

MICROCOMPUTER CROP COST AND RETURN GENERATOR

BUDGET AREA..... De Baca County Projected 2006.
FARM SIZE..... 30.00 ACRES
IRRIGATION TYPE..... FLOOD
NUMBER OF CROPS..... 3

VERSION 1.0

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TABLE 1. Acreage summary of De Baca County,
Projected 2006.

BUDGET AREA.....	DE BACA COUNTY
FARM SIZE.....	30 ACRES
IRRIGATION TYPE.....	FLOOD
NUMBER OF CROPS....	3

ACREAGE SUMMARY:	WATER USE		
	LAND USE (ACRES)	AC.IN. PER AC.	TOTAL AC.IN.
ALFALFA ESTABLISHMENT	3.00 *	0	0
ALFALFA	10.00	0	0
PASTURE ESTABLISHMENT	1.00 *	0	0
PERMANENT PASTURE	20.00	0	0
TOTAL	30.00		0
ACRE FEET PER ACRE OF WATER RIGHTS			0.00

* DOUBLE-CROPPED

TABLE 2. Basic cost information for De Baca County,
Projected 2006.

Item		
Labor Wage Rate:		
Equipment operators	\$/hour	\$6.65
General & Irrigators	\$/hour	\$6.35
Purchased Inputs:		
Fertilizer:		
Nitrogen (N)	\$/pound	\$0.52
Phosphate (P205)	\$/pound	\$0.40
Seed:		
Alfalfa	\$/pound	\$3.20
Fescue	\$/pound	\$1.80
Energy:		
Butane	\$/MCF	0.00
Diesel fuel	\$/gallon	2.10
Gasoline	\$/gallon	2.00
Electricity	cents/Kwhr	8.87
Natural Gas	\$/MCF	3.28
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	8.00%
Land Interest Rate	percent	8.00%
Equipment Interest Rate	percent	8.00%
Real Interest Rate	percent	3.00%
Land Taxes	\$75.00 /acre (full value)	\$0.69
Personal Property Tax Rate	- NR - R	\$/1,000 (Assessed Value) \$27.61
Supervision Factors		
Field Crop-Irrigation	\$/labor hour	\$1.00
Field Crop-Equipment & General	\$/labor hour	\$0.50
Management Rate	percent	7.00%

TABLE 2a. Overhead cost information for De Baca County
Projected 2006.

ITEM	CROP ENTERPRISE		LIVESTOCK ENTERPRISE		TOTAL
Electricity (Domestic & Shop)	53.00 per month	572	57.24		636.00
Telephone	42.40 per month	458	45.79		508.80
Accounting & Legal		164	0.00		163.77
Misc. Supplies & Hand Tools		382	0.00		381.60
Pickup and Auto	Crop Ent. 4240.00 Livestock Ent. 2120.00				
miles	@ 0.42 per mile	1,759.60	879.80		2,639.40
Insurance					
- general liability (non-employee)		163.77	0.00		163.77
- fire/theft		137.80	0.00		137.80
Property Taxes					
- non-planted land		0.00	0.00		0.00
- other than land & machinery		0.00	0.00		0.00
Building repairs and maintenance		183.75	20.42		204.17
Dues, fees, publications		90.15	10.02		100.17
Farmstead Equipment		157.41	17.49		174.90
Total		4,068	1,031		5,110
Total Per Planted Acre		135.61			

TABLE 5. Alfalfa establishment, flood-irrigated, budgeted per acre costs and returns for a 30 acre farm with above average management, De Baca County Projected 2006.
Planting dates: September 1 - October 1

