

Stocker Cattle Management and Nutrition

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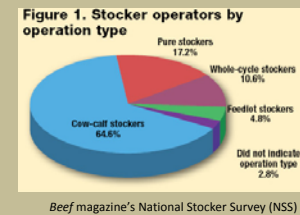


Basic Management Plan

- Procure cattle – maximize uniformity
- Receiving cattle- insure health
- Sound nutrition plan
 - No growth = No \$\$\$
- Minimize stress
 - Happy cattle = growing cattle
- Incorporating Preconditioning Program

Source of Stockers

- Home grown
- Purchased
- Contracted
- Co-op??



Procurement of Stockers

- Uniformity
 - Weight/Frame Size/Muscling
 - Steers vs. Heifers
 - Breed Type

TABLE 12. 15-Trial Summary of Effects of Breed Type on Cattle Gains on Grass

Breed	ADG
Hereford	1.70
Angus	1.61
Angus-Hereford	1.65
Dairy cross	1.72
Exotic cross (Charolais and Simmental)	1.77
Brakeman cross	1.79
Limousin cross	1.69

Source: Unpublished data.
Breed types were visually determined. 2,500 yearling cattle were used.

Average Selling Price for Feeder Cattle Based on Muscle Score

Muscle Score	Average Selling Price ^a (\$/cwt)	Discount Compared to No.1 (\$/cwt)
Number 1	\$120.45	----
Number 2	\$111.31	-\$9.14
Number 3	\$96.28	-\$24.17
Number 4	\$82.21	-\$38.24

^a Averages across muscle score are different from each other (P<0.0001) Arkansas, 2005

Average Selling Price for Feeder Cattle Based on Frame Score

Frame Score	Average Selling Price (\$/cwt)	Discount Compared to Large Frame (\$/cwt)
Large	\$118.27 ^a	----
Medium	\$118.15 ^a	-\$0.12
Small	\$95.43 ^b	-\$22.84

^{a,b} Averages without a common superscript differ (P<0.01) Arkansas, 2005



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Average Selling Price for Feeder Cattle Based on Calf Color

Calf Color	Average Selling Price (Value/cwt.)	Deviation From Overall Average (Value/cwt.)
yellow-white face	\$120.44 ^a	\$2.34
yellow	\$120.29 ^a	\$2.19
black-white face	\$120.03 ^a	\$1.93
black	\$119.24 ^b	\$1.14
gray	\$117.66 ^c	-\$0.44
gray-white face	\$116.79 ^{c,d}	-\$1.31
white	\$116.01 ^d	-\$2.09
red-white face	\$114.58 ^e	-\$3.52
red	\$113.92 ^f	-\$4.18
spotted or striped	\$107.37 ^g	-\$10.73

Arkansas (2005)

Receiving Management



- Most crucial point in operation
- Calves have the potential to go North or South
- Dependent on management

Receiving Management



Low Risk

- Known source
- Castrated
- Dehorned
- Vaccinated
- Thrifty cattle

High Risk

- Commingled calves
- Exposure to disease
- Traveled long distances
- Poor appearing



Receiving Management



- Clean, dry pen
- Access to good hay
- NO water or grain
- Let cattle rest overnight
- Work animals next day early and in small groups

Working Low-risk Cattle

- Ear-tag
- Deworm
- Vaccinate
 - IBR, BVD, IBR, BRSV (2-in-1 or 3-way viral vaccine)
 - 7-way clostridial vaccine (Blackleg)
 - Pasteurella haemolytica
 - Pasteurella multocida
 - Haemophilus somnus
- Test for persistently infected BVD
- Implant
- Castrate
- Dehorn

Working High-risk cattle

In addition to previous practices :

- Mass treat with an antibiotic (metaphylaxis)
- Remove clinically sick calves and place in a separate pen for observation and treatment



Stocker Cattle Management and Nutrition

Identifying Sick Calves

- Early recognition is key
- Check cattle daily
- Easy to do at the trough
- Look for loners, unthrifty cattle, nasal discharge
- CONSULT YOUR VET!!!



