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Duchesne County Crop Production Costs and Returns, 2011

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Introduction

Sample costs and returns to establish and produce alfalfa hay, barley, oats, and wheat under wheel line irrigation or corn silage under pivot irrigation in Duchesne County, Utah, are presented in this publication. This publication is intended to be a guide used to make production decisions, determine potential returns and prepare business and marketing plans. The practices described are not the recommendations of Utah State University, but rather the production practices and materials considered typical of a well-managed farm in the region, as determined by producer survey results from 2011. Costs, materials, and practices are not applicable to all situations as management and cultural practices vary among growers within the region. The "Your Farm" column in all tables is provided for your use.

Farm. The representative farm consists of 400 acres of land on which 200 acres are cultivated for alfalfa production, 100 acres for barley, and 50 acres for oat and wheat production, or 100 acres for corn silage production. The market value in 2011 was approximately \$3,500 per acre for agricultural land in Duchesne County with water rights.

Crop Pricing. Five-year average pricing (2006-2010) for alfalfa hay is \$125/ton, barley \$3.48/bu, corn (silage) \$34.60/ton, wheat \$6.90/bu, and oats \$2.88/bu (UDAF, 2011).

Owner Labor. The owner is provided \$30,000 annually for the 400 acre farm or \$75/acre.

Hired Labor. Hired labor is paid \$13/hr for a total of \$8,000 annually for the 400 acre farm or \$20/acre.

Irrigation System. Wheel line system is estimated at \$13,000 for a new ¼ mile with maximum of 40 acre coverage. A full pivot irrigation system is estimated at \$100,000 including pump (Valley Irrigation Company, March 2011).

Cash Overhead. Cash overhead consists of various cash expenses paid out during the year. These costs include property taxes, interest, office expenses, liability and property insurance, accounting/legal costs, as well as investment/machinery repairs.

Property Taxes. Property taxes in Utah differ across counties. For the purposes of this publication, property taxes on buildings are calculated at 1 percent of the average asset value of the property. Property taxes on land should be taken into consideration, but are not included here.

Insurance. Insurance on farm investments vary, depending on the assets included and the amount of coverage. Property insurance provides coverage for property loss at .666 percent of the average asset value. Liability and crop insurance covers accidents and crop loss on the 400 farm at an annual cost of \$7,000.

Fuel and Lube. The fuel and lube for machinery and vehicles is calculated at 8 percent of the average asset value.

Investment Repairs. Annual repairs on all farm investments or capital recovery items that require maintenance are calculated at 2 percent of the average asset value for buildings, improvements, and equipment and 7 percent of the average asset value for machinery and vehicles.

Office & Travel. Office and travel costs are estimated at \$6,500 for an average year for the 400 acre farm. These expenses include office supplies, telephone service, Internet service, and travel expenses to educational seminars.

Accounting & Legal. Annual accounting and legal costs are estimated at \$2,600 for an average year for the 400 acre farm.

Capital Recovery. Capital recovery costs are the annual depreciation (opportunity cost) of all farm investments. Capital recovery costs are calculated using straight line depreciation. All equipment listed is new unless otherwise noted. For used machinery the price is calculated as one-half of the new purchase price and useful life is two-thirds that of new machinery (Painter, 2011)

Salvage Value. Salvage value is 10 percent of the purchase price, which is an estimate of the remaining value of an investment at the end of its useful life. The salvage value for land is the purchase price, as land does not normally depreciate.

Average Asset Value Computation

$$(\frac{\text{Purchase Price} + \text{Salvage Value}}{2})$$

Straight Line Depreciation Computation

$$(\frac{\text{Purchase Price - Salvage Value}}{\text{Useful Life}})$$

REFERENCES

Painter, Kathleen (2011). The Costs of Owning and Operating Farm Machinery in the Pacific Northwest 2011. A Pacific Northwest Publication #346. University of Idaho, Washington State University, and Oregon State University.

Utah Department of Agriculture and Food (2011). 2011 Utah Agriculture Statistics and Utah Department of Agriculture and Food Annual Report.

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Table 1: Duchesne County Alfalfa Hay Establishment Costs, 200 acres, 2011.

