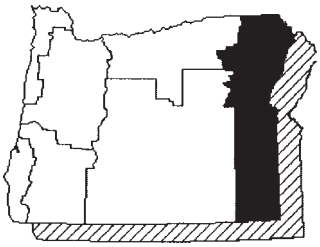
Enterprise Budget

Fine Fescue Seed Production, Eastern Oregon Region



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This enterprise budget estimates the typical costs of producing fine fescue seed near LaGrande, Oregon. While efforts were made to reflect common practices, it is not representative of any particular farm and thus should be used only as a guide to estimating actual costs. The major assumptions used in constructing this budget are discussed below. Assistance provided by area producers is greatly appreciated.

For costs and returns associated with establishment of fine fescue seed, see *EM 8614, Enterprise Budget: Fine Fescue Seed Establishment, Eastern Oregon Region*.

Land and Irrigation

This budget is based on a 1,200-acre farm with 100 acres in continuous production of fine fescue seed. The established stand is assumed to have a 4-year life. A land lease charge of $100 per acre is included to represent the cost of leasing or owning land.

Irrigation system costs are based upon a side-roll irrigation system valued at $315 per acre including pump and well. Assuming a 20-year useful life and using straight-line depreciation results in a $16-per-acre annual depreciation charge. Interest on the average investment ($315 ÷ 2) is charged at 9 percent for a total of $14 per acre.

Labor

Hired labor typically costs approximately $10 per hour including worker's compensation, FICA, and other payroll expenses. For this study, hired labor and owner labor both are valued at $10 per hour.

Capital

Opportunity costs of capital are charged at a rate of 9 percent for current and intermediate capital provided by the owner/operator.

Machinery and Equipment

The machinery complement is sufficient to farm 1,200 production acres. A detailed breakdown of machinery values used in this budget is shown in Table 1. March 1994 replacement costs are used. Estimated machinery costs are shown in Table 2.

Postharvest Residue Management

This budget utilizes open field burning for postharvest residue management for the first 3 production years. It is assumed the straw is given to a custom baler the final production year.

Burning is controlled by a seven-person crew including one person driving a 2-ton truck with a 1,000 gal water tank, another scouting with a pickup, and the remainder of the crew scouting on foot. Approximately one-fourth of the acreage does not completely burn and must be beat and propane burned. Reburning involves a 30 ft propane burner pulled by a 100 hp tractor.

Other

A general spot spraying charge of $10 per acre is used in this budget. This includes labor and a complete herbicide. There also is a miscellaneous harvest labor charge.

An amortized establishment cost of $115 is included to cover the cost of establishing fine fescue. For costs associated with establishing fine fescue, see *EM 8614, Enterprise Budget: Fine Fescue Seed Establishment, Eastern Oregon Region*.

Results

The total variable cost is $388 per acre, and the total fixed cost is $295 per acre. A harvest of 800 lb of seed per acre at $0.60 per lb offsets most of the production costs. Based on the assumptions in this budget, the net projected returns are -$204 and the break-even price over total cost is $0.85 per lb.

OREGON STATE UNIVERSITY EXTENSION SERVICE

ECONOMIC COSTS and RETURNS
Eastern Oregon Region
Fine Fescue Seed Production, 100 acres ($/acre)

GROSS INCOME Description	Quantity	Unit	$/Unit	Total	Your Returns
Fescue Seed	800.00	lb	0.60	480.00	
Total GROSS Income				480.00	

VARIABLE COST Description		Labor	Machinery	Materials	Total	Your Cost
Certification		0.00	0.00	2.00	2.00	
Broadleaf Herbicide		0.00	0.00	16.06	16.06	
Sticker	0.2 qt x 3.38 = 0.67					
Herbicide	0.75 qt x 14.86 = 11.15					
Custom Application	1 ac x 4.25 = 4.25					
Irrigation (3x)		15.00	0.00	17.85	32.85	
Repair & Maint.	3 ac x 2.50 = 7.50					
Electricity	3 ac x 3.45 = 10.35					
Fungicide		0.00	0.00	16.76	16.76	
Sticker	0.2 qt x 3.38 = 0.67					
Fungicide	0.125 qt x 84.74 = 10.59					
Custom Application	1 ac x 5.50 = 5.50					
Spot Spray		0.00	0.00	10.00	10.00	
HARVEST						
Swathing		3.03	2.50	0.00	5.53	
Misc. Harvest Labor		2.00	0.00	0.00	2.00	
Combining		8.07	17.46	0.00	25.53	
Hauling Seed		0.60	0.38	0.00	0.98	
Seed Cleaning, Bagging, and Certification		0.00	0.00	88.00	88.00	
Fees	8 cwt x 11.00 = 88.00					
Total HARVEST					199.71	
POSTHARVEST						
Beating		1.42	2.25	0.00	3.67	
Tedding		0.81	0.55	0.00	1.36	
Open Field Burn		10.59	0.30	5.75	16.64	
Burning Fee	1 ac x 5.75 = 5.75					
Beat and Reburn (.25x)		0.74	1.03	0.95	2.72	
Propane for Reburn	1.25 gal x 0.76 = 0.95					
Spike Harrowing		0.60	0.37	0.00	0.97	
Fertilizer		0.00	0.00	19.46	19.46	
25-10-0-7	0.075 tn x 202.80 = 15.21					
Custom Application	1 ac x 4.25 = 4.25					
Irrigation (2x)		10.00	0.00	11.90	21.90	
Repair & Maint.	2 ac x 2.50 = 5.00					
Electricity	2 ac x 3.45 = 6.90					
Broadleaf Herbicide		0.00	0.00	17.90	17.90	
Herbicide	0.75 qt x 14.86 = 11.15					
Herbicide	0.09 qt x 20.36 = 1.83					
Sticker	0.2 qt x 3.38 = 0.67					
Custom Application	1 ac x 4.25 = 4.25					
Insecticide		0.00	0.00	16.82	16.82	
Insecticide	1 qt x 12.57 = 12.57					
Custom Application	1 ac x 4.25 = 4.25					
Fall Fertilizer		0.00	0.00	49.82	49.82	
25-7-5-5	0.225 tn x 197.98 = 44.55					
Trace Minerals	3.75 lb x 0.273 = 1.02					
Custom Application	1 ac x 4.25 = 4.25					
Total POSTHARVEST					151.26	