Developing a Nutritional Program

Goals:

- Keep cattle gaining at ~2.0 lb/d
- Utilize forages as the major source of nutrients
- Develop economical supplement when needed



Average Selling Price for Feeder Cattle Based on Body Condition

Body condition	Average Selling Price \$/cwt	Difference Compared to Average \$/cwt
Very thin	\$119.55	\$1.41
Thin	\$116.80	-\$1.34
Average	\$118.14	Base
Fleshy	\$112.28	-\$5.86
Fat	\$101.98	-\$16.16

Arkansas, 2005

Why Supplement?

- Increase stocking rates and forage utilization
- Implanted cattle perform better
- More uniform gains
- Provides a carrier for ionophores
- Supplemented cattle perform better in the feedlot
- Hand-feeding tends to quiet cattle – more manageable
- Forces a closer observation of the cattle



Nutritional Requirements

Medium-frame steer calves

Wt (lb)	Daily Gain (lb)	DM Intake (lb)	Crude Protein (%)	TDN (%)
400	1.5	10.8	11.5	63.0
	2.0	11.0	12.7	67.5
600	1.5	14.7	9.8	63.0
	2.0	15.0	10.5	67.5
800	1.5	18.2	8.8	63.0
	2.0	18.5	9.8	67.5

Byproduct Pricing

Ingredient	\$/ton	% DM	% CP	% TDN	\$/lb CP	\$/lb TDN
SBM 48	\$ 440	88.0	47.7	87.0	\$ 0.52	\$ 0.29

\$/ton of nutrient / % DM / % nutrient / 2000 lb = \$/lb of nutrient

Stocker Cattle Management and Nutrition

Byproduct Pricing

Ingredient	\$/ton	% DM	% CP	% TDN	\$/lb CP	\$/lb TDN
SBM 48	\$ 440	88.0	47.7	87.0	\$ 0.52	\$ 0.29
Corn Gluten Feed	\$ 115	90.0	25.0	83.0	\$ 0.25	\$ 0.08
Distillers Grain	\$ 185	90.0	28.0	88.0	\$ 0.34	\$ 0.11

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Corn	\$ 184	90.0	10.0	90.0	\$ 1.02	\$ 0.11
Soyhulls	\$ 106	91.0	12.1	77.0	\$ 0.45	\$ 0.08
Whole Cottonseed	\$ 240	90.0	23.0	95.0	\$ 0.58	\$ 0.14

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Byproduct Minerals

- Supplement Ca to for proper Ca:P ratio
 - Avoid urinary calculi
 - Maintain $\leq 1.2:1$
- Monitor sulfur levels
 - Avoid polioencephalomalacia
 - Max level 0.4%
- N and P excretion
 - Environmental impact



Example

"I bought a truck load of four weight steers. I have rye-ryegrass pastures and need them to gain 2.0 lb/d to market them at 400 lb. How much supplement do I need?"

- Forages: 12% CP, 61% TDN
- Requirements: 12.7% CP, 67.5% TDN



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How do I balance my ration?

Balancer Programs:

- Taurus (UC Davis) \$400
– animalscience.ucdavis.edu/extension/Software/taurus/
- BRANDS (Iowa State Univ.) \$200-475
– www.iowabeefcenter.org/content/software_software_brands.html

Evaluator Programs:

- Cattle Grower Ration Balancer (Univ. of Arkansas)
– www.aragriculture.org/livestock/beef/nutrition/spreadsheets/
- OSUNRC2002 (Oklahoma State Univ.)
– www.ansi.okstate.edu/software/

CONSULT WITH YOUR COUNTY EXTENSION AGENT BEFORE FEEDING!!!!

How do I balance my ration?

“Those are too difficult!”

“I want something for free that will balance basic rations”

COMING SOON:

[UGA Basic Balancer](#)

Example

“I bought a truck load of four weight steers. I have rye-ryegrass pastures and need them to gain 2.0 lb/d to market them at 400 lb. How much supplement do I need?”

- Forages: 12% CP, 61% TDN
- Requirements: 12.7%, 67.5%
- Supplement: 50 Soyhull:50 Corn Gluten Feed
=34% of DMI or 3.8 lb AF at 400 lb

Should I Feed an Ionophore?

