
Adding Value to Feeder Calves: Preconditioning, Backgrounding, & Retained Ownership

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What Is Preconditioning?

- Preparing calves for next phase of beef production
 - Weaning
 - Separating calves from cows with the least amount of stress possible
 - Health program
 - Preparing calves to withstand potential diseases they will be introduced to during transportation and marketing process and during the future feeding programs (stocker or finishing phase)
 - Feed program
 - Add weight while overcoming the stresses of weaning and health management practices and teaching them to eat from a feed bunk and drink from a water trough

Why Do We Not Precondition?

- Belief it will reduce income
- Perception of lower sale weight
- Possibility of sickness / death loss
- Lack of adequate facilities
- Do not want to invest the time, effort and money for feed and facilities

Why Precondition?

- Increased sale weight
- Increased value/price in a group marketing event
- Reduced shrink
- Increased net return due to value of gain exceeding cost of gain

Why Precondition?

- Calves should withstand marketing and transportation and go on feed quicker
- Incidence of sickness (morbidity) and death loss should be lower
- David May and Todd Milton report that morbidity and death loss of preconditioned cattle is about half or less that of cattle which have not been preconditioned
 - David May – Kansas Feedlot Manager
 - Todd Milton – Feedlot Nutritionist

Why Precondition?

- Since morbidity is reduced, feedlot performance is better, carcasses are higher valued and cattle are more profitable

Comparison of Cattle Receiving Treatment vs. No Treatment at Feedlot on TN Beef Evaluation

	<u>Treatment at feedlot</u>	No Treatment at feedlot
2005-2006		
Average daily gain	3.36	3.63
Net Return to Feeding	- \$16.69	\$34.98
Choice or better	56%	66%
2006-2007		
Average daily gain	2.85	3.45
Net Return to Feeding	- \$15.41	\$57.37
Choice or better	68%	66%

Calves With a Preconditioning Program

- Gain faster
- Have lower death loss
- Require less feed
- Have lower feed costs
- Reduced sickness and lower treatment cost
- Have fewer days on feed
- Have low interest and yardage cost
- Have lower cost of gain

Capture Added Value By Marketing Through A Graded Sale

- A way for producers with less than truckloads (75-100 head) of calves to benefit from prices comparable to truckloads

Marketing Through A Graded Sale

- Calves are weighed on arrival
- Graded by a state grader
- Penned and sold with other calves of the same weight (50-100 lbs spread), grade, sex, and breed
- It pays to be in the big pen

Marketing Through A Graded Sale

- UT research by McLemore and Rawls indicated that loads of 48,000 to 50,000 lbs. sell for \$4 per hundred higher than single calves
- Groups of 10 head bring \$2 more per hundred than singles

Advantages of Weighing on Arrival

- Weights of calves will be at least 2-4 percent heavier
- So even if prices are equal to weekly auction prices, gross dollars would be 2-4 percent greater

600 lbs. @ \$110/cwt = \$660.00

618 lbs. @ \$110/cwt = \$679.80

Shrink – A Little Understood Concept

- Generally 1% weight loss per hour when away from feed and water
- Could be 2% more in a moving vehicle

Shrink – A Little Understood Concept

- With a normal wait in line cattle sold in graded sales will have about a 3% heavier pay weight
- In other words, at the same price, cattle at a graded sale will gross 3% more dollars

Shrink – A Little Understood Concept

- Compared to calves that might be brought to the weekly sale the evening before, weights could be 5% heavier at a graded sale when calves are weighed on arrival

One Farmer's Success Story

- Monroe County producer
- Markets through Southeast Pride Plus Sale at East Tennessee Livestock Center
- September 7, 2007 marketed 25 steers

Southeast Pride Plus Program

■ Feed Program

- Fed 14% High E Cattle Feed
- Approximately 2% body weight
- 45 days

■ Health Program

- 1st Vaccination
 - Blackleg and Haemophilus somnus
 - IBR, BVD, PI3, BRSV
- 2nd Vaccination
 - Blackleg and Haemophilus somnus
 - IBR, BVD, PI3, BRSV (MLV)
 - Pasteurella
 - Dewormer

One Farmer's Success Story

- Cattle Performance – 25 steers
 - Initial weight 7/24/07 697 lbs
 - Pay weight 9/7/07 804 lbs
 - Total gain 107 lbs
 - Average Daily Gain 2.38 lbs

Southeast Pride Plus Program

Cost of Health and Feeding Program per Head

Health Program

1st Vaccination

Blackleg and Haemophilus somnus \$ 0.80

IBR, BVD, PI₃, BRSV \$ 1.87

2nd Vaccination

Blackleg and Haemophilus somnus \$ 0.80

IBR, BVD, PI₃, BRSV (MLV) \$ 1.16

Pasteurella \$ 2.13

Dewormer \$ 2.56

Total Cost of Health Program \$ 9.32

Southeast Pride Plus Program

Cost of Health and Feeding Program per Head

Post-Weaning Feeding Program – 45 days

630 lbs. Feed @ \$9.35 per cwt.	\$58.91
Treatment for Coccidiosis	\$ 2.10
Total Cost of Feeding Program	\$61.01
Total Cost of Health Program	\$ 9.32
Total Cost of	
Southeast Pride Plus Program	\$70.33

