

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, 1993-2006

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

Enterprise Budget: Cull Cow Feeding Operation, Utah, 2006

Item	Units	Weight or Number	\$/Unit	Value	Your Farm
Receipts					
Cull Cows Sold	Pounds	1300	\$0.46	\$598.00	_____
Expenses					
Cull Cows Purchased	Pounds	1000	\$0.40	\$400.00	_____
Corn Grain	Cwt	24	\$5.00	\$120.00	_____
Corn Silage	Cwt	8	\$1.40	\$11.20	_____
Alfalfa Hay (good)	Ton	0.15	\$70.00	\$10.50	_____
Supplement	Ton	0.075	\$185.00	\$13.88	_____
Yardage	Head	1	\$25.00	\$25.00	_____
Trucking	Head	1	\$10.00	\$10.00	_____
Interest on Cows	Head	1	6.00%	\$6.58	_____
Miscellaneous	Head	1	\$5.00	\$5.00	_____
Total Expenses				\$602.15	_____
Net Returns					
Return above feed and purchase cow cost				\$42.43	_____
Return above all costs				-\$4.15	_____

Assumptions:

Cows purchased in mid November
 Days on Feed 100
 Average Daily Gain 3
 Yardage includes a return to labor and management and capital

Break-even Analysis (net returns per head)

Average Daily Gain	Purchase Price of Cows				
	\$0.36	\$0.38	\$0.40	\$0.42	\$0.44
2.50	\$12.85	-\$7.15	-\$27.15	-\$47.15	-\$67.15
2.75	\$24.35	\$4.35	-\$15.65	-\$35.65	-\$55.65
3.00	\$35.85	\$15.85	-\$4.15	-\$24.15	-\$44.15
3.25	\$47.35	\$27.35	\$7.35	-\$12.65	-\$32.65
3.50	\$58.85	\$38.85	\$18.85	-\$1.15	-\$21.15

Prepared by: Dillon Feuz. Based on research conducted by the author in Nebraska.

Enterprise Budget: Costs and Returns per acre from growing Cantaloupe, 2006

Item	Quantity per acre	Unit	\$/Unit	Value/cost per acre	Your Farm
Receipts					
Cantaloupe	15.0	ton	\$500.00	\$7,500.00	_____
Subtotal				\$7,500.00	_____
Operating costs					
Land preparation					
Plowing	1	acre	\$6.07	\$6.07	_____
Discing	1	acre	\$3.07	\$3.07	_____
Land plane	1	acre	\$3.45	\$3.45	_____
Roller harrow	2	acre	\$3.79	\$7.58	_____
Plastic mulch	2	4,000 ft roll	\$60.00	\$120.00	_____
Laying plastic	1	acre	\$60.00	\$60.00	_____
Removing plastic labor	4	hours	\$11.00	\$44.00	_____
Removing plastic tractor	1	hours	\$20.00	\$20.00	_____
Planting	1	acre	\$5.50	\$5.50	_____
Seed	2	pounds	\$700.00	\$1,400.00	_____
Thinning & 1st Hand Weeding	9	hours	\$11.00	\$99.00	_____
Cultivation	2	acre	\$3.04	\$6.08	_____
Hand weeding (2x)	4	hours	\$11.00	\$44.00	_____
Fertilization					
Liquid 32 (32-0-0)	30	gallons	\$0.84	\$25.08	_____
Phosphate (11-52-0)	200	pounds	\$0.17	\$33.60	_____
Potassium (0-0-60)	130	pounds	\$0.28	\$36.01	_____
Custom application	4	acre	\$4.01	\$16.04	_____
Pollination (Bee Hives)	2	hives/acre	\$20.00	\$40.00	_____
Pesticides/herbicides					
Prefar (pre-plant)	5.00	quart	\$15.00	\$75.00	_____
Brava	1.50	pint	\$6.25	\$9.38	_____
Rally	3.00	ounce	\$5.10	\$15.30	_____
Sevin	1.00	quart	\$8.00	\$8.00	_____
Lannate	1.00	quart	\$15.50	\$15.50	_____
Kelthane	1	pounds	\$15.33	\$11.50	_____
custom application	6	acre	\$7.82	\$46.92	_____
Irrigation (furrow)	9	irrigations			
Labor	4.00	hours	\$11.00	\$44.00	_____
Water assessment	1	share	\$10.00	\$10.00	_____
Harvesting					
Hired Labor	100	hours	\$11.00	\$1,100.00	_____
Interest on operating capital			7.61%	\$125.14	_____
Subtotal				\$3,430.21	_____
Ownership costs (excludes cost of land)				\$66.65	_____
Farm insurance	1	acre	\$2.00	\$2.00	_____
Machinery ownership costs	1	acre	\$64.65	\$64.65	_____
Total costs				\$3,496.86	_____
Net returns to owner for unpaid labor, management, equity and risk					
Above operating costs				\$4,069.79	_____
Above total listed costs				\$4,003.14	_____

Assumptions:

1. The planting costs listed assume seeding using a hybrid seed. A non-hybrid would cost \$200 per pound. If transplants were used, there would be \$120 in cost for transplants (\$2 per flat using 60 flats of 50 plants per flat) and \$88 per acre for labor (4 People for 2 hours per acre).
 2. Plastic mulch may not be used for later production.
 3. The costs listed for pesticides and herbicides are for one application of each. Depending on the situation some of them may be applied more than once or not at all.
 4. Interest computed on planting costs for 10 months and fertilization/herbicides for 4 months.
 5. Machinery operating costs include: fuel, oil, repairs, and labor.
 6. Machinery ownership costs are allocated based on equipment used for each crop.
 7. Machinery ownership costs include depreciation, interest, insurance, and housing.
- Budget prepared by: Dan Drost And Ruby Ward

