

**BEEF WINTERING:** Estimated revenue, operating expenses, prorated ownership expenses, and returns to land, overhead and management for 75 beef steers on 50 acres of conventionally fertilized rye or ryegrass pasture for 130 days, under rotational grazing.

Budget 21-1  
Jul-08

Category	Description	Unit	Price	Quantity	Value	Your Farm
<b>OPERATING INPUTS</b>						
Feeder Calves, steers	75 head at 575 lbs.	Cwt.	\$103.00	431.3	\$44,419	_____
Feeder Calves, heifers		Cwt.	\$0.00	0.0	\$0	_____
Pasture <sup>a</sup>	Rye &/or ryegrass	Acre	\$265.10	50.0	\$13,255	_____
Pasture		Acre	\$0.00	0.0	\$0	_____
Supplementary feed	Hay, byproducts, etc.	Head	\$25.00	73.5	\$1,838	_____
Mineral and Ionophore	.15 lb/hd/day	Lb.	\$0.40	1,544	\$617	_____
Vaccines, fly control, etc.		Hd.	\$10.00	73.5	\$735	_____
Implant		Hd.	\$1.00	73.5	\$74	_____
Fence, water repair	Pro-rated share	%	8.0%	21,855	\$1,748	_____
Facility Repair	Pro-rated share	%	1.0%	3,450	\$35	_____
Equipment operating	From Table 2				\$747	_____
Sales Comm. & transport		Hd.	\$20.00	73.5	\$1,470	_____
Annual operating capital <sup>b</sup>	Interest rate, annual	%	7.50%	53,943	\$1,552	_____
<b>TOTAL OPERATING COSTS</b>					<b>\$66,489</b>	_____
<b>PRO-RATED FIXED COSTS<sup>c</sup></b>						
Fencing & facilities, from Table 2					\$2,758	_____
Machinery & equipment, from table 2					\$497	_____
Machinery & equipment, annual pastures <sup>a</sup>		Acre	\$9.95	50.0	\$498	_____
Perennial pasture establishment, from Table 2 <sup>a</sup>					\$0	_____
<b>TOTAL OWNERSHIP COSTS</b>					<b>\$3,752</b>	_____
<b>LABOR COSTS</b>						
Machinery operator labor, From Table 2					\$423	_____
Livestock labor	Work, check cattle, etc.	\$/hr.	\$9.00	45	\$405	_____
<b>TOTAL LABOR COST</b>					<b>\$828</b>	_____
<b>TOTAL COST</b>					<b>\$71,069</b>	_____
<b>GROSS REVENUE<sup>d</sup></b>						
Feeder Cattle, steers	73.5 head @ 784lb.	Cwt.	\$106.00	576.24	\$61,081	_____
Feeder Cattle, heifers		Cwt.	\$0.00	0.00	\$0	_____
<b>TOTAL REVENUE</b>					<b>\$61,081</b>	_____
<b>RETURNS OVER OPERATING EXPENSES</b>					<b>(\$5,407)</b>	_____
<b>RETURNS TO LAND, OVERHEAD, LABOR &amp; MANAGEMENT</b>					<b>(\$9,159)</b>	_____
<b>RETURNS TO LAND, OVERHEAD AND MANAGEMENT</b>					<b>(\$9,987)</b>	_____
<b>COST SUMMARY</b>						
Average sales price (\$/cwt.) required to recover operating costs:					\$115.38	_____
Average sales price (\$/cwt.) required to recover total cost:					\$123.33	_____
Cost per pound of gain (\$/cwt.)					\$1.84	_____

<sup>a</sup> Pasture costs are taken from budget 88-9. If perennial pastures are used, include a pro-rated share of pasture annual and establishment costs based on the appropriate NCSU forage budget for the species.

<sup>b</sup> Interest calculated on full cattle purchase cost and 1/2 of other costs, except sales expense, for 5 months.

<sup>c</sup> Assumes the annual cost of the facilities is shared and one-half of the total cost is applied to this enterprise.

<sup>d</sup> Assumes 2% death loss or 1.5 head. Sale weight is 800 lbs. less 2% shrink = 786 lbs/head.

Cattle prices vary and are affected by the cattle cycle, time of year, weight, frame, fleshiness, breed, and market.

