

MICROCOMPUTER CROP COST AND RETURN GENERATOR

BUDGET AREA.....CURRY COUNTYProjected 2009.  
FARM SIZE..... 640.00 ACRES  
IRRIGATION TYPE..... SPRINKLER  
NUMBER OF CROPS.....1

VERSION 1.0

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\*\* BE SURE PRINTER IS ON AND PAPER IS ALIGNED  
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TABLE 1. Acreage Summary, Curry County,  
Projected 2009.

BUDGET AREA.....	CURRY COUNTY		
FARM SIZE.....	640 ACRES		
IRRIGATION TYPE.....	SPRINKLER		
NUMBER OF CROPS..	1		

  

ACREAGE SUMMARY:	WATER USE		
	LAND USE (ACRES)	AC. IN. PER ACRE	TOTAL AC. IN.
ALFALFA ESTABLISHMENT	100	5	500
ALFALFA HAY CORNERS, ROADS, HOMESTEAD	500	25	12,500
	140		
<b>TOTAL</b>	<b>640</b>		<b>13,000</b>
ACRE FEET PER ACRE OF WATER RIGHTS			1.69

\* DOUBLE-CROPPED

TABLE 2. Basic cost information for Curry County,  
Projected 2009.

Item			
<b>Labor Wage Rate:</b>			
Equipment operators		\$/hour	\$7.45
General & Irrigators		\$/hour	\$7.25
<b>Purchased Inputs:</b>			
<b>Fertilizer:</b>			
Nitrogen (N)		\$/pound	\$0.62
Phosphate (P205)		\$/pound	\$0.58
<b>Seed:</b>			
Alfalfa		\$/pound	\$4.00
Diesel fuel		\$/gallon	\$2.75
Gasoline		\$/gallon	\$2.50
Electricity (SWPS)		cents/KwHr	6.52
LP Gas		\$/gallon	\$2.45
Natural Gas (Gas NM)		\$/MCF	\$5.89
Plastic Twine		\$/pound	\$0.29
Employee Liability Insurance		\$/ \$1,000 wages	\$20.00
Employee Benefits		percent/wages	18.00%
Labor Downtime		percent	25.00%
<b>Financial Rates:</b>			
Operating Capital Interest Rate		percent	7.50%
Land Interest Rate		percent	7.25%
Equipment Interest Rate		percent	7.50%
Real Interest Rate		percent	3.00%
Land Taxes		\$109.00 /acre (full value)	\$0.79
Personal Property Tax Rate	- NR - R	\$/ \$1,000 (Assessed Value)	\$21.85 \$19.79
<b>Supervision Factors</b>			
Field Crop-Irrigation		\$/labor hour	\$1.00
Field Crop-Equipment & General		\$/labor hour	\$0.50
<b>Management Rate</b>		percent	7.00%

TABLE 3. Overhead cost information for Curry County,  
Projected 2009.

Item			
Electricity (Domestic & Shop)		\$232.00 per month	\$2,784
Telephone		\$116.00 per month	\$1,392
Accounting & Legal			\$1,699
Misc. Supplies & Hand Tools			\$2,546
Pickup and Auto			
miles	23,200	@	\$0.415 per mile
Insurance			
- general liability (non-employee)			\$2,285
- fire/theft			\$1,833
Property Taxes			
- non-planted land			\$0
- other than land & machinery			\$0
Building repairs and maintenance			\$1,514
Dues, fees, publications			\$418
Farmstead Equipment			\$159
		<b>Total</b>	<b>\$24,258</b>
		<b>Total Per Planted Acre</b>	<b>\$48.52</b>



TABLE 6. Alfalfa establishment, sprinkler-irrigated, budgeted per acre costs and returns for a 640 acre farm with above average management, Curry County, Projected 2009.  
Planting Dates: August 1 - September 1