One Farmer's Success Story

Beginning Value	697# @ 113.00*	\$ 787.61
Ending Value	804# @ 113.95**	<u>916.16</u>
Gross Margin		\$ 128.55
Health & Feed Program		\$ 70.33
Net Return Over Health & Feed Program		\$ 58.22
Total Net Return over Health & Feed		\$ 1455.50

* Graded Sale 8/4/07

** Southeast Pride Plus Sale 9/7/07

Other Costs to Consider

- Cost/value of hay & pasture
- Labor
- Facilities
- Equipment
- Depreciation
- Interest

Southeast Pride Plus Sale¹

Comparison with Tennessee Auctions

Steers: Medium & Large No. 1

Weight (lbs.)	SEP Price ¹ (\$/cwt.)	TN Avg. Price ² (\$/cwt)	Premium (\$/cwt)	Premium (\$/head)
458	124.00	120.62	3.38	15.48
570	125.00	114.59	10.41	59.34
654	118.75	108.77	9.98	65.27
753	114.00	106.73	7.27	54.74
891	108.00	97.03	10.97	97.74

¹September 7, 2007

²Weighted average for week ending Sept. 7, 2007

Southeast Pride Plus Sale¹

Comparison with Tennessee Auctions

Steers: Medium & Large No. 1

Weight (lbs.)	SEP Price ¹ (\$/cwt.)	TN Avg. Price ² (\$/cwt)	Premium (\$/cwt)	Premium (\$/head)
640 ³	123.60	109.54	14.06	89.98
688 ³	121.40	107.35	14.05	96.66
729 ³	119.30	106.99	12.31	89.74
773 ³	115.50	106.46	9.04	69.88
819 ³	113.90	99.56	14.34	117.44
888 ³	108.25	93.99	14.26	126.63

¹September 7, 2007

²Weighted average for week ending Sept. 7, 2007

³All Angus Sired, Southeast Pride Plus Program with identical products and feed. All cattle have EID tags, Somnus, Pasteurella (One Brand Product) and an additional modified-live respiratory vaccine. Producers are BQA certified.

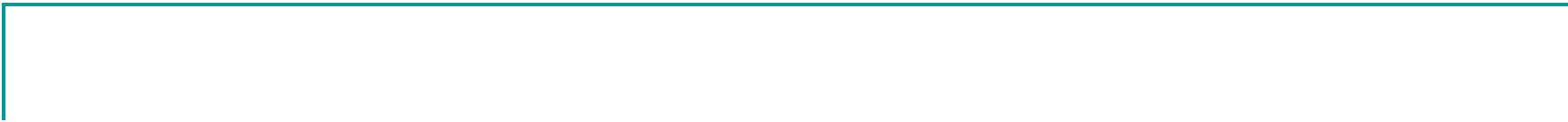
Tennessee Beef Marketing Alliance Summary Price Comparison

December 7, 2007 Sale

Alliance	Average Weight	Avg. Value Per Head	Premium above TN Avg. Price (\$/cwt)	Added Value TN Avg. Price (\$/hd)
Steers (671)	700	\$712	7.53	53.06
Heifers (443)	636	\$596	8.17	52.12
Total (1114)	674	\$666	7.78	52.69

Preconditioning: Take Home Message

- Buyers will pay more for loads or near loads of preconditioned cattle
- Graded sales are the best way for cow/calf producers to market calves
 - Weights are heavier
 - Prices are higher for large groups
- Calves weaned and fed at 2% of body weight for 45-60 days will gain enough to pay for feed and vaccination materials



What Is Backgrounding?

- Feeding cattle for longer period (90+ days) to heavier weights (adding 100+ pounds)
- Alternatives
 - Background own calves
 - Purchase calves to be backgrounded and improve management (dehorn, castrate, improve grade)

Things To Consider

- Your management level
- Facilities / Capacity
- Month placed (purchased)
- Month to market
- Number of pounds to add
- Average daily gain



**Buy/Sell
Margin**

Buy/Sell Margin

- Difference between purchase price and sale price at a later date
- Medium Frame No. 1 Steers
 - Placed in November @ 450 lbs
 - Marketed in March @ 700 lbs
 - Add 250 lbs. (2.0 ADG)
- 1997-2006
 - Average - \$4.55
 - Minimum - \$15.61
 - Maximum \$14.14

Things To Consider

- Your management level
- Facilities / Capacity
- Month placed
- Month to market
- Number of pounds to add
- Average daily gain
- Cost of gain

Things To Consider

- Forage resources
 - Pasture only
 - Pasture and hay
 - Pasture and supplemental feed
- Supplemental feed resources
 - Hay
 - Grain
 - By-product feeds
- Risk of sickness & death loss

Profitability in Backgrounding

- Profitability in backgrounding comes from Value of gain exceeding cost of gain
- Value of Gain = Gross value of additional pounds
 - Determined by
 - Purchase price
 - Sale price
 - Pounds gained

