

THE ECONOMIC FEASIBILITY OF EXPANDING SWINE OPERATIONS
IN THE PANHANDLE REGION OF NORTHERN IDAHO

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Introduction

The purpose of this meeting is to explore the economic feasibility of expanding swine production in Northern Idaho. Results of a survey by the Panhandle Swine Growers Association revealed less than 300 head of brood sows in the four northern counties of Boundary, Bonner, Kootanai, and Benewah. This four-county region produced, however, over one million bushels of barley in 1975. Nearly all of this local barley was transported to Columbia River Basin feedlots or to west coast markets. Local barley could provide the primary feed requirements for a greatly expanded Northern Idaho swine industry.

The four-county region is characterized by numerous small cut-over timber farms which provide limited employment and marginal income to farm owners. An adequate supply of labor and a need for additional farm income exists in this area. Marketing grain through livestock could create more job opportunities and provide a potentially profitable alternate enterprise for part-time and full-time farmers in Northern Idaho.

The northwest is a pork deficient area. Both dressed pork and live hogs are being shipped into the area and from as far away as the

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midwestern cornbelt. This suggests there is ample opportunity for Idaho hog producers to market significantly larger swine numbers at higher net selling prices. To effectively capture a portion of this market requires that the Idaho hogman be as efficient in cost control and production practices as his competitors elsewhere.

The technology of swine confinement has been improved in recent years. With high levels of management, the problems of ventilation, humidity, diseases, manure disposal, feeding and handling, nutrition, and death losses can be significantly reduced.

The cool dry summer climate of Northern Idaho is favorable for swine production, as expensive equipment is not required to cool the swine confinement buildings. As a result of the relatively mild winters in the Panhandle, confinement housing can be designed to utilize the heat given off by the swine and thus reduce the requirements for external sources of energy for heat.

Costs and Returns for Two Types and Sizes of Swine Enterprises

Budgets for a 30 sow, semi-confinement, farrow to finish and a 90 sow, total confinement, farrow to finish hog operation are included in this paper. The information contained within these budgets was obtained by a series of interviews with a selected committee of experienced Northern Idaho hog men.

One of the underlying reasons for exploring the costs and returns associated with these swine enterprises, was to provide information relative to the current costs of swine production that could be used in approaching bankers for financing of expanded swine enterprises.

At present, the swine industry is relatively an unimportant one in Northern Idaho. However, given proper financing, a high level of

management, and current price-cost relationships, quite excellent returns can be realized. The selling prices used in this budget for fed hogs and cull breeding are slightly below the current selling prices for these types of animals on today's market. The feed costs used in these estimated costs and returns projections are also somewhat on the conservative or low side. Thus the quite profitable picture which is presented in both of these swine operations may be-- given an above average level of management--somewhat understated.

Several uncertainties exist in terms of future projections. The two primary ones being: 1) the market price of the hog being produced and sold, and 2) the price of the inputs that go into producing that hog--primarily, the cost of feed. We have seen quite violent fluctuations in the price of feed grains over the last three or four years and to a somewhat lesser extent, significant fluctuations in the price of hogs. Table 8, associated with each of these budgets, provides information for determining the break-even cost per 100 pounds of pork produced by: 1) the total annual cost per sow, 2) the number of 220 pound hogs sold per litter, and 3) the number of litters per sow per year that is produced. This information should enable the producer and his banker to determine the price, production, and cost levels necessary to assure the repayment of the producer's loan and provide a reasonable return on his investment.

Even though both of these swine budgets give a reasonably good indication of what the costs and returns in today's market might be, they understate or ignore what the first year capital requirements might be. During the first year of entering the swine business, the first six month period is assumed to be spent in planning and building the swine enterprise facilities. During the second six months, three different

groups of bred gilts would be purchased and farrowed on a staggered basis to schedule into what will eventually become a six times per year farrowing operation. No market hogs would be sold and thus no income would be received during the first year of operation. The investment and operating capital required for the first year of operation are estimated to be \$46,336 for the 30 sow, semi-confinement, farrow to finish operation; and \$210,904 for the 90 sow, total confinement, farrow to finish hog enterprise. This figure includes the operating capital and interest on the investment capital required--assuming a 90% bank loan at 9% interest for an average period of six months--during the first year of operation. The above estimates of operating capital needed also assumes that the land upon which these swine operations are to be located is presently owned by the producer and that the labor will be totally supplied by the farm family (with the exception of \$1,000 of hired labor in the 90 sow total confinement enterprise). The composition of the estimated first year's investment in operating capital is as follows:

