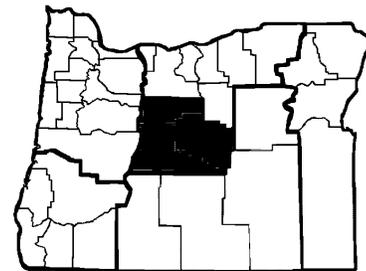


Enterprise Budget

Rough Bluegrass Establishment Year, Central Oregon Region

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EM 8808, October 2002

This enterprise budget estimates the typical costs and returns of producing certified rough bluegrass seed in the Madras area of central Oregon. While efforts were made to reflect common practices, it is not representative of any particular farm and should be used only as a guide to estimate actual costs. The major assumptions used in constructing this budget are discussed below. Assistance provided by area producers is greatly appreciated. The stand is assumed to have a 3-year life, including the establishment year. For costs and returns associated with production years of rough bluegrass, see EM 8809, *Enterprise Budget: Rough Bluegrass Production Years, Central Oregon Region*.

Cropping Pattern

This budget is based on a typical 600-acre farm with 150 acres in production of certified rough bluegrass seed, with 50 of these acres in first-year production. The budget includes production costs for 1 acre, with a yield of 950 pounds per acre. A summary of the estimated costs and returns per acre is shown in Table 1.

Land and Irrigation

A land lease charge of \$100 per acre is included to represent the cost of leasing or owning the land. The charge is based on the cost of a long-term lease for good-quality irrigated land. A water charge of \$3.17 per acre-inch covers the cost of irrigation water and canal maintenance. Calculations are based on the North Unit Irrigation District rates for Deschutes River water rights. This budget assumes that the crop is flood irrigated.

Labor

Hand labor costs \$7.68 per hour, including worker's compensation, social security taxes, and other labor overhead expenses. Hand labor is used for roguing and irrigating. Operator labor costs \$13.65 per hour and includes worker's compensation, social security taxes, and other labor overhead expenses. Operator labor is used for hauling the seed and other machinery operations. Labor hours for machinery operation are calculated by multiplying 1.21 times machine hours to allow for machinery setup, movement, and adjustments.

Capital

Opportunity costs of capital are charged at a rate of 9 percent for current, intermediate, and long-term capital provided by the owner.

Operations

The cultural operations are listed in the budget in the approximate order in which they typically are performed. Table 2 shows the cost of field operations with owned machinery. Land preparation includes tillage, one irrigation set, and a fertilizer/weed control application. Certified seed is planted by mid-September, followed by three irrigation sets (for a total of 9 inches) and a couple of herbicide applications, including row spraying.

In the spring, cultural operations include two roguing operations (hoeing, spot spraying, or clipping weed grass heads), nine irrigation sets (for a total of 27 inches), and a couple of pesticide applications. Certification of first-year rough bluegrass seed requires two field inspections, one in April and one in June.

The rough bluegrass is swathed with a self-propelled swather about 1 week prior to combining. Two 2-ton trucks (each holds about 8 tons) and one driver are required to haul the seed. Seed cleaning costs about \$0.12 per pound. Straw is sold in the swath to a custom baler for \$20 per acre.

Machinery and Equipment

The machinery complement is sufficient to farm 600 production acres. A detailed breakdown of machinery values and costs used in this budget is shown in Table 3. January 1998 replacement costs are used. The machinery costs per hour are estimated based on the total farm use of the machinery. Fixed costs for machinery and equipment include the cost of interest and depreciation.

Other

A miscellaneous charge of \$10 per acre is included to cover general insurance, tools, office supplies, and other expenses. A pickup and ATV are utilized for hauling supplies, checking irrigation, and other activities related to rough bluegrass seed production.

Total variable cost is \$747 with the break-even price over variable costs of \$0.79 per pound. The total of all costs is \$1,055, with a break-even price over total costs of \$1.10 per pound.



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Table 1. Rough bluegrass establishment year: Summary of estimated costs and returns per acre.

