



Beef Cattle Management & Marketing Alternatives for Fall 2004
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Introduction

Currently high prices for weaned, feeder, and fed cattle have many producers considering their marketing alternatives. Although profits are available to those cow-calf producers who plan to sell in the next few months, historically high feeder and fed cattle futures make it appear that there is also some profit potential in either stockering or custom finishing cattle.

Although there are numerous variations, the most likely scenarios many producers are considering are:

1. Selling at weaning
2. Stockering steers on temporary winter pasture
3. Stockering steers on fescue pasture
4. Stockering heifers to sell as feeders or breed to sell as replacements
5. Custom finishing calves

Within Georgia there are considerable differences in production systems from north to south. For that reason, stocker alternatives are divided into two general regions; North Georgia which includes the fall line hills, piedmont limestone valley, and mountain regions; and South Georgia which includes the upper, middle, and lower coastal plains.

The results of these analyses should be used as a guide only. Printed versions of the budgets used in these analyses are available at <http://www.ces.uga.edu/Agriculture/agecon/new.html>

Producers should always use their own information when possible. Electronic versions of these budgets in Microsoft Excel are available at the link listed above.

North Georgia Stocker Steer Systems

There are almost an infinite number of stocker production systems. However, for ease of comparison, three main systems in North Georgia are evaluated: steers on stockpiled Max-Q fescue, steers on overseeded winter annuals, and steers on corn silage and winter annuals. The winter annuals are assumed to be no-till drilled into an existing stand of Bermuda or fescue. Steers are assumed to be placed into the system in late October-early November and marketed in mid-March.

Stocking rates vary by system but range from 1.50 to 2.00 steers per acre. It is assumed that upon entering the program the stockers will consume a receiving ration for about 6 weeks until grass reaches a suitable grazing height. Since it is highly unlikely that grazing will be available for the entire grazing period, the calves are budgeted to consume a hay and byproduct feed ration that will

keep them gaining at 2.0 pounds per day. It is assumed this period is 30 days for those calves on winter annuals and 60 days for stockers grazing fescue.

Table 1
Risk Adjusted Returns from Stockering Steers in North Georgia Fall 2004

Item	Steers on Winter Annuals	Steers on Winter Annuals & Corn Silage	Steers on Stockpiled Fescue*
In Date	10/15/2004	10/15/2004	10/15/2004
In Weight (Pay Weight)	525	525	450
Stocking Rate (Steers/acre)	1.50	2.00	1.90
ADG	1.75	1.75	1.85
Out weight (Pay weight)	788	788	803
Out/Sales Date	03/14/15	03/14/15	03/14/15
Total Cost of Gain (\$/Cwt.)	\$94.12	\$91.03	\$87.24
Returns (loss) over variable cost (\$/head placed)	(\$5.53)	\$4.35	\$4.17
Maximum Breakeven Purchase Price of Calf (\$/Cwt.)	\$103.77	\$105.06	\$106.70
Breakeven Sales Price (\$/Cwt.)	\$101.55	\$100.55	\$99.08
% Chance of Covering Variable Costs	50%	58%	61%

**Stockered on novel-endophyte fescue. Stockering on endophyte infected fescue will reduce gains by 0.5 pounds per day.*

The results of these analyses suggest that stockering steers through this fall and winter is a risky proposition. The high cost of stocker calves and the high cost of winter grazing combine to place breakevens at levels exceeding current prices for feeder cattle.

South Georgia Stocker Systems

Stocker systems in South Georgia are similar to those in North Georgia with the exception of placing the animals in the stockering program a few weeks earlier and replacing the stockpiled fescue alternative with a scenario that utilizes lightweight steers grazing over seeded cropland. In the lightweight steer alternative, steers are purchased at 450 pounds and placed on cropland that has a winter cover crop. Steers are pulled off in time to prepare the cropland for planting next spring.

Table 2
Risk Adjusted Returns from Stockering Steers in South Georgia Fall 2004

Item	Steers on Winter Annuals	Steers on Winter Annuals & Corn Silage	Lightweight Steers on Over Seeded Cropland
In Date	09/20/2004		11/15/2004
In Weight (Pay Weight)	525	525	450
Stocking Rate (Steers/acre)	1.50	2.00	1.50
ADG	1.75	1.75	2.00
Out weight (Pay weight)	788	788	690
Out/Sales Date	02/17/2005	02/17/2005	03/15/15
Total Cost of Gain (\$/Cwt.)	\$95.00	\$91.83	\$79.38
Returns (loss) over variable cost (\$/head placed)	(\$3.35)	\$4.72	\$33.14
Maximum Breakeven Purchase Price of Calf (\$/Cwt.)	\$109.44	\$111.66	\$126.41
Breakeven Sales Price (\$/Cwt.)	\$105.13	\$104.10	\$104.24
% Chance of Covering Variable Costs	52%	61%	89%

