Missouri Crop and Livestock Budgets for 2018

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2018 Crop and Forage Budget Assumptions

Ray Massey, Extension Professor

The production practices used to develop these cost estimates are common in Missouri. The yields are for average, to above average, farms. The quantity of variable inputs used in these budgets reflects the higher yield assumptions.

Price projections are based on the conditions at the time of the budgets being developed (October 2017). Our 2018 forecasted prices are adjustments to current prices based on information from the USDA National Agricultural Statistics Service and Risk Management Agency, the Department of Energy, Chicago Mercantile Exchange, and the Kansas City Federal Reserve.

Macroeconomic principles that influenced our estimates of input costs included trade talk of the quantity of corn and soybeans expected to be planted next year, recent price trends and forecasts of fertilizer and energy, and the impact of reduced commodity prices on future decisions.

The projected farm input prices have a large impact on the cash costs of producing farm commodities. The 2016 Survey of Custom Rates done by the University of Missouri were used to estimate costs for activities done by others for farmers. To the degree that these projections differ from those paid at the time that inputs are actually being purchased, the costs of production in the attached

budgets will need adjusting. It is recommended that users go to https://www.fapri.missouri.edu/farmers-corner/software-tools-registration/ to obtain the budget generator used to create these budgets. By changing prices within the budgets, more up-to-date cost estimates can be obtained. Users can also change other inputs like application rates of fertilizer and chemicals and field activities performed to get the cost estimates to reflect more specific production practices.

Surveys indicate Missouri cropland prices have held steady for the last year while hay and pastureland increased slightly. These budgets have constant cropland rental rates but slightly increased hay and pastureland rental rates. Machinery costs are annualized costs of new machinery purchased with 2013 prices. Machinery purchase prices have not been changed on the assumption that purchases from the previous years have left farmers with a complement of fully functional equipment, and current low sales of machinery are holding down prices. Machinery and real estate costs for different farms will vary considerably.

The table below gives the prices used in the 2018 budgets for commodities sold and inputs purchased, as well as the change from last year's projections.

Input and Output Price Assumptions for 2018 Budget Estimates

Farm Outputs	2018 Price Projections	Change from 2017
Corn	\$3.50/bu	\$0.10
Soybeans	\$9.30/bu	\$0.05
Wheat	\$4.10/bu	-\$0.30
Grain Sorghum	\$3.30/bu	\$0.10
Corn Silage	\$28.00/ton	-\$7.00
Alfalfa - dairy	\$185.00/ton	-\$15.00
Mixed Fescue-Clover Hay	\$80.00/ton	\$10.00
Pasture	\$12.50/AUM	\$0.00
Farm Inputs		
Diesel fuel (off road)	\$2.37/gal	\$0.02
Gasoline	\$2.35/gal	\$0.09
L.P./Propane	\$2.58/gal	\$0.05
Electricity	\$0.10/kwh	-\$0.02
Anhydrous Ammonia	\$0.25/lb. N	-\$0.05
Urea	\$0.36/lb. N	\$0.03
P ₂ O ₅ from DAP	\$0.36/lb. P ₂ O ₅	-\$0.01
K₂O from Muriate of Potash	\$0.26/lb. K ₂ O	\$0.01
Lime, applied	\$20.00/ton	\$2.00
Interest Rate	5.50%	\$0.00
Low skill labor	\$13.50/hour	\$0.00
High skill labor	\$18.00/hour	\$0.00
Dry fertilizer custom application	\$6.00/acre	\$0.00

Dryland Corn

Projected Budgets for Crop Year 2018*

	Dryl (aft		
Yield in bushels/acre		140	
Market price/bushel		\$3.50	
ESTIMATED INCOME/ACRE			
Grain sales (yield x price/bushel)	\$	490.00	\$
ESTIMATED TOTAL INCOME/ACRE	\$	490.00	\$
ESTIMATED OPERATING COSTS/ACRE			
Seed	\$	97.50	\$
Fertilizer and soil amendments		79.61	
Crop protection chemicals		40.00	
Crop supplies, storage, marketing		1.00	
Crop consulting and insurance		21.00	
Custom hire and rental		6.00	
Energy: machinery fuel, drying, irrigation		31.95	
Machinery repairs and maintenance		13.48	
Value of operator and hired labor		13.64	
Operating interest (6% x 1/2 year)		8.36	
Total Operating Costs/Acre	\$	312.54	\$
ESTIMATED OWNERSHIP COSTS/ACRE			
Farm business overhead	\$	3.40	\$
Machinery overhead		24.45	
Machinery depreciation		27.69	
Real estate charge		132.00	
Total Ownership Costs/Acre	\$	187.54	\$
ESTIMATED TOTAL COSTS/ACRE	\$	500.08	\$
INCOME OVER OPERATING COSTS/ACRE		\$177.46	\$
INCOME OVER TOTAL COSTS/ACRE		-\$10.08	\$
Operating costs/bushel	\$	2.23	\$
Ownership costs/bushel	\$	1.34	\$
Total costs/bushel	\$	3.57	\$

^{*} Estimates made in October 2017 for 2018 crop year.

Corn estimates are for a crop raised, harvested, and sold in 2018.

Price estimates are at harvest. Costs or returns from storage or other marketing methods are not included.

No income from PLC or ARC-Co are added to these budgets.

The CBG budget calculator at http://fapri.missouri.edu can be used to modify these budgets.

Prepared by Ray Massey, Extension Economist

Irrigated Corn

Projected Budgets for Crop Year 2018*

		Irrig	ated Corn	
	Yield in bushels/acre		190	
	Market price/bushel		\$3.50	
ESTIMATED INCOME/ACRE				
Grain sales (yield x price/bushel)		\$	665.00	\$
ESTIMATED TOTAL INCOME/A	ACRE	\$	665.00	\$
ESTIMATED OPERATING COSTS/ACRE				
Seed		\$	104.00	\$
Fertilizer and soil amendments			103.75	
Crop protection chemicals			40.00	
Crop supplies, storage, marketin	g		1.00	
Crop consulting and insurance			24.00	
Custom hire and rental			6.00	
Energy: machinery fuel, drying, i	rrigation		69.35	
Machinery repairs and maintenar	nce		47.54	
Value of operator and hired labor	•		20.53	
Operating interest (6% x 1/2 year	r)		11.44	
Total Operating Costs/Acre		\$	427.61	\$
ESTIMATED OWNERSHIP COSTS/ACRE				
Farm business overhead		\$	4.80	\$
Machinery overhead			43.87	
Machinery depreciation			49.23	
Real estate charge			165.00	
Total Ownership Costs/Acre		\$	262.90	\$
ESTIMATED TOTAL COSTS/ACRE		\$	690.51	\$
INCOME OVER OPERATING O	OCTC/ACDE		¢227.20	¢
INCOME OVER OPERATING CONTROL INCOME OVER TOTAL COSTS			\$237.39 -\$25.51	\$ \$
INCOME OVER TOTAL COSTS	/ACRE		-φ∠ᢒ.ᢒ Ι	Φ
Operating costs/bush	el	\$	2.25	\$
Ownership costs/busl	hel	\$	1.38	\$
Total costs/bushel		\$	3.63	\$

^{*} Estimates made in October 2017 for 2018 crop year.

Corn estimates are for a crop raised, harvested, and sold in 2018.

Price estimates are at harvest. Costs or returns from storage or other marketing methods are not included.

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Prepared by Ray Massey, Extension Economist

Grain Sorghum Projected Budgets for Crop Year 2018*

	Grai	Grain Sorghum			
Yield in	bushels/acre	85			
Market ,	price/bushel	\$3.30			
ESTIMATED INCOME/ACRE					
Grain sales (yield x price/bushel)	\$	280.50	\$		
ESTIMATED TOTAL INCOME/ACRE	\$	280.50	\$		
ESTIMATED OPERATING COSTS/ACRE					
Seed	\$	13.20	\$		
Fertilizer and soil amendments		51.05			
Crop protection chemicals		30.00			
Crop supplies, storage, marketing		1.00			
Crop consulting and insurance		14.00			
Custom hire and rental		6.00			
Energy: machinery fuel, drying, irrigation		10.76			
Machinery repairs and maintenance		11.02			
Value of operator and hired labor		12.57			
Operating interest (6% x 1/2 year)		4.11			
Total Operating Costs/Acre	\$	153.71	\$		
ESTIMATED OWNERSHIP COSTS/ACRE					
Farm business overhead	\$	2.83	\$		
Machinery overhead		21.59			
Machinery depreciation		23.41			
Real estate charge		115.50			
Total Ownership Costs/Acre	\$	163.33	\$		
ESTIMATED TOTAL COSTS/ACRE	\$	317.04	\$		
INCOME OVER OPERATING COSTS/ACI	RE	\$126.79 -\$36.54	\$ \$		
Operating costs/bushel	\$	1.81	\$		
Ownership costs/bushel	\$	1.92	\$		
Total costs/bushel	\$	3.73	\$		

^{*} Estimates made in October 2017 for 2018 crop year.