J	·			,	,			Total	
			Ρ	rice/Cost		Total	Co	st/Value	Your
	Total Units	Unit	ı	Per Unit	(Cost/Value	Р	er Acre	Farm
OPERATING COSTS Insecticide	200.00	Acre	\$	20.00	\$	4,000.00	\$	20.00	
Herbicide	200.00	Acre	\$	20.00	\$	4,000.00	\$	20.00	
Fertilizer	200.00	Acre	\$	120.00	\$	24,000.00	\$	120.00	
Custom Chemical App	200.00	Acre	\$	10.00	\$	2,000.00	\$	10.00	
Custom Spread and Fert	200.00	Acre	\$	5.00	\$	1,000.00	\$	5.00	
Testing (Soil & Forage)	1.00	Annual	\$	200.00	\$	200.00	\$	1.00	
Irrigation	1.00	Annual	\$	5,000.00	\$	5,000.00	\$	25.00	
Alfalfa Seed	20.00	Lbs/Acre	\$	3.50	\$	14,000.00	\$	70.00	
Labor	200.00	Acre	\$	20.00	\$	4,000.00	\$	20.00	
Operator Labor	200.00	Acre	\$	75.00	\$	15,000.00	\$	75.00	
Fuel & Lube	1.00	Annual	\$	9,450.94	\$	9,450.94	\$	47.25	
Maintenance	1.00	Annual	\$	9,534.57	\$	9,534.57	\$	47.67	
Miscellaneous	200.00	Acre	\$	5.00	\$	1,000.00	\$	5.00	
TOTAL OPERATING COSTS					\$	89,185.51	\$	445.93	
OWNERSHIP COSTS									
CASH OVERHEAD COSTS									
Liability/Crop Insurance					\$	3,500.00	\$	17.50	
Accounting & Legal					\$	1,300.00	\$	6.50	
Office & Travel					\$	3,250.00	\$	16.25	
Annual Investment Insurance					\$	1,208.04	\$	6.04	
Annual Investment Taxes					\$	220.00	\$	1.10	
TOTAL CASH OVERHEAD COST	S				\$	9,478.04	\$	47.39	
NONCASH OVERHEAD COSTS ((Canital Recovery	d)							
Buildings, Improvements, & Equip		,			\$	3,840.00	\$	19.20	
Machinery & Vehicles					\$	25,494.10	\$	127.47	
TOTAL NONCASH OVERHEAD C	COSTS				\$	29,334.10	\$	146.67	
						·			
TOTAL OWNERSHIP COSTS					\$	38,812.14	\$	194.06	
TOTAL COSTS					\$	127,997.64	\$	639.99	
YEAR ONE INCOME									
Alfalfa Hay	3.00	Tons	\$	125.00	\$	75,000.00	\$	375.00	
TOTAL GROSS INCOME					\$	75,000.00	\$	375.00	
TOTAL ESTABLISHMENT INVEST	STMENT				\$	52,997.64	\$	264.99	

Table 2: Duchesne County Alfalfa Hay Production Costs and Returns, 200 acres, 2011.

Table 2. Duenesne County	7 mana may 1	Toductio	,,,	Joses and	110	tui iis, 200 t		Total	
			Р	rice/Cost		Total		st/Value	Your
	Total Units	Unit		Per Unit	(Cost/Value	Р	er Acre	Farm
GROSS INCOME									
Alfalfa Hay	5.00	Tons	\$	125.00	\$	125,000.00	\$	625.00	
. ,			,		•	-,	·		
TOTAL GROSS INCOME					\$	125,000.00	\$	625.00	
005047W0 00070									
OPERATING COSTS	200.00	۸۵۳۵	φ	20.00	φ	4 000 00	ው	20.00	
Insecticide Herbicide	200.00	Acre	\$ \$	20.00	\$	4,000.00	\$	20.00	
	200.00	Acre		120.00	\$	24 000 00	\$	120.00	
Fertilizer	200.00	Acre	\$	120.00	\$	24,000.00	\$	120.00	
Custom Chemical App	200.00	Acre	\$	10.00	\$	2,000.00	\$	10.00	
Custom Spread and Fert	200.00	Acre	\$	5.00	\$	1,000.00	\$	5.00	
Testing (Soil & Forage)	1.00	Annual	\$	200.00	\$	200.00	\$	1.00	
Irrigation	1.00	Annual	\$	5,000.00	\$	5,000.00	\$	25.00	
Labor	200.00	Acre	\$	20.00	\$	4,000.00	\$	20.00	
Operator Labor	200.00	Acre	\$	75.00	\$	15,000.00	\$	75.00	
Fuel & Lube	1.00	Annual	\$	9,450.94	\$	9,450.94	\$	47.25	
Maintenance	1.00	Annual	\$	9,534.57	\$	9,534.57		47.67	
Miscellaneous	200.00	Acre	\$	5.00	\$	1,000.00	\$	5.00	
TOTAL OPERATING COSTS					\$	75,185.51	\$	375.93	
INCOME ABOVE OPERATIN	IC COSTS				\$	49,814.50	<u>\$</u>	249.07	
INCOME ABOVE OF ETOTING	00010				Ψ	45,614.56	Ψ	240.07	
OWNERSHIP COSTS									
CASH OVERHEAD COSTS									
Liability/Crop Insurance					\$	3,500.00	\$	17.50	
Accounting & Legal					\$	1,300.00	\$		
Office & Travel					\$	3,250.00	\$		
Annual Investment Insurance					\$	1,208.04	\$	6.04	
Annual Investment Taxes					\$	220.00	\$	1.10	
Annual investment raxes					Ψ	220.00	Ψ	1.10	
TOTAL CASH OVERHEAD C	OSTS				\$	9,478.04	\$	47.39	
						<u> </u>			
NONCASH OVERHEAD COS	STS (Capital Red	covery)							
Buildings, Improvements, & E	quipment				\$	11,411.09	\$	57.06	
Machinery & Vehicles					\$	25,494.10		127.47	
•									
TOTAL NONCASH OVERHEA	AD COSTS				\$	36,905.19	\$	184.53	
TOTAL OWNERSHIP COSTS	5				\$	46,383.23	\$	231.92	
TOTAL COCTO					φ	404 E00 74	.	007.04	
TOTAL COSTS					\$	121,568.74	\$	607.84	
NET PROJECTED RETURNS	1				\$	3,431.26	\$	17.16	
I NOOLOILD KLIOKKO	•				Ψ	5,751.20	Ψ	17.10	

Table 3: Alfalfa Hay Production Investment Summary.

