

# Livestock Enterprise Budgets for Iowa — 2003



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# Livestock Enterprise Budgets for Iowa

This publication contains estimates of production costs for common livestock enterprises in Iowa. Estimates are intended to reflect average or above-average levels of management using common types of technology. Input prices reflect expected average price levels during the year.

Data were drawn from farm record summaries, feed consumption research and price projections, and are intended to be used for planning purposes only. For individual farms, expected costs and input requirements based on past results should be substituted whenever possible.

Each budget contains estimates of the following types of costs:

**Fixed costs** Costs that will occur regardless of the level of production each year. They generally include such things as depreciation, interest, taxes, and insurance on facilities, breeding livestock, and livestock equipment and facilities. Depreciation is assumed to be 8% of the original value of facilities and equipment annually. Interest averages 1/2 the original value of facilities over its lifetime, or 5% annually. Taxes and insurance add 1% for a total of 14% of the original investment annually for fixed costs.

**Variable costs** Costs that vary according to the level of production. Interest is calculated on feed and other variable costs for one-half the production period.

**Cash costs** Costs that involve a direct cash outlay. The budgets in the bulletin do not include farm-raised grain and hay, labor or interest costs (except interest on feeder livestock) as cash costs. Cash costs on breeding livestock and facilities represent property taxes and insurance only. For pasture, only maintenance costs are included in cash costs.

**Total costs** Cash costs, plus the value of labor, return on investment, depreciation, and rental value of pasture, and market value of farm raised grain and hay.

The budgets in this publication are based on the following price assumptions for inputs:

	<u>Price</u>	<u>Units</u>
Corn	\$2.18	bushel
Corn silage	20.00	ton
Alfalfa hay	100.00	ton
Alfalfa-brome hay	52.00	ton
Haylage	38.00	ton
Unimproved pasture	30.00	acre
Improved pasture	40.00	acre
Soybean meal (44%)	0.09	pound
Lamb supplement/mineral	0.15	pound
Hog supplement/mineral	0.16	pound
Beef supplement/mineral - urea based	0.08	pound
Beef supplement/mineral - all natural	0.16	pound
Dairy supplement	0.12	pound
Dairy salt and mineral	0.16	pound
Dairy commodities	0.08	pound
Dairy fat	0.25	pound
Feeder pig (50 lbs)	41.00	head
Yearling Steer (700-800 lbs)	0.82	pound
Steer Calf (500-600 lbs)	0.93	pound
Heifer calf (400-500 lbs)	0.87	pound
Feeder lamb (70 lbs)	0.70	pound
Operating capital	6.50%	year

## Livestock Enterprise Summary

<u>Page</u>	<u>Enterprise</u>	<u>Unit</u>	<u>Labor Hours</u>	<u>Bu. of Corn Required</u>	<u>Tons of Hay Required*</u>	<u>Tons of Silage Required</u>	<u>Cash Costs**</u>
<b><u>Swine</u></b>							
6	Farrow-finish, pasture	litter	13	97	0	0	\$375.70
6	Farrow-finish, total confinement	litter	11	105	0	0	\$396.87
7	Farrow-finish, partial confinement	litter	13	105	0	0	\$389.84
7	Feeder pig prod., partial confinement	litter	9	25	0	0	\$141.65
8	Finishing feeder pigs	head	0.5	9.6	0	0	\$73.53
9	SEW pig prod., total confinement	litter	4	13.5	0	0	\$142.92
10	Finishing SEW pigs, tot. confinement	head	0.7	9.7	0	0	\$70.38
<b><u>Beef</u></b>							
12	Yearling steers, hay	head	2	63	0.35	0	\$674.52
12	Yearling steers, silage	head	2	52	0	1.50	\$674.52
13	Steer calves, hay	head	3	61	0.65	0	\$590.83
13	Steer calves, silage	head	3	48	0	2.45	\$590.83
14	Yearling heifers, hay	head	2	54	0.27	0	\$662.57
14	Yearling heifers, silage	head	2	43	0	1.26	\$662.57
15	Backgrounding steer calves, winter	head	1.25	27	0.50	0	\$465.38
15	Backgrounding steer calves, summer	head	0.25	0	0	0	\$542.35
16	Cow-calf, calves sold	cow unit	8	4	2.10	0	\$181.08
16	Cow-calf, calves fed	cow unit	10	64	2.50	0	\$218.37
<b><u>Sheep</u></b>							
18	Ewe flock, early lambs	ewe unit	6	10	0.4	0	\$47.87
18	Ewe flock, late lambs	ewe unit	4	8	0.3	0	\$45.23
20	Feeder lamb	head	1	5.2	0.02	0	\$66.17
<b><u>Dairy</u></b>							
22	12,000 lbs milk/cow	cow unit	65	71	6.1	8.0	\$684.48
22	16,000 lbs milk/cow	cow unit	65	95	6.0	7.9	\$796.62
23	20,000 lbs milk/cow	cow unit	70	104	6.1	8.0	\$954.48
23	24,000 lbs milk/cow	cow unit	70	113	6.0	8.0	\$1,164.85

\* Does not include pasture.

\*\* Does not include costs of corn, hay, or silage.

# Swine Production Investment

## 1. Breeding herd investment per litter

		<b>Confinement</b>		<b>Pasture</b>	
Sow in herd			\$150		\$150
Replacement gilts	(\$150 each)	0.33 head	50	0.50 head	75
Boars	(\$800 each)	0.04 head	32	0.04 head	32
Total investment per sow			\$232		\$257
Total investment per litter		(2.2 & 1.9 litters per year, per sow)	\$105		\$135

## 2. Building Cost Estimates (replacement cost)

<u>Use</u>	<u>Type of Building</u>	<u>Unit Size</u>	<u>Cost per unit capacity</u>
Farrowing	Pasture A-frame huts	16 huts	\$300 per hut
	Remodel dairy barn	16 sows	\$1,000 per crate
	Partially slotted floor-crates	20 sows	\$2,000 per crate
Gestation	Portable on pasture	16 sows	\$150 per sow
	Open shelter & paved lot	16 sows	\$350 per sow
	Enclosed - total slot	32 sows	\$450 per sow
Nursery	Remodeled barn	200 pigs	\$25 per pig
	Barn with raised decks	200 pigs	\$50 per pig
	Raised deck with pit	200 pigs	\$115 per pig
Finishing	Drylot or pasture	100 market hogs	\$30 per hog
	Open shelter-drylot	200 market hogs	\$65 per hog
	Double curtain	200 market hogs	\$160 per hog

