## 2010 Idaho Livestock Costs and Returns Estimate



Free stall housing Milking 2X per day Kathleen M. Painter and C. Wilson Gray

# EBB-D4-10 Holstein Dairy Enterprise Annual Cow Budget 2,500-head herd 22,650 lb milk per cow Extension

Agricultural Economics & Rural Sociology

## **Background and 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 2,500cow free stall dairy. The rolling 365-day 3.5% fat-corrected milk for the year is the 2010 state average of 22,650 pounds. The herd is milked two times daily. The dairy uses a double-36 herringbone parlor with a 300-cow per hour throughput.

The herd consists of 2,500 cows total with 87 percent of cows in milk (2175 milking + 325 dry). The herd replacement rate is 35.8% annually (cull loss and mortality) with ready-tocalve heifers used as replacement (\$1,226 per head). The herd has a 5% mortality rate on mature cows and an average 12-month calving interval.

The milking cows have free stall housing with mechanical vacuum manure removal. All pens have lock-type stanchions for herd management. An average investment value of \$2,248 per cow is based on the best estimate of current cost and the average value of each component over its useful life.

Operating input costs are based on actual herd survey data, herd-based information, or both.

## **Waste Management**

A flush-type system is used for cleaning stalls. Liquid manure goes out through the center pivot. Solid waste is spread on fields when conditions are right. The dairy also splits costs of hauling waste with local farms.

#### **Feeds**

Feed is mixed on site using a blend that is customized based on current costs and nutritional requirements by stage of production, whether high production, low production, fresh, dry, or close up (CU) to calving. The ration in this budget consists of alfalfa and other hay, corn silage, beet pulp, corn, and other feed and mineral items (see table below). Cows are grouped in five production strings, barn-fed 10 pounds of concentrate, and top-dressed the balance outside. Feed components and quantities will change if relative prices of components change, with the goal of optimizing nutritional requirements at least cost.

			Pen:			_	All Cows
RATION (LB/COW)	HI	LOW	FRESH	DRY	CU	Cost/Ton	Cost/Day
NUMBER OF COWS	1432	521	130	326	91	2500	
PERCENT OF HERD	<b>57</b> %	21%	5%	13%	4%	100%	
Alfalfa hay, dairy	15.00	15.00	13.50	0.00	0.00	\$153	\$0.95
Feeder hay	0.00	0.00	0.00	29.10	0.00	\$115	\$0.22
Close-up hay	0.00	0.00	0.00	0.00	10.00	\$136	\$0.02
Straw	0.00	0.00	0.00	3.00	0.00	\$55	\$0.01
Corn silage (32% DM)	37.00	36.00	23.00	17.00	32.00	\$35	\$0.58
Beet pulp	2.50	3.35	2.00	0.00	3.00	\$130	\$0.15
Corn	11.00	10.00	7.50	0.00	3.25	\$192	\$0.86
Barley	0.00	0.00	0.00	0.00	0.00	\$173	\$0.00
Canola	3.00	2.00	2.75	0.00	0.55	\$245	\$0.28
Distillers	5.45	5.40	4.00	0.00	0.65	\$165	\$0.37
Cottonseed	6.00	4.00	3.50	0.00	0.00	\$260	\$0.58
Molasses	2.00	2.00	1.50	0.00	0.00	\$155	\$0.13
Mineral, fresh cows	0.00	0.00	1.75	0.00	0.00	\$875	\$0.04
Mineral, lactating cows	1.30	1.00	0.00	0.00	0.00	\$515	\$0.25
Mineral, dry cows	0.00	0.00	0.00	0.25	0.00	\$1,284	\$0.02
Mineral, close-up cows	0.00	0.00	0.00	0.00	1.60	\$850	\$0.02
						Cost/day>	\$4.49

Note: HI = high producers; LOW = lower producers; CU = close-up (typically 14-21 days before calving)

