

Appendix D. Overview to Crop Budgets

For each research site included in the study, spreadsheet workbooks have been developed that can be downloaded from the Internet. Each workbook is named for a specific site within the project and includes the itemized cost per acre budget for each crop produced at that site. For example, Table D1 is the itemized budget for winter wheat produced at the Dusty location.

The workbook is a “Read Only” workbook and any changes you made cannot be saved under the same name. ***Therefore, you should save each workbook under a new name as soon as you have downloaded it and before you make any changes to it.*** Once a workbook is created with a different name from the “Read Only” workbook, changes throughout the workbook can be saved. All shaded cells within a workbook are protected, but all other cell text or numbers can be changed. If a value or text in one of the protected cells of a spreadsheet is to be changed, the spreadsheet can be “unprotected”(on the main toolbar, go to the Tools button, then Protection and click on Unprotect Sheet) and the value or text changed.

Each workbook also contains a Rotations spreadsheet (Table D2) that summarizes the data for all the crop budgets in the spreadsheet and allows the user to analyze the profitability of different rotations. You will need to use the scroll arrows at the bottom left hand corner of the worksheet in order to locate all the different spreadsheets within a file. Table D2 shows the summary data for the Dusty site and the profitability estimate for a chemical fallow - winter wheat - spring barley rotation. Since economic budgets are used in the estimate of profitability, the average yearly return of \$33.86 per acre is the return to the producer for his management and risk.

If you change values on any individual crop spreadsheet, the new values will automatically be entered into the Rotation worksheet. The profitability of any given rotation can then be estimated in the Rotation spreadsheet by copying and pasting the net returns for the various crops into the Rotation column and specifying the number of years for the rotation. Therefore, if you want to estimate the profitability of the same rotation but at different yield and/or price levels, you must go back to the individual crop budgets and change the yields and/or prices. It should be noted that the reason a year’s interest is added to chemical fallow in the calculation of net returns is because the cost of chemical fallow is incurred 1 year before returns are realized.

Table D1. Itemized Cost Per Acre For Winter Wheat: Dusty, Washington.

ECONOMIC BUDGET					
	UNIT	COST/ UNIT	QUANTITY	COST/ ACRE	COST/ 200 ACRES
VARIABLE COSTS		\$		\$	\$
WINTER WHEAT SEED	LB.	0.150	80.00	12.00	2,400.00
FERTILIZER*	ACRE	23.940	1.00	23.94	4,788.00
BRONATE	OZ.	0.283	18.00	5.09	1,018.80
CROP INSURANCE	ACRE	1.690	1.00	1.69	338.00
CUSTOM HAULING	BU.	0.090	95.00	8.55	1,710.00
PERENNIAL WEED CONTRL	ACRE	0.400	1.00	0.40	80.00
				-	-
				-	-
MACHINERY REPAIRS	ACRE	10.410	1.00	10.41	2,082.00
MACHINERY FUEL & LUBE	ACRE	3.630	1.00	3.63	726.00
LABOR (TRAC/MACH)	HOOR	16.500	0.83	13.65	2,729.10
INTEREST ON OP. CAP.	ACRE	3.820	1.00	3.82	764.00
OVERHEAD	ACRE	4.159	1.00	4.16	831.80
TOTAL VARIABLE COST				87.34	17,467.70
FIXED COSTS		\$		\$	\$
MACHINE DEPRECIATION**	ACRE	6.86	1.00	6.86	1,372.00
MACHINE INTEREST**	ACRE	5.14	1.00	5.14	1,028.00
MACHINE INSURANCE**	ACRE	0.38	1.00	0.38	76.00
MACHINE TAXES**	ACRE	1.15	1.00	1.15	230.00
				-	-
				-	-
LAND TAXES	ACRE	3.75	1.00	3.75	750.00
NET RENT***	ACRE	109.54	1.00	109.54	21,908.00
TOTAL FIXED COST				126.82	25,364.00
TOTAL COST				214.16	42,831.70
YIELD PER ACRE		95.00	BUSHEL		
PRICE		3.86	PER BU.		
NET RETURNS		152.54	PER ACRE		
NET RETURNS		30,508.31	PER TOTAL ACREAGE		

Table D2. Crop Rotations for Dusty, Washington (economic budgets).