	<u>30 Sow</u>	<u>90 Sow</u>
Breeding Stock		
Gilts @ \$120/head	\$ 3,600	\$ 10,800
Boars @ \$300/head	600	1,500
Machinery, Equipment, Buildings, & Improvements	27,333	148,600
Feed		
Breeding Stock	2,894	7,887
Weaner Pigs	1,295	4,934
Feeder Pigs	4,587	17,476
Medical Supplies & Veterinary Services	288	657
Repair & Maintenance	240	1,125
Fuel, Oil, & Utilities	375	1,395
Insurance	150	1,125

	<u>30 Sow</u>	<u>90 Sow</u>
Travel, Subscriptions, Dues	\$ 50	\$ 180
Supplies	50	---
Taxes	99	516
Hired Labor	---	500
Interest on Investment & Operating Capital (90% loan @ 9% for 1/2 year)	1,805	8,209
Cash Reserves	<u>3,000</u>	<u>6,000</u>
TOTAL	\$46,366	\$210,904

30 SOW SEMI-CONFINEMENT
FARROW TO FINISH HOG ENTERPRISE
NORTHERN IDAHO

TABLE 1
ESTIMATED COSTS AND RETURNS

IRS FORM 1040 F CODES	COSTS AND RETURNS ITEMS	TOTAL	PER SOW (30 HEAD)	YOUR ESTIMATE	
				TOTAL	PER SOW
	<u>INCOME</u> (Table 3)				
	Fed Hogs (474 x 220# x \$.45)	\$46,926	\$1,564.20		
	Cull Sows (5 x 400# x \$.36)	720	24.00		
	Cull Boars (1 x 450# x \$.30)	135	4.50		
	TOTAL CASH INCOME (Table 3)	<u>\$47,781</u>	<u>\$1,592.70</u>		
	<u>CASH OPERATING COSTS</u>				
	Medical Supplies & Veterinary Services	\$ 576	\$ 19.20		
	Repair & Maintenance	480	16.00		
	Fuel, Oil, Utilities	750	25.00		
	Insurance (liability, fire, wind)	300	10.00		
	Marketing				
	Hauling - self	---	---		
	Commission @ \$1/head average	480	16.00		
	Business Travel, Subscriptions, Dues	100	3.33		
	Supplies (heat lamps, handling equipment)	100	3.33		
	Purchased Feed (Table 4)	28,319	943.97		
	Livestock Purchases	300	10.00		
	Taxes (Table 6)	198	6.60		
	Interest on Operating Capital (\$31,603 @ 9% for 1/4 year)	711	23.70		
	TOTAL CASH OPERATING COSTS	<u>\$32,314</u>	<u>\$1,077.13</u>		
	<u>NON-CASH OPERATING COSTS</u>				
	Family Labor (1100 hrs @ \$3.00/hr)	\$ 3,300	\$ 110.00		
	Interest on Average Cash Reserves (\$3000 @ 9%)	270	9.00		
	TOTAL NON-CASH OPERATING COSTS	<u>\$ 3,570</u>	<u>\$ 119.00</u>		
	TOTAL OPERATING COSTS (CASH + NON-CASH)	35,884	1,196.13		
	RETURN ABOVE OPERATING COSTS	11,897	396.57		
	Less Depreciation (Table 5)	2,072	69.07		
	RETURN TO TOTAL CAPITAL INVESTMENT & MGMT	9,825	327.50		
	% RETURN TO TOTAL CAPITAL INVESTMENT (\$35,226)		27.89%		

TABLE 2
CAPITAL INVESTMENT SUMMARY

ASSETS		TOTAL	PER SOW (30 HEAD)	YOUR ESTIMATE	
				TOTAL	PER SOW
Cash	(Average Reserve)	\$ 3,000	\$ 100.00		
Land	(Table 5)	800	26.67		
Livestock	(Table 3)	16,544	551.47		
Buildings & Improvements	(Table 5)	7,122	237.40		
Machinery & Equipment	(Table 5)	<u>7,760</u>	<u>258.67</u>		
TOTAL INVESTMENT DUE TO SWINE ENTERPRISE		\$35,226	\$1,174.21		

