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1995 Cranberry  
Establishment and  
Production Costs and  
Returns, Southwestern  
Washington, Wet  
Harvest

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**1995 CRANBERRY  
ESTABLISHMENT AND PRODUCTION  
COSTS AND RETURNS,  
SOUTHWESTERN WASHINGTON,  
WET HARVEST**

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## PREFACE

Enterprise costs and returns vary from one farm to the next and over time for any particular farm. Variability stems from differences in:

- capital, labor, and management resources.
- type, size, and age of machinery.
- cultural practices.
- size of farm and enterprise.
- crop yields.
- input prices.
- commodity prices.

Costs can also be calculated differently depending on the intended use of the cost estimate. Information in this publication serves as a general guide for a modern and well-managed southwest Washington cranberry enterprise as of 1995. To avoid drawing unwarranted conclusions about costs and returns for any particular farm or group of farms, you must examine closely the assumptions used in this publication. If they are not appropriate for your situation, adjust the costs and/or returns. Blank spaces in budget tables are provided for these adjustments.

Specific production schedules, crop treatments, and pesticide treatments outlined in this publication are intended to model the potential costs and returns of a hypothetical enterprise. Do not consider them a prescription or recommendation guaranteeing a specific outcome.

Economic results are very sensitive to anticipated cranberry prices. For budget purposes, recent prices received by growers were used. Current and prospective growers are urged to insert their own estimates of future production costs and sale prices for cranberries.

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# 1995 CRANBERRY ESTABLISHMENT AND PRODUCTION COSTS AND RETURNS, SOUTHWESTERN WASHINGTON, WET HARVEST

Cathy J. Schaeffer, Kim D. Patten, and Richard W. Carkner<sup>1</sup>

## INTRODUCTION

This study presents estimated establishment and production costs and returns for a ten-acre wet harvest cranberry bog in southwest Washington. Growers, prospective growers, agricultural lenders, and others concerned with the Washington cranberry industry can use the information to estimate the physical and financial requirements of establishing and producing cranberries for wet harvest.

While the acreage and practices outlined may not fit all conditions, they represent current trends. Pesticides are listed for cost estimating purposes only. Check labels for actual pesticide use. The adoption of Best Management Practices (BMP) are encouraged and have been considered in the development of this budget. Individual growers can use the blank spaces provided to adjust the budget tables to their individual bog circumstances. Local Cooperative Extension agents and agribusiness field representatives should be consulted for recommendations on field operations, farm inputs, and BMP applications.

## SOURCES OF INFORMATION

We interviewed area producers to identify field operations and machinery complements commonly used. These producers were considered to be representative of well-managed operations. The quantities and types of materials, i.e., fertilizers, herbicides, and insecticides are based on recommended and widely used practices. We contacted local farm input suppliers for price information on materials and other services used by farmers.

## BUDGET ASSUMPTIONS

The following assumptions were used in budget development:

1. Eleven acres of land not formerly used for crop production is valued at \$2,500 per acre (for a total of \$27,500). Ten acres are totally devoted to cranberries and one acre is used for roads, buildings, and the pond.
2. Supplemental solid set irrigation is used.

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3. A crop is established over a period of three years, with harvest operations beginning in year four and reaching full production in year seven.
4. Cranberries are harvested beginning in year four. The standard measure of yield per acre is a barrel, which equals 100 pounds. In addition, the cranberry vines are pruned annually beginning in year four and the prunings are sold by the pound. The cranberries and vines are sold independently on the open market, with the following yield estimates:

Year	Cranberries Barrels/Acre	Vine Prunings Lbs/Acre
1	0	0
2	0	0
3	0	0
4	25	330
5	150	660
6	200	330
7+	200	165

5. The price received for wet harvested cranberries is \$50/barrel. The price received for cranberry vine prunings is \$1/lb.
6. Interest rates on operating capital and capital assets including land are ten percent.
7. Unless otherwise specified, machinery fixed costs (depreciation and interest) are based on 1994 new machinery prices.

This last assumption may overstate current production costs, but it provides an indication of the cranberry enterprise's ability to replace machinery and equipment. Continued machinery and equipment price increases mean that depreciation claimed on previously purchased equipment understates the capital required to replace these assets. Current pricing of assets gives an indication of an enterprise's long-run ability to replace depreciable assets.

#### DISCUSSION OF BUDGET INFORMATION

The cranberry enterprise information is presented in a total of seven separate budgets; six for the establishment years and one representing subsequent production years. Activities in the first year include land clearing, leveling, and other development activities. The vines are spread in year two, with the activities of fertilization, irrigation, and weed control occurring in both years two and three. Activities in the fourth and subsequent years include weed, insect, and disease control; fertilization; irrigation; and harvesting.

Budgets for years one through six consist of two tables for each year. The first table (A) provides the schedule of operations by month and selected costs. The second table (B) summarizes costs and provides space for individual farm adjustments. Year seven includes a third table (C) summarizing per acre full production revenues, costs, and annual profitability.

#### Tables 1A through 7A - Schedule of Operations and Estimated Costs Per Acre

These tables outline the schedule of field operations by calendar month (MTH), the type of equipment and labor used (TOOLING), and the hours used per acre for the cranberry bog for each of the establishment and production years. The costs of field operations are divided into two categories. Fixed costs represent the ownership costs associated with machinery, irrigation, buildings, and land. The second category, variable costs, is associated with operating machinery, hiring labor, and purchasing services and materials. Total cost is the sum of fixed costs and variable costs.

Machinery fixed costs include depreciation, interest on the average investment, taxes, and insurance. Per-hour fixed costs for machinery are determined by dividing the total annual fixed cost per machine by the annual hours of machinery use over all enterprises for the representative farm. For a specific field operation, machinery fixed costs (TOTAL FIXED COSTS) are determined by multiplying the machine hours (MACH HOURS) per acre times the per-hour fixed cost (detailed in Table 10).

Variable costs depend directly on the number of acres or units produced. These costs include fuel, oil, and repairs (FUEL, LUBE, & REPAIRS); machinery operating labor (LABOR); custom work, machine rentals, and hand labor (SERVICE); inputs such as vines, fertilizer, and chemicals (MATER.); and interest on operating capital (INTER.). Overhead variable cost is a miscellaneous expense category, estimated at five percent of variable costs, to cover all other non-itemized expenses such as utilities, telephone, accounting, etc. Cost details are outlined in extensive footnotes for each table A.

#### Tables 1B through 7B - Summary of Itemized Costs per Acre

Tables 1B through 7B summarize variable, fixed, and total production costs per acre. Inputs are listed with their prices and the quantities used. Complete price information is included in Table 12.

#### Table 7C - Summary of Revenues, Costs, and Profitability at Full Production

This table summarizes per acre receipts, costs, and profitability at full production for years seven and beyond. Gross receipts are the product of the barrels of production multiplied by the price per barrel, and pounds of vine prunings multiplied by the price per pound. The first measure of profitability is the returns over variable costs and is calculated by subtracting total variable costs from gross revenues. A second measure of profitability, returns to land and management, is calculated by subtracting fixed machinery and investment costs and amortized establishment costs from returns over variable costs. A third measure of profitability is returns to management, which is gross revenues minus all costs except

management. In Table 7C, this is calculated by subtracting land charges from the returns to land and management.

### Establishment Costs - Table 8

The establishment costs must be recovered over the useful life of the cranberry bog, estimated at 20 years. This process involves carrying forward total production costs plus interest during the establishment years one through six. These costs accumulate during the establishment period and are offset by returns from the sale of cranberries, which begins in year four. When the bog reaches full production in the seventh year, the accumulated establishment cost is then amortized over the remaining useful life of the bog.

Table 8 summarizes establishment and production costs for years one through six. Production costs are composed of variable and fixed costs. Variable costs are the annual cash costs necessary to establish the bog and produce cranberries. Example variable costs in the first year are land preparation (removing stumps) and chemicals used for weed control. Fixed costs reflect the interest and depreciation costs of owned equipment, land taxes and costs, and interest on unrecovered establishment costs that are charged to the cranberry enterprise. Land fixed costs include taxes and a ten percent return on the purchase price of the land. This cost represents the minimum return the owner-operator desires on the original investment in land. Land cost is termed an opportunity cost to indicate that it is not an out-of-pocket expense, but rather a return that is foregone by the producer as a result of investing in this enterprise.

Beginning with year two, a fixed cost of ten percent of the previous year's accumulated establishment cost is charged against the investment. This cost represents the interest being paid on the cranberry production enterprise, or returns foregone by investing in the cranberry bog, rather than in an alternative investment that would give immediate returns.

The total accumulated establishment cost after year six is \$34313.33. The annual payment required to recover the establishment cost at 10 percent interest over the remaining fourteen years of the bog's 20-year life is \$4657.91. This cost is identified as a prorated establishment cost in Table 7A, 7B, and 7C.

### Returns Over Total Costs at Various Yields and Prices - Table 9

Table 9 presents annual returns over total costs, including amortized establishment costs, under full production at various yields and price combinations. The combinations of yield and price that provide positive returns are below the heavy black line. Those combinations above the black line show returns below total production costs. This information can be used to estimate the impact of yield and/or price changes on returns. It can also be used to estimate yield and price combinations necessary to produce a given return over total costs. For example, at a price of \$60 per barrel and a yield of 160 barrels per acre, the return to management is \$1908.14 per acre. The data is based on year seven costs (Tables 7A and 7B) adjusted for harvest costs at each yield level.



### Machinery Complement - Table 10

Table 10 lists the machinery complement for a ten-acre farm. Machinery fixed costs (depreciation and interest) are based on new machinery prices unless otherwise specified.

### Investment Costs - Table 11

Table 11 lists the investment costs and the associated annual depreciation, interest, repairs, insurance, and taxes on investments. These costs are converted to annual costs and charged against the cranberry enterprise.

### Input Prices - Table 12

The prices for materials, custom operations, labor, and other inputs used in deriving these budgets are detailed in Table 12.

SCHEDULE OF OPERATIONS AND ESTIMATED COSTS PER ACRE  
FOR ESTABLISHING WET HARVEST CRANBERRIES IN  
SOUTHWEST WASHINGTON; YEAR ONE

TABLE 1A.

