

MICROCOMPUTER CROP COST AND RETURN GENERATOR

BUDGET AREA..... CURRY COUNTY Projected 2018
FARM SIZE..... 640.00 ACRES
IRRIGATION TYPE..... SPRINKLER
NUMBER OF CROPS..... 2

VERSION 1.0

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TABLE 1. Acreage Summary, Curry County,
Projected 2018

BUDGET AREA..... CURRY COUNTY			
FARM SIZE..... 640 ACRES			
IRRIGATION TYPE..... SPRINKLER			
NUMBER OF CROPS... 2			
		WATER USE	
ACREAGE SUMMARY:	LAND USE (ACRES)	AC. IN. PER ACRE	TOTAL AC. IN.
WHEAT	119	10	1,190
ARP	0		
FLEX IN WHEAT	21	10	210
CORN	306	20	6,120
ARP	0		
FLEX IN WHEAT	54	10	540
CORNERS, ROADS, HOMESTEAD	140		
TOTAL	640		8,060
ACRE FEET PER ACRE PER ACRE OF WATER RIGHTS			1.05

TABLE 2. Basic cost information for Curry County,
Projected 2018

Item			
Labor Wage Rate:			
Equipment operators		\$/hour	\$7.75
General & Irrigators		\$/hour	\$7.50
Purchased Inputs:			
Fertilizer:			
Nitrogen (N)		\$/pound	\$0.31
Phosphate (P205)		\$/pound	\$0.24
Seed:			
Corn		\$/bag	\$240.00
Wheat		\$/pound	\$0.44
Diesel fuel		\$/gallon	\$2.70
Gasoline		\$/gallon	\$2.40
Electricity (SWPS)		cents/Kwhr	7.74
LP gas		\$/gallon	\$2.90
Natural gas (Gas NM)		\$/MCF	\$4.00
Employee Liability Insurance		\$/ \$1,000 wages	\$20.00
Employee Benefits		percent/wages	18.00%
Labor Downtime		percent	25.00%
Financial Rates:			
Operating Capital Interest Rate		percent	5.50%
Land Interest Rate		percent	5.00%
Equipment Interest Rate		percent	5.50%
Real Interest Rate		percent	3.00%
Land Taxes		\$109.00 /acre (full value)	\$0.78
Personal Property Tax Rate	- NR	\$/ \$1,000 (Assessed Value)	\$21.60
	- R		\$20.65
Supervision Factors			
Field Crop-Irrigation		\$/labor hour	\$1.00
Field Crop-Equipment & General		\$/labor hour	\$0.50
Management Rate		percent	7.00%

TABLE 3. Overhead cost information for Curry County,
Projected 2018

Item			
Electricity (Domestic & Shop)		\$254.00 per month	\$3,048
Telephone		\$127.00 per month	\$1,524
Accounting & Legal			\$1,861
Misc. Supplies & Hand Tools			\$2,788
Pickup and Auto			
miles	25,400	@ \$0.500 per mile	\$12,700
Insurance			
- general liability (non-employee)			\$2,502
- fire/theft			\$2,007
Property Taxes			
- non-planted land			\$0
- other than land & machinery			\$0
Building repairs and maintenance			\$1,657
Dues, fees, publications			\$445
Farmstead Equipment			\$191
Total			\$28,721
Total Per Planned Acre			\$57.44

TABLE 6. Wheat, sprinkler-irrigated, budgeted per acre costs and returns for a 640 acre farm with above average management, Curry County,
 Projected 2018
 Planting Dates: August 15 - September 15
 Harvesting Dates: June 15 - July 15

ITEM	PRICE	YIELD	BASE	TOTAL
GROSS RETURNS				
WHEAT	\$4.40	75.00 BUSHELS		\$330.00
DIRECT PAYMENT	\$0.00	75.00 BUSHELS	0.85	\$0.00
COUNTER CYCLICAL PAYMENT	\$0.00			\$0.00
GRAZING	\$40.00	1.00 ACRE		\$40.00
TOTAL				\$370.00

