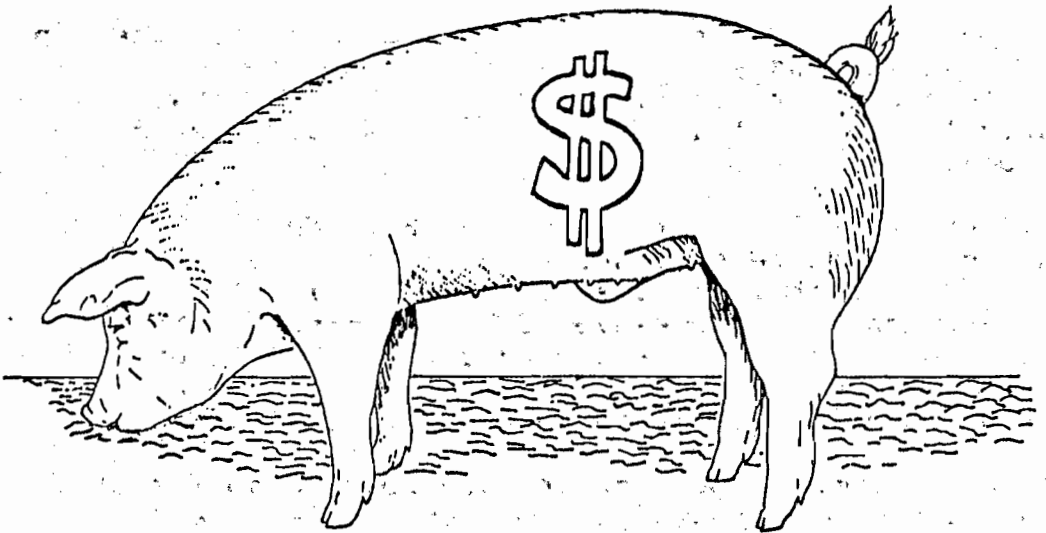


SWINE PRODUCTION COSTS

Stanislaus County
1989



William J. van Riet, Farm Advisor
Stanislaus & San Joaquin Counties

INTRODUCTION

These studies of swine production costs and returns can be used by producers, prospective producers, lenders or others interested in making swine production/economic decisions. They are quite typical for hogs produced in confinement operations in the Stanislaus County area. Yet every operation is different; and time brings price changes.

We have chosen to report costs and returns (as well as annual feed requirements) for a 100 sow operation. Three alternatives for marketing are presented.

- 1) 100 sows, selling all pigs as roasters weighing 95 lbs.
- 2) 100 sows, selling half the production as roasters and half as 235 lb. market hogs.
- 3) 100 sows, selling all pigs as 235 lb. market hogs.

SUMMARY

Under the costs and returns reported herein, the operation selling all pigs as roasters was most profitable with an income over all costs of \$498.30. Selling market hogs resulted in a (\$-1562.31) and selling half of each was intermediate with a (\$-532.00) net returns.

Of interest also is the final table shown for each study showing increasing and decreasing net returns expected with these costs if the sales price increases or decreases in \$1.00 per hundred weight increments. Break-even for marketing fat hogs is \$44.34 per cwt. As market prices decrease from that figure, marketing roasters is the most profitable alternative, whereas prices above \$44.34 favor market hog production.

Larger operations should experience some economies of scale as labor and investment costs per sow tend to decrease.

