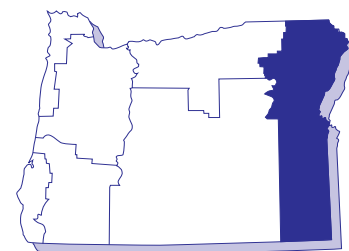




Enterprise Budget

Bluegrass Seed Establishment, Eastern Oregon Region



EM 8620, August 1995

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This enterprise budget estimates the typical costs of establishing 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 established bluegrass seed, see *EM 8621, Enterprise Budget: Bluegrass Seed Production, 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. This budget includes establishment costs for 1 acre. The stand is assumed to have a 4-year life beyond the establishment year. 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, assuming the machinery is half depreciated.

Operations

The budget shows farming operations in the order they typically are performed for a spring planting. Early in the fall, the field is plowed, followed by a roller packer. Next, the field is spring-tooth harrowed and roller packed twice. In the spring, 4 lb of seed are planted per acre. This is followed with two herbicide applications for broadleaf control. A fertilizer mix of 25-10-0-7 is applied at a rate of 150 lb per acre. Following establishment, a third application of herbicide is applied. The bluegrass then is hand hoed at a cost of \$30 per acre and spot sprayed with a herbicide. In the summer, the field is irrigated once with 3 inches of water at a cost of \$20 per acre. This charge includes electricity, labor, repair and maintenance for the wheel-line irrigation system. In late summer, fields are mowed, and a fall application of broadleaf herbicide and 400 lb of 25-7-5-5 fertilizer is applied per acre.

Establishment Cost

The total cost to establish bluegrass seed is \$397 per acre. This includes \$247 variable cost and \$150 fixed cost. The total establishment cost of \$397 per acre must be recovered during the 4 bluegrass production years. At 9 percent interest, an annual payment of \$123 will just repay this amount, with interest, in 4 years. This annual payment is included as a noncash fixed cost in *EM 8621, Bluegrass Seed Production, Eastern Oregon Region*.



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ECONOMIC COSTS and RETURNS

Eastern Oregon Region

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

<u>VARIABLE COST Description</u>	<u>Labor</u>	<u>Machinery</u>	<u>Materials</u>	<u>Total</u>	<u>Your Cost</u>
Plowing	1.73	3.26	0.00	4.99	_____
Roller Packing	0.60	1.28	0.00	1.88	_____
Harrowing	0.97	2.37	0.00	3.34	_____
Roller Packing	1.21	2.56	0.00	3.77	_____
Planting	0.60	1.25	10.00	11.85	_____
Bluegrass Seed 4 lb x 2.50 = 10.00					
Certification Signup	0.00	0.00	0.83	0.83	_____
Broadleaf Herbicide	0.00	0.00	19.79	19.79	_____
Sticker 0.2 qt x 3.38 = 0.67					
Herbicide 1 qt x 14.86 = 14.86					
Custom Application 1 ac x 4.25 = 4.25					
Broadleaf Herbicide	0.00	0.00	29.67	29.67	_____
Herbicide 0.75 qt x 14.86 = 11.15					
Herbicide 0.062 qt x 20.36 = 1.27					
Herbicide 2 qt x 6.50 = 13.00					
Custom Application 1 ac x 4.25 = 4.25					
Broadleaf Herbicide	0.00	0.00	15.15	15.15	_____
Herbicide 0.125 qt x 20.36 = 2.54					
Herbicide 0.5 qt x 3.71 = 1.85					
Herbicide 1 qt x 6.50 = 6.50					
Custom Application 1 ac x 4.25 = 4.25					
Soil Test	0.00	0.00	0.75	0.75	_____
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					
Hand Hoeing	0.00	0.00	30.00	30.00	_____
Irrigation	5.00	0.00	5.95	10.95	_____
Electricity 1 ac x 3.45 = 3.45					
Repair & Maint. 1 ac x 2.50 = 2.50					
Clipping	1.42	2.13	0.00	3.55	_____
Broadleaf Herbicide	0.00	0.00	18.62	18.62	_____
Herbicide 0.75 qt x 14.86 = 11.15					
Herbicide 0.125 qt x 20.36 = 2.54					
Sticker 0.2 qt x 3.38 = 0.67					
Custom Application 1 ac x 4.25 = 4.25					
Fall Fertilizer	0.00	0.00	47.94	47.94	_____
25-7-5-5 0.2 tn x 197.98 = 39.59					
Trace Minerals 15 lb x 0.273 = 4.10					
Custom Application 1 ac x 4.25 = 4.25					
MISCELLANEOUS					
Pickup	4.58	1.67	0.00	6.25	_____
Operating Capital Interest	0.00	0.00	18.04	18.04	_____
Total MISCELLANEOUS				24.29	_____
Total VARIABLE COST				246.83	_____
GROSS INCOME minus VARIABLE COST				-246.83	_____