Grain sorghum estimates are for a crop raised, harvested, and sold in 2018.

Price estimates are at harvest. Costs or returns from storage or other marketing methods are not included.

No income from PLC or ARC-Co are added to these budgets.

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Prepared by Ray Massey, Extension Economist

Soybeans Projected Budgets for Crop Year 2018*

	Soybeans				
	ield in bushels/acre		48		
M	arket price/bushel		\$9.30		
ESTIMATED INCOME/ACRE					
Grain sales (yield x price/bushel)		\$	446.40	\$	
ESTIMATED TOTAL INCOME/ACR	E	\$	446.40	\$	
ESTIMATED OPERATING COSTS/ACRE					
Seed		\$	58.93	\$	
Fertilizer and soil amendments			42.20		
Crop protection chemicals			44.00		
Crop supplies, storage, marketing			1.00		
Crop consulting and insurance			13.00		
Custom hire and rental			6.00		
Energy: machinery fuel, drying, irrig	ation		9.62		
Machinery repairs and maintenance			10.85		
Value of operator and hired labor			11.38		
Operating interest (6% x 1/2 year)			5.42		
Total Operating Costs/Acre		\$	202.40	\$	
ESTIMATED OWNERSHIP COSTS/ACRE					
Farm business overhead		\$	4.05	\$	
Machinery overhead			17.70		
Machinery depreciation			22.47		
Real estate charge			132.00		
Total Ownership Costs/Acre		\$	176.22	\$	
ESTIMATED TOTAL COSTS/ACRE		\$	378.62	\$	
INCOME OVER OPERATING COS	ΓS/ACRE		\$244.00	\$	
INCOME OVER TOTAL COSTS/AC			\$67.78	\$	
Operating costs/bushel		\$	4.22	\$	
Ownership costs/bushel		\$	3.67	\$	
Total costs/bushel		\$	7.89	\$	

^{*} Estimates made in October 2017 for 2018 crop year.

No income from PLC or ARC-Co are added to these budgets.

The CBG budget calculator at http://fapri.missouri.edu can be used to modify these budgets.

Prepared by Ray Massey, Extension Economist

Soybean estimates are for a crop raised, harvested, and sold in 2018.

Price estimates are at harvest. Costs or returns from storage or other marketing methods are not included.

Soybeans and Wheat Projected Budgets for Crop Year 2018*

		oybeans ter wheat)		Wheat		eat+Beans ble cropped)
Yield in bushels/acre	(an	25	(5	55	(dour	ne croppeu)
Market price/bushel		\$9.30		\$4.10		
ESTIMATED INCOME/ACRE						
Grain sales (yield x price/bushel)	\$	232.50	\$	225.50	\$	458.00
ESTIMATED TOTAL INCOME/ACRE	\$	232.50	\$	225.50	\$	458.00
ESTIMATED OPERATING COSTS/ACRE						
Seed	\$	69.33	\$	32.00	\$	101.33
Fertilizer and soil amendments		16.10		52.97		69.07
Crop chemicals		7.50		16.00		23.50
Crop supplies, testing		0.00		1.00		1.00
Crop insurance		0.00		12.00		12.00
Custom application		0.00		12.00		12.00
Machinery fuel		5.12		8.95		14.07
Machinery repairs and maintenance		8.21		9.70		17.91
Value of operator and hired labor		9.52		11.39		20.91
Operating interest (6% x 1/2 year)		3.18		4.29		7.47
Total Operating Costs/Acre	\$	118.96	\$	160.30	\$	279.26
ESTIMATED OWNERSHIP COSTS/ACRE						
Farm business overhead		4.25	\$	4.25	\$	4.25
Machinery overhead		11.64		15.15		26.86
Machinery depreciation		13.74		18.93		32.35
Real estate charge				115.50		122.50
Total Ownership Costs/Acre	\$	29.63	\$	153.83	\$	185.96
ESTIMATED TOTAL COSTS/ACRE	\$	148.59	\$	314.13	\$	465.22
INCOME OVER OPERATING COSTS/ACRE		\$113.54		\$65.20		\$178.74
INCOME OVER TOTAL COSTS/ACRE		\$83.91		-\$88.63		-\$7.22
Operating costs/bushel	\$	4.76	\$	2.91		
Ownership costs/bushel	\$	1.19	\$	2.80		
Total costs/bushel	\$	5.94	\$	5.71		

^{*} Estimates made in October 2017 for 2018 crop year.

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Prepared by Ray Massey, Extension Economist

Soybean estimates are for a crop raised, harvested, and sold in 2018.

Wheat estimates are for a crop planted in the fall of 2017, harvested and sold in 2018.

Price estimates are at harvest. Costs or returns from storage or other marketing methods are not included.

Forage Establishment Projected Budget for 2018

	Alfalfa		l Season
Wald in tour / and air due hasia*	Alfalfa		
Yield in tons/acre, air-dry basis*	\$185.00		0.83 \$30.30
	φ165.00		φ30.30
ESTIMATED VALUE/ACRE			
Hay (70 - 60 lb. Bales @\$5.50)	\$ 388.50	\$	-
Grazing (2 AUM's @ \$12.50)			25.00
ESTIMATED TOTAL VALUE/ACRE	\$ 388.50	\$	25.00
ESTIMATED OPERATING COSTS/ACRE			
Seed	\$ 67.50	\$	27.60
Fertilizer and soil amendments	107.90		94.75
Crop protection chemicals	20.50		10.50
Crop supplies	7.00		3.50
Custom hire and hauling	42.00		25.00
Machinery fuel	17.05		5.25
Machinery repairs and maintenance	14.90		2.59
Operator and hired labor	36.99		11.33
Operating interest (1/8 operating costs x 6%)	8.63		4.96
Total Operating Costs/Acre	\$ 322.47	\$	185.48
ESTIMATED OWNERSHIP COSTS/ACRE			
Farm business overhead	\$ 4.38	\$	3.00
Machinery overhead	22.65		6.86
Machinery depreciation	36.69		7.67
Real estate charge	85.80		38.00
Total Ownership Costs/Acre	\$ 149.52	\$	55.53
ESTIMATED TOTAL COSTS/ACRE	\$ 471.99	\$	241.01
INCOME OVER OPERATING COSTS/ACRE INCOME OVER TOTAL COSTS/ACRE	\$66.03 -\$83.49		-\$160.48 -\$216.01
Operating costs/ton, air-dry*	\$ 153.56	\$	223.48
Ownership costs/ton, air-dry*	\$ 71.20	\$	66.90
Total costs/ton, air-dry*	\$ 224.76	\$	290.38

^{*}Air-dry basis is hay equivalent moisture, or 90% dry matter.

Prepared by Ray Massey, Extension Economist

The FBG budget calculator at http://fapri.missouri.edu can be used to modify these budgets.

Hay and Pasture Projected Budgets for Crop Year 2018*

			Alfalfa Small square bales		cue-Clover	+St	scue Seed ubble Hay - Graze
	Yield in tons/acre, air dry basis* Weighted value/ton, air dry		5 \$185.00		3.14 \$80.41		3.21 \$56.19
ESTIMA	ATED INCOME/ACRE						
	Hay	\$	925.00	\$	240.00	\$	168.00
	Grazing				12.50		12.50
	Seed	\$		\$	-	\$	69.00
	ESTIMATED TOTAL VALUE/ACRE	\$	925.00	\$	252.50	\$	249.50
ESTIMA	ATED OPERATING COSTS/ACRE						
	Seed	\$	-	\$	_	\$	-
	Fertilizer and soil amendments		77.20		56.10		66.80
	Crop protection chemicals		7.00		-		-
	Crop supplies		10.00		10.00		6.00
	Custom hire and hauling		152.34		22.71		36.60
	Machinery fuel		18.99		5.77		6.60
	Machinery repairs and maintenance		13.17		4.30		5.75
	Value of operator and hired labor		40.69		10.07		13.71
	Operating interest (6% x 1/2 year)		8.78		3.00		3.73
	Total Operating Costs/Acre	\$	328.17	\$	111.95	\$	139.19
ESTIMA	TED OWNERSHIP COSTS/ACRE						
	Farm business overhead	\$	6.13	\$	3.50	\$	2.33
	Machinery overhead		8.54		9.80		9.73
	Machinery depreciation		30.82		12.78		11.96
	Real estate charge		85.80		38.00		38.00
	Total Ownership Costs/Acre	\$	131.29	\$	64.08	\$	62.02
ESTIMA	ATED TOTAL COSTS/ACRE	\$	459.46	\$	176.03	\$	201.21
	INCOME OVER OPERATING COSTS/ACF	RE	\$596.83 \$465.54		\$140.55 \$76.47		\$110.31 \$48.29
	Operating costs/ton, air dry*	\$	65.63	\$	35.65	\$	43.36
	Ownership costs/ton, air dry*	\$	26.26	\$	20.41	\$	19.32
	Total costs/ton, air dry*	\$	91.89	\$	56.06	\$	62.68

^{*}Air-dry basis is hay equivalent moisture, or 90% dry matter.