Description	Pı	ırchase Price	Percentage Use	Purch	ase Price	Useful Life (Yrs)	Sa	alvage Value	nual Capital Recovery	lr	Annual surance	Annual Taxes	Annual Repairs	An	nual Fuel & Lube
Buildings, Improvements, and	Equipme	ent													
Land	\$	1,400,000.00	50%	\$	700,000.00	150.00	\$	700,000.00	\$ -	\$	-	TBD	\$ -	\$	-
Machine Shop	\$	80,000.00	50%	\$	40,000.00	40.00	\$	4,000.00	\$ 900.00	\$	146.52	\$ 220.00	\$ 440.00	\$	-
Irrigation System (Wheel Line)	\$	65,000.00	100%	\$	65,000.00	25.00	\$	6,500.00	\$ 2,340.00	\$	238.10	\$ -	\$ 715.00	\$	-
Implements	\$	20,000.00	50%	\$	10,000.00	15.00	\$	1,000.00	\$ 600.00	\$	36.63	\$ -	\$ 110.00	\$	-
Alfalfa Establishment	\$	52,997.64	100%	\$	52,997.64	7.00	\$	-	\$ 7,571.09	\$	-	\$ -	\$ -	\$	-
Sub Total Pre-Establishment	\$	1,565,000.00		\$	815,000.00		\$	711,500.00	\$ 3,840.00	\$	421.25	\$ 220.00	\$ 1,265.00	\$	<u>-</u>
Sub Total Post-Establishment	\$	1,617,997.64		\$	867,997.64		\$	711,500.00	\$ 11,411.09	\$	421.25	\$ 220.00	\$ 1,265.00	\$	-
Machinery and Vehicles															
185 HP Tractor (used)	\$	76,000.00	50%	\$	38,000.00	10.00	\$	3,800.00	\$ 3,420.00	\$	139.19	\$ -	\$ 1,463.00	\$	1,672.00
125 HP Tractor (used)	\$	46,000.00	50%	\$	23,000.00	10.00	\$	2,300.00	\$ 2,070.00	\$	84.25	\$ -	\$ 885.50	\$	1,012.00
85 HP Tractor (used)	\$	26,000.00	50%	\$	13,000.00	10.00	\$	1,300.00	\$ 1,170.00	\$	47.62	\$ -	\$ 500.50	\$	572.00
2 Ton Flatbed (used)	\$	15,000.00	50%	\$	7,500.00	10.00	\$	750.00	\$ 675.00	\$	27.47	\$ -	\$ 288.75	\$	330.00
Sw ather (used)	\$	35,000.00	100%	\$	35,000.00	7.00	\$	3,500.00	\$ 4,500.00	\$	128.21	\$ -	\$ 1,347.50	\$	1,540.00
Baler (32X34) (used)	\$	35,000.00	66%	\$	23,100.00	7.00	\$	2,310.00	\$ 2,970.00	\$	84.62	\$ -	\$ 889.35	\$	1,016.40
Harrow (used)	\$	20,000.00	66%	\$	13,200.00	7.00	\$	1,320.00	\$ 1,697.14	\$	48.35	\$ -	\$ 508.20	\$	580.80
Hydraulic Rake	\$	15,900.00	66%	\$	10,494.00	10.00	\$	1,049.40	\$ 944.46	\$	38.44	\$ -	\$ 404.02	\$	461.74
4-Wheeler (2)	\$	20,000.00	50%	\$	10,000.00	5.00	\$	1,000.00	\$ 1,800.00	\$	36.63	\$ -	\$ 385.00	\$	440.00
Backhoe (used)	\$	18,000.00	50%	\$	9,000.00	10.00	\$	900.00	\$ 810.00	\$	32.97	\$ -	\$ 346.50	\$	396.00
3/4 Ton Pickup (used)	\$	15,000.00	50%	\$	7,500.00	4.00	\$	750.00	\$ 1,687.50	\$	27.47	\$ -	\$ 288.75	\$	330.00
1 Ton Pickup	\$	50,000.00	50%	\$	25,000.00	6.00	\$	2,500.00	\$ 3,750.00	\$	91.58	\$ -	\$ 962.50	\$	1,100.00
Sub Total				\$	214,794.00		\$	21,479.40	\$ 25,494.10	\$	786.79	\$ -	\$ 8,269.57	\$	9,450.94
Total				\$ 1	,082,791.64		\$	732,979.40	\$ 36,905.19	\$	1,208.04	\$ 220.00	\$ 9,534.57	\$	9,450.94

Table 4: Duchesne County Barley Production Costs and Returns, 100 acres, 2011.

