

## RanchCalc

- Cow-calf and stocker software to assist with budgeting and cashflow
- Downloadable from <http://agecon.okstate.edu/faculty/publication/s/3397.xlsm>
- User's manual can be downloaded from <http://www.osuextra.com>

## A frequent user's issue

The program utilizes a programming feature called "macros." Macros must be enable for the program to function properly.

If macros are disabled, a message will appear stating that. Click on the "options" button and then "enable this content."

For more information on using this program, contact Eric DeVuyst at [eric.devuyst@okstate.edu](mailto:eric.devuyst@okstate.edu) or 405-744-6166

Oklahoma Ranch Calculation - Ok Ranch Calc Oklahoma State University	
Developed by: Eric DeVuyst, Oklahoma State University Bills Stewart and Christopher Stewart Oklahoma State University	
MC Summit	11-Aug-09

Cow, heifer, and bull inventory									
	units	Mature cows	2 <sup>nd</sup> calf heifers	Yearling heifers	Bulls	Totals			
Owned	hd	79	0	11	0	90			
Born value	\$/hd	2000	2100	2000	20	2000			
Purchased	hd	0	0	0	0	0			
% financed	%	0.0%	0.0%	0.0%	0.0%	0.0%			
Death loss	%	1.0%	1.0%	1.0%	1.0%	1.0%			
Borrowed	\$/hd	50	50	50	50	50.000			
Owner percentage	%	98.0%	99.0%	100%	100%	98.0%			
Calfes owned	hd	88.3	0.0	0.0	0.0	88.3			
Cows owned	hd	11.0	0.0	0.0	0.0	11.0			
Heifers owned	hd	0.0	0.0	0.0	0.0	0.0			
Bulls owned	hd	0.0	0.0	0.0	0.0	0.0			
Cost principal	\$/	50	50	50	50	50.000			
Interest rate	%	9.00%	9.00%	9.00%	9.00%	9.00%			
Loan term	years	4	4	4	4	4			
Cost principal current year	\$/	50	50	50	50	50.000			
Cost interest current year	\$/	50	50	50	50	50.000			
Cost interest current year	\$/	50	50	50	50	50.000			

  

Breeding stock purchase									
	Head	\$/head	Total \$	Percent financed	Interest rate	Months purchase	Down payment	1st year interest	
Mature cows	0	2000	0	0%	4.00%	1	0	0	0
2 <sup>nd</sup> calf heifers	0	2100	0	0%	4.00%	1	0	0	0
Yearling heifers	0	2000	0	0%	4.00%	1	0	0	0
Bulls	0	20	0	0%	4.00%	1	0	0	0
<b>Total purchases</b>	<b>0</b>	<b>\$1,200</b>	<b>\$0</b>	<b>0%</b>	<b>4.00%</b>	<b>1</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

  

Calf sales					
	# sold	Average weight (lbs)	Average cost (\$/cwt)	Sale price (\$/cwt)	Total
Calf cows and 2 <sup>nd</sup> calf heifers	11	1,100	2000	2200	24,200
2 <sup>nd</sup> calf heifers	0	0	2000	2200	0
Yearling heifers	1	1,100	2000	2200	2,200
<b>Total sales</b>	<b>12</b>	<b>1,200</b>	<b>2,000</b>	<b>2,400</b>	<b>\$26,400</b>

  

Inventory						
	Beginning	Purchased & retained	Sales	Death loss	Net transfers	Ending
Heifers cows & 2 <sup>nd</sup> calf heifers	88.3	0.0	11.0	0.0	11.0	77.3
Yearling heifers	11.0	0.0	0.0	0.0	0.0	11.0
<b>Bulls</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

Stocker inventory						
	units	Purchased Stocker 1	Purchased Stocker 2	Retained stocker steers	Retained stocker heifers	Totals and averages
Number	hd	0	0	0	0	0
% financed	%	100.0%	0.0%	xxx	xxx	xxx
Initial weight	lbs	500	510	540	510	510
Initial price	\$/cwt	\$112.00	\$108.00	\$110.00	\$105.00	xxx
ADG	lb/day	2.00	2.20	2.40	2.20	xxx
Death loss	%	2.0%	1.0%	1.0%	1.0%	xxx
Days owned	days	135	135	180	180	xxx
Borrowed	\$/hd	50	50	xxx	xxx	50
Initial principal	\$/	50	50	xxx	xxx	50
Interest rate	%	6.25%	5.00%	xxx	xxx	0.00%
Loan term	days	135 days	135 days	xxx	xxx	xxx
Years remaining on note	Annually	Annually	Annually	xxx	xxx	xxx
Payment frequency		Annually	Annually	xxx	xxx	xxx
Total annual payments	\$/	50	50	xxx	xxx	50
Total principal current yr	\$/	50	50	xxx	xxx	50
Total interest current year	\$/	50	50	xxx	xxx	50