TABLE 3
LIVESTOCK INVENTORY, PRODUCTION AND SALES

Kind of Livestock	Beginning of Year			To Be Purchased		Number of Head Born	Number of Head Died	Sales			
	Head	Value per Head	Total Value	Head	Value			Head	Weight per Head	Price	Total Receipts
Mature Sows	24	\$126	\$ 3,024				1	5	400#	\$.36	\$ 720
Bred Gilts	6	120	720								
Boars	2	300	600	1	\$300			1	450#	.30	135
Weaner Pigs (30# average)	50	30	1,500			660	156				
Feeder Pigs (120# average)	214	50	10,700				24	474	220#	.45	46,926
TOTAL	296	xxx	\$16,544	1	\$300	660	181	480	xxx	xxx	\$47,781

TABLE 4
FEED REQUIREMENTS AND COSTS

FEEDS	LIVESTOCK		REQUIREMENTS				SOURCE						
	Kind of ANIMAL	No. of HEAD	Length of Feeding Period (days)	Amount PER HEAD (lbs/day)	Amount PER HEAD for Feed Period (pounds)	TOTAL (Quantity) (tons)	HOME GROWN			PURCHASED			
							Quantity	Value per Unit	TOTAL VALUE	Quantity (tons)	Price per Unit (\$/ton)	TOTAL COST	
Sow Feed (16% protein)	Mature Sows	24	365	6.3	2,300	27.60				27.60	160	\$ 4,416	
	Bred Gilts	6	365	6.0	2,190	6.57				6.57	160	1,051	
	Boars	2	365	5.5	2,008	2.00				2.00	160	320	
Baby Pig Chow (18% protein)	Weaner Pigs	498	30	(lbs/mo)	5	5	1.25				1.25	300	375
				25	25	6.15				6.15	210	1,292	
Pig Starter (18% protein)	Weaner Pigs	492	30	(lbs/day)	25	25	6.15						
Pig Grower (16% protein)	Weaner Pigs (to 50#)	488	7	3.0	21	5.12				5.12	180	922	
	Feeder Pigs (above 50#)	486	14	4.6	64	15.65				15.65	180	2,817	
Pig Finisher (14% protein)	Feeder Pigs	480	91	4.9	446	107.04				107.04	160	17,126	

TOTAL VALUE OF HOME GROWN FEEDS \$

TOTAL COST OF PURCHASED FEEDS \$28,319

TABLE 5
CAPITAL INVESTMENT
Land; Buildings and Improvements; Machinery and Equipment

Column #	1	2	3	4	5	6	7	8	9
ITEM	Replacement Cost	Salvage Value	Average Value ¹	Percent Due to Swine Enterprise	Average Investment Due to Enterprise ²	Useful Life (years)	Annual Cost		
							Depreciation Straight Line ³	Interest on Investment ⁴	
Machinery & Equipment:									
Feeders (16)	\$2,240	\$ 224	\$ 1,232	100%	\$ 1,232	7	\$ 288	\$ 111	
Waterers (24)	603	60	332	100%	332	10	54	30	
Farrowing Crates (8)	3,200	320	1,760	100%	1,760	10	288	158	
Gates (16)	320	32	176	100%	176	10	29	16	
Vent Fans (5)	600	60	330	100%	330	10	54	30	
Slats (900 sq ft nursery)	1,350	0	675	100%	675	5	270	61	
Heat Units (2)	700	70	385	100%	385	10	63	35	
Feed Handling & Bins	1,400	140	770	100%	770	10	126	69	
Manure Handling Equipment	2,000	0	1,000	100%	1,000	20	100	90	
3/4 Ton Pick-up (used)	3,600	800	2,200	50%	1,100	5	280	99	
Sub-Total					\$ 7,760		\$ 1,552	\$ 699	
Buildings & Improvements:									
Existing Barn (2000 sq ft) Remodeled - Sows & Finishing	3,500	1,500	2,500	100%	2,500	10	200	225	
New Nursery Growing Barn (1000 sq ft)	4,350	800	2,575	100%	2,575	20	178	232	
New Farrowing Barn (520 sq ft)	3,470	624	2,047	100%	2,047	20	142	184	
Sub-Total					\$ 7,122		\$ 520	\$ 641	
Land: 2 acres @ \$400/acre			800	100%	800		---	72	
Sub-Total					\$ 800			\$ 72	
TOTAL					\$15,682		\$ 2,072	\$ 1,412	
PER SOW (30 HEAD)					\$522.73		\$ 69.07	\$ 47.07	