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	FIXED COST	TOTAL
SEED	\$0.44	80 LBS	\$35.20		\$35.20
LIQUID FERT (28-0-0)	\$0.07	460 LBS	\$33.35		\$33.35
NITROGEN (N)	\$0.31	18 LBS	\$5.58		\$5.58
PHOSPHATE (P205)	\$0.24	46 LBS	\$11.04		\$11.04
INSECTICIDE (CUSTOM)	\$11.16	1 ACRE	\$11.16		\$11.16
HERBICIDE (CUSTOM)	\$11.16	1 ACRE	\$11.16		\$11.16
PUMP WATER*		10 AC. IN.			
CROP INSURANCE	\$0.26		\$0.26		\$0.26
SUBTOTAL			\$107.75		\$107.75

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
CHISEL	185 HP	0.15 HR		\$1.16	\$4.20	\$1.16	\$4.60	\$11.12
DISC (3X)	185 HP	0.33 HR		\$2.56	\$9.23	\$4.94	\$11.22	\$27.94
FERT SPREADER-ANHY	140 HP	0.05 HR		\$0.39	\$1.05	\$0.22	\$1.79	\$3.45
DRILL	140 HP	0.13 HR		\$1.01	\$2.74	\$0.79	\$8.51	\$13.05
IRRIGATE (7X)		0.70 HR		\$5.25	\$47.91	\$0.00	\$4.17	\$57.33
SUBTOTAL		1.36 HR		\$10.37	\$65.13	\$7.10	\$30.30	\$112.89

HARVEST OPERATIONS								
COMBINE (CUSTOM)			\$8.76					\$8.76
HAUL (CUSTOM)			\$12.00					\$12.00
SUBTOTAL			\$20.76					\$20.76

OVERHEAD EXPENSES								
DOWNTIME		0.17 HR		\$1.28				\$1.28
EMPLOYEE BENEFITS				\$1.87				\$1.87
INSURANCE			\$0.21					\$0.21
LAND TAXES							\$0.78	\$0.78
SUPERVISION AND MANAGEMENT				\$26.86				\$26.86
OTHER EXPENSES			\$57.44					\$57.44
SUBTOTAL		0.17 HR	\$57.65	\$30.00			\$0.78	\$88.43

TOTAL OPERATING EXPENSES 1.53 HR \$186.16 \$40.36 \$65.13 \$7.10 \$31.08 \$329.84

NET OPERATING PROFIT \$40.16

INTEREST ON OPERATING CAPITAL (\$73.66 @ 5.50%) \$4.05
 INTEREST ON EQUIPMENT INVESTMENT \$11.67

RETURN TO LAND AND RISK \$24.44

* Pump water costs are shown under irrigation in the preharvest operations section.

BUDGET SUMMARY

GROSS RETURN		\$370.00	
VARIABLE OPERATING EXPENSES	\$258.39		
RETURN OVER VARIABLE EXPENSES		\$111.61	(GROSS MARGIN)
FIXED EXPENSES	\$31.08		
NET FARM INCOME		\$80.53	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$40.36		
NET OPERATING PROFIT		\$40.16	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$15.72		
RETURN TO LAND AND RISK		\$24.44	

TABLE 7. Corn for grain, sprinkler-irrigated, budgeted per acre costs and returns for a 640 acre farm with above average management, Curry County, Projected 2018
 Planting Dates: April 15 - May 15
 Harvesting Dates: September 1 - October 15

ITEM	PRICE	YIELD	BASE	TOTAL
GROSS RETURNS				
CORN FOR GRAIN	\$6.61	105.00 CWT		\$693.75
DIRECT PAYMENT	\$0.00	105.00 CWT	0.85	\$0.00
COUNTER CYCLICAL PAYMENT	\$0.00	0.00 CWT		\$0.00
GRAZING	\$10.00	1.00 ACRE		\$10.00
TOTAL				\$703.75