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ECONOMIC COSTS and RETURNS

Eastern Oregon Region

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

<u>FIXED COST Description</u>	<u>Unit</u>	<u>Total</u>	<u>Your Cost</u>
CASH Cost			
Machinery & Equipment Insurance	acre	1.64	_____
Land Lease	acre	100.00	_____
Total CASH Cost		<u>101.64</u>	_____
NONCASH Cost			
Irrigation Interest & Depreciation	acre	30.00	_____
Machinery & Equipment Depreciation & Interest	acre	<u>18.67</u>	_____
Total NONCASH Cost		48.67	_____
Total FIXED Cost		150.31	_____
Total of ALL Cost		397.14	_____
NET PROJECTED RETURNS		-397.14	_____

Table 1. Machinery Cost Assumptions

<u>Machine</u>	<u>Size</u>	<u>List Price</u>	<u>Current Market Value</u>	<u>Salvage Value</u>	<u>Useful Life</u>	<u>Remaining Life</u>	<u>Annual Use</u>
Tractor	170 hp	\$81,000	\$52,650	\$24,300	10,000 hr	5,000 hr	56 hr
Tractor	100 hp	50,000	32,500	15,000	10,000 hr	5,000 hr	16 hr
Plow	8-18's	4,500	2,700	900	2,000 hr	1,000 hr	17 hr
Roller Packer	28-30's	25,000	15,000	5,000	2,000 hr	1,000 hr	18 hr
Spring-tooth Harrow	50 ft	24,000	14,400	4,800	2,000 hr	1,000 hr	10 hr
Grain Drill	12 ft	9,000	5,400	1,800	1,500 hr	750 hr	6 hr
Rotary Mower	14 ft	11,500	6,900	2,300	2,000 hr	1,000 hr	14 hr
Pickup	4 wd	18,000	10,800	3,600	100,000 mi	50,000 mi	2,000 mi

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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	170 hp	\$8.49	\$5.95	\$15.96	\$1.05	\$31.45	0.47 hr	\$6.72	\$7.91	\$14.63
Tractor	100 hp	4.99	3.68	9.09	0.65	18.41	0.13 hr	1.12	1.26	2.38
Plow	8-18's	0.00	2.44	2.69	0.27	5.40	0.14 hr	0.35	0.42	0.77
Roller Packer	28-30's	0.00	5.28	19.19	1.50	25.96	0.15 hr	0.79	3.10	3.89
Spring-tooth Harrow	50 ft	0.00	9.25	18.42	1.44	29.11	0.08 hr	0.74	1.59	2.33
Grain Drill	12 ft	0.00	4.61	6.65	0.54	11.79	0.05 hr	0.23	0.36	0.59
Rotary Mower	14 ft	0.00	5.92	12.90	0.69	19.51	0.12 hr	0.70	1.60	2.29
Pickup	4 wd	0.07	0.03	0.21	0.04	0.35	16.67 mi	1.67	4.07	5.74
Total								\$12.32	\$20.31	\$32.63



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