## 3. Facilities, equipment and machinery investment for farrow to finish (\$ per litter per year)

	<u>Pasture</u>		<u>Partial Confinement</u>		<u>Total Confinement</u>	
Farrowing	\$300 / 2 lit/yr/hut = \$150		\$2,000 / 12 lit/yr/crate = \$167		\$2,000 / 12 lit/yr/crate = \$167	
Gestation	\$150 / 1.9 lit/sow = 79		\$350 / 2.2 lit/sow = 159		\$450 / 2.2 lit/sow = 205	
Nursery	\$25 / 2 lit/yr x 7.2 = 90		\$50 / 7.5 lit/yr x 8.2 = 55		\$115 / 7.5 lit/yr x 8.2 = 126	
Finishing	\$30 / 2 lit/yr x 6.3 = 95		\$160 / 2.8 lit/yr x 7.4 = 423		\$160 / 2.8 lit/yr x 7.4 = 423	
Feed Storage		50		75	75	
Feed Handling		25		40	40	
Manure Handling		15		50	75	
Tractor	( <u>\$10,000 x 25%</u> ) 50 lit/yr =	50	( <u>\$10,000 x 25%</u> ) 150 lit./yr. =	17	( <u>\$10,000 x 50%</u> ) 250 lit/yr =	20
Total Investment		\$553		\$985	\$1,130	
Interest, depreciation, taxes, insurance @ 14%		\$77		\$138	\$158	

## Swine Production Investment, cont.

### 4. Facilities, equipment and machinery investment for feeder pigs

Feeder Pig Production			
Farrowing	\$2,000 divided by 12 litters per year	=	\$167
Gestation	\$350 divided by 2.2 litters per sow	=	159
Feed Storage			30
Feed Handling			30
Manure Handling			40
Tractor			17
Total Investment			\$443
Interest, taxes, insurance, depreciation @ 14% times investment		=	\$61.99
Feeder Pig Finishing			
Finishing	\$160 divided by 2.8 head per year per space	=	\$57
Feed Storage, Handling			20
Manure Handling			10
Tractor			6
Total Investment			\$93
Interest, taxes, insurance, depreciation @ 14% times investment		=	\$13.04

### 5. Estimated feed requirements for farrow-to-finish enterprise, including breeding herd

Pigs Per Sow <u>Per Year</u>	Bushels of Corn <u>Per Litter</u>	Pounds of Supplement <u>Per Litter</u>
11	92	1,400
13	106	1,500
15	112	1,600
17	115	1,700

### 6. Break-even selling price for farrow-to-finish if corn price is:

Corn <u>(\$ per bushel)</u>	Supplement <u>(\$ per pound)</u>	Total Costs <u>\$/cwt.</u>	Variable Costs <u>\$/cwt.</u>
1.75	0.12	36.94	28.81
2.00	0.14	39.82	31.70
2.25	0.16	42.71	34.58
2.50	0.18	45.59	37.47
2.75	0.20	48.48	40.35
3.00	0.22	51.36	43.24
3.25	0.24	54.24	46.12

## Swine Production -- One Litter

	Farrow-to-Finish Pasture		Farrow-to-Finish Total Confinement	
<b>INCOME</b> <i>a/</i>				
Market Hogs (250 lb x \$ _____/lb)	6.80 head	\$ _____	7.80 head	\$ _____
Cull Sows (400 lb x \$ _____/lb)	0.57 head	\$ _____	0.38 head	\$ _____
<b>GROSS INCOME</b>		\$ _____		\$ _____
<b>VARIABLE COSTS</b>	Total	Cash	Total	Cash
Feed Costs				
Corn @ \$2.18 per bushel	97 bu	\$211.46	\$0.00	105 bu
Supplement & minerals @ \$0.16 per lb	1,360 lbs	217.60	217.60	1,500 lbs
Pasture @ \$30.00 per acre	0.20 ac	6.00	3.00	None
Feed Additives		22.00	22.00	
<b>Total Feed Costs</b>		\$457.06	\$242.60	\$493.90
Veterinary and health		\$34.00	\$34.00	\$25.00
Fuel, repairs, utilities		35.00	35.00	50.00
Bedding, marketing, miscellaneous		45.00	45.00	30.00
Interest on variable costs @ 6.5% for 5 months		15.47	0.00	16.22
Labor @ \$9.00 per hour	13 hours	117.00	0.00	11 hours
<b>TOTAL VARIABLE COSTS</b>		\$703.53	\$356.60	\$714.12
<b>INCOME OVER VARIABLE COSTS</b>		\$ _____	\$ _____	\$ _____
<b>FIXED COSTS</b>				
Machinery, facilities		\$77.48	\$7.75	\$158.17
Boar depreciation/replacement		10.00	10.00	10.00
Interest, insurance on breeding herd @ 10% annually		13.53	1.35	10%
<b>TOTAL FIXED COSTS</b>		\$101.01	\$19.10	\$178.72
<b>TOTAL ALL COSTS</b>		\$804.54	\$375.70	\$892.84
<b>INCOME OVER ALL COSTS</b>		\$ _____	\$ _____	\$ _____
Break-even selling price for variable costs <i>b/</i>		\$37.62 per cwt		\$34.43 per cwt
Break-even selling price for all costs <i>b/</i>		\$43.56 per cwt		\$43.60 per cwt

*a/ For pasture, a weaning average of 7.80 pigs is assumed, minus 0.40 death loss and 0.60 for replacement. For confinement, a weaning average of 8.80 pigs is assumed, minus 0.60 death loss and 0.40 for replacement. Sow death loss is 5%.*

*b/ Cull sow income of \$64.00 per litter is assumed for pasture (sows sold after 2 litters) and \$42.67 per litter for total confinement (sows sold after 3 litters).*

## Swine Production -- One Litter

	<b>Farrow-to-Finish, Partial Confinement</b>		<b>Feeder Pig Production Partial Confinement</b>			
<b>INCOME</b> <i>a/</i>						
Market Hogs	(250 lb x \$_____/lb x 7.80 hd)	\$_____	(50 lb x \$_____/lb x 8.20 hd)	\$_____		
Cull Sows	(400 lb x \$_____/lb x 0.38 hd)	\$_____	(400 lb x \$_____/lb x 0.38 hd)	\$_____		
<b>GROSS INCOME</b>		\$_____		\$_____		
<b>VARIABLE COSTS</b>		Total      Cash		Total      Cash		
Feed Costs						
Corn @ \$2.18 per bushel	105 bu	\$228.90	\$0.00	25 bu	\$54.50	\$0.00
Supplement & minerals @ \$0.16 per lb	1,500 lbs	240.00	240.00	415 lbs	66.40	66.40
Feed Additives		25.00	25.00		7.00	7.00
<b>Total Feed Costs</b>		\$493.90	\$265.00		\$127.90	\$73.40
Veterinary and health		\$25.00	\$25.00		\$16.00	\$16.00
Fuel, repairs, utilities		45.00	45.00		15.00	15.00
Marketing, miscellaneous		30.00	30.00		20.00	20.00
Interest on variable costs @ 6.5%	5 months	16.08	0.00	3 months	2.91	0.00
Labor @ \$9.00 per hour	13 hours	117.00	0.00	9 hours	81.00	0.00
<b>TOTAL VARIABLE COSTS</b>		\$726.98	\$365.00		\$262.81	\$124.40
<b>INCOME OVER VARIABLE COSTS</b>		\$_____	\$_____		\$_____	\$_____
<b>FIXED COSTS</b>						
Machinery, facilities		\$137.89	\$13.79		\$61.99	\$6.20
Boar depreciation/replacement		10.00	10.00		10.00	10.00
Interest, insurance on breeding herd @ 10% ann.		10.55	1.05	10% annually	10.55	1.05
<b>TOTAL FIXED COSTS</b>		\$158.44	\$24.84		\$82.53	\$17.25
<b>TOTAL ALL COSTS</b>		\$885.42	\$389.84		\$345.34	\$141.65
<b>INCOME OVER ALL COSTS</b>		\$_____	\$_____		\$_____	\$_____
Break-even selling price for variable costs <i>b/</i>		\$35.09	per cwt		\$26.85	per head
Break-even selling price for all costs <i>b/</i>		\$43.22	per cwt		\$36.91	per head