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	FIXED COST	TOTAL
SEED	\$3.00	34 000	\$102.00		\$102.00
LIQUID FERT (28-0-0)	\$0.08	525 LBS	\$42.00		\$42.00
LIQUID FERT (46-0-0)	\$0.08	325 LBS	\$26.00		\$26.00
K-MAG	\$0.09	45 LBS	\$4.05		\$4.05
PHOSPHATE (P205)	\$0.24	100 LBS	\$24.00		\$24.00
NITROGEN (N)	\$0.31	50 LBS	\$15.50		\$15.50
HERBICIDE (SYSTEM)	\$16.99	1 X/ACRE	\$16.99		\$16.99
INSECTICIDE (SYSTEM)	\$11.16	2 X/ACRE	\$22.32		\$22.32
TRACE ELEMENTS	\$16.00	1 ACRE	\$16.00		\$16.00
PUMP WATER*		20 AC. IN.			
CROP INSURANCE	\$0.16		\$0.16		\$0.16
SUBTOTAL			\$269.02		\$269.02

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	185 HP	0.11 HR		\$0.85	\$3.08	\$1.65	\$3.74	\$9.31
CHISEL	185 HP	0.15 HR		\$1.16	\$4.20	\$1.16	\$4.60	\$11.12
DISC (2X)	185 HP	0.22 HR		\$1.71	\$6.15	\$3.29	\$7.48	\$18.63
FERT SPREADER	140 HP	0.05 HR		\$0.39	\$1.05	\$0.22	\$1.79	\$3.45
PLANTER	140 HP	0.17 HR		\$1.32	\$3.59	\$1.09	\$8.98	\$14.97
CULTIVATOR	140 HP	0.13 HR		\$1.01	\$2.74	\$1.05	\$6.04	\$10.84
IRRIGATE (14X)		1.40 HR		\$10.50	\$95.82	\$0.00	\$8.04	\$114.36
SUBTOTAL		2.23 HR		\$16.93	\$116.63	\$8.44	\$40.68	\$182.68

HARVEST OPERATIONS				
COMBINE (CUSTOM)			\$20.00	\$20.00
HAUL (CUSTOM)			\$18.90	\$18.90
SUBTOTAL			\$38.90	\$38.90

OVERHEAD EXPENSES				
DOWNTIME		0.21 HR	\$1.61	\$1.61
EMPLOYEE BENEFITS			\$3.05	\$3.05
INSURANCE			\$0.34	\$0.34
LAND TAXES				\$0.78
SUPERVISION AND MANAGEMENT			\$51.08	\$51.08
OTHER EXPENSES			\$57.44	\$57.44
SUBTOTAL		0.21 HR	\$57.78	\$57.78

TOTAL OPERATING EXPENSES		2.44 HR	\$365.70	\$72.67	\$116.63	\$8.44	\$41.46	\$604.90
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NET OPERATING PROFIT								\$98.85
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INTEREST ON OPERATING CAPITAL	(\$169.02	@	5.50%)			\$9.30
INTEREST ON EQUIPMENT INVESTMENT								\$16.27

RETURN TO LAND AND RISK								\$73.28
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* Pump water costs are shown under irrigation in the preharvest operations section.

BUDGET SUMMARY

GROSS RETURN		\$703.75	
VARIABLE OPERATING EXPENSES	\$490.77		
RETURN OVER VARIABLE EXPENSES	\$212.98	(GROSS MARGIN)	
FIXED EXPENSES	\$41.46		
NET FARM INCOME	\$171.52	(RETURN TO CAPITAL, LABOR, LAND & RISK)	
LABOR AND MANAGEMENT COST	\$72.67		
NET OPERATING PROFIT	\$98.85	(RETURN TO CAPITAL, LAND & RISK)	
CAPITAL COSTS	\$25.57		
RETURN TO LAND AND RISK		\$73.28	

TABLE 8. Summary of per acre costs and returns for a 640 acre farm with above average management Curry County, Projected 2018