The CBG budget calculator at http://fapri.missouri.edu can be used to modify these budgets.

Prepared by Ray Massey, Extension Economist

Sileage and Baleage Projected Budget for 2018*

	Со	rn Silage	Alfal	fa Baleage
Yield in tons/acre, air-dry basis*		8		5
Value/ton, air dry		\$63.00		\$135.00
ESTIMATED VALUE/ACRE				
Sileage	\$	504.00	\$	-
Baleage				675.00
ESTIMATED TOTAL VALUE/ACRE	\$	504.00	\$	675.00
ESTIMATED OPERATING COSTS/ACRE				
Seed	\$	68.25	\$	-
Fertilizer and soil amendments		128.50		77.20
Crop protection chemicals		42.00		7.50
Crop supplies		5.00		95.00
Custom hire and hauling		73.50		41.25
Machinery fuel		18.10		31.63
Machinery repairs and maintenance		16.07		45.33
Operator and hired labor		25.14		57.16
Operating interest (1/8 operating costs x 6%)		10.36		9.76
Total Operating Costs/Acre	\$	386.92	\$	364.83
ESTIMATED OWNERSHIP COSTS/ACRE				
Farm business overhead	\$	4.00	\$	6.13
Machinery overhead	·	26.03	•	29.25
Machinery depreciation		32.85		55.28
Real estate charge		132.00		85.80
Total Ownership Costs/Acre	\$	194.88	\$	176.46
ESTIMATED TOTAL COSTS/ACRE	\$	581.80	\$	541.29
INCOME OVER OPERATING COSTS/ACRE		\$117.08 \$77.80		\$310.17 \$422.74
INCOME OVER TOTAL COSTS/ACRE		-\$77.80		\$133.71
Operating costs/ton, air-dry*	\$	48.36	\$	72.97
Ownership costs/ton, air-dry*	\$	24.36	\$	35.29
Total costs/ton, air-dry*	\$	72.72	\$	108.26

^{*}Air-dry basis is hay equivalent moisture, or 90% dry matter.

Prepared by Ray Massey, Extension Economist

The FBG budget calculator at http://fapri.missouri.edu can be used to modify these budgets.

Feeder Pigs

Projected Budget for 2018

Per Sow Per Year

Description of Production: 22 pigs per sow per year, selling at 50 lbs.

	Per Sow		
	(1	3 cwt)	Your Estimate
ESTIMATED INCOME/SOW			
Feeder pigs sold	\$	1,001	\$
(11 cwt feeder pigs sold/sow x \$91 avg price/cwt)			
Cull sows sold	\$	72	\$
(2 cwt cull sow sold/sow x \$36 avg price/cwt)			
Estimated Total Income (Gross Receipts/Sow)	\$	1,073	\$
ESTIMATED OPERATING COSTS			
Feed		240	•
Commercial (1,458 lbs x 17.0 cents)	\$	248	\$
Grain & DDGS (2,708 lbs x 6.0 cents)		162	Φ.
Total Feed Cost	\$	410	\$
Veterinary and medicine	\$	58	\$
Breeding and replacement gilts		220	
Equipment operation, machine hire, and transportation Utilities, insurance and miscellaneous		62 72	
Personal property taxes		5	
Hog facility repair and maintenance		51	
Operating interest (1/2 operating costs x 5.5%)		24	
Total Operating Costs Except Labor	\$	902	\$
Estimated labor cost (12 hrs @ \$14.00)	\$	168	\$
Total Operating Costs Including Labor	\$	1,070	\$
ESTIMATED OWNERSHIP (FIXED) COSTS			
Real estate interest, depreciation, and taxes	\$	107	\$
Interest on breeding herd		16	
Machinery & equipment interest and depreciation		64	
Total Fixed Costs	\$	187	\$
ESTIMATED TOTAL COSTS/SOW	\$	1,257	\$
INCOME OVER OPERATING COSTS	\$	3	\$
INCOME OVER TOTAL COSTS	\$	(184)	\$

Prepared by Scott Brown, Extension Economist

Farrow-Finnish Swine

Projected Budget for 2018

Per Sow Per Year

Description of Production: 22 pigs per sow per year, selling at 280 lbs.

		er Sow	
	(6	3.6 cwt)	Your Estimate
ESTIMATED INCOME/SOW			
Market hogs sold	\$	2,710	\$
(61.6 cwt mkt hogs sold/sow x \$44 avg price/cwt)			
Cull sows sold	\$	72	\$
(2 cwt cull sow sold/sow x \$36 avg price/cwt)			
Estimated Total Income (Gross Receipts/Sow)	\$	2,782	\$
ESTIMATED OPERATING COSTS			
Feed		604	Φ.
Commercial (4,022 lbs x 17.0 cents)	\$	684	\$
Grain & DDGS (15,115 lbs x 6.0 cents)	<u> </u>	907	Φ.
Total Feed Cost	\$	1,591	\$
Veterinary and medicine	\$	118	\$
Breeding and replacement gilts		221	
Equipment operation, machine hire, and transportation Utilities, insurance and miscellaneous		133 128	
Personal property taxes		6	
Hog facility repair and maintenance		104	-
Operating interest (1/2 operating costs x 5.56%)		63	
Total Operating Costs Except Labor	\$	2,364	\$
Estimated labor cost (20 hrs @ \$14)	\$	280	\$
Total Operating Costs Including Labor	\$	2,644	\$
ESTIMATED OWNERSHIP (FIXED) COSTS			
Real estate interest, depreciation, and taxes	\$	211	\$
Interest on breeding herd		18	
Machinery & equipment interest and depreciation		118	
Total Fixed Costs	\$	347	\$
ESTIMATED TOTAL COSTS/SOW	\$	2,991	\$
INCOME OVER OPERATING COSTS	\$	138	\$
INCOME OVER TOTAL COSTS	\$	(209)	\$

Prepared by Scott Brown, Extension Economist

Hog Finishing

Projected Budget for 2018

Per Lot of 100 Hogs

Description of Production: Purchase 103 head of 50 lb pigs, sell 100 head of 280 lb market hogs.

	Per Lot		Varan Fatimata	
	(2	280 cwt)	Your Estimate	
ESTIMATED INCOME/LOT				
Market hogs sold	\$	12,320	\$	
(280 cwt mkt hogs sold/lot x \$44 avg price/cwt)				
ESTIMATED OPERATING COSTS				
Feed				
Commercial (10,159 lbs x 17.0 cents)	\$	1,727	\$	
Grain & DDGS (52,500 lbs x 6.0 cents)		3,150		
Total Feed Cost	\$	4,877	\$	
Purchase pigs (103 head x 50 lbs x \$0.91)	\$	4,687	\$	
Veterinary and medicine		451	\$	
Livestock materials and services		25		
Equipment operation, machine hire, and transportation		527	\$	
Utilities, insurance and miscellaneous		326	\$	
Personal property taxes		25	-	
Hog facility repair and maintenance		193		
Operating interest (1/8 operating costs x 5.5%)		76		
Total Operating Costs Except Labor	\$	11,187		
Estimated labor cost (39 hrs @ \$14.00)	\$	546		
Total Operating Costs Including Labor	\$	11,733	\$	
ESTIMATED OWNERSHIP (FIXED) COSTS				
Real estate interest, depreciation, and taxes	\$	604	\$	
Machinery & equipment interest and depreciation		367		
Total Fixed Costs	\$	971	\$	
ESTIMATED TOTAL COSTS/LOT	\$	12,704	\$	
INCOME OVER OPERATING COSTS	\$	587	\$	
INCOME OVER TOTAL COSTS	\$	(384)	\$	