*a/ Weaning average of 8.80 pigs per litter assumed minus 0.60 head death loss (0.20 for feeder pig production) and 0.40 head for replacement gilts. Sow death loss is 5%.*

*b/ Cull sow income of \$42.67 per litter is assumed (sows sold after 3 litters).*

## Finishing Feeder Pigs -- One Pig

	Total	Cash
<b>INCOME</b> <i>a/</i>		
Market hog (250 lb x \$_____ per lb x 0.96 head)	\$ _____	\$ _____
 <b>VARIABLE COSTS</b>		
Feeder pig (50 lb)	\$41.00	\$41.00
Interest @ 6.5% for 124 days	\$0.91	\$0.91
 <b>Feed Costs</b>		
Corn @ \$2.18 per bushel	9.6 bu \$20.93	\$0.00
Supplement & minerals @ \$0.16 per lb	132 lbs 21.12	21.12
Feed Additives	<u>3.00</u>	<u>3.00</u>
 <b>Total Feed Costs</b>	\$45.05	\$24.12
 Veterinary and medical	\$1.00	\$1.00
Fuel, repairs, utilities	1.20	1.20
Marketing, miscellaneous	4.00	4.00
Interest on feed and other costs @ 6.5%	2 months <u>0.56</u>	<u>0.00</u>
Labor @ \$9.00 per hour	0.50 hours <u>4.50</u>	<u>0.00</u>
 <b>TOTAL VARIABLE COSTS</b>	\$98.21	\$72.23
 <b>INCOME OVER VARIABLE COSTS</b>	\$ _____	\$ _____
 <b>FIXED COSTS</b>		
Machinery, facilities	<u>\$13.04</u>	<u>\$1.30</u>
 <b>TOTAL OF ALL COSTS</b>	\$111.25	\$73.53
 <b>INCOME OVER ALL COSTS</b>	\$ _____	\$ _____
 Break-even selling price for variable costs	\$40.92 per cwt.	
 Break-even selling price for all costs	\$46.35 per cwt.	

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*a/ Assumed death loss is 4 percent.*

## Swine Production -- One Litter Producing SEW Pigs, Total Confinement

### INCOME *a/*

SEW Pigs	(9 pigs x \$ _____/head)	\$ _____
Cull Sows	(400 lb x \$ _____/lb x 0.35 hd)	\$ _____

### VARIABLE COSTS

#### Feed Costs

	Total	Cash
Corn @ \$2.18 per bushel	13.5 bu	\$29.43
Supplement & minerals @ \$0.16 per lb	188 lbs	30.08
Feed processing & delivery @ \$20.00 per ton	9.44	9.44

#### Total Feed Costs

	\$68.95	\$39.52
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Veterinary and medical	\$10.00	\$10.00
Fuel, repairs, utilities	7.50	7.50
Marketing, miscellaneous	10.00	10.00
Manure application cost	3.00	3.00
Interest on feed and other costs @ 6.5%	3 months	1.62
Labor @ \$10.00 per hour, including benefits	4 hours	40.00

#### TOTAL VARIABLE COSTS

	\$141.07	\$70.02
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#### INCOME OVER VARIABLE COSTS

	\$ _____	\$ _____
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#### FIXED COSTS

Facilities & equipment	\$46.14	\$4.61
Boar depreciation/replacement	10.00	10.00
Replacement gilts 0.38 hd @ \$150 each	57.00	57.00
Interest, insurance on breeding herd @ 10% annually	12.82	1.28

#### TOTAL FIXED COSTS

	\$125.95	\$72.90
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#### TOTAL OF ALL COSTS

	\$267.02	\$142.92
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#### INCOME OVER ALL COSTS

	\$ _____	\$ _____
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Break-even selling price for variable costs *b/* \$11.61 per head

Break-even selling price for all costs *b/* \$25.61 per head

*a/* A weaning average of 9.0 pigs per litter and all replacement gilts are purchased is assumed.

*b/* Cull sow income of \$36.57 per litter is assumed (sows sold after 3.5 litters).



**Table 3. Feed requirements and conversion rates to carry hogs from various purchased wts. to various market wts.\***

Purchase		Feed							
wt. (lbs)	requirements	Unit	190 lbs	200 lbs	210 lbs	220 lbs	230 lbs	240 lbs	250 lbs
30	Corn	bu	7.9	8.5	9.2	9.9	10.6	11.4	12.1
		lbs	441	478	515	554	595	636	680
	Supplement	lbs	96	102	109	116	123	131	138
	Total	lbs	537	580	624	670	718	767	818
	Conversion	lbs/cwt	336	341	347	353	359	365	372
40	Corn	bu	7.6	8.2	8.9	9.6	10.3	11.1	11.9
		lbs	426	462	500	539	579	621	664
	Supplement	lbs	89	96	102	109	117	124	132
	Total	lbs	515	558	602	648	696	745	796
	Conversion	lbs/cwt	343	349	354	360	366	372	379
50	Corn	bu	7.2	7.9	8.6	9.3	10	10.8	11.5
		lbs	406	443	480	520	560	602	645
	Supplement	lbs	85	91	98	104	112	119	127
	Total	lbs	491	534	578	624	672	721	772
	Conversion	lbs/cwt	351	356	361	367	373	379	386
60	Corn	bu	6.9	7.5	8.2	8.9	9.6	10.4	11.1
		lbs	386	422	460	499	539	581	624
	Supplement	lbs	79	86	92	99	107	114	122
	Total	lbs	465	508	552	598	646	695	746
	Conversion	lbs/cwt	358	363	368	374	380	386	393
70	Corn	bu	6.5	7.1	7.8	8.5	9.2	10	10.8
		lbs	363	400	437	476	517	558	602
	Supplement	lbs	74	80	87	94	101	109	116
	Total	lbs	437	480	524	570	618	667	718
	Conversion	lbs/cwt	364	369	374	380	386	392	399
80	Corn	bu	6.1	6.7	7.4	8.1	8.8	9.5	10.3
		lbs	339	376	413	452	493	534	578
	Supplement	lbs	68	74	81	88	95	103	110
	Total	lbs	407	450	494	540	588	637	688
	Conversion	lbs/cwt	370	375	380	386	392	398	405
90	Corn	bu	5.6	6.2	6.9	7.6	8.3	9.1	9.9
		lbs	314	350	388	427	467	509	552
	Supplement	lbs	61	68	74	81	89	96	104
	Total	lbs	375	418	462	508	556	605	656
	Conversion	lbs/cwt	375	380	385	391	397	403	410
100	Corn	bu	5.1	5.8	6.5	7.2	7.9	8.6	9.4
		lbs	287	324	362	401	441	482	526
	Supplement	lbs	55	61	68	75	82	90	97
	Total	lbs	342	385	430	476	523	572	623
	Conversion	lbs/cwt	380	385	391	397	402	409	415

\*Feed efficiency varies considerably depending on environmental temperatures, disease level, ration fed, quality of management, and death loss. The feed requirements here are for hogs with good performance under excellent management. These figures assume zero mortality; correction for mortality is made when you complete the worksheet in Table 1.

