

Preconditioning: Some Economic Considerations



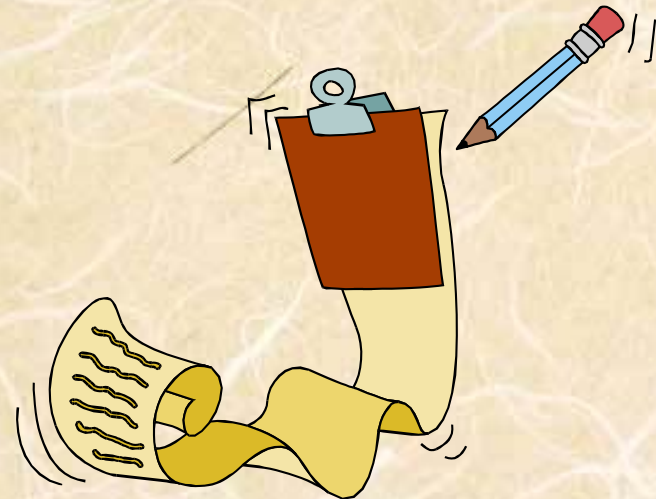
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Beef & Forage In-Service
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Preconditioning

- System used to add weight to light calves
- Emphasis on keeping calves healthy and reducing risk of disease once in a backgrounding program.
- System includes:
 - "Bunk breaking"
 - Vaccinations
 - Castrating males
 - De-horning
 - De-worming



Preconditioning- What's the value?

- Things to consider:
 - Shrink
 - Value to buyer
 - Cost of calf
 - Price spread and cost of gain



Preconditioning- When & Where?

- Has been around for several years:
 - Southeast Pride, TN Livestock Producers, and others
- Periods of 30, 45, 60 days after weaning
 - 30 or 45 is industry standard
 - 60 can enhance income
 - Beyond 60 days may lead to problems
- Goal:
 - To have cattle gain enough to pay for feed & vaccines, then market in truckloads or near truckloads to capture the added value

Preconditioning- Why the Interest?

- Developments in the industry:
 - Food safety concerns
 - Source & age verification
 - Individual animal identification
 - Value-based marketing
 - Buyers want healthy calves that will perform well

How Do We Evaluate Profitability?

- Profitability comes from:
 - Added value exceeding the cost of gain
 - Increase in price during the weaning period
 - Smaller reduction in price due to the increase in weight and seasonal price changes
- Selling calves at weaning vs. preconditioning

Preconditioned Calf

- Added Costs:

- Vaccinations
- Feed
- Hay
- Interest
- Equipment

- Added Revenues:

- Selling weight
 - Average daily gain
 - Days
 - Shrink
- Price premiums



How Did Certain Factors Affect Preconditioning Returns?

- Starting weight
- Sex
- Month of weaning
- Time period
- Are certain months of the year more profitable for preconditioning?