Prepared by Scott Brown, Extension Economist

Beef Cow/Calf - South Missouri

2018 Southern Missouri Beef Cow-Calf, Purchased Replacements

	2010 Boutstern Missouri Beer Cow Carly I	Fall	Spring	
		Calving	Calving	Your Farm
	Calf crop, % weaned	88%	85%	
ESTIMATED INCO	OME/COW			
Steer calf sales:	580 lbs. @ \$151.02/cwt. x 85% x 1/2		\$372.26	
	580 lbs. @ \$150.12/cwt. x 88% x 1/2	\$383.11		
Heifer calf sales:	560 lbs. @ \$140.88/cwt. x 85% x 1/2		335.29	
	560 lbs @ \$139.88/cwt. x 88% x 1/2	344.66		
Cull cow sales:	1200 lbs. @ \$60/cwt.x 14%		100.80	
	1200 lbs. @ \$60/cwt.x 14%	100.80		
	Total Income	\$828.57	\$808.36	
	ABLE COSTS/COW			
Pasture (rental rat	re)	\$115.25	\$115.25	
Hay and forage		149.98	136.59	
Grain		0.00	0.00	
Protein and miner	rals	55.22	45.86	
Labor		62.50	62.50	
Veterinary, drugs	, and supplies	35.50	35.50	
Marketing		20.71	20.21	
Utilities and all m	nachinery costs	114.43	107.36	
Livestock facility	repairs	8.00	8.00	
Cow replacement		168.93	211.16	
Bull cost or AI ch	arge	25.00	25.00	
Professional fees	(legal, accounting, etc.)	1.00	1.00	
Miscellaneous		6.00	6.00	
Operating interest	t	16.64	15.83	
	Total Variable Costs	\$779.15	\$790.25	
ESTIMATED FIXE	D COSTS/COW			
	acilities and equipment	8.48	8.48	
Interest on breedi		87.39	89.71	-
Interest on faciliti	-	7.18	7.18	
	es on breeding stock & capital items	32.19	32.62	
mourance and tax	Total Fixed Costs	\$135.25	\$13 7.99	
	Tomi Flacu Costs	ф133.23	φ131.77	
	Total Costs	\$914.40	\$928.24	
INCOME OVER	R VARIABLE COSTS	\$49.42	\$18.11	
INCOME OVER	R TOTAL COSTS	(\$85.83)	(\$119.88)	

For more details see website http://agebb.missouri.edu/mgt/budget/index.htm

Prepared by Wesley Tucker and Eldon Cole, MU Regional Extension Specialists, and Joe Horner, Extension Economis

Beef Cow/Calf - North Missouri

2018 Northern Missouri Beef Cow-Calf, Purchased Replacements

		Fall	Spring	
		Calving	Calving	Your Farm
	Calf crop, % weaned	88%	84%	
ESTIMATED INCO	ME/COW			
Steer calf sales:	580 lbs. @ \$151.02/cwt. x 84% x 1/2		\$367.88	
	580 lbs. @ \$150.12/cwt. x 88% x 1/2	\$383.11		
Heifer calf sales:	560 lbs. @ \$140.88/cwt. x 84% x 1/2		331.35	
	560 lbs @ \$139.88/cwt. x 88% x 1/2	344.66		
Cull cow sales:	1200 lbs. @ \$60/cwt.x 14%		100.80	
	1200 lbs. @ \$60/cwt.x 14%	100.80		-
	Total Income	\$828.57	\$800.03	
ESTIMATED VARI	ABLE COSTS/COW			
Pasture (rental rate	e)	\$137.50	\$147.50	
Hay and forage		165.90	142.86	
Grain		21.87	10.53	
Protein and minera	als	32.07	22.81	
Labor		62.50	62.50	
Veterinary, drugs,	and supplies	35.50	35.50	
Marketing		24.86	24.00	
Utilities and all ma	achinery costs	144.18	144.18	
Livestock facility	repairs	8.00	8.00	
Cow replacement	(0.15% of heifers)	211.20	211.20	
Bull cost or AI cha	arge	35.00	35.00	
Professional fees ((legal, accounting, etc.)	1.00	1.00	-
Miscellaneous		6.00	6.00	
Operating interest		18.78	17.86	
	Total Variable Costs	\$904.36	\$868.94	
ESTIMATED FIXE	O COSTS/COW			
	acilities and equipment	\$8.48	\$8.48	
Interest on breeding		\$91.92	\$91.92	
Interest on facilitie		7.18	7.18	
	es on breeding stock & capital items	33.41	33.41	
	Total Fixed Costs	\$140.98	\$140.98	
	Total Costs	\$1,045.34	\$1,009.92	
INCOME OVER	VARIABLE COSTS	(\$75.79)	(\$68.91)	
INCOME OVER	TOTAL COSTS	(\$216.77)	(\$209.89)	

For more details see website http://agebb.missouri.edu/mgt/budget/index.htm

Prepared by Joe Koenen and Zachary Erwin, MU Regional Extension Specialists, and Joe Horner, Extension Economist

Beef Steer Backgrounding

2018 Beef Steer Backgrounding

		Winter	Pasture	
		Backgrounding	Backgrounding	Your Farm
ESTIMATED INCOM	E/STEER			
Market steer sales:	815 lbs. @ \$135.35/cwt.	\$1,103.10		
	775 lbs. @ \$134.15/cwt.		\$1,039.66	
Less death loss		11.03	10.40	
Other income		0.00	0.00	
	Total Income	\$1,092.07	\$1,029.27	
ESTIMATED VARIAB	BLE COSTS/STEER			
Fall purchased steer:	580 pounds @ \$155.69/cwt	\$903.00		
-	eer: 580 pounds @ \$151.99/cwt		\$881.54	
Pasture (rental rate)		0.00	29.64	
Mixed hay		48.84	0.00	
Grain		47.13	0.00	
Protein supplement		10.70	31.50	
Salt, mineral, limesto	one	10.80	10.80	
Labor		31.25	18.75	
Veterinary, drugs, ar	nd supplies	18.00	15.00	
Marketing		22.06	20.79	'
Hauling		0.00	0.00	
Utilities and all macl	hinery costs	51.07	23.33	
Livestock facility rep	pairs	3.75	0.75	
Professional fees (le	•	1.00	1.00	
Miscellaneous	- · ·	3.50	3.50	
Operating interest		16.10	15.03	
	Total Variable Costs	\$1,167.20	\$1,051.64	
ESTIMATED FIXED	COSTS/STEER			
Depreciation on live		3.87	0.62	
Interest on livestock		3.27	0.52	
Insurance and taxes		3.66	2.59	
	Total Fixed Costs	\$10.81	\$3.72	
	Total Costs	\$1,178.00	\$1,055.36	
INCOME OVER V	ARIABLE COSTS	(\$75.13)	(\$22.37)	
INCOME OVER T	OTAL COSTS	(\$85.93)	(\$26.09)	
Hundredweight of ga	ain per steer purchased	2.27	1.87	
Feed cost per cwt ga	in	\$51.78	\$38.42	
Breakeven steer pric	e per cwt	\$146.00	\$137.55	

For more details see website http://agebb.missouri.edu/mgt/t

Prepared by Wesley Tucker and Eldon Cole, MU Regional Extension Specialists, and Joe Horner, Extension Economist

Replacement Beef Heifers

2018 Replacement Beef Heifers

Description of Production: Buy 560 pound heifer calves, sell bred heifers at 1,000 pounds

Pasture-based operation for growing a quality beef replacement cow

		Your Fai
ESTIMATED INCOME/HEAD		
Heifer sales		
Bred heifer, springer (0.875 head)	\$1,268.75	
Cull heifer (0.05 head)	70.00	
Yearling heifer (0.075 head)	70.65	
Less death loss (0.01 of heifer sales)	14.09	
Total Income	\$1,395.31	
STIMATED VARIABLE COSTS/HEAD		
Purchased heifer calf (560 lbs@ \$145.55/cwt.)	\$815.08	
Summer pasture (8.19 AUMs @\$12.50/AUM)	102.33	
Mixed hay (1250 lbs. @ \$80/ton)	50.00	
Corn (5.89 bu. @ \$3.71/bu.)	21.88	
Protein supplement (330 lbs. @ \$200/ton)	33.00	
Mineral and salt (104 lbs. @ \$800/ton)	41.60	
Labor (5 hrs. @ \$12.5 /hr)	62.50	
Veterinary, drugs, and supplies	30.00	
Marketing costs	42.28	
Breeding costs	37.50	
Utilities and all machinery costs	106.97	
Livestock facility repairs	8.00	
Professional fees (legal, accounting, etc.)	2.00	
Miscellaneous	4.00	
Interest on calf purchase and 1/2 of operating costs	\$61.37	
Total Variable Costs	\$1,418.52	
STIMATED FIXED COSTS/HEAD		
Depreciation on livestock facilities	\$8.45	
Interest on livestock facilities	7.44	
Insurance and taxes on capital items	13.51	
Total Fixed Costs	29.40	
Total Costs	\$1,447.92	
INCOME OVER VARIABLE COSTS	(\$23.21)	
INCOME OVER TOTAL COSTS	(\$52.61)	
Total cost per head per day (excluding calf price)	\$1.67	
Total cost per head per day (excluding can price) Total cost per pound of gain*	\$1.52	
Springer heifer break-even price, \$/head	\$1,511.29	

^{*}Represents cost per pound of springer heifer sold after adjusting for cull income and death loss.