Crop Name:	Yield Per Acre	Price Per Unit	Variable Cost Per Acre	Fixed Cost Per Acre	Total Cost Per Acre	Gross Returns Per Acre	Net Returns Per Acre	Net Returns + 1-yr. Interest*	Rotation
ChemFal	-	-	23.82	6.07	29.89	-	(29.89)	(32.29)	(32.29)
WinWht	95.00	3.86	87.34	126.82	214.16	366.70	152.54		152.54
SprBly	1.39	92.00	98.35	48.19	146.54	127.88	(18.66)		(18.66)
SprWht	54.00	3.86	100.56	74.76	175.32	208.44	33.12		
SprPeas	0.70	140.00	83.39	45.64	129.03	98.00	(31.03)		
Corn	36.00	2.60	147.58	24.95	172.52	93.60	(78.92)		
Corn (2)	36.00	2.60	121.40	26.60	147.99	93.60	(54.39)		
								Total Net Returns.....	101.59
Number of years in Rotation..... <input type="text" value="3"/>								Average Yearly Return/Acre	33.86

*Since the cost of chemical fallow is incurred 1 year before returns are realized, a year's interest must be added to its original cost.

Table D3 shows a summary of the research results for all rotations tested at the Dusty site at price levels of \$3.86/bushel for wheat, \$92/ton for barley, \$7/cwt. for peas, and \$2.60/bushel for corn. Table D3 is copied from the Results spreadsheet in the Dusty workbook. A user may develop a different results spreadsheet by changing the yield, price, and cost figures in the Results spreadsheet.

Each workbook also contains a Machinery Complement spreadsheet (Table D4) that summarizes the value of the actual machinery used by the producers at a specific research site. This spreadsheet is included to show users of these budgets the values of the machinery and the associated machinery cost figures used in the crop budgets developed for the site. Thus, producers may compare their own machinery values with those used in the study and then modify the machinery budget figures for the various crops.

The crop budgets presented in the workbooks may be modified. However, in order to effectively use and modify these budgets to fit an individual's particular situation, one must understand the difference between "economic" and "cash" budgets and how an economic budget can be used to develop a cash budget.

The budget shown in Table D1 is an "economic" budget for winter wheat produced at the Dusty site. It is assumed that the field is 200 acres, the yield is 95 bushels and the price to the producer, net of storage and marketing charges, is \$3.86 per bushel. This budget indicates the total cost (excluding management) per acre to produce winter wheat is \$214.16, not including the cost of the previous year chemical fallow. A producer's cash budget is shown in Table D5.

While individual producers may differ in the type and amount of inputs they use and the yield they obtain, the main source of confusion in an "economic" budget is the cost of owned capital, labor, and land. To fully understand "economic" enterprise budgets, one must understand the concept of "opportunity" cost. Opportunity cost is the revenue lost by not investing in the next best similar risk alternative. For instance, if a producer invests \$50,000 of equity capital in machinery, the producer gives up the alternative of investing this money in the stock market or paying off a current loan. Thus, if the producer is to realize an "economic" profit, the machinery investment must realize a return greater than that associated with the next best alternative. If the next best alternative happens to be paying off a current loan with 10% annual interest, economic profits are not realized until a net return greater than \$5,000 is realized by the equipment investment. Thus, economic budgets reflect an interest cost on both owned and borrowed capital.

The same is true for operator labor and owned land. In calculating labor costs for economic enterprise budgets, operator and family labor are valued at their opportunity cost of being hired out to a neighboring farmer or having a job elsewhere. For land that is owned, the opportunity cost that is included in the economic budget is the net rental return that the producer would receive if the land were rented out rather than used by the producer. In short, in the current spreadsheet budgets it is assumed that the owner of capital assets and unpaid labor wants a "fair" market return for these resources. If full economic costs are not covered, a less than "fair" market return is realized on these resources.

Table D3. Summary of Research Results, Dusty, Washington.

