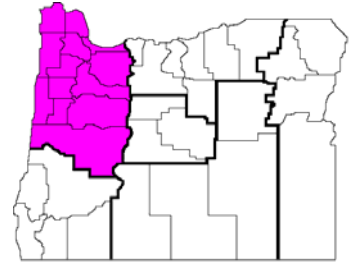


Enterprise Budget

Winter Wheat, Conventional Tillage and No-Till, Willamette Valley Region

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This enterprise budget estimates the typical costs of producing winter wheat in the Willamette Valley of Oregon. Since wheat may be grown with either conventional tillage or no-till practices (or the two may be alternated), budgets for both technologies are included. While efforts were made to reflect common practices, this budget does not represent any particular farm and thus should be used only as a guide to estimating actual costs. Assistance provided by area producers is greatly appreciated.

Several Willamette Valley seed, grain and forage budgets were estimated as a group and are presented in a similar, consistent format. Table 1 shows the summary returns and cost information, with inputs grouped by various categories. For wheat, this is divided into two sub-tables, A for conventional tillage and B for no-till or direct seeding. Table 2, similarly divided into A and B sections, shows itemized details about the cultural operations performed, and their costs, in a chronological sequence. Tables 3.A and B show break-even prices and net returns around the assumed price and yield for the crop.

Land and Cropping Pattern

This budget is based on a farm with 1200 acres in continuous production of grass seeds or related, similar technology crops such as small grains, oil seeds and forage seeds. Historically, most of the acreage in the Willamette Valley has been in grass seeds, with wheat as a rotation crop. But with the declining grass seed prices and several recent years with strong grain prices, wheat and other grains have been much more widely planted. The budget estimates establishment costs on a per-acre basis.

A land lease charge of \$120 per acre is included to represent the cost of leasing or owning land. Land cost varies depending on specific location and competition for production of alternate crops.

Labor and Capital

Hired labor typically costs approximately \$16 per hour including worker's compensation, FICA, and other payroll expenses. For this study, all labor is treated as owner/operator labor valued at \$16 per hour, and is assumed to be a cash cost. For mechanized operations, labor hours

are calculated based on machinery hours. Opportunity costs of capital are charged at a rate of 10 percent for current and intermediate capital provided by the owner/operator.

Machinery and Equipment

The machinery complement is sufficient to farm 1200 production acres. Late 2010 replacement costs are used, assuming the machinery is half depreciated. Table 4 (subdivided into A, B, C and D sections) shows the cost of operating owned machinery in the cultural practices used in this and several related Willamette Valley seed, grain and forage budgets. Your machinery costs may differ.

Cultural Practices

The budget shows farming operations in the order they typically are performed. See Tables 2.A and 2.B, respectively, for details of operations for conventional and no-till seeding practices,

Results

Tables 1.A and 1.B show the costs and returns for conventional tillage and no-till respectively. The negative net returns do not necessarily translate into a loss in the common interpretation of the word. These budgets include investment costs for all owned resources, such as land and machinery as well as the cost of owner labor. These may not be cash costs for many operators.

The field operations and their costs are detailed in Tables 2.A and 2.B. The break-even prices needed to cover the total cost of production are given in Tables 3.A and B. The break-even price of \$5.46 per bushel is higher than the \$4.95 of no-till. Thus the reduced machinery (and associated operator labor) costs of no-till more than offset higher chemical costs. Please note that at the break-even price, returns over total costs at the assumed (100%) budget yield are zero—by definition all costs would be covered. Table 3 also shows the sensitivity of returns over variable (or operating costs) and returns over total costs (net profit) as either prices or crop yields are varied.

Table 1.A Estimated costs and returns per acre
 Winter Wheat, Conventional Tillage
 Willamette Valley, 2010

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Wheat	bu	4.50	100.0000	450.00	_____