¹(Col 2 + Col 3)/2

²Col 4 x Col 5

³[(Col 2 - Col 3) x Col 5]/Col 7

⁴.09 x Col 6

TABLE 6
REAL ESTATE AND PERSONAL PROPERTY TAXES

ITEM	Number of Units (acres)	Appraised Value		Assessed Value		Levy ¢/\$ of Assessed	TAXES	
		per Unit (acre)	Total	Percent	Total		per Unit (acre)	Total
LAND	2	\$400	\$ 800	18	\$ 144	7	5	\$ 10
BUILDINGS & IMPROVEMENTS			7,122	18	1,282	7		90
MACHINERY & EQUIPMENT			7,760	18	1,397	7		98
TOTAL TAXES CHARGED TO SWINE ENTERPRISE								\$198

TABLE 7
INCOME SUMMARY

COSTS AND RETURNS ITEMS	TOTAL	PER SOW (30 HEAD)	YOUR ESTIMATE	
			TOTAL	PER SOW
TOTAL CASH INCOME (Table 1)	\$47,781	\$1,592.70		
TOTAL CASH OPERATING COSTS (Table 1)	\$32,314	\$1,077.13		
NON-CASH COSTS				
Interest on Average Cash Reserves	\$ 270	\$ 9.00		
Operator's Labor (1100 hours @ \$3.00/hr)	\$ 3,300	\$ 110.00		
SUB-TOTAL NON-CASH OPERATING COSTS (Table 1)	\$ 3,570	\$ 119.00		
Depreciation				
Machinery & Equipment (Table 5)	\$ 1,552	\$ 51.74		
Buildings & Improvements (Table 5)	520	17.33		
Sub-Total Depreciation	\$ 2,072	\$ 69.07		
Interest on Investment at 9%				
Machinery & Equipment (Table 5)	\$ 699	\$ 23.30		
Buildings & Improvements (Table 5)	641	21.37		
Livestock (Table 3)	1,489	49.63		
Land (Table 5)	72	2.40		
Sub-Total Interest on Investment	\$ 2,901	\$ 96.70		
SUB-TOTAL NON-CASH OWNERSHIP COSTS	\$ 4,973	\$ 165.77		
TOTAL NON-CASH COSTS (OPERATING & OWNERSHIP)	\$ 8,543	\$ 284.77		
TOTAL COSTS	\$40,857	\$1,361.90		
RETURN TO MANAGEMENT	\$ 6,924	\$ 230.80		
Plus Interest on Capital Investment at 9%	2,901	96.70		
RETURN TO CAPITAL INVESTMENT & MANAGEMENT	\$ 9,825	\$ 327.50		
Plus Operator's Labor	3,300	110.00		
RETURN TO CAPITAL INVESTMENT, OPERATOR'S LABOR AND MANAGEMENT	\$13,125	\$ 437.50		

TABLE 8
 COST PER 100 POUNDS OF HOG PRODUCED
 BY TOTAL ANNUAL COST PER SOW,
 NUMBER OF 220 POUND PIGS SOLD PER LITTER
 AND NUMBER OF LITTERS PER SOW PER YEAR

Annual Cost Per Sow and Number of Pigs Sold Per Litter	Number of Litters Per Sow Per Year				
	2.0	2.1	2.2	2.3	2.4
	(Costs, dollars per 100 pounds) ¹				
<u>\$1000 Cost Per Sow</u>					
7 pigs/litter	\$32.47	\$30.92	\$29.52	\$28.23	\$27.06
8	28.41	27.06	25.82	24.70	23.67
9	25.25	24.05	22.96	21.96	21.04
10	22.73	21.65	20.66	19.76	18.94
<u>\$1200 Cost Per Sow</u>					
7 pigs/litter	\$38.96	\$37.11	\$35.42	\$33.88	\$32.47
8	34.09	32.47	30.99	29.64	28.41
9	30.30	28.86	27.55	26.35	25.25
10	27.27	25.97	24.79	23.72	22.73
<u>\$1400 Cost Per Sow</u>					
7 pigs/litter	\$45.45	\$43.29	\$41.32	\$39.53	\$37.88
8	39.77	37.88	36.16	34.59	33.14
9	35.35	33.67	32.14	30.74	29.46
10	31.82	30.30	28.93	27.67	26.52
<u>\$1600 Cost Per Sow</u>					
7 pigs/litter	\$51.95	\$49.47	\$47.23	\$45.17	\$43.29
8	45.45	43.29	41.32	39.53	37.88
9	40.40	38.48	36.73	35.13	33.67
10	36.36	34.63	33.06	31.62	30.30
<u>\$1800 Cost Per Sow</u>					
7 pigs/litter	\$58.44	\$55.66	\$53.13	\$50.82	\$48.70
8	51.14	48.70	46.49	44.47	42.61
9	45.45	43.29	41.32	39.53	37.88
10	40.91	38.96	37.19	35.57	34.09
<u>\$2000 Cost Per Sow</u>					
7 pigs/litter	\$64.94	\$61.84	\$59.04	\$56.46	\$
8	56.82	54.12	51.64	49.40	
9	50.50	48.10	45.92	43.92	
10	45.46	43.30	41.32	39.52	