Buy Sell Margins Calculator

Buy/Sell Margins Calculator - Input

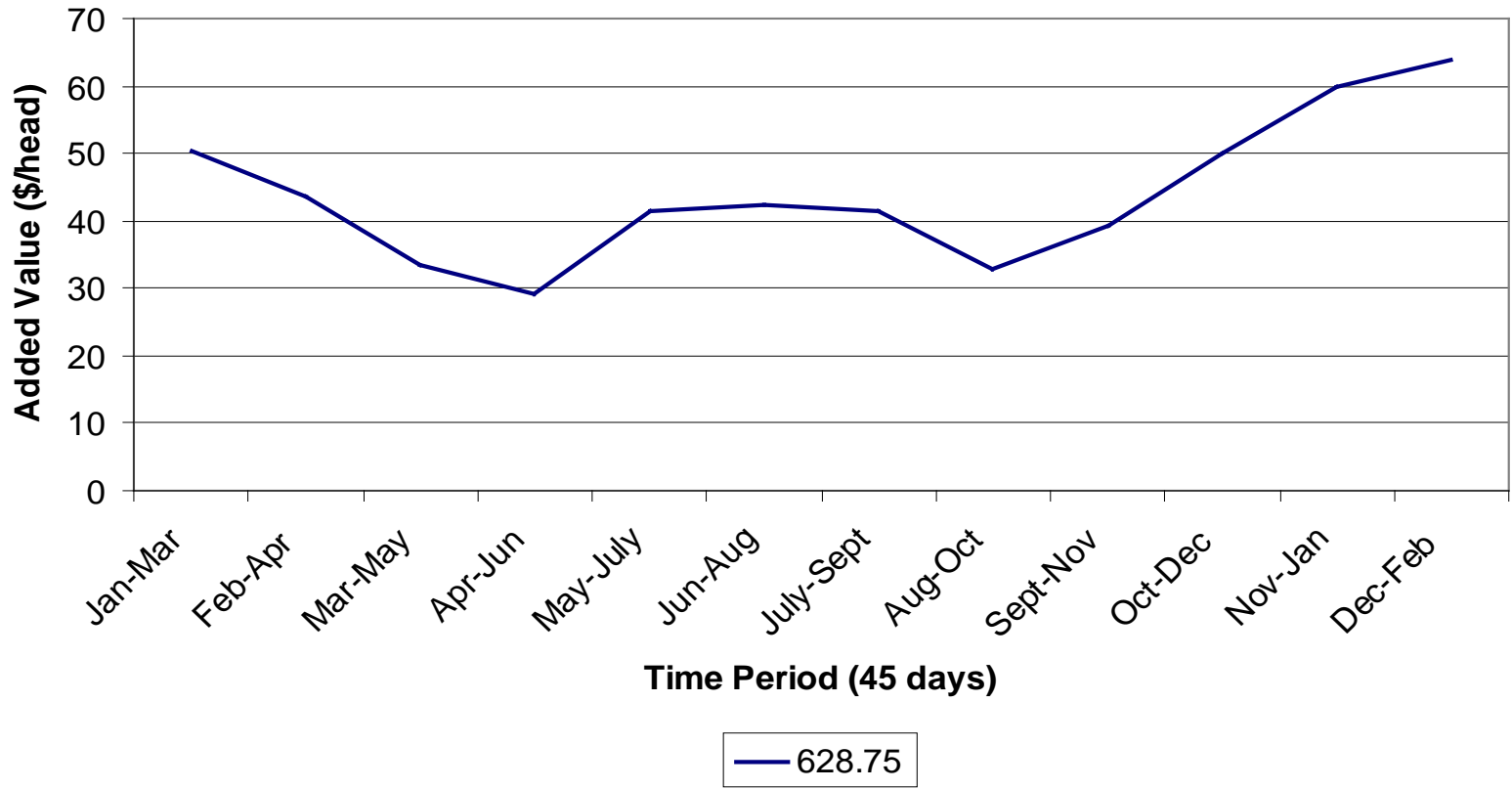
Buying Month		Selling Month	
State	TN	State	TN
Sex	Steer	Sex	Steer
Grade	Medium Frame No. 1	Grade	Medium Frame No. 1
Weight Range	400 - 500	Weight Range	300 - 400 400 - 500 500 - 600 600 - 700
Month	Jan	Month	

Calculate
Clear
Help
Exit

- Difference in the purchase and sale price of a feeder calf
- Impacted by the seasonality of cattle prices
- Based on a 10-year average

