



# University of Idaho Extension



*Cattle grazing forage oats, spring triticale, spring peas, spring canola, forage radish and forage turnips in North Idaho. Credit: Doug Finkelburg*

## **2020 Direct Seed Budgets for Northern Idaho:**

### **Cover Crops**

*Assuming a 2500-acre farm*

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## **INSTRUCTIONS AND ASSUMPTIONS**

### **General Instructions:**

A color coding system is used to indicate the source of the data for each budget and to show which data can be adjusted. Numbers in red type can be changed without affecting the underlying equations in this cost calculator. Adjusting these numbers will automatically update calculations throughout the spreadsheet, which is very useful for sensitivity analyses.

### **Input Prices:**

By entering input prices on the Input Prices sheet (click on the green Input Prices tab), all of the cost calculations will be automatically updated. Input cost changes can also be made on individual crop price sheets, over-riding the input cost formulae on that particular crop budget.

### **Machinery Costs:**

The machinery complement and associated hourly machinery cost data are in the last two sheets. The hourly machinery cost data are used to create the individualized machinery cost data for each budget. In the cover crop budget sheets, entries in blue cells are calculated by the machinery cost program and come from the associated Machinery Cost sheet for that crop. Machinery fixed costs include depreciation, interest, property taxes, insurance, and housing. For the overall farm operation, these costs do not vary by crop, given the ownership of a specific machinery complement, and are incurred whether or not crops are grown. Your per acre fixed costs will change if the farm size differs significantly from the size assumption used in these budgets.

### **General Assumptions:**

Since farming is inherently variable and constantly changing, we hope that this spreadsheet format will be helpful in adjusting these budgets to reflect your particular operation. Enterprise costs and returns vary from one location to the next and over time for any particular farming operation. Variability stems from differences in the following:

- Capital, labor, and natural resources
- Type and size of machinery complement
- Cultural practices
- Size of farm enterprise
- Input prices

Please examine closely the assumptions we have used and make adjustments to reflect your particular operation. Adjustments in the variable costs can easily be made without affecting the overall accuracy of the budget information. Machinery costs are more difficult to adjust, due to the underlying complexity of machinery cost calculations. A separate machinery cost calculator program is used to develop the costs used in these budgets, which are based on specific machinery widths, tractor horsepower, type of operation, etc. The machinery cost program and data sets specific to this budget are available upon request.

### **Acknowledgments:**

I wish to thank everyone who helped gather all of the information needed to create these worksheets. First and foremost, I thank the farmers who were willing to take the time to share their enterprise information in order to create this worksheet. Without their assistance we would not be able to provide this critical information to others. However, I take responsibility for any errors in these budgets.

**Budget spreadsheets are available at the following link:**

<https://www.uidaho.edu/cals/idaho-agbiz/crop-budgets>

**2020 Direct Seed Cover Crop Budgets for Northern Idaho:  
Summary of Variable and Total Costs (\$/acre/yr)**

<b><u>By Crop:</u></b>	<b><u>Unit</u></b>	<b><u>Total Variable Costs</u></b>	<b><u>Total Cost of Operation</u></b>
<a href="#"><u>Value Blend cover crop mix</u></a>	ac	\$49	\$82
<a href="#"><u>Soil Builder Blend cover crop mix</u></a>	ac	\$67	\$101
<a href="#"><u>Grazing Blend cover crop mix</u></a>	ac	\$55	\$89
<a href="#"><u>Fall Seeded Nitrogen Fixing cover crop mix</u></a>	ac	\$93	\$129

Input Prices		
<b>Note: Changing prices here will change them throughout the spreadsheet.</b>		
	Unit	2020 Price/unit
<b>Fuel:</b>		
Diesel (gal)	gal	\$2.55
Gas (gal)	gal	\$2.43
<b>Pesticides:</b>		
Ammonium Sulfate (liquid)	oz	\$0.01
2,4-DB	oz	\$0.11
Glyphosate	oz	\$0.13
M90	oz	\$0.22
<b>Custom Rental:</b>		
Self-propelled sprayer	acre	\$8.95
<b>Labor:</b>		
Hourly machine labor*	acre	\$20.00
<b>Cash Rent:</b>		
Cash Rent	acre	\$0.00
<b>Overhead:</b>		
	percent	5.00%
<b>Interest:</b>		
Operating Loan	percent	5.00%
Machinery Loan/investment	percent	5.75%

\*Includes all applicable state and federal taxes.