As in North Georgia, returns from winter stockering are very marginal. The only program that appears to offer much profit potential is purchasing lightweight steers and grazing them on cropland. The apparent profitability of this scenario is due to lower grazing cost and lower total animal cost of the lightweight steers. Grazing costs are lower in this scenario for two reasons, the seed cost is allocated to the crop enterprise, and the fertilizer costs are reduced due to the presence of residual fertilizer from the previous crop.

Heifer Alternatives

Some producers may be interested in stockering heifers through the spring and then either selling them as breeding heifers or breeding them and selling them as bred heifers. One reason this is an attractive alternative is because the discount between steers and heifers becomes smaller as size increases. This alternative may also be attractive because of the forecast high prices of breeding age and bred heifers for the next few years.

Two alternatives are compared in this study. One examines heifers placed in a stockering system to be sold as feeders or open breeding-size heifers next spring. The other alternative analyzed is purchasing or retaining heifers this fall and selling them as bred heifers next spring.

In the bred heifer alternative the heifers are artificially inseminated (AI) using the CIDR method and then placed with a clean up bull. It is assumed that all heifers will require 1.5 straws of semen and 20 percent of the heifers will not conceive.

Table 3
Risk Adjusted Returns from Stockering Heifers in Georgia Fall 2004

Item	Lightweight Heifers Stockered on Winter Annuals	Heifers Stockered on Winter Annuals and AI Bred
In Date	10/01/2004	10/01/2004
In Weight (Pay Weight)	425	500
Stocking Rate (Steers/acre)	1.50	1.50
ADG	1.65	N/A
Out weight (Pay weight)	673	800
Out/Sales Date	02/28/2005	Spring
Total Cost of Gain (\$/Cwt.)	\$94.12	N/A
Returns (loss) over variable cost (\$/head placed)	\$34.50	\$55.35
Maximum Breakeven Purchase Price of Calf (\$/Cwt.)	\$122.28	\$122.29
Breakeven Sales Price (\$/Cwt.)	\$107.50	\$880.79*
% Chance of Covering Variable Costs	76%	76%

**Breakeven sales price is dollars per head.*

Both of these alternatives appear to be profitable. In this situation, selling bred heifers is a more attractive alternative. However, there is considerably more time, management, and facilities involved in conducting a breeding program than in a stockering program.

Cattlemen interested in establishing a heifer breeding program should be aware of the economic impacts of non-conceiving females and market prices. After completing a breeding program, heifers diagnosed as open will weigh more than many feeder heifers marketed in Georgia. As such, they will typically receive stiff discounts when marketed. To illustrate the effects of non-breeding heifers on profits, Table 4 was developed.

Table 4
Effect of Failure to Breed and Average Sales Price on Profitability of Developing and Breeding Heifers

		Percentage of Heifers That Conceive				
		20.00%	40.00%	60.00%	80.00%	100.00%
Sales Price/Head	\$700.00	(\$168.16)	(\$172.16)	(\$176.16)	(\$180.16)	(\$184.16)
	\$800.00	(\$148.16)	(\$132.16)	(\$116.16)	(\$100.16)	(\$84.16)
	\$900.00	(\$128.16)	(\$92.16)	(\$56.16)	(\$20.16)	\$15.84
	\$1,000.00	(\$108.16)	(\$52.16)	\$3.84	\$59.84	\$115.84
	\$1,100.00	(\$88.16)	(\$12.16)	\$63.84	\$139.84	\$215.84
	\$1,200.00	(\$68.16)	\$27.84	\$123.84	\$219.84	\$315.84

By reviewing this table it is easy to see that producers need to have close to an 80 percent conception rate to break even. It is also easy to see that if a producer only achieves a 60 percent conception rate among heifers, he will need to average almost \$1,000 per head for the bred heifers just to break even.

Custom Finishing

Custom finishing is a value-adding alternative that increasing numbers of Georgia cattlemen are pursuing. Like stockering, the major factors impacting profits are current calf value, ending value, and cost of gain. Several scenarios with different beginning weights are presented below in Table 5.