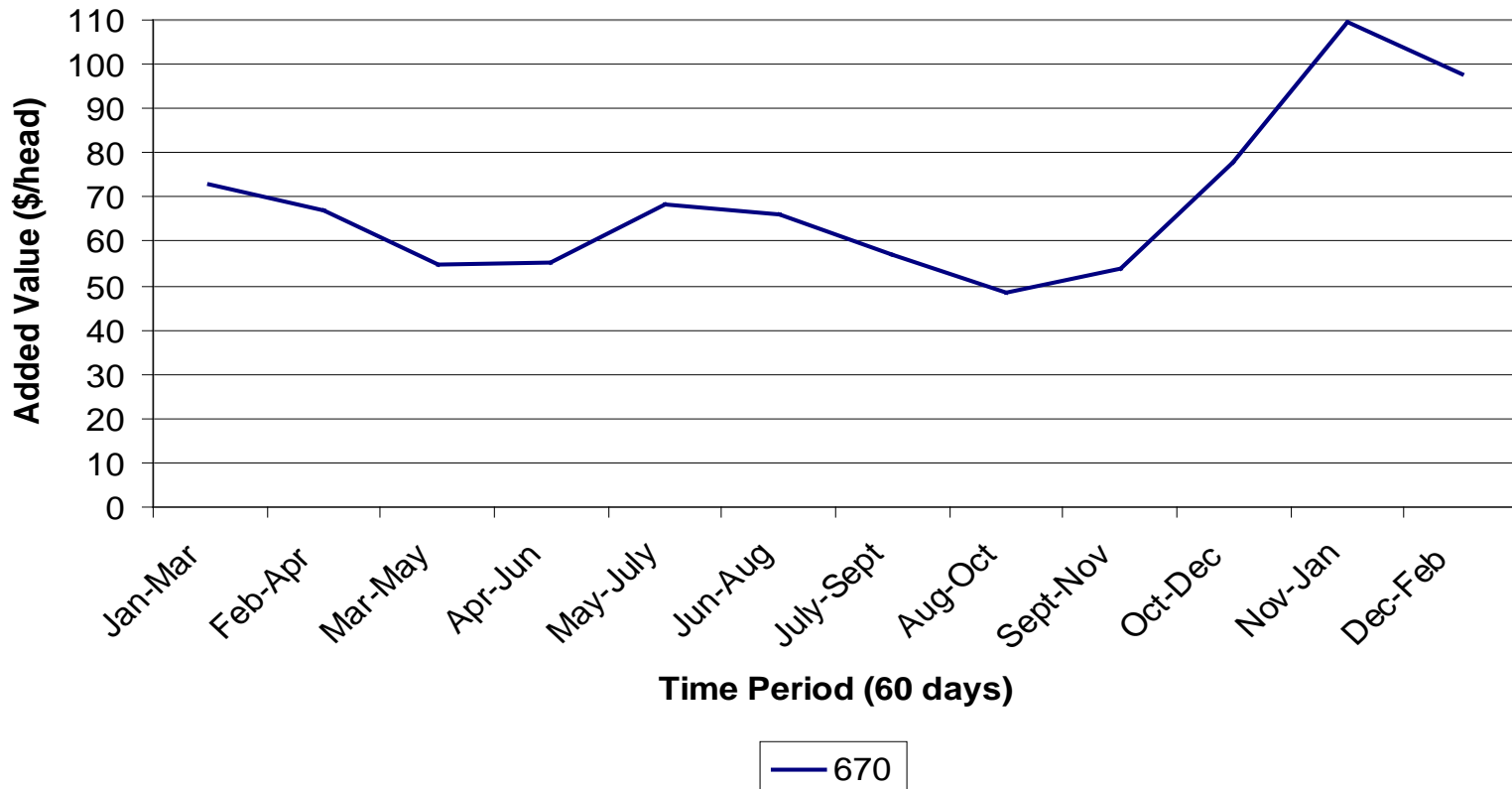
Gross Margins

Addition to Gross Value by Adding 78.75 Pounds
550-628.75 lbs; M-1 Steers; Using 1999-2003 Prices



Gross Margins

**Addition to Gross Value by Adding 120 Pounds
550-670 lbs; M-1 Heifers; Using 1999-2003 Prices**



Alternatives

- Fall Calving: weaned in
 - May
 - June
 - July
- Spring Calving: weaned in
 - October
 - November
 - December
- Steers & Heifers

Alternatives con't.