(Economic Budget Figures)

	Year	Crop	Yield	Price	Cost	Returns	Net Returns Per Acre
Rotation 1a:	1999	Win Wht	95.00	3.86	214.16	366.70	152.54
	2000	Spr Barley	1.39	92.00	146.54	127.88	(18.66)
	2001	Chem Fall	-	-	32.29	-	(32.29)
	Total 3-Year Net Return:						
Average Yearly Return:							33.86
Rotation 1b:	2000	Spr Barley	1.39	92.00	146.54	127.88	(18.66)
	2001	Chem Fall	-	-	32.29	-	(32.29)
	2002	Win Wht	79.00	3.86	192.06	304.94	112.88
	Total 3-Year Net Return:						
Average Yearly Return:							20.64
Rotation 2a:	1999	Spr Barley	1.35	92.00	145.16	124.20	(20.96)
	2000	Chem Fall	-	-	32.29	-	(32.29)
	2001	Win Wht	80.00	3.86	193.44	308.80	115.36
	Total 3-Year Net Return:						
Average Yearly Return:							20.70
Rotation 2b:	2000	Chem Fall	-	-	32.29	-	(32.29)
	2001	Win Wht	80.00	3.86	193.44	308.80	115.36
	2002	Spr Barley	1.62	92.00	154.50	149.04	(5.46)
	Total 3-Year Net Return:						
Average Yearly Return:							25.87
Rotation 3a:	1999	Chem Fall	-	-	32.29	-	(32.29)
	2000	Win Wht	88.00	3.86	204.49	339.68	135.19
	2001	Spr Barley	1.63	92.00	154.85	149.96	(4.89)
	Total 3-Year Net Return:						
Average Yearly Return:							32.67
Rotation 3b:	2000	Win Wht	88.00	3.86	204.49	339.68	135.19
	2001	Spr Barley	1.63	92.00	154.85	149.96	(4.89)
	2002	Chem Fall	-	-	32.29	-	(32.29)
	Total 3-Year Net Return:						
Average Yearly Return:							32.67
Rotation 4:	1999	Peas	14.00	7.00	129.03	98.00	(31.03)
	2000	Win Wht	106.00	3.86	229.35	409.16	179.81
	2001	Spr Wht	55.50	3.86	177.40	214.23	36.83
	2002	Corn	42.00	2.60	148.24	109.20	(39.04)
	Total 4-Year Net Return:						
Average Yearly Return							36.64

Table D3 cont. Summary of Research Results, Dusty, Washington.

(Economic Budget Figures)

	Year	Crop	Yield	Price	Cost	Returns	Net Returns Per Acre
Rotation 5:	1999	Win Wht	66.00	3.86	174.10	254.76	80.66
	2000	Spr Wht	63.00	3.86	187.76	243.18	55.42
	2001	Corn	46.33	2.60	182.45	120.46	(61.99)
	2002	Peas	14.20	7.00	129.54	99.40	(30.14)
	Total 4-Year Net Return:						
Average Yearly Return							10.99
Rotation 6:	1999	Corn	39.00	2.60	175.41	101.40	(74.01)
	2000	Peas	25.08	7.00	157.07	175.56	18.49
	2001	Win Wht	74.00	3.86	185.15	285.64	100.49
	2002	Spr Wht	33.00	3.86	146.32	127.38	(18.94)
	Total 4-Year Net Return:						
Average Yearly Return							6.51
Rotation 7:	1999	Win Wht	74.00	3.86	185.15	285.64	100.49
	2000	Corn	51.00	2.60	186.94	132.60	(54.34)
	2001	Peas	20.86	7.00	146.39	146.02	(0.37)
	2002	Win Wht	64.00	3.86	171.34	247.04	75.70
	Total 4-Year Net Return:						
Average Yearly Return							30.37

Wheat measured in bushels.

Barley measured in tons.

Peas measured in cwt..

Corn measured in bushels.

Table D4. Machinery Complement for Farm in Dusty, Washington.