### Schedule of Operations for Direct Seeded Spring Cover Crop Blends, Northern Idaho

Month	Operation	Tooling	Materials/Service
April	Harrow	200HP-WT, 60' Harrow	
April	Spray Weeds	200HP-WT, 100' Sprayer	18 oz Roundup, 50 oz Ammonium Sulfate, 1.5 oz M90
April	Drill*	450HP-WT, 36' Direct Seed Drill, Fertilizer Tanks & Pumps	Cover crop mix
September	Terminate cover crop	200HP-WT, 100' Sprayer	18 oz Roundup, 1.5 oz M90, 50 oz Ammonium Sulfate

\*Cover crop should be planted as soon as possible after terminating the weeds.

### Schedule of Operations for Direct Seeded Fall Cover Crop Blends, Northern Idaho

Month	Operation	Tooling	Materials/Service
October, Year 1	Spray Weeds	200HP-WT, 100' Sprayer	18 oz Roundup, 50 oz Ammonium Sulfate, 1.5 oz M90
October, Year 1	Drill*	450HP-WT, 36' Direct Seed Drill, Fertilizer Tanks & Pumps	Cover crop mix
Sept., Year 2	Terminate cover crop	200HP-WT, 100' Sprayer	18 oz Roundup, 1.5 oz M90, 50 oz Ammonium Sulfate

\*Cover crop should be planted as soon as possible after terminating the weeds.

## Production Costs for Value Blend Direct Seeded Cover Crops, Northern Idaho

Item	Quantity Per Acre	Unit	Price or Cost/Unit	Value or Cost/Acre
<b>Variable Costs</b>				
<b>Cover Crop Seed:</b>				<b>\$14.27</b>
<a href="#">Smart Value Blend</a>	12		\$1.19	\$14.27
<b>Fertilizer:</b>				<b>\$0.00</b>
<i>Base your rate on your soil test results.</i>				
<i>A typical recommendation might include the following:</i>				
				\$0.00
				\$0.00
				\$0.00
<b>Pesticides:</b>				<b>\$6.48</b>
<i>Rates &amp; chemicals will depend on the pests in your crop.</i>				
<i>Consult a certified pesticide applicator or the PNW Pest Control Management Guides.</i>				
<i>The following cost estimates are typical:</i>				
Roundup	36	oz	\$0.13	\$4.68
Ammonium Sulfate (liquid)	100	oz	\$0.01	\$1.13
M90	3	oz	\$0.22	\$0.67
<b>Machinery:</b>				<b>\$27.05</b>
Fuel	2.71	gal	\$2.55	\$6.91
Lubricants	1	acre	\$1.08	\$1.08
Machinery Repairs	1	acre	\$6.56	\$6.56
Machinery Labor	0.63	hour	\$20.00	\$12.51
<b>Custom &amp; Consultants:</b>				<b>\$0.00</b>
Custom sprayer	0	acre	\$8.95	\$0.00
<b>Other:</b>				<b>\$0.00</b>
Crop insurance	1	acre	\$0.00	\$0.00
Storage Facility & Equip. Repairs				\$0.00
Other Labor				
Operating Interest <sup>1</sup>				\$1.20
<b>Total Variable Costs</b>				<b>\$49.00</b>
<b>Ownership Costs:</b>				
Machinery depreciation		acre	\$10.52	\$10.52
Machinery interest on investment		acre	\$8.43	\$8.43
Machinery taxes, insurance, housing, licenses		acre	\$5.02	\$5.02
Land Cost		acre		\$0.00
Overhead <sup>2</sup>				\$2.00
Management fee <sup>3</sup>				\$7.00
<b>Total Fixed Costs</b>				<b>\$32.98</b>
<b>Total Costs per Acre</b>				<b>\$81.97</b>

Notes:

<sup>1</sup>Calculated as 5.75% interest on operating capital for 6 months.