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

	Quantity		Price or	Value or	Value or	Value or
Item	Per Head	Unit	Cost	Cost/Dairy	Cost/Head/Yr	Cost/Cwt
ncome:				\$8,800,125	\$3,520.05	\$15.54
Milk	226.5	cwt	\$14.50	\$8,210,625	\$3,284.25	\$14.50
Bull Calves	0.51	head	\$35.00	\$44,625	\$17.85	\$0.08
Heifer Calves	0.51	head	\$135.00	\$172,125	\$68.85	\$0.30
Cull Cows	0.30	head	\$497.00	\$372,750	\$149.10	\$0.60
Operating Costs:						
Feed (ton/head/yr):				\$4,088,385	\$1,635.35	\$7.22
Alfalfa hay, dairy	2.27	head	\$153.00	\$867,125	\$346.85	\$1.5
Feeder hay	0.69	head	\$115.00	\$198,807	\$79.52	\$0.3
Close-up hay	0.07	head	\$136.00	\$22,622	\$9.05	\$0.04
Straw	0.07	head	\$55.00	\$9,802	\$3.92	\$0.0
Corn silage (32%DM)	6.07	head	\$35.00	\$531,377	\$212.55	\$0.94
Beet pulp	0.43	head	\$130.00	\$139,014	\$55.61	\$0.2
Corn	1.62	head	\$192.00	\$779,161	\$311.66	\$1.3
Barley	0.00	head	\$173.00	\$0	\$0.00	\$0.00
Canola	0.42	head	\$245.00	\$256,951	\$102.78	\$0.4
Distillers	0.82	head	\$165.00	\$337,217	\$134.89	\$0.60
Cottonseed	0.81	head	\$260.00	\$528,252	\$211.30	\$0.93
Molasses	0.30	head	\$155.00	\$116,023	\$46.41	\$0.20
Mineral, fresh cows	0.02	head	\$875.00	\$36,387	\$14.55	\$0.00
Mineral, lactating cows	0.17	head	\$515.00	\$223,955	\$89.58	\$0.40
Mineral, dry cows	0.01	head	\$1,284.00	\$19,070	\$7.63	\$0.03
Mineral, close-up cows	0.01	head	\$850.00	\$22,622	\$9.05	\$0.04
Other costs:				\$3,732,500	\$1,493	\$6.59
abor, including fringe costs	1.00	head	\$359.00	\$897,500	\$359.00	\$1.58
Herd replacement costs	1.00	head	\$287.00	\$717,500	\$287.00	\$1.2
Veterinary, breeding, testing	1.00	head	\$87.00	\$217,500	\$87.00	\$0.38
Supplies	1.00	head	\$171.00	\$427,500	\$171.00	\$0.75
Repairs and maintenance	1.00	head	\$147.00	\$367,500	\$147.00	\$0.65
Jtilities						\$0.0
	1.00	head	\$54.00	\$135,000	\$54.00	
Milk hauling	1.00	head 	\$61.00	\$152,500	\$61.00	\$0.27
State & association charges	1.00	head	\$50.00	\$125,000	\$50.00	\$0.22
Miscellaneous (fuel, insur., etc.)	1.00	head 	\$160.00	\$400,000	\$160.00	\$0.7
nterest	1.00	head	\$117.00	\$292,500	\$117.00	\$0.52
Total Operating Costs				\$7,820,885	\$3,128.35	\$13.81
Net Returns Above Variable Costs				\$979,240	\$391.70	\$1.73
Fixed Costs:				\$1,550,956	\$620.38	\$2.74
		1	0.000			
Capital recovery*	1.00	head	\$529.09	\$1,322,721	\$529.09	\$2.34
nsurance*	1.00	herd	\$32,712.56	\$32,713	\$13.09	\$0.06
Overhead (2.5% Oper Costs) See Table 2.	1.00	herd	\$195,522.12	\$195,522	\$78.21	\$0.35
JEE TANIE Z.						
Total Costs (Operating and Fixed)				\$9,371,841	\$3,748.74	\$16.55
Net Returns Above Total Costs				-\$571,716	-\$228.69	-\$1.01
				+-· <b>-/·-</b>	,	7

### **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 budgetswill be automatically updated in these breakeven analyses.

