

Enterprise Budgets

Prepared by the Economics Department, Utah State University

The following crop and livestock enterprise budgets were prepared by personnel at Utah State University with input from farmers and ranchers. These budgets are provided to assist farmers and ranchers in evaluating alternatives that may increase the profitability of their operation. The costs and returns commonly vary for a particular farm or ranch from those shown. Therefore, a column has been provided to adapt the budget to reflect the costs and returns for a specific farm or ranch enterprise.

Questions concerning these budgets should be referred to the appropriate contact individual in the Economics department at Utah State University in Logan at 435- 797-2310.

Budgets published in this and previous additions of Utah Agricultural Statistics as well as budgets for other crop and livestock enterprises may be found on the extension web page at Utah State University, <http://extension.usu.edu/>.

Index of Enterprise Budgets by Subject and Year Most Recently Published in Utah Agricultural Statistics, 1993-2007

Alfalfa Hay, establishment with oat hay	1998	Deer Hunt Pack Trip	1996
Alfalfa Hay, establishment, Grand County	1994	Floriculture	2004
Alfalfa Hay, irrigated, East Millard County	2001	Elk	1997
Alfalfa Hay, dryland, Box Elder County	2002	Grass Hay, Rich County	2006
Alfalfa Haylage, Millard County	2001	Grass Hay, Daggett County	2007
Apples, Utah County	1994	Lawn Turf	2006
Barley, wheel-line irrigation, Cache County	2002	Machinery data	1993
Beans - Dry edible, dryland	1993	Manure & Waste Disposal, Dairy	1998
Beef Cattle		Oat Hay, San Juan County	2003
Background feeder cattle	2000	Oats, San Juan County	2003
Beef heifer replacement	1998	Onion Production	2005
Cow/calf	1997	Ostrich	1995
Cow/calf northern Utah	2004	Pasture, irrigated	1995
Cow/calf, southern Utah	2000	Pasture, Native Meadow	1993
Cow/calf/yearling, Rich County	1996	Pasture Establishment	1995
Cow/calf, Tooele County	2007	Peaches, Box Elder County	1994
Cull Cows	2006	Pheasants	1995
Feeder cattle	2005	Potatoes, chipper, Box Elder County	1994
Feeder steer calves	2003	Pumpkin	1997
Finish cattle	2000	Raspberry	1996
Bison, Cow/Calf, 50 Cows	2001	Safflower, dryland	1999
Canola, Spring irrigated	1996	Safflower, irrigated	2005
Cantaloupe	2006	Sheep, range	1997
Cherries, Tart	1995	Soybean	1998
Corn for grain, Box Elder County	2002	Swine, farrow to finish	1998
Corn Silage, Cache County	2002	Swine, Hog Finishing	1993
Corn, Sweet	1996	Tomatoes	2003
CRP Contract, per acre	2001	Triticale	1996
Custom Operators Rates	2007	Turkeys, Hen	2000
Dairy		Watermelons	1996
Holstein Heifer Replacement	2001	Wheat, dryland,	2003
Jersey Heifer Replacement	2000	Wheat, Spring, irrigated	1994
Milk Cows, Jersey	1998	Wheat Straw Residue	1997
Milk Cows, Holstein	2001	Wheat, Soft White Winter, Irrigated, Box Elder Co	2000
Dairy Bull	1998		

Enterprise Budgets: Costs and Returns per cow and total for typical Tooele County Cow-Calf Ranch, 2007