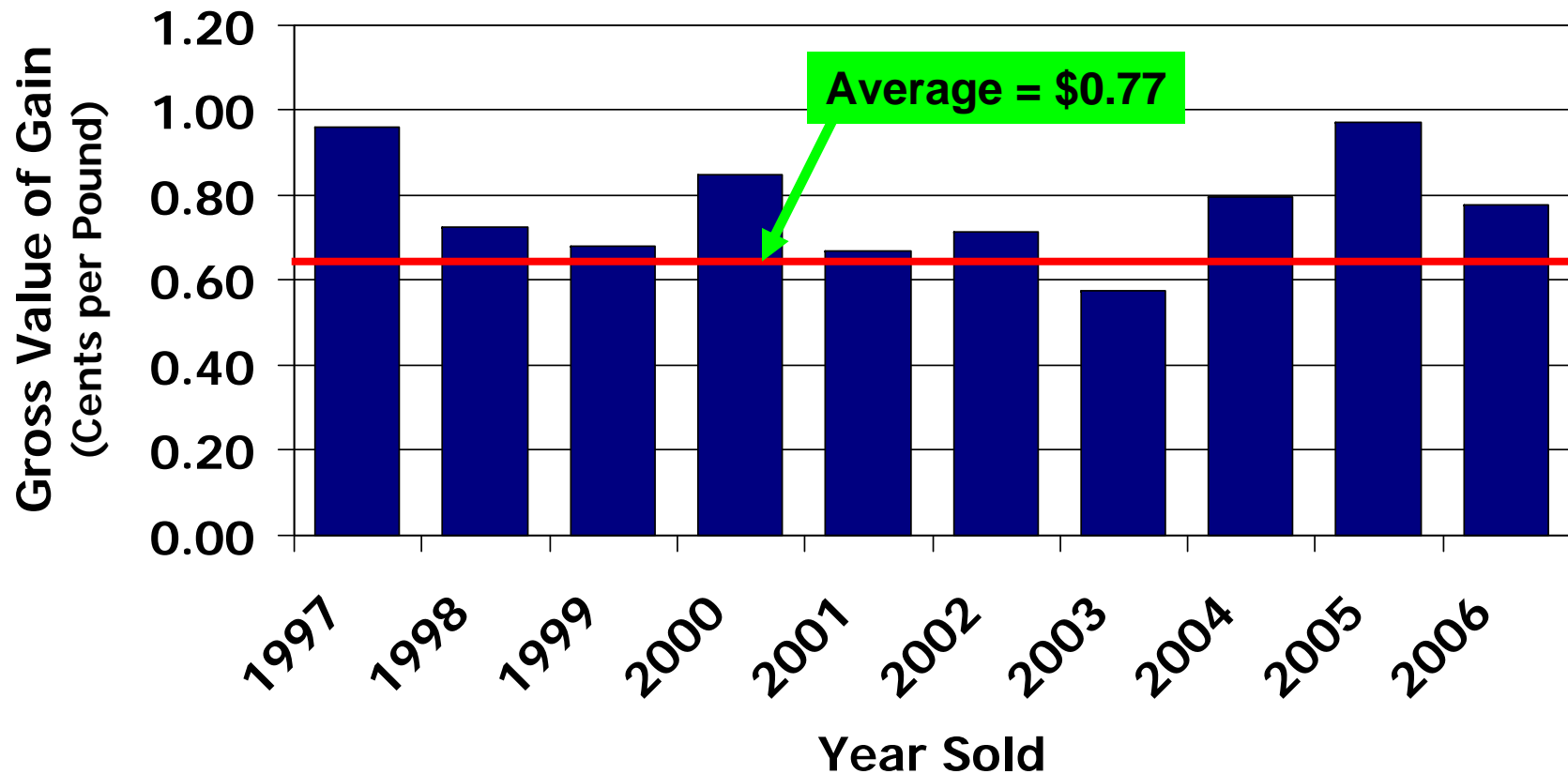
Value of Gain

Sales value (700 lbs * \$85.44)	\$ 598.08
Beginning Value (450 lbs * \$90.00)	- <u>405.00</u>
Gross Return	\$ 193.08
Total weight gain	÷ <u>250</u>
Value of Gain	\$ 0.7723 per lb
	or \$ 77.23 per cwt

Value of gain > Cost of gain = Profitable

Value of gain < Cost of gain = Not profitable

Value of Gain Steer 450# Bought/Started in November & Sold at 700# in March – 1997-2006



Prices were weighted for buying 75% M-1 & 25% M-2 and selling 90% M-1 & 10% M-2

Value of Gain at Various Buying (450 lb steer) and Selling (700 lb steer) Prices

Sell at:	\$1.05	\$1.00	\$0.95	\$0.90	\$0.85	\$0.80
Buy at \$1.15	0.87	0.73	0.59	0.45	0.31	0.17
Buy at \$1.10	0.96	0.82	0.68	0.54	0.40	0.26
Buy at \$1.05	1.05	0.91	0.77	0.63	0.49	0.35
Buy at \$1.00	1.14	1.00	0.86	0.72	0.58	0.44
Buy at \$0.95	1.23	1.09	0.95	0.81	0.67	0.53
Buy at \$0.90	1.32	1.18	1.04	0.90	0.76	0.62

Source: "Why Steers? Why Now?" Kevin Moore & Jim Gerrish, Univ. of Missouri-Columbia

What About Backgrounding Heifers?