	Total Units	Unit	rice/Cost Per Unit	С	Total ost/Value		Total st/Value er Acre	Your Farm
-								
GROSS INCOME				_		_		
Barley	100.00	Bushels	\$ 3.48		34,800.00	\$	348.00	
Straw	2.00	Ton	\$ 50.00	\$	10,000.00	\$	100.00	
TOTAL GROSS INCOME				\$	44,800.00	\$	448.00	
OPERATING COSTS								
Herbicide	100.00	Acre	\$ 20.00	\$	2,000.00	\$	20.00	
Fertilizer	100.00	Acre	\$ 50.00	\$	5,000.00	\$	50.00	
Custom Fertilizer Application	100.00	Acre	\$ 5.00	\$	500.00	\$	5.00	
Custom Combine	100.00	Acre	\$ 30.00	\$	3,000.00	\$	30.00	
Seed	100.00	Acre	\$ 20.00	\$	2,000.00	\$	20.00	
Irrigation	1.00	Annual	\$ 2,500.00	\$	2,500.00	\$	25.00	
Labor	100.00	Acre	\$ 20.00	\$	2,000.00	\$	20.00	
Operator Labor	100.00	Acre	\$ 75.00	\$	7,500.00	\$	75.00	
Fuel & Lube	1.00	Annual	\$ 3,986.66	\$	3,986.66	\$	39.87	
Maintenance	1.00	Annual	\$ 4,016.33	\$	4,016.33	\$	40.16	
Miscellaneous	100.00	Acre	\$ 5.00	\$	500.00	\$	5.00	
TOTAL OPERATING COSTS				\$	33,003.00	\$	330.03	
INCOME ABOVE OPERATING	COSTS			\$	11,797.01	\$	117.97	
OWNERSHIP COSTS CASH OVERHEAD COSTS Liability/Crop Insurance				\$	1,750.00	\$	17.50	
Accounting & Legal				\$	650.00	\$	6.50	
Office & Travel				\$	1,625.00	\$	16.25	
Annual Investment Insurance				\$	507.71	\$	5.08	
Annual Investment Taxes				\$	165.00	\$	1.65	
TOTAL CASH OVERHEAD CO	OSTS			\$	4,697.71	\$	46.98	
NONCASH OVERHEAD COST	TS (Capital Rec	overy)						
Buildings, Improvements, & Ed		• •		\$	1,308.00	\$	13.08	
Machinery & Vehicles					10,582.08		105.82	
TOTAL NONCASH OVERHEA	D COSTS			\$	11,890.08	\$	118.90	
TOTAL OWNERSHIP COSTS				\$	16,587.79	\$	165.88	
TOTAL COSTS				\$	49,590.78	\$	495.91	

Table 5: Barley Production Investment Summary.

·								Annual				_	
Description		Purchase Price	Percentage Use	Purchase Price	Useful Life (Yrs)	Sa	alvage Value	Capital ecovery	Annual surance	Annual Taxes	Annual Repairs		nual Fuel & Lube
					(112)		g		 		 -		
Buildings, Improvements, and Equipment													
Land	\$ 1	,400,000.00	25%	\$ 350,000.00	150.00	\$	350,000.00	\$ -	\$ -	TBD	\$ -	\$	-
Machine Shop	\$	80,000.00	25%	\$ 20,000.00	50.00	\$	2,000.00	\$ 360.00	\$ 73.26	\$ 110.00	\$ 220.00	\$	-
Grain Bin	\$	10,000.00	100%	\$ 10,000.00	50.00	\$	1,000.00	\$ 180.00	\$ 36.63	\$ 55.00	\$ 110.00	\$	-
Irrigation System (Wheel Line)	\$	13,000.00	100%	\$ 13,000.00	25.00	\$	1,300.00	\$ 468.00	\$ 47.62	\$ -	\$ 143.00	\$	-
Implements	\$	20,000.00	25%	\$ 5,000.00	15.00	\$	500.00	\$ 300.00	\$ 18.32	\$ -	\$ 55.00	\$	-
Sub Total				\$ 393,000.00	NA	\$	354,800.00	\$ 1,308.00	\$ 175.82	\$ 165.00	\$ 528.00	\$	-
Machinery and Vehicles													
185 HP Tractor (used)	\$	76,000.00	25%	\$ 19,000.00	10.00	\$	1,900.00	\$ 1,710.00	\$ 69.60	\$ -	\$ 731.50	\$	836.00
125 HP Tractor (used)	\$	46,000.00	25%	\$ 11,500.00	10.00	\$	1,150.00	\$ 1,035.00	\$ 42.12	\$ -	\$ 442.75	\$	506.00
85 HP Tractor (used)	\$	26,000.00	25%	\$ 6,500.00	10.00	\$	650.00	\$ 585.00	\$ 23.81	\$ -	\$ 250.25	\$	286.00
2 Ton Flatbed (used)	\$	15,000.00	25%	\$ 3,750.00	10.00	\$	375.00	\$ 337.50	\$ 13.74	\$ -	\$ 144.38	\$	165.00
Sw ather (used)	\$	35,000.00	0%	\$ -	7.00	\$	-	\$ -	\$ -	\$ -	\$ -	\$	-
Baler (32X34) (used)	\$	35,000.00	34%	\$ 11,900.00	7.00	\$	1,190.00	\$ 1,530.00	\$ 43.59	\$ -	\$ 458.15	\$	523.60
Harrow (used)	\$	20,000.00	34%	\$ 6,800.00	7.00	\$	680.00	\$ 874.29	\$ 24.91	\$ -	\$ 261.80	\$	299.20
Hydraulic Rake	\$	15,900.00	34%	\$ 5,406.00	10.00	\$	540.60	\$ 486.54	\$ 19.80	\$ -	\$ 208.13	\$	237.86
4-Wheeler (2)	\$	20,000.00	25%	\$ 5,000.00	5.00	\$	500.00	\$ 900.00	\$ 18.32	\$ -	\$ 192.50	\$	220.00
Backhoe (used)	\$	18,000.00	25%	\$ 4,500.00	10.00	\$	450.00	\$ 405.00	\$ 16.48	\$ -	\$ 173.25	\$	198.00
3/4 Ton Pickup (used)	\$	15,000.00	25%	\$ 3,750.00	4.00	\$	375.00	\$ 843.75	\$ 13.74	\$ -	\$ 144.38	\$	165.00
1 Ton Pickup	\$	50,000.00	25%	\$ 12,500.00	6.00	\$	1,250.00	\$ 1,875.00	\$ 45.79	\$ -	\$ 481.25	\$	550.00
Sub Total				\$ 90,606.00	NA	\$	9,060.60	\$ 10,582.08	\$ 331.89	\$ -	\$ 3,488.33	\$	3,986.66
Total				\$ 483,606.00	NA	\$	363,860.60	\$ 11,890.08	\$ 507.71	\$ 165.00	\$ 4,016.33	\$	3,986.66

