

**Estimating 2009 Costs of Production  
 Wheat Following Rice, Clay Soils**

AG-1168-08-08

**Scott Stiles, Instructor/Extension Economist  
 Jason Kelley, Assistant Professor/Extension Wheat Specialist**

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
DIRECT EXPENSES					
FERTILIZERS					
DAP 18-46-0	lb	0.60	150.0000	90.00	_____
Urea, Solid (46% N)	lb	0.51	320.0000	163.20	_____
HERBICIDES					
Harmony Extra XP	oz	11.00	0.5000	5.50	_____
CROP SEED					
Wheat Seed Public	lb	0.27	120.0000	32.40	_____
ADJUVANTS					
Surfactant (80-20)	pt	1.55	0.2000	0.31	_____
CUSTOM HIRE					
Cstm Ap Grd Fert	acre	5.00	1.0000	5.00	_____
Cstm Ap Air Fert	lb	0.06	320.0000	20.00	_____
Cstm Ap Air Herb	acre	6.00	1.0000	6.00	_____
Cstm Haul Wheat	bu	0.21	50.0000	10.50	_____
OPERATOR LABOR					
Tractors	hour	9.92	0.3103	3.08	_____
Harvesters	hour	9.92	0.0851	0.84	_____
HAND LABOR					
Implements	hour	8.60	0.0942	0.81	_____
DIESEL FUEL					
Tractors	gal	4.00	3.2445	12.98	_____
Harvesters	gal	4.00	1.4243	5.70	_____
REPAIR & MAINTENANCE					
Implements	acre	3.07	1.0000	3.07	_____
Tractors	acre	1.12	1.0000	1.12	_____
Harvesters	acre	1.90	1.0000	1.90	_____
INTEREST ON OP. CAP.	acre	10.20	1.0000	10.20	_____
				-----	
TOTAL DIRECT EXPENSES				372.61	_____
FIXED EXPENSES					
Implements	acre	7.55	1.0000	7.55	_____
Tractors	acre	7.91	1.0000	7.91	_____
Harvesters	acre	8.40	1.0000	8.40	_____
				-----	
TOTAL FIXED EXPENSES				23.86	_____
				-----	
TOTAL SPECIFIED EXPENSES				396.47	_____

<sup>1</sup> fertilizer rates are for single crop wheat; not for a soybean-wheat double crop.

Visit our web site at: <http://www.uaex.edu>

View or print all of the Arkansas crop budgets at [http://www.uaex.edu/depts/ag\\_economics/crop\\_budgets.htm](http://www.uaex.edu/depts/ag_economics/crop_budgets.htm)

University of Arkansas, United States Department of Agriculture and County Governments Cooperating  
 The Division of Agriculture offers its programs to all eligible persons regardless of race, color, national origin, religion, gender, age, disability, marital or veteran status, or any other legally protected status, and is an Affirmative Action/Equal Opportunity Employer.

**Table 2. Estimated resource use and costs for field operations, per acre, Wheat Following Rice, Clay Soils, 2009.**

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT			TOTAL COST
						DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST	
						-----dollars-----				dollars		-----dollars-----			
Disk Harrow	28'	MFWD 225	0.070	2.00	Oct	7.06	3.99	1.15	2.76	0.14	1.39				16.35
Cstm Ap Grd Fert	acre			1.00	Oct							1.0000	5.00	5.00	5.00
DAP 18-46-0	lb											150.0000	0.60	90.00	90.00
Field Cultivate	32'	MFWD 225	0.046	1.00	Oct	2.35	1.33	0.31	1.50	0.04	0.46				5.95
Grain Drill	20'	2WD 190	0.094	1.00	Oct	4.01	2.26	1.12	2.45	0.18	1.75				11.59
Wheat Seed Public	lb											120.0000	0.27	32.40	32.40
Ditcher	3	MFWD 105	2.909	0.01	Oct	0.68	0.33	0.05	0.08	0.02	0.29				1.43
Cstm Ap Air Fert	lb			1.00	Feb							160.0000	0.06	10.00	10.00
Urea, Solid (46% N)	lb											160.0000	0.51	81.60	81.60
Cstm Ap Air Herb	acre			1.00	Mar							1.0000	6.00	6.00	6.00
Harmony Extra XP	oz											0.5000	11.00	5.50	5.50
Surfactant (80-20)	pt											0.2000	1.55	0.31	0.31
Cstm Ap Air Fert	lb			1.00	Mar							160.0000	0.06	10.00	10.00
Urea, Solid (46% N)	lb											160.0000	0.51	81.60	81.60
Header Wheat/Sorghum	30'	Rigid 325hp	0.085	1.00	Jun	7.60	8.40	0.44	0.76	0.08	0.84				18.04
Cstm Haul Wheat	bu											50.0000	0.21	10.50	10.50
TOTALS						21.70	16.31	3.07	7.55	0.48	4.73			332.91	386.27
INTEREST ON OPERATING CAPITAL															10.20
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															396.47