ITEM	PRICE	QUANTITY	PURCHASED INPUTS	TOTAL					
PURCHASED INPUTS									
SEED	3.20	17.00 LBS	54.40	54.40					
NITROGEN (N)	0.52	0.00 LBS	0.00	0.00					
PHOSPHATE (P2O5)	0.40	0.00 LBS	0.00	0.00					
CANAL WATER		12.00 AC. IN.							
SUBTOTAL			54.40	54.40					
PREHARVEST OPERATIONS									
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
DISC	40 HP	0.31 HR		2.06	0.42	1.20	57.75	61.43	
PLOW (BORROWED)	40 HP	1.31 HR		8.71	1.78	1.41	54.80	66.71	
DISC (1X)	40 HP	0.31 HR		2.06	0.42	1.20	57.75	61.43	
BORDER DISC	40 HP	0.05 HR		0.33	0.07	0.10	37.73	38.23	
DRILL (BORROWED)	40 HP	0.41 HR		2.73	0.56	0.44	17.15	20.88	
IRRIGATE (2X)		1.00 HR		6.35				6.35	
SUBTOTAL		3.39 HR		22.24	3.25	4.35	225.18	255.03	
OVERHEAD EXPENSES									
DOWNTIME		0.85 HR		5.56				5.56	
EMPLOYEE BENEFITS				4.00				4.00	
INSURANCE			0.44					0.44	
SUPERVISION AND MANAGEMENT				23.86				23.86	
SUBTOTAL		0.85 HR	0.44	33.42				33.86	
TOTAL OPERATING EXPENSES			4.24 HR	54.84	55.66	3.25	4.35	225.18	343.29

TABLE 6. Alfalfa hay, flood-irrigated, budgeted per acre costs and returns for a 30 acre farm with above average management, De Baca County Projected 2006.
Harvest dates: June 15 - October 15

ITEM	PRICE	YIELD					TOTAL	
GROSS RETURNS								
ALFALFA HAY	100.00	5.00	TONS (STANDING)				500.00	
GRAZING	10.00	1.00	AUM				10.00	
TOTAL							510.00	
PURCHASED INPUTS								
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS		FIXED COST	TOTAL		
NITROGEN (N)	0.52	35.00	LBS		36.00	36.00		
PHOSPHATE (P2O5)	0.40	90.00	LBS		13.49	13.49		
INSECTICIDE (CUSTOM)	13.49	1.00	ACRE		13.49	13.49		
WIRE	0.50	42.85	LBS		21.43	21.43		
ESTABLISHMENT: Principal		6.00	YEARS			57.22	57.22	
: Interest						5.86	5.86	
CANAL WATER		48.00	AC. IN.			42.50	42.50	
SUBTOTAL			84.41			105.58	189.99	
PREHARVEST OPERATIONS								
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
IRRIGATE (3X)		2.25	HR		14.29			14.29
SUBTOTAL			2.25		14.29			14.29
OVERHEAD EXPENSES								
DOWNTIME					3.57			3.57
EMPLOYEE BENEFITS					2.57			2.57
INSURANCE								0.00
LAND TAXES						0.69		0.69
SUPERVISION AND MANAGEMENT					35.70			35.70
OTHER EXPENSES					135.61			135.61
SUBTOTAL					135.61	41.84	0.69	178.14
TOTAL OPERATING EXPENSES		2.25	HR		135.61	56.13	0.69	192.43
NET OPERATING PROFIT							317.57	
INTEREST ON OPERATING CAPITAL	(135.61	@	0.08)			10.85
INTEREST ON EQUIPMENT INVESTMENT								0.00
RETURN TO LAND AND RISK							306.72	
BUDGET SUMMARY								
GROSS RETURN		510.00						
VARIABLE OPERATING EXPENSES	135.61							
RETURN OVER VARIABLE EXPENSES		374.39	(GROSS MARGIN)					
FIXED EXPENSES	0.69							
NET FARM INCOME		373.70	(RETURN TO CAPITAL, LABOR, LAND & RISK)					
LABOR AND MANAGEMENT COST	56.13							
NET OPERATING PROFIT		317.57	(RETURN TO CAPITAL, LAND & RISK)					
CAPITAL COSTS	10.85							
RETURN TO LAND AND RISK		306.72						

TABLE 7. Permanent pasture establishment, flood-irrigated, budgeted per acre costs and returns for a 30 acre farm with above average management, De Baca County Projected 2006.
Planting dates: May 1 - June 15