For more details see website http://agebb.missouri.edu/mgt/budget/index.htm Prepared by Wesley Tucker and Eldon Cole, MU Regional Extension Specialists, and Joe Horner, Extension Economist

Yearling Beef Steer Feeding Projected Budget for 2017-18

Description of Production: Buy 750 lb. steers Nov. 2017 and feed 5 months in lot, sell April 2018 3.65 lbs. gain per day, 151 days

CATTLE SALES				Your Estimate
CITTED CITED				
Gross receipts/head (1,300 lbs. @ \$115/cwt.)		\$	1,495.00	\$
Less death loss, 2%		,	-29.90	
ESTIMATED TOTAL INCOME/STEER		\$	1,465.10	\$
ESTIMATED OPERATING COSTS/STEER				
Purchased steer calf (750 lbs. @ \$135/cwt.)		\$	1,012.50	\$
Purchased feed:				
Corn (40 bu. @\$3.50/bu.)	\$ 140.00			
DDGS (1,500 lbs. @ \$115/Ton)	86.25			
Soybean meal (100 lbs. @ \$320/Ton)	16.00			
Salt and additives (30 lbs. @ \$400/Ton)	6.00			
Grass Hay (500 lbs. @ \$55/Ton)	13.75			
Total Feed Costs		\$	262.00	
Machinery costs, feed preparation, etc.			8.00	
Veterinarian and medicine:				
Production veterinary products			8.50	
Disease treatment			3.75	
Commission, yardage, hauling			26.00	
Utilities and all machinery costs			5.00	
Labor (2 hours @ \$14.00/hour)			28.00	
Operating interest (1/3 of operating costs x 5.5%)			24.57	
Total Operating Costs		\$	1,378.32	\$
ESTIMATED OWNERSHIP (FIXED) COSTS/STEER				
Real estate interest, depreciation		\$	5.00	\$
Real estate and property taxes		7	4.00	,
Total Ownership Costs		\$	9.00	\$
ESTIMATED TOTAL COSTS/STEER		\$	1,387.32	\$
INCOME OVER OPERATING COSTS/STEER		\$	86.78	\$
INCOME OVER TOTAL COSTS/STEER		\$	77.78	\$

Prepared by Scott Brown, Extension Economist.

Conventional Dairy, 150-cow herd

Projected Budget for 2018 (150-cow herd, replacements raised)