Item	Unit	Price (\$)	Quantity	Amount (\$)	Your Farm
INCOME					
Grass Straw	Acre	20.00	1.00	20.00	_____
Rough Bluegrass Seed	Pound	1.10	950.00	1,045.00	_____
TOTAL INCOME				1,065.00	_____
DIRECT EXPENSES					
Herbicides	Acre	40.63	1.00	40.63	_____
Fungicides	Acre	13.44	1.00	13.44	_____
Custom Applications	Acre	30.59	1.00	30.59	_____
Seed	Acre	14.00	1.00	14.00	_____
Other	Acre	149.00	1.00	149.00	_____
Hand Labor	Acre	153.65	1.00	153.65	_____
Fertilizer	Acre	104.00	1.00	104.00	_____
Water	Acre	114.12	1.00	114.12	_____
Operator Labor	Hour	13.65	2.62	35.76	_____
Diesel Fuel	Gal	1.30	12.86	16.72	_____
Gasoline	Gal	1.55	0.14	0.21	_____
Repair & Maintenance	Acre	41.13	1.00	41.13	_____
Interest on Operating Capital	Acre	34.06	1.00	34.06	_____
TOTAL DIRECT EXPENSES				747.31	_____
RETURNS ABOVE DIRECT EXPENSES				317.69	_____
FIXED EXPENSES					
Implements	Acre	15.49	1.00	15.49	_____
Tractors	Acre	18.88	1.00	18.88	_____
Self-propelled Equipment	Acre	136.99	1.00	136.99	_____
Trucks	Acre	1.30	1.00	1.30	_____
TOTAL FIXED EXPENSES				172.66	_____
TOTAL SPECIFIED EXPENSES				919.97	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				145.03	_____
ALLOCATED COST ITEMS					
General Overhead	Acre	35.00	1.00	35.00	_____
Land Costs	Acre	100.00	1.00	100.00	_____
RESIDUAL RETURNS				10.03	_____

This publication replaces EM 8572, *Enterprise Budget: Bluegrass Establishment, South-Central Region*.

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Table 2. Rough bluegrass establishment year: Estimated per-acre resource use and costs for field operations.

Operation	Perf. Rate	Times Over	Month	Tractor Cost		Equipment Cost		Labor		Operating Input Cost	Total Cost
	(Hr/ac)			Direct	Fixed	Direct	Fixed	Hours	Cost		
Land Level	0.16	1	Aug	3.10	3.67	1.60	6.76	0.19	2.64	----	17.77
Fertilizer, preplant ¹	----	----	----	----	----	----	----	----	----	61.92	61.92
64# N, 64# P, 64# K	----	----	----	----	----	----	----	----	----	----	----
Plant Seed	0.2	1	Sept	3.74	5.07	0.33	1.40	0.29	3.96	----	14.50
Registered Seed Stock	----	----	----	----	----	----	----	----	----	14.00	14.00
Irrigate Labor	----	3	Sept–Oct	----	----	0.48	0.39	1.62	12.43	----	13.30
Water	----	----	----	----	----	----	----	----	----	28.53	28.53
Seedling Inspection	----	1	Oct	----	----	----	----	----	----	35.00	35.00
Broadleaf Weed Control	----	----	----	----	----	----	----	----	----	18.19	18.19
Row Spray	0.2	1	Nov	3.74	5.07	1.21	3.66	0.29	3.96	12.12	29.76
Broadleaf Weed Control	----	1	Mar	----	----	----	----	----	----	20.40	20.40
Row Spray	0.2	1	Apr	3.74	5.07	1.21	3.66	0.29	3.96	2.42	20.06
Fertilizer	----	----	Apr	----	----	----	----	----	----	53.92	53.92
160# N, 0# P, 0# K, 24# S	----	----	----	----	----	----	----	----	----	----	----
Seed Certification	----	1	Apr	----	----	----	----	----	----	2.50	2.50
Irrigate Labor	----	9	Apr–June	----	----	----	----	4.50	34.56	----	34.56
Water	----	----	----	----	----	----	----	----	----	85.59	85.59
Roguing	----	1	Apr	----	----	----	----	6.50	49.92	----	49.92
Mildew Control	----	1	May	----	----	----	----	----	----	19.69	19.69
Roguing	----	1	June	----	----	----	----	6.50	49.92	----	49.92
Harvest	----	----	----	----	----	----	----	----	----	----	----
Swath	0.3	1	July	----	----	5.01	14.52	3.63	4.95	----	24.48
Combine w/ Pickup	1	1	July	----	----	33.75	122.07	1.20	16.38	----	172.20
Two 2-ton Trucks	----	----	----	----	----	0.12	1.30	0.50	6.82	----	8.24
Seed Cleaning	----	1	Oct	----	----	----	----	----	----	114.00	114.00
Total											888.45
Interest on Operating Capital											34.06
Total Specified Cost											922.51

¹Fertilizer and pesticide costs include cost of custom application.

