

Costs and Returns per acre from establishing alfalfa with oat hay, 2006

Utah County

	Quantity per acre	Unit	Price/cost per unit	Value/cost per acre	Base Value	Your Value
Receipts						
Oat hay	2.6	tons	\$67.67	\$175.93	\$175.93	
Alfalfa hay	1.00	tons	\$88.57	\$88.57	\$88.57	
	Subtotal			\$264.50	\$264.50	
Operating costs						
Land preparation						
Plowing	1	acre	\$5.88	\$5.88	\$5.88	
Roller harrow	2	acre	\$3.64	\$7.28	\$7.28	
Discing	1	acre	\$3.73	\$3.73	\$3.73	
Land plane	1	acre	\$3.34	\$3.34	\$3.34	
Planting	1	acre	\$2.96	\$2.96	\$2.96	
Seed						
Oat seed	80	pounds	\$0.17	\$13.60	\$13.60	
Alfalfa seed	16	pounds	\$2.52	\$40.32	\$40.32	
Fertilization						
Nitrogen (34-0-0)	278	pounds	\$0.18	\$49.62	\$49.62	
Phosphate (11-52-0)	48	pounds	\$0.18	\$8.57	\$8.57	
Custom application	1	acre	\$7.82	\$7.82	\$7.82	
Pesticides/herbicides						
none	-	pounds	\$0.00	\$0.00	\$0.00	
Custom application	-	acre	\$7.82	\$0.00	\$0.00	
Irrigation (wheel line)						
Labor	1.33	hours	\$10.00	\$13.33	\$13.33	
Water assessment	1	share	\$10.00	\$10.00	\$10.00	
Repairs/maintenance	1	acre	\$2.30	\$2.30	\$2.30	
Pumping	37	acre inch	\$0.00	\$0.00	\$0.00	
Harvesting						
Swathing	2	acre	\$4.03	\$8.07	\$8.07	
Turning/raking	2	acre	\$1.39	\$2.78	\$2.78	
Baling	2.60	tons	\$4.79	\$12.45	\$12.45	
Hauling/stacking	2.60	tons	\$3.63	\$9.44	\$9.44	
Crop insurance (75% Yield, 100% Price)	1	acre	\$5.63	\$5.63	\$5.63	
Interest on operating capital			7.61%	\$8.38	\$8.38	
	Subtotal			\$215.52	\$213.41	
Ownership costs (excludes cost of land)						
Insurance	1	acre	\$2.00	\$2.00	\$2.00	
Machinery ownership costs	1	acre	\$143.13	\$143.13	\$143.13	
Irrigation equipment costs	1	acre	\$8.25	\$8.25	\$8.25	
	Total costs			\$368.90	\$366.78	
Net returns to owner for unpaid labor, management, equity and risk						
Above operating costs				\$48.98	\$51.09	
Above total costs				-\$104.40	-\$102.28	

Breakeven Table - Oat Hay

Net returns per acre above operating costs

Yield (Ton/Ac)	Selling Price (\$/ton)				
	\$57.67	\$62.67	\$67.67	\$72.67	\$77.67
1.10	-\$50.89	-\$45.39	-\$39.89	-\$34.39	-\$28.89
1.60	-\$26.27	-\$18.27	-\$10.27	-\$2.27	\$5.73
2.10	-\$1.64	\$8.86	\$19.36	\$29.86	\$40.36
2.60	\$22.98	\$35.98	\$48.98	\$61.98	\$74.98
3.10	\$47.60	\$63.10	\$78.60	\$94.10	\$109.60
3.60	\$72.23	\$90.23	\$108.23	\$126.23	\$144.23
4.10	\$96.85	\$117.35	\$137.85	\$158.35	\$178.85

Assumptions

- Oat hay planted in late March and harvested in July.
- Interest computed on land preparation and planting costs for 10 months and fertilization/herbicides/irrigation costs for 6 months.
- Machinery operating costs include: fuel, oil, repairs and labor.
- Machinery ownership costs are allocated based on equipment used for each crop.
- Machinery ownership costs include depreciation, interest, insurance, and housing.

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