TOTAL INCOME				450.00	_____
DIRECT EXPENSES					
CHEM--FERTILIZER					
16-20-0-14 LB	lb	0.37	100.0000	37.00	_____
33-0-0-12 LB	lb	0.19	110.0000	20.90	_____
46-0-0 Urea LB	lb	0.22	110.0000	24.20	_____
MISC BUS EXP					
Misc. business exp	acre	30.00	1.0000	30.00	_____
CHEM--HERBICIDE					
AxiomOZ	oz	0.73	10.0000	7.30	_____
Osprey	oz	3.85	3.2000	12.32	_____
Harmony Extra	oz	12.30	0.3000	3.69	_____
CHEM--INSECTICIDE					
Mustang 1.5 EW	gal	235.00	0.0312	7.34	_____
SEEDS & PLANTS					
Treated W.Wheat Seed	lb	0.20	100.0000	20.00	_____
CUSTOM, YIELD PROP.					
Transport to PDX	bu	0.27	100.0000	27.00	_____
CHEM--FUNGICIDE					
Stratego	oz	1.30	10.0000	13.00	_____
CHEM--PESTICIDE					
Slug Bait	lb	1.48	5.0000	7.40	_____
FEES, PROPORTIONAL					
Wheat Assessment	bu	0.05	100.0000	5.00	_____
Operator Labor					
Self-Propelled	hour	8.65	0.2105	1.82	_____
Machinery Labor					
Tractors	hour	16.00	0.6481	10.38	_____
Self-Propelled	hour	16.00	0.1407	2.26	_____
Pickup	hour	16.00	0.1150	1.84	_____
DIESEL FUEL					
Tractors	gal	3.00	9.7865	29.36	_____
Self-Propelled	gal	3.00	2.3214	6.94	_____
Pickup	gal	3.00	0.5000	1.50	_____
REPAIR & MAINTENANCE					
Implements	acre	5.29	1.0000	5.29	_____
Tractors	acre	12.87	1.0000	12.87	_____
Self-Propelled	acre	17.87	1.0000	17.87	_____
Pickup	mile	0.16	5.0000	0.83	_____
INTEREST ON OP. CAP.	acre	16.93	1.0000	16.93	_____

TOTAL DIRECT EXPENSES				323.04	_____
RETURNS ABOVE DIRECT EXPENSES				126.96	_____
FIXED EXPENSES					
Implements	acre	10.98	1.0000	10.98	_____
Tractors	acre	36.66	1.0000	36.66	_____
Self-Propelled	acre	46.80	1.0000	46.80	_____
Pickup	each	6721.63	0.0008	5.60	_____
Mach/Equip Ins, Low	each	3.43	1.0000	3.43	_____
Land Rent WV Wheat	each	119.99	1.0000	120.00	_____

TOTAL FIXED EXPENSES	----- 223.47	_____
TOTAL SPECIFIED EXPENSES	----- 546.51	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES	-96.51	_____
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Table 1.B Estimated costs and returns per acre
 Winter Wheat, No-Till Seeding
 Willamette Valley, 2010

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
Wheat	bu	4.50	100.0000	450.00	_____

TOTAL INCOME				450.00	_____
DIRECT EXPENSES					
CHEM--FERTILIZER					
16-20-0-14 LB	lb	0.37	100.0000	37.00	_____
33-0-0-12 LB	lb	0.19	110.0000	20.90	_____
46-0-0 Urea LB	lb	0.22	110.0000	24.20	_____
MISC BUS EXP					
Misc. business exp	acre	30.00	1.0000	30.00	_____
CHEM--HERBICIDE					
GlyphosateGAL3	gal	15.00	0.7500	11.25	_____
AxiomOZ	oz	0.73	5.0000	3.65	_____
Osprey	oz	3.85	3.2000	12.32	_____
Harmony Extra	oz	12.30	0.3000	3.69	_____
CHEM--INSECTICIDE					
Mustang 1.5 EW	gal	235.00	0.0312	7.34	_____
SEEDS & PLANTS					
Treated W.Wheat Seed	lb	0.20	110.0000	22.00	_____
CUSTOM, YIELD PROP.					
Transport to PDX	bu	0.27	100.0000	27.00	_____
CHEM--FUNGICIDE					
Stratego	oz	1.30	10.0000	13.00	_____
CHEM--PESTICIDE					
Slug Bait	lb	1.48	12.0000	17.76	_____
FEES, PROPORTIONAL					
Wheat Assessment	bu	0.05	100.0000	5.00	_____
Operator Labor					
Self-Propelled	hour	8.65	0.2105	1.82	_____
Machinery Labor					
Tractors	hour	16.00	0.2679	4.29	_____
Self-Propelled	hour	16.00	0.1980	3.18	_____
Pickup	hour	16.00	0.1150	1.84	_____
DIESEL FUEL					
Tractors	gal	3.00	2.5861	7.76	_____
Self-Propelled	gal	3.00	2.6705	7.98	_____
Pickup	gal	3.00	0.5000	1.50	_____
REPAIR & MAINTENANCE					
Implements	acre	3.56	1.0000	3.56	_____
Tractors	acre	2.48	1.0000	2.48	_____
Self-Propelled	acre	18.85	1.0000	18.85	_____
Pickup	mile	0.16	5.0000	0.83	_____
INTEREST ON OP. CAP.	acre	13.23	1.0000	13.23	_____