Item	No. of Animals	Average Weight	Unit	Sale Price per Unit	Value / Cow	Total Value	Your Farm
Receipts							
Steers	85	550 lbs		\$1.08	\$252.45	\$50,490.00	_____
Heifers	85	510 lbs		\$1.00	\$216.75	\$43,350.00	_____
Cull Cows	20	1100 lbs		\$0.45	\$49.50	\$9,900.00	_____
Cull Bulls	2	1850 lbs		\$0.55	\$10.18	\$2,035.00	_____
Total					<u>\$528.88</u>	<u>\$105,775.00</u>	_____
Expenses							
	Units / Cow	Total Units	Unit	Cost per Unit	Cost / Cow	Total Costs	
Variable Costs							
Feed Expense							
Grass Hay	1	200 tons		\$60.00	\$60.00	\$12,000.00	_____
Alfalfa Hay	0.75	150 tons		\$100.00	\$75.00	\$15,000.00	_____
Salt and Mineral	0.01	2 tons		\$125.00	\$1.25	\$250.00	_____
BLM permit ¹							
Grazing Fees	1.06	636 AUMs		\$1.35	\$4.29	\$858.60	_____
Non fee costs	1.06	636 AUMs		\$7.00	\$22.26	\$4,452.00	_____
Forest grazing permit ¹							
Grazing Fees	1.06	424 AUMs		\$1.35	\$2.86	\$572.40	_____
Non fee costs	1.06	424 AUMs		\$9.00	\$19.08	\$3,816.00	_____
Private Pasture Lease ¹	1.06	530 AUMs		\$15.00	\$39.75	\$7,950.00	_____
Reproduction Costs							
AI project	0.11	22 heifer		\$25.00	\$2.75	\$550.00	_____
Breeding Bulls	0.01	2 bull		\$2,500.00	\$25.00	\$5,000.00	_____
Replacement heifers/cows ²	0.11	22 heifer		\$900.00	\$99.00	\$19,800.00	_____
Animal Health							
Veterinarian service	1	200 cow		\$3.00	\$3.00	\$600.00	_____
Medication & supplies	1	200 cow		\$2.00	\$2.00	\$400.00	_____
Vaccinations-cow	1	200 cow		\$7.00	\$7.00	\$1,400.00	_____
Vaccinations-calf	0.85	170 calf		\$5.00	\$4.25	\$850.00	_____
Bull testing & vaccine	0.04	8 bull		\$50.00	\$2.00	\$400.00	_____
Hired Labor							
Calving season	2.4	480 hrs		\$10.00	\$24.00	\$4,800.00	_____
General Feeding	0	0 hrs		\$10.00	\$0.00	\$0.00	_____
Cattle handling & care	0	0 hrs		\$10.00	\$0.00	\$0.00	_____
Marketing and Transportation							
Transportation		1 yr.		\$2,000.00	\$10.00	\$2,000.00	_____
Sale Commission	0.96	192 head		\$3.00	\$2.88	\$576.00	_____
		Total Variable Costs			<u>\$406.38</u>	<u>\$81,275.00</u>	_____
General Overhead Cost							
Facility Maintenance		1 yr.		\$300.00	\$1.50	\$300.00	_____
Fuel & lube		1 yr.		\$120.00	\$0.60	\$120.00	_____
Machinery		1 yr.		\$200.00	\$1.00	\$200.00	_____
Vehicles & trailers		1 yr.		\$200.00	\$1.00	\$200.00	_____
Animal death insurance		200 head		\$10.00	\$10.00	\$2,000.00	_____
Depreciation-machinery & vehicles		1 yr.		\$1,500.00	\$7.50	\$1,500.00	_____
Property taxes		1 yr.		\$1,000.00	\$5.00	\$1,000.00	_____
Miscellaneous		1 yr.		\$1,000.00	\$5.00	\$1,000.00	_____
		General Overhead Costs			<u>\$31.60</u>	<u>\$6,320.00</u>	_____
		Total Costs			<u>\$437.98</u>	<u>\$87,595.00</u>	_____
				NET INCOME	<u>\$90.90</u>	<u>\$18,180.00</u>	_____

1 This figure is including bull grazing

2 Heifers are replaced at cull cow rate plus death loss

Assumptions: (200 head)

Percentage of cows to wean a calf	85%	Number of months grazed	
Percent death loss of cows	1%	BLM land	3
Cost of replacement stock (heifers and bulls) @market value		Forest Service	2
Cull Cow rate	10%	Private	2.5
Bull replacement rate	25%	Number of months feed hay	4.5
Feed costs at market value		Animals sold in the fall	
All calves sold. Some may be sold to another enterprise.			
Cows per Bull	25		

Budget prepared by: Dillon M. Feuz, E. Bruce Godfrey, Matt Hirschi and Linden Greenhalgh

Enterprise Budgets: Costs and Returns per cow and total for typical Duchesne County Cow-Calf Ranch, 2007