Enterprise Budget: Turf, 200 Acre Operation, Northern Utah, 2005

Item	Units/times	Number	\$/Unit	Value	Your Farm
Receipts					
Sod ¹	Square Feet	35000	0.21	\$7,350.00	_____
Other ²				\$250.00	_____
Subtotal				\$7,600.00	_____
Operating expenses including labor					
Land Preparation					
Disking	Times	2	\$5.97	\$11.94	_____
Plane & Roll	Times	7	\$4.72	\$33.04	_____
Cultipacking	Times	2	\$4.72	\$9.44	_____
Soil test		1	\$14.00	\$14.00	_____
Fertilization ³					
Nitrogen	Unit	500	\$0.40	\$200.00	_____
Phosphosphate	Unit	200	\$0.30	\$60.00	_____
Potash	Unit	80	\$0.18	\$14.40	_____
Seed	lbs.	130	\$2.50	\$325.00	_____
Seeding	Times	1	\$10.92	\$10.92	_____
Herbicides and Insecticides					
2-4D	Pint	15	\$3.70	\$55.50	_____
Cararyl 4L (Sevin)	Gallon	2	\$30.57	\$61.14	_____
Dithiopyr (Dimension)	Quart	2	\$42.00	\$84.00	_____
Turf care					
Spraying	Times	14	\$1.63	\$22.82	_____
Mowing	Times	30	\$3.70	\$111.00	_____
Weeding & Maintenance	Times	10	\$4.83	\$48.27	_____
Irrigation					
Irrigation	Times	30	\$4.75	\$142.50	_____
Water Assessment				\$10.00	_____
Operating interest	Months	18	7.61%	\$325.01	_____
Harvesting					
Cutting and loading	square feet	35000	\$0.020	\$700.00	_____
Pallets ⁴	Each	87.5	\$2.00	\$175.00	_____
Trucking & labor	square feet	35000	\$0.068	\$2,380.00	_____
Subtotal				\$4,793.98	_____
Ownership costs (excludes cost of land)					
Machinery ownership costs				\$219.56	_____
Irrigation equipment				\$61.30	_____
Office expenses	square feet	35000	\$0.035	\$1,225.00	_____
Subtotal				\$1,505.86	_____
Total of listed costs				\$6,299.84	_____
Net returns					
Above operating costs				\$2,806.02	_____
Above listed costs				\$1,300.16	_____
Breakeven on listed costs	square feet			\$0.18	_____

Assumptions

1. Crop is harvested every 18 months with 10% waste
2. Other includes delivery and installation charges
3. Fertilizer is on an active ingredient basis and is applied through irrigation system over 18 months
4. One pallet per 400 square feet of sod (87.5 per acre) costing \$5 each with 40% breakage

Prepared by DeeVon Bailey with input from a turf producer and input providers

Enterprise Budget: Costs and Returns per acre from growing Grass Hay, Rich County, 2006

Item	Quantity per acre	Unit	\$/Unit	Value/cost per acre	Your Farm
			 Dollars
Receipts					
Grass hay	1.5	tons	\$70.00	\$105.00	_____
Residue	1.5	AUM	\$12.00	\$18.00	_____
Subtotal				\$123.00	_____
Operating costs					
Fertilization					
Nitrogen (34-0-0)	500	pounds	\$0.14	\$70.00	_____
Custom application	1	acre	\$7.82	\$7.82	_____
Irrigation (flood)	5	irrigations			
Labor	1.67	hours	\$10.00	\$16.67	_____
Water assessment	1	share	\$10.00	\$10.00	_____
Repairs/maintenance	1	acre	\$2.30	\$2.30	_____
Harvesting					
Swathing	1	acre	\$8.07	\$8.07	_____
Baling	1.5	\$ per ton	\$4.79	\$7.19	_____
Hauling/stacking	1.5	\$ per ton	\$3.63	\$5.45	_____
Interest on operating capital			7.61%	\$2.35	_____
Subtotal				\$129.83	_____
Ownership costs (excludes cost of land)					
Farm insurance	1	acre	\$2.00	\$2.00	_____
Machinery ownership costs	1	acre	\$100.07	\$100.07	_____
Subtotal				\$102.07	_____
Total costs				\$231.90	_____
Net returns to owner for unpaid labor, management, equity and risk					
Above operating costs				-\$6.83	_____
Above total listed costs				-\$108.90	_____

Assumptions:

1. Grass already established. Harvested in late summer and grazed in fall.
2. Interest computed on fertilization costs for 6 months and operating costs for 3 months.
3. Machinery operating costs include: fuel, oil, repairs and labor.
4. Machinery ownership costs include depreciation, interest, insurance, and housing.

Net returns above total costs for various prices and yields.

Price of hay	Production (tons) per acre				
	1.1	1.3	1.5	1.7	1.9
\$60	-\$144.53	-\$134.22	-\$123.90	-\$113.59	-\$103.27
\$65	-\$139.03	-\$127.72	-\$116.40	-\$105.09	-\$93.77
\$70	-\$133.53	-\$121.22	-\$108.90	-\$96.59	-\$84.27
\$75	-\$128.03	-\$114.72	-\$101.40	-\$88.09	-\$74.77
\$80	-\$122.53	-\$108.22	-\$93.90	-\$79.59	-\$65.27

Budget prepared by: E. Bruce Godfrey, Cody Bingham and Darrell Rothlisberger