OPERATION	TOOLING	MTH YEAR	MACH HOURS	MACH LABOR HOURS	TOTAL FIXED COST	VARIABLE COST					TOTAL VARIABLE COST	TOTAL COST
						FUEL, LUBE, & REPAIRS	LABOR	SERVICE	MATER.	INTER.		
REMOVE STUMPS	CUSTOM BRUSH AND STUMP REMOVAL	JUN 1995	.00	.00	\$ .00	\$ .00	\$ .00	\$ 4000.00	\$ .00	\$ 133.33	\$ 4133.33	\$ 4133.33
LEVEL	CUSTOM LEVEL	JUN 1995	.00	.00	.00	.00	.00	1000.00	.00	33.33	1033.33	1033.33
SMOOTH	RENT TRACTOR/DRAW; 8 HRS LABOR	JUN 1995	.00	1.00	.00	.00	12.50	156.00	.00	5.62	174.12	174.12
BUILD POND	CUSTOM BUILD POND	JUN 1995	.00	.00	.00	.00	.00	500.00	.00	16.67	516.67	516.67
BUILD DIKE	CUSTOM BUILD DIKE	JUN 1995	.00	.00	.00	.00	.00	1000.00	.00	33.33	1033.33	1033.33
SOIL TEST	2 TESTS FOR ALL FARM ACREAGE	JUL 1995	.00	.00	.00	.00	.00	7.00	.00	.18	7.18	7.18
APPLY 1" SAND	CUSTOM SAND APPLICATION	JUL 1995	.00	.00	.00	.00	.00	1000.00	.00	25.00	1025.00	1025.00
INSTALL IRRIGATN	HAND TOOLS; 40 HRS HAND LABOR	JUL 1995	40.00	.00	74.90	13.33	.00	380.00	.00	9.83	403.17	478.07
WEED CONTROL	RENT TRACTOR/SPRAY EQUIP. [1]	JUL 1995	.00	1.50	.00	.00	18.75	50.00	79.90	3.72	152.37	152.37
DITCHING	HAND TOOLS; 64 HRS HAND LABOR	AUG 1995	64.00	.00	119.84	21.33	.00	608.00	.00	10.49	639.82	759.66
CRIB DITCH	CUSTOM INSTALLATION	AUG 1995	.00	.00	.00	.00	.00	4500.00	.00	75.00	4575.00	4575.00
PICK-UP TRUCK	ANNUAL USE	ANN 1995	15.00	16.50	129.11	51.43	206.25	.00	.00	12.88	270.56	399.67
LAND OWNERSHIP	LAND COST	ANN 1995	.00	.00	275.00	.00	.00	.00	.00	.00	.00	275.00
INVEST REPAIRS	EQUIPMENT AND BUILDING REPAIRS	ANN 1995	.00	.00	.00	.00	.00	35.50	.00	1.78	37.27	37.27
INVEST INT/DEPR	EQUIP/BLDGS INTEREST & DEPREC.	ANN 1995	.00	.00	399.60	.00	.00	.00	.00	.00	.00	399.60
INSURANCE/TAXES	ON INVESTMENTS AND LAND TAXES	ANN 1995	.00	.00	62.19	.00	.00	.00	.00	.00	.00	62.19
OVERHEAD	5% VARIABLE COSTS	ANN 1995	.00	.00	.00	.00	.00	700.06	.00	.00	700.06	700.06
TOTAL PER ACRE			119.00	19.00	\$1060.64	\$86.10	\$237.50	\$13936.65	\$79.90	\$361.16	\$14701.21	\$15761.85

[1] 1 gal/acre Round-Up.

ITEMIZED COST PER ACRE FOR ESTABLISHING  
WET HARVEST CRANBERRIES IN SOUTHWEST  
WASHINGTON; YEAR ONE

TABLE 1B.

	UNIT	PRICE OR COST/UNIT	QUANTITY	VALUE OR COST	YOUR FARM
<b>VARIABLE COSTS</b>					
TRACTOR/DRAG RENT	ACRE	\$ 80.00	1.00	\$ 80.00	_____
CUSTOM LEVEL	ACRE	1000.00	1.00	1000.00	_____
BUILD POND	ACRE	500.00	1.00	500.00	_____
STUMP REMOVAL	ACRE	4000.00	1.00	4000.00	_____
CUSTOM BUILD DIKE	ACRE	1000.00	1.00	1000.00	_____
TRACTOR/SPRAY RENT	ACRE	50.00	1.00	50.00	_____
ROUND-UP	GAL	79.90	1.00	79.90	_____
CUSTOM SAND APPLIC.	ACRE	1000.00	1.00	1000.00	_____
SOILS TESTS	EACH	35.00	.20	7.00	_____
CUSTOM CRIB DITCH	ACRE	4500.00	1.00	4500.00	_____
HAND LABOR	HOUR	9.50	112.00	1064.00	_____
OVERHEAD	ACRE	700.06	1.00	700.06	_____
INVESTMENT REPAIRS	ACRE	35.50	1.00	35.50	_____
INTEREST ON OPER.CAP.	DOL	.10	3611.56	361.16	_____
MACHINERY REPAIRS	ACRE	86.10	1.00	86.10	_____
LABOR (TRAC/MACH)	ACRE	237.50	1.00	237.50	_____
				\$14701.21	_____
<b>TOTAL VARIABLE COST</b>					
<b>FIXED COSTS</b>					
MACHINE DEPRECIATION	ACRE	\$ 185.62	1.00	\$ 185.62	_____
MACHINE INTEREST	ACRE	114.24	1.00	114.24	_____
MACHINE INSURANCE	ACRE	6.85	1.00	6.85	_____
MACHINE TAXES	ACRE	17.14	1.00	17.14	_____
LAND COSTS	ACRE	275.00	1.00	275.00	_____
INTEREST: EQUIP/BLDGS	ACRE	207.80	1.00	207.80	_____
DEPREC: EQUIP/BLDGS	ACRE	191.80	1.00	191.80	_____
INVESTMENT INSUR/TAX	ACRE	41.56	1.00	41.56	_____
LAND TAXES	ACRE	20.63	1.00	20.63	_____
				\$1060.64	_____
<b>TOTAL FIXED COST</b>					
<b>TOTAL COST</b>					
				\$15761.85	_____

SCHEDULE OF OPERATIONS AND ESTIMATED COSTS PER ACRE  
FOR ESTABLISHING WET HARVEST CRANBERRIES IN  
SOUTHWEST WASHINGTON; YEAR TWO

TABLE 2A.

OPERATION	TOOLING	MTH YEAR	MACH HOURS	MACH LABOR HOURS	TOTAL FIXED COST	VARIABLE COST					TOTAL VARIABLE COST	TOTAL COST
						FUEL, LUBE, & REPAIRS	LABOR	SERVICE	MATER.	INTER.		
SPREAD VINES	HAND TOOLS;24 HRS LBR;1T VINES	MAR 1996	24.00	.00	\$ 44.94	\$ 8.00	\$ .00	\$ 228.00	\$ 2000.00	\$ 130.43	\$ 2366.43	\$ 2411.37
DISC VINES	RENT TRACTOR/DISC; MACH. LABOR	MAR 1996	.00	1.00	.00	.00	12.50	80.00	.00	5.40	97.90	97.90
APPLY HERBICIDE	HAND SPREADER; 1/2 HR LABOR[1]	APR 1996	.50	.00	.54	.33	.00	4.75	91.00	4.80	100.89	101.43
FERTILIZE	HAND SPREADER; 1/2 HR LABOR[2]	APR 1996	.50	.00	.54	.33	.00	4.75	7.25	.62	12.95	13.49
FERTILIZE	THROUGH CHEMIGATION SYSTEM [3]	APR 1996	.00	.00	.00	.00	.00	9.50	2.52	.60	12.62	12.62
MOW/TRIM DIKES	MOWER; WEED WHACKER; 4 HRS LBR	APR 1996	4.00	4.00	9.22	7.77	50.00	.00	.00	2.89	60.66	69.88
FERTILIZE	HAND SPREADER; 1/2 HR LABOR[4]	MAY 1996	.50	.00	.54	.33	.00	4.75	7.25	.51	12.85	13.39
FERTILIZE	THROUGH CHEMIGATION SYSTEM [5]	MAY 1996	.00	.00	.00	.00	.00	9.50	2.52	.50	12.52	12.52
MOW/TRIM DIKES	MOWER; WEED WHACKER; 4 HRS LBR	MAY 1996	4.00	4.00	9.22	7.77	50.00	.00	.00	2.41	60.18	69.40
FERTILIZE	HAND SPREADER; 1/2 HR LABOR[6]	JUN 1996	.50	.00	.54	.33	.00	4.75	7.25	.41	12.74	13.29
FERTILIZE	THROUGH CHEMIGATION SYSTEM [7]	JUN 1996	.00	.00	.00	.00	.00	9.50	2.52	.40	12.42	12.42
MOW/TRIM DIKES	MOWER; WEED WHACKER; 4 HRS LBR	JUN 1996	4.00	4.00	9.22	7.77	50.00	.00	.00	1.93	59.70	68.92
FERTILIZE	HAND SPREADER; 1/2 HR LABOR[8]	JUL 1996	.50	.00	.54	.33	.00	4.75	7.25	.31	12.64	13.18
FERTILIZE	THROUGH CHEMIGATION SYSTEM [9]	JUL 1996	.00	.00	.00	.00	.00	9.50	2.52	.30	12.32	12.32
MOW/TRIM DIKES	MOWER; WEED WHACKER; 4 HRS LBR	JUL 1996	4.00	4.00	9.22	7.77	50.00	.00	.00	1.44	59.22	68.44
FERTILIZE	HAND SPREADER;1/2 HR LABOR[10]	AUG 1996	.50	.00	.54	.33	.00	4.75	7.25	.21	12.54	13.08
FERTILIZE	THROUGH CHEMIGATION SYSTEM[11]	AUG 1996	.00	.00	.00	.00	.00	9.50	1.26	.18	10.94	10.94
MOW/TRIM DIKES	MOWER; WEED WHACKER; 4 HRS LBR	AUG 1996	4.00	4.00	9.22	7.77	50.00	.00	.00	.96	58.74	67.96
MOW/TRIM DIKES	MOWER; WEED WHACKER; 4 HRS LBR	SEP 1996	4.00	4.00	9.22	7.77	50.00	.00	.00	.48	58.26	67.47
MOW/TRIM DIKES	MOWER; WEED WHACKER; 4 HRS LBR	OCT 1996	4.00	4.00	9.22	7.77	50.00	.00	.00	.00	57.77	66.99
IRRIGATION	ELECTRICITY AND USAGE CHARGES	SEA 1996	.00	.00	.00	.00	.00	93.00	.00	4.65	97.65	97.65
HAND WEEDING	HAND TOOLS; 210 HRS SEASONALLY	SEA 1996	210.00	.00	393.23	70.00	.00	1995.00	.00	103.25	2168.25	2561.48
BOG & DIKE MAINT	HAND TOOLS; 10 HRS HAND LABOR	ANN 1996	10.00	.00	18.73	3.33	.00	95.00	.00	4.92	103.25	121.98
PICK-UP TRUCK	ANNUAL USE	ANN 1996	15.00	16.50	129.11	51.43	206.25	.00	.00	12.88	270.56	399.67
ESTABLISH. COST	INTER. ON UNRECOVERED EST. COST	ANN 1996	.00	.00	1576.19	.00	.00	.00	.00	.00	.00	1576.19
LAND OWNERSHIP	LAND COSTS	ANN 1996	.00	.00	275.00	.00	.00	.00	.00	.00	.00	275.00
INSURANCE/TAXES	ON INVESTMENTS AND LAND TAXES	ANN 1996	.00	.00	62.19	.00	.00	.00	.00	.00	.00	62.19
INVEST INT/DEPR	EQUIP/BLDGS INTEREST & DEPREC.	ANN 1996	.00	.00	399.60	.00	.00	.00	.00	.00	.00	399.60
INVEST REPAIRS	EQUIPMENT AND BUILDING REPAIRS	ANN 1996	.00	.00	.00	.00	.00	35.50	.00	1.78	37.27	37.27
OVERHEAD	5% VARIABLE COSTS	ANN 1996	.00	.00	.00	.00	.00	289.06	.00	.00	289.06	289.06
TOTAL PER ACRE			290.00	45.50	\$2966.77	\$189.18	\$568.75	\$2891.56	\$2138.59	\$282.26	\$6070.34	\$9037.11

[1] 50 lbs/acre Evital 5G [2] 50 lbs/acre 6-24-24 [3] 20 lbs/acre 46-0-0 [4] 50 lbs/acre 6-24-24 [5] 20 lbs/acre 46-0-0 [6] 50 lbs/acre 6-24-24  
[7] 20 lbs/acre 46-0-0 [8] 50 lbs/acre 6-24-24 [9] 20 lbs/acre 46-0-0 [10] 50 lbs/acre 6-24-24 [11] 10 lbs/acre 46-0-0.

