb	10	10	10	10
Daily hot weather demand	Gal/1100lb	20	20	20	20

Feed Bunk

Length in Linear inches/head

	Cows	Calves 500 lbs	Feeders 750 lbs	Finishers 1100 lbs
limit feeding	26-30	18-22	-	-
full feed (once/day)	-	-	18-24	24
max height at throat	22	18	18	22

Handling facilities

- need easy sort out options
- good head gate and chute design
- sick pen

2. Management

- ability to identify sick calves
  - art and science
- good feed bunk management
- good records

Time of Year

- the weather can make the best planning go to pot
- August - September starts are easiest
- December is the hardest month

Disease Challenges

Viruses:

- *IBR: Infectious bovine rhinotracheitis
- *BVD: Bovine viral diarrhea
- PI_3: Parainfluenza
- *BRSV: Bovine respiratory syncytial virus
- BRCV: Bovine Respiratory Corona virus

Parasites

- worms, flukes and lice
- *coccidiosis

Bacterial

- Pasteurella hemolytica (Mannheimia hemolytica)
- Pasteurella multocida
- Haemophilus sonmus
- *Mycoplasma

Options

Do I buy Low Risk Cattle or High Risk Cattle?

Low Risk

- heavier starting weights
- single source
- properly vaccinated dams
- pre-vaccinated calves
- bunk ready

High Risk

- lighter weighs
- multi source
- multi sale
- no vaccination history

Low Risk vs. High Risk continued

- this decision must be based on economics and facility and management challenges
- too often high risk cattle are placed into below average facilities with below average management
- good for the vet - bad for the producer

Vaccinations

- in my opinion there is no place in today's beef industry for killed vaccines against IBR, BVD or BRSV (other than animals you don't want to show an antibody titer)
- consult with your Veterinarian for the best program for your herd situation

On Arrival Programs

- good environment
- hay first, then water to prevent rumen wash out
- electrolytes in the water if long distance trucking is involved
- 24-48 hours rest
  - * temperatures taken at processing
  - herd vaccination program
  - prescribed Antibiotic and Endectocide

Disease Management

- know what you're treating
- use prescribed, effective first line treatment
- aggressive pulls
- mass medication

Feed Medications

- excellent tool for disease management
- better bacterial sensitivities than water options
- safe
- cost effective

Aureo S - 700 (Alpharma Can. Corp.)

- Historic feed medication of choice for use in feedlot starters
- Claim: as an aid in the maintenance of weight gains and feed efficiency in beef cattle in the presence of stress due to shipping, weaning and handling

AS 700

- Directions: Mix in feed to supply 350 mg Chlortetracycline and 350 mg Sulfamethazine per head per day
- feed for the first 4 weeks
- 10 day slaughter withdrawal

Problems

- Sulfamethazine
  - in Ontario we cannot send dead stock for rendering with sulfamethazine tissue residues
- Low level of drug

Our clinic recommendation

- group evaluation and feed medication prescription
- 4.0 mg/lb bw/hd/day of Chlortetracycline (Aureomycin 220, Alpharma Can. Corp.)

  + .227 mg/lb bw/hd/day of Decoquinate (Deccox 6%, Alpharma)

Our clinic recommendation

- i.e. 8.8 mg/kg bw CTC
- .5 mg/kg bw Decoquinate
- feed for the 1st 28 days
- 14 day slaughter withdrawal

Info required

- Group history
- Average body weight of calves
- Feeding rate of feedlot starter

Comparison

- 500 lb steer at 4.0 mg/lb bw/hd/day
  = 2000 mg Chlortetracycline (CTC)
- vs. 350 mg/hd/day Chlortetracycline in AS 700
- cost of Aureomycin in the 4.0 mg feeding program is approximately $2.00/hd

Why did we choose this approach?

- Product efficacy
  - CTC attains the highest level in lung tissue of the Tetracyclines
  - bacterial susceptibility is significantly better with CTC and OTC compared to Tetracycline HCL
  - peak Aureomycin in blood and lung levels are obtained in 48 hours

Why did we choose this approach?