Per cow Per cow Per cow Per cow		0,000 lbs.	milk sold	24,000 lbs. n	nilk sold
Milk sales @ \$17.5/cwt \$3,499.96 \$17.50 \$4,199.94 Quality premium 0.00 0.00 0.00 Government payments 0.00 0.00 0.00 Calf sales: bulls and surplus heifers 72.88 0.36 72.88 Cull cow sales: 1450 lbs. x 27% x \$60/cwt 234.90 1.17 234.90 Total Income \$3,807.74 \$19.04 \$4,507.71 ESTIMATED OPERATING COSTS/COW Feed \$1,784.82 \$8.92 \$1,969.40 Labor 394.09 1.97 394.09 Veterinary, drugs, and supplies 110.00 0.55 115.00 Utilities and water 55.00 0.28 60.00 Fuel, oil, and all vehicle expense 64.13 0.32 64.13 Milk hauling and promotion 200.00 1.00 240.00 Building and equipment repair 203.32 1.02 203.32 Breeding/genetic charges Capital replacement 0.00 0.00 0.00 Semen, A.I. services, supplies 54.00	pe	r cow	per cwt	per cow	per cwt
Milk sales @ \$17.5/cwt \$3,499.96 \$17.50 \$4,199.94 Quality premium 0.00 0.00 0.00 Government payments 0.00 0.00 0.00 Calf sales: bulls and surplus heifers 72.88 0.36 72.88 Cull cow sales: 1450 lbs. x 27% x \$60/cwt 234.90 1.17 234.90 Total Income \$3,807.74 \$19.04 \$4,507.71 ESTIMATED OPERATING COSTS/COW Feed \$1,784.82 \$8.92 \$1,969.40 Labor 394.09 1.97 394.09 Veterinary, drugs, and supplies 110.00 0.55 115.00 Utilities and water 55.00 0.28 60.00 Fuel, oil, and all vehicle expense 64.13 0.32 64.13 Milk hauling and promotion 200.00 1.00 240.00 Building and equipment repair 203.32 1.02 203.32 Breeding/genetic charges Capital replacement 0.00 0.00 0.00 Semen, A.I. services, supplies 54.00	A A THEIR IN COLUMN COLUMN				
Quality premium 0.00 0.00 0.00 Government payments 0.00 0.00 0.00 Calf sales: bulls and surplus heifers 72.88 0.36 72.88 Cull cow sales: 1450 lbs. x 27% x \$60/cwt 234.90 1.17 234.90 Total Income \$3,807.74 \$19.04 \$4,507.71 ESTIMATED OPERATING COSTS/COW Feed \$1,784.82 \$8.92 \$1,969.40 Labor 394.09 1.97 394.09 Veterinary, drugs, and supplies 110.00 0.55 115.00 Utilities and water 55.00 0.28 60.00 Fuel, oil, and all vehicle expense 64.13 0.32 64.13 Milk hauling and promotion 200.00 1.00 240.00 Building and equipment repair 203.32 1.02 203.32 Breeding/genetic charges Capital replacement 0.00 0.00 0.00 Semen, A.I. services, supplies 54.00 0.27 54.00 Interest on breeding herd 14.00 0.07		100.06	417.50	Φ4 100 04	Φ1 7 .50
Government payments					\$17.50
Calf sales: bulls and surplus heifers 72.88 0.36 72.88 Cull cow sales: 1450 lbs. x 27% x \$60/cwt 234.90 1.17 234.90 Total Income \$3,807.74 \$19.04 \$4,507.71 ESTIMATED OPERATING COSTS/COW Feed \$1,784.82 \$8.92 \$1,969.40 Labor 394.09 1.97 394.09 Veterinary, drugs, and supplies 110.00 0.55 115.00 Utilities and water 55.00 0.28 60.00 Fuel, oil, and all vehicle expense 64.13 0.32 64.13 Milk hauling and promotion 200.00 1.00 240.00 Building and equipment repair 203.32 1.02 203.32 Breeding/genetic charges Capital replacement 0.00 0.00 0.00 Semen, A.I. services, supplies 54.00 0.27 54.00 Interest on breeding herd 70.00 0.35 70.00 Insurance on breeding herd 14.00 0.07 14.00 Operating Interest (1/2 of selected operating costs	• •				0.00
Cull cow sales: 1450 lbs. x 27% x \$60/cwt 234.90 1.17 234.90 Total Income \$3,807.74 \$19.04 \$4,507.71 ESTIMATED OPERATING COSTS/COW Feed \$1,784.82 \$8.92 \$1,969.40 Labor 394.09 1.97 394.09 Veterinary, drugs, and supplies 110.00 0.55 115.00 Utilities and water 55.00 0.28 60.00 Fuel, oil, and all vehicle expense 64.13 0.32 64.13 Milk hauling and promotion 200.00 1.00 240.00 Building and equipment repair 203.32 1.02 203.32 Breeding/genetic charges Capital replacement 0.00 0.00 0.00 0.00 Semen, A.I. services, supplies 54.00 0.27 54.00 1.02 203.32 1.02 203.32 Interest on breeding herd 70.00 0.35 70.00 1.05 10.00 1.05 10.00 10.05 10.00 10.05 10.00 10.05 10.00 10.05 10.00 10.	± •				0.00
Total Income \$3,807.74 \$19.04 \$4,507.71	<u>*</u>				0.30
STIMATED OPERATING COSTS/COW Feed	ull cow sales: 1450 lbs. x 27% x \$60/cwt	234.90	1.17	234.90	0.98
Feed \$1,784.82 \$8.92 \$1,969.40 Labor 394.09 1.97 394.09 Veterinary, drugs, and supplies 110.00 0.55 115.00 Utilities and water 55.00 0.28 60.00 Fuel, oil, and all vehicle expense 64.13 0.32 64.13 Milk hauling and promotion 200.00 1.00 240.00 Building and equipment repair 203.32 1.02 203.32 Breeding/genetic charges Capital replacement 0.00 0.00 0.00 Semen, A.I. services, supplies 54.00 0.27 54.00 Interest on breeding herd 70.00 0.35 70.00 Insurance on breeding herd 14.00 0.07 14.00 Professional fees (legal, accounting, etc.) 10.00 0.05 10.00 Miscellaneous 18.00 0.09 21.60 Operating Interest (1/2 of selected operating costs x 5%) 67.68 0.34 72.64 Total Operating Costs \$3,045.04 \$15.23 \$3,288.18 ESTIMATED OWNERSHIP COSTS/COW Depreciation on bldgs. and equipment \$358.88 1.79 \$358.88 Interest on land, bldgs., and equipment 161.07 0.81 161.07 Insurance and taxes on land, bldgs., equipment 92.30 0.46 92.30 Total Ownership Costs \$612.24 \$3.06 \$612.24	Total Income \$3	,807.74	\$19.04	\$4,507.71	\$18.78
Labor 394.09 1.97 394.09 Veterinary, drugs, and supplies 110.00 0.55 115.00 Utilities and water 55.00 0.28 60.00 Fuel, oil, and all vehicle expense 64.13 0.32 64.13 Milk hauling and promotion 200.00 1.00 240.00 Building and equipment repair 203.32 1.02 203.32 Breeding/genetic charges Capital replacement 0.00 0.00 0.00 0.00 Semen, A.I. services, supplies 54.00 0.27 54.00 Interest on breeding herd 70.00 0.35 70.00 Insurance on breeding herd 14.00 0.07 14.00 Professional fees (legal, accounting, etc.) 10.00 0.05 10.00 Miscellaneous 18.00 0.09 21.60 Operating Interest (1/2 of selected operating costs x 5%) 67.68 0.34 72.64 Total Operating Costs \$3,045.04 \$15.23 \$3,288.18 ESTIMATED OWNERSHIP COSTS/COW Depreciation on bldgs. and equipment \$358.88 1.79 \$358.88 Interest on land, bldgs., and equipment 92.30 0.46 92.30	MATED OPERATING COSTS/COW				
Veterinary, drugs, and supplies 110.00 0.55 115.00 Utilities and water 55.00 0.28 60.00 Fuel, oil, and all vehicle expense 64.13 0.32 64.13 Milk hauling and promotion 200.00 1.00 240.00 Building and equipment repair 203.32 1.02 203.32 Breeding/genetic charges Capital replacement 0.00 0.00 0.00 Semen, A.I. services, supplies 54.00 0.27 54.00 Interest on breeding herd 70.00 0.35 70.00 Insurance on breeding herd 14.00 0.07 14.00 Professional fees (legal, accounting, etc.) 10.00 0.05 10.00 Miscellaneous 18.00 0.09 21.60 Operating Interest (1/2 of selected operating costs x 5%) 67.68 0.34 72.64 Total Operating Costs \$3,045.04 \$15.23 \$3,288.18 ESTIMATED OWNERSHIP COSTS/COW 161.07 0.81 161.07 Insurance and taxes on land, bldgs., equipment 92.30	eed \$1,	784.82	\$8.92	\$1,969.40	\$8.21
Utilities and water 55.00 0.28 60.00 Fuel, oil, and all vehicle expense 64.13 0.32 64.13 Milk hauling and promotion 200.00 1.00 240.00 Building and equipment repair 203.32 1.02 203.32 Breeding/genetic charges Capital replacement 0.00 0.00 0.00 Semen, A.I. services, supplies 54.00 0.27 54.00 Interest on breeding herd 70.00 0.35 70.00 Insurance on breeding herd 14.00 0.07 14.00 Professional fees (legal, accounting, etc.) 10.00 0.05 10.00 Miscellaneous 18.00 0.09 21.60 Operating Interest 67.68 0.34 72.64 Total Operating Costs \$3,045.04 \$15.23 \$3,288.18 ESTIMATED OWNERSHIP COSTS/COW Depreciation on bldgs. and equipment \$358.88 1.79 \$358.88 Interest on land, bldgs., and equipment 161.07 0.81 161.07 Insurance and taxes on land, bldgs., equipment 92.30 0.46 92.30 Total Ownershi	abor	394.09	1.97	394.09	1.64
Utilities and water 55.00 0.28 60.00 Fuel, oil, and all vehicle expense 64.13 0.32 64.13 Milk hauling and promotion 200.00 1.00 240.00 Building and equipment repair 203.32 1.02 203.32 Breeding/genetic charges Capital replacement 0.00 0.00 0.00 Semen, A.I. services, supplies 54.00 0.27 54.00 Interest on breeding herd 70.00 0.35 70.00 Insurance on breeding herd 14.00 0.07 14.00 Professional fees (legal, accounting, etc.) 10.00 0.05 10.00 Miscellaneous 18.00 0.09 21.60 Operating Interest 67.68 0.34 72.64 Total Operating Costs \$3,045.04 \$15.23 \$3,288.18 ESTIMATED OWNERSHIP COSTS/COW Same and equipment 161.07 0.81 161.07 Insurance and taxes on land, bldgs., and equipment 92.30 0.46 92.30 Total Ownership Costs \$3,657.28 \$18.29	eterinary, drugs, and supplies	110.00	0.55	115.00	0.48
Milk hauling and promotion 200.00 1.00 240.00 Building and equipment repair 203.32 1.02 203.32 Breeding/genetic charges 20juil replacement 0.00 0.00 0.00 Semen, A.I. services, supplies 54.00 0.27 54.00 Interest on breeding herd 70.00 0.35 70.00 Insurance on breeding herd 14.00 0.07 14.00 Professional fees (legal, accounting, etc.) 10.00 0.05 10.00 Miscellaneous 0.09 21.60 Operating Interest (1/2 of selected operating costs x 5%) 67.68 0.34 72.64 Total Operating Costs \$3,045.04 \$15.23 \$3,288.18 ESTIMATED OWNERSHIP COSTS/COW Depreciation on bldgs. and equipment \$358.88 1.79 \$358.88 Interest on land, bldgs., and equipment 161.07 0.81 161.07 Insurance and taxes on land, bldgs., equipment 92.30 0.46 92.30 Total Ownership Costs \$612.24 \$3.06 \$612.24 <t< td=""><td></td><td>55.00</td><td>0.28</td><td>60.00</td><td>0.25</td></t<>		55.00	0.28	60.00	0.25
Milk hauling and promotion 200.00 1.00 240.00 Building and equipment repair 203.32 1.02 203.32 Breeding/genetic charges Capital replacement 0.00 0.00 0.00 Semen, A.I. services, supplies 54.00 0.27 54.00 Interest on breeding herd 70.00 0.35 70.00 Insurance on breeding herd 14.00 0.07 14.00 Professional fees (legal, accounting, etc.) 10.00 0.05 10.00 Miscellaneous 18.00 0.09 21.60 Operating Interest (1/2 of selected operating costs x 5%) 67.68 0.34 72.64 Total Operating Costs \$3,045.04 \$15.23 \$3,288.18 ESTIMATED OWNERSHIP COSTS/COW Depreciation on bldgs. and equipment \$358.88 1.79 \$358.88 Interest on land, bldgs., and equipment 161.07 0.81 161.07 Insurance and taxes on land, bldgs., equipment 92.30 0.46 92.30 Total Ownership Costs \$3,657.28 \$18.29 \$3,900.42	uel, oil, and all vehicle expense	64.13	0.32	64.13	0.27
Building and equipment repair 203.32 1.02 203.32 Breeding/genetic charges Capital replacement 0.00 0.00 0.00 Semen, A.I. services, supplies 54.00 0.27 54.00 Interest on breeding herd 70.00 0.35 70.00 Insurance on breeding herd 14.00 0.07 14.00 Professional fees (legal, accounting, etc.) 10.00 0.05 10.00 Miscellaneous 18.00 0.09 21.60 Operating Interest (1/2 of selected operating costs x 5%) 67.68 0.34 72.64 Total Operating Costs \$3,045.04 \$15.23 \$3,288.18 ESTIMATED OWNERSHIP COSTS/COW \$358.88 1.79 \$358.88 Interest on land, bldgs., and equipment 161.07 0.81 161.07 Insurance and taxes on land, bldgs., equipment 92.30 0.46 92.30 Total Ownership Costs \$3,657.28 \$18.29 \$3,900.42	_	200.00	1.00	240.00	1.00
Breeding/genetic charges Capital replacement 0.00 0.00 0.00 0.00 Semen, A.I. services, supplies 54.00 0.27 54.00 Interest on breeding herd 70.00 0.35 70.00 Insurance on breeding herd 14.00 0.07 14.00 Professional fees (legal, accounting, etc.) 10.00 0.05 10.00 Miscellaneous 18.00 0.09 21.60 Operating Interest (1/2 of selected operating costs x 5%) 67.68 0.34 72.64 Total Operating Costs \$3,045.04 \$15.23 \$3,288.18 ESTIMATED OWNERSHIP COSTS/COW Depreciation on bldgs. and equipment \$358.88 1.79 \$358.88 Interest on land, bldgs., and equipment 161.07 0.81 161.07 Insurance and taxes on land, bldgs., equipment 92.30 0.46 92.30 Total Ownership Costs \$612.24 \$3.06 \$612.24 \$3.00 \$612.24 \$3.900.42		203.32	1.02	203.32	0.85
Capital replacement 0.00 0.00 0.00 Semen, A.I. services, supplies 54.00 0.27 54.00 Interest on breeding herd 70.00 0.35 70.00 Insurance on breeding herd 14.00 0.07 14.00 Professional fees (legal, accounting, etc.) 10.00 0.05 10.00 Miscellaneous 18.00 0.09 21.60 Operating Interest (1/2 of selected operating costs x 5%) 67.68 0.34 72.64 Total Operating Costs \$3,045.04 \$15.23 \$3,288.18 ESTIMATED OWNERSHIP COSTS/COW \$358.88 1.79 \$358.88 Interest on land, bldgs., and equipment 161.07 0.81 161.07 Insurance and taxes on land, bldgs., equipment 92.30 0.46 92.30 Total Ownership Costs \$612.24 \$3.06 \$612.24 Total Costs \$3,657.28 \$18.29 \$3,900.42	reeding/genetic charges				
Semen, A.I. services, supplies 54.00 0.27 54.00 Interest on breeding herd 70.00 0.35 70.00 Insurance on breeding herd 14.00 0.07 14.00 Professional fees (legal, accounting, etc.) 10.00 0.05 10.00 Miscellaneous 18.00 0.09 21.60 Operating Interest 67.68 0.34 72.64 Total Operating Costs \$3,045.04 \$15.23 \$3,288.18 ESTIMATED OWNERSHIP COSTS/COW Depreciation on bldgs. and equipment \$358.88 1.79 \$358.88 Interest on land, bldgs., and equipment 161.07 0.81 161.07 Insurance and taxes on land, bldgs., equipment 92.30 0.46 92.30 Total Ownership Costs \$612.24 \$3.06 \$612.24 Total Costs \$3,657.28 \$18.29 \$3,900.42	• •	0.00	0.00	0.00	0.00
Interest on breeding herd 70.00 0.35 70.00	Semen, A.I. services, supplies	54.00	0.27	54.00	0.23
Insurance on breeding herd		70.00	0.35	70.00	0.29
Professional fees (legal, accounting, etc.) 10.00 0.05 10.00 Miscellaneous 18.00 0.09 21.60 Operating Interest (1/2 of selected operating costs x 5%) 67.68 0.34 72.64 Total Operating Costs \$3,045.04 \$15.23 \$3,288.18 ESTIMATED OWNERSHIP COSTS/COW \$358.88 1.79 \$358.88 Interest on land, bldgs., and equipment 161.07 0.81 161.07 Insurance and taxes on land, bldgs., equipment 92.30 0.46 92.30 Total Ownership Costs \$612.24 \$3.06 \$612.24 Total Costs \$3,657.28 \$18.29 \$3,900.42	-	14.00	0.07	14.00	0.06
Miscellaneous 18.00 0.09 21.60 Operating Interest (1/2 of selected operating costs x 5%) 67.68 0.34 72.64 Total Operating Costs \$3,045.04 \$15.23 \$3,288.18 ESTIMATED OWNERSHIP COSTS/COW Depreciation on bldgs. and equipment \$358.88 1.79 \$358.88 Interest on land, bldgs., and equipment 161.07 0.81 161.07 Insurance and taxes on land, bldgs., equipment 92.30 0.46 92.30 Total Ownership Costs \$612.24 \$3.06 \$612.24 Total Costs \$3,657.28 \$18.29 \$3,900.42	rofessional fees (legal, accounting, etc.)	10.00	0.05	10.00	0.04
(1/2 of selected operating costs x 5%) 67.68 0.34 72.64 Total Operating Costs \$3,045.04 \$15.23 \$3,288.18 ESTIMATED OWNERSHIP COSTS/COW Depreciation on bldgs. and equipment \$358.88 1.79 \$358.88 Interest on land, bldgs., and equipment 161.07 0.81 161.07 Insurance and taxes on land, bldgs., equipment 92.30 0.46 92.30 Total Ownership Costs \$612.24 \$3.06 \$612.24 Total Costs \$3,657.28 \$18.29 \$3,900.42		18.00	0.09	21.60	0.09
(1/2 of selected operating costs x 5%) 67.68 0.34 72.64 Total Operating Costs \$3,045.04 \$15.23 \$3,288.18 ESTIMATED OWNERSHIP COSTS/COW Depreciation on bldgs. and equipment \$358.88 1.79 \$358.88 Interest on land, bldgs., and equipment 161.07 0.81 161.07 Insurance and taxes on land, bldgs., equipment 92.30 0.46 92.30 Total Ownership Costs \$612.24 \$3.06 \$612.24 Total Costs \$3,657.28 \$18.29 \$3,900.42	perating Interest				
ESTIMATED OWNERSHIP COSTS/COW S358.88 1.79 \$358.8	. •	67.68	0.34	72.64	0.30
Depreciation on bldgs. and equipment \$358.88 1.79 \$358.88 Interest on land, bldgs., and equipment 161.07 0.81 161.07 Insurance and taxes on land, bldgs., equipment 92.30 0.46 92.30 Total Ownership Costs \$612.24 \$3.06 \$612.24 Total Costs \$3,657.28 \$18.29 \$3,900.42	Total Operating Costs \$3	,045.04	\$15.23	\$3,288.18	\$13.70
Interest on land, bldgs., and equipment 161.07 0.81 161.07 Insurance and taxes on land, bldgs., equipment 92.30 0.46 92.30 Total Ownership Costs \$612.24 \$3.06 \$612.24 Total Costs \$3,657.28 \$18.29 \$3,900.42	MATED OWNERSHIP COSTS/COW				
Interest on land, bldgs., and equipment 161.07 0.81 161.07 Insurance and taxes on land, bldgs., equipment 92.30 0.46 92.30 Total Ownership Costs \$612.24 \$3.06 \$612.24 Total Costs \$3,657.28 \$18.29 \$3,900.42		\$358.88	1.79	\$358.88	1.50
Insurance and taxes on land, bldgs., equipment 92.30 0.46 92.30 Total Ownership Costs \$612.24 \$3.06 \$612.24 Total Costs \$3,657.28 \$18.29 \$3,900.42					0.67
Total Ownership Costs \$612.24 \$3.06 \$612.24 Total Costs \$3,657.28 \$18.29 \$3,900.42			0.46		0.38
		612.24	\$3.06	\$612.24	\$2.55
INCOME OVED ODED ATING COSTS \$7/2.20 \$2.91 \$1.210.54	Total Costs \$3	,657.28	\$18.29	\$3,900.42	\$16.25
INCOME OVER OF ERATING COSTS \$702.09 \$5.81 \$1,219.54 INCOME OVER TOTAL COSTS \$150.45 \$0.75 \$607.29	·	762.69	\$3.81	\$1,219.54	\$5.08 \$2.53