Time Period	45 days	60 days
Weaning Weight	450 & 550 pounds	450 & 550 pounds
Average Daily Gain	1.75 lbs/day	2.00 lbs/day
Death Loss	1 percent	1 percent
Feed Costs (2004)	\$160/ton	\$160/ton

Budget Construction- Data & Assumptions

- Historic Costs & Returns from 1995-2008
- Used partial budgeting to compare additional costs & returns of preconditioning
- Assumed producer had:
 - Head gate, loading & unloading facilities, hay ring, tractor
- Shrink also included
 - 4% for weanlings; 2% for preconditioned calves

Budget

**Estimated Returns and Expenses for Preconditioning Calves (Steers)
60 Day Period with 120 lb Gained (2 lb per day) Using a Complete Feed
December-February (Spring Calving)
550 lb to 670 lb
2008-2009**

Traditional Management Income

Item	Unit	Quantity	Price	Amount
Feeder Steer (weaning weight)	lb	550		
Shrink	%	4.00%		
Feeder Steer (sale weight)	lb	528	\$82.39	
Gross Revenue	head			\$435.02

Preconditioning Management Income

Item	Unit	Quantity	Price	Amount
Feeder Steer (weaning weight)	lb	550		
Days from Weaning to Marketing		60		
ADG	lbs/day	2.00		
Feeder Steer (ending weight)	lb	670		
Shrink	%	2.00%		
Death Loss	%	1.00%		
Feeder Steer (sale weight)	lb	656.60		
Weaning Price	cwt		\$82.39	
Final Price	cwt		\$87.54	
Preconditioning Premium	cwt		4.00	
Final Price with Premium	cwt		91.54	
Gross Revenue	head			\$601.05

Budget con't.

Preconditioning Costs (\$/head)

Item	Unit	Quantity	Price	Amount
Health Supplies and Medicine	head			15.00
Maintenance, Repairs, and Fuel	head			4.00
Depreciation (Equipment)	head	25	\$1,018.22	4.07
Complete Feed (Purchased)	ton	732.00	250.49	91.68
Hay	ton	0.15	75.00	11.25
Interest on Feeder	\$435.02	60 days	8.00%	5.72
Interest on Health and Maintenance	19.00	60 days	8.00%	0.25
Interest on Equipment	4.07	365 days	8.00%	0.33
Interest on Feed and Hay	102.93	30 days	8.00%	0.68
Death Loss	%	1.00%	\$601.05	6.01
Total Cost	head			\$138.99
Cost Per Day	head			\$2.32
Cost of Gain	cwt			\$108.08

Comparison

Traditional Management Income

Item	Unit	Quantity	Price	Amount
Gross Revenue	head	528	\$82.39	\$435.02

Preconditioning Management Income

Item	Unit	Quantity	Price	Amount
ADG	lbs/day	2.00		
Death Loss	%	1.00%		
Gross Revenue	head	656.60	\$91.54	\$601.05

Preconditioning Costs (\$/head)

Item	Unit	Quantity	Price	Amount
Total Cost	head			\$138.99
Cost Per Day	head			\$2.32
Cost of Gain	cwt			\$108.08

Comparison: Traditional vs Preconditioning

Item	Unit	Quantity	Price	Amount
Traditional Gross Revenue	head			\$435.02
Preconditioning Gross Revenue	head			\$601.05
Increased Revenue	head			\$166.03
Less Preconditioning Costs	head			\$138.99
Net Return from Preconditioning (\$/head) to Land, Labor, and Management				\$27.05
Return on Costs	%			19.46%
Breakeven Price	cwt			\$87.42
Final Price	cwt			\$87.54
Final Price with Premium	cwt			\$91.54
Premium Needed to Breakeven	cwt			-\$0.12

Results

- Net returns from years (1995-2008) averaged
- 60 day post-weaning periods more profitable
- **Spring Calving:**
 - 550lb heifers sold in February; Range: \$8.54-\$97.44; Average: \$50.48
 - 450lb steers sold in February; Range: \$6.91-\$95.82; Average: \$49.82
- **Fall Calving:**
 - 450lb heifers sold in August; Range: (\$23.94)-\$59.30; Average: \$19.81
 - 450lb steers sold in August; Range: (\$15.08)-\$54.74; Average: \$19.79

Remember...

- Several alternatives exist
- Budgets serve as a guide
- Seek creative solutions
- Stay focused on your goals
- Calculate costs and returns



“Easy Button”



At the END of the DAY What Do We Know?

- Results based on calves weaned and fed on the farm
- System must fit total production plan
- 60 day systems more profitable
- Marketing program for preconditioned calves is essential for a price advantage