100 SOW UNIT-ALL PIGS SOLD AS MARKET HOGS

STANISLAUS COUNTY SWINE PRODUCTION COSTS
 Bill van Riet - Livestock Farm Advisor
 University of California Cooperative Extension
 Stanislaus County December 1989
 (Adapted from Farley, Merced Co., 1984)
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GENERAL INPUTS	Quantity	Unit	Number	Unit
Sow Herd----->	100	Head		
Litters/Sow----->	2.15	Litters	215	
Pigs/Litter----->	11	Pigs	2365	
Death Loss				
Sows----->	2	Percent	2	
Birth to Weaning---->	16	Percent	378	
Weaning to 40 lbs--->	1.5	Percent	30	
40 lbs to 220 lbs--->	.5	Percent	10	
Sow Cull Rate----->	30	Percent	30	
Gilt Cull Rate----->	10	Percent	3	
Sows/Boar----->	20	Head		
Replace Boars in_Yrs->	2	Years		
Creep Feed/Litter----->	20	Pounds		
Feed Costs				
Milled Feed----->	180	Dollars		
Creep Feed----->	550	Dollars		
Starter Feed----->	205	Dollars		
Depreciation, ___ Yrs->	15	Years		
Roaster/Feeder Pigs				
Sold----->			0	Pigs
Selling Weights				
Roaster/Feeder Pigs----->			95	Pounds
Market Pigs----->			235	Pounds
Cull Sows----->			450	Pounds
Cull Gilts----->			325	Pounds
Cull Boars----->			500	Pounds
Selling Prices - \$/CWT				
Roaster/Feeder Pig				
Premium - \$/CWT----->			25.00	
Market Pigs----->			44.00	
Cull Sows----->			30.00	
Cull Gilts----->			30.00	
Cull Boars----->			22.00	
Operator's Labor, \$ ----->			22000.00	
Hired Labor - Hours----->			1040	Hours

INVESTMENT COSTS	Unit	Quantity	Price or Cost/Unit	Value
Land	acres	5	8000	40000
Site Preparation				3500
Water system				8000
Farrowing House	crates	25	1100	27500
Weaning House				10000
Growing Unit				20000
Finishing Unit				24000
Sow & Boar Pens				16000
Waste Disposal System				12000
Breeding Stock				20000
TOTAL INVESTMENT				181000
Investment per Sow				1810

GROSS RECEIPTS	Wt/ Head	Unit	Quantity	Price Cost/Unit	Gross Receipts	% of Total	\$/CWT Sold	\$/ Sow	
Roaster or Feeder Pigs	95	Lbs.	0	69.00	.00	.00	.00	0	
Market Pigs	235	Lbs.	1912	44.00	197704.24	97.72	42.63	1977	
Cull Sows	450	Lbs.	30	30.00	4050.00	2.00	.87	41	
Cull Gilts	325	Lbs.	3	30.00	292.50	.14	.06	3	
Cull Boars	500	Lbs.	3	22.00	275.00	.14	.06	3	
TOTAL POUNDS PORK SOLD	463803								
TOTAL GROSS					202321.74	100.00	43.62	2023	
OPERATING COSTS			Quantity	Unit	Price /Unit	Cost			
Feed Costs									
Milled Feed			705.41	Tons	180.00	126973.00	62.28	27.38	1270
Creep Feed			2.15	Tons	550.00	1182.50	.58	.25	12
Starter Feed			53.77	Tons	205.00	11023.60	5.41	2.38	110
TOTAL FEED COSTS						139179.10	68.26	30.01	1392
Other Operating Costs									
Operator's Labor						22000.00	10.79	4.74	220
Labor, Hired			1040	Hours	8.00	8320.00	4.08	1.79	83
Supplies & Repairs			1912	Pigs Sold	1.31	2504.76	1.23	.54	25
Vet & Medicine			1912	Pigs Sold	1.25	2390.04	1.17	.52	24
Utilities			12	Months	300.00	3600.00	1.77	.78	36
Freight & Commission			1912	Pigs Sold	2.00	3824.07	1.88	.82	38
Replacement Stock			3	Boars	350.00	875.00	.43	.19	9
Auto, Office & Misc.			1912	Pigs Sold	1.00	1912	.94	.41	19
OTHER OPERATING COSTS						45425.91	22.28	9.79	454
TOTAL OPERATING COSTS						184605.00			
FIXED COSTS						Cost			
Interest on Op. Costs			12	Percent	184605	1846.05	.91	.40	18
Interest on Investment			9	Percent	181000	8145.00	3.99	1.76	81
Insurance			.68	Percent	97500	663.00	.33	.14	7
Taxes			1	Percent	157500	1575.00	.77	.34	16
Depreciation					117500	7050.00	3.46	1.52	71
TOTAL FIXED COSTS						19279.05	9.46	4.16	193
SUMMARY OF COSTS									
TOTAL FEED COSTS						139179.10	68.26	30.01	1392
TOTAL OTHER OPERATING COSTS						45425.91	22.28	9.79	454
TOTAL FIXED COSTS						19279.05	9.46	4.16	193
TOTAL COSTS						203884.05	100.00	43.96	2039
TOTAL COST(dollars)PER POUND OF PORK						.44			
TOTAL COST(cents)PER POUND OF PORK						43.96			
INCOME OVER ALL COSTS						-1562.31			
INCOME PER POUND OF PORK						.00			
INCOME PER HEAD MARKETED						-.80			