- Heifer prices decline less than steers as weight increases
 - Potential to be pregnant at lighter weights
- Taking lightweight heifers from fall to spring results in smaller price rollback than with steers

Buy/Sell Margin: Steers vs. Heifers

- Medium Frame No. 1 Steers
 - Placed in November @ 450 lbs
 - Marketed in March @ 700 lbs
 - Add 250 lbs. (2.0 ADG)

- 1997-2006
 - Average - \$4.55
 - Minimum - \$15.61
 - Maximum \$14.14

- Medium Frame No. 1 Heifers
 - Placed in November @ 450 lbs
 - Marketed in March @ 630 lbs
 - Add 180 lbs. (1.5 ADG)

- 1997-2006
 - Average - \$2.68
 - Minimum - \$22.80
 - Maximum \$15.72

Tennessee Beef Budgets

- Use as a **guide** in evaluating your alternatives
- Always make your decisions based on **your** costs and expected returns

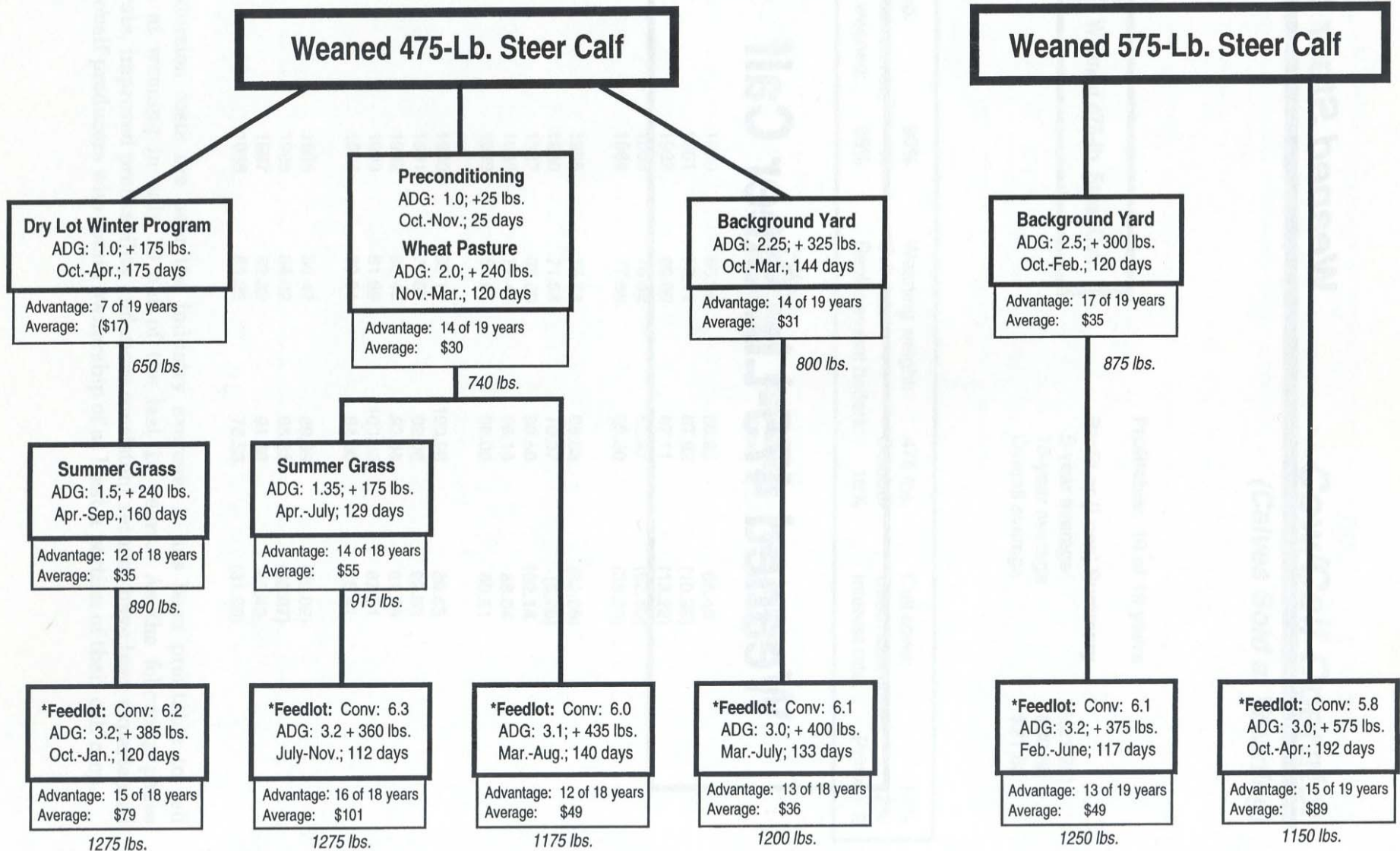
Retained Ownership Through Finishing

At times it may be
the best marketing alternative

Average return per head about \$25
without using risk management

Spring-Born Steer Calves

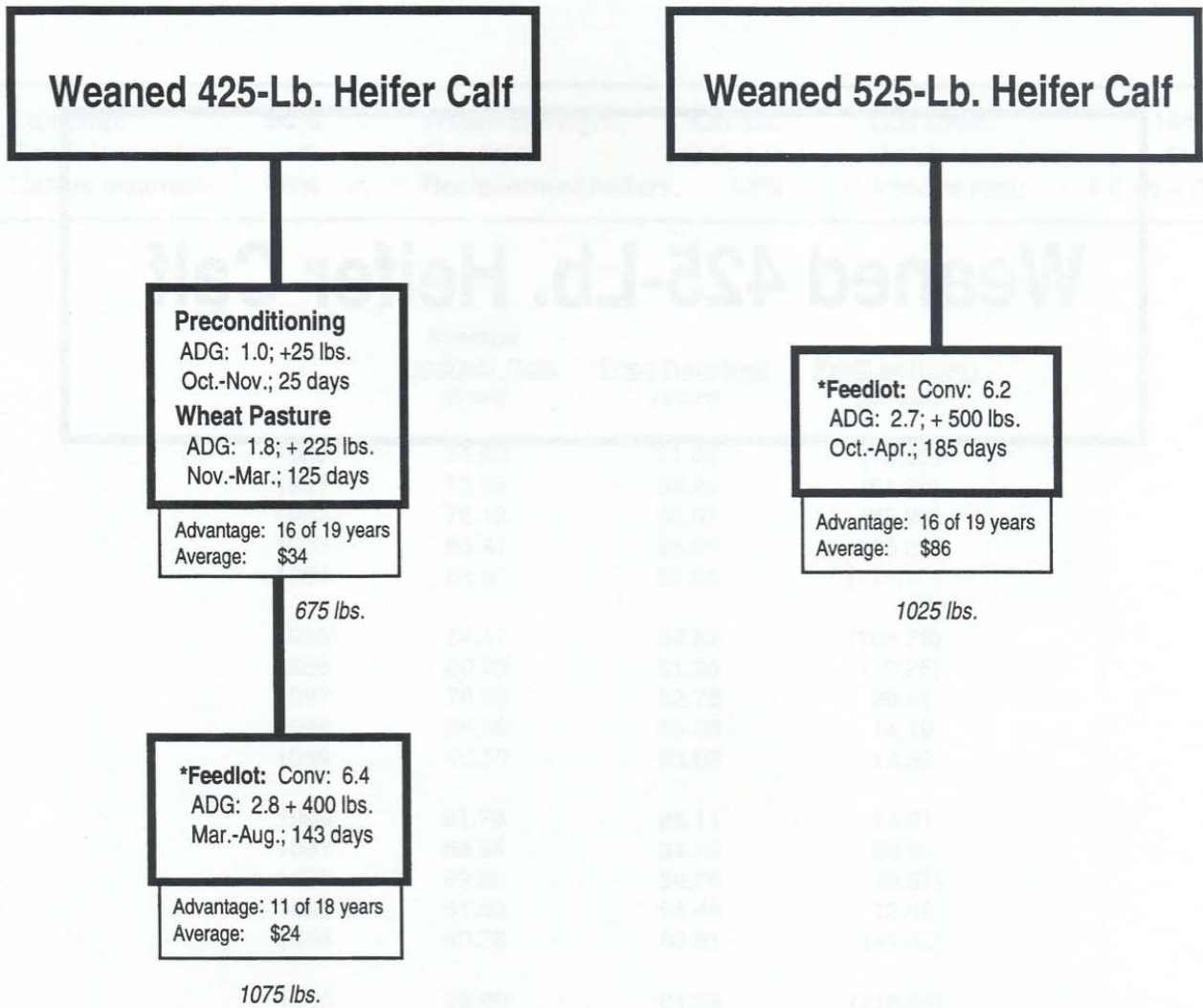
Retained Ownership Alternatives



* Feedlot conversions are measured on a dry-matter basis.