ITEM	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
<b>PURCHASED INPUTS</b>								
SEED	\$4.00	30.00 LBS		\$120.00				\$120.00
NITROGEN (N)	\$0.62	20.00 LBS		\$12.40				\$12.40
PHOSPHATE (P2O5)	\$0.58	50.00 LBS		\$29.00				\$29.00
PUMP WATER*		5.00 AC. IN.						
SUBTOTAL				\$161.40				\$161.40
<b>PREHARVEST OPERATIONS</b>								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
CHISEL	185 HP	0.20 HR		\$1.49	\$5.70	\$1.45	\$10.21	\$18.86
DISC	185 HP	0.14 HR		\$1.04	\$3.99	\$1.33	\$10.19	\$16.55
FLOAT (2X)	140 HP	0.32 HR		\$2.38	\$6.88	\$1.40	\$6.42	\$17.08
PRE-IRRIGATE		0.10 HR		\$0.75	\$2.88	\$0.00	\$0.18	\$3.80
SEED (CUSTOM)			\$9.00					\$9.00
IRRIGATE (6X)		0.60 HR		\$4.35	\$17.28	\$0.00	\$1.07	\$22.70
SUBTOTAL		1.36 HR	\$9.00	\$10.01	\$36.72	\$4.18	\$28.07	\$87.98
<b>OVERHEAD EXPENSES</b>								
DOWNTIME		0.09 HR		\$0.63				\$0.63
EMPLOYEE BENEFITS				\$1.80				\$1.80
INSURANCE			\$0.03					\$0.03
SUPERVISION AND MANAGEMENT				\$18.44				\$18.44
SUBTOTAL		0.09 HR	\$0.03	\$20.87				\$20.90
<b>TOTAL OPERATING EXPENSES</b>		1.45 HR	\$170.43	\$30.88	\$36.72	\$4.18	\$28.07	\$270.28

TABLE 7. Alfalfa hay, sprinkler-irrigated, budgeted per acre costs and returns for a 640 acre farm with above average management, Curry County, Projected 2009.  
Harvesting Dates: May 15 - September 15

ITEM	PRICE	YIELD	TOTAL
<b>GROSS RETURNS</b>			
ALFALFA HAY	\$140.00	6.50 TONS (STACKED)	\$910.00
<b>TOTAL</b>			<b>\$910.00</b>

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	FIXED COST	TOTAL
NITROGEN (N)	\$0.62	100 LBS	\$62.00		\$62.00
PHOSPHATE (P205)	\$0.58	200 LBS	\$116.00		\$116.00
TRACE ELEMENTS	\$14.25	1 ACRE	\$14.25		\$14.25
HERBICIDE (CUSTOM)	\$20.54	1 ACRE	\$20.54		\$20.54
INSECTICIDE (CUSTOM)	\$14.39	1 ACRE	\$14.39		\$14.39
PLASTIC TWINE	\$0.29	170 FT/TON	\$0.08		\$0.08
ESTABLISHMENT: Principal		6 YEARS		\$45.05	\$45.05
: Interest				\$11.23	\$11.23
PUMP WATER*		25 AC. IN.			
<b>SUBTOTAL</b>			<b>\$227.26</b>	<b>\$56.28</b>	<b>\$283.54</b>

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
IRRIGATE		2.00 HR		\$14.50	\$100.79	\$0.00	\$6.24	\$121.53
<b>SUBTOTAL</b>		<b>2.00 HR</b>		<b>\$14.50</b>	<b>\$100.79</b>	<b>\$0.00</b>	<b>\$6.24</b>	<b>\$121.53</b>

**HARVEST OPERATIONS**

SWATHER (5X)	16 FT	0.55 HR		\$4.10	\$5.66	\$0.80	\$7.77	\$18.33
RAKE (5X)	96 HP	0.60 HR		\$4.47	\$10.05	\$1.50	\$2.89	\$18.91
BALER (5X)	185 HP	0.25 HR		\$1.86	\$7.12	\$1.88	\$22.92	\$33.78
FRONT END LOADER (5X)	140 HP	0.50 HR		\$3.73	\$10.75	\$3.76	\$9.59	\$27.81
<b>SUBTOTAL</b>		<b>1.90 HR</b>		<b>\$14.16</b>	<b>\$33.58</b>	<b>\$7.94</b>	<b>\$43.16</b>	<b>\$98.83</b>

**OVERHEAD EXPENSES**

DOWNTIME		0.48 HR		\$3.54				\$3.54
EMPLOYEE BENEFITS				\$5.16				\$5.16
INSURANCE			\$0.57					\$0.57
LAND TAXES						\$0.79		\$0.79
SUPERVISION AND MANAGEMENT				\$66.65				\$66.65
OTHER EXPENSES			\$48.52					\$48.52
<b>SUBTOTAL</b>		<b>0.48 HR</b>		<b>\$49.09</b>	<b>\$75.35</b>		<b>\$0.79</b>	<b>\$125.23</b>

