

Juab County Crop Production Costs and Returns, 2011

Jeffrey Banks, Extension Associate Professor, Juab County

Kynda Curtis, Associate Professor and Extension Specialist, Department of Applied Economics

Rob Lee, Research Associate, Department of Applied Economics

Don Snyder, Professor and Experiment Station Assistant Director, Department of Applied Economics

Introduction

Sample costs and returns to establish and produce alfalfa hay, barley, corn (grain and silage), and oats (hay) under wheel line irrigation, and dryland wheat in Juab 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 2000 acres of land on which 60 acres are cultivated for alfalfa production, 10 acres for barley production, 10 acres for oat hay production, 10 acres for corn production, 10 acres for corn silage production, 1000 acres for dryland wheat production, and 900 acres for grazing. The market value in 2011 in Juab County was \$10,000 per acre for agricultural land with water rights and \$750 per acre without.

Crop Pricing. Five-year average pricing (2006-2010) for alfalfa hay is \$125/ton, barley \$3.48/bu, corn \$4.43/bu, corn (silage) \$34.60/ton, oat hay \$104/ton, and wheat \$6.90/bu (UDAF, 2011).



Owner Labor. The owner is provided \$30,000 annually for the 1100 acres under production, or \$75/acre for the 100 irrigated acres and \$22.50/acre for 1000 non irrigated acres.

Hired Labor. Hired labor is paid \$10/at a total cost of \$22,000 annually for the 1100 acre farm or \$20/acre.

Irrigation System. Wheel line system estimated at \$13,000 for a new ¼ mile with maximum of 40 acre coverage (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 farm at an annual cost of \$2,200.

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 \$500 for an average year for the 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 \$4,400 for an average year for the 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

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

Straight Line Depreciation Computation

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

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..

Utah State University is committed to providing an environment free from harassment and other forms of illegal discrimination based on race, color, religion, sex, national origin, age (40 and older), disability, and veteran's status. USU's policy also prohibits discrimination on the basis of sexual orientation in employment and academic related practices and decisions.

Utah State University employees and students cannot, because of race, color, religion, sex, national origin, age, disability, or veteran's status, refuse to hire; discharge; promote; demote; terminate; discriminate in compensation; or discriminate regarding terms, privileges, or conditions of employment, against any person otherwise qualified. Employees and students also cannot discriminate in the classroom, residence halls, or in on/off campus, USU-sponsored events and activities.

This publication is issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Noelle E. Cockett, Vice President for Extension and Agriculture, Utah State University.

Table 1: Juab County Alfalfa Hay Establishment Costs, 60 acres, 2011.

	Total Units	Unit	Price/Cost Per Unit	Total Cost/Value	Total Cost/Value Per Acre	Your Farm
OPERATING COSTS						
Insecticide	60.00	Acre	\$ 18.00	\$ 1,080.00	\$ 18.00	_____
Herbicide	60.00	Acre	\$ 25.00	\$ 1,500.00	\$ 25.00	_____
Fertilizer	60.00	Acre	\$ 60.00	\$ 3,600.00	\$ 60.00	_____
Custom Chemical App	60.00	Acre	\$ 11.00	\$ 660.00	\$ 11.00	_____
Custom Seed Bed Prep	60.00	Acre	\$ 50.00	\$ 3,000.00	\$ 50.00	_____
Testing (Soil & Forage)	60.00	Acre	\$ 1.00	\$ 60.00	\$ 1.00	_____
Irrigation	1.00	Annual	\$ 5,400.00	\$ 5,400.00	\$ 90.00	_____
Alfalfa Seed	60.00	Acre	\$ 45.00	\$ 2,700.00	\$ 45.00	_____
Labor	60.00	Acre	\$ 20.00	\$ 1,200.00	\$ 20.00	_____
Operator Labor	60.00	Acre	\$ 75.00	\$ 4,500.00	\$ 75.00	_____
Fuel & Lube	1.00	Annual	\$ 3,500.00	\$ 3,500.00	\$ 58.33	_____
Maintenance	1.00	Annual	\$ 3,842.50	\$ 3,842.50	\$ 64.04	_____
Miscellaneous	60.00	Acre	\$ 5.00	\$ 300.00	\$ 5.00	_____
TOTAL OPERATING COSTS				\$ 31,342.50	\$ 522.38	
OWNERSHIP COSTS						
CASH OVERHEAD COSTS						
Liability/Crop Insurance				\$ 120.00	\$ 2.00	_____
Accounting & Legal				\$ 240.00	\$ 4.00	_____
Office & Travel				\$ 300.00	\$ 5.00	_____
Annual Investment Insurance				\$ 303.11	\$ 5.05	_____
Annual Investment Taxes				\$ 64.63	\$ 1.08	_____
TOTAL CASH OVERHEAD COSTS				\$ 1,027.74	\$ 17.13	
NONCASH OVERHEAD COSTS (Capital Recovery)						
Buildings, Improvements, & Equipment				\$ 1,275.38	\$ 21.26	_____
Machinery & Vehicles				\$ 5,025.00	\$ 83.75	_____
TOTAL NONCASH OVERHEAD COSTS				\$ 6,300.38	\$ 105.01	
TOTAL OWNERSHIP COSTS				\$ 7,328.11	\$ 122.14	
TOTAL COSTS				\$ 38,670.61	\$ 644.51	
YEAR ONE INCOME						
Alfalfa Hay	4.50	Tons	\$ 125.00	\$ 33,750.00	\$ 562.50	
TOTAL GROSS INCOME				\$ 33,750.00	\$ 562.50	
TOTAL ESTABLISHMENT INVESTMENT				\$ 4,920.61	\$ 82.01	