TOTAL DIRECT EXPENSES				302.43	_____
RETURNS ABOVE DIRECT EXPENSES				147.57	_____
FIXED EXPENSES					
Implements	acre	7.16	1.0000	7.16	_____
Tractors	acre	7.07	1.0000	7.07	_____
Self-Propelled	acre	49.98	1.0000	49.98	_____
Pickup	each	6721.63	0.0008	5.60	_____

Mach/Equip Ins, Low	each	3.43	1.0000	3.43	_____
Land Rent WV Wheat	each	119.99	1.0000	120.00	_____

TOTAL FIXED EXPENSES				193.24	_____

TOTAL SPECIFIED EXPENSES				495.67	_____
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-45.67	_____
<hr/>					

Table 2.A Estimated resource use and costs for field operations, per acre
 Winter Wheat, Conventional Tillage
 Willamette Valley, 2010

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT			TOTAL COST
						DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST	
						-----dollars-----				dollars		-----dollars-----			
FLAIL				1.00	Aug										
Flail J Knife	15 ft	160	0.132			5.67	3.64	1.25	1.37	0.15	2.45				14.38
DISK				3.00	Aug										
Disk	20	250	0.097			29.47	29.20	2.45	6.12	0.33	5.36				72.60
PLANT				1.00	Aug										
Drill	13 ft	160	0.139			7.09	3.82	0.96	1.92	0.16	2.57				16.36
Harrow/Cultipacker	16ft		0.139					0.63	1.57						2.20
Treated W.Wheat Seed	lb											100.0000	0.20	20.00	20.00
16-20-0-14 LB	lb											100.0000	0.37	37.00	37.00
FALL HERBICIDE				1.00	Oct										
Spray Bug60	10mph	60'	0.021			0.85	1.35			0.02	0.39				2.59
AxiomOZ	oz											10.0000	0.73	7.30	7.30
SLUG CONTROL				0.50	Dec										
Spray Bug60	10mph	60'	0.021			0.43	0.67			0.01	0.19				1.29
Slug Bait	lb											5.0000	1.48	7.40	7.40
GRASS CONTROL				1.00	Jan										
Spray Bug100	7mph	100'	0.014			0.68	1.06			0.01	0.15				1.89
Osprey	oz											3.2000	3.85	12.32	12.32
SPRING FERTILIZER				1.00	Mar										
Spray Bug60	7 mph	60'	0.030			1.22	1.93			0.03	0.56				3.71
33-0-0-12 LB	lb											110.0000	0.19	20.90	20.90
46-0-0 Urea LB	lb											110.0000	0.22	24.20	24.20
SPRING GRS/BRDLF CTL				1.00	Apr										
Spray Bug60	7 mph	60'	0.030			1.22	1.93			0.03	0.56				3.71
Harmony Extra	oz											0.3000	12.30	3.69	3.69
SPRING FUNG./INSECT.				1.00	Jun										
Spray Bug60	7 mph	60'	0.030			1.22	1.93			0.03	0.56				3.71
Stratego	oz											10.0000	1.30	13.00	13.00
Mustang 1.5 EW	gal											0.0312	235.00	7.34	7.34
COMBINE				1.00	Jul										
Combine 300	300 hp		0.168			19.19	37.93			0.19	1.67				58.79
TRANSPORT GRAIN				1.00	Jul										
Transport to PDX	bu											100.0000	0.27	27.00	27.00
WHEAT ASSESSMENT				1.00	Jul										
Wheat Assessment	bu											100.0000	0.05	5.00	5.00
MISCELLANEOUS				1.00	Jul										
Misc. business exp	acre											1.0000	30.00	30.00	30.00
Pickup	each			1.00	Jul				5.60			0.0008			5.60
Application 1	mile							2.33		0.11	1.84	5.0000			4.17
Mach/Equip Ins, Low	each			1.00	Jul				3.43			1.0000			3.43
Land Rent WV Wheat	each			1.00	Jul				120.00			1.0000			120.00
TOTALS						67.04	83.46	7.62	140.01	1.11	16.30			215.15	529.58
INTEREST ON OPERATING CAPITAL															16.93
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															546.51

