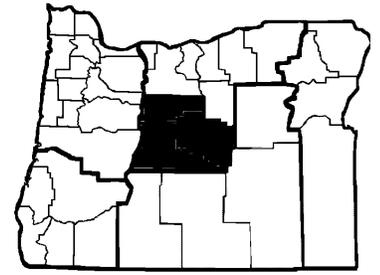


Enterprise Budget

Kentucky Bluegrass Establishment Year, Central Oregon Region

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This enterprise budget estimates the typical costs and returns of producing certified Kentucky 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 4-year life, including the establishment year. For costs and returns associated with full production years of Kentucky bluegrass, see EM 8811, *Enterprise Budget: Kentucky 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 Kentucky bluegrass seed, with 50 acres of these as first-year fields. Kentucky bluegrass is planted into either a fallow field or following wheat; this budget assumes that the crop will follow wheat. The budget includes production costs for 1 acre, with a yield of 1,000 pounds per acre. A summary of the estimated costs and returns 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 payroll expenses. Hand labor is primarily used for roguing and irrigating. Operator labor costs \$13.65 per hour, including worker's compensation, social security taxes, and other payroll expenses. Operator labor is used for hauling seed and other machinery operations. Labor hours for machinery operation are found 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 burning the wheat stubble, tillage, one irrigation set, and a fertilizer/weed control application. Certified seed is planted in August followed by six irrigation sets (for a total of 15 inches) and several herbicide applications, including row spraying.

In the spring, cultural operations include 1 roguing operation (hoeing, spot spraying, or clipping weed grass heads), 6 irrigation sets (for a total of 15 inches), and several pesticide applications. Certification of establishment Kentucky bluegrass seed requires two field inspections, one in April and one in June.

The Kentucky 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 Kentucky bluegrass seed production.

The total establishment cost of \$905.12 per acre is partially offset by a first-year harvest of 1,000 pounds of seed per acre. The remaining amount of \$85.14 must be recovered during the 3 additional production years. At 9 percent interest, an annual payment of \$37.78 will just repay this amount, with interest, in 3 years. This annual payment is included as an allocated cost in EM 8811, *Enterprise Budget: Kentucky Bluegrass Production Years, Central Oregon Region*.

Total variable cost is \$662, and the break-even price over variable costs is \$0.66 per lb. The total of all costs is \$905, with a break-even price over total costs of \$0.90 per lb.

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Table 1. Kentucky 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	_____
Kentucky Bluegrass Seed	Pound	0.80	1,000.00	800.00	_____
TOTAL INCOME				820.00	_____
DIRECT EXPENSES					
Herbicides	Acre	61.78	1.00	61.78	_____
Insecticides	Acre	4.51	1.00	4.51	_____
Fungicides	Acre	11.52	1.00	11.52	_____
Custom Applications	Acre	43.09	1.00	43.09	_____
Other	Acre	176.00	1.00	176.00	_____
Hand Labor	Acre	87.46	1.00	87.46	_____
Fertilizer	Acre	105.40	1.00	105.40	_____
Water	Acre	91.93	1.00	91.93	_____
Operator Labor	Hour	13.65	2.24	30.58	_____
Diesel Fuel	Gal	1.30	7.13	9.27	_____
Gasoline	Gal	1.55	3.80	5.89	_____
Repair & Maintenance	Acre	28.18	1.00	28.18	_____
Interest on Operating Capital	Acre	6.79	1.00	6.79	_____
TOTAL DIRECT EXPENSES				662.40	_____
RETURNS ABOVE DIRECT EXPENSES				157.61	_____
FIXED EXPENSES					
Implements	Acre	6.08	1.00	6.08	_____
Tractors	Acre	23.31	1.00	23.31	_____
Self-propelled Equipment	Acre	77.90	1.00	77.90	_____
Trucks	Acre	0.43	1.00	0.43	_____
TOTAL FIXED EXPENSES				107.72	_____
TOTAL SPECIFIED EXPENSES				770.12	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				49.87	_____
ALLOCATED COST ITEMS					
General Overhead	Acre	35.00	1.00	35.00	_____
Land Costs	Acre	100.00	1.00	100.00	_____
RESIDUAL RETURNS				-85.14	_____

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

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Table 2. Kentucky bluegrass establishment year: Estimated resource use and costs for field operations.