Table 2: Juab County Alfalfa Hay Production Costs and Returns, 60 acres, 2011.

	Total Units	Unit	Price/Cost Per Unit	Total Cost/Value	Total Cost/Value Per Acre	Your Farm
GROSS INCOME						
Alfalfa Hay	5.00	Tons	\$ 125.00	\$ 37,500.00	\$ 625.00	_____
TOTAL GROSS INCOME				\$ 37,500.00	\$ 625.00	
OPERATING COSTS						
Insecticide	60.00	Acre	\$ 18.00	\$ 1,080.00	\$ 18.00	_____
Herbicide	60.00	Acre	\$ 25.00	\$ 1,500.00	\$ 25.00	_____
Fertilizer	60.00	Acre	\$ 60.00	\$ 3,600.00	\$ 60.00	_____
Custom Chemical App	60.00	Acre	\$ 11.00	\$ 660.00	\$ 11.00	_____
Testing (Soil & Forage)	60.00	Acre	\$ 1.00	\$ 60.00	\$ 1.00	_____
Irrigation	1.00	Annual	\$ 5,400.00	\$ 5,400.00	\$ 90.00	_____
Labor	60.00	Acre	\$ 20.00	\$ 1,200.00	\$ 20.00	_____
Operator Labor	60.00	Acre	\$ 75.00	\$ 4,500.00	\$ 75.00	_____
Fuel & Lube	1.00	Annual	\$ 3,500.00	\$ 3,500.00	\$ 58.33	_____
Maintenance	1.00	Annual	\$ 3,842.50	\$ 3,842.50	\$ 64.04	_____
Miscellaneous	60.00	Acre	\$ 5.00	\$ 300.00	\$ 5.00	_____
TOTAL OPERATING COSTS				\$ 25,642.50	\$ 427.38	
INCOME ABOVE OPERATING COSTS				\$ 11,857.50	\$ 197.63	
OWNERSHIP COSTS						
CASH OVERHEAD COSTS						
Liability/Crop Insurance				\$ 120.00	\$ 2.00	_____
Accounting & Legal				\$ 240.00	\$ 4.00	_____
Office & Travel				\$ 300.00	\$ 5.00	_____
Annual Investment Insurance				\$ 303.11	\$ 5.05	_____
Annual Investment Taxes				\$ 64.63	\$ 1.08	_____
TOTAL CASH OVERHEAD COSTS				\$ 1,027.74	\$ 17.13	
NONCASH OVERHEAD COSTS (Capital Recovery)						
Buildings, Improvements, & Equipment				\$ 1,890.45	\$ 31.51	_____
Machinery & Vehicles				\$ 5,025.00	\$ 83.75	_____
TOTAL NONCASH OVERHEAD COSTS				\$ 6,915.45	\$ 115.26	
TOTAL OWNERSHIP COSTS				\$ 7,943.19	\$ 132.39	
TOTAL COSTS				\$ 33,585.69	\$ 559.76	
NET PROJECTED RETURNS				\$ 3,914.31	\$ 65.24	

Table 3: Alfalfa Production Investment Summary.

