

# FARM MANAGEMENT GUIDE

## KSU Farrow-to-Finish Swine Budget

Current Prices (as of Dec. 4th, 2017)

### Production Efficiency Information

Weaned Pigs/Mated Sow/Year	23.60		
Litters/Mated Sow/Year	2.28		
Wean-Finish Mortality (%)	7.52	Nursery Feed to Gain	1.53
Market Hogs Sold/Mated Sow/Year	21.83	Grow/Finish Feed to Gain	2.54
Sow Replacement Rate	50%	Weaned Pig Weight	13.90
Sow Mortality (%)	8%	Nursery Exit Weight	51.50

Revenue	Price	Unit	Qty	Unit		Total per Year per Sow	Total per Year per Pig Sold
Market Hogs	\$ 46.41	per cwt	x 279	lbs	x 21.83 =	\$ 2,826.02	\$ 129.48
Cull Sows	\$ 46.16	per cwt	x 400	lbs	x 0.42 =	\$ 77.55	\$ 3.55
Manure Credit						\$ 130.95	\$ 6.00
Other revenue						\$ -	\$ -
<b>Gross Income</b>						<b>\$ 3,034.52</b>	<b>\$ 139.04</b>
<b>Variable Costs</b>							
Sow Feed	\$ 0.09	per lb	x 125.0	lbs	=	\$ 24.70	\$ 10.83
Nursery Feed	\$ 0.15	per lb	x 57.5	lbs	=	\$ 201.53	\$ 8.54
Grow-Finish Feed	\$ 0.08	per lb	x 577.9	lbs	=	\$ 1,009.75	\$ 46.27
Feed Processing	\$ 17.00	per ton	x 0.4	ton	=	\$ 141.06	\$ 6.46
Labor	\$ 15.00	per hour	x 6.0	hours	=	\$ 205.20	\$ 9.40
Vet Medicine/Drugs						\$ 194.86	\$ 8.93
Replacement Females	\$ 202.63	per head	x 0.50	hd	=	\$ 101.31	\$ 4.64
Semen Cost & Genetic Fee						\$ 29.64	\$ 1.36
Marketing, Bedding, and Misc						\$ 68.81	\$ 3.15
Utilities, Gas, Fuel, Oil						\$ 105.34	\$ 4.83
Machinery, Facility/Equip. Repairs						\$ 140.66	\$ 6.44
Other variable costs						\$ -	\$ -
<b>Total Variable Costs</b>						<b>\$ 2,222.87</b>	<b>\$ 110.85</b>
<b>Fixed Costs</b>							
Machinery, Facilities, General Overhead						\$ 931.05	\$ 42.66
Taxes and Insurance						\$ 49.93	\$ 2.29
Legal, Accounting, etc.						\$ 32.74	\$ 1.50
Other fixed costs						\$ -	\$ -
<b>Total Fixed Costs</b>						<b>\$ 1,013.72</b>	<b>\$ 46.45</b>
<b>Total Costs</b>						<b>\$ 3,236.58</b>	<b>\$ 157.30</b>
Income Over Variable Costs						\$ 811.66	\$ 28.18
<b>Income Over Total Costs</b>						<b>\$ (202.06)</b>	<b>\$ (18.26)</b>

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K-State's Agricultural Economics Department publishes *Farm Management Guides* to estimate the current profitability of different agricultural enterprises. This format for livestock enterprises allows the user to change certain key inputs to cater the budget to their production situation. Climate, genetics, local cash prices, and a variety of other factors makes budgeting to the entire state of Kansas difficult. While defaults in the spreadsheet are research-based estimates, users should enter their own performance, price and cost information using the cells in **blue**. Base input and output prices are currently updated quarterly. Users are encouraged to update prices to best reflect their specific situation.

Three different sets of price forecasts are available in the spreadsheet. By clicking the dropdown menu at the top of the budget, a user can select "Current Prices", "One Year Out Prices", or "Five Year Out Prices". All price assumptions can be viewed in the *Prices* tab.

Feed assumptions can be viewed in the *Feed* tab.

Base production/situation values are derived (except for sow replacement and mortality rates) from the most recent *U.S. Pork Industry Productivity Analysis* published by the National Pork Board and authored by Dr. Stalder, Iowa State University.

Most non-feed variable and fixed costs are derived from USDA ERS Cost of Production Estimates (provided in on \$/cwt gain units) last updated October 2, 2017.