Table 6: Duchesne County Corn Silage (Pivot) Production Costs and Returns, 100 acres, 2011.

	a, a a a ga	()	ction cost			-)	Total	
	-		rice/Cost	_	Total		ost/Value	Your
	Total Units	Unit	 Per Unit		ost/Value	-	Per Acre	Farm
GROSS INCOME								
Corn Silage	25.00	Tons	\$ 34.60	\$	86,500.00	\$	865.00	
TOTAL GROSS INCOME				\$	86,500.00	\$	865.00	
TOTAL GROOD INCOME				Ψ	00,000.00	Ψ	000.00	
OPERATING COSTS								
Insecticide	100.00	Acre	\$ -	\$	-	\$	-	
Herbicide	100.00	Acre	\$ 20.00	\$	2,000.00	\$	20.00	
Fertilizer	100.00	Acre	\$ 300.00	\$	30,000.00	\$	300.00	
Custom Harvest	100.00	Acre	\$ 325.00	\$	32,500.00	\$	325.00	
Testing (Soil)	1.00	Annual	\$ 100.00	\$	100.00	\$	1.00	
Seed	100.00	Acre	\$ 90.00	\$	9,000.00	\$	90.00	
Irrigation	1.00	Annual	\$ 2,500.00	\$	2,500.00	\$	25.00	
Labor	100.00	Acre	\$ 20.00	\$	2,000.00	\$	20.00	
Operator Labor	100.00	Acre	\$ 75.00	\$	7,500.00	\$	75.00	
Fuel & Lube	1.00	Annual	\$ 2,926.00	\$	2,926.00	\$	29.26	
Maintenance	1.00	Annual	\$ 4,660.25	\$	4,660.25	\$	46.60	
Miscellaneous	100.00	Acre	\$ 5.00	\$	500.00	\$	5.00	
TOTAL OPERATING COS	TS			\$	93,686.25	\$	936.86	
INCOME ABOVE OPERA				\$	(7,186.25)	\$	(71.86)	
				<u> </u>	(1,100.20)	<u> </u>	(1.1100)	
OWNERSHIP COSTS								
CASH OVERHEAD COST	S							
Liability/Crop Insurance				\$	880.00	\$	8.80	
Accounting & Legal				\$	1,320.00	\$	13.20	
Office & Travel				\$	1,760.00	\$	17.60	
Annual Investment Insuran	ce			\$	942.89	\$	9.43	
Annual Investment Taxes				\$	610.00	\$	6.10	
TOTAL CASH OVERHEAD	COSTS			\$	5,512.89	\$	55.13	
TO THE ONOTION ENTIREME	3 00010			Ψ	0,012.00	Ψ	00.10	
NONCASH OVERHEAD C	OSTS (Capital R	(ecovery)						
Buildings, Improvements, 8		,		\$	5,450.00	\$	54.50	
Machinery & Vehicles	2 = qu.p			\$	7,691.25		76.91	
,				Ť	,	•		
TOTAL NONCASH OVER	HEAD COSTS			\$	13,141.25	\$	131.41	
TOTAL OWNERSHIP COS	STS			\$	18,654.14	\$	186.54	
-					·			
TOTAL COSTS				\$	112,340.39	\$	1,123.40	
NET PROJECTED RETUR	NS			\$	(25,840.39)	\$	(258.40)	

Table 7: Corn (Silage) Production Investment Summary.