ECONOMIC COSTS and RETURNS
Eastern Oregon Region
Fine Fescue Seed Production, 100 acres ($/acre)

VARIABLE COST Description	Labor	Machinery	Materials	Total	Your Cost
MISCELLANEOUS					
Pickup	4.58	1.67	0.00	6.26	
Operating Capital Interest	0.00	0.00	23.75	23.75	
Fine Fescue Commission Assessment Charge 8 cwt x 0.90 = 7.20	0.00	0.00	7.20	7.20	
Total MISCELLANEOUS				37.21	
Total VARIABLE COST				388.18	
GROSS INCOME minus VARIABLE COST				91.82	

FIXED COST Description	Unit	Total	Your Cost
CASH Cost			
Machinery & Equipment Insurance	acre	3.35	
Land Lease	acre	100.00	
Total CASH Cost		103.35	
NONCASH Cost			
Amortized Establishment Cost	acre	114.72	
Irrigation Interest & Depreciation	acre	30.00	
Machinery & Equipment Depreciation & Interest	acre	47.26	
Total NONCASH Cost		191.98	
Total FIXED Cost		295.33	
Total of ALL Cost		683.51	
NET PROJECTED RETURNS		-203.51	
Break-even Price, Total Variable Cost		$0.49 per lb	
Break-even Price, Total Cost		$0.85 per lb	

Table 1. Machinery Cost Assumptions

Machine	Size	List Price	Current Market Value	Salvage Value	Useful Life	Remaining Life	Annual Use
Tractor	125 hp	$65,000	$42,250	$19.500	10,000 hr	5,000 hr	16 hr
Tractor	100 hp	50,000	32,500	15,000	10,000 hr	5,000 hr	3 hr
Tractor	60 hp	23,000	14,950	6,900	10,000 hr	5,000 hr	13 hr
Combine w/ Header	13 ft	135,000	81,000	27,000	3,000 hr	1,500 hr	67 hr
Swather	12 ft	44,000	26,400	8,800	4,000 hr	2,000 hr	25 hr
Propane Burner	30 ft	9,000	5,400	1,800	2,000 hr	1,000 hr	3 hr
Rotary Mower	14 ft	11,500	6,900	2,300	2,000 hr	1,000 hr	15 hr
Spike-tooth Harrow	20 ft	2,750	1,650	550	2,000 hr	1,000 hr	5 hr
Water Tank	1,000 gal	1,000	600	200	1,000 hr	500 hr	100 hr
Tedder	18 ft	3,000	1,800	600	2,000 hr	1,000 hr	7 hr
Grain Truck (used)	2 ton	7,000	4,200	1,400	100,000 mi	50,000 mi	290 mi
Pickup	4 wd	18,000	10,800	3,600	100,000 mi	50,000 mi	1,667 mi

Table 2. Machinery Cost Calculations

		Costs per Hour or Mile						Costs per Acre		
		Variable		Fixed						
Machine	Size	Fuel & Lube	Repair & Maint.	Depr. & Interest	Insurance	Total Cost	Hours or Miles per Acre	Variable	Fixed	Total
Tractor	125 hp	$6.24	$4.78	$11.82	$0.85	$23.68	0.16 hr	$1.81	$2.08	$3.88
Tractor	100 hp	4.99	3.68	9.09	0.65	18.41	0.03 hr	0.28	0.32	0.60
Tractor	60 hp	3.00	1.69	3.96	0.30	8.94	0.13 hr	0.60	0.55	1.15
Combine w/ Header	13 ft	8.37	17.82	49.50	2.93	78.61	0.67 hr	17.46	34.95	52.41
Swather	12 ft	4.33	5.68	15.77	0.95	26.72	0.25 hr	2.50	4.18	6.68
Propane Burner	30 ft	0.00	2.96	5.38	0.54	8.88	0.03 hr	0.09	0.18	0.27
Rotary Mower	14 ft	0.00	5.92	12.90	0.69	19.51	0.15 hr	0.87	2.00	2.87
Spike-tooth Harrow	20 ft	0.00	0.58	2.11	0.17	2.86	0.05 hr	0.03	0.11	0.14
Water Tank	1,000 gal	0.00	0.00	0.91	0.06	0.97	1.00 hr	0.00	0.97	0.97
Tedder	18 ft	0.00	1.54	3.37	0.18	5.09	0.07 hr	0.10	0.24	0.34
Grain Truck (used)	2 ton	0.11	0.09	0.21	0.04	0.45	2.90 mi	0.58	0.71	1.29
Pickup	4 wd	0.07	0.03	0.21	0.04	0.35	16.67 mi	1.67	4.31	5.98
Total								$25.99	$50.58	$76.57

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