¹This is the price which must be received for hogs to BREAK-EVEN, at various levels of annual cost per sow, number of pigs sold per litter and number of litters per sow per year.

90 SOW TOTAL CONFINEMENT
FARROW TO FINISH HOG ENTERPRISE
NORTHERN IDAHO

TABLE 1
ESTIMATED COSTS AND RETURNS

IRS FORM 1040 F CODES	COSTS AND RETURNS ITEMS	TOTAL	PER SOW (90 HEAD)	YOUR ESTIMATE	
				TOTAL	PER SOW
	<u>INCOME (Table 3)</u>				
	Fed Hogs (1826 x 220# x \$.45)	\$180,774	\$2,008.60		
	Cull Sows (15 x 400# x \$.36)	2,160	24.00		
	Cull Boars (1.5 x 500# x \$.30)	225	2.50		
	TOTAL CASH INCOME (Table 3)	<u>\$183,159</u>	<u>\$2,035.10</u>		
	<u>CASH OPERATING COSTS</u>				
	Medical Supplies & Veterinary Services	\$ 1,314	\$ 14.60		
	Repair & Maintenance	2,250	25.00		
	Fuel, Oil & Utilities	2,790	31.00		
	Insurance (liability, fire, wind)	2,250	25.00		
	Marketing				
	Hauling @ \$1.50/head	2,764	30.71		
	Commission @ \$1.00/head average	1,843	20.48		
	Business Travel, Subscriptions, Dues	360	4.00		
	Purchased Feed	100,576	1,117.51		
	Livestock Purchases	450	5.00		
	Taxes	1,032	11.47		
	Interest on Operating Capital (\$116,985 @ 9% x 1/4 year)	2,632	29.25		
	Hired Labor (250 hrs @ \$4/hr)	1,000	11.11		
	TOTAL CASH OPERATING COSTS	<u>\$119,261</u>	<u>\$1,325.13</u>		
	<u>NON-CASH OPERATING COSTS</u>				
	Family Labor (2250 hrs @ \$4.00/hr)	\$ 9,000	\$ 100.00		
	Interest on Average Cash Reserves (\$6,000 @ 9%)	540	6.00		
	TOTAL NON-CASH OPERATING COSTS	<u>\$ 9,540</u>	<u>\$ 106.00</u>		
	TOTAL OPERATING COSTS (CASH + NON-CASH)	128,801	1,431.13		
	RETURN ABOVE OPERATING COSTS	54,358	603.98		
	Less Depreciation (Table 5)	13,212	146.80		
	RETURN TO TOTAL CAPITAL INVESTMENT & MGMT	41,146	457.18		
	% RETURN TO TOTAL CAPITAL INVESTMENT (\$136,112)		30.23%		

TABLE 2
CAPITAL INVESTMENT SUMMARY

ASSETS		TOTAL	PER SOW (90 HEAD)	YOUR ESTIMATE	
				TOTAL	PER SOW
Cash	(Average Reserve)	\$ 6,000	\$ 66.67		
Land	(Table 5)	1,200	13.33		
Livestock	(Table 3)	48,172	535.24		
Buildings & Improvements, Machinery & Equipment	(Table 5)	<u>80,740</u>	<u>897.11</u>		
TOTAL INVESTMENT DUE TO SWINE ENTERPRISE		\$136,112	\$1,512.36		