Source: *Pork Production Systems With Business Analysis. Pork Industry Handbook-17.*  
Cooperative Extension Service AS-443.

## Finishing Yearling Steers -- One Head

	Corn and Hay Ration		Corn and Silage Ration			
	Total	Cash	Total	Cash		
<b>INCOME</b>						
Sales income (1,250 lbs @ \$_____)	\$ _____	\$ _____	\$ _____	\$ _____		
Minus death loss (-0.75% of sales)	-\$ _____	-\$ _____	-\$ _____	-\$ _____		
<b>GROSS INCOME</b>	\$ _____	\$ _____	\$ _____	\$ _____		
<b>VARIABLE COSTS</b>						
Feeder Cost @ \$0.82 per lb	750 lbs	\$615.00	\$615.00	750 lbs	\$615.00	\$615.00
Interest @ 6.5%	160 days	17.52	17.52	160 days	17.52	17.52
<b>Feed Costs</b>						
Corn @ \$2.18 per bushel	63 bu	\$137.34	\$0.00	52 bu	\$113.36	\$0.00
Supplement & minerals @ \$0.08 per lb	120 lbs	9.60	9.60	120 lbs	9.60	9.60
Alfalfa - brome hay @ \$52.00 per ton	0.35 tons	18.20	0.00		0.00	0.00
Corn Silage @ \$20.00 per ton		0.00	0.00	1.50 tons	30.00	0.00
<b>Total Feed Costs</b>		\$165.14	\$9.60		\$152.96	\$9.60
Veterinary and health		\$8.00	\$8.00		\$8.00	\$8.00
Machinery and equipment		7.00	7.00		7.00	7.00
Marketing and miscellaneous		16.00	16.00		16.00	16.00
Interest on feed & other costs @ 6.5%	80 days	2.79	0.00	80 days	2.62	0.00
Labor @ \$9.00 per hour	2 hours	18.00	0.00	2 hours	18.00	0.00
<b>TOTAL VARIABLE COSTS</b>		\$849.46	\$673.12		\$837.10	\$673.12
<b>INCOME OVER VARIABLE COSTS</b>		\$ _____	\$ _____		\$ _____	\$ _____
<b>FIXED COSTS</b>						
Machinery, equipment, housing		\$14.00	\$1.40		\$14.00	\$1.40
<b>TOTAL ALL COSTS</b>		\$863.46	\$674.52		\$851.10	\$674.52
<b>INCOME OVER ALL COSTS</b>		\$ _____	\$ _____		\$ _____	\$ _____
Break-even selling price for variable costs		\$0.68	per lb.		\$0.67	per lb.
Break-even selling price for all costs		\$0.70	per lb.		\$0.69	per lb.

## Finishing Steer Calves -- One Head

	Corn and Hay Ration			Corn and Silage Ration		
		Total	Cash		Total	Cash
<b>INCOME</b>						
Sales income (1,150 lbs @ \$_____)		\$ _____	\$ _____		\$ _____	\$ _____
Minus death loss (-1.00% of sales)		-\$ _____	-\$ _____		-\$ _____	-\$ _____
<b>GROSS INCOME</b>		\$ _____	\$ _____		\$ _____	\$ _____
<b>VARIABLE COSTS</b>						
Feeder Cost @ \$0.93 per lb	550 lbs	\$511.50	\$511.50	550 lbs	\$511.50	\$511.50
Interest @ 6.5%	230 days	20.95	20.95	230 days	20.95	20.95
<b>Feed Costs</b>						
Corn @ \$2.18 per bushel	61 bu	\$132.98	\$0.00	48 bu	\$104.64	\$0.00
Supplement & minerals @ \$0.16 per lb	75 lbs	12.00	12.00	75 lbs	12.00	12.00
Supplement & minerals @ \$0.08 per lb	116 lbs	9.28	9.28	116 lbs	9.28	9.28
Alfalfa - brome hay @ \$52.00 per ton	0.65 tons	33.80	0.00		0.00	0.00
Corn Silage @ \$20.00 per ton		0.00	0.00	2.45 tons	49.00	0.00
<b>Total Feed Costs</b>		<u>\$188.06</u>	<u>\$21.28</u>		<u>\$174.92</u>	<u>\$21.28</u>
Veterinary and health		\$10.00	\$10.00		\$10.00	\$10.00
Machinery and equipment		11.00	11.00		11.00	11.00
Marketing and miscellaneous		14.00	14.00		14.00	14.00
Interest on feed & other costs @ 6.5%	115 days	4.57	0.00	115 days	4.30	0.00
Labor @ \$9.00 per hour	3 hours	27.00	0.00	3 hours	27.00	0.00
<b>TOTAL VARIABLE COSTS</b>		<u>\$787.08</u>	<u>\$588.73</u>		<u>\$773.67</u>	<u>\$588.73</u>
<b>INCOME OVER VARIABLE COSTS</b>		\$ _____	\$ _____		\$ _____	\$ _____
<b>FIXED COSTS</b>						
Machinery, equipment, housing		<u>\$21.00</u>	<u>\$2.10</u>		<u>\$21.00</u>	<u>\$2.10</u>
<b>TOTAL ALL COSTS</b>		\$808.08	\$590.83		\$794.67	\$590.83
<b>INCOME OVER ALL COSTS</b>		\$ _____	\$ _____		\$ _____	\$ _____
Break-even selling price for variable costs		\$0.69 per lb.		\$0.68 per lb.		
Break-even selling price for all costs		\$0.71 per lb.		\$0.70 per lb.		