Description	Purchase Price	Percentage Use	Purchase Price	Useful Life (Yrs)	Salvage Value	Annual Capital Recovery	Annual Insurance	Annual Taxes	Annual Repairs	Annual Fuel & Lube
Buildings, Improvements, and Equipment										
Land	\$ 1,000,000.00	60%	\$ 600,000.00	150.00	\$ 600,000.00	\$ -	\$ -	TBD	\$ -	\$ -
Shop (40X80) & Tools	\$ 35,000.00	5%	\$ 1,750.00	40.00	\$ 175.00	\$ 39.38	\$ 6.41	\$ 9.63	\$ 35.00	\$ -
Hay Barn (50X40)	\$ 10,000.00	100%	\$ 10,000.00	40.00	\$ 1,000.00	\$ 225.00	\$ 36.63	\$ 55.00	\$ 200.00	\$ -
Irrigation System (Wheel Line)	\$ 26,000.00	100%	\$ 26,000.00	25.00	\$ 2,600.00	\$ 936.00	\$ 95.24	\$ -	\$ 520.00	\$ -
Implements	\$ 25,000.00	5%	\$ 1,250.00	15.00	\$ 125.00	\$ 75.00	\$ 4.58	\$ -	\$ 25.00	\$ -
Alfalfa Establishment	\$ 4,920.61	100%	\$ 4,920.61	8.00	\$ -	\$ 615.08	\$ -	\$ -	\$ -	\$ -
Sub Total Pre-Establishment	\$ 1,096,000.00		\$ 639,000.00		\$ 603,900.00	\$ 1,275.38	\$ 142.86	\$ 64.63	\$ 780.00	\$ -
Sub Total Post-Establishment	\$ 1,100,920.61		\$ 643,920.61		\$ 603,900.00	\$ 1,890.45	\$ 142.86	\$ 64.63	\$ 780.00	\$ -
Machinery and Vehicles										
95 HP Tractor (used)	\$ 30,000.00	60%	\$ 18,000.00	10.00	\$ 1,800.00	\$ 1,620.00	\$ 65.93	\$ -	\$ 1,260.00	\$ 1,440.00
Swather (used)	\$ 35,000.00	60%	\$ 21,000.00	7.00	\$ 2,100.00	\$ 2,700.00	\$ 76.92	\$ -	\$ 1,470.00	\$ 1,680.00
Baler (32X34) (used)	\$ 35,000.00	5%	\$ 1,750.00	7.00	\$ 175.00	\$ 225.00	\$ 6.41	\$ -	\$ 122.50	\$ 140.00
(2) 4-Wheeler	\$ 20,000.00	5%	\$ 1,000.00	5.00	\$ 100.00	\$ 180.00	\$ 3.66	\$ -	\$ 70.00	\$ 80.00
3/4 Ton Pickup	\$ 40,000.00	5%	\$ 2,000.00	6.00	\$ 200.00	\$ 300.00	\$ 7.33	\$ -	\$ 140.00	\$ 160.00
Sub Total			\$ 43,750.00		\$ 4,375.00	\$ 5,025.00	\$ 160.26	\$ -	\$ 3,062.50	\$ 3,500.00
Total			\$ 687,670.61		\$ 608,275.00	\$ 6,915.45	\$ 303.11	\$ 64.63	\$ 3,842.50	\$ 3,500.00

Table 4: Juab County Barley Production Costs and Returns, 10 acres, 2011.

	Total Units	Unit	Price/Cost Per bu.	Total Cost/Value	Total Cost/Value Per Acre	Your Farm
GROSS INCOME						
Barley	100.00	Bushels	\$ 3.48	\$ 3,480.00	\$ 348.00	_____
TOTAL GROSS INCOME				\$ 3,480.00	\$ 348.00	
OPERATING COSTS						
Herbicide	10.00	Acre	\$ 15.00	\$ 150.00	\$ 15.00	_____
Fertilizer	10.00	Acre	\$ 25.00	\$ 250.00	\$ 25.00	_____
Custom Chemical App	10.00	Acre	\$ 11.00	\$ 110.00	\$ 11.00	_____
Custom Combine	10.00	Acre	\$ 35.00	\$ 350.00	\$ 35.00	_____
Testing (Soil)	10.00	Acre	\$ 1.00	\$ 10.00	\$ 1.00	_____
Seed	10.00	Acre	\$ 28.00	\$ 280.00	\$ 28.00	_____
Irrigation	10.00	Acre	\$ 40.00	\$ 400.00	\$ 40.00	_____
Labor	10.00	Acre	\$ 20.00	\$ 200.00	\$ 20.00	_____
Operator Labor	10.00	Acre	\$ 75.00	\$ 750.00	\$ 75.00	_____
Fuel & Lube	1.00	Annual	\$ 158.40	\$ 158.40	\$ 15.84	_____
Maintenance	1.00	Annual	\$ 180.95	\$ 180.95	\$ 18.10	_____
Miscellaneous	10.00	Acre	\$ 5.00	\$ 50.00	\$ 5.00	_____
TOTAL OPERATING COSTS				\$ 2,889.35	\$ 288.94	
INCOME ABOVE OPERATING COSTS				\$ 590.65	\$ 59.07	
OWNERSHIP COSTS						
CASH OVERHEAD COSTS						
Liability/Crop Insurance				\$ 20.00	\$ 2.00	_____
Accounting & Legal				\$ 40.00	\$ 4.00	_____
Office & Travel				\$ 50.00	\$ 5.00	_____
Annual Investment Insurance				\$ 27.29	\$ 2.73	_____
Annual Investment Taxes				\$ 1.93	\$ 0.19	_____
TOTAL CASH OVERHEAD COSTS				\$ 139.21	\$ 13.92	
NONCASH OVERHEAD COSTS (Capital Recovery)						
Buildings, Improvements, & Equipment				\$ 139.88	\$ 13.99	_____
Machinery & Vehicles				\$ 366.00	\$ 36.60	_____
TOTAL NONCASH OVERHEAD COSTS				\$ 505.88	\$ 50.59	
TOTAL OWNERSHIP COSTS				\$ 645.09	\$ 64.51	
TOTAL COSTS				\$ 3,534.44	\$ 353.44	
NET PROJECTED RETURNS				\$ (54.44)	\$ (5.44)	

Table 5: Barley Production Investment Summary.