Type of Machine	Replacement Value \$	Years of Life	Annual Hours of Use	Salvage Value \$	Annual Repairs \$
200HP-D5 Cat	12,000	15	250	2,000	3,000
6622 JD-Combine	20,000	10	220	2,500	5,000
JD 750 NT Drill	20,000	10	150	5,000	1,500
30' JD 455 Drill	25,000	20	100	10,000	1,000
70' Sprayer	4,000	10	300	1,200	500
Farm truck 1	15,000	15	150	3,000	550
Farm truck 2	6,500	10	100	1,000	400
Water truck	3,700	10	50	700	350
Pickup	25,000	10	400	7,500	500
4-Wheel ATV	6,000	15	100	1,500	150
50HP-WT w/bucket	8,500	20	100	1,500	75
			Acres Covered		
Farm buildings	80,000	30	4,000	4,000	1,000
Shop tools	30,000	15	4,000	1,500	500
Fuel and misc. tanks	25,000	20	4,000	0	100

Table D5. Itemized Cost Per Acre for Winter Wheat, Dusty, Washington.

CASH BUDGET					
	UNIT	COST/ UNIT	QUANTITY	COST/ ACRE	COST/ 200 ACRES
VARIABLE COSTS		\$		\$	\$
WINTER WHEAT SEED	LB.	0.150	80.00	12.00	2,400.00
FERTILIZER*	ACRE	23.940	1.00	23.94	4,788.00
BRONATE	OZ.	0.283	18.00	5.09	1,018.80
CROP INSURANCE	ACRE	1.690	1.00	1.69	338.00
CUSTOM HAULING	BU.	0.090	95.00	8.55	1,710.00
PERENNIAL WEED CONTROL	ACRE	0.400	1.00	0.40	80.00
				-	-
				-	-
MACHINERY REPAIRS	ACRE	10.410	1.00	10.41	2,082.00
MACHINERY FUEL & LUBE	ACRE	3.630	1.00	3.63	726.00
LABOR (TRAC/MACH)	HOUR	16.500	0.21	3.47	693.00
INTEREST ON OP. CAP.	ACRE	3.820	1.00	3.82	764.00
OVERHEAD	ACRE	3.650	1.00	3.65	729.99
TOTAL VARIABLE COST				76.65	15,329.79
FIXED COSTS		\$		\$	\$
MACHINE P&I PAYMENTS	ACRE	16.00	1.00	16.00	3,200.00
MACHINE EQUITY FINANCE	ACRE	10.00	1.00	10.00	2,000.00
MACHINE INSURANCE**	ACRE	0.38	1.00	0.38	76.00
MACHINE TAXES**	ACRE	1.15	1.00	1.15	230.00
				-	-
LAND P&I PAYMENTS	ACRE	37.50	1.00	37.50	7,500.00
LAND TAXES	ACRE	3.75	1.00	3.75	750.00
NET RENT***	ACRE		1.00	-	-
TOTAL FIXED COST				68.78	13,756.00
TOTAL COST				145.43	29,085.79
YIELD PER ACRE		95.00	BUSHELS		
PRICE		3.86	PER BU.		
NET RETURNS		221.27	PER ACRE		
NET RETURNS		44,254.21	PER TOTAL ACREAGE		

Since most producers have equity in their farm businesses and provide much of the labor associated with running their operations in order to determine what a particular producer's "cash" costs might be, adjustments must be made to the "economic budget." Let us assume, for example, a producer in the Dusty area agrees with all the budget figures for the chemical fallow - winter wheat - spring barley rotation in the Dusty workbook except for interest, labor, and land costs. This owner-operator owns all land and equipment and furnishes 75% of all labor used on the farm. Furthermore, this person owns the 600 acres on which he/she would grow a crop rotation of chemical fallow - winter wheat - spring barley, and he/she estimates annual principal and interest (P&I payment(s)) on this 600 acres to be approximately \$22,500. The estimated annual P&I payment(s) on the machinery loan(s) total approximately \$32,000. In addition, during the year he/she equity finances \$20,000 worth of machinery purchases. Assuming for analysis purposes each year there are 200 acres of chemical fallow, 200 acres of winter wheat and 200 acres of spring barley, he/she attributes approximately 10% of the machinery cost to both the 200 acres of wheat and barley, and 5% of the machinery cost to the 200 acres of chemical fallow. Labor costs, including Social Security and Labor and Industry payments, are estimated to be the same as those in the budget.