- BRD
  - bovine respiratory disease
  - accounts for 65-79% of morbidity and 44-72% of mortality in stocker calves
  - reaction time to BRD challenges

Safety

- Aureomycin is approved in combination with Deccox
- safety trials have been done
  - feeding cattle up to 30 mg per lb bw/day for 42 days
  - no toxicity or decreased feed consumption
  - no gross pathological lesions

Metaphylaxis

- Mass-medication with injectable, water or feed-grade antibiotics at times of increased morbidity

Aureomycin 10 mg/lb BW dose

- February 16, 1996 Aureomycin received a new approved indication in the U.S.
- Aureomycin for use in calves, beef and non-lactating dairy cattle: 10 mg/lb body weight/hd/day feed for no more than 5 days
- 0 withdrawal in U.S.
- we recommend a 14 day slaughter withdrawal

Powerful tool to have in the toolbox

- must be combined with good individual treatment programs
- very effective
- very cost effective
- same positive points as outlined earlier
- cost: approximately $0.91 to medicate 500 lb steer for 5 days

Maximum Residue Limits(MRL's) Aureomycin (CTC)

- 0.1 ppm - liver, kidney and muscle of cattle
- 1.0 ppm - muscle and fat of calves
- 4.0 ppm - liver and kidney of calves

Opportunities

- Marketing your product
  - information exchange
  - targeting the right calf
  - improved health

Linwood Vets Started Calf Program

- new product for the feedlot industry
- goal: provide bunk ready started calves to feedlot clients
- off set risk with value added service and product
- enhanced options for feedlots

Program

- Place weaned stocker calves into a starter barn
- maximizing farm strengths
- set health protocol
- 42 day feeding period

Health program

- on arrival temp. and processing
  - Resvac 4 somubac
  - Dectomax
  - Temp and Treat
    - > 103.5 Micotil SQ
    - < 103.5 Liquamycin LA IM
  - 55 day slaughter withdrawal
  - individually tagged

First line BRD treatment program

- Nuflor 3cc/100 lbs IM
- Biomycin 5cc/100 lbs SQ
- Predef 20 mg (10cc IM)
- 48 day slaughter withdrawal

Day 29

- re-vaccinated with Resvac 4 somubac
- nuts and horns
- implanted (Compudose)
- 21 day slaughter withdrawal

Feeding Program

- customized feedlot starter medicated as per our prescription (28 day feeding period)
- hay 1st 21 days
- silage exposure last 21 days
- medicated grower pellet (rumensin) last 14 days

Detailed records

- incoming group weights
- individual temperatures on entry
- diagnosis and treatment records as well as response
- outgoing group weights

Cost

- $100.00/head and processing
- we assume the loss on mortality and chronic BRD animals

Value Added Calf Protocols

Bruce Peninsula (BP)	**Blue Water (BW)**
Bovi-Shield NC 4, One Shot, Ultrabac 7 Somubac at spring turn-out	Bovi-Shield NC 4, One Shot, Ultrabac 7 Somubac at spring turn-out and 2 weeks before weaning
Castrated, Dehorned at least 1 month before sale	Castrated, Dehorned at least 1 month before sale
Bunk Adjusted	Bunk Adjusted
Char Cross, Pre-sort Sale	Black calves, Pre-sort
Have adopted Bovi-Shield FP for the breeding herd	Have adopted Bovi-Shield FP for the breeding herd

Compilation of Value-Added Health Data

	BP 2002	BP 2003	BW 2003	Total
Number of Calves	1,162	1,026	510	2,698
1st Treatment Rate	13%	27%	7%	17%
Retreatment Rate	3%	9%	2%	5%
% Chronics	0.77%	2.34%	0.59%	1.33%
% Dead	0.86%	0.68%	0.20%	0.67%

LVS started calf program

		Worst Group	Best Group
# Calves	329	113	114
1st Treatment Rate	8.2%	14.2%	0
Retreatment Rate	2.4%	7.1%	0
% Chronics	0.9%	2.7%	0
% Dead	.6%	1.8%	0
% Hot on arrival	20.1%	41.6%	6.1%

True North Cattle Initiative

- group of Peace River, B.C. producers attempting direct marketing to feedlots
- taking a “what do you want and we will provide it” approach
- preconditioned calves
- backgrounded cattle
- same colour low variability groups
- Information! Information!

Points to Ponder

- Specialization within our industry
  - i.e. commercial heifer producers
    vs beef producers
- Branded Product
  - working backwards from targeted meat market
- Food Safety
  - traceability
  - chemical biological and physical residue target of zero
    (irradiation of meat)