Item	No. of Animals	Average Weight	Unit	Sale Price per Unit	Value/ Cow	Total Value	Your Farm
Receipts							
Steers	90	575	lbs	\$1.04	\$269.10	\$53,820.00	_____
Heifers	90	535	lbs	\$0.96	\$231.12	\$46,224.00	_____
Cull Cows	20	1100	lbs	\$0.45	\$49.50	\$9,900.00	_____
Cull Bulls	2	1850	lbs	\$0.55	\$10.18	\$2,035.00	_____
Total					<u>\$559.90</u>	<u>\$111,979.00</u>	_____
Expenses							
	Units/ Cow	Total Units	Unit	Cost per Unit	Cost/ Cow	Total Costs	
Variable Costs							
Feed Expense							
Grass Hay	1	200	tons	\$60.00	\$60.00	\$12,000.00	_____
Alfalfa Hay	1	200	tons	\$100.00	\$100.00	\$20,000.00	_____
Salt and Mineral	0.01	2	tons	\$125.00	\$1.25	\$250.00	_____
BLM permit ¹							
Grazing Fees	1.06	0	AUMs	\$1.35	\$0.00	\$0.00	_____
Non fee costs	1.06	0	AUMs	\$7.00	\$0.00	\$0.00	_____
Forest grazing permit ¹							
Grazing Fees	1.06	0	AUMs	\$1.35	\$0.00	\$0.00	_____
Non fee costs	1.06	0	AUMs	\$9.00	\$0.00	\$0.00	_____
Private Pasture Lease ¹	1.06	1484	AUMs	\$20.00	\$148.40	\$29,680.00	_____
Reproduction Costs							
AI project	0.11	22	heifer	\$0.00	\$0.00	\$0.00	_____
Breeding Bulls	0.01	2	bull	\$2,500.00	\$25.00	\$5,000.00	_____
Replacement heifers/cows ²	0.11	22	heifer	\$900.00	\$99.00	\$19,800.00	_____
Animal Health							
Veterinarian service	1	200	cow	\$3.00	\$3.00	\$600.00	_____
Medication & supplies	1	200	cow	\$2.00	\$2.00	\$400.00	_____
Vaccinations-cow	1	200	cow	\$7.00	\$7.00	\$1,400.00	_____
Vaccinations-calf	0.9	180	calf	\$5.00	\$4.50	\$900.00	_____
Bull testing & vaccine	0.04	8	bull	\$50.00	\$2.00	\$400.00	_____
Hired Labor							
Calving season	0	0	hrs	\$10.00	\$0.00	\$0.00	_____
General Feeding	0	0	hrs	\$10.00	\$0.00	\$0.00	_____
Cattle handling & care	0	0	hrs	\$10.00	\$0.00	\$0.00	_____
Marketing and Transportation							
Transportation		1	yr.	\$1,000.00	\$5.00	\$1,000.00	_____
Sale Commission	1.01	202	head	\$7.00	\$7.07	\$1,414.00	_____
			Total Variable Costs		<u>\$464.22</u>	<u>\$92,844.00</u>	_____
General Overhead Cost							
Facility Maintenance		1	yr.	\$300.00	\$1.50	\$300.00	_____
Fuel & lube		1	yr.	\$120.00	\$0.60	\$120.00	_____
Machinery		1	yr.	\$200.00	\$1.00	\$200.00	_____
Vehicles & trailers		1	yr.	\$200.00	\$1.00	\$200.00	_____
Animal death insurance		200	head	\$10.00	\$10.00	\$2,000.00	_____
Depreciation-machinery & vehicles		1	yr.	\$1,500.00	\$7.50	\$1,500.00	_____
Property taxes		1	yr.	\$1,000.00	\$5.00	\$1,000.00	_____
Miscellaneous		1	yr.	\$1,000.00	\$5.00	\$1,000.00	_____
			General Overhead Costs		<u>\$31.60</u>	<u>\$6,320.00</u>	_____
			Total Costs		<u>\$495.82</u>	<u>\$99,164.00</u>	_____
			NET INCOME		<u>\$64.07</u>	<u>\$12,815.00</u>	_____

1 his figure is including bull grazing

2 Heifers are replaced at cull cow rate plus death loss

Assumptions: (200 head)

Percentage of cows to wean a calf	90%	Number of months grazed	
Percent death loss of cows	1%	BLM land	0
Cost of replacement stock (heifers and bulls) @market value		Forest Service	0
Cull Cow rate	10%	Private	7
Bull replacement rate	25%	Number of months feed hay	5
Feed costs at market value		Animals sold in the fall	

All calves sold. Some may be sold to another enterprise.