Spring-Born Heifer Calves

Retained Ownership Alternatives

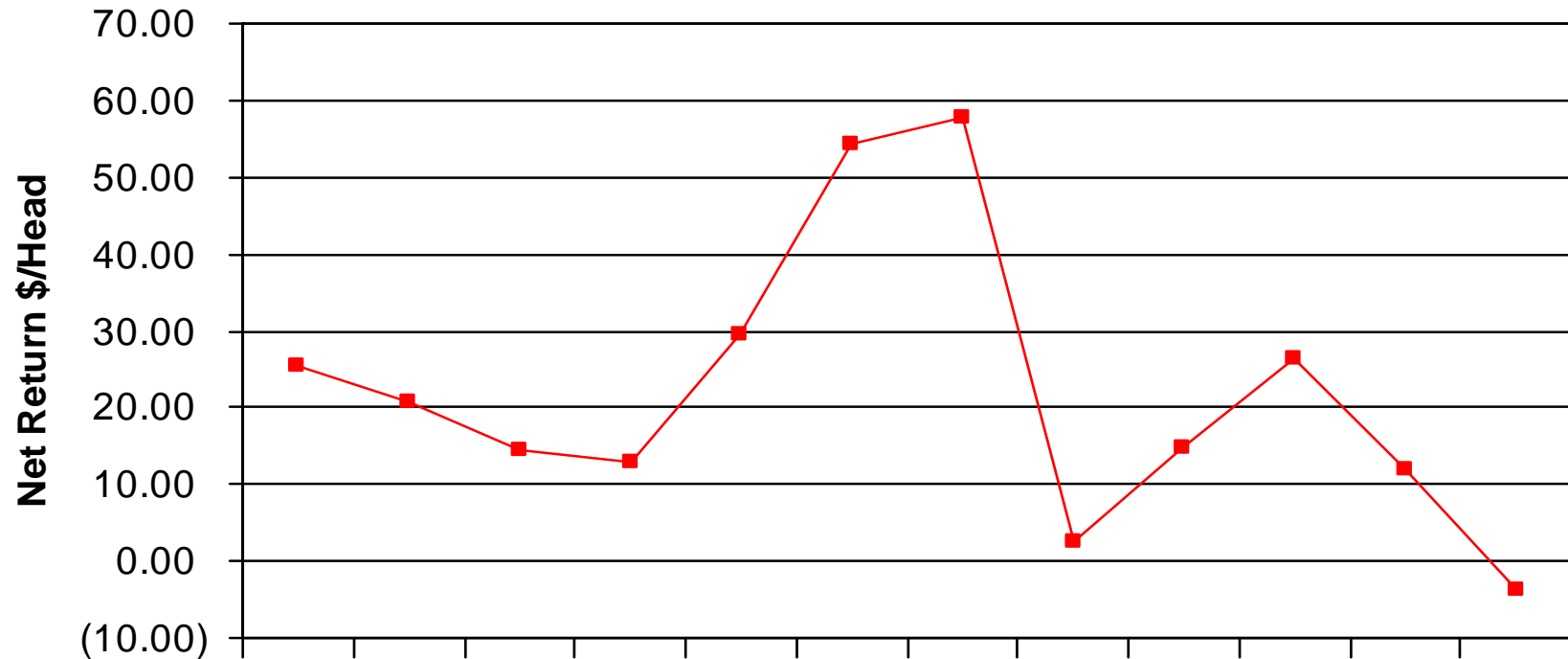


* Feedlot conversions are measured on a dry matter basis.

Some Factors Affecting Profitability of Retained Ownership

- Month placed
- Month marketed
- Price
- Daily gain
- Cost of gain
- Weight of cattle placed

Monthly Average Returns from Finishing Tennessee 700-799lb M-1 Steers in Kansas with Final Weight 1200lbs