ITEMIZED COST PER ACRE FOR ESTABLISHING  
WET HARVEST CRANBERRIES IN SOUTHWEST  
TABLE 2B. WASHINGTON; YEAR TWO

		PRICE OR	QUANTITY	VALUE OR	YOUR
		UNIT COST/UNIT		COST	FARM
<b>VARIABLE COSTS</b>					
TRACTOR/DISC RENT	ACRE	\$ 80.00	1.00	\$ 80.00	_____
HAND LABOR	HOUR	9.50	247.00	2346.50	_____
HYBRID VINES	LB	1.00	2000.00	2000.00	_____
EVITAL 5G	LB	1.82	50.00	91.00	_____
K2SO4 6-24-24	LB	.14	250.00	36.25	_____
UREA 46-0-0	LB	.13	90.00	11.34	_____
IRRIGATION LABOR	HOUR	9.50	5.00	47.50	_____
INVESTMENT REPAIRS	ACRE	35.50	1.00	35.50	_____
OVERHEAD	ACRE	289.06	1.00	289.06	_____
IRRIGATION USAGE	ACRE	58.00	1.00	58.00	_____
IRRIGATION ELECTRIC	ACRE	35.00	1.00	35.00	_____
INTEREST ON OPER. CAP.	DOL	.10	2822.57	282.26	_____
MACHINERY REPAIRS	ACRE	164.63	1.00	164.63	_____
MACHINE FUEL/LUBE	ACRE	24.55	1.00	24.55	_____
LABOR (TRAC/MACH)	ACRE	568.75	1.00	568.75	_____
				-----	
TOTAL VARIABLE COST				\$6070.34	_____
<b>FIXED COSTS</b>					
MACHINE DEPRECIATION	ACRE	\$ 388.32	1.00	\$ 388.32	_____
MACHINE INTEREST	ACRE	219.40	1.00	219.40	_____
MACHINE INSURANCE	ACRE	13.16	1.00	13.16	_____
MACHINE TAXES	ACRE	32.91	1.00	32.91	_____
INVESTMENT INSUR/TAX	ACRE	41.56	1.00	41.56	_____
LAND TAXES	ACRE	20.63	1.00	20.63	_____
ACCUMULATED INTEREST	ACRE	1576.19	1.00	1576.19	_____
DEPREC: EQUIP/BLDG	ACRE	191.80	1.00	191.80	_____
INTEREST: EQUIP/BLDGS	ACRE	207.80	1.00	207.80	_____
LAND COSTS	ACRE	275.00	1.00	275.00	_____
				-----	
TOTAL FIXED COST				\$2966.77	_____
				-----	
TOTAL COST				\$9037.11	_____

SCHEDULE OF OPERATIONS AND ESTIMATED COSTS PER ACRE  
FOR ESTABLISHING WET HARVEST CRANBERRIES IN  
SOUTHWEST WASHINGTON; YEAR THREE

TABLE 3A.

OPERATION	TOOLING	MTH YEAR	MACH HOURS	MACH LABOR HOURS	TOTAL FIXED COST	VARIABLE COST					TOTAL VARIABLE COST	TOTAL COST
						FUEL, LUBE, & REPAIRS	LABOR	SERVICE	MATER.	INTER.		
SOIL ANALYSIS	2 TESTS FOR ALL FARM ACREAGE	MAR 1997	.00	.00	\$ .00	\$ .00	\$ .00	\$ 7.00	\$ .00	\$ .41	\$ 7.41	\$ 7.41
APPLY HERBICIDE	HAND SPREADER; 1/2 HR LABOR[1]	MAR 1997	.50	.00	.54	.33	.00	4.75	93.00	5.72	103.80	104.35
FERTILIZE	HAND SPREADER; 1/2 HR LABOR[2]	APR 1997	.50	.00	.54	.33	.00	4.75	22.20	1.36	28.65	29.19
APPLY HERBICIDE	HAND SPREADER; 1/2 HR LABOR[3]	APR 1997	.50	.00	.54	.33	.00	4.75	46.50	2.58	54.16	54.71
MOW/TRIM DIKES	MOWER; WEED WHACKER; 4 HRS LBR	APR 1997	4.00	4.00	9.22	7.77	50.00	.00	.00	2.89	60.66	69.88
FERTILIZE	HAND SPREADER; 1/2 HR LABOR[4]	MAY 1997	.50	.00	.54	.33	.00	4.75	14.10	.80	19.98	20.53
FERTILIZE	THROUGH CHEMIGATION SYSTEM [5]	MAY 1997	.00	.00	.00	.00	.00	9.50	2.52	.50	12.52	12.52
MOW/TRIM DIKES	MOWER; WEED WHACKER; 4 HRS LBR	MAY 1997	4.00	4.00	9.22	7.77	50.00	.00	.00	2.41	60.18	69.40
FERTILIZE	HAND SPREADER; 1/2 HR LABOR[6]	JUN 1997	.50	.00	.54	.33	.00	4.75	7.25	.41	12.74	13.29
FERTILIZE	THROUGH CHEMIGATION SYSTEM [7]	JUN 1997	.00	.00	.00	.00	.00	9.50	2.52	.40	12.42	12.42
MOW/TRIM DIKES	MOWER; WEED WHACKER; 4 HRS LBR	JUN 1997	4.00	4.00	9.22	7.77	50.00	.00	.00	1.93	59.70	68.92
FERTILIZE	HAND SPREADER; 1/2 HR LABOR[8]	JUL 1997	.50	.00	.54	.33	.00	4.75	7.25	.31	12.64	13.18
FERTILIZE	THROUGH CHEMIGATION SYSTEM [9]	JUL 1997	.00	.00	.00	.00	.00	9.50	2.52	.30	12.32	12.32
MOW/TRIM DIKES	MOWER; WEED WHACKER; 4 HRS LBR	JUL 1997	4.00	4.00	9.22	7.77	50.00	.00	.00	1.44	59.22	68.44
FERTILIZE	HAND SPREADER; 1/2 HR LABOR[10]	AUG 1997	.50	.00	.54	.33	.00	4.75	7.25	.21	12.54	13.08
MOW/TRIM DIKES	MOWER; WEED WHACKER; 4 HRS LBR	AUG 1997	4.00	4.00	9.22	7.77	50.00	.00	.00	.96	58.74	67.96
MOW/TRIM DIKES	MOWER; WEED WHACKER; 4 HRS LBR	SEP 1997	4.00	4.00	9.22	7.77	50.00	.00	.00	.48	58.26	67.47
MOW/TRIM DIKES	MOWER; WEED WHACKER; 4 HRS LBR	OCT 1997	4.00	4.00	9.22	7.77	50.00	.00	.00	.00	57.77	66.99
IRRIGATION	ELECTRICITY AND USAGE CHARGE	SEA 1997	.00	.00	.00	.00	.00	93.00	.00	4.65	97.65	97.65
HAND WEEDING	HAND TOOLS; 210 HRS HAND LABOR	SEA 1997	210.00	.00	393.23	70.00	.00	1995.00	.00	103.25	2168.25	2561.48
BOG & DIKE MAINT	HAND TOOLS; 10 HRS HAND LABOR	ANN 1997	10.00	.00	18.73	3.33	.00	95.00	.00	4.92	103.25	121.98
PICK-UP TRUCK	ANNUAL USE	ANN 1997	15.00	16.50	129.11	51.43	206.25	.00	.00	12.88	270.56	399.67
ESTABLISH. COST	INTER. ON UNRECOVERED EST. COST	ANN 1997	.00	.00	2479.90	.00	.00	.00	.00	.00	.00	2479.90
LAND OWNERSHIP	LAND COSTS	ANN 1997	.00	.00	275.00	.00	.00	.00	.00	.00	.00	275.00
INSURANCE/TAXES	ON INVESTMENTS AND LAND TAXES	ANN 1997	.00	.00	62.19	.00	.00	.00	.00	.00	.00	62.19
INVEST INT/DEPR	EQUIP/BLDGS INTEREST & DEPREC.	ANN 1997	.00	.00	399.60	.00	.00	.00	.00	.00	.00	399.60
INVEST REPAIRS	EQUIPMENT AND BUILDING REPAIRS	ANN 1997	.00	.00	.00	.00	.00	35.50	.00	1.78	37.27	37.27
OVERHEAD	5% VARIABLE COSTS	ANN 1997	.00	.00	.00	.00	.00	169.04	.00	.00	169.04	169.04
TOTAL PER ACRE			266.50	44.50	\$3826.08	\$181.51	\$556.25	\$2456.29	\$205.11	\$150.59	\$3549.75	\$7375.83

[1] 50 lbs/acre Devrinol [2] 100 lbs/acre 0-0-22 KMag; 100 lbs/acre 0-46-0 [3] 25 lbs/acre Devrinol [4] 100 lbs/acre 0-23-25 [5] 20 lbs/acre 46-0-0 [6] 50 lbs/acre 6-24-24 [7] 20 lbs/acre 46-0-0 [8] 50 lbs/acre 6-24-24 [9] 20 lbs/acre 46-0-0 [10] 50 lbs/acre 6-24-24.