	Breakeven Mil	lk Prices (\$/cwt):	
		Base	
	Less:	Yield	Plus:
	10%	(cwt/hd/yr):	10%
	\$203.85	\$226.50	\$274.07
Operating Cost Breakeven	\$15.35	\$13.81	\$11.41
Ownership Cost Breakeven	\$3.04	\$2.74	\$2.26
Total Cost Breakeven	\$18.39	\$16.55	\$13.68
	Breakeven Yie	lds (cwt/hd/year)	:
		Base	
	Less:	Price	Plus:
	10%	(\$/cwt):	10%
	\$13.05	\$14.50	\$17.55
Operating Cost Breakeven	239.7	215.7	178.3
Ownership Cost Breakeven	47.5	42.8	35.4
Total Cost Breakeven	287.3	258.5	213.7

The Authors - Kathleen Painter is a farm and ranch economics specialist in the University of Idaho Department of Agricultural Economics and Rural Sociology, Moscow. C. Wilson Gray is an Extension agricultural economist in the UI District III Extension Office.

Issued in furtherance of cooperative extension work in agriculture and home economics, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Charlotte Eberlein, Director of Cooperative Extension System, University of Idaho, Moscow, Idaho 83843. The University of Idaho provides equal opportunity in education and employment on the basis of race, color, religion, national origin, gender, age disability, or status as a Vietnam-era veteran, as required by state and federal laws.

02-11 (new)

http://www.cals.uidaho.edu/aers/r\_livestock.htm

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

Item	Per Dairy	Unit	Cost	Cost		
nitial Capital Outlays:				Cost		
inclui Capitai Gatiays.						
				42.052.500		
attle:	2 500	hd	¢1 22E	\$3,062,500		
nitial cow purchase	2,500	nu	\$1,225	\$3,062,500		
and:				\$1,787,500		
and purchase	150	ac	\$4,000	\$600,000		
ite Prep: Permits, well, roads	2,500	hd	\$475	\$1,187,500		
eeding Facilities:	1			\$211,710		
cales	1	farm	\$100,000	\$100,000		
ommodity shed, 7 bays	1	farm	\$105,000	\$105,000		
lay storage (1,200 tons) lay tarps, 50' x 50'	2	farm stack	\$2,680 \$450	\$5,360 \$1,350		
	3	Stack	Ş430			
reestall Barn	2.500		<b>#</b> 4.500	\$3,750,000		
talls, in 5 barns, 525' x 210'	2,500	stall	\$1,500	\$3,750,000		
Ailking Barn				\$1,181,000		
uilding	3,500	sq ft	\$70	\$245,000		
ouble 36 parallel stalls	72	stall	\$13,000	\$936,000		
ospital Barn				\$226,000		
uilding	1,000	sq ft	\$70	\$70,000		
ouble 6 parallel stalls	12	stall	\$13,000	\$156,000		
Nachinery:				\$1,208,503		
ienerator	1	farm	\$45,000	\$45,000		
arm pickups, new	1	farm	\$40,000	\$40,000		
arm pickups, used	1	farm	\$20,000	\$20,000		
-wheelers	1	farm	\$6,000	\$6,000		
0-wheel truck (manure removal)	2	farm	\$60,000	\$120,000		
ractor-125 HP	1	farm	\$95,000	\$95,000		
ractor-75 HP	1	farm	\$55,000	\$55,000		
ractor-60 HP	1	farm	\$41,000	\$41,000		
traw Spreader	2	farm	\$35,000	\$70,000		
oaders, used	2	farm	\$74,000	\$148,000		
kid steer loader	2	farm	\$35,000	\$70,000		
elehandler loader	1	farm	\$50,000	\$50,000		
emis, with feedbox mixers, new	1	farm	\$125,000	\$125,000		
emis, with feedbox mixers, used	1	farm	\$95,000	\$95,000		
ump truck	2	farm	\$16,188	\$32,376		
acuum tank	1	farm	\$64,500	\$64,500		
ackhoe	1	farm	\$45,000	\$45,000		
oxscraper	1	farm	\$3,000	\$3,000		
rush hog, 10'	1	farm	\$9,127	\$9,127		
iooseneck trailer, 28' 1iscellaneous	1 1	farm farm	\$24,500 \$50,000	\$24,500 \$50,000		
liscellarieous	1	Idilli	\$30,000	\$50,000		
nsurance:				\$32,713		
nsur., facilities @ \$5 per \$1,000	1	farm	\$26,844	\$26,844		
nsur., machinery, @ \$4 per \$1,000	1	farm	\$4,834.01	\$4,834		
iability Insur. (\$1 million coverage)	1	farm	\$1,035	\$1,035		
otal Capital Costs				\$11,459,926		
apital Costs per Unit				\$4,584		
verage Capital Costs (Purchase - Salvage	e Value)/2			\$5,621,235		
verage Capital Costs per unit				\$2,248		
otal Capital Recovery Costs				\$1,322,721		