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**Table 1. Investment in specialized facilities & equipment and pro-rated share of annual ownership expenses**

Category	Life	Initial Cost	Salvage Value	Depreciation <sup>a</sup>	Interest <sup>b</sup>	Tax & Ins. <sup>c</sup>	Total	Share to Enterprise	Share to Enterprise
	Years	\$	\$	\$	\$	\$	\$	%	\$
Interest & Tax Rates ==>					7.5%	1.40%			
Facilities:									
Perimeter Fence	25	12,240	0	490	441	171	1,102	100.0%	1102
Prem. Internal Fence	25	6,115	0	245	220	86	550	100.0%	550
Temp. Electric Fence	3	200	0	67	5	3	74	100.0%	74
Watering system	10	3,500	0	350	118	49	517	100.0%	517
Corral & Chute	15	6,000	0	400	210	84	694	50.0%	347
Feed Bunks <sup>d</sup>	3	900	0	300	23	13	335	50.0%	168
Other facilities	1	0	0	0	0	0	0	0.0%	0
Feeding Cattle									
Tractor	10	20,500	5,330	1,517	712	287	2,516	10.0%	252
+ equipment	10	2,500	750	175	87	35	297	10.0%	30
Pasture and Cattle Management									
1/2 T Pickup or 4-wheele	10	17,400	4,350	1,305	604	244	2,152	10.0%	215
Other equipment	1	0	0	0	0	0	0	0.0%	0
Pasture Establishment <sup>e</sup>	5	0	0	0	0	0	0	0.0%	0
<b>TOTAL</b>									<b>3255</b>

<sup>a</sup> Depreciation = (Initial cost - Salvage value) / years of life

<sup>b</sup> Interest on average value of investment = ((Initial cost + Salvage value) / 2) X interest rate specified

<sup>c</sup> Property taxes and insurance on facilities and equipment = Initial cost X specified property tax plus insurance rate

<sup>d</sup> 6 bunks @ \$150.00 each

<sup>e</sup> If perennial pastures are used, include appropriate pasture establishment costs for the species based on the NCSU forage budgets

**Table 2. Operating expense for machinery and equipment per batch of cattle**

Operation and Item	Horse Power	Repairs & Maint. <sup>a</sup>	Repairs & Maint.	Share to Enterprise	Est. Fuel Use	Fuel Cost	Fuel & Lube <sup>b</sup>	Hours of Use/Year	Total Op. Cost/Year	Labor Cost <sup>c</sup>	Total Expense
		%	\$/Year	\$	Gals/hr	\$	\$/Hour	Hours	\$	\$	\$
Fuel cost per gallon & Labor cost per hour =====>										4.00	9.40
Tractor	55	2%	410.00	205.00	2.42	9.68	11.13	35.0	594.62	329.00	924
+ equipment		1%	25.00	2.50	0	0.00	0.00	35.0	2.50		3
1/2 T Pickup or 4-wheeler		2%	348.00	34.80	2.5	10.00	11.50	10.0	149.80	94.00	244
Other equipment		1%	0.00	0.00	0	0.00	0.00	0.0	0.00		0
<b>TOTAL</b>									<b>747</b>	<b>423</b>	<b>1,170</b>

<sup>a</sup> Repairs and maintenance costs are calculated as a % of the initial cost in Table 1. Percentages are higher for equipment that is bought used.

<sup>b</sup> Fuel cost is based on engine horsepower plus lube costs estimated as 15% of the fuel cost.

<sup>c</sup> Labor cost or charge includes an additional 15% allowance for inspection, equipment adjustments, cleaning up, travel. etc. Include labor that does not require equipment as "Livestock labor" directly in the budget, e..g, working cattle, moving fence, checking cattle.

**Table 3. SENSITIVITY ANALYSIS**

This table shows the returns to land, overhead and management (a measure of profit) under various assumptions about costs and returns. Specifically, the cost and returns shown in the enterprise budget on the first page are believed to be fairly representative of conditions in North Carolina. However, there is a wide variation in farm performance from one farm to another and costs and cattle prices can change rapidly from year-to-year. The table shows the effects of returns that are 10 percent higher and lower than for the base budget. Similarly, the table also shows shows the effects of total costs that are 10 percent higher and lower than in the base budget.

RETURNS TO LAND, OVERHEAD AND MANAGEMENT:

		REVENUE		
		-10% Lower	Base Budget	10% Higher
COST	-10%	-\$8,989	-\$2,881	\$3,228
	Base	-\$16,096	-\$9,987	-\$3,879
	10%	-\$23,202	-\$17,094	-\$10,986

