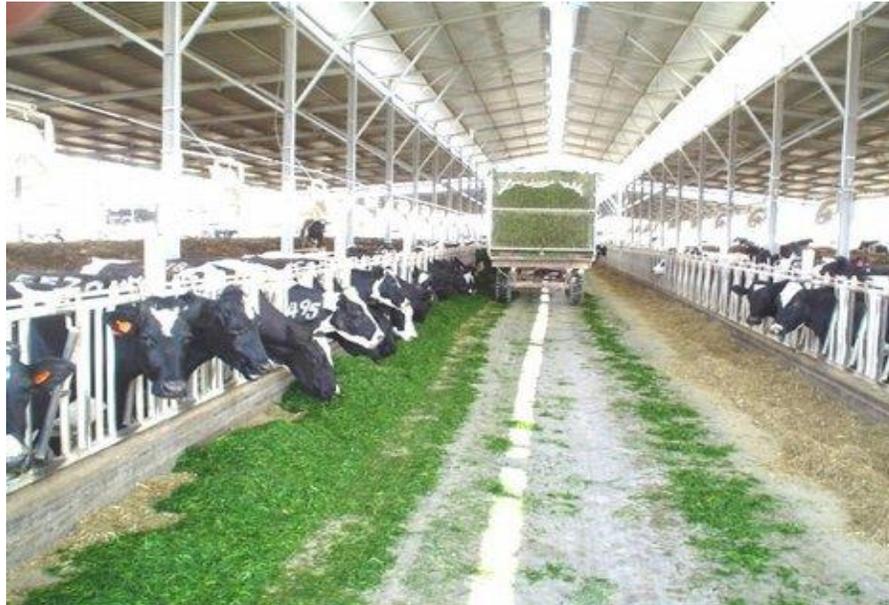


University of Idaho

College of Agricultural *and* Life Sciences



EBB-D4-12 Costs and Returns for a 2500-Head Free Stall Dairy in Southern Idaho

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Budget spreadsheets are available at the following link:

<http://web.cals.uidaho.edu/idaohoagbiz/enterprise-budgets/>

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Background & Assumptions

Economic costs are used in the University of Idaho costs and returns estimates. All resources are valued based on market price or opportunity cost. This budget represents the average costs and returns per cow associated with a 2500-cow dairy herd. The rolling 365-day 3.5% fat-corrected milk for the year is 23,376lb per cow, which is the state average for 2012. The herd is milked twice daily in a double 36 parallel parlor. Cows are grouped in three production strings and fed a total mixed ration.

Free stalls provide housing for the milking cows. Loose housing is provided for dry cows. All pens have lock-type stanchions for herd management. The owner contributes to the daily labor requirement. The \$2,886 per cow facility investment is based on the best estimate of current cost and the average value of each component over its useful life.

Dairy Overview

Herd Information

The herd consists of 2500 cows total with 85 percent of cows in milk (2100 milking + 400 dry). The herd replacement rate is 40% annually (cull loss and mortality) with ready-to-calve heifers used as replacement (\$1,289 per head). The herd has a 8% mortality rate on mature cows and an average 13.8-month calving interval.

Labor

As shown below in Table 1, all milking labor is hired (55 hours/day includes all cleanup). Feeding labor is hired labor (14 hours/day for feeding plus time to do rations). Facility management labor is split between hired (20 hours/ day) and owner (4 hours/day). Herd management labor is also split between the herd manager plus hired labor (21 hours/day) and the herd owner (4 hours/day). Manure is managed in open lots and removed twice a year by a custom operator. Feed lanes are scraped once or twice daily.

Feeds

Total Mixed Rations (TMR) are combined with alfalfa using a vertical mixer. A base commodity mix is fed to all cows. In addition, the milking herd receives a supplement mix. These two blends are purchased are created by a consultant who creates rations based on current relative costs and cattle nutrient needs to meet the requirements of each group of cows. A representative daily feed ration would consist of hay, grain, and other supplements as shown in Table 2. Average total feed cost per cow for the herd is \$6.04 per day.

Herd Health

Artificial insemination (AI) is used for breeding. Breeding, testing, veterinary services, and medicine are included in the annual veterinary services charge.