TABLE 3
LIVESTOCK INVENTORY, PRODUCTION AND SALES

Kind of Livestock	Beginning of Year			To Be Purchased		Number of Head Born	Number of Head Died	Sales			
	Head	Value per Head	Total Value	Head	Value			Head	Weight per Head	Price	Total Receipts
Sows	72	\$126	\$ 9,072				3	15	400#	\$.36	\$ 2,160
Replacement Sows	20	120	2,400				2				
Boars	5	300	1,500	1.5	\$450			1.5	500#	.30	225
Weaner Pigs (to 70#)	240	30	7,200			2,277 ¹	381				
Feeder Pigs (70 - 220#)	560	50	28,000				50	1,826	220#	.45	180,774
TOTAL	897	xxx	\$48,172	1.5	\$450	2,277	436	1,842.5	xxx	xxx	\$183,159

¹Sows farrowed 2.3 times yearly and pigs weaned at 3 weeks

TABLE 4
FEED REQUIREMENTS AND COSTS

FEEDS	LIVESTOCK		REQUIREMENTS				SOURCE					
	Kind of ANIMAL	No. of HEAD	Length of Feeding Period (days)	Amount PER HEAD (pounds)	Amount PER HEAD for Feed Period (pounds)	TOTAL (Quantity) (tons)	HOME GROWN			PURCHASED		
							Quantity	Value per Unit	TOTAL VALUE	Quantity (tons)	Price per Unit (\$/ton)	TOTAL COST
16% Protein Sow Feed	Sows	72	365	5.6	2,044	73.58				73.58	160	\$ 11,773
	Replacement Sows	20	365	5.6	2,044	20.44				20.44	160	3,270
	Boars	5	365	5.0	1,825	4.56				4.56	160	730
18% Baby Pig Chow	Weaner Pigs	1,896	30	5/mo	5	4.74				4.74	300	1,422
18% Pig Starter	Weaner Pigs	1,870	30	25/mo	25	23.38				23.38	210	4,910
16% Pig Grower (to 100#)	Weaner Pigs - Feeder Pigs	1,860	30	85/mo	85	79.05				79.05	180	14,229
14% Pig Finisher	Feeder Pigs	1,846	75	5.8	435	401.51				401.51	160	64,242
TOTAL VALUE OF HOME GROWN FEEDS							\$					
								TOTAL COST OF PURCHASED FEEDS \$100,576				

TABLE 5
CAPITAL INVESTMENT
Land; Buildings and Improvements; Machinery and Equipment

Column #	1	2	3	4	5	6	7	8	9
ITEM	Replace- ment Cost	Salvage Value	Average Value ¹	Percent Due to Swine Enterprise	Average Investment Due to Enterprise ²	Useful Life (years)	Annual Cost		
							Depreciation Straight Line ³	Interest on Investment ⁴	
<u>Machinery & Equipment, Buildings & Improvements:</u>									
Pick-up Truck	\$ 4,500	\$ 450	\$ 2,475	60%	\$ 1,485	10	\$ 243	\$ 134	
Farrowing House	36,000	3,600	19,800	100%	19,800	10	3,240	1,782	
Nursery	15,600	1,560	8,580	100%	8,580	10	1,404	722	
Finishing	52,200	5,220	28,710	100%	28,710	10	4,698	2,584	
Gestation & Boar Housing	23,000	2,300	12,650	100%	12,650	10	2,070	1,139	
Lagoon & Manure Handling Eqpt.	7,300	730	4,015	100%	4,015	10	657	361	
Feed Processing	10,000	1,000	5,500	100%	5,500	10	900	495	
Sub-Total					\$80,740		\$ 13,212	\$ 7,217	
Land: 3 acres @ \$400/acre			1,200	100%	1,200			108	
Sub-Total					\$ 1,200			\$ 108	
TOTAL					\$81,940		\$ 13,212	\$ 7,325	
PER SOW (90 HEAD)					\$910.44		\$ 146.80	\$ 81.39	

¹(Col 2 + Col 3)/2

²Col 4 x Col 5

³[(Col 2 - Col 3) x Col 5]/Col 7

⁴.09 x Col 6

TABLE 6
REAL ESTATE AND PERSONAL PROPERTY TAXES

ITEM	Number of Units	Appraised Value		Assessed Value		Levy ¢/\$	TAXES		
		per Unit	Total	Percent	Total		per Unit	Total	
LAND (acres)	3	\$400	\$ 1,200	18	\$ 216	7		\$ 15	
BUILDINGS & IMPROVEMENTS, MACHINERY & EQUIPMENT			80,741	18	14,533	7		1,017	
TOTAL TAXES CHARGED TO SWINE ENTERPRISE									\$1,032