Table 2.B Estimated resource use and costs for field operations, per acre
 Winter Wheat, No-Till Seeding
 Willamette Valley, 2010

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST		EQUIPMENT COST		ALLOC LABOR		OPERATING/DURABLE INPUT			TOTAL COST
						DIRECT	FIXED	DIRECT	FIXED	HOURS	COST	AMOUNT	PRICE	COST	
						-----dollars-----				dollars		-----dollars-----			
FLAIL				1.00	Aug										
Flail J Knife	15 ft	180	0.132			5.15	4.33	1.25	1.37	0.15	2.45				14.55
STAND KILL				1.00	Aug										
Spray Bug60	7 mph	60'	0.030			1.22	1.93			0.03	0.56				3.71
GlyphosateGAL3	gal											0.5000	15.00	7.50	7.50
SPROUT SPRAY				1.00	Oct										
Spray Bug60	7 mph	60'	0.030			1.22	1.93			0.03	0.56				3.71
GlyphosateGAL3	gal											0.2500	15.00	3.75	3.75
PLANT				1.00	Nov										
No-Till Drill	15 ft	160	0.100			5.09	2.74	2.31	5.79	0.11	1.84				17.77
Treated W.Wheat Seed	lb											110.0000	0.20	22.00	22.00
16-20-0-14 LB	lb											100.0000	0.37	37.00	37.00
Slug Bait	lb											7.0000	1.48	10.36	10.36
FALL HERBICIDE				0.50	Nov										
Spray Bug60	10mph	60'	0.021			0.43	0.67			0.01	0.19				1.29
AxiomOZ	oz											5.0000	0.73	3.65	3.65
SLUG CONTROL				0.50	Dec										
Spray Bug60	10mph	60'	0.021			0.43	0.67			0.01	0.19				1.29
Slug Bait	lb											5.0000	1.48	7.40	7.40
GRASS CONTROL				1.00	Jan										
Spray Bug100	7mph	100'	0.014			0.68	1.06			0.01	0.15				1.89
Osprey	oz											3.2000	3.85	12.32	12.32
SPRING FERTILIZER				1.00	Mar										
Spray Bug60	7 mph	60'	0.030			1.22	1.93			0.03	0.56				3.71
33-0-0-12 LB	lb											110.0000	0.19	20.90	20.90
46-0-0 Urea LB	lb											110.0000	0.22	24.20	24.20
SPRING GRS/BRDLF CTL				1.00	Apr										
Spray Bug60	7 mph	60'	0.030			1.22	1.93			0.03	0.56				3.71
Harmony Extra	oz											0.3000	12.30	3.69	3.69
SPRING FUNG./INSECT.				1.00	Jun										
Spray Bug60	7 mph	60'	0.030			1.22	1.93			0.03	0.56				3.71
Stratego	oz											10.0000	1.30	13.00	13.00
Mustang 1.5 EW	gal											0.0312	235.00	7.34	7.34
COMBINE				1.00	Jul										
Combine 300	300 hp		0.168			19.19	37.93			0.19	1.67				58.79
TRANSPORT GRAIN				1.00	Jul										
Transport to PDX	bu											100.0000	0.27	27.00	27.00
WHEAT ASSESSMENT				1.00	Jul										
Wheat Assessment	bu											100.0000	0.05	5.00	5.00
MISCELLANEOUS				1.00	Jul										
Misc. business exp	acre											1.0000	30.00	30.00	30.00
Pickup	each			1.00	Jul				5.60			0.0008			5.60
Application 1	mile							2.33		0.11	1.84	5.0000			4.17
Mach/Equip Ins, Low	each			1.00	Jul				3.43			1.0000			3.43
Land Rent WV Wheat	each			1.00	Jul				120.00			1.0000			120.00
TOTALS						37.07	57.05	5.89	136.19	0.79	11.13			235.11	482.44
INTEREST ON OPERATING CAPITAL															13.23

UNALLOCATED LABOR
TOTAL SPECIFIED COST

0.00
495.67

Table 3.A Breakeven price above total expenses and net returns for price/yield combinations, per acre
 Winter Wheat, Conventional Tillage
 Willamette Valley, 2010