Table 1. Daily (hr/herd) and Annual (hr/head) Labor

	Daily (hr/herd)		Annual labor (hr/cow)		
	Hired	Owner	Hired	Owner	Total
Milking	55.0	0.0	8.0	0.0	15.4
Feeding	14.0	0.0	2.0	0.0	2.0
Facility mgmt.	20.0	4.0	3.0	0.6	1.7
Herd mgmt.	21.0	4.0	3.0	0.6	3.4
Manure mgmt.	0.0	0.0	0.0	0.0	0.0
Total	110.0	8.0	16.0	1.2	17.2

Table 2. Daily Feed Ration, Quantities and Costs

Feed item:	Quantity lb/day	Price \$/lb	Cost \$/day
Alfalfa hay, dairy	12.42	\$11.75	\$1.46
Feeder hay	3.79	\$10.55	\$0.40
Close-up hay	0.36	\$11.55	\$0.04
Straw	0.39	\$2.75	\$0.01
Corn silage (32%DM)	33.28	\$2.00	\$0.67
Beet pulp	2.34	\$8.00	\$0.19
Corn	8.89	\$12.61	\$1.12
Barley	0.00	\$11.50	\$0.00
Canola	2.30	\$15.25	\$0.35
Distillers	4.48	\$12.50	\$0.56
Cottonseed	4.45	\$17.50	\$0.78
Molasses	1.64	\$8.25	\$0.14
Mineral, fresh cows	0.09	\$43.75	\$0.04
Mineral, lactating cows	0.95	\$25.75	\$0.25
Mineral, dry cows	0.03	\$64.20	\$0.02
Mineral, close-up cows	0.06	\$42.50	\$0.02
Total cost per day, all cows			\$6.04

**Summary of Annual Costs and Returns for Operating a 2500-Head Free Stall Dairy in
Southern Idaho, 2012 (\$/head/year)**

Annual Milk Production (cwt/head)	233.76
Milk Price (\$/cwt)	\$17.53
Annual Milk Revenue (\$/head/year)	\$4,098
Total Revenue (\$/head/year)	\$3,715
Annual Feed Costs (\$/head/year)	\$2,206
Total Variable Costs (\$/head/year)	\$3,384
Fixed Costs (\$/head/year)	\$627
Total Costs (\$/head/year)	\$4,011
Returns over Variable Costs (\$/head/year)	\$330
Returns over Total Costs (\$/head/year)	-\$296

In the spreadsheet version, you can change values in red and they will be updated throughout the budget.