Description	Purchase Price	Percentage Use	Purchase Price	Useful Life (Yrs)	Salvage Value	Annual Capital Recovery	Annual Insurance	Annual Taxes	Annual Repairs	Annual Fuel & Lube
Buildings, Improvements, and Equipment										
Land	\$ 1,000,000.00	10%	\$ 100,000.00	150.00	\$ 100,000.00	\$ -	\$ -	TBD	\$ -	\$ -
Shop (30X80) & Tools	\$ 35,000.00	1%	\$ 350.00	40.00	\$ 35.00	\$ 7.88	\$ 1.28	\$ 1.93	\$ 3.85	\$ -
Implements	\$ 25,000.00	1%	\$ 250.00	15.00	\$ 25.00	\$ 15.00	\$ 0.92	\$ -	\$ 2.75	\$ -
Irrigation System (Wheel Line)	\$ 13,000.00	25%	\$ 3,250.00	25.00	\$ 325.00	\$ 117.00	\$ 11.90	\$ -	\$ 35.75	\$ -
Sub Total			\$ 103,850.00	NA	\$ 100,385.00	\$ 139.88	\$ 14.10	\$ 1.93	\$ 42.35	\$ -
Machinery and Vehicles										
95 HP Tractor (used)	\$ 30,000.00	10%	\$ 3,000.00	10.00	\$ 300.00	\$ 270.00	\$ 10.99	\$ -	\$ 115.50	\$ 132.00
(2) 4-Wheeler	\$ 20,000.00	1%	\$ 200.00	5.00	\$ 20.00	\$ 36.00	\$ 0.73	\$ -	\$ 7.70	\$ 8.80
3/4 Ton Pickup	\$ 40,000.00	1%	\$ 400.00	6.00	\$ 40.00	\$ 60.00	\$ 1.47	\$ -	\$ 15.40	\$ 17.60
Sub Total			\$ 3,600.00	NA	\$ 360.00	\$ 366.00	\$ 13.19	\$ -	\$ 138.60	\$ 158.40
Total			\$ 107,450.00	NA	\$ 100,745.00	\$ 505.88	\$ 27.29	\$ 1.93	\$ 180.95	\$ 158.40

Table 6: Juab County Corn (Grain) Production Costs and Returns, 10 acres, 2011.

	Total Units	Unit	Price/Cost Per bu.	Total Cost/Value	Total Cost/Value Per Acre	Your Farm
GROSS INCOME						
Corn Grain	155.00	bu.	\$ 4.43	\$ 6,866.50	\$ 686.65	_____
TOTAL GROSS INCOME				\$ 6,866.50	\$ 686.65	
OPERATING COSTS						
Herbicide	10.00	Acre	\$ 20.00	\$ 200.00	\$ 20.00	_____
Insecticide	10.00	Acre	\$ 8.00	\$ 80.00	\$ 8.00	_____
Fertilizer	10.00	Acre	\$ 100.00	\$ 1,000.00	\$ 100.00	_____
Seed	10.00	Acre	\$ 70.00	\$ 700.00	\$ 70.00	_____
Custom Chemical App	10.00	Acre	\$ 11.00	\$ 110.00	\$ 11.00	_____
Irrigation	10.00	Acre	\$ 90.00	\$ 900.00	\$ 90.00	_____
Labor	10.00	Acre	\$ 20.00	\$ 200.00	\$ 20.00	_____
Operator Labor	10.00	Acre	\$ 75.00	\$ 750.00	\$ 75.00	_____
Custom Combine	10.00	Acre	\$ 100.00	\$ 1,000.00	\$ 100.00	_____
Testing	10.00	Acre	\$ 14.00	\$ 140.00	\$ 14.00	_____
Fuel & Lube	1.00	Annual	\$ 158.40	\$ 158.40	\$ 15.84	_____
Maintenance	1.00	Annual	\$ 220.95	\$ 220.95	\$ 22.10	_____
Miscellaneous	10.00	Acre	\$ 5.00	\$ 50.00	\$ 5.00	_____
TOTAL OPERATING COSTS				\$ 5,509.35	\$ 550.94	
INCOME ABOVE OPERATING COSTS				\$ 1,357.15	\$ 135.72	
OWNERSHIP COSTS						
CASH OVERHEAD COSTS						
Liability/Crop Insurance				\$ 20.00	\$ 2.00	_____
Accounting & Legal				\$ 40.00	\$ 4.00	_____
Office & Travel				\$ 50.00	\$ 5.00	_____
Annual Investment Insurance				\$ 40.61	\$ 4.06	_____
Annual Investment Taxes				\$ 21.93	\$ 2.19	_____
TOTAL CASH OVERHEAD COSTS				\$ 172.53	\$ 17.25	
NONCASH OVERHEAD COSTS (Capital Recovery)						
Buildings, Improvements, & Equipment				\$ 139.88	\$ 13.99	_____
Machinery & Vehicles				\$ 366.00	\$ 36.60	_____
TOTAL NONCASH OVERHEAD COSTS				\$ 505.88	\$ 50.59	
TOTAL OWNERSHIP COSTS				\$ 678.41	\$ 67.84	
TOTAL COSTS				\$ 6,187.76	\$ 618.78	
NET PROJECTED RETURNS				\$ 678.74	\$ 67.87	

Table 7: Corn (Grain) Production Investment Summary.