ANNUAL FEED REQUIREMENTS

Class	Number	Number Days	Milled Feed Per Hd/Day Pounds	Milled Feed Per Hd/Yr Pounds	Milled Feed Total-Class Pounds
450 Pound Boars	5	365	8	2920	14600
Adult Sows--					
Gestation	70	287	6	1722	120540
Lactation	70	78	11	858	60060
2nd Litter Gilts					
Gestation	31	129	6	774	23994
Lactation	30	35	11	385	11550
Replacement Gilts					
Growth/Gestation	35	166	8	1328	46480
Lactation	32	35	10.5	368	11760
TOTAL - Breeding Herd					288984 Pounds 144 Tons
=====					
				Lbs/Litter	Creep Feed
Nursing Litters/Year	215	28		20	4300
Weaners - 20-40 lbs.				*****	Starter Feed
Av. Daily Gain----->	.55	1957	36	1.5	55
Mkt Pigs - 40-70 lbs.					*****
Av. Daily Gain----->	1.25	1954	24	3.3	79
Mkt Pigs - 70-100 lbs.					
Av. Daily Gain----->	1.50	1950	20	4.25	85
Mkt Pigs/Replacement Gilts - 100-220lbs.					
Av. Daily Gain----->	1.75	1947	69	6	411
TOTAL - Growing Pigs					1121827 Pounds 561 Tons
=====					
TOTAL - Entire Herd					1410811 Pounds
Total Feed per Pound of Pork Sold			3.28 Pounds	705 Tons	

With total costs of \$ 203884.05 or====> 43.96 dollars / cwt. of pork, the income over all costs would change as follows with changes in the average price of pork sold.

	INCOME PER \$/CWT. SOLD	CWT. SOLD	INCOME OVER ALL COSTS
	38.62	-5.34	-24752.45
	39.62	-4.34	-20114.42
	40.62	-3.34	-15476.40
	41.62	-2.34	-10838.37
	42.62	-1.34	-6200.34
	43.62	-.34**	-1562.31
	44.62	.66	3075.72
	45.62	1.66	7713.75
	46.62	2.66	12351.77
	47.62	3.66	16989.80
	48.62	4.66	21627.83

GROSS RECEIPTS	Wt/ Head	Unit	Quantity	Price Cost/Unit	Gross Receipts	% of Total	\$/CWT Sold	\$/ Sow	
Roaster or Feeder Pigs	95	Lbs.	956	69.00	62665.80	37.72	18.99	627	
Market Pigs	235	Lbs.	956	44.00	98853.84	59.50	29.96	989	
Cull Sows	450	Lbs.	30	30.00	4050.00	2.44	1.23	41	
Cull Gilts	325	Lbs.	3	30.00	292.50	.18	.09	3	
Cull Boars	500	Lbs.	3	22.00	275.00	.17	.08	3	
TOTAL POUNDS PORK SOLD	329963								
TOTAL GROSS					166137.14	100.00	50.35	1661	

OPERATING COSTS			Quantity	Unit	Price /Unit	Cost			
Feed Costs									
Milled Feed			508.74	Tons	180.00	91573.69	54.94	27.75	916
Creep Feed			2.15	Tons	550.00	1182.50	.71	.36	12
Starter Feed			53.77	Tons	205.00	11023.60	6.61	3.34	110
TOTAL FEED COSTS						103779.78	62.27	31.45	1038

Other Operating Costs			Quantity	Unit	Cost /Unit	Cost			
Operator's Labor									
Labor, Hired			1040	Hours	8.00	8320.00	4.99	2.52	83
Supplies & Repairs			1912	Pigs Sold	1.31	2504.76	1.50	.76	25
Vet & Medicine			1912	Pigs Sold	1.25	2390.04	1.43	.72	24
Utilities			12	Months	300.00	3600.00	2.16	1.09	36
Freight & Commission			1912	Pigs Sold	2.00	3824.07	2.29	1.16	38
Replacement Stock			3	Boars	350.00	875.00	.52	.27	9
Auto, Office & Misc.			1912	Pigs Sold	1.00	1912	1.15	.58	19
OTHER OPERATING COSTS						45425.91	27.26	13.77	454
TOTAL OPERATING COSTS						149205.69			