ITEMIZED COST PER ACRE FOR ESTABLISHING  
WET HARVEST CRANBERRIES IN SOUTHWEST  
TABLE 3B. WASHINGTON; YEAR THREE

		PRICE OR UNIT COST/UNIT	QUANTITY	VALUE OR COST	YOUR FARM
<b>VARIABLE COSTS</b>					
SOILS TESTS	EACH	\$ 35.00	.20	\$ 7.00	_____
HAND LABOR	HOUR	9.50	223.50	2123.25	_____
DEVRIKOL 10G	LB	1.86	75.00	139.50	_____
KMAG 0-0-22	LB	.10	100.00	9.80	_____
0-46-0	LB	.12	100.00	12.40	_____
0-23-25	LB	.14	100.00	14.10	_____
UREA 46-0-0	LB	.13	60.00	7.56	_____
IRRIGATION LABOR	HOUR	9.50	3.00	28.50	_____
K2SO4 6-24-24	LB	.14	150.00	21.75	_____
INVESTMENT REPAIRS	ACRE	35.50	1.00	35.50	_____
OVERHEAD	ACRE	169.04	1.00	169.04	_____
IRRIGATION USAGE	ACRE	58.00	1.00	58.00	_____
IRRIGATION ELECTRIC	ACRE	35.00	1.00	35.00	_____
INTEREST ON OPER.CAP.	DOL	.10	1505.86	150.59	_____
MACHINERY REPAIRS	ACRE	156.96	1.00	156.96	_____
MACHINE FUEL/LUBE	ACRE	24.55	1.00	24.55	_____
LABOR (TRAC/MACH)	ACRE	556.25	1.00	556.25	_____
<b>TOTAL VARIABLE COST</b>				<b>\$3549.75</b>	_____
<b>FIXED COSTS</b>					
MACHINE DEPRECIATION	ACRE	\$ 360.74	1.00	\$ 360.74	_____
MACHINE INTEREST	ACRE	205.50	1.00	205.50	_____
MACHINE INSURANCE	ACRE	12.33	1.00	12.33	_____
MACHINE TAXES	ACRE	30.83	1.00	30.83	_____
ACCUMULATED INTEREST	ACRE	2479.90	1.00	2479.90	_____
DEPREC:EQUIP/BLDG	ACRE	191.80	1.00	191.80	_____
INTEREST:EQUIP/BLDGS	ACRE	207.80	1.00	207.80	_____
LAND COSTS	ACRE	275.00	1.00	275.00	_____
INVESTMENT INSUR/TAX	ACRE	41.56	1.00	41.56	_____
LAND TAXES	ACRE	20.63	1.00	20.63	_____
<b>TOTAL FIXED COST</b>				<b>\$3826.08</b>	_____
<b>TOTAL COST</b>				<b>\$7375.83</b>	_____

SCHEDULE OF OPERATIONS AND ESTIMATED COSTS PER ACRE  
FOR ESTABLISHING AND PRODUCING WET HARVEST CRANBERRIES  
IN SOUTHWEST WASHINGTON; YEAR FOUR

TABLE 4A.

OPERATION	TOOLING	MTH YEAR	MACH HOURS	MACH LABOR HOURS	TOTAL FIXED COST	VARIABLE COST					TOTAL VARIABLE COST	TOTAL COST
						FUEL, LUBE, & REPAIRS	LABOR	SERVICE	MATER.	INTER.		
APPLY HERBICIDE	HAND SPREADER; 1/2 HR LABOR[1]	MAR 1998	.50	.00	\$ .54	\$ .33	\$ .00	\$ 4.75	\$ 68.00	\$ 4.26	\$ 77.35	\$ 77.89
FERTILIZE	HAND SPREADER; 1/2 HR LABOR[2]	APR 1998	.50	.00	.54	.33	.00	4.75	9.80	.74	15.63	16.17
APPLY HERBICIDE	HAND SPREADER; 1/2 HR LABOR[3]	APR 1998	.50	.00	.54	.33	.00	4.75	130.20	6.76	142.05	142.59
MOW/TRIM DIKES	MOWER; WEED WHACKER; 4 HRS LBR	APR 1998	4.00	4.00	9.22	7.77	50.00	.00	.00	2.89	60.66	69.88
FERTILIZE	HAND SPREADER; 1/2 HR LABOR[4]	MAY 1998	.50	.00	.54	.33	.00	4.75	40.60	1.90	47.59	48.13
APPLY FUNGICIDE	THROUGH CHEMIGATION SYSTEM [5]	MAY 1998	.00	.00	.00	.00	.00	9.50	16.80	1.10	27.40	27.40
APP. INSECTICIDE	THROUGH CHEMIGATION SYSTEM [6]	MAY 1998	.00	.00	.00	.00	.00	9.50	12.57	.92	22.99	22.99
MOW/TRIM DIKES	MOWER; WEED WHACKER; 4 HRS LBR	MAY 1998	4.00	4.00	9.22	7.77	50.00	.00	.00	2.41	60.18	69.40
POLLINATION	1 HIVE/ACRE	JUN 1998	.00	.00	.00	.00	.00	35.00	.00	1.17	36.17	36.17
FERTILIZE	HAND SPREADER; 1/2 HR LABOR[7]	JUN 1998	.50	.00	.54	.33	.00	4.75	35.45	1.35	41.88	42.43
MOW/TRIM DIKES	MOWER; WEED WHACKER; 4 HRS LBR	JUN 1998	4.00	4.00	9.22	7.77	50.00	.00	.00	1.93	59.70	68.92
APPLY FUNGICIDE	THROUGH CHEMIGATION SYSTEM [8]	JUL 1998	.00	.00	.00	.00	.00	9.50	7.44	.42	17.36	17.36
APP. INSECTICIDE	THROUGH CHEMIGATION SYSTEM [9]	JUL 1998	.00	.00	.00	.00	.00	9.50	14.70	.61	24.80	24.80
FERTILIZE	THROUGH CHEMIGATION SYSTEM[10]	JUL 1998	.00	.00	.00	.00	.00	9.50	16.02	.64	26.16	26.16
MOW/TRIM DIKES	MOWER; WEED WHACKER; 4 HRS LBR	JUL 1998	4.00	4.00	9.22	7.77	50.00	.00	.00	1.44	59.22	68.44
FERTILIZE	THROUGH CHEMIGATION SYSTEM[11]	AUG 1998	.00	.00	.00	.00	.00	9.50	14.24	.40	24.14	24.14
MOW/TRIM DIKES	MOWER; WEED WHACKER; 4 HRS LBR	AUG 1998	4.00	4.00	9.22	7.77	50.00	.00	.00	.96	58.74	67.96
FERTILIZE	THROUGH CHEMIGATION SYSTEM[12]	SEP 1998	.00	.00	.00	.00	.00	9.50	13.35	.19	23.04	23.04
MOW/TRIM DIKES	MOWER; WEED WHACKER; 4 HRS LBR	SEP 1998	4.00	4.00	9.22	7.77	50.00	.00	.00	.48	58.26	67.47
HARVEST	HARVEST EQUIP; 8 HOURS LABOR	OCT 1998	8.00	8.00	70.33	21.41	100.00	.00	.00	.00	121.41	191.74
LOAD/HAUL HARVST	3/4-T TRUCK & TRAILER	OCT 1998	1.00	1.00	15.68	6.55	12.50	.00	.00	.00	19.05	34.73
PRUNE/SELL VINES	PRUNE 1/3 OF ACREAGE EACH YEAR	OCT 1998	.33	.33	5.17	2.16	4.12	16.50	.00	.00	22.79	27.96
MOW/TRIM DIKES	MOWER; WEED WHACKER; 4 HRS LBR	OCT 1998	4.00	4.00	9.22	7.77	50.00	.00	.00	.00	57.77	66.99
IRRIGATION	ELECTRICITY AND USAGE CHARGE	SEA 1998	.00	.00	.00	.00	.00	93.00	.00	4.65	97.65	97.65
HAND WEEDING	HAND TOOLS; 150 HRS SEASONALLY	SEA 1998	150.00	.00	280.88	50.00	.00	1425.00	.00	73.75	1548.75	1829.63
BOG & DIKE MAINT	HAND TOOLS; 10 HRS HAND LABOR	ANN 1998	10.00	.00	18.73	3.33	.00	95.00	.00	4.92	103.25	121.98
PICK-UP TRUCK	ANNUAL USE	ANN 1998	15.00	16.50	129.11	51.43	206.25	.00	.00	12.88	270.56	399.67
ESTABLISH. COST	ACCUMULATED INTEREST	ANN 1998	.00	.00	3217.47	.00	.00	.00	.00	.00	.00	3217.47
LAND OWNERSHIP	LAND COSTS	ANN 1998	.00	.00	275.00	.00	.00	.00	.00	.00	.00	275.00
INSURANCE/TAXES	ON INVESTMENTS AND LAND TAXES	ANN 1998	.00	.00	62.19	.00	.00	.00	.00	.00	.00	62.19
INVEST INT/DEPR	EQUIP/BLDGS INTEREST & DEPREC.	ANN 1998	.00	.00	399.60	.00	.00	.00	.00	.00	.00	399.60
INVEST REPAIRS	EQUIPMENT AND BUILDING REPAIRS	ANN 1998	.00	.00	.00	.00	.00	35.50	.00	1.78	37.27	37.27
OVERHEAD	5% VARIABLE COSTS	ANN 1998	.00	.00	.00	.00	.00	158.09	.00	.00	158.09	158.09
TOTAL PER ACRE			214.83	53.83	\$4541.40	\$190.97	\$672.88	\$1948.34	\$379.17	\$128.55	\$3319.90	\$7861.30

[1] 50 lbs/acre Casoron 4G [2] 100 lbs/acre 0-0-22 KMag [3] 70 lbs/acre Devrinol 10G [4] 100 lbs/acre 0-46-0; 200 lbs/acre 0-23-25 [5] 8 lbs/acre Kocide 101DF [6] 1.33 lbs/acre Orthene 75WP [7] 200 lbs/acre 0-23-25; 50 lbs/acre 6-24-24 [8] 3.5 pt/acre Bravo 720 [9] 2 lbs/acre Guthion 50WP [10] 30 lbs/acre 21-0-0; 3 gal/acre 3-18-18 [11] 10 lbs/acre 21-0-0; 3 gal/acre 3-18-18 [12] 3 gal/acre 3-18-18.