Description	Purchase Price	Percentage Use	Purchase Price	Useful Life (Yrs)	Salvage Value	Annual Capital Recovery	Annual Insurance	Annual Taxes	Annual Repairs	Annual Fuel & Lube
Buildings, Improvements, and Equipment										
Land	\$ 1,000,000.00	10%	\$ 100,000.00	150.00	\$ 100,000.00	\$ -	\$ -	TBD	\$ -	\$ -
Bin (2000 bu.)	\$ 2,000.00	100%	\$ 2,000.00	150.00	\$ 2,000.00	\$ -	\$ 13.32	\$ 20.00	\$ 40.00	\$ -
Shop (40X80) & Tools	\$ 35,000.00	1%	\$ 350.00	40.00	\$ 35.00	\$ 7.88	\$ 1.28	\$ 1.93	\$ 3.85	\$ -
Implements	\$ 25,000.00	1%	\$ 250.00	15.00	\$ 25.00	\$ 15.00	\$ 0.92	\$ -	\$ 2.75	\$ -
Irrigation System (Wheel Line)	\$ 13,000.00	25%	\$ 3,250.00	25.00	\$ 325.00	\$ 117.00	\$ 11.90	\$ -	\$ 35.75	\$ -
Sub Total			\$ 105,850.00	NA	\$ 102,385.00	\$ 139.88	\$ 27.42	\$ 21.93	\$ 82.35	\$ -
Machinery and Vehicles										
95 HP Tractor (used)	\$ 30,000.00	10%	\$ 3,000.00	10.00	\$ 300.00	\$ 270.00	\$ 10.99	\$ -	\$ 115.50	\$ 132.00
(2) 4-Wheeler	\$ 20,000.00	1%	\$ 200.00	5.00	\$ 20.00	\$ 36.00	\$ 0.73	\$ -	\$ 7.70	\$ 8.80
3/4 Ton Pickup	\$ 40,000.00	1%	\$ 400.00	6.00	\$ 40.00	\$ 60.00	\$ 1.47	\$ -	\$ 15.40	\$ 17.60
Sub Total			\$ 3,600.00	21.00	\$ 360.00	\$ 366.00	\$ 13.19	\$ -	\$ 138.60	\$ 158.40
Total			\$ 109,450.00	NA	\$ 102,745.00	\$ 505.88	\$ 40.61	\$ 21.93	\$ 220.95	\$ 158.40

Table 8: Juab County Corn (Silage under Flood) Production Costs and Returns, 10 acres, 2011.

	Total Units	Unit	Price/Cost Per bu.	Total Cost/Value	Total Cost/Value Per Acre	Your Farm
GROSS INCOME						
Corn Silage	25.00	Tons	\$ 34.60	\$ 8,650.00	\$ 865.00	_____
TOTAL GROSS INCOME				\$ 8,650.00	\$ 865.00	
OPERATING COSTS						
Insecticide	10.00	Acre	\$ 8.00	\$ 80.00	\$ 8.00	_____
Herbicide	10.00	Acre	\$ 20.00	\$ 200.00	\$ 20.00	_____
Fertilizer	10.00	Acre	\$ 100.00	\$ 1,000.00	\$ 100.00	_____
Custom Chemical App	10.00	Acre	\$ 11.00	\$ 110.00	\$ 11.00	_____
Custom Chop	10.00	Acre	\$ 250.00	\$ 2,500.00	\$ 250.00	_____
Testing (Soil)	10.00	Acre	\$ 1.00	\$ 10.00	\$ 1.00	_____
Seed	10.00	Acre	\$ 70.00	\$ 700.00	\$ 70.00	_____
Irrigation	1.00	Annual	\$ 900.00	\$ 900.00	\$ 90.00	_____
Labor	10.00	Acre	\$ 20.00	\$ 200.00	\$ 20.00	_____
Operator Labor	10.00	Acre	\$ 75.00	\$ 750.00	\$ 75.00	_____
Fuel & Lube	1.00	Annual	\$ 288.00	\$ 288.00	\$ 28.80	_____
Maintenance	1.00	Annual	\$ 964.00	\$ 964.00	\$ 96.40	_____
Miscellaneous	10.00	Acre	\$ 5.00	\$ 50.00	\$ 5.00	_____
TOTAL OPERATING COSTS				\$ 7,752.00	\$ 775.20	
INCOME ABOVE OPERATING COSTS				\$ 898.00	\$ 89.80	
OWNERSHIP COSTS						
CASH OVERHEAD COSTS						
Liability/Crop Insurance				\$ 20.00	\$ 2.00	_____
Accounting & Legal				\$ 40.00	\$ 4.00	_____
Office & Travel				\$ 50.00	\$ 5.00	_____
Annual Investment Insurance				\$ 131.93	\$ 13.19	_____
Annual Investment Taxes				\$ 1.93	\$ 0.19	_____
TOTAL CASH OVERHEAD COSTS				\$ 243.86	\$ 24.39	
NONCASH OVERHEAD COSTS (Capital Recovery)						
Buildings, Improvements, & Equipment				\$ 722.88	\$ 72.29	_____
Machinery & Vehicles				\$ 366.00	\$ 36.60	_____
TOTAL NONCASH OVERHEAD COSTS				\$ 1,088.88	\$ 108.89	
TOTAL OWNERSHIP COSTS				\$ 1,332.73	\$ 133.27	
TOTAL COSTS				\$ 9,084.73	\$ 908.47	
NET PROJECTED RETURNS				\$ (434.73)	\$ (43.47)	