Table 1: Annual Enterprise Budget for a 2500-Head Free Stall Dairy

Item	Quantity Per Head	Unit	No. of Cows	Price or Cost	Value or Cost/Dairy	Value or Cost/Head/Yr	Value or Cost/Cwt
Income:					\$9,286,459	\$3,714.58	\$15.89
Milk	233.76	cwt	2100	\$17.53	\$8,605,407	\$3,442.16	\$14.73
Bull Calves	0.51	head	2500	\$120.00	\$153,000	\$61.20	\$0.26
Heifer Calves	0.51	head	2500	\$200.00	\$255,000	\$102.00	\$0.44
Cull Cows	0.30	head	2500	\$364.07	\$273,053	\$109.22	\$0.47
Operating Costs:							
Feed (ton/head/yr):					\$5,514,159	\$2,205.66	\$9.44
Alfalfa hay, dairy	2.27	head	2500	\$235.00	\$1,331,858	\$532.74	\$2.28
Feeder hay	0.69	head	2500	\$211.00	\$364,768	\$145.91	\$0.62
Close-up hay	0.07	head	2500	\$231.00	\$38,425	\$15.37	\$0.07
Straw	0.07	head	2500	\$55.00	\$9,802	\$3.92	\$0.02
Corn silage (32%DM)	6.07	head	2500	\$40.00	\$607,288	\$242.92	\$1.04
Beet pulp	0.43	head	2500	\$160.00	\$171,094	\$68.44	\$0.29
Corn	1.62	head	2500	\$252.20	\$1,023,460	\$409.38	\$1.75
Barley	0.00	head	2500	\$230.00	\$0	\$0.00	\$0.00
Canola	0.42	head	2500	\$305.00	\$319,878	\$127.95	\$0.55
Distillers	0.82	head	2500	\$250.00	\$510,935	\$204.37	\$0.87
Cottonseed	0.81	head	2500	\$350.00	\$711,108	\$284.44	\$1.22
Molasses	0.30	head	2500	\$165.00	\$123,508	\$49.40	\$0.21
Mineral, fresh cows	0.02	head	2500	\$875.00	\$36,387	\$14.55	\$0.06
Mineral, lactating cows	0.17	head	2500	\$515.00	\$223,955	\$89.58	\$0.38
Mineral, dry cows	0.01	head	2500	\$1,284.00	\$19,070	\$7.63	\$0.03
Mineral, close-up cows	0.01	head	2500	\$850.00	\$22,622	\$9.05	\$0.04
Other costs:					\$2,946,443	\$1,179	\$5.04
Labor, including fringe costs	1.00	head	2500	\$361.93	\$904,825	\$361.93	\$1.55
Herd replacement costs	1.00	head	2500	\$205.00	\$512,500	\$205.00	\$0.88
Veterinary, breeding, testing	1.00	head	2500	\$73.13	\$182,825	\$73.13	\$0.31
Supplies	1.00	head	2500	\$229.21	\$573,025	\$229.21	\$0.98
Repairs and maintenance	1.00	head	2500	\$72.10	\$180,250	\$72.10	\$0.31
Utilities	1.00	head	2500	\$39.18	\$97,950	\$39.18	\$0.17
Milk hauling	1.00	head	2500	\$64.94	\$162,350	\$64.94	\$0.28
State & association charges	1.00	head	2500	\$36.63	\$91,575	\$36.63	\$0.16
Miscellaneous (fuel, insur., etc.)	1.00	head	2500	\$62.95	\$157,375	\$62.95	\$0.27
Interest (2 mos. Average use)	0.17	\$	\$8,376,834	\$0.06	\$83,768	\$33.51	\$0.14
Total Operating Costs					\$8,460,602	\$3,384.24	\$14.48
Net Returns Above Variable Costs					\$825,857	\$330.34	\$1.41
Fixed Costs:					\$1,566,949	\$626.78	\$2.68
Capital recovery*	1.00	head	2500	\$529.09	\$1,322,721	\$529.09	\$2.26
Insurance*	1.00	herd	1	\$32,712.56	\$32,713	\$13.09	\$0.06
Overhead (2.5% Oper Costs)	1.00	herd	1	\$211,515.05	\$211,515	\$84.61	\$0.36
*See Table 2.							
Total Costs (Operating and Fixed)					\$10,027,551	\$4,011.02	\$17.16
Net Returns Above Total Costs					-\$741,091	-\$296.44	-\$1.27

Breakeven Price and Yield

The first breakeven analysis below presents breakeven milk prices (\$/cwt) that will cover operating costs, ownership costs, and total costs for the base yield in the enterprise budget above, as well as for milk yields that are 10% above and below the base yield. The second breakeven analysis below presents breakeven yields that will cover operating costs, ownership costs, and total costs for the base price in the enterprise budget above, as well as for milk prices that are 10% above and below the base yield. In the spreadsheet version (Excel), you can change the numbers in the percentages in the orange cells and all values will be updated. Costs, prices, and yields in this breakeven table are all linked to values in the budget above, so any changes in the budgets will be automatically updated in these breakeven analyses.

Breakeven Milk Prices (\$/cwt):

	Less: 10%	Base Yield (cwt/hd/yr):	Plus: 10%	Plus: 10%
	\$210.38	\$233.76	\$257.14	\$282.85
Operating Cost Breakeven	\$16.09	\$14.48	\$13.16	\$11.96
Ownership Cost Breakeven	\$2.98	\$2.68	\$2.44	\$2.22
Total Cost Breakeven	\$19.07	\$17.16	\$15.60	\$14.18

Breakeven Yields (cwt/hd/year):

	Less: 10%	Base Price (\$/cwt):	Plus: 10%	Plus: 10%
	\$15.78	\$17.53	\$19.28	\$21.21
Operating Cost Breakeven	214.5	193.1	175.5	159.5
Ownership Cost Breakeven	39.7	35.8	32.5	29.5
Total Cost Breakeven	254.2	228.8	208.0	189.1