## Finishing Yearling Heifers -- One Head

	Corn and Hay Ration		Corn and Silage Ration			
	Total	Cash	Total	Cash		
<b>INCOME</b>						
Sales income (1,100 lb @ \$_____)	\$_____	\$_____	\$_____	\$_____		
Minus death loss (-0.75% of sales)	-\$_____	-\$_____	-\$_____	-\$_____		
<b>GROSS INCOME</b>	\$_____	\$_____	\$_____	\$_____		
<b>VARIABLE COSTS</b>						
Feeder Cost @ \$0.87 per lb	700 lbs	\$609.00	\$609.00	700 lbs	\$609.00	\$609.00
Interest @ 6.5%	155 days	16.81	16.81	155 days	16.81	16.81
<b>Feed Costs</b>						
Corn @ \$2.18 per bushel	54 bu	\$117.72	\$0.00	43 bu	\$93.74	\$0.00
Supplement & minerals @ \$0.08 per lb	117 lbs	9.36	9.36	117 lbs	9.36	9.36
Alfalfa - brome hay @ \$52.00 per ton	0.27 tons	14.04	0.00		0.00	0.00
Corn Silage @ \$20.00 per ton		0.00	0.00	1.26 tons	25.20	0.00
<b>Total Feed Costs</b>		\$141.12	\$9.36		\$128.30	\$9.36
Veterinary and health		\$6.00	\$6.00		\$6.00	\$6.00
Machinery and equipment		8.00	8.00		8.00	8.00
Marketing and miscellaneous		12.00	12.00		12.00	12.00
Interest on feed & other costs @ 6.5%	78 days	2.32	0.00	78 days	2.14	0.00
Labor @ \$9.00 per hour	2 hours	18.00	0.00	2 hours	18.00	0.00
<b>TOTAL VARIABLE COSTS</b>		\$813.25	\$661.17		\$800.25	\$661.17
<b>INCOME OVER VARIABLE COSTS</b>		\$_____	\$_____		\$_____	\$_____
<b>FIXED COSTS</b>						
Machinery, equipment, housing		\$14.00	\$1.40		\$14.00	\$1.40
<b>TOTAL ALL COSTS</b>		\$827.25	\$662.57		\$814.25	\$662.57
<b>INCOME OVER ALL COSTS</b>		\$_____	\$_____		\$_____	\$_____
Break-even selling price for variable costs		\$0.74	per lb.		\$0.73	per lb.
Break-even selling price for all costs		\$0.76	per lb.		\$0.75	per lb.

## Backgrounding Steer Calves -- One Head

	<b>Winter Corn and Hay Ration</b>		<b>Summer Improved Pasture</b>			
	Total	Cash	Total	Cash		
<b>INCOME</b>						
Sales income (750 lb @ \$_____)	\$_____	\$_____	\$_____	\$_____		
Minus death loss (-1.00% of sales)	-\$_____	-\$_____	-\$_____	-\$_____		
<b>GROSS INCOME</b>	\$_____	\$_____	\$_____	\$_____		
<b>VARIABLE COSTS</b>						
Feeder Cost @ \$0.93 per lb	450 lbs	\$418.50	\$418.50	525 lbs	\$488.25	\$488.25
Interest @ 6.5%	150 days	11.18	11.18	150 days	13.04	13.04
<b>Feed Costs</b>						
Corn @ \$2.18 per bushel	27 bu	\$58.86	\$0.00		\$0.00	\$0.00
Supplement & minerals @ \$0.16 per lb	80 lbs	12.80	12.80	35 lbs	5.60	5.60
Alfalfa - brome hay @ \$52.00 per ton	0.5 tons	26.00	0.00		0.00	0.00
Improved pasture @ \$40.00 per acre		0.00	0.00	0.7 acres	28.00	0.00
Pasture fert, misc costs @ \$20.00 per ac.		0.00	0.00	0.7 acres	14.00	14.00
<b>Total Feed Costs</b>		\$97.66	\$12.80		\$47.60	\$19.60
Veterinary and health		\$5.00	\$5.00		\$5.00	\$5.00
Machinery and equipment		4.50	4.50		4.25	4.25
Marketing and miscellaneous		12.00	12.00		12.00	12.00
Interest on feed & other costs @ 6.5%	75 days	1.59	0.00	75 days	0.92	0.00
Labor @ \$9.00 per hour	1.25 hours	11.25	0.00	0.25 hours	2.25	0.00
<b>TOTAL VARIABLE COSTS</b>		\$561.68	\$463.98		\$573.31	\$542.14
<b>INCOME OVER VARIABLE COSTS</b>		\$_____	\$_____		\$_____	\$_____
<b>FIXED COSTS</b>						
Machinery, equipment, housing		\$14.00	\$1.40		\$2.10	\$0.21
<b>TOTAL ALL COSTS</b>		\$575.68	\$465.38		\$575.41	\$542.35
<b>INCOME OVER ALL COSTS</b>		\$_____	\$_____		\$_____	\$_____
Break-even selling price for variable costs		\$0.76	per lb.		\$0.77	per lb.
Break-even selling price for all costs		\$0.78	per lb.		\$0.77	per lb.

## Beef Cow-Calf -- One Cow Unit <sup>a/</sup>

	Hay and Pasture Calves Sold		Hay and Pasture Calves Fed			
	Total	Cash	Total	Cash		
<b>INCOME</b>						
Heifer calf (0.26 head x 500 lb x \$_____/lb)	\$_____	\$_____	1,000 lbs x \$_____/lb	\$_____		
Steer calf (0.46 head x 550 lb x \$_____/lb)	\$_____	\$_____	1,100 lbs x \$_____/lb	\$_____		
Cull cow (0.18 head x 1,150 lb x \$_____/lb)	\$_____	\$_____	1,150 lbs x \$_____/lb	\$_____		
<b>GROSS INCOME</b>	\$_____	\$_____	\$_____	\$_____		
<b>VARIABLE COSTS</b>						
<b>Feed Costs</b>						
Pasture @ \$30.00 per acre	2.5 acres	\$75.00	\$37.50	2.5 acres	\$75.00	\$37.50
Pasture fert, misc costs @ \$20 per ac.	2.5 acres	50.00	50.00	2.5 acres	50.00	50.00
Corn @ \$2.18 per bushel	4 bu	8.72	0.00	64 bu	139.52	0.00
Supplement & minerals @ \$0.16 per lb	50 lbs	8.00	8.00	110 lbs	17.60	17.60
Supplement & minerals @ \$0.08 per lb		0.00	0.00	115 lbs	9.20	9.20
Alfalfa - brome hay @ \$52.00 per ton	2.1 tons	109.20	0.00	2.5 tons	130.00	0.00
Corn stalks @ \$3.00 per acre	4 acres	12.00	0.00	4 acres	12.00	0.00
<b>Total Feed Costs</b>		\$262.92	\$95.50		\$433.32	\$114.30
Veterinary and health		\$25.00	\$25.00		\$30.00	\$30.00
Machinery, equipment, fuel and repairs		15.00	15.00		23.00	23.00
Marketing and miscellaneous		20.00	20.00		25.00	25.00
Interest on feed & other costs @ 6.5%	6 months	10.49	0.00	9 months	24.93	0.00
Labor @ \$9.00 per hour	8 hours	72.00	0.00	10 hours	90.00	0.00
<b>TOTAL VARIABLE COSTS</b>		\$405.41	\$155.50		\$626.25	\$192.30
<b>INCOME OVER VARIABLE COSTS</b>		\$_____	\$_____		\$_____	\$_____
<b>FIXED COSTS</b>						
Machinery, equipment, fences		\$40.60	\$4.06		\$45.50	\$4.55
Interest, insurance on herd @ 10% annually		95.20	9.52		95.20	9.52
Bull depreciation/replacement		12.00	12.00		12.00	12.00
<b>TOTAL FIXED COSTS</b>		\$147.80	\$25.58		\$152.70	\$26.07
<b>TOTAL OF ALL COSTS</b>		\$553.21	\$181.08		\$778.95	\$218.37
<b>INCOME OVER ALL COSTS</b>		\$_____	\$_____		\$_____	\$_____
Break-even selling price for variable costs <sup>b/</sup>		\$0.82	per lb.		\$0.70	per lb.
Break-even selling price for all costs <sup>b/</sup>		\$1.20	per lb.		\$0.90	per lb.