Table 9: Corn (Silage) Production Investment Summary.

Description	Purchase Price	Percentage Use	Purchase Price	Useful Life (Yrs)	Salvage Value	Annual Capital Recovery	Annual Insurance	Annual Taxes	Annual Repairs	Annual Fuel & Lube
Buildings, Improvements, and Equipment										
Land	\$ 1,000,000.00	20%	\$ 200,000.00	150.00	\$ 200,000.00	\$ -	\$ -	TBD	\$ -	\$ -
Shop (30X80) & Tools	\$ 35,000.00	1%	\$ 350.00	40.00	\$ 35.00	\$ 7.88	\$ 1.28	\$ 1.93	\$ 7.00	\$ -
Silage Pit	\$ 35,000.00	100%	\$ 35,000.00	50.00	\$ -	\$ 700.00	\$ 116.55	\$ -	\$ 700.00	\$ -
Implements	\$ 25,000.00	1%	\$ 250.00	15.00	\$ 25.00	\$ 15.00	\$ 0.92	\$ -	\$ 5.00	\$ -
Sub Total			\$ 35,600.00	NA	\$ 60.00	\$ 722.88	\$ 118.75	\$ 1.93	\$ 712.00	\$ -
Machinery and Vehicles										
95 HP Tractor (used)	\$ 30,000.00	10%	\$ 3,000.00	10.00	\$ 300.00	\$ 270.00	\$ 10.99	\$ -	\$ 210.00	\$ 240.00
(2) 4-Wheeler	\$ 20,000.00	1%	\$ 200.00	5.00	\$ 20.00	\$ 36.00	\$ 0.73	\$ -	\$ 14.00	\$ 16.00
3/4 Ton Pickup	\$ 40,000.00	1%	\$ 400.00	6.00	\$ 40.00	\$ 60.00	\$ 1.47	\$ -	\$ 28.00	\$ 32.00
Sub Total			\$ 3,600.00	NA	\$ 360.00	\$ 366.00	\$ 13.19	\$ -	\$ 252.00	\$ 288.00
Total			\$ 39,200.00	NA	\$ 420.00	\$ 1,088.88	\$ 131.93	\$ 1.93	\$ 964.00	\$ 288.00

Table 10: Juab County Oat Hay Production Costs and Returns, 10 acres, 2011.

	Total Units	Unit	Price/Cost Per bu.	Total Cost/Value	Total Cost/Value Per Acre	Your Farm
GROSS INCOME						
Oat Hay	4.00	Ton	\$ 104.00	\$ 4,160.00	\$ 416.00	_____
TOTAL GROSS INCOME				\$ 4,160.00	\$ 416.00	
OPERATING COSTS						
Herbicide	10.00	Acre	\$ 20.00	\$ 200.00	\$ 20.00	_____
Fertilizer	10.00	Acre	\$ 20.00	\$ 200.00	\$ 20.00	_____
Seed	10.00	Acre	\$ 35.00	\$ 350.00	\$ 35.00	_____
Custom Chemical App	10.00	Acre	\$ 11.00	\$ 110.00	\$ 11.00	_____
Irrigation	10.00	Acre	\$ 40.00	\$ 400.00	\$ 40.00	_____
Labor	10.00	Acre	\$ 20.00	\$ 200.00	\$ 20.00	_____
Operator Labor	10.00	Acre	\$ 75.00	\$ 750.00	\$ 75.00	_____
Fuel & Lube	1.00	Annual	\$ 466.40	\$ 466.40	\$ 46.64	_____
Maintenance	1.00	Annual	\$ 483.45	\$ 483.45	\$ 48.35	_____
Miscellaneous	10.00	Acre	\$ 5.00	\$ 50.00	\$ 5.00	_____
TOTAL OPERATING COSTS				\$ 3,209.85	\$ 320.99	
INCOME ABOVE OPERATING COSTS				\$ 950.15	\$ 95.02	
OWNERSHIP COSTS						
CASH OVERHEAD COSTS						
Liability/Crop Insurance				\$ 20.00	\$ 2.00	_____
Accounting & Legal				\$ 40.00	\$ 4.00	_____
Office & Travel				\$ 50.00	\$ 5.00	_____
Annual Investment Insurance				\$ 52.38	\$ 5.24	_____
Annual Investment Taxes				\$ 18.43	\$ 1.84	_____
TOTAL CASH OVERHEAD COSTS				\$ 180.81	\$ 18.08	
NONCASH OVERHEAD COSTS (Capital Recovery)						
Buildings, Improvements, & Equipment				\$ 207.38	\$ 20.74	_____
Machinery & Vehicles				\$ 861.00	\$ 86.10	_____
TOTAL NONCASH OVERHEAD COSTS				\$ 1,068.38	\$ 106.84	
TOTAL OWNERSHIP COSTS				\$ 1,249.18	\$ 124.92	
TOTAL COSTS				\$ 4,459.03	\$ 445.90	
NET PROJECTED RETURNS				\$ (299.03)	\$ (29.90)	