	WHEAT	CORN FOR GRAIN
	BUSHEL	CWT
PRIMARY YIELD	75.00	105.00
PRIMARY PRICE	\$4.40	\$6.61
GOVERNMENT PAYMENTS	\$0.00	\$0.00
SECOND INCOME	\$40.00 ACRE	\$10.00 ACRE
GROSS RETURN	\$370.00	\$703.75
CASH OPERATING EXPENSES		
SEED	\$35.20	\$102.00
FERTILIZER	\$49.97	\$127.55
CHEMICALS	\$22.32	\$39.31
CROP INSURANCE	\$0.26	\$0.16
OTHER PURCHASED INPUTS		
CANAL WATER		
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$17.22	\$20.81
FUEL-IRRIGATION	\$47.91	\$95.82
REPAIRS	\$7.10	\$8.44
CUSTOM CHARGES	\$20.76	\$38.90
LAND TAXES	\$0.78	\$0.78
OTHER EXPENSES	\$57.65	\$57.78
TOTAL CASH EXPENSES	\$259.18	\$491.56
RETURN OVER CASH EXPENSES	\$110.82	\$212.19
FIXED EXPENSES	\$30.30	\$40.68
TOTAL EXPENSES	\$289.47	\$532.23
NET FARM INCOME	\$80.53	\$171.52
LABOR AND MANAGEMENT COSTS	\$40.36	\$72.67
NET OPERATING PROFIT	\$40.16	\$98.85
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL	\$4.05	\$9.30
INTEREST ON EQUIPMENT INVESTMENT	\$11.67	\$16.27
TOTAL CAPITAL COSTS	\$15.72	\$25.57
RETURN TO LAND AND RISK	\$24.44	\$73.28

Flex Computation

66.41

130.23

TABLE 9. Whole farm summary, Curry County,
Projected 2018

GROSS RETURNS		
WHEAT	194 ACRES	
CROP		\$64,020
GRAZING		\$7,760
DIRECT PAYMENT		\$0
COUNTER CYCLICAL PAYMENT		\$0
CORN FOR GRAIN	306 ACRES	
CROP		\$212,288
GRAZING		\$3,060
DIRECT PAYMENT		\$0
COUNTER CYCLICAL PAYMENT		\$0
GROSS RETURN		<u>\$287,128</u>
CASH OPERATING EXPENSES		
SEED		\$38,041
FERTILIZER		\$48,724
CHEMICALS		\$16,359
CROP INSURANCE		\$100
OTHER PURCHASED INPUTS		\$0
CANAL WATER		\$0
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$9,709
FUEL-IRRIGATION		\$38,614
REPAIRS		\$3,961
CUSTOM CHARGES		\$15,931
LAND TAXES		\$392
OTHER EXPENSES		\$28,865
TOTAL CASH EXPENSES		<u>\$200,697</u>
RETURN OVER CASH EXPENSES		\$86,430
FIXED EXPENSES		\$18,324
TOTAL EXPENSES		\$219,021
NET FARM INCOME		\$68,106
LABOR AND MANAGEMENT COSTS		\$30,066
NET OPERATING PROFIT		\$38,040
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$3,631
INTEREST ON EQUIPMENT INVESTMENT		\$7,243
TOTAL CAPITAL COSTS		<u>\$10,874</u>
RETURN TO LAND AND RISK		<u><u>\$27,166</u></u>

LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
\$500 /ACRE	\$17,566	8.45%
\$1,000 /ACRE	\$7,966	4.94%
\$1,500 /ACRE	(\$1,634)	3.49%
\$2,000 /ACRE	(\$11,234)	2.70%
\$2,500 /ACRE	(\$20,834)	2.20%

* RETURN TO LAND AND RISK MINUS (INTEREST RATE TIMES LAND VALUE TIMES ACREAGE)

** NET OPERATING PROFIT DIVIDED BY (MACHINERY AND EQUIPMENT VALUE PLUS LAND VALUE)