ITEMIZED COST PER ACRE FOR ESTABLISHING  
AND PRODUCING WET HARVEST CRANBERRIES  
TABLE 4B. IN SOUTHWEST WASHINGTON; YEAR FOUR

		PRICE OR		VALUE OR	YOUR
	UNIT	COST/UNIT	QUANTITY	COST	FARM
VARIABLE COSTS					
CASORON 4G	LB	\$ 1.36	50.00	\$ 68.00	_____
HAND LABOR	HOURL	9.50	162.50	1543.75	_____
KMAG 0-0-22	LB	.10	100.00	9.80	_____
DEVRIKOL 10G	LB	1.86	70.00	130.20	_____
ORTHEK 75WP	LB	9.45	1.33	12.57	_____
KOCIDE 101DF	LB	2.10	8.00	16.80	_____
0-46-0	LB	.12	100.00	12.40	_____
0-23-25	LB	.14	400.00	56.40	_____
POLLINATION	EACH	35.00	1.00	35.00	_____
K2SO4 6-24-24	LB	.14	50.00	7.25	_____
IRRIGATION LABOR	HOURL	9.50	7.00	66.50	_____
21-0-0	LB	.09	40.00	3.56	_____
3-18-18	GAL	4.45	9.00	40.05	_____
GUTHION 50WP	LB	7.35	2.00	14.70	_____
BRAVO 720	PT	2.12	3.50	7.44	_____
CUSTOM PRUNE	ACRE	50.00	.33	16.50	_____
INVESTMENT REPAIRS	ACRE	35.50	1.00	35.50	_____
OVERHEAD	ACRE	158.09	1.00	158.09	_____
IRRIGATION USAGE	ACRE	58.00	1.00	58.00	_____
IRRIGATION ELECTRIC	ACRE	35.00	1.00	35.00	_____
INTEREST ON OPER.CAP.	DOL	.10	1285.47	128.55	_____
MACHINERY REPAIRS	ACRE	166.42	1.00	166.42	_____
MACHINE FUEL/LUBE	ACRE	24.55	1.00	24.55	_____
LABOR (TRAC/MACH)	ACRE	672.88	1.00	672.88	_____
TOTAL VARIABLE COST				\$3319.90	_____
FIXED COSTS					
MACHINE DEPRECIATION	ACRE	\$ 328.72	1.00	\$ 328.72	_____
MACHINE INTEREST	ACRE	213.57	1.00	213.57	_____
MACHINE INSURANCE	ACRE	12.81	1.00	12.81	_____
MACHINE TAXES	ACRE	32.04	1.00	32.04	_____
INVESTMENT INSUR/TAX	ACRE	41.56	1.00	41.56	_____
LAND TAXES	ACRE	20.63	1.00	20.63	_____
ACCUMULATED INTEREST	ACRE	3217.47	1.00	3217.47	_____
INTEREST: EQUIP/BLDGS	ACRE	207.80	1.00	207.80	_____
DEPREC: EQUIP/BLDG	ACRE	191.80	1.00	191.80	_____
LAND COSTS	ACRE	275.00	1.00	275.00	_____
TOTAL FIXED COST				\$4541.40	_____
TOTAL COST				\$7861.30	_____

SCHEDULE OF OPERATIONS AND ESTIMATED COSTS PER ACRE  
FOR ESTABLISHING AND PRODUCING WET HARVEST CRANBERRIES  
IN SOUTHWEST WASHINGTON; YEAR FIVE

TABLE 5A.

OPERATION	TOOLING	MTH YEAR	MACH HOURS	MACH LABOR HOURS	TOTAL FIXED COST	VARIABLE COST					TOTAL VARIABLE COST	TOTAL COST
						FUEL, LUBE, & REPAIRS	LABOR	SERVICE	MATER.	INTER.		
APPLY HERBICIDE	HAND SPREADER; 1/2 HR LABOR[1]	MAR 1999	.50	.00	\$ .54	\$ .33	\$ .00	\$ 4.75	\$ 68.00	\$ 4.26	\$ 77.35	\$ 77.89
FERTILIZE	HAND SPREADER; 1/2 HR LABOR[2]	APR 1999	.50	.00	.54	.33	.00	4.75	9.80	.74	15.63	16.17
APPLY HERBICIDE	HAND SPREADER; 1/2 HR LABOR[3]	APR 1999	.50	.00	.54	.33	.00	4.75	68.00	3.65	76.74	77.28
MOW/TRIM DIKES	MOWER; WEED WHACKER; 4 HRS LBR	APR 1999	4.00	4.00	9.22	7.77	50.00	.00	.00	2.89	60.66	69.88
FERTILIZE	HAND SPREADER; 1/2 HR LABOR[4]	MAY 1999	.50	.00	.54	.33	.00	4.75	40.60	1.90	47.59	48.13
APPLY FUNGICIDE	THROUGH CHEMIGATION SYSTEM [5]	MAY 1999	.00	.00	.00	.00	.00	9.50	16.80	1.10	27.40	27.40
APP. INSECTICIDE	THROUGH CHEMIGATION SYSTEM [6]	MAY 1999	.00	.00	.00	.00	.00	9.50	12.57	.92	22.99	22.99
MOW/TRIM DIKES	MOWER; WEED WHACKER; 4 HRS LBR	MAY 1999	4.00	4.00	9.22	7.77	50.00	.00	.00	2.41	60.18	69.40
POLLINATION	1 HIVE/ACRE	JUN 1999	.00	.00	.00	.00	.00	35.00	.00	1.17	36.17	36.17
FERTILIZE	HAND SPREADER; 1/2 HR LABOR[7]	JUN 1999	.50	.00	.54	.33	.00	4.75	35.45	1.35	41.88	42.43
MOW/TRIM DIKES	MOWER; WEED WHACKER; 4 HRS LBR	JUN 1999	4.00	4.00	9.22	7.77	50.00	.00	.00	1.93	59.70	68.92
APPLY FUNGICIDE	THROUGH CHEMIGATION SYSTEM [8]	JUL 1999	.00	.00	.00	.00	.00	9.50	7.44	.42	17.36	17.36
APP. INSECTICIDE	THROUGH CHEMIGATION SYSTEM [9]	JUL 1999	.00	.00	.00	.00	.00	9.50	14.70	.61	24.80	24.80
FERTILIZE	THROUGH CHEMIGATION SYSTEM[10]	JUL 1999	.00	.00	.00	.00	.00	9.50	16.02	.64	26.16	26.16
MOW/TRIM DIKES	MOWER; WEED WHACKER; 4 HRS LBR	JUL 1999	4.00	4.00	9.22	7.77	50.00	.00	.00	1.44	59.22	68.44
LEAF ANALYSIS	FOR FERTILIZER	AUG 1999	.00	.00	.00	.00	.00	30.00	.00	.50	30.50	30.50
FERTILIZE	THROUGH CHEMIGATION SYSTEM[11]	AUG 1999	.00	.00	.00	.00	.00	9.50	14.24	.40	24.14	24.14
MOW/TRIM DIKES	MOWER; WEED WHACKER; 4 HRS LBR	AUG 1999	4.00	4.00	9.22	7.77	50.00	.00	.00	.96	58.74	67.96
FERTILIZE	THROUGH CHEMIGATION SYSTEM[12]	SEP 1999	.00	.00	.00	.00	.00	9.50	13.35	.19	23.04	23.04
MOW/TRIM DIKES	MOWER; WEED WHACKER; 4 HRS LBR	SEP 1999	4.00	4.00	9.22	7.77	50.00	.00	.00	.48	58.26	67.47
HARVEST	HARVEST EQUIP; 12 HOURS LABOR	OCT 1999	12.00	12.00	105.50	32.11	150.00	.00	.00	.00	182.11	287.61
LOAD/HAUL HARVST	LOAD AND HAUL TO PROCESSOR	OCT 1999	1.50	1.50	23.52	9.83	18.75	.00	.00	.00	28.58	52.10
PRUNE/SELL VINES	PRUNE 1/3 OF ACREAGE EACH YEAR	OCT 1999	.33	.33	5.17	2.16	4.12	16.50	.00	.00	22.79	27.96
MOW/TRIM DIKES	MOWER; WEED WHACKER; 4 HRS LBR	OCT 1999	4.00	4.00	9.22	7.77	50.00	.00	.00	.00	57.77	66.99
IRRIGATION	ELECTRICITY AND USAGE CHARGE	SEA 1999	.00	.00	.00	.00	.00	93.00	.00	4.65	97.65	97.65
HAND WEEDING	HAND TOOLS; 50 HRS HAND LABOR	SEA 1999	50.00	.00	93.63	16.67	.00	475.00	.00	24.58	516.25	609.87
BOG & DIKE MAINT	HAND TOOLS; 10 HRS HAND LABOR	ANN 1999	10.00	.00	18.73	3.33	.00	95.00	.00	4.92	103.25	121.98
PICK-UP TRUCK	ANNUAL USE	ANN 1999	15.00	16.50	129.11	51.43	206.25	.00	.00	12.88	270.56	399.67
ESTABLISH. COST	ACCUMULATED INTEREST	ANN 1999	.00	.00	3845.61	.00	.00	.00	.00	.00	.00	3845.61
LAND OWNERSHIP	LAND COSTS	ANN 1999	.00	.00	275.00	.00	.00	.00	.00	.00	.00	275.00
INSURANCE/TAXES	ON INVESTMENTS AND LAND TAXES	ANN 1999	.00	.00	62.19	.00	.00	.00	.00	.00	.00	62.19
INVEST INT/DEPR	EQUIP/BLDGS INTEREST & DEPREC.	ANN 1999	.00	.00	399.60	.00	.00	.00	.00	.00	.00	399.60
INVEST REPAIRS	EQUIPMENT AND BUILDING REPAIRS	ANN 1999	.00	.00	.00	.00	.00	35.50	.00	1.78	37.27	37.27
OVERHEAD	5% VARIABLE COSTS	ANN 1999	.00	.00	.00	.00	.00	108.24	.00	.00	108.24	108.24
TOTAL PER ACRE			119.33	58.33	\$5025.30	\$171.62	\$729.13	\$978.49	\$316.97	\$76.77	\$2272.97	\$7298.27

[1] 50 lbs/acre Casoron 4G [2] 100 lbs/acre 0-0-22 KMag [3] 50 lbs/acre Casoron 4G [4] 100 lbs/acre 0-46-0; 200 lbs/acre 0-23-25 [5] 8 lbs/acre Kocide 101DF [6] 1.33 lbs/acre Orthene 75WP [7] 200 lbs/acre 0-23-25; 50 lbs/acre 6-24-24 [8] 3.5 pt/acre Bravo 720 [9] 2 lbs/acre Guthion 50WP [10] 30 lbs/acre 21-0-0; 3 gal/acre 3-18-18 [11] 10 lbs/acre 21-0-0; 3 gal/acre 3-18-18 [12] 3 gal/acre 3-18-18.