TOTAL OPERATING EXPENSES 4.38 HR \$276.35 \$104.00 \$134.37 \$7.94 \$106.47 \$629.13

NET OPERATING PROFIT \$280.87

INTEREST ON OPERATING CAPITAL ( \$147.90 @ 7.50% ) \$11.09  
INTEREST ON EQUIPMENT INVESTMENT \$29.72

**RETURN TO LAND AND RISK \$240.05**

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

**BUDGET SUMMARY**

GROSS RETURN		\$910.00	
VARIABLE OPERATING EXPENSES	\$418.66		
RETURN OVER VARIABLE EXPENSES	\$491.34		(GROSS MARGIN)
FIXED EXPENSES	\$106.47		
NET FARM INCOME	\$384.87		(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$104.00		
NET OPERATING PROFIT	\$280.87		(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$40.81		
<b>RETURN TO LAND AND RISK</b>		<b>\$240.05</b>	

TABLE 8. Summary of per acre costs and returns for a 640 acre farm with above average management, Curry County, Projected 2009.

	ALFALFA ESTABLISHMENT	ALFALFA HAY
		TONS
PRIMARY YIELD		6.50
PRIMARY PRICE		\$140.00
GOVERNMENT PAYMENTS		\$0.00
SECOND INCOME		\$0.00
GROSS RETURN		\$910.00
CASH OPERATING EXPENSES		
SEED	\$120.00	
FERTILIZER	\$41.40	\$192.25
CHEMICALS		\$34.93
CROP INSURANCE		
OTHER PURCHASED INPUTS		\$0.08
CANAL WATER		
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$16.56	\$33.58
FUEL-IRRIGATION	\$20.16	\$100.79
REPAIRS	\$4.18	\$7.94
CUSTOM CHARGES	\$9.00	\$0.00
LAND TAXES		\$0.79
OTHER EXPENSES	\$0.03	\$49.09
TOTAL CASH EXPENSES	\$211.33	\$419.45
RETURN OVER CASH EXPENSES	(\$211.33)	\$490.55
FIXED EXPENSES	\$28.07	\$105.68
TOTAL EXPENSES	\$239.40	\$525.13
NET FARM INCOME	(\$239.40)	\$384.87
LABOR AND MANAGEMENT COSTS	\$30.88	\$104.00
NET OPERATING PROFIT	(\$270.28)	\$280.87
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$11.09
INTEREST ON EQUIPMENT INVESTMENT		\$29.72
TOTAL CAPITAL COSTS	\$0.00	\$40.81
RETURN TO LAND AND RISK	(\$270.28)	\$240.05

TABLE 9. Whole farm summary, Curry County,  
Projected 2009.

GROSS RETURNS		
ALFALFA HAY	500 ACRES	
CROP		\$455,000
GROSS RETURN		<u>\$455,000</u>
CASH OPERATING EXPENSES		
		\$12,000
		\$100,263
CHEMICALS		\$17,466
CROP INSURANCE		\$0
OTHER PURCHASED INPUTS		\$40
CANAL WATER		\$0
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$18,445
FUEL-IRRIGATION		\$52,413
REPAIRS		\$4,388
CUSTOM CHARGES		\$900
LAND TAXES		\$397
OTHER EXPENSES		\$24,547
TOTAL CASH EXPENSES		<u>\$230,859</u>
RETURN OVER CASH EXPENSES		\$224,141
FIXED EXPENSES		\$33,123
TOTAL EXPENSES		\$263,982
NET FARM INCOME		\$191,018
LABOR AND MANAGEMENT COSTS		\$55,089
NET OPERATING PROFIT		\$135,929
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$5,546
INTEREST ON EQUIPMENT INVESTMENT		\$14,860
TOTAL CAPITAL COSTS		<u>\$20,406</u>
RETURN TO LAND AND RISK		<u>\$115,523</u>

LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
\$500 /ACRE	\$105,923	25.75%
\$1,000 /ACRE	\$96,323	16.03%
\$1,500 /ACRE	\$86,723	11.64%
\$2,000 /ACRE	\$77,123	9.14%
\$2,500 /ACRE	\$67,523	7.52%

\* 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)