			-----BREAKEVEN PRICE-----										
Wheat			3.75	3.99	4.27	4.60	4.99	5.46 ³	6.03	6.75	7.66	8.89	10.60
PERCENT	YIELD	UNIT	-----dollars-----										
50	50.00	bu	-119 ¹	-107	-92	-76	-57	-33	-5	30	76	137	223
			-342 ²	-330	-316	-299	-280	-257	-228	-192	-146	-85	0
60	60.00	bu	-85	-70	-53	-33	-10	17	52	94	150	223	326
			-308	-293	-276	-257	-233	-205	-171	-128	-73	0	102
70	70.00	bu	-50	-33	-13	9	36	69	109	159	223	309	429
			-274	-257	-237	-214	-186	-154	-114	-64	0	85	205
80	80.00	bu	-16	3	25	52	83	120	166	223	296	394	532
			-239	-220	-197	-171	-140	-102	-57	0	73	171	308
90	90.00	bu	17	39	65	94	129	172	223	287	370	480	634
			-205	-183	-158	-128	-93	-51	0	64	146	257	411
100	100.00	bu	52	76	104	137	176	223	280	352	443	566	737
			-171	-146	-118	-85	-46	0	57	128	220	342	514
110	110.00	bu	86	113	144	180	223	274	337	416	517	652	840
			-137	-110	-79	-42	0	51	114	192	293	428	617
120	120.00	bu	120	150	183	223	270	326	394	480	590	737	943
			-102	-73	-39	0	46	102	171	257	367	514	719
130	130.00	bu	154	186	223	266	316	377	452	544	664	823	1046
			-68	-36	0	42	93	154	228	321	440	599	822
140	140.00	bu	189	223	263	309	363	429	509	609	737	909	1149
			-34	0	39	85	140	205	285	385	514	685	925
150	150.00	bu	223	260	302	352	410	480	566	673	811	994	1251
			0	36	79	128	186	257	342	449	587	771	1028

¹The top number in each cell is Returns Above Direct Expenses.

²The bottom number in each cell is Returns Above Total Specified Expenses.

³ This is the breakeven price at the assumed (100%) budget yield. Prices to the left and right are for higher and lower yield levels.

Only the product listed has been varied to calculate net returns.

Table 3.B Breakeven price above total expenses and net returns for price/yield combinations, per acre
 Winter Wheat, No-Till Seeding
 Willamette Valley, 2010

			-----BREAKEVEN PRICE-----										
Wheat			3.41	3.63	3.88	4.18	4.53	4.95 ³	5.47	6.11	6.94	8.04	9.59
PERCENT	YIELD	UNIT	-----dollars-----										
50	50.00	bu	-115 ¹	-104	-91	-77	-59	-38	-12	19	60	116	193
			-308 ²	-297	-285	-270	-252	-231	-205	-173	-132	-77	0
60	60.00	bu	-84	-71	-56	-38	-17	7	38	77	127	193	285
			-278	-264	-249	-231	-210	-185	-154	-115	-66	0	92
70	70.00	bu	-53	-38	-20	0	24	54	90	135	193	270	378
			-247	-231	-213	-193	-168	-139	-102	-57	0	77	185
80	80.00	bu	-23	-5	15	38	66	100	141	193	259	347	471
			-216	-198	-178	-154	-126	-92	-51	0	66	154	278
90	90.00	bu	7	27	50	77	108	146	193	251	325	424	563
			-185	-165	-142	-115	-84	-46	0	57	132	231	370
100	100.00	bu	38	60	86	116	151	193	244	309	391	502	656
			-154	-132	-106	-77	-42	0	51	115	198	308	463
110	110.00	bu	69	93	121	154	193	239	296	367	458	579	749
			-123	-99	-71	-38	0	46	102	173	264	386	556
120	120.00	bu	100	127	157	193	235	285	347	424	524	656	842
			-92	-66	-35	0	42	92	154	231	331	463	648
130	130.00	bu	131	160	193	231	277	332	399	482	590	733	934
			-61	-33	0	38	84	139	205	289	397	540	741
140	140.00	bu	162	193	228	270	319	378	450	540	656	811	1027
			-30	0	35	77	126	185	257	347	463	617	834
150	150.00	bu	193	226	264	309	361	424	502	598	722	888	1120
			0	33	71	115	168	231	308	405	529	695	926

¹The top number in each cell is Returns Above Direct Expenses.

²The bottom number in each cell is Returns Above Total Specified Expenses.