Table 11: Oat Hay Production Investment Summary.

Description	Purchase Price	Percentage Use	Purchase Price	Useful Life (Yrs)	Salvage Value	Annual Capital Recovery	Annual Insurance	Annual Taxes	Annual Repairs	Annual Fuel & Lube
Buildings, Improvements, and Equipment										
Land	\$ 1,000,000.00	10%	\$ 100,000.00	150.00	\$ 100,000.00	\$ -	\$ -	TBD	\$ -	\$ -
Shop (30X80) & Tools	\$ 35,000.00	1%	\$ 350.00	40.00	\$ 35.00	\$ 7.88	\$ 1.28	\$ 1.93	\$ 3.85	\$ -
Hay Barn	\$ 3,000.00	100%	\$ 3,000.00	40.00	\$ 300.00	\$ 67.50	\$ 10.99	\$ 16.50	\$ 33.00	\$ -
Implements	\$ 25,000.00	1%	\$ 250.00	15.00	\$ 25.00	\$ 15.00	\$ 0.92	\$ -	\$ 2.75	\$ -
Irrigation System (Wheel Line)	\$ 13,000.00	25%	\$ 3,250.00	25.00	\$ 325.00	\$ 117.00	\$ 11.90	\$ -	\$ 35.75	\$ -
Sub Total			\$ 106,850.00	NA	\$ 100,685.00	\$ 207.38	\$ 25.09	\$ 18.43	\$ 75.35	\$ -
Machinery and Vehicles										
95 HP Tractor (used)	\$ 30,000.00	10%	\$ 3,000.00	10.00	\$ 300.00	\$ 270.00	\$ 10.99	\$ -	\$ 115.50	\$ 132.00
Swather (used)	\$ 35,000.00	10%	\$ 3,500.00	7.00	\$ 350.00	\$ 450.00	\$ 12.82	\$ -	\$ 245.00	\$ 280.00
Baler (32X34) (used)	\$ 35,000.00	1%	\$ 350.00	7.00	\$ 35.00	\$ 45.00	\$ 1.28	\$ -	\$ 24.50	\$ 28.00
(2) 4-Wheeler	\$ 20,000.00	1%	\$ 200.00	5.00	\$ 20.00	\$ 36.00	\$ 0.73	\$ -	\$ 7.70	\$ 8.80
3/4 Ton Pickup	\$ 40,000.00	1%	\$ 400.00	6.00	\$ 40.00	\$ 60.00	\$ 1.47	\$ -	\$ 15.40	\$ 17.60
Sub Total			\$ 7,450.00	NA	\$ 745.00	\$ 861.00	\$ 27.29	\$ -	\$ 408.10	\$ 466.40
Total			\$ 114,300.00	NA	\$ 101,430.00	\$ 1,068.38	\$ 52.38	\$ 18.43	\$ 483.45	\$ 466.40

Table 12: Juab County Wheat (Dryland) Production Costs and Returns, 1000 acres, 2011.