To convert the winter wheat economic budget to the producer's cash budget (Table D5), all opportunity costs are eliminated. Thus, the quantity of labor changes from .83 total hour per acre to .21 hired labor hour per acre.¹ Machine depreciation and interest are deleted and replaced with the per acre allocation of principal and interest to be paid on the machinery loan(s) of \$16.00,² along with a line for equity financed machinery purchases of \$10.00.³ Net rent is deleted and replaced with the per acre allocation of principal and interest to be paid on the real estate loan of \$37.50.⁴ Thus, the total cash cost per acre for the producer is \$145.43.

Without going into the above detail that was done in explaining the conversion of the economic winter wheat budget to a cash winter wheat budget, but making the same assumptions, Tables 6 and 7 show the changes made in converting the economic spring barley budget to the cash spring barley budget and Tables 8 and 9 show the changes made in converting the economic chemical fallow budget to the cash chemical budget. Table D10 shows the summary data for the Dusty area and the profitability estimation of chemical fallow - winter wheat - spring barley rotation using the newly developed cash budgets. Since cash budgets are used in the estimation of profitability, the average yearly return of \$40.52 per acre is return to the producer for his labor, management, net worth, and risk. These changes were made and stored in the workbook named Dustyrev.

Spreadsheets like those presented in the Dusty workbook and described above are presented for the other areas in their respective workbooks as well. The manipulations and changes made above using the Dusty workbook spreadsheets can also be made using the workbook spreadsheets for the other areas.

¹0.83 hour x .25 = .21 hour

²\$3,200/200 acres = \$16.00

³\$2,000/200 acres = \$10.00

⁴\$22,500/200 acres = \$37.50

Table D6. Itemized Cost Per Acre for Spring Barley, Dusty, Washington.

ECONOMIC BUDGET					
		COST/		COST/	COST/
	UNIT	UNIT	QUANTITY	ACRE	200
VARIABLE COSTS		\$		\$	\$
					ACRES
SPRING BARLEY SEED	LB.	0.160	85.00	13.60	2,720.00
FERTILIZER*	ACRE	20.740	1.00	20.74	4,148.00
GLYPHOSATE	OZ.	0.152	20.00	3.04	608.00
LIQ AMMONIA SULFATE	OZ.	0.006	50.00	0.30	60.00
STICKER	OZ.	0.070	6.00	0.42	84.00
BRONATE	OZ.	0.283	18.00	5.09	1,018.80
ACHIEVE	LB.	27.800	0.50	13.90	2,780.00
CROP INSURANCE	ACRE	1.200	1.00	1.20	240.00
CUSTOM HAULING	TON	3.750	1.39	5.21	1,042.50
PERENNIAL WEED CONTRL	ACRE	0.400	1.00	0.40	80.00
				-	-
				-	-
MACHINERY REPAIRS	ACRE	9.950	1.00	9.95	1,990.00
MACHINERY FUEL & LUBE	ACRE	3.610	1.00	3.61	722.00
LABOR (TRAC/MACH)	HOUR	16.500	0.84	13.86	2,772.00
INTEREST ON OP. CAP.	ACRE	2.340	1.00	2.34	468.00
OVERHEAD	ACRE	4.683	1.00	4.68	936.67
TOTAL VARIABLE COST				98.35	19,669.97
FIXED COSTS		\$		\$	\$
MACHINE DEPRECIATION**	ACRE	6.68	1.00	6.68	1,336.00
MACHINE INTEREST**	ACRE	5.08	1.00	5.08	1,016.00
MACHINE INSURANCE**	ACRE	0.38	1.00	0.38	76.00
MACHINE TAXES**	ACRE	1.14	1.00	1.14	228.00
				-	-
				-	-
LAND TAXES	ACRE	3.75	1.00	3.75	750.00
NET RENT***	ACRE	31.16	1.00	31.16	6,232.67
TOTAL FIXED COST				48.19	9,638.67
TOTAL COST				146.54	29,308.63
YIELD PER ACRE		1.39	TONS		
PRICE		92.00	PER TON		
NET RETURNS		(18.66)	PER ACRE		
NET RETURNS		(3,732.63)	PER TOTAL ACREAGE		

Table D7. Itemized Cost Per Acre for Spring Barley, Dusty, Washington.