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	\$671,886	\$671,886	\$671,886	\$671,886	\$671,886	\$671,886	\$671,886	\$671,886	\$671,886	\$671,886	\$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	\$660,756	\$660,756	\$660,756	\$660,756	\$660,756	\$660,756	\$660,756	\$660,756	\$660,756	\$660,826	\$7,974,818

Table 4: Monthly Feed Requirements (tons) for a 2500-Head Free Stall Dairy in Southern Idaho

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Feed (tons):													
Alfalfa hay, dairy	473	473	473	473	473	473	473	473	473	473	473	473	5670
Feeder hay	144	144	144	144	144	144	144	144	144	144	144	144	1728
Close-up hay	14	14	14	14	14	14	14	14	14	14	14	14	168
Straw	15	15	15	15	15	15	15	15	15	15	15	15	180
Corn silage (32%DM)	1265	1265	1265	1265	1265	1265	1265	1265	1265	1265	1265	1265	15180
Beet pulp	89	89	89	89	89	89	89	89	89	89	89	89	1068
Corn	338	338	338	338	338	338	338	338	338	338	338	338	4056
Barley	0	0	0	0	0	0	0	0	0	0	0	0	0
Canola	88	88	88	88	88	88	88	88	88	88	88	88	1050
Distillers	171	171	171	171	171	171	171	171	171	171	171	171	2046
Cottonseed	170	170	170	170	170	170	170	170	170	170	170	170	2034
Molasses	63	63	63	63	63	63	63	63	63	63	63	63	750
Mineral, fresh cows	4	4	4	4	4	4	4	4	4	4	4	4	42
Mineral, lactating cows	36	36	36	36	36	36	36	36	36	36	36	36	432
Mineral, dry cows	1	1	1	1	1	1	1	1	1	1	1	1	12
Mineral, close-up cows	2	2	2	2	2	2	2	2	2	2	2	2	24

