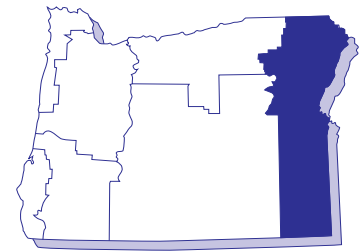




Enterprise Budget

Bluegrass Seed Production, Eastern Oregon Region

Sue Kummerow, undergraduate student,
Gordon Cook, Extension agent, Union County, and
Brenda Turner, graduate research assistant,
Oregon State University



EM 8621, August 1995

This enterprise budget estimates the typical costs of producing bluegrass 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 bluegrass seed, see *EM 8620, Enterprise Budget: Bluegrass Seed Establishment, Eastern Oregon Region*.

Land and Irrigation

This budget is based on a 1,200-acre farm with 120 acres in continuous production of bluegrass 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 on 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 ($\$315 \div 2$) 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 3 out of the 4 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 burn completely 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 \$123 is included to cover the cost of establishing bluegrass. For costs associated with establishing bluegrass, see *EM 8620, Enterprise Budget: Bluegrass Seed Establishment, Eastern Oregon Region*.

Results

The total variable cost is \$41, and the total fixed cost is \$302. A harvest of 800 lb of seed per acre at \$0.85 per lb offsets most of the production costs. However, the net projected returns are -\$33. The break-even price over total cost is \$0.89 per lb.



EM 8621 Enterprise Budget

ECONOMIC COSTS and RETURNS

Eastern Oregon Region

Bluegrass Seed Production, 120 acres (\$/acre)

<u>GROSS INCOME Description</u>	<u>Quantity</u>	<u>Unit</u>	<u>\$/Unit</u>	<u>Total</u>	<u>Your Returns</u>
Bluegrass	800.00	lb	0.85	680.00	_____
Total GROSS Income				680.00	_____
<u>VARIABLE COST Description</u>	<u>Labor</u>	<u>Machinery</u>	<u>Materials</u>	<u>Total</u>	<u>Your Cost</u>
PREHARVEST					
Seed Certification	0.00	0.00	2.00	2.00	_____
Broadleaf Herbicide	0.00	0.00	27.21	27.21	_____
Sticker	0.2 qt x 3.38 = 0.67				
Herbicide	1.5 qt x 14.86 = 22.29				
Custom Application	1 ac x 4.25 = 4.25				
Irrigation (3x)	15.00	0.00	17.85	32.85	_____
Electricity	3 ac x 3.45 = 10.35				
Repair & Maint.	3 ac x 2.50 = 7.50				
Spot Spray	0.00	0.00	10.00	10.00	_____
Fungicide (2x)	0.00	0.00	33.47	33.47	_____
Sticker	0.4 qt x 3.38 = 1.35				
Fungicide	0.25 qt x 84.74 = 21.18				
Custom Application	2 ac x 5.50 = 11.00				
Total PREHARVEST				105.54	_____
HARVEST					
Swathing	2.02	1.67	0.00	3.69	_____
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				120.20	_____
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	24.53	24.53	_____
25-10-0-7	0.1 tn x 202.80 = 20.28				
Custom Application	1 ac x 4.25 = 4.25				
Irrigation (2x)	10.00	0.00	11.90	21.90	_____
Electricity	2 ac x 3.45 = 6.90				
Repair & Maint.	2 ac x 2.50 = 5.00				
Broadleaf Herbicide	0.00	0.00	29.76	29.76	_____
Herbicide	1.5 qt x 14.86 = 22.29				
Herbicide	0.125 qt x 20.36 = 2.55				
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				

EM 8621 Enterprise Budget

ECONOMIC COSTS and RETURNS

Eastern Oregon Region

Bluegrass Seed Production, 120 acres (\$/acre)