For more details see website http://agebb.missouri.edu/mgt/budget/index.htm Prepared by Joe Horner and Ryan Milhollin, Extension Economists.

Rotational Grazing Dairy, 150-cow herd

Projected Budget for 2018 (150-cow herd, replacements raised)

	11,000 lbs.	milk sold	14,000 lbs.	milk sold
	per cow	per cwt	per cow	per cwt
FOTIMATED INCOME/COM				
ESTIMATED INCOME/COW	#4.005.04	047.50	ΦO 450 05	47.50
Milk sales @ \$17.5/cwt	\$1,925.04	\$17.50	\$2,450.05	\$17.50
Quality premium	0.00	0.00	0.00	0.00
Government payments	0.00	0.00	0.00	0.00
Calf sales: bulls and surplus heifers	95.63	0.87	95.63	0.68
Cull cow sales: 1100 lbs. x 18% x \$60/cwt	118.80	1.08	118.80	0.85
Total Income	\$2,139.47	\$19.45	\$2,664.48	\$19.03
ESTIMATED OPERATING COSTS/COW				
Feed	\$790.29	\$7.18	\$856.96	\$6.12
Labor	266.67	2.42	266.67	1.90
Veterinary, drugs, and supplies	85.00	0.77	95.00	0.68
Utilities and water	50.00	0.45	50.00	0.36
Fuel, oil, and all vehicle expense	59.06	0.54	59.06	0.42
Milk hauling and promotion	110.00	1.00	140.00	1.00
Building and equipment repair	142.52	1.30	142.52	1.02
Breeding/genetic charges				
Capital replacement	0.00	0.00	0.00	0.00
Semen, A.I. services, supplies	54.00	0.49	54.00	0.39
Interest on breeding herd	70.00	0.64	70.00	0.50
Insurance on breeding herd	14.00	0.13	14.00	0.10
Professional fees (legal, accounting, etc.)	10.00	0.09	10.00	0.07
Miscellaneous	9.90	0.09	12.38	0.09
Operating Interest				
(1/2 of selected operating costs x 5%)	37.04	0.34	39.01	0.28
Total Operating Costs	\$1,698.48	\$15.44	\$1,809.60	\$12.93
ESTIMATED OWNERSHIP COSTS/COW				
Depreciation on bldgs. and equipment	\$105.71	\$0.96	\$105.71	\$0.76
Interest on land, bldgs. and equipment	205.64	1.87	205.64	1.47
Insurance and taxes on land, bldgs. and equip.	38.89	0.35	38.89	0.28
Total Ownership Costs	\$350.24	\$3.18	\$350.24	\$2.50
Total Costs	\$2,048.72	\$18.62	\$2,159.84	\$15.43
INCOME OVER OPERATING COSTS	\$440.99	\$4.01	\$854.88	\$6.11
INCOME OVER TOTAL COSTS	\$90.75	\$0.82	\$504.64	\$3.60

For more details see website http://agebb.missouri.edu/mgt/budget/index.htm Prepared by Joe Horner and Ryan Milhollin, Extension Economists.