ITEM	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
<u>PURCHASED INPUTS</u>								
FESCUE SEED	1.80	17.00 LBS	30.60				30.60	
NITROGEN	0.52	70.00 LBS	36.40				36.40	
CANAL WATER		18.00 AC. IN.						
SUBTOTAL			67.00				67.00	
<u>PREHARVEST OPERATIONS</u>								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	40 HP	0.31 HR		2.06	0.42	1.20	57.75	61.43
PLOW (BORROWED)	40 HP	1.31 HR		8.71	1.78	1.41	54.80	66.71
FERTILIZE	40 HP	0.05 HR		0.33	0.07	0.19	9.31	9.91
FLOAT	40 HP	0.32 HR		2.13	0.44	0.35	70.40	73.31
BORDER DISC	40 HP	0.00 HR		0.00	0.00	0.00	0.00	0.00
DRILL (BORROWED)	40 HP	0.41 HR		2.73	0.56	0.44	17.15	20.88
IRRIGATE (3X)		2.25 HR		14.96				14.96
SUBTOTAL		4.65 HR		30.92	3.26	3.60	209.42	247.21
<u>OVERHEAD EXPENSES</u>								
DOWNTIME		0.60 HR		0.15				0.15
EMPLOYEE BENEFITS				5.57				5.57
INSURANCE			0.62					0.62
SUPERVISION AND MANAGEMENT				25.44				25.44
SUBTOTAL		0.60 HR	0.62	31.16				31.78
<u>TOTAL OPERATING EXPENSES</u>		5.25 HR	67.62	62.08	3.26	3.60	209.42	345.98

TABLE 8. Permanent pasture, flood-irrigated, budgeted per acre costs and returns for a 30 acre farm with above average management, De Baca County Projected 2006.
Harvest dates: Year Round

ITEM	PRICE	YIELD						TOTAL	
GROSS RETURNS									
PASTURE	12.00	10.00	AUMS					120.00	
TOTAL								120.00	
PURCHASED INPUTS									
	PRICE	QUANTITY	PURCHASED INPUTS		FIXED COST		TOTAL		
PHOSPHATE	0.40	34	13.60				13.60		
NITROGEN	0.52	70.00 LBS	36.40				36.40		
ESTABLISHMENT: Principal		20.00 YEARS			17.30		17.30		
: Interest					7.08		7.08		
CANAL WATER		24.00 AC. IN.			42.50		42.50		
SUBTOTAL			50.00		66.88		116.88		
PREHARVEST OPERATIONS									
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
FERTILIZE	40HP	0.05		0.33	0.07	0.19	9.31	9.91	
IRRIGATE (3X)		5.00 HR		31.75				31.75	
CLEAN DITCHES	CUSTOM		5.00					5.00	
SUBTOTAL			5.00 HR	5.00	32.08	0.07	0.19	9.31	46.66
OVERHEAD EXPENSES									
DOWNTIME				0.00				0.00	
EMPLOYEE BENEFITS				5.77				5.77	
INSURANCE			0.64					0.64	
LAND TAXES							0.69	0.69	
SUPERVISION AND MANAGEMENT				13.40				13.40	
OTHER EXPENSES			135.61					135.61	
SUBTOTAL				136.25	19.17		0.69	156.11	
TOTAL OPERATING EXPENSES			5.00 HR	191.25	51.26	0.07	0.19	76.89	319.65
NET OPERATING PROFIT								-199.65	
INTEREST ON OPERATING CAPITAL	(116.88	@	0.08				5.31	
INTEREST ON EQUIPMENT INVESTMENT								3.40	
RETURN TO LAND AND RISK								-208.36	
BUDGET SUMMARY									
GROSS RETURN		120.00							
VARIABLE OPERATING EXPENSES	191.51								
RETURN OVER VARIABLE EXPENSES	-71.51	(GROSS MARGIN)							
FIXED EXPENSES	76.89								
NET FARM INCOME	-148.39	(RETURN TO CAPITAL, LABOR, LAND & RISK)							
LABOR AND MANAGEMENT COST	51.26								
NET OPERATING PROFIT	-199.65	(RETURN TO CAPITAL, LAND & RISK)							
CAPITAL COSTS	8.71								
RETURN TO LAND AND RISK	-208.36								

Table 9. Livestock Enterprise, cost and returns for a 30 acre farm with livestock as the primary enterprise, with above average management, De Baca County Projected 2006.