Table 5
Risk Adjusted Returns from Custom Finishing Steers, Fall 2004

Item	Custom Finish 550 Pound Steer	Custom Finish 650 Pound Steer	Custom Finish 750 Pound Steer
In Date	10/01/2004	10/01/2004	10/01/2004
In Weight (Pay Weight)	550	650	750
Feed Conversion (as fed)	7.15	7.15	7.15
ADG	3.00	3.00	3.00
Out weight (Pay weight)	1,128	1,128	1,128
Out/Sales Date	04/11/2005	03/09/2005	02/04/2005
Total Cost of Gain (\$/Cwt.)	\$62.77	\$66.96	\$72.81
Returns (loss) over variable cost (\$/head placed)	\$44.47	(\$12.16)	(\$13.82)
Maximum Breakeven Purchase Price of Calf (\$/Cwt.)	\$118.09	\$103.13	\$93.16
Breakeven Sales Price (\$/Cwt.)	\$85.89	\$88.95	\$87.63
% Chance of Covering Variable Costs	77%	41%	40%

From this analysis it appears that cattle weighing more than 600 pounds should be marketed now unless a producer's situation is considerably different than the one assumed here. The main culprit for the unprofitability of the heavier weight cattle is the high value of the feeders. Using current and projected Georgia auction market prices, a 550 pound steer is worth \$605 per head while a 750 pound steer is worth \$712.50. With the relatively low price of grain, feed is cheaper than weight at this juncture.

Risk Management

With prices at historically high levels, any type of stockering or finishing program must incorporate a price risk management plan. One piece of information that may be helpful to know is how prices usually change from fall to spring. The difference in sales price when purchasing or retaining and then selling is known as the buy-sell margin (BSM). Typically this number is negative as heavier animals bring a lower price per pound than lighter animals. BSM for several scenarios are given below in Tables 6 and 7.

Table 6
Historical Buy-Sell Margin for 400-500 Pound Steers, 1994-2003

Buy Month	600-700 lbs. April	700-800 lbs. April	700-800 lbs. May
October	-\$9.10	-\$12.34	-\$14.19
November	-\$10.34	-\$13.59	-\$15.43
December	-\$11.85	-\$15.10	-\$16.95

Table 7
Historical Buy-Sell Margin for 500-600 Pound Steers
Bought in September and Sold at 700-800 Pounds in Various Months, 1994-2003

Buy Month	700-800 lbs. Feb	700-800 lbs. Mar	700-800 lbs. April	700-800 lbs. May
Average	-\$5.30	-\$5.25	-\$5.77	-\$7.62
Best	+\$7.94	+\$9.17	+\$11.97	+\$14.59
Worst	-\$11.83	-\$14.63	-\$14.25	-\$17.29

In Table 6 we see that usually there is a negative BSM of \$13.59 for 400-500 pound steers purchased in November and sold as 700-800 pound steers in April. So, if a 450 pound steer costs \$110/Cwt. in November, he would be expected to bring \$96.41/Cwt. as a 700-800 pound steer in April.

This information can be useful in several ways. First, if we assume the steer will weigh 725 pounds in April, we can estimate our total gross margin. In this case we would estimate the gross margin to be \$203.97 per head (725 pounds x \$96.41/cwt. – 450 pounds x \$110.00). This amount would be what we have available to spend for feeding, pasture, death loss, interest, etc.

This information can also be used to estimate the potential profitability. For instance, if we figure that we will need a breakeven price of \$105 per pound for a 750 steer in March and current prices for a 550 pound steer are \$110.00/cwt. that means we can tolerate a BSM of -\$5.00. Anything worse than that will result in a loss. Reviewing Table 7 we see that the average BSM from September to March is -\$5.25/cwt. which results in a small loss. We also see that the best BSM was +9.17 and the worst was -\$14.25. If after working through these scenarios you find that the risk is greater than the benefit, you may choose not to stocker or see what you can do to lower your breakeven cost.

Cattlemen can also reduce their price risk by utilizing futures and options. Producers unfamiliar with these concepts are encouraged to contact their local county agent or download a free copy of “[Developing and Using Marketing Plans for Georgia Livestock](#),” and “[Grains and Commodity Options as Price Insurance for Cattlemen](#).” Both of these publications are available at <http://www.ces.uga.edu/Agriculture/agecon/pubs/marketpubs/marketpubl.html>

Summary

Cattlemen have a myriad of management choices this fall. Current economics suggest that either selling steers, or custom finishing them is more profitable than fall stockering programs. Alternatively, stockering heifers to either sell as feeders or bred heifers can be profitable in the right situation.

If you have questions about this publication please contact your local county agent, or email Dr. Curt Lacy at clacy@uga.edu.