Replacement Dairy Heifers Projected Budget for 2018

Dairy calves purchased at birth, raised, bred, and sold at 24 months. No milk sold.

		Your Estima
ESTIMATED INCOME/HEIFER		
Heifer sales:		
Springer heifer (0.95 head x \$1400/head)	\$1,330.00	
Cull heifer (0.025 head x 1300 lbs. x \$100/cwt)	32.50	
Yearling heifer (0.025 head x 725 lbs. x \$100/cwt)	18.13	
Less death loss (4% of purchased calves)	(7.00)	
Total Income	\$1,373.63	
ESTIMATED OPERATING COSTS/HEIFER SOLD		
Purchased heifer calf (\$175/head)	\$175.00	
Interest on heifer calf investment	18.20	
Feed (birth to 24 months of age)	709.10	
Labor (10 hours @ \$12.5/hour)	125.00	
Veterinary, drugs, and supplies	25.00	
Breeding costs for AI services	45.00	
Transportation and marketing	15.00	
Utilities, fuel, oil	18.75	
Building and equipment repairs	9.68	
Miscellaneous	15.00	
Operating interest		
(1/2 of operating costs x 5% for 24 months)	24.06	
Total Operating Costs	\$1,179.79	
ESTIMATED OWNERSHIP COSTS/HEIFER SOLD		
Depreciation on buildings and equipment	\$52.09	
Interest on buildings and equipment	26.61	
Insurance and taxes on buildings and equipment	14.08	
Total Ownership Costs	\$92.78	
Estimated Total Costs/Heifer Sold	\$1,272.56	
ncome over Total Costs/Heifer Sold	\$101.06	
Springer heifer breakeven price/head	\$1,293.62	
Total cost/day per heifer sold	\$1.50	
Total cost/pound of gain per heifer sold	\$0.91	

For more details see website http://agebb.missouri.edu/mgt/budget/index.htm Prepared by Joe Horner and Ryan Milhollin, Extension Economists.

Goats, Spring Kidding Doe Herd

Projected Annual Budget for 2018 Per Doe Per Year

Description of Production: Herd of 100 Does and 4 Bucks with 175% kid crop raised. Seventeen doe kids are kept as replacements.

	Per Doe	Your Estimate
ESTIMATED INCOME/DOE		
Wether kid sales	\$112.20	\$
Doe kid sales	\$112.20	\$
Cull doe sales	30.15	Ψ
Other income	0.00	
ESTIMATED TOTAL INCOME/DOE	\$254.55	\$
ESTEVENTED TOTAL INCOME/DOL	<u>Ψ234.33</u>	Ψ
ESTIMATED OPERATING COSTS/DOE		
Pasture (rental rate)	\$20.97	\$
Hay and forage	13.99	
Grain	4.32	
Mineral	7.23	
Labor	36.00	
Veterinary, drugs, and supplies	8.46	
Marketing	17.82	
Utilities and all machinery costs	4.18	_
Livestock facility repairs	1.33	
Breeding charge		
Doe replacement (17% of herd)	33.71	
Buck cost or A.I. charge	8.58	•
Interest on breeding stock	24.42	
Insurance on breeding stock	4.07	
Professional fees (legal, accounting, etc.)	0.25	
Miscellaneous	1.00	-
Interest on 1/2 operating costs @ 6.0%	3.47	
TOTAL OPERATING COSTS	\$189.80	\$
ESTIMATED OWNERSHIP COST/DOE		
Depreciation on livestock facilities	\$7.20	\$
Interest on livestock facilities	5.40	Ψ
Insurance and taxes on capital items	5.37	
TOTAL OWNERSHIP COSTS	\$17.97	\$
TOTAL OWNERSHIE COSTS	φ17.97	Ψ
ESTIMATED TOTAL COSTS/DOE	\$207.77	\$
INCOME OVER OPERATING COSTS/DOE	\$64.75	\$
INCOME OVER TOTAL COSTS/DOE	\$46.78	\$

Prepared by: Jennifer Lutes, Agricultural Business Specialist, MU Extension

10/25/2017

Goats – Doe Replacement Projected Budget for 2018

Description of Production: Buy 55 lb. doe kids, sell unbred yearling does.

ESTIMATED INCOME/DOE	Per Doe	Your Estimate
Doe kid sales:		
Doe, springer (0.80 head)	\$175.87	\$
Cull doe (0.19 head)	41.77	<u> </u>
Less death loss (1% of doe sales)	2.18	
Other income	0.00	
ESTIMATED TOTAL INCOME/DOE	\$215.46	\$
ESTIMATED OPERATING COSTS/DOE		
Purchased doe kid (55 lbs @ \$240/cwt)	\$132.00	\$
Summer pasture (180 days @ 0.54 ac/hd @ \$30/ac)	8.01	
Mixed hay (187 lbs @ \$65.00/ton)	6.09	
Commodity Mix 16% (34 lbs @ \$164/ton)	2.77	
Mineral and salt (10 lbs @ \$880/ton)	4.46	
Labor (1.5 hrs @ \$12/hr)	18.00	
Veterinary, drugs, and supplies	1.44	
Marketing	2.92	
Breeding cost	0.00	
Utilities and all machinery costs	3.94	
Livestock facility repairs	1.33	
Professional fees (legal, accounting, etc.)	0.25	
Miscellaneous	1.00	
Interest on kid purchase and 1/2 operating costs @ 6%	5.83	
TOTAL OPERATING COSTS	\$188.02	\$
ESTIMATED OWNERSHIP COSTS/DOE		
Depreciation on livestock facilities	\$5.90	
Interest on livestock facilities	2.73	
Insurance and taxes on capital items	3.77	
TOTAL OWNERSHIP COSTS	\$12.40	
ESTIMATED TOTAL COSTS/DOE	\$200.42	
INCOME OVER OPERATING COSTS/DOE	\$27.44	
INCOME OVER TOTAL COSTS/DOE	\$15.04	
2.00.22 O LER TOTTE COOLUIDOD	Ψ13.04	
Total cost per head per day	0.30	
Total cost per pound of gain	1.15	
Doe breakeven price, \$/head	\$198.32	

Prepared by: Jennifer Lutes, Agricultural Business Specialist, MU Extension

10/25/2017

Sheep Flock

Projected Budget for Spring Lambing Ewe Flock in 2018 Per Ewe Per Year

	F	Per Ewe	Your Estimate
ESTIMATED INCOME/EWE			
Wether lambs, 105 lbs @ \$155.00/cwt. X 70%	\$	113.93	\$
Ewe lambs, 95 lbs @ \$160.00/cwt. X 70%	•	106.40	'
Culled ewes, 145 lbs @ \$75.00/cwt. x 16%		17.40	
Total returns per ewe	\$	237.73	\$
ESTIMATED OPERATING COSTS/EWE			
Pasture @ \$30 per acre	\$	17.31	\$
Hay @ \$60 per ton		8.66	
Supplement @ \$0.18 per lb		10.65	
Mineral @ \$0.40 per lb		3.65	
Animal health supplies, vet-med, etc.		16.98	
Marketing costs		13.07	
Utilities and machinery expense		18.91	
Fence, water, facility repairs		5.00	
Annual ram cost (net)		7.00	
Ewe replacement (17% of flock)		33.07	
Operating interest, 1/2 operating costs @ 6%		2.64	
Total Operating Costs, except labor	\$	136.94	\$
Estimated Labor costs (3.5 hours @ \$12/hour)		42.00	
Total Operating Costs, including labor	\$	178.94	\$
ESTIMATED OWNERSHIP COSTS/EWE			
Business overhead (legal, accounting, misc.)	\$	2.50	\$
Interest and insurance on breeding stock	\$	22.81	
Interest, insurance, taxes on capital items		9.24	
Depreciation on facilities and equipment		7.20	
Total Ownership Costs	\$	41.75	\$
ESTIMATED TOTAL COSTS/EWE	\$	220.69	\$
INCOME OVER OPERATING COSTS	\$	58.78	\$
INCOME OVER TOTAL COSTS	\$	17.03	\$

Prepared by Brent Carpenter, MU Regional Extension Ag Business Specialist

10/29/2017