Information presented in this document is prepared solely as a general guide and is not intended to recognize or predict the costs and returns from any one particular farm operation. The mention of any commercial product in this analysis does not imply its endorsement by the University of Arkansas Cooperative Extension Service over other products not named, nor does the omission imply that they are not satisfactory. This budget does not include costs for land, overhead, or management.

**View or print all of the Arkansas crop budgets at [http://www.uaex.edu/depts/ag\\_economics/crop\\_budgets.htm](http://www.uaex.edu/depts/ag_economics/crop_budgets.htm)**

**Table 3. Breakeven Yields (BEY) Required to Cover Direct Expenses and Net Returns above Direct Expenses for Price/Yield Combinations and Select Land Tenure Arrangements, per acre.**

**Wheat, Following Rice, Clay Soils, 2009**

<b>Farm Owner</b>							
BEY (bu/acre)	Crop Price (\$/bu)						
	5.76	6.40	7.04	7.68	8.32	8.96	9.60
	Returns above Variable Costs (\$/Acre)						
38	-147	-123	-98	-74	-49	-25	0
41	-132	-105	-79	-53	-26	0	26
44	-113	-85	-57	-28	0	28	57
48	-92	-62	-31	0	31	62	92
53	-67	-34	0	34	67	101	135
58	-37	0	37	74	111	148	185
65	0	41	83	124	165	207	248

Farm Owner is assumed to have 100% Equity in Land

<b>Tenant 75-25 Crop-Share</b>							
BEY (bu/acre)	Crop Price (\$/bu)						
	5.76	6.40	7.04	7.68	8.32	8.96	9.60
	Returns above Variable Costs (\$/Acre)						
51	-148	-123	-99	-74	-49	-25	0
55	-132	-106	-79	-53	-26	0	26
59	-114	-86	-57	-29	0	29	57
65	-93	-62	-31	0	31	62	93
71	-68	-34	0	34	68	102	136
78	-37	0	37	75	112	150	187
87	0	42	83	125	167	208	250

Landowner Receives 25% of the Crop.

Tenant pays 100% of Hauling Crop to Grain Elevator

<b>Tenant 50-50 Crop-Share</b>							
BEY (bu/acre)	Crop Price (\$/bu)						
	5.76	6.40	7.04	7.68	8.32	8.96	9.60
	Returns above Variable Costs (\$/Acre)						
47	-89	-74	-60	-45	-30	-15	0
50	-80	-64	-48	-32	-16	0	16
54	-69	-52	-35	-17	0	17	35
59	-56	-38	-19	0	19	38	56
64	-41	-21	0	21	41	62	82
71	-23	0	23	45	68	91	114
79	0	25	51	76	101	127	152

Landowner Receives 50% of the Crop

Tenant Pays 100% of Hauling Crop to Elevator.

Landowner Pays 50% of:

Seed, Fertilizer, Herbicides, Fungicides,  
Insecticides, and Custom Application Costs.

<b>Tenant 80-20 Crop-Share</b>							
BEY (bu/acre)	Crop Price (\$/bu)						
	5.76	6.40	7.04	7.68	8.32	8.96	9.60
	Returns above Variable Costs (\$/Acre)						
48	-148	-123	-98	-74	-49	-25	0
52	-132	-106	-79	-53	-26	0	26
56	-114	-85	-57	-28	0	28	57
60	-93	-62	-31	0	31	62	93
66	-68	-34	0	34	68	101	135
73	-37	0	37	75	112	149	187
81	0	42	83	125	166	208	250

Landowner Receives 20% of the Crop

Tenant Pays 100% of Hauling Crop to Elevator.