	ı	Purchase	Percentage	Purchase	Useful Life			Annual Capital		Annual	,	Annual		Annual	Ar	nnual Fuel
Description		Price	Use	Price	(Yrs)	Sa	alvage Value	ecovery	Ins	surance	-	Taxes	R	epairs		& Lube
Buildings, Improvements, and Equipment																
Land	\$ 1	,400,000.00	25%	\$ 350,000.00	150.00	\$	350,000.00	\$ _	\$	_		TBD	\$	_	\$	_
Machine Shop	\$	80,000.00	25%	20,000.00	40.00	\$	2,000.00	\$ 450.00		73.26	\$	110.00	\$	220.00		
Silage Pit (60X200X12)	\$	100,000.00	100%	100,000.00	50.00	\$	-	\$ 2,000.00	\$	333.00	\$	500.00	\$	1,000.00	\$	_
Irrigation System (3/4 Pivot)	\$	75,000.00	100%	75,000.00	25.00	\$	7,500.00	2,700.00	·	274.73	\$	_	\$	825.00		_
Implements	\$	20,000.00	25%	5,000.00	15.00	\$	500.00	\$ 300.00		18.32	\$	-	\$	55.00		-
Sub Total				\$ 550,000.00	NA	\$	360,000.00	\$ 5,450.00	\$	699.30	\$	610.00	\$	2,100.00	\$	
Machinery and Vehicles																
185 HP Tractor (used)	\$	76,000.00	25%	\$ 19,000.00	10.00	\$	1,900.00	\$ 1,710.00	\$	69.60	\$	-	\$	731.50	\$	836.00
125 HP Tractor (used)	\$	46,000.00	25%	\$ 11,500.00	10.00	\$	1,150.00	\$ 1,035.00	\$	42.12	\$	-	\$	442.75	\$	506.00
85 HP Tractor (used)	\$	26,000.00	25%	\$ 6,500.00	10.00	\$	650.00	\$ 585.00	\$	23.81	\$	-	\$	250.25	\$	286.00
2 Ton Flatbed (used)	\$	15,000.00	25%	\$ 3,750.00	10.00	\$	375.00	\$ 337.50	\$	13.74	\$	-	\$	144.38	\$	165.00
Sw ather (used)	\$	35,000.00	0%	\$ -	7.00	\$	-	\$ -	\$	-	\$	-	\$	-	\$	-
Baler (32X34) (used)	\$	35,000.00	0%	\$ -	7.00	\$	-	\$ -	\$	-	\$	-	\$	-	\$	-
Harrow (used)	\$	20,000.00	0%	\$ -	7.00	\$	-	\$ -	\$	-	\$	-	\$	-	\$	-
Hydraulic Rake	\$	15,900.00	0%	\$ -	10.00	\$	-	\$ -	\$	-	\$	-	\$	-	\$	-
4-Wheeler (2)	\$	20,000.00	25%	\$ 5,000.00	5.00	\$	500.00	\$ 900.00	\$	18.32	\$	-	\$	192.50	\$	220.00
Backhoe (used)	\$	18,000.00	25%	\$ 4,500.00	10.00	\$	450.00	\$ 405.00	\$	16.48	\$	-	\$	173.25	\$	198.00
3/4 Ton Pickup (used)	\$	15,000.00	25%	\$ 3,750.00	4.00	\$	375.00	\$ 843.75	\$	13.74	\$	-	\$	144.38	\$	165.00
1 Ton Pickup	\$	50,000.00	25%	\$ 12,500.00	6.00	\$	1,250.00	\$ 1,875.00	\$	45.79	\$	-	\$	481.25	\$	550.00
Sub Total				\$ 66,500.00	NA	\$	6,650.00	\$ 7,691.25	\$	243.59	\$	-	\$	2,560.25	\$	2,926.00
Total				\$ 616,500.00	NA	\$	366,650.00	\$ 13,141.25	\$	942.89	\$	610.00	\$	4,660.25	\$	2,926.00

Table 8: Duchesne County Oat Production Costs and Returns, 50 acres, 2011.

Table 6. Ducheshe County			P	rice/Cost		Total	Co	Total est/Value	Your
	Total Units	Unit		Per Unit	C	ost/Value	<u> </u>	er Acre	Farm
GROSS INCOME									
Oats	80.00	Bushels	\$	2.88	\$	23,040.00	\$	230.40	
Straw	2.00	Ton	\$	50.00		10,000.00	\$	100.00	
			•		•	,	*		
TOTAL GROSS INCOME					\$	33,040.00	\$	330.40	
OPERATING COSTS									
Herbicide	100.00	Acre	\$	8.00	\$	800.00	\$	8.00	
Custom Chemical Application		Acre	\$	10.00	\$	1,000.00	\$	10.00	
Custom Combine	100.00	Acre	\$	30.00	\$	3,000.00	\$	30.00	
Seed	100.00	Acre	\$	18.00	\$	1,800.00	\$	18.00	
Irrigation	1.00	Annual	\$	1,250.00	\$	1,250.00	\$	12.50	
Labor	100.00	Acre	\$	20.00	\$	2,000.00	\$	20.00	
Operator Labor	100.00	Acre	\$	75.00	\$	7,500.00	\$	75.00	
Fuel & Lube	1.00	Annual	\$	1,463.00	\$	1,463.00	\$	14.63	
Maintenance	1.00	Annual	\$	1,560.63	\$	1,560.63	\$	15.61	
Miscellaneous	100.00	Acre	\$	5.00	\$	500.00	\$	5.00	
			•		-				
TOTAL OPERATING COSTS						20,873.63	\$	208.74	
INCOME ABOVE OPERATING	G COSTS				\$	12,166.38	\$	121.66	
OWNERSHIP COSTS									
CASH OVERHEAD COSTS									
Liability/Crop Insurance					\$	875.00	\$	8.75	
Accounting & Legal					\$	325.00	\$	3.25	
Office & Travel					\$	812.00	\$	8.12	
Annual Investment Insurance					\$	215.20	\$	2.15	
Annual Investment Taxes					\$	55.00	\$	0.55	
TOTAL CASH OVERHEAD CO	OSTS				\$	2,282.20	\$	22.82	
NONCASH OVERHEAD COS	TS (Capital Rec	overv)							
Buildings, Improvements, & E		0.0.77			\$	798.00	\$	7.98	
Machinery & Vehicles	40.6				\$	3,845.63		38.46	
					·	ŕ			
TOTAL NONCASH OVERHEA	AD COSTS				\$	4,643.63	\$	46.44	
TOTAL OWNERSHIP COSTS					\$	6,925.83	\$	69.26	
10 //L OWNALINOI III 00010					Ψ	0,020.00	Ψ	00.20	
TOTAL COSTS					\$	27,799.45	\$	277.99	
NET DDO IECTED DETUDNO					<u>r</u>	E 240 EF	¢	E2 44	
NET PROJECTED RETURNS					\$	5,240.55	\$	52.41	

Table 9: Oat Production Investment Summary.