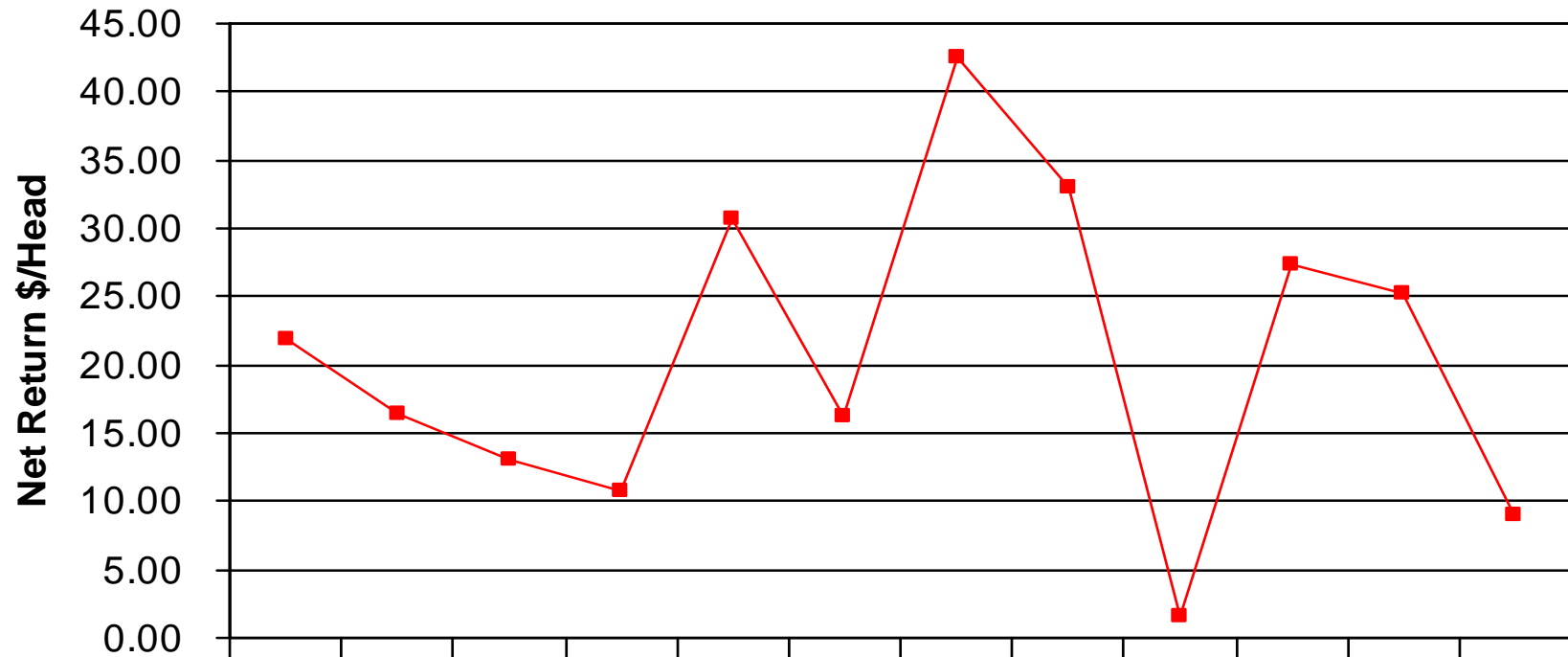


Placement Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Sale Month	May	Jun	Jul	Aug	Sept	Oct	Nov	Jan	Feb	Mar	Apr	May

Note: Based on Tennessee 5 year average prices for 700-800lb M-1 steers and So. Plains fed cattle.

Monthly Average Cost of Gain and Average Daily Gain based on Kansas Survey Data (January 1985 to August 1999). D. Mark, R. Jones, J. Mintert

Monthly Average Returns from Finishing Tennessee 800-899lb M-1 Steers in Kansas with Final Weight 1250lbs

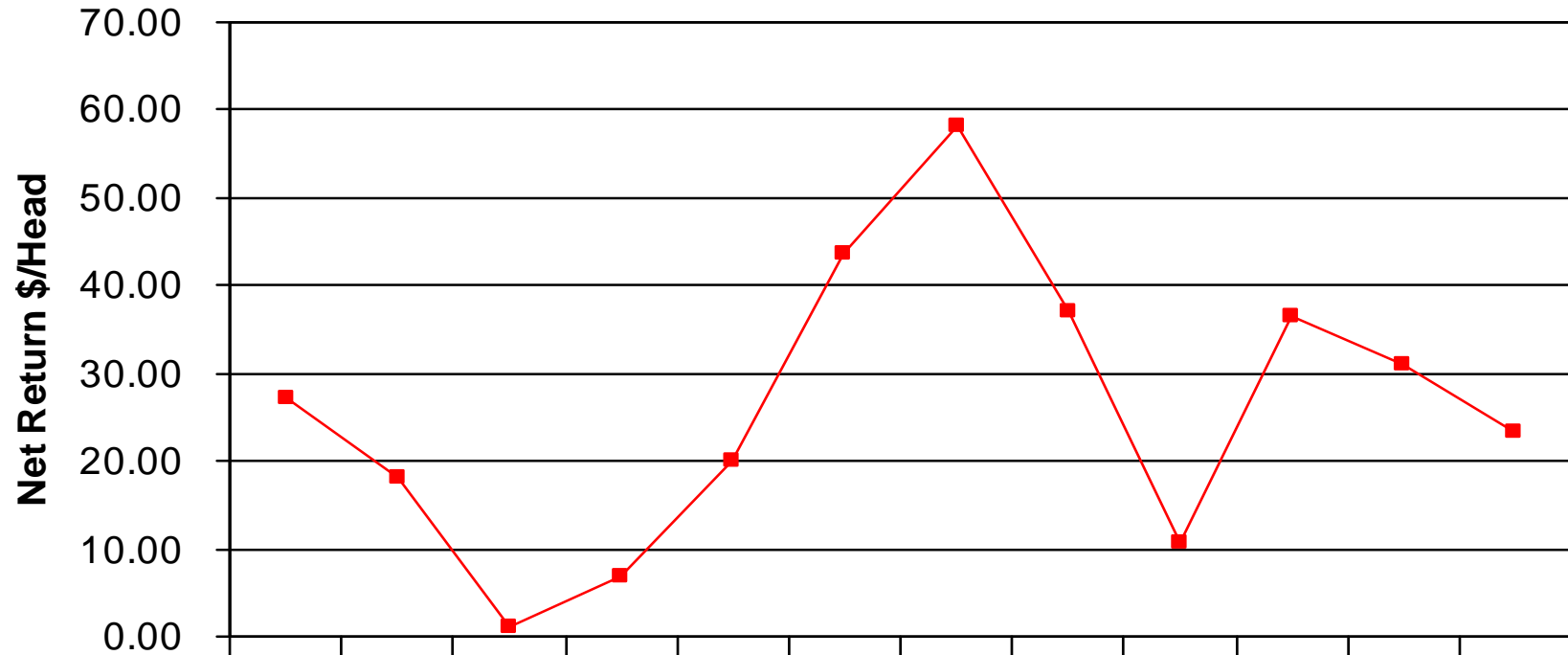


Placement Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
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Note: Based on Tennessee 5 year average prices for 800-900lb M-1 steers and So. Plains fed cattle.