Calf and stocker sales					
	From cows	Head sold	Weight (lbs)	Sale price (\$/cwt)	Total
Calf sales	steer calves	31.0	500	\$110.00	\$5,500
	heifer calves	20.5	475	\$105.00	\$4,999
	From 1st calf heifers				
	steer calves	3.0	475	\$112.00	\$532
heifer calves	3.6	450	\$107.00	\$482	
Stocker sales	Retained calves				
	stocker steers	0.0	972	\$89.00	\$865
	stocker heifers	0.0	906	\$86.00	\$779
	Purchased calves				
Stocker 1	0.0	770	\$97.00	\$747	
Stocker 2	0.0	807	\$0.00	\$0	
<b>Totals</b>		<b>60.1</b>	<b>29,265</b>	<b>\$108 avg</b>	<b>\$528 avg</b>

Owned pasture information							
Type	units	Name	Bermuda	Wheat	Native purch	Fescue	TOTALS
Acres			500	500	0	0	600
% Fescue	%	0.0%	75.0%	50.0%	50.0%	50.0%	1.8% avg
Purchase price	\$/acre	5000	12,000	12,000	5000	12,000	\$617 avg
Financial per acre	\$/acre	50	5000	5000	5000	5000	\$2,800
Value	\$/acre	\$2,500	\$1,200	\$1,200	\$1,200	\$1,200	\$2,800
Capital loss principal	\$	50	500,000	50	50	50	500,000
Interest rate	%	5.00%	7.00%	8.00%	5.00%	5.00%	7.5%
Payment frequency	Annually	Annually	Annually	Annually	Annually	Annually	
Loan term	years	20	20	15	15	15	
Years remaining on loan		20	20	15	15	15	
Total annual payment	\$/year	50	\$4,895	50	50	50	\$2,495
Annual rent per acre	\$/acre	\$12	\$20	\$20	\$14	\$14	\$6.50
Total annual payment	\$/year	50	\$4,919	50	50	50	\$4,919
Total interest payment	\$/year	50	\$4,377	50	50	50	\$4,377

  

Rented pasture information							
Type	units	Name	Bermuda	Wheat	Native purch	Fescue	TOTALS
Acres			0	0	0	0	0
Annual rent per acre	\$/acre	\$12	\$20	\$20	\$14	\$14	\$6.50
Total rent	\$/year	50	50	50	50	50	50

Pasture allocation—head grazed on each pasture type (optional)										
Pasture	Mature cows	1st Calf heifers			Purchased Stocker 1		Purchased Stocker 2		Retained stocker heifers	
		(head)	(75)	(25)	(25)	(25)	(25)	(25)	(25)	
Native	55	0	0	0	0	0	0	0	0	
Bermuda	0	0	15	0	0	0	0	0	0	
Wheat	0	0	0	150	0	0	0	0	0	
Native purch	20	20	0	0	0	0	0	0	0	
Fescue	0	0	0	0	0	0	0	0	0	
Head remaining to allocate	0	17	14	150	0	0	0	0	0	

  

Pasture allocation—acres per head (optional)									
Pasture Types	total acres	Mature cows	1st Calf heifers	Yearling heifers	Purchased Stocker 1	Purchased Stocker 2	Retained stocker steers	Retained stocker heifers	Excess/deficit acres
Native	500	9	9	9	0	0	0	0	5
Bermuda	200	0	0	0	0	0	0	0	50
Wheat	0	0	0	0	2	2	2	2	-100
Native purch	0	10	10	10	0	0	0	0	-450
Fescue	0	0	0	0	0	0	0	0	0

Pasture cash expense							
Category	Native	Bermuda	Wheat (owned)	Wheat (rented)	Native purch	Fescue	TOTALS
Capital expense	\$/acre	5000	12000	12000	5000	12000	61700
Interest and time	\$/year	50	4895	50	50	50	5495
Other	\$/year	50	50	50	50	50	200
Operating	\$/year	50	50	50	50	50	200
Operating, burning, other	\$/year	50	50	50	50	50	200
Total per acre	\$/year	517	5495	500	50	50	6412
Cost for term	\$/year	10,000	53,900	50	50	50	54,000

  

Pasture rent and overhead allocation							
Category	Native	Bermuda	Wheat (owned)	Wheat (rented)	Native purch	Fescue	TOTALS
Enterprise	100%	100%	100%	100%	100%	100%	100%
Low-calf	100%	100%	100%	100%	100%	100%	100%
Stocker	0%	0%	100%	100%	0%	0%	100%
Crops and other	0%	0%	0%	0%	0%	100%	100%
Total	100%	100%	100%	100%	100%	100%	100%

Hay and feed costs per head																		
Category	Units	Mature cows			1st Calf heifers			Yearling heifers		Purchased Stocker 1		Purchased Stocker 2		Retained stocker steers		Retained stocker heifers		Bulls
		Head	75	25	Head	75	25	Head	75	Head	75	Head	75	Head	75			
Native	500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bermuda	200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wheat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Native purch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fescue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total per head	\$/year	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

  