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

ltem	Value or Cost	Years of Life	Salvage Value	Salvage Value	Discount Rate	Capital Recovery	Capital Recovery
item	C031	(n)	(\$/head)	(\$/herd)	(i)	Factor	Value
Initial Capital Outlays:							
Cattle:	¢2.002.500						
Initial cow purchase	\$3,062,500 \$3,062,500	3	\$525	\$1,312,500	5.00%	0.3672	\$708,225
		3	<b>7323</b>	71,312,300	3.0070	0.3072	7700,223
Land:	\$1,787,500	20			7.500/		445.000
Land purchase*	\$600,000	30 30	\$0		7.50%	0.0727	\$45,000
Site Prep: Permits, well, roads**	\$1,187,500	30	ŞU		6.00%	0.0727	\$86,272
Feeding Facilities:	\$211,710						
Scales	\$100,000	30	\$0		6.00%	0.0727	\$7,265
Commodity shed, 7 bays	\$105,000	30	\$0		6.00%	0.0727	\$7,628
Hay storage (1,200 tons)	\$5,360	30	\$0		6.00%	0.0727	\$389
Hay tarps, 50' x 50'	\$1,350	5	\$0		6.00%	0.2374	\$320
Freestall Barn	\$3,750,000.00						
Stalls, in 5 barns, 525' x 210'	\$3,750,000.00	30			6.00%	0.0727	\$272,438
Milking Barn	\$1,181,000	30	\$118,100	\$0	6.00%	0.0727	\$85,800
Building	\$245,000			·			
Double 36 parallel stalls	\$936,000						
Hospital Barn	\$226,000	30	\$0		6.00%	0.0727	\$16,419
Building	\$70,000	30	γU		0.0070	0.0727	710,415
Double 6 parallel stalls	\$156,000						
						Takalı	6172 424
Machinery: Generator	\$1,208,503 \$45,000	25	\$4,500	\$4,500	6.00%	<b>Total:</b> 0.0782	<b>\$173,434</b> \$3,438
Farm pickups, new	\$40,000	25 8	\$4,000	\$4,000	6.00%	0.0782	\$5,438 \$6,036
Farm pickups, used	\$20,000	8	\$2,000	\$2,000	6.00%	0.1610	\$3,018
4-wheelers	\$6,000	10	\$600	\$600	6.00%	0.1359	\$770
10-wheel truck (manure removal)	\$120,000	10	\$6,000	\$12,000	6.00%	0.1359	\$15,397
Tractor-125 HP	\$95,000	20	\$9,500	\$9,500	6.00%	0.0872	\$8,024
Tractor-75 HP	\$55,000	20	\$5,500	\$5,500	6.00%	0.0872	\$4,646
Tractor-60 HP	\$41,000	20	\$4,100	\$4,100	6.00%	0.0872	\$3,463
Straw Spreader	\$70,000	10	\$3,500	\$7,000	6.00%	0.1359	\$8,982
Loaders, used	\$148,000	10	\$7,400	\$14,800	6.00%	0.1359	\$18,990
Skid steer loader	\$70,000	3	\$3,500	\$7,000	6.00%	0.3741	\$23,989
Telehandler loader	\$50,000	3	\$5,000	\$5,000	6.00%	0.3741	\$17,135
Semis, with feedbox mixers, new	\$125,000	4	\$12,500	\$12,500	6.00%	0.1610	\$18,863
Semis, with feedbox mixers, used	\$95,000	2	\$9,500	\$9,500	6.00%	0.1610	\$14,336
Dump truck	\$32,376 \$64,500	20	\$1,619	\$3,238	6.00% 6.00%	0.0872	\$2,735
Vacuum tank Backhoe	\$45,000	10 20	\$6,450 \$4,500	\$6,450 \$4,500	6.00%	0.1359 0.0872	\$8,276 \$3,801
Boxscraper	\$3,000	20	\$300	\$300	6.00%	0.0872	\$3,601
Brush hog, 10'	\$9,127	10	\$913	\$913	6.00%	0.1359	\$1,171
Gooseneck trailer, 28'	\$24,500	8	\$2,450	\$2,450	6.00%	0.1610	\$3,697
Miscellaneous	\$50,000	10	\$5,000	\$5,000	6.00%	0.1359	\$6,416
				, , , , , ,			, .,
Total Capital Costs/Salvage Value	\$11,427,213		\$217,457				
Capital Costs/Salvage Value per Head	\$4,571		\$87				
Average Capital Costs	\$5,822,335						
Average Capital Costs per Head	\$2,329						
Total Capital Recovery Costs	\$1,403,190						\$1,403,190
Capital Recovery Costs per Head	\$1,403,190 \$561						\$1,403,190 \$561
cupital necovery costs per nead				rest rate. Land is no			7501

<sup>\*</sup>Opportunity cost on land investment is calculated as land value multiplied by the interest rate. Land is not depreciable.

<sup>\*\*</sup>Site preparation charges include nutrient management expenses.