FIXED COSTS						Cost			
Interest on Op. Costs									
Interest on Investment			12	Percent	149206	1492.06	.90	.45	15
Insurance			9	Percent	169000	7605.00	4.56	2.30	76
Taxes			.68	Percent	85500	581.40	.35	.18	6
Depreciation			1	Percent	145500	1455.00	.87	.44	15
					105500	6330.00	3.80	1.92	63
TOTAL FIXED COSTS						17463.46	10.48	5.29	175

SUMMARY OF COSTS									
TOTAL FEED COSTS						103779.78	62.27	31.45	1038
TOTAL OTHER OPERATING COSTS						45425.91	27.26	13.77	454
TOTAL FIXED COSTS						17463.46	10.48	5.29	175
TOTAL COSTS						166669.15	100.00	50.51	1667
TOTAL COST(dollars)PER POUND OF PORK						.51			
TOTAL COST(cents)PER POUND OF PORK						50.51			
INCOME OVER ALL COSTS						-532.00			
INCOME PER POUND OF PORK						.00			
INCOME PER HEAD MARKETED						-.27			

ANNUAL FEED REQUIREMENTS

Class	Number	Number Days	Milled Feed Per Hd/Day Pounds	Milled Feed Per Hd/Yr Pounds	Milled Feed Total-Class Pounds
450 Pound Boars	5	365	8	2920	14600
Adult Sows--					
Gestation	70	287	6	1722	120540
Lactation	70	78	11	858	60060
2nd Litter Gilts					
Gestation	31	129	6	774	23994
Lactation	30	35	11	385	11550
Replacement Gilts					
Growth/Gestation	35	166	8	1328	46480
Lactation	32	35	10.5	368	11760
TOTAL - Breeding Herd					288984 Pounds 144 Tons

				Lbs/Litter	Creep Feed
Nursing Litters/Year	215	28		20	4300
Weaners - 20-40 lbs.				*****	Starter Feed
Av. Daily Gain=====>	.55	1957	36	55	107547
Mkt Pigs - 40-70 lbs.					*****
Av. Daily Gain=====>	1.25	1954	24	79	154849
Mkt Pigs - 70-100 lbs.					
Av. Daily Gain=====>	1.50	1950	20	85	165912
Mkt Pigs/Replacement Gilts - 100-220lbs.					
Av. Daily Gain=====>	1.75	991	69	6	411
TOTAL - Growing Pigs					728501 Pounds 364 Tons

TOTAL - Entire Herd 1017485 Pounds
 Total Feed per Pound of Pork Sold 3.42 Pounds 509 Tons

With total costs of \$ 166669.15 or====> 50.51 dollars / cwt. of pork, the income over all costs would change as follows with changes in the average price of pork sold.

	INCOME PER \$/CWT. SOLD	CWT. SOLD	INCOME OVER ALL COSTS
	45.35	-5.16	-17030.14
	46.35	-4.16	-13730.52
	47.35	-3.16	-10430.89
	48.35	-2.16	-7131.26
	49.35	-1.16	-3831.63
	50.35	-.16**	-532.00
	51.35	.84	2767.62
	52.35	1.84	6067.25
	53.35	2.84	9366.88
	54.35	3.84	12666.51
	55.35	4.84	15966.14

GROSS RECEIPTS	Wt/ Head	Unit	Quantity	Price Cost/Unit	Gross Receipts	% of Total	\$/CWT Sold	\$/ Sow
Roaster or Feeder Pigs	95	Lbs.	1912	69.00	125331.60	96.44	63.90	1253
Market Pigs	235	Lbs.	0	44.00	3.44	.00	.00	0
Cull Sows	450	Lbs.	30	30.00	4050.00	3.12	2.07	41
Cull Gilts	325	Lbs.	3	30.00	292.50	.23	.15	3
Cull Boars	500	Lbs.	3	22.00	275.00	.21	.14	3
TOTAL POUNDS PORK SOLD	196123							
TOTAL GROSS					129952.54	100.00	66.26	1300