	Total Units	Unit	Price/Cost Per bu.	Total Cost/Value	Total Cost/Value Per Acre	Your Farm
GROSS INCOME						
Wheat	25.00	Bushels	\$ 6.90	\$ 172,500.00	\$ 172.50	_____
TOTAL GROSS INCOME				\$ 172,500.00	\$ 172.50	
OPERATING COSTS						
Herbicide	1000	Acre	\$ 12.00	\$ 12,000.00	\$ 12.00	_____
Fertilizer	1000	Acre	\$ 8.00	\$ 8,000.00	\$ 8.00	_____
Seed	1000	Acre	\$ 12.00	\$ 12,000.00	\$ 12.00	_____
Custom Chemical App	1000	Acre	\$ 11.00	\$ 11,000.00	\$ 11.00	_____
Labor	1000	Acre	\$ 20.00	\$ 20,000.00	\$ 20.00	_____
Operator Labor	1000	Acre	\$ 22.50	\$ 22,500.00	\$ 22.50	_____
Fuel & Lube	1	Annual	\$ 18,480.00	\$ 18,480.00	\$ 18.48	_____
Maintenance	1	Annual	\$ 17,370.00	\$ 17,370.00	\$ 17.37	_____
Miscellaneous	1000	Acre	\$ 5.00	\$ 5,000.00	\$ 5.00	_____
TOTAL OPERATING COSTS				\$ 126,350.00	\$ 126.35	
INCOME ABOVE OPERATING COSTS				\$ 46,150.00	\$ 46.15	
OWNERSHIP COSTS						
CASH OVERHEAD COSTS						
Liability/Crop Insurance				\$ 2,000.00	\$ 2.00	_____
Accounting & Legal				\$ 4,000.00	\$ 4.00	_____
Office & Travel				\$ 500.00	\$ 0.50	_____
Annual Investment Insurance				\$ 1,065.93	\$ 1.07	_____
Annual Investment Taxes				\$ 206.25	\$ 0.21	_____
TOTAL CASH OVERHEAD COSTS				\$ 7,772.18	\$ 7.77	
NONCASH OVERHEAD COSTS (Capital Recovery)						
Buildings, Improvements, & Equipment				\$ 2,193.75	\$ 2.19	_____
Machinery & Vehicles				\$ 25,785.00	\$ 25.79	_____
TOTAL NONCASH OVERHEAD COSTS				\$ 27,978.75	\$ 27.98	
TOTAL OWNERSHIP COSTS				\$ 35,750.93	\$ 35.75	
TOTAL COSTS				\$ 162,100.93	\$ 162.10	
NET PROJECTED RETURNS				\$ 10,399.07	\$ 10.40	

Table 13: Wheat (Dryland) Production Investment Summary.

Description	Purchase Price	Percentage Use	Purchase Price	Useful Life (Yrs)	Salvage Value	Annual Capital Recovery	Annual Insurance	Annual Taxes	Annual Repairs	Annual Fuel & Lube
Buildings, Improvements, and Equipment										
Land	\$ 825,000.00	90%	\$ 742,500.00	150.00	\$ 742,500.00	\$ -	\$ -	TBD	\$ -	\$ -
Shop (40X80) & Tools	\$ 35,000.00	90%	\$ 31,500.00	40.00	\$ 3,150.00	\$ 708.75	\$ 115.38	\$ 173.25	\$ 630.00	\$ -
Grain Bin (12,000 bu.)	\$ 6,000.00	100%	\$ 6,000.00	40.00	\$ 600.00	\$ 135.00	\$ 21.98	\$ 33.00	\$ 120.00	\$ -
Implements	\$ 25,000.00	90%	\$ 22,500.00	15.00	\$ 2,250.00	\$ 1,350.00	\$ 82.42		\$ 450.00	\$ -
Sub Total			\$ 802,500.00	NA	\$ 748,500.00	\$ 2,193.75	\$ 219.78	\$ 206.25	\$ 1,200.00	\$ -
Machinery and Vehicles										
Combine (used)	\$ 125,000.00	100%	\$ 125,000.00	10.00	\$ 12,500.00	\$ 11,250.00	\$ 457.88	\$ -	\$ 8,750.00	\$ 10,000.00
235 HP Tractor (used)	\$ 146,000.00	100%	\$ 146,000.00	10.00	\$ 14,600.00	\$ 13,140.00	\$ 534.80	\$ -	\$ 10,220.00	\$ 11,680.00
125 HP Tractor (used)	\$ 95,000.00	90%	\$ 85,500.00	10.00	\$ 8,550.00	\$ 7,695.00	\$ 313.19	\$ -	\$ 5,985.00	\$ 6,840.00
Baler (used)	\$ 35,000.00	90%	\$ 31,500.00	7.00	\$ 3,150.00	\$ 4,050.00	\$ 115.38	\$ -	\$ 2,205.00	\$ 2,520.00
(2) 2 Ton Flatbed (used)	\$ 30,000.00	100%	\$ 30,000.00	10.00	\$ 3,000.00	\$ 2,700.00	\$ 109.89	\$ -	\$ 2,100.00	\$ 2,400.00
Dumptruck (used)	\$ 30,000.00	100%	\$ 30,000.00	10.00	\$ 3,000.00	\$ 2,700.00	\$ 109.89	\$ -	\$ 2,100.00	\$ 2,400.00
(2) 4-Wheeler	\$ 20,000.00	90%	\$ 18,000.00	5.00	\$ 1,800.00	\$ 3,240.00	\$ 65.93	\$ -	\$ 1,260.00	\$ 1,440.00
3/4 Ton Pickup	\$ 40,000.00	90%	\$ 36,000.00	6.00	\$ 3,600.00	\$ 5,400.00	\$ 131.87	\$ -	\$ 2,520.00	\$ 2,880.00
Sub Total			\$ 231,000.00	NA	\$ 23,100.00	\$ 25,785.00	\$ 846.15	\$ -	\$ 16,170.00	\$ 18,480.00
Total			\$ 1,033,500.00	NA	\$ 771,600.00	\$ 27,978.75	\$ 1,065.93	\$ 206.25	\$ 17,370.00	\$ 18,480.00