ITEMIZED COST PER ACRE FOR ESTABLISHING  
AND PRODUCING WET HARVEST CRANBERRIES  
TABLE 5B. IN SOUTHWEST WASHINGTON; YEAR FIVE

		PRICE OR UNIT COST/UNIT	QUANTITY	VALUE OR COST	YOUR FARM
VARIABLE COSTS					
CASORON 4G	LB	\$ 1.36	100.00	\$136.00	_____
HAND LABOR	HOUR	9.50	62.50	593.75	_____
KMAG 0-0-22	LB	.10	100.00	9.80	_____
0-46-0	LB	.12	100.00	12.40	_____
0-23-25	LB	.14	400.00	56.40	_____
IRRIGATION LABOR	HOUR	9.50	7.00	66.50	_____
KOCIDE 101DF	LB	2.10	8.00	16.80	_____
ORTHENE 75WP	LB	9.45	1.33	12.57	_____
POLLINATION	EACH	35.00	1.00	35.00	_____
K2SO4 6-24-24	LB	.14	50.00	7.25	_____
GUTHION 50WP	LB	7.35	2.00	14.70	_____
21-0-0	LB	.09	40.00	3.56	_____
3-18-18	GAL	4.45	9.00	40.05	_____
BRAVO 720	PT	2.12	3.50	7.44	_____
LEAF ANALYSIS	ACRE	30.00	1.00	30.00	_____
CUSTOM PRUNE	ACRE	50.00	.33	16.50	_____
INVESTMENT REPAIRS	ACRE	35.50	1.00	35.50	_____
OVERHEAD	ACRE	108.24	1.00	108.24	_____
IRRIGATION USAGE	ACRE	58.00	1.00	58.00	_____
IRRIGATION ELECTRIC	ACRE	35.00	1.00	35.00	_____
INTEREST ON OPER.CAP.	DOL	.10	767.70	76.77	_____
MACHINERY REPAIRS	ACRE	147.07	1.00	147.07	_____
MACHINE FUEL/LUBE	ACRE	24.55	1.00	24.55	_____
LABOR (TRAC/MACH)	ACRE	729.13	1.00	729.13	_____
TOTAL VARIABLE COST				\$2272.97	_____
FIXED COSTS					
MACHINE DEPRECIATION	ACRE	\$ 230.37	1.00	\$ 230.37	_____
MACHINE INTEREST	ACRE	175.64	1.00	175.64	_____
MACHINE INSURANCE	ACRE	10.54	1.00	10.54	_____
MACHINE TAXES	ACRE	26.35	1.00	26.35	_____
INTEREST: EQUIP/BLDGS	ACRE	207.80	1.00	207.80	_____
DEPREC: EQUIP/BLDG	ACRE	191.80	1.00	191.80	_____
LAND COSTS	ACRE	275.00	1.00	275.00	_____
ACCUMULATED INTEREST	ACRE	3845.61	1.00	3845.61	_____
INVESTMENT INSUR/TAX	ACRE	41.56	1.00	41.56	_____
LAND TAXES	ACRE	20.63	1.00	20.63	_____
TOTAL FIXED COST				\$5025.30	_____
TOTAL COST				\$7298.27	_____

SCHEDULE OF OPERATIONS AND ESTIMATED COSTS PER ACRE  
FOR ESTABLISHING AND PRODUCING WET HARVEST CRANBERRIES  
IN SOUTHWEST WASHINGTON; YEAR SIX

TABLE 6A.

OPERATION	TOOLING	MTH YEAR	MACH HOURS	MACH LABOR HOURS	TOTAL FIXED COST	VARIABLE COST					TOTAL VARIABLE COST	TOTAL COST
						FUEL, LUBE, & REPAIRS	LABOR	SERVICE	MATER.	INTER.		
APPLY HERBICIDE	HAND SPREADER; 1/2 HR LABOR[1]	MAR 2000	.50	.00	\$ .54	\$ .33	\$ .00	\$ 4.75	\$ 68.00	\$ 4.26	\$ 77.35	\$ 77.89
FERTILIZE	HAND SPREADER; 1/2 HR LABOR[2]	APR 2000	.50	.00	.54	.33	.00	4.75	9.80	.74	15.63	16.17
APPLY HERBICIDE	HAND SPREADER; 1/2 HR LABOR[3]	APR 2000	.50	.00	.54	.33	.00	4.75	68.00	3.65	76.74	77.28
MOW/TRIM DIKES	MOWER; WEED WHACKER; 4 HRS LBR	APR 2000	4.00	4.00	9.22	7.77	50.00	.00	.00	2.89	60.66	69.88
FERTILIZE	HAND SPREADER; 1/2 HR LABOR[4]	MAY 2000	.50	.00	.54	.33	.00	4.75	40.60	1.90	47.59	48.13
APPLY FUNGICIDE	THROUGH CHEMIGATION SYSTEM [5]	MAY 2000	.00	.00	.00	.00	.00	9.50	16.80	1.10	27.40	27.40
APP. INSECTICIDE	THROUGH CHEMIGATION SYSTEM [6]	MAY 2000	.00	.00	.00	.00	.00	9.50	12.57	.92	22.99	22.99
MOW/TRIM DIKES	MOWER; WEED WHACKER; 4 HRS LBR	MAY 2000	4.00	4.00	9.22	7.77	50.00	.00	.00	2.41	60.18	69.40
POLLINATION	2 HIVES/ACRE	JUN 2000	.00	.00	.00	.00	.00	70.00	.00	2.33	72.33	72.33
FERTILIZE	HAND SPREADER; 1/2 HR LABOR[7]	JUN 2000	.50	.00	.54	.33	.00	4.75	35.45	1.35	41.88	42.43
MOW/TRIM DIKES	MOWER; WEED WHACKER; 4 HRS LBR	JUN 2000	4.00	4.00	9.22	7.77	50.00	.00	.00	1.93	59.70	68.92
APPLY FUNGICIDE	THROUGH CHEMIGATION SYSTEM [8]	JUL 2000	.00	.00	.00	.00	.00	9.50	7.44	.42	17.36	17.36
APP. INSECTICIDE	THROUGH CHEMIGATION SYSTEM [9]	JUL 2000	.00	.00	.00	.00	.00	9.50	14.70	.61	24.80	24.80
FERTILIZE	THROUGH CHEMIGATION SYSTEM[10]	JUL 2000	.00	.00	.00	.00	.00	9.50	16.02	.64	26.16	26.16
MOW/TRIM DIKES	MOWER; WEED WHACKER; 4 HRS LBR	JUL 2000	4.00	4.00	9.22	7.77	50.00	.00	.00	1.44	59.22	68.44
LEAF ANALYSIS	FOR FERTILIZER	AUG 2000	.00	.00	.00	.00	.00	30.00	.00	.50	30.50	30.50
FERTILIZE	THROUGH CHEMIGATION SYSTEM[11]	AUG 2000	.00	.00	.00	.00	.00	9.50	14.24	.40	24.14	24.14
MOW/TRIM DIKES	MOWER; WEED WHACKER; 4 HRS LBR	AUG 2000	4.00	4.00	9.22	7.77	50.00	.00	.00	.96	58.74	67.96
FERTILIZE	THROUGH CHEMIGATION SYSTEM[12]	SEP 2000	.00	.00	.00	.00	.00	9.50	13.35	.19	23.04	23.04
MOW/TRIM DIKES	MOWER; WEED WHACKER; 4 HRS LBR	SEP 2000	4.00	4.00	9.22	7.77	50.00	.00	.00	.48	58.26	67.47
HARVEST	HARVEST EQUIP; 16 HOURS LABOR	OCT 2000	16.00	16.00	140.67	42.82	200.00	.00	.00	.00	242.82	383.49
LOAD/HAUL HARVST	LOAD AND HAUL TO PROCESSOR	OCT 2000	2.00	2.00	31.35	13.11	25.00	.00	.00	.00	38.11	69.46
PRUNE/SELL VINES	PRUNE 1/3 OF ACREAGE EACH YEAR	OCT 2000	.33	.33	5.17	2.16	4.12	16.50	.00	.00	22.79	27.96
MOW/TRIM DIKES	MOWER; WEED WHACKER; 4 HRS LBR	OCT 2000	4.00	4.00	9.22	7.77	50.00	.00	.00	.00	57.77	66.99
IRRIGATION	ELECTRICITY AND USAGE CHARGE	SEA 2000	.00	.00	.00	.00	.00	93.00	.00	4.65	97.65	97.65
HAND WEEDING	HAND TOOLS; 25 HRS HAND LABOR	SEA 2000	25.00	.00	46.81	8.33	.00	237.50	.00	12.29	258.12	304.94
BOG & DIKE MAINT	HAND TOOLS; 10 HRS HAND LABOR	ANN 2000	10.00	.00	18.73	3.33	.00	95.00	.00	4.92	103.25	121.98
PICK-UP TRUCK	ANNUAL USE	ANN 2000	15.00	16.50	129.11	51.43	206.25	.00	.00	12.88	270.56	399.67
ESTABLISH. COST	ACCUMULATED INTEREST	ANN 2000	.00	.00	3759.43	.00	.00	.00	.00	.00	.00	3759.43
LAND OWNERSHIP	LAND COSTS	ANN 2000	.00	.00	275.00	.00	.00	.00	.00	.00	.00	275.00
INSURANCE/TAXES	ON INVESTMENTS AND LAND TAXES	ANN 2000	.00	.00	62.19	.00	.00	.00	.00	.00	.00	62.19
INVEST INT/DEPR	EQUIP/BLDGS INTEREST & DEPREC.	ANN 2000	.00	.00	399.60	.00	.00	.00	.00	.00	.00	399.60
INVEST REPAIRS	EQUIPMENT AND BUILDING REPAIRS	ANN 2000	.00	.00	.00	.00	.00	35.50	.00	1.78	37.27	37.27
OVERHEAD	5% VARIABLE COSTS	ANN 2000	.00	.00	.00	.00	.00	100.65	.00	.00	100.65	100.65
TOTAL PER ACRE			98.83	62.83	\$4935.31	\$177.27	\$785.38	\$768.40	\$316.97	\$65.65	\$2113.66	\$7048.97

[1] 50 lbs/acre Casoron 4G [2] 100 lbs/acre 0-0-22 KMag [3] 50 lbs/acre Casoron 4G [4] 100 lbs/acre 0-46-0; 200 lbs/acre 0-23-25 [5] 8 lbs/acre Kocide 101DF [6] 1.33 lbs/acre Orthene 75WP [7] 200 lbs/acre 0-23-25; 50 lbs/acre 6-24-24 [8] 3.5 pt/acre Bravo 720 [9] 2 lbs/acre Guthion 50WP [10] 30 lbs/acre 21-0-0; 3 gal/acre 3-18-18 [11] 10 lbs/acre 21-0-0; 3 gal/acre 3-18-18 [12] 3 gal/acre 3-18-18.