			. .					Annual				
Description		Purchase Price	Percentage Use	Purchase Price	Useful Life (Yrs)	Sa	ılvage Value	Capital ecovery	Annual surance	Annual Faxes	Annual Repairs	ınual Fuel & Lube
•											<u> </u>	
Buildings, Improvements, and Equipment												
Land	\$ 1	,400,000.00	12.5%	\$ 175,000.00	150.00	\$	175,000.00	\$ -	\$ -	TBD	\$ -	\$ -
Machine Shop	\$	80,000.00	12.5%	\$ 10,000.00	50.00	\$	1,000.00	\$ 180.00	\$ 36.63	\$ 55.00	\$ 110.00	\$ -
Grain Bin	\$	10,000.00	0.0%	\$ -	50.00	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -
Irrigation System (Wheel Line)	\$	13,000.00	100.0%	\$ 13,000.00	25.00	\$	1,300.00	\$ 468.00	\$ 47.62	\$ -	\$ 143.00	\$ -
Implements	\$	20,000.00	12.5%	\$ 2,500.00	15.00	\$	250.00	\$ 150.00	\$ 9.16	\$ -	\$ 27.50	\$ -
Sub Total				\$ 198,000.00	NA	\$	177,550.00	\$ 798.00	\$ 93.41	\$ 55.00	\$ 280.50	\$ -
Machinery and Vehicles												
185 HP Tractor (used)	\$	76,000.00	12.5%	\$ 9,500.00	10.00	\$	950.00	\$ 855.00	\$ 34.80	\$ -	\$ 365.75	\$ 418.00
125 HP Tractor (used)	\$	46,000.00	12.5%	\$ 5,750.00	10.00	\$	575.00	\$ 517.50	\$ 21.06	\$ -	\$ 221.38	\$ 253.00
85 HP Tractor (used)	\$	26,000.00	12.5%	\$ 3,250.00	10.00	\$	325.00	\$ 292.50	\$ 11.90	\$ -	\$ 125.13	\$ 143.00
2 Ton Flatbed (used)	\$	15,000.00	12.5%	\$ 1,875.00	10.00	\$	187.50	\$ 168.75	\$ 6.87	\$ -	\$ 72.19	\$ 82.50
Sw ather (used)	\$	35,000.00	0.0%	\$ -	7.00	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -
Baler (32X34) (used)	\$	35,000.00	0.0%	\$ -	7.00	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -
Harrow (used)	\$	20,000.00	0.0%	\$ -	7.00	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -
Hydraulic Rake	\$	15,900.00	0.0%	\$ -	10.00	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -
4-Wheeler (2)	\$	20,000.00	12.5%	\$ 2,500.00	5.00	\$	250.00	\$ 450.00	\$ 9.16	\$ -	\$ 96.25	\$ 110.00
Backhoe (used)	\$	18,000.00	12.5%	\$ 2,250.00	10.00	\$	225.00	\$ 202.50	\$ 8.24	\$ -	\$ 86.63	\$ 99.00
3/4 Ton Pickup (used)	\$	15,000.00	12.5%	\$ 1,875.00	4.00	\$	187.50	\$ 421.88	\$ 6.87	\$ -	\$ 72.19	\$ 82.50
1 Ton Pickup	\$	50,000.00	12.5%	\$ 6,250.00	6.00	\$	625.00	\$ 937.50	\$ 22.89	\$ -	\$ 240.63	\$ 275.00
Sub Total				\$ 33,250.00	NA	\$	3,325.00	\$ 3,845.63	\$ 121.79	\$ -	\$ 1,280.13	\$ 1,463.00
Total				\$ 231,250.00	NA	\$	180,875.00	\$ 4,643.63	\$ 215.20	\$ 55.00	\$ 1,560.63	\$ 1,463.00

Table 10: Duchesne County Wheat Production Costs and Returns, 50 acres, 2011.

	·		ь	rice/Cost		Total	Co	Total st/Value	Your
	Total Units	Unit		Per Unit	С	ost/Value		er Acre	Farm
GROSS INCOME	20.00	Duahala	Ф	0.00	Φ	07.000.00	Ф	FF0 00	
Wheat	80.00	Bushels	\$	6.90	Ф	27,600.00	\$	552.00	
TOTAL GROSS INCOME					\$	27,600.00	\$	552.00	
OPERATING COSTS	50.00		•		•		Φ.		
Insecticide	50.00	Acre	\$	-	\$	-	\$	-	
Herbicide	50.00	Acre	\$	8.00	\$	400.00	\$	8.00	
Fertilizer	50.00	Acre	\$	50.00	\$	2,500.00	\$	50.00	
Custom Harvest/Haul	50.00	Acre	\$	75.00	\$	3,750.00	\$	75.00	
Custom Chemical	50.00	Acre	\$	15.00	\$	750.00	\$	15.00	
Seed	50.00	Acre	\$	15.00	\$	750.00	\$	15.00	
Irrigation	1.00	Annual	\$	1,250.00	\$	1,250.00	\$	25.00	
Labor	50.00	Acre	\$	20.00	\$	1,000.00	\$	20.00	
Operator Labor	50.00	Acre	\$	75.00	\$	3,750.00	\$	75.00	
Fuel & Lube	1.00	Annual	\$	1,463.00	\$	1,463.00	\$	29.26	
Maintenance	1.00	Annual	\$	1,560.63	\$	1,560.63	\$	31.21	
Miscellaneous	50.00	Acre	\$	5.00	\$	250.00	\$	5.00	
TOTAL OPERATING COS	STS				\$	17,423.63	\$	348.47	
INCOME ABOVE OPERA						10,176.38	\$	203.53	
						,	<u> </u>		
OWNERSHIP COSTS									
CASH OVERHEAD COST	TS								
Liability/Crop Insurance					\$	875.00	\$	17.50	
Accounting & Legal					\$	325.00	\$	6.50	
Office & Travel					\$	812.00	\$	16.24	
Annual Investment Insura	nce				\$	215.20	\$	4.30	
Annual Investment Taxes					\$	55.00	\$	1.10	
TOTAL CASH OVERHEA	D COSTS				\$	2,282.20	\$	45.64	
NONCA SHI OVEDHEAD	COSTS (Conital F	2000,024							
NONCASH OVERHEAD	• •	(ecovery)			φ	798.00	\$	15.96	
Buildings, Improvements,	α Equipment				\$ \$				
Machinery & Vehicles					Ф	3,845.63	Ф	76.91	
TOTAL NONCASH OVER	RHEAD COSTS				\$	4,643.63	\$	92.87	
TOTAL OWNERSHIP CO	STS				\$	6,925.83	\$	138.52	
101AL OVINLINGIII OO	010				Ψ	0,020.00	Ψ	100.02	
TOTAL COSTS					\$	24,349.45	\$	486.99	
NET PROJECTED RETUI	DNC				.	2 2E0 EE	¢	65.01	
MET PROJECTED KETU	CVIZ				\$	3,250.55	\$	าับ.co	