OPERATING COSTS		Quantity	Unit	Price /Unit	Cost			
Feed Costs								
Milled Feed		312.08	Tons	180.00	56174.37	43.39	28.64	562
Creep Feed		2.15	Tons	550.00	1182.50	.91	.60	12
Starter Feed		53.77	Tons	205.00	11023.60	8.52	5.62	110
TOTAL FEED COSTS					68380.47	52.82	34.87	684
Other Operating Costs								
		Quantity	Unit	Cost /Unit	Cost			
Operator's Labor					22000.00	16.99	11.22	220
Labor, Hired		1040	Hours	8.00	8320.00	6.43	4.24	83
Supplies & Repairs		1912	Pigs Sold	1.31	2504.76	1.93	1.28	25
Vet & Medicine		1912	Pigs Sold	1.25	2390.04	1.85	1.22	24
Utilities		12	Months	300.00	3600.00	2.78	1.84	36
Freight & Commission		1912	Pigs Sold	2.00	3824.07	2.95	1.95	38
Replacement Stock		3	Boars	350.00	875.00	.68	.45	9
Auto, Office & Misc.		1912	Pigs Sold	1.00	1912	1.48	.97	19
OTHER OPERATING COSTS					45425.91	35.09	23.16	454
TOTAL OPERATING COSTS					113806.37			

FIXED COSTS					Cost			
Interest on Op. Costs		12	Percent	113806	1138.06	.88	.58	11
Interest on Investment		9	Percent	157000	7065.00	5.46	3.60	71
Insurance		.68	Percent	73500	499.80	.39	.25	5
Taxes		1	Percent	133500	1335.00	1.03	.68	13
Depreciation				93500	5610.00	4.33	2.86	56
TOTAL FIXED COSTS					15647.86	12.09	7.98	156

SUMMARY OF COSTS								
					68380.47	52.82	34.87	684
					45425.91	35.09	23.16	454
					15647.86	12.09	7.98	156
TOTAL COSTS					129454.24	100.00	66.01	1295
TOTAL COST(dollars)PER POUND OF PORK					.66			
TOTAL COST(cents)PER POUND OF PORK					66.01			
INCOME OVER ALL COSTS					498.30			
INCOME PER POUND OF PORK					.00			
INCOME PER HEAD MARKETED					.26			

ANNUAL FEED REQUIREMENTS

Class	Number	Number Days	Milled Feed Per Hd/Day Pounds	Milled Feed Per Hd/Yr Pounds	Milled Feed Total-Class Pounds
450 Pound Boars	5	365	8	2920	14600
Adult Sows--					
Gestation	70	287	6	1722	120540
Lactation	70	78	11	858	60060
2nd Litter Gilts					
Gestation	31	129	6	774	23994
Lactation	30	35	11	385	11550
Replacement Gilts					
Growth/Gestation	35	166	8	1328	46480
Lactation	32	35	10.5	368	11760
TOTAL - Breeding Herd					288984 Pounds 144 Tons
=====					
				Lbs/Litter	Creep Feed
Nursing Litters/Year	215	28		20	4300
Weaners - 20-40 lbs.				*****	Starter Feed
Av. Daily Gain=====>	.55	1957	36	1.5	55
Mkt Pigs - 40-70 lbs.					*****
Av. Daily Gain=====>	1.25	1954	24	3.3	79
Mkt Pigs - 70-100 lbs.					
Av. Daily Gain=====>	1.50	1950	20	4.25	85
Mkt Pigs/Replacement Gilts - 100-220lbs.					
Av. Daily Gain=====>	1.75	35	69	6	411
TOTAL - Growing Pigs					335176 Pounds 168 Tons
=====					
TOTAL - Entire Herd					624160 Pounds
Total Feed per Pound of Pork Sold	3.75		Pounds		312 Tons

With total costs of \$ 129454.24 or====> 66.01 dollars / cwt. of pork,
the income over all costs would change as follows with changes in the average
price of pork sold.

	INCOME PER \$/CWT. SOLD	CWT. SOLD	INCOME OVER ALL COSTS
	61.26	-4.75	-9307.84
	62.26	-3.75	-7346.61
	63.26	-2.75	-5385.38
	64.26	-1.75	-3424.15
	65.26	-.75	-1462.92
	66.26	.25**	498.30
	67.26	1.25	2459.53
	68.26	2.25	4420.76
	69.26	3.25	6381.99
	70.26	4.25	8343.22
	71.26	5.25	10304.45