³This is the breakeven price at the assumed (100%) budget yield. Prices to the left and right are for higher and lower yield levels.

Only the product listed has been varied to calculate net returns.

Table 4.A Tractors/Harvesters: estimated purchase price, annual use, useful life, fuel use, and direct and fixed cost per hour, 2010

Item Name	Size	Purchase Price	Annual Use	Useful Life	Fuel Use	Labor	Fuel	R&M	Total Direct	Fixed	Total Cost
		dollars	hours	years	gal/hr	-----\$/hour-----					
Tractor 130	130	95,700	400	20	6.57	16.00	19.73	11.96	47.69	27.26	74.96
Tractor 140	140	121,000	500	20	6.50	16.00	19.50	12.10	47.60	27.58	75.18
Tractor 160	160	113,000	470	20	11.00	16.00	33.00	9.61	58.61	27.40	86.01
Tractor 180 Oper.	180	143,000	500	20	9.10	16.00	27.32	11.44	54.76	32.59	87.35
Tractor 200	200	154,000	550	20	10.12	16.00	30.36	11.20	57.56	31.91	89.47
Tractor 215	215	165,000	250	20	11.00	16.00	33.00	26.40	75.40	75.21	150.61
Tractor 250	250	220,000	250	20	11.00	16.00	33.00	35.20	84.20	100.29	184.49
Tractor 310	310	231,000	500	20	15.68	16.00	47.05	18.48	81.53	52.65	134.19

Notes:

Labor: Includes allocated labor from power unit.

Total Direct: Does not include interest on operating capital.

Table 4.B Self-propelled machines: estimated purchase price, annual use, useful life, fuel use, performance rate, and direct and fixed cost per acre, 2010

Item Name	Size	Purchase Price	Annual Use	Useful Life	Fuel Use	Perf Rate	Labor	Fuel	R&M	Total Direct	Fixed	Total Cost
		dollars	hours	years	gal/hr	hr/ac	-----\$/acre-----					
ATV	20 hp	5,600	200	10	1.38	0.050	0.92	0.20	0.14	1.26	0.21	1.47
Combine 300	300 hp	300,000	200	10	8.00	0.168	1.67	4.04	15.15	20.86	37.93	58.80
Combine 300 slow	300 hp	300,000	200	10	8.00	0.210	1.82	5.05	18.94	25.81	47.41	73.22
Fertilizer Buggy	20	35,000	200	20	5.52	0.070	1.29	1.16	0.61	3.08	1.40	4.48
Fertilizer Buggy	30	44,000	200	20	6.50	0.047	0.86	0.91	0.51	2.29	1.17	3.47
Fertilizer Buggy OB	80	35,000	200	20	5.52	0.056	1.03	0.92	0.49	2.44	1.11	3.56
Spray Bug100 7mph	100'	190,000	300	20	8.00	0.014	0.14	0.35	0.32	0.82	1.06	1.88
Spray Bug40 4mph	40'	60,000	250	20	7.00	0.079	1.45	1.66	0.66	3.79	2.16	5.96
Spray Bug60 10mph	60'	140,000	250	20	7.00	0.021	0.38	0.44	0.41	1.24	1.34	2.59
Spray Bug60 7 mph	60'	140,000	250	20	7.00	0.030	0.55	0.63	0.59	1.78	1.92	3.71
Spray Bug80 7 mph	80'	163,000	300	20	5.52	0.021	0.38	0.34	0.40	1.13	1.30	2.43
Swather	15'	62,000	200	10	8.00	0.174	3.21	4.19	2.16	9.56	8.12	17.69

Notes:

Labor: includes allocated labor plus any additional labor from self-propelled machine.

Direct: Does not include interest on operating capital.

Table 4.C Implements: estimated purchase price, annual use, useful life, performance rate, and direct and fixed cost per acre, 2010