Effects of Feeding Ionophores On Stocker Cattle Gains

Number of trials	Method	Intake, mg/hd/day	Weight Gain, lb/hd/day	
			-ionophore	+ionophore
<u>Rumensin</u>				
47 trials	hand-fed	144	1.52	1.62
12 trials	self-fed	88	1.37	1.52
<u>Bovatec</u>				
9 trials	hand-fed	193	1.64	1.81
3 trials	self-fed	162	.78	.80

Mineral Supplementation

- May or may not improve performance
- CHEAP INSURANCE
- Minerals to consider
 - Na and Cl (salt)
 - Ca and P
 - Maintain ratio of 1.5-2.0 Ca:P
 - Important when feeding corn milling byproducts
 - Mg - Include when grazing lush winter annuals to prevent grass tetany
 - Trace minerals

Pre-conditioning

- Preparing calves for the feedlot after weaning
- Spread out the stress of weaning
- Get health records straight
- Feed for 45 days before it is shipped
- Help uniform group
- Goal ADG ~ 2 lb/d



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Extension Beef Specialist



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Vaccination Protocol (+ BVD – PI)

- Prevent BRD (bovine respiratory disease) with proper vaccinations therefore reducing sickness and death in feedlot
 - IBR, BVD, PI3, BRSV (a 4- or 5-way viral vaccine)
 - 7-way clostridial vaccine (Blackleg)
 - Pasteurella haemolytica
 - Pasteurella multocida
 - Haemophilus somnus
- Test for BVD – PI (bovine viral diarrhea – persistently infected) animals



Identification (EID)

- Many feedlots utilize EID tags in their record keeping system
- Contributes to traceability (age and source verification)
- Helps producer get data back on their animals



Known health program

- 2003 Evaluation of Oklahoma Quality Beef Network
- Third year of the program
- Evaluated if a price advantage existed



Known health program

- OQBN – Preconditioned, known vaccination protocol
- Three years of data, over 56,000 calves
- Utilize regular auction market to host sale
- Non-program cattle are sold at the sale site on the same day



Price Advantage (\$/cwt) for Specifically Defined QBN Lots. Three Year Average.

OQBN Certified, 10 or more head	\$5.85
Non-certified Cattle	Base



- BQA Certification - guarantees sound management and good production practices
- Online test at <http://www.iqbeef.org/>, GCA records cert, re-cert after 2 yrs

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Good Record Keeping

- Proper ID for animals and record of date of birth (individual or group age)
- Required for Japan Export, COOL, PVP
- Help producer make more informed decisions



Stocker Cattle In Georgia

- Source of cattle
- Three distinct forage zones
- Encouraging market to support stockering
- Resources to market cattle post stocker



Thank You!

DON'T FORGET TO FILL OUT THE SURVEY!!!

Questions?

Deep South Stocker Conference

Aug. 20th & 21st, 2009
Forrest County Agri-Center
Hattiesburg, MS



This conference will address issues that affect:
Stocker Operators (Winter & Summer Grazing)
Backgrounders & Pre-conditioning Yards
Carcass Producers

Tradeshow During Breaks and Meals

Production Tours

- Thursday, Aug. 20th: Noon - 6 p.m.
- South Mississippi Producers
 - Production overview and philosophy
 - Facilities tour
 - MSU White Sand Research Unit
 - Forage research: new varieties and mixed forages
 - Pasture / Animal Ryegrass rotation
 - Farm tour and cattle information
 - Evening Meal
 - John Anderson (Miss. State Univ.)
 - Price Risk Management

Seminars

- Friday, Aug. 21st: 8 am - 4 p.m.
- Receiving Health Protocols
 - Robbin Faulkner (Purina Animal Health)
 - Soil Nutrient Management
 - Dennis Hancock (Univ. of Georgia)
 - Producer Panel
 - Three diverse operators
 - Grazing Management
 - Holly Ireland (Miss. State Univ.)
 - Feeder and Fed Cattle Market Trends
 - John Michael Riley (Miss. State Univ.)

Stockering Beef Cattle:

Adding value to Georgia's Beef Industry



Tuesday, July 28 – Crawford, GA



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