CASH BUDGET					
	UNIT	COST/ UNIT	QUANTITY	COST/ ACRE	COST/ 200 ACRES
VARIABLE COSTS		\$		\$	\$
SPRING BARLEY SEED	LB.	0.160	85.00	13.60	2,720.00
FERTILIZER*	ACRE	20.740	1.00	20.74	4,148.00
GLYPHOSATE	OZ.	0.152	20.00	3.04	608.00
LIQ AMMONIA SULFATE	OZ.	0.006	50.00	0.30	60.00
STICKER	OZ.	0.070	6.00	0.42	84.00
BRONATE	OZ.	0.283	18.00	5.09	1,018.80
ACHIEVE	LB.	27.800	0.50	13.90	2,780.00
CROP INSURANCE	ACRE	1.200	1.00	1.20	240.00
CUSTOM HAULING	TON	3.750	1.39	5.21	1,042.50
PERENNIAL WEED CONTRL	ACRE	0.400	1.00	0.40	80.00
				-	-
				-	-
MACHINERY REPAIRS	ACRE	9.950	1.00	9.95	1,990.00
MACHINERY FUEL & LUBE	ACRE	3.610	1.00	3.61	722.00
LABOR (TRAC/MACH)	HOUR	16.500	0.21	3.47	693.00
INTEREST ON OP. CAP.	ACRE	2.340	1.00	2.34	468.00
OVERHEAD	ACRE	4.164	1.00	4.16	832.72
TOTAL VARIABLE COST				87.44	17,487.02
FIXED COSTS		\$		\$	\$
MACHINE P&I PAYMENTS	ACRE	16.00	1.00	16.00	3,200.00
MACHINE EQUITY FINANCE	ACRE	10.00	1.00	10.00	2,000.00
MACHINE INSURANCE**	ACRE	0.38	1.00	0.38	76.00
MACHINE TAXES**	ACRE	1.14	1.00	1.14	228.00
				-	-
LAND P&I PAYMENTS	ACRE	37.50	1.00	37.50	7,500.00
LAND TAXES	ACRE	3.75	1.00	3.75	750.00
NET RENT***	ACRE		1.00	-	-
TOTAL FIXED COST				68.77	13,754.00
TOTAL COST				156.21	31,241.02
YIELD PER ACRE		1.39	TONS		
PRICE		92.00	PER TON		
NET RETURNS		(28.33)	PER ACRE		
NET RETURNS		(5,665.02)	PER TOTAL ACREAGE		

Table D8. Itemized Cost Per Acre for Chemical Fallow, Dusty, Washington.

ECONOMIC BUDGET					
	UNIT	COST/ UNIT	QUANTITY	COST/ ACRE	COST/ 200 ACRES
VARIABLE COSTS		\$		\$	\$
FERTILIZER*	ACRE	-	1.00	-	-
GLYPHOSATE	OZ.	0.152	60.00	9.12	1,824.00
LIQ. AMMONIUM SULFATE	OZ.	0.006	150.00	0.90	180.00
STICKER	OZ.	0.070	18.00	1.26	252.00
PERENNIAL WEED CONTRL	ACRE	0.400	1.00	0.40	80.00
				-	-
				-	-
MACHINERY REPAIRS	ACRE	2.220	1.00	2.22	444.00
MACHINERY FUEL & LUBE	ACRE	1.380	1.00	1.38	276.00
LABOR (TRAC/MACH)	HOURL	16.500	0.42	6.93	1,386.00
INTEREST ON OP. CAP.	ACRE	0.480	1.00	0.48	96.00
OVERHEAD	ACRE	1.135	1.00	1.13	226.90
TOTAL VARIABLE COST				23.82	4,764.90
FIXED COSTS		\$		\$	\$
MACHINE DEPRECIATION**	ACRE	2.94	1.00	2.94	588.00
MACHINE INTEREST**	ACRE	2.72	1.00	2.72	544.00
MACHINE INSURANCE**	ACRE	0.20	1.00	0.20	40.00
MACHINE TAXES**	ACRE	0.61	1.00	0.61	122.00
LAND TAXES	ACRE	3.75	1.00	3.75	750.00
NET RENT***	ACRE	(4.15)	1.00	(4.15)	(830.00)
TOTAL FIXED COST				6.07	1,214.00
TOTAL COST				29.89	5,978.90
ANNUAL INTEREST RATE		8.00	PERCENT		
TOTAL COST + 1 YEAR INTEREST		32.29			