<sup>a/</sup> A cow-calf unit is 1 cow, 0.2 bred heifer, 0.9 calf, and 0.04 bull. Calf crop weaned of 92% of cows in herd, 20% replacement and 2% death rate on replacement heifers and cows are assumed.

<sup>b/</sup> Assumes yearly cull cow sales of \$93.15.

## Beef Cow-Calf Investment

### 1. Breeding herd investment per cow unit

Beef cow	\$750.00
Replacement heifer (\$650 x 0.20 head per cow unit)	\$130.00
Bull (\$1,800 divided by 25 cows)	<u>\$72.00</u>
Per cow unit	\$952.00

### 2. Bull replacement cost per cow unit

Bull cost,	minus cull value,	divided by cows,	divided by number of years	
\$1,800	\$900	25 cows	3 years	\$12.00

### 3. Facilities and machinery investment (50 - cow herd) (replacement cost)

Utility tractor (\$10,000 x 25% cow use)	\$2,500
Hay moving equipment	\$2,000
Handling facilities	\$3,000
Fences (\$40.00 per acre x 125 acres)	\$5,000
Feeders and waterers	<u>\$2,000</u>
<b>Total</b>	\$14,500
Total investment per cow (50 cow herd)	\$290
Depreciation, interest, taxes, insurance @ 14% annually	\$41

## Ewe Flock -- One Ewe <sup>a/</sup>

	Early Lambing (Jan-Feb)		Late Lambing (Apr-May)			
	Total	Cash	Total	Cash		
<b>INCOME</b>						
lambs: 1.24 head x 125 lb x \$ _____ /lb	\$ _____	\$ _____	1.33 hd x 125 lbs \$ _____	\$ _____		
cull ewes: 0.15 head x 150 lb x \$ _____ /lb	\$ _____	\$ _____	0.15 hd x 150 lbs \$ _____	\$ _____		
wool: 9 lb x \$ _____ /lb	\$ _____	\$ _____	11 lbs \$ _____	\$ _____		
<b>GROSS INCOME</b>	<b>\$ _____</b>	<b>\$ _____</b>	<b>\$ _____</b>	<b>\$ _____</b>		
<b>VARIABLE COSTS</b>						
<b>Feed Costs</b>						
Corn @ \$2.18 per bushel	10 bu	\$21.80	\$0.00	8 bu	\$17.44	\$0.00
Supplement & minerals @ \$0.15 per lb	100 lbs	15.00	15.00	60 lbs	9.00	9.00
Alfalfa - brome hay @ \$52.00 per ton	0.4 tons	20.80	0.00	0.3 tons	15.60	0.00
Pasture @ \$30.00 per acre	0.2 acres	6.00	3.00	0.3 acres	9.00	4.50
Pasture fert, misc @ \$20.00 per acre	0.2 acres	4.00	4.00	0.3 acres	6.00	6.00
<b>Total Feed Costs</b>		<b>\$67.60</b>	<b>\$22.00</b>	<b>\$57.04</b>	<b>\$19.50</b>	
Veterinary, medical, shearing		\$8.00	\$8.00	\$9.00	\$9.00	
Machinery and equipment operating		5.00	5.00	4.00	4.00	
Marketing and miscellaneous		5.00	5.00	5.00	5.00	
Interest on feed & other costs @ 6.5%	6 months	2.78	0.00	6 months	2.44	0.00
Labor @ \$9.00 per hour	6 hours	54.00	0.00	4 hours	36.00	0.00
<b>TOTAL VARIABLE COSTS</b>		<b>\$142.38</b>	<b>\$40.00</b>	<b>\$113.48</b>	<b>\$37.50</b>	
<b>INCOME OVER VARIABLE COSTS</b>		<b>\$ _____</b>	<b>\$ _____</b>	<b>\$ _____</b>	<b>\$ _____</b>	
<b>FIXED COSTS</b>						
Machinery, equipment, housing, fencing		\$11.85	\$1.19	\$10.55	\$1.05	
Int., ins. on breeding flock @ 10% annually		10.80	1.08	10% annually 10.80	1.08	
Ram replacement		5.60	5.60	5.60	5.60	
<b>TOTAL FIXED COSTS</b>		<b>\$28.25</b>	<b>\$7.87</b>	<b>\$26.95</b>	<b>\$7.73</b>	
<b>TOTAL OF ALL COSTS</b>		<b>\$170.64</b>	<b>\$47.87</b>	<b>\$140.43</b>	<b>\$45.23</b>	
<b>INCOME OVER ALL COSTS</b>		<b>\$ _____</b>	<b>\$ _____</b>	<b>\$ _____</b>	<b>\$ _____</b>	
Break-even selling price for variable costs <sup>b/</sup>		\$0.84	per lb.	\$0.60	per lb.	
Break-even selling price for all costs <sup>b/</sup>		\$1.02	per lb.	\$0.76	per lb.	

<sup>a/</sup> 160% (early) or 170% (late) lamb crop, 20% replacement rate. One unit includes one ewe, 0.2 replacement ewe, 1.6 lambs, and 0.04 ram.

Death loss of 10% for lambs weaned and 5% for ewes and ewe lambs assumed.

<sup>b/</sup> Assumes cull ewe income of \$8.00 and wool income of \$4.50 (early) or \$5.50 (late) per unit.

## Ewe Flock Investment

### 1. Breeding flock investment per ewe unit

Ewe	\$80.00	
Replacement ewe lamb (\$70.00 x 0.20 per ewe)	\$14.00	
Ram (\$350.00 divided by 25 ewes)	\$14.00	
Total	\$108.00	per unit

### 2. Ram replacement cost per ewe unit

Ram cost,	minus cull value,	divided by number of ewes,	divided by years	
\$350.00	\$70.00	25 ewes	2 years	\$5.60 per unit

### 3. Facilities and machinery investment (150 ewes) (replacement cost)

	<u>Early Lambing</u>	<u>Late Lambing</u>
Utility tractor (\$10,000 x 25% use for sheep)	\$2,500	\$2,500
Fences (\$40.00 per acres times 30 acres or 45 acres)	\$1,200	\$1,800
Feed Storage	\$2,000	\$2,000
Barns, pens, feeders, etc.	\$7,000	\$5,000
Total	\$12,700	\$11,300
Total investment per ewe (150 ewe flock)	\$84.67	\$75.33
Depreciation, interest, taxes, insurance @ 14% annually	\$11.85	\$10.55