These tables are also available for you to modify in a spreadsheet version:

<http://www.cals.uidaho.edu/aers/LivestockEBB2010/EBBD4102500.xlsx>

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06-13 (revised)

<http://web.cals.uidaho.edu/idaahoqbiz/enterprise-budgets/>

Table 2. Capital Costs for 2500-Head Free Stall Dairy in Southern Idaho

Item	Quantity Per Dairy	Unit	Price or Cost	Value or Cost
Initial Capital Outlays:				
Cattle:				\$3,062,500
Initial cow purchase	2,500	hd	\$1,225	\$3,062,500
Land:				\$1,787,500
Land purchase	150	ac	\$4,000	\$600,000
Site Prep: Permits, well, roads	2,500	hd	\$475	\$1,187,500
Feeding Facilities:				\$211,710
Scales	1	farm	\$100,000	\$100,000
Commodity shed, 7 bays	1	farm	\$105,000	\$105,000
Hay storage (1,200 tons)	2	farm	\$2,680	\$5,360
Hay tarps, 50' x 50'	3	stack	\$450	\$1,350
Freestall Barn				\$3,750,000
Stalls, in 5 barns, 525' x 210'	2,500	stall	\$1,500	\$3,750,000
Milking Barn				\$1,181,000
Building	3,500	sq ft	\$70	\$245,000
Double 36 parallel stalls	72	stall	\$13,000	\$936,000
Hospital Barn				\$226,000
Building	1,000	sq ft	\$70	\$70,000
Double 6 parallel stalls	12	stall	\$13,000	\$156,000
Machinery:				\$1,208,503
Generator	1	farm	\$45,000	\$45,000
Farm pickups, new	1	farm	\$40,000	\$40,000
Farm pickups, used	1	farm	\$20,000	\$20,000
4-wheelers	1	farm	\$6,000	\$6,000
10-wheel truck (manure removal)	2	farm	\$60,000	\$120,000
Tractor-125 HP	1	farm	\$95,000	\$95,000
Tractor-75 HP	1	farm	\$55,000	\$55,000
Tractor-60 HP	1	farm	\$41,000	\$41,000
Straw Spreader	2	farm	\$35,000	\$70,000
Loaders, used	2	farm	\$74,000	\$148,000
Skid steer loader	2	farm	\$35,000	\$70,000
Telehandler loader	1	farm	\$50,000	\$50,000
Semis, with feedbox mixers, new	1	farm	\$125,000	\$125,000
Semis, with feedbox mixers, used	1	farm	\$95,000	\$95,000
Dump truck	2	farm	\$16,188	\$32,376
Vacuum tank	1	farm	\$64,500	\$64,500
Backhoe	1	farm	\$45,000	\$45,000
Boxscraper	1	farm	\$3,000	\$3,000
Brush hog, 10'	1	farm	\$9,127	\$9,127
Gooseneck trailer, 28'	1	farm	\$24,500	\$24,500
Miscellaneous	1	farm	\$50,000	\$50,000
Insurance:				\$32,713
Insur., facilities @ \$5 per \$1,000	1	farm	\$26,844	\$26,844
Insur., machinery, @ \$4 per \$1,000	1	farm	\$4,834.01	\$4,834
Liability Insur. (\$1 million coverage)	1	farm	\$1,035	\$1,035
Total Capital Costs				\$11,459,926
Capital Costs per Head				\$4,584
Average Capital Costs (Purchase - Salvage Value)/2				\$5,621,235
Average Capital Costs per Head				\$2,248
Total Capital Recovery Costs				\$1,322,721
Capital Recovery Costs per Head				\$529

Table 3: Monthly Summary of Returns and Expenses for a 2500-Head Free Stall Dairy in Southern Idaho