ITEMIZED COST PER ACRE FOR ESTABLISHING  
AND PRODUCING WET HARVEST CRANBERRIES  
TABLE 6B. IN SOUTHWEST WASHINGTON; YEAR SIX

		PRICE OR UNIT COST/UNIT	QUANTITY	VALUE OR COST	YOUR FARM
VARIABLE COSTS					
CASORON4G	LB	\$ 1.36	100.00	\$ 136.00	_____
HAND LABOR	HOUR	9.50	37.50	356.25	_____
KMAG 0-0-22	LB	.10	100.00	9.80	_____
0-46-0	LB	.12	100.00	12.40	_____
0-23-25	LB	.14	400.00	56.40	_____
IRRIGATION LABOR	HOUR	9.50	7.00	66.50	_____
KOCIDE 101DF	LB	2.10	8.00	16.80	_____
ORTHENE 75WP	LB	9.45	1.33	12.57	_____
POLLINATION	EACH	35.00	2.00	70.00	_____
K2SO4 6-24-24	LB	.14	50.00	7.25	_____
GUTHION 50WP	LB	7.35	2.00	14.70	_____
21-0-0	LB	.09	40.00	3.56	_____
3-18-18	GAL	4.45	9.00	40.05	_____
BRAVO 720	PT	2.12	3.50	7.44	_____
LEAF ANALYSIS	ACRE	30.00	1.00	30.00	_____
CUSTOM PRUNE	ACRE	50.00	.33	16.50	_____
INVESTMENT REPAIRS	ACRE	35.50	1.00	35.50	_____
OVERHEAD	ACRE	100.65	1.00	100.65	_____
IRRIGATION USAGE	ACRE	58.00	1.00	58.00	_____
IRRIGATION ELECTRIC	ACRE	35.00	1.00	35.00	_____
INTEREST ON OPER.CAP.	DOL	.10	656.45	65.65	_____
MACHINERY REPAIRS	ACRE	152.72	1.00	152.72	_____
MACHINE FUEL/LUBE	ACRE	24.55	1.00	24.55	_____
LABOR (TRAC/MACH)	ACRE	785.38	1.00	785.38	_____
TOTAL VARIABLE COST				\$2113.66	_____
FIXED COSTS					
MACHINE DEPRECIATION	ACRE	\$ 219.52	1.00	\$219.52	_____
MACHINE INTEREST	ACRE	181.47	1.00	181.47	_____
MACHINE INSURANCE	ACRE	10.89	1.00	10.89	_____
MACHINE TAXES	ACRE	27.22	1.00	27.22	_____
DEPREC:EQUIP/BLDG	ACRE	191.80	1.00	191.80	_____
INTEREST:EQUIP/BLDGS	ACRE	207.80	1.00	207.80	_____
LAND COSTS	ACRE	275.00	1.00	275.00	_____
INVESTMENT INSUR/TAX	ACRE	41.56	1.00	41.56	_____
LAND TAXES	ACRE	20.63	1.00	20.63	_____
ACCUMULATED INTEREST	ACRE	3759.43	1.00	3759.43	_____
TOTAL FIXED COST				\$4935.31	_____
TOTAL COST				\$7048.97	_____

SCHEDULE OF OPERATIONS AND ESTIMATED COSTS PER ACRE  
FOR ESTABLISHING AND PRODUCING WET HARVEST CRANBERRIES  
IN SOUTHWEST WASHINGTON; YEAR SEVEN

TABLE 7A.

OPERATION	TOOLING	MTH YEAR	MACH HOURS	MACH LABOR HOURS	TOTAL FIXED COST	VARIABLE COST					TOTAL VARIABLE COST	TOTAL COST
						FUEL, LUBE, & REPAIRS	LABOR	SERVICE	MATER.	INTER.		
APPLY HERBICIDE	HAND SPREADER; 1/2 HR LABOR[1]	MAR 2001	.50	.00	\$ .54	\$ .33	\$ .00	\$ 4.75	\$ 68.00	\$ 4.26	\$ 77.35	\$ 77.89
FERTILIZE	HAND SPREADER; 1/2 HR LABOR[2]	APR 2001	.50	.00	.54	.33	.00	4.75	9.80	.74	15.63	16.17
APPLY HERBICIDE	HAND SPREADER; 1/2 HR LABOR[3]	APR 2001	.50	.00	.54	.33	.00	4.75	68.00	3.65	76.74	77.28
MOW/TRIM DIKES	MOWER; WEED WHACKER; 4 HRS LBR	APR 2001	4.00	4.00	9.22	7.77	50.00	.00	.00	2.89	60.66	69.88
FERTILIZE	HAND SPREADER; 1/2 HR LABOR[4]	MAY 2001	.50	.00	.54	.33	.00	4.75	40.60	1.90	47.59	48.13
APPLY FUNGICIDE	THROUGH CHEMIGATION SYSTEM [5]	MAY 2001	.00	.00	.00	.00	.00	9.50	16.80	1.10	27.40	27.40
APP. INSECTICIDE	THROUGH CHEMIGATION SYSTEM [6]	MAY 2001	.00	.00	.00	.00	.00	9.50	12.57	.92	22.99	22.99
MOW/TRIM DIKES	MOWER; WEED WHACKER; 4 HRS LBR	MAY 2001	4.00	4.00	9.22	7.77	50.00	.00	.00	2.41	60.18	69.40
POLLINATION	2 HIVES/ACRE	JUN 2001	.00	.00	.00	.00	.00	70.00	.00	2.33	72.33	72.33
FERTILIZE	HAND SPREADER; 1/2 HR LABOR[7]	JUN 2001	.50	.00	.54	.33	.00	4.75	35.45	1.35	41.88	42.43
MOW/TRIM DIKES	MOWER; WEED WHACKER; 4 HRS LBR	JUN 2001	4.00	4.00	9.22	7.77	50.00	.00	.00	1.93	59.70	68.92
APPLY FUNGICIDE	THROUGH CHEMIGATION SYSTEM [8]	JUL 2001	.00	.00	.00	.00	.00	9.50	7.44	.42	17.36	17.36
APP. INSECTICIDE	THROUGH CHEMIGATION SYSTEM [9]	JUL 2001	.00	.00	.00	.00	.00	9.50	14.70	.61	24.80	24.80
FERTILIZE	THROUGH CHEMIGATION SYSTEM[10]	JUL 2001	.00	.00	.00	.00	.00	9.50	16.02	.64	26.16	26.16
MOW/TRIM DIKES	MOWER; WEED WHACKER; 4 HRS LBR	JUL 2001	4.00	4.00	9.22	7.77	50.00	.00	.00	1.44	59.22	68.44
LEAF ANALYSIS	FOR FERTILIZER	AUG 2001	.00	.00	.00	.00	.00	30.00	.00	.50	30.50	30.50
FERTILIZE	THROUGH CHEMIGATION SYSTEM[11]	AUG 2001	.00	.00	.00	.00	.00	9.50	14.24	.40	24.14	24.14
MOW/TRIM DIKES	MOWER; WEED WHACKER; 4 HRS LBR	AUG 2001	4.00	4.00	9.22	7.77	50.00	.00	.00	.96	58.74	67.96
FERTILIZE	THROUGH CHEMIGATION SYSTEM[12]	SEP 2001	.00	.00	.00	.00	.00	9.50	13.35	.19	23.04	23.04
MOW/TRIM DIKES	MOWER; WEED WHACKER; 4 HRS LBR	SEP 2001	4.00	4.00	9.22	7.77	50.00	.00	.00	.48	58.26	67.47
HARVEST	HARVEST EQUIP; 16 HOURS LABOR	OCT 2001	16.00	16.00	140.67	42.82	200.00	.00	.00	.00	242.82	383.49
LOAD/HAUL HARVST	LOAD AND HAUL TO PROCESSOR	OCT 2001	2.00	2.00	31.35	13.11	25.00	.00	.00	.00	38.11	69.46
PRUNE/SELL VINES	PRUNE 1/3 OF ACREAGE EACH YEAR	OCT 2001	.33	.33	5.17	2.16	4.12	16.50	.00	.00	22.79	27.96
MOW/TRIM DIKES	MOWER; WEED WHACKER; 4 HRS LBR	OCT 2001	4.00	4.00	9.22	7.77	50.00	.00	.00	.00	57.77	66.99
HAND WEEDING	HAND TOOLS; 25 HRS HAND LABOR	SEA 2001	25.00	.00	46.81	8.33	.00	237.50	.00	12.29	258.12	304.94
IRRIGATION	ELECTRICITY AND USAGE CHARGE	SEA 2001	.00	.00	.00	.00	.00	93.00	.00	4.65	97.65	97.65
BOG & DIKE MAINT	HAND TOOLS; 10 HRS HAND LABOR	ANN 2001	10.00	.00	18.73	3.33	.00	95.00	.00	4.92	103.25	121.98
PICK-UP TRUCK	ANNUAL USE	ANN 2001	15.00	16.50	129.11	51.43	206.25	.00	.00	12.88	270.56	399.67
ESTABLISH. COST	PRORATED ESTABLISHMENT COST	ANN 2001	.00	.00	4657.91	.00	.00	.00	.00	.00	.00	4657.91
LAND OWNERSHIP	LAND COSTS	ANN 2001	.00	.00	275.00	.00	.00	.00	.00	.00	.00	275.00
INSURANCE/TAXES	ON INVESTMENTS AND LAND TAXES	ANN 2001	.00	.00	62.19	.00	.00	.00	.00	.00	.00	62.19
INVEST INT/DEPR	EQUIP/BLDGS INTEREST & DEPRECI.	ANN 2001	.00	.00	399.60	.00	.00	.00	.00	.00	.00	399.60
INVEST REPAIRS	EQUIPMENT AND BUILDING REPAIRS	ANN 2001	.00	.00	.00	.00	.00	35.50	.00	1.78	37.27	37.27
OVERHEAD	5% VARIABLE COSTS	ANN 2001	.00	.00	.00	.00	.00	100.65	.00	.00	100.65	100.65
TOTAL PER ACRE			98.83	62.83	\$5833.79	\$177.27	\$785.38	\$768.40	\$316.97	\$65.65	\$2113.66	\$7947.46

[1] 50 lbs/acre Casoron 4G [2] 100 lbs/acre 0-0-22 KMag [3] 50 lbs/acre Casoron 4G [4] 100 lbs/acre 0-46-0; 200 lbs/acre 0-23-25 [5] 8 lbs/acre Kocide 101DF [6] 1.33 lbs/acre Orthene 75WP [7] 200 lbs/acre 0-23-25; 50 lbs/acre 6-24-24 [8] 3.5 pt/acre Bravo 720 [9] 2 lbs/acre Guthion 50WP [10] 30 lbs/acre 21-0-0; 3 gal/acre 3-18-18 [11] 10 lbs/acre 21-0-0; 3 gal/acre 3-18-18 [12] 3 gal/acre 3-18-18.