Monthly Average Cost of Gain and Average Daily Gain based on Kansas Survey Data (January 1985 to August 1999). D. Mark, R. Jones, J. Mintert

Monthly Average Returns from Finishing Tennessee 600-699lb M-1 Heifers in Kansas with Final Weight 1050lbs

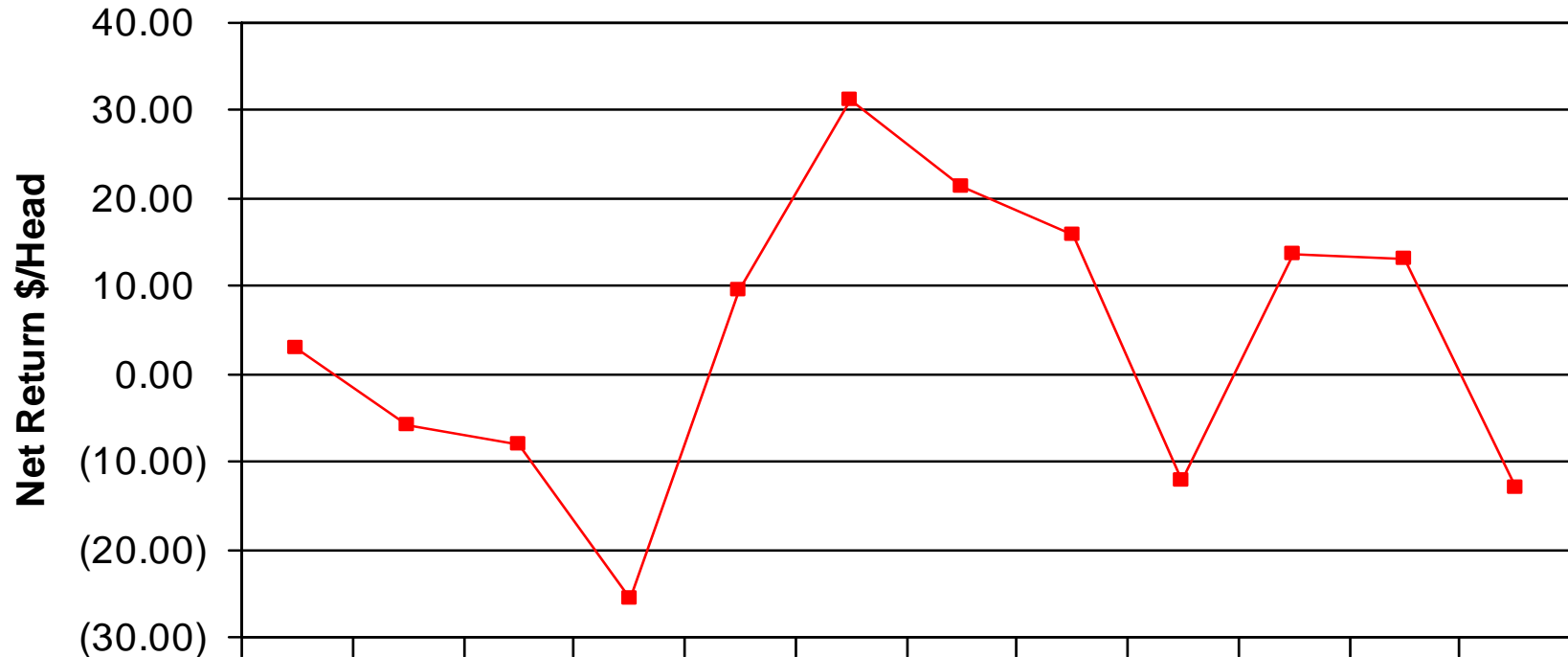


Placement Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Sale Month	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Mar	Apr	May

Note: Based on Tennessee 5 year average prices for 600-700lb M-1 heifers and So. Plains fed cattle.

Monthly Average Cost of Gain and Average Daily Gain based on Kansas Survey Data (January 1985 to August 1999). D. Mark, R. Jones, J. Mintert

Monthly Average Returns from Finishing Tennessee 700-799lb M-1 Heifers in Kansas with Final Weight 1100lbs



Placement Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Sale Month	May	Jun	Jul	Aug	Sept	Oct	Oct	Dec	Jan	Feb	Mar	Apr

Note: Based on Tennessee 5 year average prices for 700-800lb M-1 heifers and So. Plains fed cattle.

Monthly Average Cost of Gain and Average Daily Gain based on Kansas Survey Data (January 1985 to August 1999). D. Mark, R. Jones, J. Mintert

Bottom Line

Yearling cattle placed on feed mid-summer and marketed in October and November were most profitable.

(No price risk management)

Take Home Message

- Evaluate each phase of production individually
 - Cost of gain
 - Value of gain
 - Buy/Sell Margin
- Always base decisions on *your* costs and expected returns

Questions?



www.tnbeefcattleinitiative.org