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Production:													
Milk	\$656,719	\$656,719	\$656,719	\$656,719	\$656,719	\$656,719	\$656,719	\$656,719	\$656,719	\$656,719	\$656,719	\$656,719	\$7,880,622
Bull Calves	\$1,972	\$1,972	\$1,972	\$1,972	\$1,972	\$1,972	\$1,972	\$1,972	\$1,972	\$1,972	\$1,972	\$1,972	\$23,658
Heifer Calves	\$7,323	\$7,323	\$7,323	\$7,323	\$7,323	\$7,323	\$7,323	\$7,323	\$7,323	\$7,323	\$7,323	\$7,323	\$87,876
Cull Cows	\$5,873	\$5,873	\$5,873	\$5,873	\$5,873	\$5,873	\$5,873	\$5,873	\$5,873	\$5,873	\$5,873	\$5,873	\$70,476
Total Receipts	\$671,886	\$8,062,632											
Operating Inputs:													
Alfalfa hay, dairy	\$70,844	\$70,844	\$70,844	\$70,844	\$70,844	\$70,844	\$70,844	\$70,844	\$70,844	\$70,844	\$70,844	\$70,844	\$850,122
Feeder hay	\$12,246	\$12,246	\$12,246	\$12,246	\$12,246	\$12,246	\$12,246	\$12,246	\$12,246	\$12,246	\$12,246	\$12,246	\$146,946
Close-up hay	\$1,663	\$1,663	\$1,663	\$1,663	\$1,663	\$1,663	\$1,663	\$1,663	\$1,663	\$1,663	\$1,663	\$1,663	\$19,956
Straw	\$817	\$817	\$817	\$817	\$817	\$817	\$817	\$817	\$817	\$817	\$817	\$817	\$9,804
Corn silage (32%DM)	\$44,282	\$44,282	\$44,282	\$44,282	\$44,282	\$44,282	\$44,282	\$44,282	\$44,282	\$44,282	\$44,282	\$44,282	\$531,378
Beet pulp	\$11,585	\$11,585	\$11,585	\$11,585	\$11,585	\$11,585	\$11,585	\$11,585	\$11,585	\$11,585	\$11,585	\$11,585	\$139,014
Corn	\$64,930	\$64,930	\$64,930	\$64,930	\$64,930	\$64,930	\$64,930	\$64,930	\$64,930	\$64,930	\$64,930	\$64,930	\$779,154
Barley													
Canola	\$21,413	\$21,413	\$21,413	\$21,413	\$21,413	\$21,413	\$21,413	\$21,413	\$21,413	\$21,413	\$21,413	\$21,413	\$256,956
Distillers	\$28,101	\$28,101	\$28,101	\$28,101	\$28,101	\$28,101	\$28,101	\$28,101	\$28,101	\$28,101	\$28,101	\$28,101	\$337,212
Cottonseed	\$44,021	\$44,021	\$44,021	\$44,021	\$44,021	\$44,021	\$44,021	\$44,021	\$44,021	\$44,021	\$44,021	\$44,021	\$528,246
Molasses	\$9,669	\$9,669	\$9,669	\$9,669	\$9,669	\$9,669	\$9,669	\$9,669	\$9,669	\$9,669	\$9,669	\$9,669	\$116,028
Mineral, fresh cows	\$3,032	\$3,032	\$3,032	\$3,032	\$3,032	\$3,032	\$3,032	\$3,032	\$3,032	\$3,032	\$3,032	\$3,032	\$36,384
Mineral, lactating cows	\$18,664	\$18,664	\$18,664	\$18,664	\$18,664	\$18,664	\$18,664	\$18,664	\$18,664	\$18,664	\$18,664	\$18,664	\$223,962