ITEMIZED COST PER ACRE FOR ESTABLISHING  
AND PRODUCING WET HARVEST CRANBERRIES  
TABLE 7B. IN SOUTHWEST WASHINGTON; YEAR SEVEN

		PRICE OR		VALUE OR	YOUR
	UNIT	COST/UNIT	QUANTITY	COST	FARM
<b>VARIABLE COSTS</b>					
CASORON4G	LB	\$ 1.36	100.00	\$ 136.00	_____
HAND LABOR	HOUR	9.50	37.50	356.25	_____
KMAG 0-0-22	LB	.10	100.00	9.80	_____
0-46-0	LB	.12	100.00	12.40	_____
0-23-25	LB	.14	400.00	56.40	_____
IRRIGATION LABOR	HOUR	9.50	7.00	66.50	_____
KOCIDE 101DF	LB	2.10	8.00	16.80	_____
ORTHENE 75WP	LB	9.45	1.33	12.57	_____
POLLINATION	EACH	35.00	2.00	70.00	_____
K2SO4 6-24-24	LB	.14	50.00	7.25	_____
GUTHION 50WP	LB	7.35	2.00	14.70	_____
21-0-0	LB	.09	40.00	3.56	_____
3-18-18	GAL	4.45	9.00	40.05	_____
BRAVO 720	PT	2.12	3.50	7.44	_____
LEAF ANALYSIS	ACRE	30.00	1.00	30.00	_____
CUSTOM PRUNE	ACRE	50.00	.33	16.50	_____
OVERHEAD	ACRE	100.65	1.00	100.65	_____
INVESTMENT REPAIRS	ACRE	35.50	1.00	35.50	_____
IRRIGATION USAGE	ACRE	58.00	1.00	58.00	_____
IRRIGATION ELECTRIC	ACRE	35.00	1.00	35.00	_____
INTEREST ON OPER.CAP.	DOL	.10	656.45	65.64	_____
MACHINERY REPAIRS	ACRE	152.72	1.00	152.72	_____
MACHINE FUEL/LUBE	ACRE	24.55	1.00	24.55	_____
LABOR (TRAC/MACH)	ACRE	785.38	1.00	785.38	_____
<b>TOTAL VARIABLE COST</b>				<b>\$2113.66</b>	_____
<b>FIXED COSTS</b>					
MACHINE DEPRECIATION	ACRE	\$ 219.52	1.00	\$ 219.52	_____
MACHINE INTEREST	ACRE	181.47	1.00	181.47	_____
MACHINE INSURANCE	ACRE	10.89	1.00	10.89	_____
MACHINE TAXES	ACRE	27.22	1.00	27.22	_____
PRORATED ESTAB. COST	ACRE	4657.91	1.00	4657.91	_____
INTEREST: EQUIP/BLDGS	ACRE	207.80	1.00	207.80	_____
DEPREC: EQUIP/BLDG	ACRE	191.80	1.00	191.80	_____
LAND COSTS	ACRE	275.00	1.00	275.00	_____
INVESTMENT INSUR/TAX	ACRE	41.56	1.00	41.56	_____
LAND TAXES	ACRE	20.63	1.00	20.63	_____
<b>TOTAL FIXED COST</b>				<b>\$5833.80</b>	_____
<b>TOTAL COST</b>				<b>\$7947.46</b>	_____

SUMMARY OF RECEIPTS, COSTS, AND PROFITABILITY  
 PER ACRE FOR ESTABLISHING AND PRODUCING WET  
 HARVEST CRANBERRIES IN SOUTHWEST WASHINGTON;  
 YEAR SEVEN AND BEYOND

TABLE 7C.

	PRICE OR UNIT COST/UNIT	QUANTITY	VALUE OR COST	YOUR FARM
GROSS RECEIPTS FROM PRODUCTION				
CRANBERRIES	BARREL	50.00	200.00	10000.00
VINE PRUNINGS	LB	1.00	165.00	165.00
1. TOTAL RECEIPTS			\$10165.00	
LESS: - TOTAL VARIABLE COST			2113.66	
2. RETURNS OVER VARIABLE COST			\$8051.34	
LESS: - MACHINERY AND INVESTMENT COSTS			880.26	
- PRORATED ESTABLISHMENT COSTS			4657.91	
3. RETURNS TO LAND AND MANAGEMENT			\$2513.17	
LESS: - LAND COSTS AND PROPERTY TAXES			295.63	
4. RETURNS TO MANAGEMENT			\$2217.54	



TABLE 8. PER ACRE COSTS TO ESTABLISH WET HARVEST CRANBERRIES IN SOUTHWEST WASHINGTON<sup>2</sup>

Year	Production Costs	Interest on Establishment	Total Annual Production Costs	Accumulated Establishment Balance	Total Annual Revenue	Unrecovered Establishment Investment
1	\$15,761.85	\$0.00	\$15,761.85	\$15,761.85	\$0.00	\$15,761.85
2	7,460.92	1,576.19	9,037.11	24,798.96	0.00	24,798.96
3	4,895.93	2,479.90	7,375.83	32,174.79	0.00	32,174.79
4	4,643.82	3,217.48	7,861.30	40,036.09	1,580.00	38,456.09
5	3,452.66	3,845.61	7,298.27	45,754.36	8,160.00	37,594.36
6	\$3,289.54	\$3,759.43	\$7,048.97	\$44,643.33	\$10,330.00	\$34,313.33

TABLE 9. CRANBERRY RETURNS PER ACRE OVER TOTAL COST UNDER FULL PRODUCTION AT VARYING CRANBERRY YIELDS AND PRICES<sup>3</sup>

YIELD (Barrels/Ac)	PRICE PER BARREL				
	\$30	\$40	\$50	\$60	\$70
140	(\$3,446.57)	(\$2,046.57)	(\$646.57)	\$753.44	\$2,153.44
160	(\$2,891.86)	(\$1,291.86)	\$308.14	\$1,908.14	\$3,508.14
180	(\$2,337.16)	(\$537.16)	\$1,262.85	\$3,062.85	\$4,862.85
200	(\$1,782.45)	\$217.55	\$2,217.55	\$4,217.55	\$6,217.55
220	(\$1,227.75)	\$972.26	\$3,172.26	\$5,372.26	\$7,572.26
240	(\$673.04)	\$1,726.96	\$4,126.96	\$6,526.96	\$8,926.96
260	(\$118.34)	\$2,481.67	\$5,081.67	\$7,681.67	\$10,281.67
280	\$436.37	\$3,236.37	\$6,036.37	\$8,836.37	\$11,636.37

<sup>2</sup> Interest is applied to net accumulated establishment costs for the previous year at a rate of 10% per year. Total production costs are the sum of the annual production costs (column 2) and the interest on establishment costs (column 3). The accumulated establishment balance is the sum of the previous year's net accumulated costs (column 7), plus total annual production costs (column 4). Unrecovered establishment investment is the accumulated establishment costs (column 5) less annual revenue (column 6).

<sup>3</sup> Total costs are those from Table 7B including the amortized establishment investment costs. Harvest and hauling costs for cranberries vary with yield and are assumed to be approximately \$2.26 per barrel; costs and receipts for the cranberry vine prunings are assumed to be fixed at year seven levels.

TABLE 10. MACHINERY COMPLEMENT FOR A 10-ACRE BOG<sup>4</sup>

Machinery	Purchase Price	Years to Trade	Hours of Annual Use	Total Fixed/Hr	Total Var/Hr	Total Cost/Hr
Walking Beater	\$5,000.00	10	150	\$5.02	\$1.67	\$6.69
Elevator	\$5,000.00	20	150	\$3.77	\$1.01	\$4.78
Hand Spreader	\$100.00	3	30	\$1.09	\$0.67	\$1.76
¾-ton used Truck	\$10,000.00	10	175	\$8.61	\$3.43	\$12.04
Hand tools/Misc.	\$3,500.00	10	300	\$1.87	\$0.33	\$2.20
Trailer	\$2,500.00	20	40	\$7.07	\$3.13	\$10.20
42" Mower	\$1,500.00	10	150	\$1.51	\$1.36	\$2.87

TABLE 11. INVESTMENT COSTS FOR A 10-ACRE BOG<sup>5</sup>

Item Description	Investment Cost	Years of Life	- Non-cash Overhead (\$)		-Cash Overhead (\$)-		Total
			Depreciation	Interest	Insurance and Taxes	Repairs	
Chemigation System	\$3,000.00	20	120.00	180.00	36.00	50.00	\$386.00
Pesticide Storage	\$3,500.00	20	175.00	175.00	35.00	50.00	\$435.00
Pump, 30hp, fit/pp	\$15,000.00	15	800.00	900.00	180.00	75.00	\$1,955.00
Pumphouse	\$3,500.00	20	175.00	175.00	35.00	50.00	\$435.00
Storage Building	\$12,960.00	20	648.00	648.00	129.60	130.00	\$1,555.60
<b>TOTAL INVESTMENT</b>	<b>\$37,960.00</b>		<b>\$1,918.00</b>	<b>\$2,078.00</b>	<b>\$415.60</b>	<b>\$355.00</b>	<b>\$4,766.60</b>

<sup>4</sup> Fixed costs include depreciation, interest, taxes, and insurance. Variable costs include repairs, fuel, and lubrication. Total costs are the sum of fixed and variable costs.

<sup>5</sup> Straight-line depreciation is calculated as (investment - salvage) ÷ (useful life). Interest on the average investment is (investment + salvage) ÷ 2 x 10% interest rate.

TABLE 12. PRICES FOR SELECTED INPUTS, SOUTHWEST WASHINGTON--1995

<u>ITEM</u>	<u>UNIT</u>	<u>PRICE (\$)</u>
<u>FERTILIZERS</u>		
K <sub>2</sub> SO <sub>4</sub> 6-24-24	LB	0.145
Urea 46-0-0	LB	0.126
KMag 0-0-22	LB	0.098
0-46-0	LB	0.124
0-23-25	LB	0.141
3-18-18	GAL	4.45
21-0-0	LB	0.089
<u>PESTICIDES</u>		
Evital 5G	LB	1.82
Devrinol 10G	LB	1.86
Casoron 4G	LB	1.36
Kocide 101DF	LB	2.10
Bravo 720	PT	2.125
Orthene 75WP	LB	9.45
Guthion 50WP	LB	7.35
Round-Up	GAL	79.90
<u>VINES</u>		
Hybrid Vines	LB	1.00
<u>CUSTOM</u>		
Stump removal	ACRE	4000.00
Level	ACRE	1000.00
Tractor/Drag rental	ACRE	80.00
Soils Tests	EACH	35.00
Sand Application	ACRE	1000.00
Prune cranberry vines	ACRE	50.00
Crib Ditch	ACRE	4500.00
Build Pond	ACRE	500.00
Build Dike	ACRE	1000.00
Tractor/Spray rental	ACRE	50.00
Tractor/Disc rental	ACRE	80.00

TABLE 12. PRICES --1995 (continued)

<u>ITEM</u>	<u>UNIT</u>	<u>PRICE (\$)</u>
<u>CUSTOM (continued)</u>		
Bee hives (Pollination)	EACH	35.00
Leaf Analysis	ACRE	30.00
Haul harvest (wet)	CWT	0.25
<u>LABOR</u>		
Hand Labor	HOUR	9.50
Machine/Harvest labor	HOUR	12.50
Irrigation Labor	HOUR	9.50
<u>OTHER</u>		
Irrigation usage charge	ACRE	58.00
Irrigation electricity charge	ACRE	35.00
Land taxes	ACRE	20.63
Land costs (10% return on purchase)	ACRE	275.00
Investment (Equip/Bldg) depreciation	ACRE	191.80
Investment (Equip/Bldg) interest	ACRE	207.80
Investment insurance/taxes	ACRE	41.56
Investment repairs	ACRE	35.50

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