### Production Efficiency Measures

**Weaned Pigs/Mated Sow/Year:** Default of 23.6 pigs.

**Litters/Mated Sow/Year:** Default value of 2.28 litters.

**Wean-Finish Mortality (%):** Default value of 7.52%.

**Market Hogs Sold/Mated Sow/Year:** Reflects number of weaned pigs and post-weaning mortality.

**Sow Replacement Rate:** Default value of 50% of herd being replaced each year.

**Sow Mortality (%):** Default value of 8%.

**Nursery to Feed Gain:** Default is 1.53 pounds of feed per pound of gain

**Grow/Finish Feed to Gain:** Default is 2.54 pounds of feed per pound of gain

**Weaned Pig Weight:** Default is 13.90 pounds, where the pigs would start the nursery diet

**Nursery Exit Weight:** Default is 51.5 pounds, which is where the pigs would transition from the nursery diet to the grow/finish diet

### Revenue

**Market Hogs:** Price is \$/cwt live weight and based upon the USDA LM\_HG203 Report with a default weight which can be adjusted.

**Cull Sows:** Price \$/cwt live weight and based upon the USDA LM\_HG230 Report with a default weight which can be adjusted.

**Manure Credit:** Default value is set at \$6/pig sold.

**Other Revenue:** Placeholder for other revenue to be entered.

### Variable Costs

**Sow, Nursery, and Grow-Finish Feed:** See *Feed* tab for ration assumptions by production phase. Final feed volumes are calculated to reflect changes in both market hogs sold and finished weights.

**Feed Processing:** Default of \$17/ton feed hauling, grinding, etc.

**Labor:** Default of 6 hours/litter valued at \$15/hour.

**Vet Medicine/Drugs:** Default of \$3.20/cwt produced.

**Replacement Females:** Reflects a \$75/head premium over the Market Hog price.

**Semen Cost and Genetic Fee:** Default of \$13/sow.

**Marketing, Bedding, Misc.:** Default of \$1.13/cwt produced.

**Utilities, Gas, Fuel, Oil:** Default of \$1.73/cwt produced.

**Machinery, Facility/Equip. Repairs:** Default of \$2.31/cwt produced.

**Other Variable Costs:** Placeholder for other variable costs to be entered.

### Fixed Costs

**Machinery, Facilities, and General Overhead:** Default of \$15.29/cwt produced.

**Taxes and Insurance:** Default of \$0.82/cwt produced.

**Legal, Accounting, etc.:** Reflects \$1.50 per pig sold, per year.

**Other Fixed Costs:** Placeholder for other fixed costs to be entered.

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### Budget Assumptions

#### Feed Ration

Ingredient	Qty	Unit
Corn, Yellow Dent	616.88	lbs
Soybean Meal, Dehull, Sol Extr	138.66	lbs
Calcium phosphate (monocalcium)	4.25	lbs
Limestone, ground	7.57	lbs
Sodium chloride	3.78	lbs
L-Lys-HCL	1.96	lbs
DL-Met	0.14	lbs
L-Thr	0.45	lbs
Ractopamine 9 g/lb	0.00	lbs
Vitamin premix with phytase	1.04	lbs
Trace mineral premix	0.87	lbs
Sow add pack	0.31	lbs
Ronozyme PMX PLT (4625 FYT/g)	0.07	lbs
Corn DDGS, 7.5% Oil	5.25	lbs
Denegard	0.09	lbs
CTC 50	0.21	lbs
Phase 2 supplement (Feb, 2014)	2.10	lbs

#### Farrow-Finish Prices

	Current	One Year Out	Five Years Out
Market Hogs (\$/cwt)	\$ 46.41	\$ 47.72	\$ 48.68
Cull Sows (\$/cwt)	\$ 46.16	\$ 47.47	\$ 48.42
Replacement Gilts (\$/hd)	\$ 202.63	\$ 208.36	\$ 212.54
Swine Feed processing (\$/ton) charge	\$ 17.00	\$ 17.00	\$ 17.00
Sow Feed (\$/lb)	\$ 0.03	\$ 0.04	\$ 0.04
Nursery Feed (\$/lb)	\$ 0.08	\$ 0.08	\$ 0.08
Grow-Finish Feed (\$/lb)	\$ 0.03	\$ 0.03	\$ 0.03
Corn (\$/bu)	\$ 3.30	\$ 3.75	\$ 3.40
Soybean Meal (\$/ton)	\$ 314.00	\$ 318.20	\$ 339.00
DDGS (\$/ton)	\$ 152.50	\$ 173.30	\$ 157.12
Other Feed Ingredients	\$ 0.09	\$ 0.09	\$ 0.09

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