Mineral, dry cows	\$1,592	\$1,592	\$1,592	\$1,592	\$1,592	\$1,592	\$1,592	\$1,592	\$1,592	\$1,592	\$1,592	\$1,592	\$19,104
Mineral, close-up cows	\$1,887	\$1,887	\$1,887	\$1,887	\$1,887	\$1,887	\$1,887	\$1,887	\$1,887	\$1,887	\$1,887	\$1,887	\$22,644
Supplies	\$35,626	\$35,626	\$35,626	\$35,626	\$35,626	\$35,626	\$35,626	\$35,626	\$35,626	\$35,626	\$35,626	\$35,626	\$427,506
Utilities	\$11,250	\$11,250	\$11,250	\$11,250	\$11,250	\$11,250	\$11,250	\$11,250	\$11,250	\$11,250	\$11,250	\$11,250	\$135,000
Labor, including fringe costs	\$74,793	\$74,793	\$74,793	\$74,793	\$74,793	\$74,793	\$74,793	\$74,793	\$74,793	\$74,793	\$74,793	\$74,793	\$897,510
Herd replacement costs	\$59,792	\$59,792	\$59,792	\$59,792	\$59,792	\$59,792	\$59,792	\$59,792	\$59,792	\$59,792	\$59,792	\$59,792	\$717,504
Repairs & maintenance	\$30,625	\$30,625	\$30,625	\$30,625	\$30,625	\$30,625	\$30,625	\$30,625	\$30,625	\$30,625	\$30,625	\$30,625	\$367,500
Milk hauling	\$12,709	\$12,709	\$12,709	\$12,709	\$12,709	\$12,709	\$12,709	\$12,709	\$12,709	\$12,709	\$12,709	\$12,709	\$152,502
State & association charges	\$10,417	\$10,417	\$10,417	\$10,417	\$10,417	\$10,417	\$10,417	\$10,417	\$10,417	\$10,417	\$10,417	\$10,417	\$125,004
Misc. (fuel, insur., etc.)	\$33,334	\$33,334	\$33,334	\$33,334	\$33,334	\$33,334	\$33,334	\$33,334	\$33,334	\$33,334	\$33,334	\$33,334	\$400,002
Interest	\$24,375	\$24,375	\$24,375	\$24,375	\$24,375	\$24,375	\$24,375	\$24,375	\$24,375	\$24,375	\$24,375	\$24,375	\$292,500
Veterinary Medicine	\$18,125	\$18,125	\$18,125	\$18,125	\$18,125	\$18,125	\$18,125	\$18,125	\$18,125	\$18,125	\$18,125	\$18,125	\$217,500
Machinery (Fuel,Lube,Repair)	\$2,501	\$2,501	\$2,501	\$2,501	\$2,501	\$2,501	\$2,501	\$2,501	\$2,501	\$2,501	\$2,501	\$2,513	\$30,024
Vehicles (Fuel and Repair)	\$1,497	\$1,497	\$1,497	\$1,497	\$1,497	\$1,497	\$1,497	\$1,497	\$1,497	\$1,497	\$1,497	\$1,504	\$17,965
Equipment (Repair)	\$305	\$305	\$305	\$305	\$305	\$305	\$305	\$305	\$305	\$305	\$305	\$305	\$3,654
Housing, Improvements (Repair)	\$10,668	\$10,668	\$10,668	\$10,668	\$10,668	\$10,668	\$10,668	\$10,668	\$10,668	\$10,668	\$10,668	\$10,719	\$128,061
Taxes and Insurance	\$45,676	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$45,676
Total	\$706,432	\$660,756	\$660,826	\$7,974,818									