TABLE 7
INCOME SUMMARY

COSTS AND RETURNS ITEMS	TOTAL	PER SOW (90 HEAD)	YOUR ESTIMATE	
			TOTAL	PER SOW
TOTAL CASH INCOME (Table 1)	\$183,159	\$2,035.10		
TOTAL CASH OPERATING COSTS (Table 1)	\$119,261	\$1,325.13		
NON-CASH COSTS				
Interest on Operating Capital	\$ 2,632	\$ 29.25		
Operator's Labor (2250 hrs @ \$4.00/hr)	\$ 9,000	\$ 100.00		
SUB-TOTAL NON-CASH OPERATING COSTS	\$ 11,632	\$ 129.25		
Depreciation				
Machinery & Equipment, Buildings & Improvements (Table 5)	\$ 13,212	\$ 146.80		
Interest on Investment at 9%				
Machinery & Equipment, Buildings & Improvements (Table 5)	\$ 7,217	\$ 80.19		
Livestock (Table 3)	4,335	48.17		
Land (Table 5)	108	1.20		
Sub-Total Interest on Investment	\$ 11,660	\$ 129.55		
SUB-TOTAL NON-CASH OWNERSHIP COSTS	\$ 24,872	\$ 276.35		
TOTAL NON-CASH COSTS (OPERATING & OWNERSHIP)	\$ 36,504	\$ 405.60		
TOTAL COSTS	\$155,765	\$1,730.72		
RETURN TO MANAGEMENT	\$ 27,394	\$ 304.38		
Plus Interest on Capital Investment at 9%	11,655	129.50		
RETURN TO CAPITAL INVESTMENT & MANAGEMENT	\$ 39,049	\$ 433.88		
Plus Operator's Labor	9,000	100.00		
RETURN TO CAPITAL INVESTMENT, OPERATOR'S LABOR AND MANAGEMENT	\$ 48,049	\$ 533.88		

TABLE 8
 COST PER 100 POUNDS OF HOG PRODUCED
 BY TOTAL ANNUAL COST PER SOW,
 NUMBER OF 220 POUND PIGS SOLD PER LITTER
 AND NUMBER OF LITTERS PER SOW PER YEAR

Annual Cost Per Sow and Number of Pigs Sold Per Litter	Number of Litters Per Sow Per Year				
	2.0	2.1	2.2	2.3	2.4
	(Costs, dollars per 100 pounds) ¹				
<u>\$1000 Cost Per Sow</u>					
7 pigs/litter	\$32.47	\$30.92	\$29.52	\$28.23	\$27.06
8	28.41	27.06	25.82	24.70	23.67
9	25.25	24.05	22.96	21.96	21.04
10	22.73	21.65	20.66	19.76	18.94
<u>\$1200 Cost Per Sow</u>					
7 pigs/litter	\$38.96	\$37.11	\$35.42	\$33.88	\$32.47
8	34.09	32.47	30.99	29.64	28.41
9	30.30	28.86	27.55	26.35	25.25
10	27.27	25.97	24.79	23.72	22.73
<u>\$1400 Cost Per Sow</u>					
7 pigs/litter	\$45.45	\$43.29	\$41.32	\$39.53	\$37.88
8	39.77	37.88	36.16	34.59	33.14
9	35.35	33.67	32.14	30.74	29.46
10	31.82	30.30	28.93	27.67	26.52
<u>\$1600 Cost Per Sow</u>					
7 pigs/litter	\$51.95	\$49.47	\$47.23	\$45.17	\$43.29
8	45.45	43.29	41.32	39.53	37.88
9	40.40	38.48	36.73	35.13	33.67
10	36.36	34.63	33.06	31.62	30.30
<u>\$1800 Cost Per Sow</u>					
7 pigs/litter	\$58.44	\$55.66	\$53.13	\$50.82	\$48.70
8	51.14	48.70	46.49	44.47	42.61
9	45.45	43.29	41.32	39.53	37.88
10	40.91	38.96	37.19	35.57	34.09
<u>\$2000 Cost Per Sow</u>					
7 pigs/litter	\$64.94	\$61.84	\$59.04	\$56.46	\$
8	56.82	54.12	51.64	49.40	
9	50.50	48.10	45.92	43.92	
10	45.46	43.30	41.32	39.52	

¹This is the price which must be received for hogs to BREAK-EVEN, at various levels of annual cost per sow, number of pigs sold per litter and number of litters per sow per year.