## Feeder Lamb -- One Head

	Total	Cash
<b>INCOME</b>		
Sale of lamb (125 lbs @ \$_____ per lb)	\$ _____	\$ _____
Sale of wool (3 lbs @ \$_____ per lb)	\$ _____	\$ _____
Minus death loss (2.0% of sale income)	-\$ _____	-\$ _____
<b>GROSS INCOME</b>	<b>\$ _____</b>	<b>\$ _____</b>
<b>VARIABLE COSTS</b>		
Feeder cost @ \$0.70 per lb	70 lbs \$49.00	\$49.00
Interest @ 6.5%	100 days 0.87	0.87
<b>Feed Costs</b>		
Corn @ \$2.18 per bushel	290 lbs \$11.29	\$0.00
Supplement & minerals @ \$0.15 per lb	32 lbs 4.80	4.80
Alfalfa - brome hay @ \$52.00 per ton	35 lbs 0.91	0.00
<b>Total Feed Costs</b>	<b>\$17.00</b>	<b>\$4.80</b>
Veterinary, medical, shearing	\$5.00	\$5.00
Machinery and equipment	1.00	1.00
Marketing, miscellaneous	2.00	2.00
Interest on feed & other costs @ 6.5%	60 days 0.27	0.00
Labor @ \$9.00 per hour	1.0 hours 9.00	0.00
<b>TOTAL VARIABLE COSTS</b>	<b>\$84.14</b>	<b>\$62.67</b>
<b>INCOME OVER VARIABLE COSTS</b>	<b>\$ _____</b>	<b>\$ _____</b>
<b>FIXED COSTS</b>		
Machinery, equipment, housing	\$3.50	\$3.50
<b>TOTAL OF ALL COSTS</b>	<b>\$87.64</b>	<b>\$66.17</b>
<b>INCOME OVER ALL COSTS</b>	<b>\$ _____</b>	<b>\$ _____</b>
Break-even selling price for variable costs <i>a/</i>	\$0.66 per lb.	
Break-even selling price for all costs <i>a/</i>	\$0.69 per lb.	

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*a/ Assumes wool income of \$3.00 per head and death loss of 2%.*

## Lamb Feed Requirements

**Table 1. Feed Requirement and Portion of Year on Feed to Finish Lamb to 110 lb.**

Beginning <u>Wt. of Feeder, lb</u>	Corn		Supplement <u>(32-36%), lb</u>	Hay <u>lb</u>	<u>Days on Feed</u>	lb feed per <u>lb of gain</u>
	<u>Bu</u>	<u>Lb</u>				
60	3.60	202	39	35	100	5.50
65	3.37	189	34	30	90	5.65
70	3.12	175	29	25	80	5.70
75	2.81	157	24	22	70	5.85
80	2.50	140	19	18	60	5.90
85	2.16	121	15	14	50	6.05

**Table 2. Approximate Feed Requirement When Feeding Complete Pelleted Rations**

Beginning <u>Wt. of Feeder, lb</u>	Lb feed per <u>lb of gain</u>	Complete <u>Feed-pelleted (lb)</u>	Time on Feed	
			<u>Days</u>	<u>Portion of year</u>
60	5.70	285	90	0.25
65	5.80	261	82	0.22
70	5.90	236	73	0.20
75	6.00	210	64	0.18
80	6.10	183	55	0.15
85	6.20	155	45	0.12

**Table 3. Approximate Feed Requirement When Feeding Low Roughage**

Mainly Corn and Supplement Rations

Beginning <u>Wt. of Feeder, lb</u>	<u>Mainly Corn and Supplement Rations</u>			Time on Feed	
	<u>Roughage</u>	<u>Grain</u>	<u>Supplement</u>	<u>Days</u>	<u>Portion of year</u>
75	15	158	24	67	0.18
80	13	139	19	58	0.16
85	10	120	15	48	0.13

## Grade A Dairy -- One Cow Unit

	12,000 lb of milk per cow annually		16,000 lb of milk per cow annually			
	Total	Cash	Total	Cash		
<b>INCOME</b>						
Milk sales 120 cwt x \$_____/cwt <i>a/</i>	\$_____	\$_____	160 cwt of milk <i>a/</i>	\$_____		
Cull cow 0.36 head x 1,300 lb x \$_____/lb	\$_____	\$_____	0.35 hd x 1,350 lb	\$_____		
Dairy calf 0.49 head x \$_____/hd	\$_____	\$_____	0.50 head	\$_____		
Replacement heifer 0.12 head x \$_____/hd	\$_____	\$_____	0.15 head	\$_____		
<b>GROSS INCOME</b>	<b>\$_____</b>	<b>\$_____</b>		<b>\$_____</b>		
<b>VARIABLE COSTS</b>						
<b>Feed Costs</b>						
Corn equivalents @ \$2.18 per bushel	71 bu	\$154.78	\$0.00	95 bu	\$207.10	\$0.00
Corn Silage @ \$20.00 per ton	8.0 tons	160.00	0.00	7.9 tons	158.00	0.00
Hay equivalents @ \$100.00 per ton	6.1 tons	610.00	0.00	6.0 tons	600.00	0.00
Salts and minerals @ \$0.16 per lb	149 lbs	23.84	23.84	212 lbs @ \$0.15/lb	31.80	31.80
Protein supplement @ \$0.12 per lb	405 lbs	48.60	48.60	891 lbs	106.92	106.92
Cottonseed @ \$0.08 per lb	0 lbs	0.00	0.00	214 lbs	17.12	17.12
Fat @ \$0.25 per lb	0 lbs	0.00	0.00	0 lbs	0.00	0.00
Milk replacer, calf starter		90.00	90.00		90.00	90.00
<b>Total Feed Costs</b>		<b>\$1,087.22</b>	<b>\$162.44</b>		<b>\$1,210.94</b>	<b>\$245.84</b>
Hauling @ \$0.40 per cwt	120 cwt	\$48.00	\$48.00	160 cwt @ \$0.34 /cwt	\$54.40	\$54.40
Veterinary and health		90.00	90.00		90.00	90.00
Fuel, utilities and repairs		130.00	130.00		140.00	140.00
DHIA & accounting		24.00	24.00		26.00	26.00
Breeding fees		21.00	21.00		28.00	28.00
Bedding, supplies and miscellaneous		140.00	140.00		140.00	140.00
Interest on feed, other costs @ 6.5%	3 months	25.03	0.00	3 months	27.45	0.00
Labor @ \$9.00 per hour	65 hours	585.00	0.00	65 hours	585.00	0.00
<b>TOTAL VARIABLE COSTS</b>		<b>\$2,150.25</b>	<b>\$615.44</b>		<b>\$2,301.79</b>	<b>\$724.24</b>
<b>INCOME OVER VARIABLE COSTS</b>		<b>\$_____</b>	<b>\$_____</b>		<b>\$_____</b>	<b>\$_____</b>
<b>FIXED COSTS</b>						
Machinery, equipment, facilities		\$520.00	\$52.00		\$520.00	\$52.00
Interest, insurance on herd @ 10% annually		170.40	17.04	10% annually	203.75	20.38
<b>TOTAL FIXED COSTS</b>		<b>\$690.40</b>	<b>\$69.04</b>		<b>\$723.75</b>	<b>\$72.38</b>
<b>TOTAL OF ALL COSTS</b>		<b>\$2,840.65</b>	<b>\$684.48</b>		<b>\$3,025.54</b>	<b>\$796.62</b>
<b>INCOME OVER ALL COSTS</b>		<b>\$_____</b>	<b>\$_____</b>		<b>\$_____</b>	<b>\$_____</b>
Income from cull cows, calves, and heifers		\$260.00			\$280.00	
Break-even selling price for variable costs		\$15.75	per cwt		\$12.64	per cwt
Break-even selling price for all costs		\$21.51	per cwt		\$17.16	per cwt