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Table 3. Self-propelled machines, tractors, and implements: Estimated performance rating, useful life, annual use, purchase price, repair cost, fuel consumption rating, and direct and fixed cost per hour and acre.

Item Name	Size	Perf.	Useful	Annual	Purchase	Repair	Fuel	Direct Cost		Fixed Cost	
		Rate	Life	Use	Price	Cost	Cons. Rate	(\$/hour)	(\$/acre)	(\$/hour)	(\$/acre)
		(Hr/acre)	(Years)	(Hours)	(\$)	Percent purchase price	(Gallons/ hour)				
Combine w/ pickup	14 ft	0.50	20	100	120,000.00	40	7.59	35.76	17.88	126.76	63.38
Swather	12 ft	0.30	20	120	55,000.00	50	4.04	16.71	5.01	48.41	14.52
Combine w/ pickup	14 ft	1.00	20	100	120,000.00	40	7.50	33.75	33.75	122.07	122.07
Swather	12 ft	0.08	20	120	55,000.00	50	4.04	16.71	1.33	48.41	3.87
ATV	20 hp	0.03	10	200	5,600.00	100	1.38	4.93	0.16	3.99	0.13
2wd cab tractor	130 hp	----	20	400	87,000.00	100	6.57	19.41	----	22.97	----
2wd cab tractor	180 hp	----	20	500	125,000.00	80	9.10	21.83	----	26.40	----
2wd tractor	50 hp	----	20	200	21,500.00	80	2.70	7.81	----	11.14	----
2wd tractor	80 hp	----	20	300	60,000.00	100	4.30	15.59	----	21.12	----
Tractor w/ loader	80 hp	----	25	100	60,000.00	50	1.00	13.30	----	59.66	----
Bedder bar	12 ft	0.20	10	100	2,000.00	20	----	0.40	0.08	2.85	0.57
Carrot roller	4 row	0.16	20	20	2,000.00	20	----	1.00	0.16	10.56	1.69
Chisel	10 ft	0.20	20	100	12,500.00	50	----	3.12	0.62	13.20	2.64
Cultimulcher	12 ft	0.10	20	100	12,000.00	40	----	2.40	0.24	12.67	1.26
Disk	15 ft	0.10	20	50	17,000.00	60	----	10.20	1.02	35.91	3.59
Electric thinner	4 row	1.00	10	20	900.00	10	----	0.45	0.45	6.41	6.41
Flail mower	15 ft	0.10	20	100	13,500.00	50	----	3.37	0.33	14.26	1.42
Flamer	30 ft	0.16	20	50	9,000.00	70	----	6.30	1.00	19.01	3.04
Flex harrow	20 ft	0.08	25	100	10,000.00	50	----	2.00	0.16	9.94	0.79
Land leveler	12 ft	0.16	20	25	10,000.00	50	----	10.00	1.60	42.25	6.76
Mint planter	16 ft	0.50	25	20	7,500.00	20	----	3.00	1.50	36.71	18.35
Mint rake	12 ft	0.01	20	20	5,000.00	25	----	3.12	0.03	26.40	0.26
Paper roller	10 ft	0.50	20	20	2,000.00	20	----	1.00	0.50	10.56	5.28
Pasture harrow	12 ft	0.08	20	100	1,000.00	50	----	0.25	0.02	1.05	0.08
Precision planter	12.5 ft	0.20	20	75	5,000.00	50	----	1.66	0.33	7.04	1.40
Roller	12 ft	0.10	10	200	5,000.00	25	----	0.62	0.06	3.56	0.35
Rolling cultivator	12 ft	0.25	20	50	2,000.00	20	----	0.40	0.10	4.22	1.05
Rototiller	10 ft	1.00	20	50	4,200.00	80	----	3.36	3.36	8.87	8.87
Row sprayer	12.5 ft	0.20	20	75	13,000.00	70	----	6.06	1.21	18.31	3.66
Tool bar w/shovels	12.5 ft	0.20	25	25	3,000.00	75	----	1.80	0.36	5.96	1.19