Table 5: Investment Summary for a 2500-Head Free Stall Dairy in Southern Idaho

Item	Quantity Per Dairy	Unit	Price or Cost	Value or Cost	Years of Life (n)	Salvage Value (/head)	Salvage Value (\$/herd)	Discount Rate (i)	Capital Recovery Factor	Capital Recovery Value
Initial Capital Outlays:										
Cattle:				\$3,062,500						
Initial cow purchase	2,500	hd	\$1,225	\$3,062,500	3	\$525	\$1,312,500	5.00%	0.3672	\$708,225
Land:				\$1,847,500						
Land purchase*	150	ac	\$4,400	\$660,000	30			7.50%		\$49,500
Site Prep: Permits, well, roads**	2,500	hd	\$475	\$1,187,500	30	\$0		6.00%	0.0727	\$86,272
Feeding Facilities:				\$211,710						
1	1									
Scales	1	farm	\$100,000	\$100,000	30	\$0		6.00%	0.0727	\$7,265
Commodity shed, 7 bays	1	farm	\$105,000	\$105,000	30	\$0		6.00%	0.0727	\$7,628
Hay storage (1,200 tons)	2	farm	\$2,680	\$5,360	30	\$0		6.00%	0.0727	\$389
Hay tarps, 50' x 50'	3	stack	\$450	\$1,350	5	\$0		6.00%	0.2374	\$320
Freestall Barn				\$3,750,000.00						
Stalls, in 5 barns, 525' x 210'	2,500	stall	\$1,500	\$3,750,000.00	30			6.00%	0.0727	\$272,438
Milking Barn				\$1,181,000						
Building	3,500	sq ft	\$70	\$245,000	30	#####	\$0	6.00%	0.0727	\$85,800
Double 36 parallel stalls	72	stall	\$13,000	\$936,000						
Hospital Barn				\$226,000						
Building	1,000	sq ft	\$70	\$70,000	30	\$0		6.00%	0.0727	\$16,419
Double 6 parallel stalls	12	stall	\$13,000	\$156,000						
Machinery:				\$1,234,803						
Generator	1	farm	\$45,000	\$45,000	25	\$4,500	\$4,500	6.00%	0.0782	\$3,438
Farm pickups, new	1	farm	\$40,000	\$40,000	8	\$4,000	\$4,000	6.00%	0.1610	\$6,036
Farm pickups, used	1	farm	\$20,000	\$20,000	8	\$2,000	\$2,000	6.00%	0.1610	\$3,018
4-wheelers	1	farm	\$6,000	\$6,000	10	\$600	\$600	6.00%	0.1359	\$770
10-wheel truck (manure removal)	2	farm	\$60,000	\$120,000	10	\$6,000	\$12,000	6.00%	0.1359	\$15,397
Tractor-125 HP	1	farm	\$95,000	\$95,000	20	\$9,500	\$9,500	6.00%	0.0872	\$8,024
Tractor-75 HP	1	farm	\$59,000	\$59,000	20	\$5,900	\$5,900	6.00%	0.0872	\$4,983
Tractor-60 HP	1	farm	\$44,000	\$44,000	20	\$4,400	\$4,400	6.00%	0.0872	\$3,717
Straw Spreader	2	farm	\$38,000	\$76,000	10	\$3,800	\$7,600	6.00%	0.1359	\$9,752
Loaders, used	2	farm	\$79,000	\$158,000	10	\$7,900	\$15,800	6.00%	0.1359	\$20,273
Skid steer loader	2	farm	\$35,000	\$70,000	3	\$3,500	\$7,000	6.00%	0.3741	\$23,989
Telehandler loader	1	farm	\$50,000	\$50,000	3	\$5,000	\$5,000	6.00%	0.3741	\$17,135
Semis, with feedbox mixers, new	1	farm	\$125,000	\$125,000	4	#####	\$12,500	6.00%	0.1610	\$18,863
Semis, with feedbox mixers, used	1	farm	\$65,000	\$95,000	2	\$6,500	\$6,500	6.00%	0.1610	\$14,639
Dump truck	2	farm	\$16,188	\$32,376	20	\$1,619	\$3,238	6.00%	0.0872	\$2,735
Vacuum tank	1	farm	\$64,500	\$64,500	10	\$6,450	\$6,450	6.00%	0.1359	\$8,276
Backhoe	1	farm	\$48,000	\$48,000	20	\$4,800	\$4,800	6.00%	0.0872	\$4,054
Boxscraper	1	farm	\$3,300	\$3,300	20	\$330	\$330	6.00%	0.0872	\$279
Brush hog, 10'	1	farm	\$9,127	\$9,127	10	\$913	\$913	6.00%	0.1359	\$1,171
Gooseneck trailer, 28'	1	farm	\$24,500	\$24,500	8	\$2,450	\$2,450	6.00%	0.1610	\$3,697
Miscellaneous	1	farm	\$50,000	\$50,000	10	\$5,000	\$5,000	6.00%	0.1359	\$6,416
Total Capital Costs/Salvage Value				\$11,513,513		#####				
Capital Costs/Salvage Value per Head				\$4,605		\$87				
Average Capital Costs				\$5,864,900						
Average Capital Costs per Head				\$2,346						
Total Capital Recovery Costs				\$1,410,916						\$1,410,916
Capital Recovery Costs per Head				\$564						\$564

*Opportunity cost on land investment is calculated as land value multiplied by the interest rate. Land is not depreciable.

**Site preparation charges include nutrient management expenses.