Operation	Perf.	Times	Month	Tractor Cost		Equipment Cost		Labor		Operating Input Cost	Total Cost
	Rate	Over		Direct	Fixed	Direct	Fixed	Hours	Cost		
	(Hr/ac)										
Open Field Burn Previous Year's Crop	----	1	Aug	----	----	0.01	0.11	1.00	7.68	1.00	8.80
Cultimulch	0.10	1	Aug	2.34	2.78	0.24	1.26	0.15	1.99	----	8.61
Preplant Fertilizer ¹	----	----	Aug	----	----	----	----	----	----	5.92	5.92
65# N, 65# P, 65# K	----	----	----	----	----	----	----	----	----	57.40	57.40
Harrow	0.08	1	Aug	1.37	1.85	0.16	0.79	0.11	1.45	----	5.62
Plant Seed	0.50	1	Aug	0.70	11.48	----	----	0.61	8.25	----	29.43
Registered Seed Stock	----	----	----	----	----	----	----	----	----	17.50	17.50
Irrigate—Labor	----	7	Aug–Oct	----	----	----	----	----	----	44.38	44.38
Water	----	----	----	----	----	----	----	----	----	26.88	26.88
Preemergence Weed Control	----	1	Aug	----	----	----	----	----	----	17.75	17.75
Seedling Inspection Signup	----	----	Sept	----	----	----	----	----	----	35.00	35.00
Broadleaf Weed Control	----	1	Sept	----	----	----	----	----	----	24.69	24.69
Fertilizer	----	----	Oct	----	----	----	----	----	----	5.92	5.92
160# N, 24# S	----	----	----	----	----	----	----	----	----	48.00	48.00
Row Spray	0.20	1	Nov	3.74	5.07	1.21	3.66	0.29	3.96	11.50	29.14
Insect Control	----	1	Feb	----	----	----	----	----	----	10.76	10.76
Roll	0.10	1	Mar	1.55	2.11	0.06	0.35	1.65	----	----	4.07
Broadleaf Weed Control	----	1	Apr	----	----	----	----	----	----	20.84	20.84
Powdery Mildew Control	----	1	Apr	----	----	----	----	----	----	17.77	17.77
Seed Certification	----	1	Apr	----	----	----	----	----	----	2.50	2.50
Chemical Roguing	----	1	May	----	----	----	----	----	----	5.75	5.75
Labor	----	----	----	----	----	----	----	----	----	23.04	23.04
Irrigate—Labor	----	6	Apr–June	----	----	----	----	----	----	23.04	23.04
Water	----	----	----	----	----	----	----	----	----	47.55	47.55
Harvest	----	----	----	----	----	----	----	----	----	----	----
Swath	0.30	1	July	----	----	5.01	14.52	0.36	4.95	----	24.48
Combine w/ Pickup	0.50	1	July	----	----	17.88	63.38	0.61	8.25	----	89.51
Two 2-ton Trucks w/ Labor	----	----	----	----	----	0.03	0.32	0.50	6.82	----	7.17
Seed Cleaning	----	1	Oct	----	----	----	----	----	----	120.00	120.00
Total											761.52
Interest on Operating Capital											6.79
Total Specified Cost											768.31

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. Rate	Useful Life	Annual Use	Purchase Price	Repair Cost	Fuel Cons. Rate	Direct Cost		Fixed Cost	
		(Hr/acre)	(Years)	(Hours)	(\$)	Percent purchase price	(Gallons/hour)	(\$/hour)	(\$/acre)	(\$/hour)	(\$/acre)
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