Inventory and utilization																		
Category	Units	Mature cows			1st Calf heifers			Yearling heifers		Purchased Stocker 1		Purchased Stocker 2		Retained stocker steers		Retained stocker heifers		Bulls
		Head	75	25	Head	75	25	Head	75	Head	75	Head	75					
Native	500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bermuda	200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wheat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Native purch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fescue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total per head	\$/year	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Machinery, equipment and facilities				
Category	Units	Machinery and	Working facilities	Other
Purchase price	\$	100,000	100,000	100,000
Depreciation	%	10%	10%	10%
Operating	\$/year	50	50	50
Other	\$/year	50	50	50
Total per year	\$/year	100,000	100,000	100,000
Interest on investment	\$/year	10,000	10,000	10,000
Interest on average investment	\$/year	10,000	10,000	10,000

  

Labor and overhead allocation				
Category	Units	Overhead	Interest	Other
Native	500	0	0	0
Bermuda	200	0	0	0
Wheat	0	0	0	0
Native purch	0	0	0	0
Fescue	0	0	0	0
Total per year	\$/year	0	0	0

  

Operating costs information				
Category	Units	Overhead	Interest	Other
Native	500	0	0	0
Bermuda	200	0	0	0
Wheat	0	0	0	0
Native purch	0	0	0	0
Fescue	0	0	0	0
Total per year	\$/year	0	0	0

Other overhead costs									
Category	Units	Overhead	Interest	Other	Overhead	Interest	Other	Overhead	Interest
Native	500	0	0	0	0	0	0	0	0
Bermuda	200	0	0	0	0	0	0	0	0
Wheat	0	0	0	0	0	0	0	0	0
Native purch	0	0	0	0	0	0	0	0	0
Fescue	0	0	0	0	0	0	0	0	0
Total per year	\$/year	0	0	0	0	0	0	0	0

Cow herd cash flow and profitability analysis		
	Cash flow	Profitability
Revenue		
Calf production	\$11,695	\$40,485
Cull sales	\$6,858	\$6,118
Increase in replacement heifer value	xxx	\$1,100
<b>Total cow herd revenue</b>	<b>\$40,601</b>	<b>\$47,703</b>
Expenses		
Pasture rent	\$0	\$0
Pasture operating	\$2,700	\$2,700
Hay and feed	\$13,551	\$13,551
Veterinary etc.	\$957	\$957
Cash mach, equip, & facilities	\$3,179	\$3,179
Hired labor	\$0	\$0
Miscellaneous	\$0	\$0
Interest on		
Operating	\$703	\$703
Pasture mortgage	\$4,177	xxx
Breeding stock notes	\$267	xxx
Mach, equip and facilities notes	\$1,487	xxx
Taxes	\$1,310	\$1,310
Insurance	\$483	\$483
Depreciation and death loss	xxx	\$6,769
Opportunity cost on investment	xxx	\$19,896
Value of unpaid labor	xxx	\$10,900
<b>Total Expenses</b>	<b>\$28,477</b>	<b>\$62,819</b>
Other cash flows		
Breeding livestock purchases	\$1,200	xxx
Principal payments—breeding stock	\$1,998	xxx
Principal payments—real estate	\$4,319	xxx
Principal payments—mach, facilities, etc.	\$7,216	xxx
<b>Net cash flow from cow herd</b>	<b>-\$2,609</b>	<b>xxx</b>
<b>Net income from cow herd</b>	<b>xxx</b>	<b>-\$14,319</b>
<b>Net income from stockers</b>	<b>xxx</b>	<b>\$0</b>
<b>Net income—whole farm</b>	<b>xxx</b>	<b>-\$14,319</b>

Stocker cash flow and profitability analysis		
	Cash flow	Profitability
Revenue		
Purchased stockers	\$0	\$0
Retained stockers	\$0	\$0
<b>Total stocker revenue</b>	<b>\$0</b>	<b>\$0</b>
Expenses		
Purchased and retained calves	\$0	\$0
Pasture rent	\$0	\$0
Pasture operating	\$0	\$0
Hay and feed	\$0	\$0
Veterinary etc.	\$0	\$0
Cash mach, equip, & facilities exp	\$0	\$0
Hired labor	\$0	\$0
Miscellaneous	\$0	\$0
Interest on		
Operating	\$0	\$0
Pasture mortgage	\$0	xxx
Calf notes	\$0	xxx
Mach, equip and facilities notes	\$0	xxx
Taxes	\$0	\$0
Depreciation	xxx	\$0
Opportunity cost on investment	xxx	\$0
Value of unpaid labor	xxx	\$0
<b>Total expenses</b>	<b>\$0</b>	<b>\$0</b>
Other cash flows		
Principal payments—real estate	\$0	xxx
Principal payments—mach, facilities, etc.	\$0	xxx
<b>Net cash flow from stockers</b>	<b>\$0</b>	<b>xxx</b>
<b>Net income</b>	<b>xxx</b>	<b>\$0</b>

Whole farm cash flow and profitability analysis		
	Cash flow	Profitability
Net cash flow from cow herd	-\$2,609	xxx
Net cash flow from stockers	\$0	xxx
<b>Net cash flow—whole farm</b>	<b>-\$2,609</b>	<b>xxx</b>
Net income from cow herd	xxx	-\$14,319
Net income from stockers	xxx	\$0
<b>Net income—whole farm</b>	<b>xxx</b>	<b>-\$14,319</b>