GROSS RETURNS						
NUMBER		\$/CWT	Sale Weight (CWT)	Total (\$)	Guideline Value (\$/Cow)	Guideline Value (\$/AU)
0.00	YEARLING HEIFERS	92.00	4.85	0.00	0.00	0.00
0.00	YEARLING STEERS	102.00	5.25	0.00	0.00	0.00
11.55	HEIFER CALVES	88.00	4.20	4435.20	147.84	119.79
14.55	STEER CALVES	1.00	4.70	70.50	2.35	1.90
0.00	BULLS	40.00	14.75	0.00	0.00	0.00
3.00	CULL COWS	34.00	8.85	902.70	30.09	24.38
429.30	MANURE	0.13	8.00	429.30	14.31	11.59
TOTAL				5837.70	194.59	157.67
PURCHASED INPUTS						
NUMBER	PURCHASED INPUTS	Unit	\$/Unit	Total	Guideline Value (\$/Cow)	Guideline Value (\$/AU)
FORAGE:						
10.00	ALFALFA	AUM	10.00	100.00	3.33	2.70
200.00	PERMANENT PASTURE	AUM	12.00	2400.00	80.00	64.82
SUBTOTAL				2500.00	83.33	67.52
LABOR, FEED, LIVESTOCK:						
0.60	PROTEIN SUPPLEMENT	TON	245.00	147.00	4.90	3.97
0.24	SALT & MINERALS	TON	200.00	48.00	1.60	1.30
93.72	HAY	TON	135.00	12652.20	421.74	341.72
0.00	GRAIN	TON	200.00	0.00	0.00	0.00
0.00	GRAIN CUBES	TON	200.00	0.00	0.00	0.00
	FUEL AND REPAIRS	ANNUAL		0.00	0.00	0.00
	VETERINARY AND MEDICINE	ANNUAL		818.85	27.30	22.12
0.00	BULLS PURCHASED	HEAD	1300.00	0.00	0.00	0.00
	LIVESTOCK TAXES	ANNUAL		5.75	0.19	0.16
	MAINTENANCE	ANNUAL		0.00	0.00	0.00
33.00	PREGNANCY TEST	HEAD	2.00	66.00	2.00	1.78
47.40	LABOR	HOUR	5.00	237.00	7.90	6.40
29.10	BEEF CHECKOFF PROGRAM	HEAD	1.00	29.10	0.97	0.79
	MISCELLANEOUS	ANNUAL		0.00	0.00	0.00
SUBTOTAL				14003.90	466.60	378.23
OVERHEAD EXPENSES						
	EMPLOYEE BENEFITS			0.00	0.00	0.00
	INSURANCE			0.00	0.00	0.00
	DEPRECIATION			522.50	17.42	14.11
	SUPERVISION AND MANAGEMENT			0.00	0.00	0.00
	OTHER EXPENSES			890.75	29.69	24.06
SUBTOTAL				1413.25	47.11	38.17
TOTAL OPERATING EXPENSES				17917.15	597.24	483.92
NET OPERATING PROFIT				-12079.45	-402.65	-326.25
CAPITAL COST						
	INTEREST ON OPERATING CAPITAL			644.57	21.49	17.41
	INTEREST ON MACHINERY AND IMPROVEMENTS			730.00	24.33	19.72
	INTEREST ON LIVESTOCK			0.00	0.00	0.00
TOTAL CAPITAL COST				1374.57	45.82	37.13
RETURN TO RISK				-13454.01	-448.47	-363.38
RATE OF RETURN ON INVESTMENT				-0.36		
BUDGET SUMMARY						
GROSS RETURN					5837.70	
VARIABLE OPERATING EXPENSES				16503.90		
RETURN OVER VARIABLE EXPENSES					-10666.20	
FIXED EXPENSES				1413.25		
NET FARM INCOME					-12079.45	
LABOR AND MANAGEMENT COST				0.00		
NET OPERATING PROFIT					-12079.45	
CAPITAL COST				1374.57		
RETURN TO LAND AND RISK					-13454.01	

TABLE 10. Summary of per acre costs and returns, 30 acre farm with above average management, De Baca County Projected 2006.