Item Name	Size	Power Unit	Purchase Price	Annual Use	Useful Life	Perf Rate	Labor	Fuel	---R&M---	Total Direct	--Fixed-- Imp.	Total Cost		
			dollars	hours	years	hr/ac	-----\$/acre-----							
3-Point Blade	10 ft	140	3,500	100	20	0.050	0.80	0.97	0.00	0.60	2.38	0.19	1.37	3.96
Chisel Plow	21 ft	310	20,000	100	20	0.143	2.28	6.73	1.07	2.64	12.73	3.26	7.53	23.53
Cultimulcher	12 ft	140	7,000	150	10	0.140	2.24	2.73	0.13	1.69	6.79	0.98	3.86	11.63
Cultipacker	20 ft.	180	10,000	200	10	0.097	1.55	2.65	0.38	1.11	5.70	0.72	3.16	9.59
Disk	20	215	28,000	200	10	0.097	1.55	3.20	0.81	2.56	8.13	2.04	7.30	17.47
Disk	27	310	35,000	200	10	0.071	1.15	3.38	0.75	1.32	6.61	1.88	3.78	12.29
Ditcher		140	2,000	100	20	0.050	0.80	0.97	0.02	0.60	2.40	0.11	1.37	3.89
Dixon Harrow MF	16 ft	180	3,000	350	10	0.350	5.60	9.45	0.18	3.53	18.76	0.45	10.06	29.27
Drill	13 ft	140	11,000	120	10	0.139	2.23	2.71	0.95	1.68	7.59	1.92	3.84	13.36
Field Cultivator	45 ft	130	27,000	120	20	0.066	1.07	1.32	0.52	0.80	3.72	1.71	1.82	7.26
Flail	14 ft	140	14,500	180	20	0.157	2.51	3.06	0.94	1.90	8.42	1.44	4.33	14.20
Flail J Knife	15 ft	180	13,500	180	12	0.132	2.12	3.63	1.24	1.52	8.52	1.37	4.33	14.23
Harrow	20 ft	180	15,000	350	10	0.138	2.21	3.74	0.35	1.39	7.71	0.89	3.98	12.59
Harrow/Cultipacker	16ft	160	15,000	200	10	0.125	2.00	4.12	0.56	1.20	7.88	1.40	3.42	12.72
Land Leveler	24 ft	140	12,000	35	25	0.114	1.83	2.23	0.78	1.38	6.23	4.24	3.16	13.64
Land Leveler MF	16 ft	140	8,000	35	10	0.040	0.64	0.78	0.18	0.48	2.08	1.37	1.10	4.56
Moldboard Plow	6 bottom	215	18,000	200	10	0.196	3.14	6.48	1.76	5.18	16.57	2.65	14.77	34.00
No-Till Drill	15 ft	160	37,000	80	15	0.100	1.60	3.30	2.31	0.96	8.17	5.78	2.74	16.70
Ripper	12 ft	180	12,000	200	10	0.207	3.32	5.68	0.93	2.37	12.32	1.87	6.77	20.97
Rol-Har/Dix/Rol	21 ft	200	43,000	200	10	0.076	1.23	2.33	0.99	0.86	5.42	2.48	2.45	10.36
Roller	20 ft	180	10,000	200	10	0.114	1.83	3.09	0.22	1.15	6.31	0.86	3.29	10.46
Roller MF	18 ft	180	8,500	200	10	0.200	3.20	5.40	0.34	2.01	10.95	1.27	5.75	17.98
Roller-Harrow	21 ft	200	21,000	200	10	0.076	1.23	2.33	0.48	0.86	4.91	1.21	2.45	8.58

Notes:

Labor: Includes labor from Power unit plus additional labor from the implement.

Total Direct: Does not include interest on operating capital.

Table 4.D Single durable inputs: estimated purchase price, annual use, useful life, fuel consumption rate, labor, fuel, R&M, total direct, fixed and total cost per year, , 2010

Item Name	Unit of Measure	Purchase Price	Annual Use	Useful Life	Fuel Use	Operation Time	Labor	Fuel	R&M	Total Direct	Fixed	Total Cost
		dollars	miles	years	gal/hr	hr/mile	\$/yr	\$/yr	\$/yr	\$/yr	\$/yr	\$/yr
ATV	mi	4,500	2000	10	1.00	0.0333	663.10	189.98	225.00	1078.08	675.88	1753.96
Harvest Truck	mile	30,000	1000	10	3.50	0.0285	525.68	299.98	1500.00	2325.67	4505.88	6831.56
Pickup	mile	33,000	10000	6	5.00	0.0200	3680.00	3000.00	1650.00	8330.00	6721.63	15051.63
Truck w/ Tank	mile	36,000	1500	10	3.50	0.0285	788.53	449.97	1800.00	3038.50	5407.06	8445.57

Notes:

Labor: Includes allocated labor from the durable input.

Total Direct: Does not include interest on operating capital.

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