*a/ Milk price per cwt. is a total based on the following price components: butterfat, protein, other solids, producer price differential, quality, volume, and capital payout.*

## Grade A Dairy -- One Cow Unit

	20,000 lb of milk per cow annually		24,000 lb of milk per cow annually			
	Total	Cash	Total	Cash		
<b>INCOME</b>						
Milk sales 200 cwt x \$_____/cwt <i>a/</i>	\$ _____	\$ _____	240 cwt of milk <i>a/</i>	\$ _____		
Cull cow 0.36 head x 1,350 lb x \$_____/lb	\$ _____	\$ _____	0.39 hd x 1,400 lb	\$ _____		
Dairy calf 0.51 head x \$_____/hd	\$ _____	\$ _____	0.52 head	\$ _____		
Replacement heifer 0.18 head x \$_____/hd	\$ _____	\$ _____	0.21 head	\$ _____		
<b>GROSS INCOME</b>	<b>\$ _____</b>	<b>\$ _____</b>		<b>\$ _____</b>		
<b>VARIABLE COSTS</b>						
<b>Feed Costs</b>						
Corn equivalents @ \$2.18 per bushel	104 bu	\$226.72	\$0.00	113 bu	\$246.34	\$0.00
Corn Silage @ \$20.00 per ton	8.0 tons	160.00	0.00	8.0 tons	160.00	0.00
Hay equivalents @ \$100.00 per ton	6.1 tons	610.00	0.00	6.0 tons	600.00	0.00
Salts and minerals @ \$0.14 per lb	242 lbs	33.88	33.88	323 lbs @ \$0.13/lb	41.99	41.99
Protein supplement @ \$0.12 per lb	1,285 lbs	154.20	154.20	1,855 lbs	222.60	222.60
Cottonseed @ \$0.08 per lb	725 lbs	58.00	58.00	1,361 lbs	108.88	108.88
Fat @ \$0.25 per lb	26 lbs	6.50	6.50	111 lbs	27.75	27.75
Milk replacer, calf starter		90.00	90.00		90.00	90.00
<b>Total Feed Costs</b>		<b>\$1,339.30</b>	<b>\$342.58</b>		<b>\$1,497.56</b>	<b>\$491.22</b>
Hauling @ \$0.30 per cwt	200 cwt	\$60.00	\$60.00	240 cwt @ \$0.28 /cwt	\$66.00	\$66.00
Veterinary and health		98.00	98.00		118.00	118.00
Fuel, utilities and repairs		150.00	150.00		160.00	160.00
DHIA & accounting		28.00	28.00		30.00	30.00
Breeding fees		40.00	40.00		50.00	50.00
Bedding, supplies and miscellaneous		160.00	160.00		170.00	170.00
Interest on feed, other costs @ 6.5%	3 months	30.47	0.00	3 months	33.99	0.00
Labor @ \$9.00 per hour	70 hours	630.00	0.00	70 hours	630.00	0.00
<b>TOTAL VARIABLE COSTS</b>		<b>\$2,535.77</b>	<b>\$878.58</b>		<b>\$2,755.55</b>	<b>\$1,085.22</b>
<b>INCOME OVER VARIABLE COSTS</b>		<b>\$ _____</b>	<b>\$ _____</b>		<b>\$ _____</b>	<b>\$ _____</b>
<b>FIXED COSTS</b>						
Machinery, equipment, facilities		\$520.00	\$52.00		\$520.00	\$52.00
Interest, insurance on herd @ 10% annually		239.00	23.90	10% annually	276.30	27.63
<b>TOTAL FIXED COSTS</b>		<b>\$759.00</b>	<b>\$75.90</b>		<b>\$796.30</b>	<b>\$79.63</b>
<b>TOTAL OF ALL COSTS</b>		<b>\$3,294.77</b>	<b>\$954.48</b>		<b>\$3,551.85</b>	<b>\$1,164.85</b>
<b>INCOME OVER ALL COSTS</b>		<b>\$ _____</b>	<b>\$ _____</b>		<b>\$ _____</b>	<b>\$ _____</b>
Income from cull cows, calves, and heifers		\$300.00			\$320.00	
Break-even selling price for variable costs		\$11.18	per cwt		\$10.15	per cwt
Break-even selling price for all costs		\$14.97	per cwt		\$13.47	per cwt

*a/ Milk price per cwt. is a total based on the following price components: butterfat, protein, other solids, producer price differential, quality, volume, and capital payout.*

## Dairy Investment

1. Breeding herd investment per cow unit	12,000 lb milk per cow annually		16,000 lb milk per cow annually	
Dairy cow	1.00 hd @ \$1,200	\$1,200	1.00 hd @ \$1,400	\$1,400
Replacement dairy heifer	0.34 hd @ \$1,000	340	0.37 hd @ \$1,200	444
Replacement dairy calf	0.41 hd @ \$400	164	0.43 hd @ \$450	194
Total investment per cow unit		\$1,704		\$2,038
	20,000 lb milk per cow annually		24,000 lb milk per cow annually	
Dairy cow	1.00 hd @ \$1,600	\$1,600	1.00 hd @ \$1,800	\$1,800
Replacement dairy heifer	0.40 hd @ \$1,400	560	0.43 hd @ \$1,600	688
Replacement dairy calf	0.46 hd @ \$500	230	0.50 hd @ \$550	275
Total investment per cow unit		\$2,390		\$2,763

### 2. Facilities, equipment and machinery investment (replacement cost)

	<u>12,000 lb</u>	<u>16,000 lb</u>	<u>20,000 lb</u>	<u>24,000 lb</u>
Dairy barn, pens, shelter	\$125,000	\$125,000	\$125,000	\$125,000
Milk house, stanchion, cooler, etc	35,000	35,000	35,000	35,000
Feed storage	40,000	40,000	40,000	40,000
Utility tractor	30,000	30,000	30,000	30,000
Manure and feed handling equipment	30,000	30,000	30,000	30,000
<b>TOTAL INVESTMENT</b>	\$260,000	\$260,000	\$260,000	\$260,000
Total investment per cow for 70 cow herd	\$3,714	\$3,714	\$3,714	\$3,714
Deprec., int., taxes, ins. @ 14% annually	\$520	\$520	\$520	\$520

### 3. Feed requirements per cow unit

Pounds of milk per year	<u>12,000 lb</u>	<u>16,000 lb</u>	<u>20,000 lb</u>	<u>24,000 lb</u>
Corn silage (tons)	8.0	7.9	8.0	8.0
Hay equivalents (tons)	6.1	6.0	6.1	6.0
Corn equivalents (bu)	71	95	104	113
Protein supplement (lb)	405	891	1285	1855
Salt and mineral (lb)	149	212	242	323
Whole (linted) cottonseed (lb)	0	214	725	1361
Fat (lb)	0	0	26	111

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