Table 11: Wheat Production Investment Summary.

Description		urchase Price	Percentage Use	Purchase Price	Useful Life (Yrs)	Sa	alvage Value	Annual Capital ecovery	Annual surance	Annual Taxes	Annual Repairs	nnual Fuel & Lube
2000.191.011	- '			11100	(1.0)		ugo raiuo	 	 	Тилоо	 to pull o	
Buildings, Improvements, and Equipment												
Land	\$	1,400,000.00	12.5%	\$ 175,000.00	150.00	\$	175,000.00	\$ -	\$ -	TBD	\$ -	\$ -
Machine Shop	\$	80,000.00	12.5%	\$ 10,000.00	50.00	\$	1,000.00	\$ 180.00	\$ 36.63	\$ 55.00	\$ 110.00	\$ -
Grain Bin	\$	10,000.00	0.0%	\$ -	50.00	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -
Irrigation System (Wheel Line)	\$	13,000.00	100.0%	\$ 13,000.00	25.00	\$	1,300.00	\$ 468.00	\$ 47.62	\$ -	\$ 143.00	\$ -
Implements	\$	20,000.00	12.5%	\$ 2,500.00	15.00	\$	250.00	\$ 150.00	\$ 9.16	\$ -	\$ 27.50	\$ -
Sub Total				\$ 200,500.00	NA	\$	177,550.00	\$ 798.00	\$ 93.41	\$ 55.00	\$ 280.50	\$
Machinery and Vehicles												
185 HP Tractor (used)	\$	76,000.00	12.5%	\$ 9,500.00	10.00	\$	950.00	\$ 855.00	\$ 34.80	\$ -	\$ 365.75	\$ 418.00
125 HP Tractor (used)	\$	46,000.00	12.5%	\$ 5,750.00	10.00	\$	575.00	\$ 517.50	\$ 21.06	\$ -	\$ 221.38	\$ 253.00
85 HP Tractor (used)	\$	26,000.00	12.5%	\$ 3,250.00	10.00	\$	325.00	\$ 292.50	\$ 11.90	\$ -	\$ 125.13	\$ 143.00
2 Ton Flatbed (used)	\$	15,000.00	12.5%	\$ 1,875.00	10.00	\$	187.50	\$ 168.75	\$ 6.87	\$ -	\$ 72.19	\$ 82.50
Swather (used)	\$	35,000.00	0.0%	\$ -	7.00	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -
Baler (32X34) (used)	\$	35,000.00	0.0%	\$ -	7.00	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -
Harrow (used)	\$	20,000.00	0.0%	\$ -	7.00	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -
Hydraulic Rake	\$	15,900.00	0.0%	\$ -	10.00	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -
4-Wheeler (2)	\$	20,000.00	12.5%	\$ 2,500.00	5.00	\$	250.00	\$ 450.00	\$ 9.16	\$ -	\$ 96.25	\$ 110.00
Backhoe (used)	\$	18,000.00	12.5%	\$ 2,250.00	10.00	\$	225.00	\$ 202.50	\$ 8.24	\$ -	\$ 86.63	\$ 99.00
3/4 Ton Pickup (used)	\$	15,000.00	12.5%	\$ 1,875.00	4.00	\$	187.50	\$ 421.88	\$ 6.87	\$ -	\$ 72.19	\$ 82.50
1 Ton Pickup	\$	50,000.00	12.5%	\$ 6,250.00	6.00	\$	625.00	\$ 937.50	\$ 22.89	\$ -	\$ 240.63	\$ 275.00
Sub Total				\$ 33,250.00	NA	\$	3,325.00	\$ 3,845.63	\$ 121.79	\$ -	\$ 1,280.13	\$ 1,463.00
Total				\$ 233,750.00	NA	\$	180,875.00	\$ 4,643.63	\$ 215.20	\$ 55.00	\$ 1,560.63	\$ 1.463.00