	ALFALFA ESTABLISHMENT	ALFALFA HAY -----FLOOD-----	PERMANENT PASTURE EST.	PERMANENT PASTURE
		TONS		AUMS
PRIMARY YIELD		5.00		10.00
PRIMARY PRICE		100.00		12.00
GOVERNMENT PAYMENTS		0.00		0.00
SECOND INCOME		10.00		0.00
GROSS RETURN		510.00		120.00
CASH OPERATING EXPENSES				
SEED	54.40		30.60	
FERTILIZER	0.00	49.49	36.40	50.00
CHEMICALS		13.49		
CROP INSURANCE				
OTHER PURCHASED INPUTS		21.43		
CANAL WATER		42.50		42.50
FUEL, OIL & LUBRICANTS-EQUIPMENT	3.25	0.00	3.26	0.07
FUEL-IRRIGATION				
REPAIRS	4.35	0.00	3.60	0.19
CUSTOM CHARGES	0.00		0.00	
LAND TAXES		0.69		0.69
OTHER EXPENSES	0.44	135.61	0.62	136.25
TOTAL CASH EXPENSES	62.45	263.20	74.48	229.70
RETURN OVER CASH EXPENSES	-62.45	246.80	-74.48	-109.70
FIXED EXPENSES	225.18	-42.50	209.42	33.70
TOTAL EXPENSES	287.63	220.70	283.90	263.39
NET FARM INCOME	-287.63	289.30	-283.90	-143.39
LABOR AND MANAGEMENT COSTS	55.66	56.13	62.08	51.26
NET OPERATING PROFIT	-343.29	233.17	-345.98	-194.65
CAPITAL COSTS				
INTEREST ON OPERATING CAPITAL		10.85		5.31
INTEREST ON EQUIPMENT INVESTMENT		0.00		3.40
TOTAL CAPITAL COSTS	0.00	10.85	0.00	8.71
RETURN TO LAND AND RISK	-343.29	222.32	-345.98	-203.36

Flex Computation

0.00 0.00

TABLE 11. Whole farm budget summary, De Baca County Projected 2006.

GROSS RETURNS		
ALFALFA HAY	10.00 ACRES	
CROP		5,000.00
GRAZING		100.00
PERMANENT PASTURE	20.00 ACRES	
GRAZING		2,400.00
LIVESTOCK		5,837.70
GROSS RETURN		<u>13,338</u>
CASH OPERATING EXPENSES		
FORAGE		2,500.00
LIVESTOCK FEED		14,003.90
SEED		193.80
FERTILIZER		1,531.31
CHEMICALS		134.91
CROP INSURANCE		0.00
OTHER PURCHASED INPUTS		214.25
CANAL WATER		1,275.00
FUEL, OIL & LUBRICANTS-EQUIPMENT		14.38
FUEL-IRRIGATION		0.00
REPAIRS		20.53
CUSTOM CHARGES		0.00
LAND TAXES		20.70
OTHER EXPENSES		4,082.96
TOTAL CASH EXPENSES		<u>23,992</u>
RETURN OVER CASH EXPENSES		-10,654.04
FIXED EXPENSES		1,133.87
TOTAL EXPENSES		25,125.61
NET FARM INCOME		-11,787.91
LABOR AND MANAGEMENT COSTS		1,815.53
NET OPERATING PROFIT		-13,603.44
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		214.69
INTEREST ON EQUIPMENT INVESTMENT		68.02
TOTAL CAPITAL COSTS		<u>283</u>
RETURN TO LAND AND RISK		<u>-13,886.14</u>

LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
1,000 /ACRE	-14,786.14	-0.33
2,000 /ACRE	-15,686.14	-0.19
3,000 /ACRE	-16,586.14	-0.13
4,000 /ACRE	-17,486.14	-0.10
5,000 /ACRE	-18,386.14	-0.08
6,000 /ACRE	-19,286.14	-0.07
7,000 /ACRE	-20,186.14	-0.06

* 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)