Table D9. Itemized Cost Per Acre for Chemical Fallow, Dusty, Washington.

CASH BUDGET					
	UNIT	COST/ UNIT	QUANTITY	COST/ ACRE	COST/ 200 ACRES
VARIABLE COSTS					
		\$		\$	\$
FERTILIZER*	ACRE	-	1.00	-	-
GLYPHOSATE	OZ.	0.152	60.00	9.12	1,824.00
LIQ. AMMONIUM SULFATE	OZ.	0.006	150.00	0.90	180.00
STICKER	OZ.	0.070	18.00	1.26	252.00
PERENNIAL WEED CONTROL	ACRE	0.400	1.00	0.40	80.00
				-	-
				-	-
MACHINERY REPAIRS	ACRE	2.220	1.00	2.22	444.00
MACHINERY FUEL & LUBE	ACRE	1.380	1.00	1.38	276.00
LABOR (TRAC/MACH)	HOUR	16.500	0.11	1.73	346.50
INTEREST ON OP. CAP.	ACRE	0.480	1.00	0.48	96.00
OVERHEAD	ACRE	0.875	1.00	0.87	174.93
TOTAL VARIABLE COST				18.37	3,673.43
FIXED COSTS				\$	\$
MACHINE P&I PAYMENTS	ACRE	2.94	1.00	2.94	588.00
MACHINE EQUITY FINANCE	ACRE	2.72	1.00	2.72	544.00
MACHINE INSURANCE**	ACRE	0.20	1.00	0.20	40.00
MACHINE TAXES**	ACRE	0.61	1.00	0.61	122.00
LAND P&I PAYMENTS	ACRE	37.50	1.00	37.50	7,500.00
LAND TAXES	ACRE	3.75	1.00	3.75	750.00
NET RENT***	ACRE		1.00	-	-
TOTAL FIXED COST				47.72	9,544.00
TOTAL COST				66.09	13,217.43
ANNUAL INTEREST RATE		8.00	PERCENT		
TOTAL COST + 1 YEAR INTEREST		71.37			

Table D10. Crop Rotations for Dusty, Washington (cash budgets).

Crop Name:	Yield Per Acre	Price Per Unit	Variable Cost Per Acre	Fixed Cost Per Acre	Total Cost Per Acre	Gross Returns Per Acre	Net Returns Per Acre	Net Returns + 1-yr. Interest	Rotation
ChemFal	-	-	18.37	47.72	66.09	-	(66.09)	(71.37)*	(71.37)
WinWht	95.00	3.86	76.65	68.78	145.43	366.70	221.27		221.27
SprBly	1.39	92.00	87.44	68.77	156.21	127.88	(28.33)		(28.33)
SprWht	54.00	3.86	89.35	68.77	158.12	208.44	50.32		
SprPeas	0.70	140.00	73.32	68.77	142.09	98.00	(44.09)		
Corn	36.00	2.60	139.80	68.77	208.57	93.60	(114.97)		
Corn (2)	36.00	2.60	110.85	68.77	179.62	93.60	(86.02)		
								Total Net Returns.....	121.57
								Average Yearly Return/Acre	40.52
Number of years in rotation.....									<input type="text" value="3"/>

*Since the cost of chemical fallow is incurred 1 year before returns are realized, a year's interest must be added to its original cost.