<u>VARIABLE COST Description</u>	<u>Labor</u>	<u>Machinery</u>	<u>Materials</u>	<u>Total</u>	<u>Your Cost</u>
Fall Fertilizer	0.00	0.00	33.87	33.87	_____
25-7-5-5 0.15 tn x 197.98 = 29.70					
Trace Minerals 7.5 lb x 0.273 = 2.05					
Custom Application 0.5 ac x 4.25 = 2.12					
Total POSTHARVEST				152.24	_____
MISCELLANEOUS					
Pickup	4.58	1.67	0.00	6.26	_____
Operating Capital Interest	0.00	0.00	24.71	24.71	_____
Total MISCELLANEOUS				30.97	_____
Total VARIABLE COST				408.95	_____
GROSS INCOME minus VARIABLE COST				271.05	_____
<u>FIXED COST Description</u>		<u>Unit</u>		<u>Total</u>	<u>Your Cost</u>
CASH Cost					
Machinery & Equipment Insurance		acre		3.27	_____
Land Lease		acre		100.00	_____
Total CASH Cost				103.27	_____
NONCASH Cost					
Amortized Establishment Cost		acre		122.54	_____
Irrigation Interest & Depreciation		acre		30.00	_____
Machinery & Equipment Depreciation & Interest		acre		45.95	_____
Total NONCASH Cost				198.49	_____
Total FIXED Cost				301.76	_____
Total of ALL Cost				710.71	_____
NET PROJECTED RETURNS				-30.71	_____
Break-even Price, Total Variable Cost				\$0.51 per lb	_____
Break-even Price, Total Cost				\$0.89 per lb	_____

EM 8621 Enterprise Budget

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	20 hr
Tractor	100 hp	50,000	32,500	15,000	10,000 hr	5,000 hr	4 hr
Tractor	60 hp	23,000	14,950	6,900	10,000 hr	5,000 hr	15 hr
Combine w/ Header	13 ft	135,000	81,000	27,000	3,000 hr	1,500 hr	80 hr
Swather	12 ft	44,000	26,400	8,800	4,000 hr	2,000 hr	20 hr
Propane Burner	30 ft	9,000	5,400	1,800	2,000 hr	1,000 hr	4 hr
Rotary Mower	14 ft	11,500	6,900	2,300	2,000 hr	1,000 hr	18 hr
Spike-tooth Harrow	20 ft	2,750	1,650	550	2,000 hr	1,000 hr	6 hr
Tedder	18 ft	3,000	1,800	600	2,000 hr	1,000 hr	8 hr
Water Tank	1,000 gal	1,000	600	200	1,000 hr	500 hr	120 hr
Grain Truck (used)	2 ton	7,000	4,200	1,400	100,000 mi	25,000 mi	348 mi
Pickup	4 wd	18,000	10,800	3,600	100,000 mi	50,000 mi	2,000 mi

Table 2. Machinery Cost Calculations

Machine	Size	Costs per Hour or Mile					Total Cost	Hours or Miles per Acre	Costs per Acre		
		Variable		Fixed		Variable			Fixed	Total	
		Fuel & Lube	Repair & Maint.	Depr. & Interest	Insurance						
Tractor	125 hp	\$6.24	\$4.78	\$11.82	\$0.85	\$23.67	0.16 hr	\$1.81	\$2.07	\$3.88	
Tractor	100 hp	4.99	3.68	9.09	0.65	18.40	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	0.17 hr	1.67	2.79	4.45	
Propane Burner	30 ft	0.00	2.96	5.38	0.54	8.87	0.03 hr	0.09	0.19	0.28	
Rotary Mower	14 ft	0.00	5.92	12.90	0.69	19.50	0.15 hr	0.87	2.00	2.87	
Spike-tooth Harrow	20 ft	0.00	0.58	2.11	0.17	2.85	0.05 hr	0.03	0.11	0.14	
Tedder	18 ft	0.00	1.54	3.37	0.18	5.08	0.07 hr	0.10	0.24	0.34	
Water Tank	1,000 gal	0.00	0.00	0.91	0.06	0.96	1.00 hr	0.00	0.97	0.97	
Grain Truck (used)	2 ton	0.11	0.09	0.21	0.04	0.44	2.90 mi	0.58	0.71	1.29	
Pickup	4 wd	0.07	0.03	0.21	0.04	0.34	16.67 mi	1.67	4.47	6.33	
Total								\$25.16	\$49.36	\$74.51	

Extension Service, Oregon State University, Corvallis, Lyla Houghlum, interim director. This publication was produced and distributed in furtherance of the Acts of Congress of May 8 and June 30, 1914. Extension work is a cooperative program of Oregon State University, the U.S. Department of Agriculture, and Oregon counties.



Oregon State University Extension Service offers educational programs, activities, and materials—without regard to race, color, religion, sex, sexual orientation, national origin, age, marital status, disability, and disabled veteran or Vietnam-era veteran status—as required by Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, and Section 504 of the Rehabilitation Act of 1973. Oregon State University Extension Service is an Equal Opportunity Employer.