

Calculating Unit Cost of Production for a Beef Cow Operation

Spreadsheet developed for use with the High Plains Ranch Practicum School

Instructions:

Complete orange shaded areas of sections 1-5

Use attached pages to help calculate some of the numbers

Then enter numbers in spreadsheet or contact Dallas Mount for assistance in entering your numbers.

Questions: Contact Dallas Mount

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Section 1: Production Profile

January 1 Number of Beef Cows		# of Head	
Replacement Heifer calves Jan 1		# of Head	
SPA Adjusted Females Exposed		# of Head (Use tab at bottom if needed)	
Cows and heifers exposed that bred		# of Head	
Live Calves Born		# of Head	
		# Average Weight Total lbs weaned	
Live Calves Weaned	Steers		0
	Heifers		0
	Bulls		0
	Total	0	0
Number of Cows Culled		# of Head	
Number of Cows that Died		# of Head	
Calves that Died		# of Head	

Section 2: Gross Income

	No. Head	Ave Wt.	Price (\$/cwt)	Total
Steer Calves				\$ -
Heifer Calves				\$ -
Cull Cows				\$ -
Cull Replacement Heifers				\$ -
Cull Bulls				\$ -
Other Income				\$ -
Other Income				\$ -

Beef Cow Inventory Use "cow herd inventory" change sheet to calculate

Beginning	
Ending	
Difference	\$ -

Total Gross Income	\$ -
Gross Income/Cow	
cwt steer calf equivalent	
Price Received per Cwt of Steer Calf	\$ -

*This is a factor used to convert all income to a steer calf equivalent

Section 3: Feed Costs

Winter Feed Costs for previous winter to calf crop, summer pasture costs for current summer

Pasture Rent			Total	Total/Cow		
or	<input type="text"/>	Acres/Cow/year	<input type="text"/>	Rent Per Acre	\$ -	
or	<input type="text"/>	AUM/Cow/year	<input type="text"/>	Per AUM	\$ -	
or	<input type="text"/>	Cow/calf pair months	<input type="text"/>	Per Cow-calf pair	\$ -	
	<input type="text"/>	Public Land Payment	<input type="text"/>	\$/herd	\$ -	
	<input type="text"/>	Aftermath Grazing	<input type="text"/>	\$/herd	\$ -	
	<input type="text"/>	Pasture Maintenance costs	<input type="text"/>	\$/total year	\$ -	
						(share to the cow herd in addition to pasture rent)
Feed	Amt			\$/Unit		
Hay	<input type="text"/>	# of tons	<input type="text"/>	\$/ton	\$ -	
Salt and Mineral	<input type="text"/>	# of tons	<input type="text"/>	\$/ton	\$ -	
Protein	<input type="text"/>	# of tons	<input type="text"/>	\$/ton	\$ -	
Other Feed 1	<input type="text"/>	# of units	<input type="text"/>	\$/unit	\$ -	
Other Feed 2	<input type="text"/>	# of tons	<input type="text"/>	\$/ton	\$ -	
Total Feed Costs					\$ -	
Total Feed Cost/CWT of calf Sold			<input type="text"/>			

Use market price for farm raised feeds

Section 4: Livestock Costs

			Total	Total/Cow	
Preventive Medicine (Vaccines etc.)	\$ -	\$/herd			
Treatment costs		\$/herd			
Vet costs		\$/herd			
		Total Vet Med	\$ -		
Replacement Heifers					
Percent of Cows Replaced			\$ -		
Cost of Developing Heifers		\$/rep hfr			1. Include only hfr development costs - not weaning market value 2. Suggest \$300 to \$350 per heifer developed
Fuel Costs		\$/hd	\$ -		(Beef cow herd only - Feeding cows, checking pasture etc.)
Livestock Supplies		\$/herd	\$ -		
Utilities		\$/herd	\$ -		Beef cow herd share
Trucking		\$/herd	\$ -		
Marketing		\$/herd	\$ -		
Bull Depreciation for Total Herd		\$/herd	\$ -		
Other Breeding costs (AI, etc.)		\$/herd	\$ -		
Hired Labor for Beef cows only		\$/herd	\$ -		(Wages plus benefits)
Interest		%			
Interest on Operating Capital					
		Total			
			Total per CWT		

Section 5: Overhead Costs (Beef Cow Herd Share Only)

Breeding Herd Capital Investment \$/herd
 Building Investment \$/herd
 Equipment Investment \$/herd

Use DIRT-5 sheet to figure % to charge
 and use overhead inventory sheet to calculate

	%	Total	Per Cow
<input type="text"/>			
<input type="text"/>			
<input type="text"/>			
Total		\$0.00	\$0.00
		Per CWT	

Cow Herd Inventory Change

Description of Cattle	Number at breeding past year	Jan 1 Current year	Dec 31 Current year	Dollars per head	Beginning Value	Ending Value	Difference
Mature Cows					\$ -	\$ -	\$ -
Replacement heifer calves					\$ -	\$ -	\$ -
Coming two year old heifers					\$ -	\$ -	\$ -
Mature Bulls					\$ -	\$ -	\$ -
Other 1					\$ -	\$ -	\$ -
Other 2					\$ -	\$ -	\$ -
				Totals	\$ -	\$ -	\$ -

DIRTI Five - Rough estimate for overhead costs associated with vairous categories

	Buildings		Equipment		Cows	
	Suggested	Yours	Suggested	Yours	Suggested	Yours
Depreciation	5.0%		10.0%			
Interest	5.5%		5.0%		10.0%	
Repairs	1.0%		2.0%			
Taxes						
Insurance	1.0%		1.0%		1.0%	
DIRTI Factor	12.5%	0.0%	18.0%	0.0%	11.0%	0.0%
Excluding Interest	7.0%	0.0%	13.0%	0.0%	1.0%	0.0%

Breeding Inventory Reconciliation for SPA Adjusted Exposed Females

Note: Exposed female numbers should include all replacement heifers as well as adult breeding cows. F

For Year:

Reported Calving Starting Date

Total Females Exposed at the beginning of the breeding season

Culled exposed females not intended to be calved but in the exposed herd at breeding time

exposed females sold or transferred out before the breeding season ends

Exposed females purchased or transferred-in during the breeding season

Adjustments After Breeding Season End

Open females sold or transferred out after the breeding season

Pregnant females sold or transferred out after the breeding season

Exposed females sold or transferred out after the breeding season without pregnancy testing

Total

Exposed and pregnant females purchased or transferred in after the breeding season

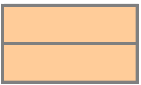
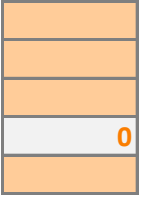
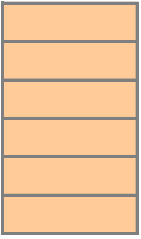
Adjustments after Calving Season Begins

Females sold or transferred out with nursing calves between calving and weaning

Females purchased or transferred in with nursing calves between calving and weaning

SPA Adjusted Females Exposed

Female numbers should not be adjusted for death loss.



Use to calculate total amount of inventory for overhead

Equipment

Item	Estimated current value	% to cow herd	Total \$
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
Total Equipment			\$ -

Buildings

Item	Estimated current value	% to cow herd	Total \$
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
Total Buildings			\$ -