Cows per Bull 25

Budget prepared by: Dillon M. Feuz, E. Bruce Godfrey, Matt Hirschi and Troy Cooper

Enterprise Budgets: Costs and Returns Per Acre from Growing Grass Hay, Daggett County, 2007

Item	Quantity Per acre	Unit	Price/cost Per Unit	Value/cost Per Acre	Your Farm
Receipts					
Grass Hay	1.5	Tons	\$120.00	\$192.00	_____
Residue	2.00	AUMs	\$12.00	\$24.00	_____
Subtotal				\$216.00	_____
Operating costs					
Fertilization					
Nitrogen (46-0-0)	100	pounds	\$0.17	\$17.00	_____
Custom application	1	acre	\$7.82	\$7.82	_____
Irrigation (flood)					
Labor	2.64	hours	\$10.00	\$26.40	_____
Water assessment	1	share	\$10.00	\$10.00	_____
Repairs/maintenance	1	acre	\$5.19	\$5.19	_____
Pumping	25	acre inch		\$0.00	_____
Harvesting					
Swathing	1	acre	\$4.05	\$4.05	_____
Rake	1	acre	\$1.40	\$1.40	_____
Baling	1	acre	\$3.40	\$3.40	_____
Hauling/stacking	0.3	loads/acre	\$21.00	\$5.60	_____
Interest on Operating capital			8.40%	\$1.92	_____
Subtotal				\$82.78	_____
Ownership costs (excludes cost of land)					
Farm Insurance	1	acre	\$2.00	\$2.00	_____
	1	acre	\$85.00	\$85.00	_____
	1	acre	\$5.00	\$5.00	_____
Total Costs				\$174.78	_____
Net returns to owner for unpaid labor, management, equity and risk					
Above operating costs				\$133.22	_____
Above total listed costs				\$41.22	_____

Assumptions:

1. Grass already established. Harvested in June or July.
2. Interest computed on fertilization/herbicide costs for 6 months and operating costs for 3 months.
3. Machinery operating costs include: fuel, oil, repairs, and labor.
4. Machinery costs and based on 195 acres of grass hay.
5. Machinery ownership costs include depreciation, interest, insurance, and housing.

**Net returns above total costs for various prices and yields
Production (tons per acre)**

Price of Hay(\$per ton)	1	1.2	1.4	1.6	1.8	2
60	-\$90.78	-\$78.78	-\$66.78	-\$54.78	-\$42.78	-\$30.78
80	-\$70.78	-\$54.78	-\$38.78	-\$22.78	-\$6.78	\$9.22
100	-\$50.78	-\$30.78	-\$10.78	\$9.22	\$29.22	\$49.22
120	-\$30.78	-\$6.78	\$17.22	\$41.22	\$65.22	\$89.22
140	-\$10.78	\$17.22	\$45.22	\$73.22	\$101.22	\$129.22
160	\$9.22	\$41.22	\$73.22	\$105.22	\$137.22	\$169.22

Prepared by: Cody Bingham, E. Bruce Godfrey, and Boyd Kitchen

Enterprise Budgets: Rates Charged By Custom Operators in Cache County, 2007

Operation	Unit	Average
Land Preparation		
Plowing	acre	\$25.00
Discing	acre	\$14.00
Triple-K digging	acre	\$13.00
Leveling	acre	\$13.00
Rototill	acre	\$25.00
Seedbed preparation	acre	\$16.00
Planting and Spraying		
Planting Small Grains	acre	\$14.00
Planting Corn	acre	\$15.00
Ground Spraying	acre	\$8.00
Harvesting		
Swathing	acre	\$16.50
Raking	acre	\$7.50
Baling	bale	\$0.50
Baling midsize	bale	\$8.00
Baling large square	bale	\$15.00
Baling large round	bale	\$10.00
Hauling small bales	bale	\$0.40
Hauling large bales	bale	\$5.00
Combing small grains	acre	\$30.00

Prepared by: Clark Israelsen, Cache County Agent
 Custom Operation Services are Listed on the following
 Web Page: <http://utahageexchange.org>