<sup>2</sup>Covers legal, accounting, and utility fees. Calculated as 2.5% of operating expenses.

<sup>3</sup>The management fee is calculated as a 5% of gross revenue.

**DISCLAIMER: The University of Idaho does not endorse any particular company or brand. The following quote is used as an example of a cover crop blend in terms of components and expected prices.**



PO Box 1064  
 Davenport, WA 99122  
 Toll free 1(800) 828-8873  
 Phone 1(509) 725-1235  
 Fax 1(509) 725-7015  
 www.rainierseeds.com

Page: 1 of 1

**QUOTE**

**Quote Date:** Mar 12, 2021  
**Quote Expires:** Apr 11, 2021

Prepared for:

University of Idaho  
 3806 N 3600 E  
 Kimberly, ID 83341-5082  
 p 208-885-7333

Mix Name:

**Smart Value Cover Crop Blend Forage Mix**

Prepared by:	Ordered by:	FOB:
Jessica Hoard	Shelley	Davenport, WA
Rate	Component	
1.0 lbs	Turnip Purple Top	
2.0 lbs	Spring Triticale	
2.0 lbs	Buckwheat Cereal Grain	
2.0 lbs	Forage Peas	
2.0 lbs	Oats Celsia	
2.0 lbs	Annual Ryegrass	
1.0 lbs	Millet White Proso	
<b>12.0 lbs</b>		<b>Unit Cost: \$1.189 / lb</b>

Comments: \$250 minimum on custom blends  
 \$10 or \$0.05/lb blend fee to apply (whichever is greater)  
 Please allow 3 business days for order processing

## Production Costs for Direct Seeded Soil Builder Blend Cover Crop, Northern Idaho

Item	Quantity Per Acre	Unit	Price or Cost/Unit	Value or Cost/Acre
<b>Variable Costs</b>				
<b>Cover Crop Seed:</b>				<b>\$31.53</b>
Soil Builder Blend	25		\$1.26	\$31.53
<b>Fertilizer:</b>				<b>\$0.00</b>
<i>Base your rate on your soil test results.</i>				
<i>A typical recommendation might include the following:</i>				
				\$0.00
				\$0.00
				\$0.00
<b>Pesticides:</b>				<b>\$6.48</b>
<i>Rates &amp; chemicals will depend on the pests in your crop.</i>				
<i>Consult a certified pesticide applicator or the PNW Pest Control Management Guides.</i>				
<i>The following cost estimates are typical:</i>				
Roundup	36	oz	\$0.13	\$4.68
Ammonium Sulfate (liquid)	100	oz	\$0.01	\$1.13
M90	3	oz	\$0.22	\$0.67
<b>Machinery:</b>				<b>\$27.05</b>
Fuel	2.71	gal	\$2.55	\$6.91
Lubricants	1	acre	\$1.08	\$1.08
Machinery Repairs	1	acre	\$6.56	\$6.56
Machinery Labor	0.63	hour	\$20.00	\$12.51
<b>Custom &amp; Consultants:</b>				<b>\$0.00</b>
Custom sprayer	0	acre	\$8.95	\$0.00
<b>Other:</b>				<b>\$0.00</b>
Crop insurance	1	acre	\$0.00	\$0.00
Storage Facility & Equip. Repairs				\$0.00
Other Labor				
Operating Interest <sup>1</sup>				\$1.63
<b>Total Variable Costs</b>				<b>\$66.68</b>
<b>Ownership Costs:</b>				
Machinery depreciation		acre	\$10.52	\$10.52
Machinery interest on investment		acre	\$8.43	\$8.43
Machinery taxes, insurance, housing, licenses		acre	\$5.02	\$5.02
Land Cost		acre		\$0.00
Overhead <sup>2</sup>				\$3.00
Management fee <sup>3</sup>				\$7.00
<b>Total Fixed Costs</b>				<b>\$33.98</b>
<b>Total Costs per Acre</b>				<b>\$100.66</b>

Notes:

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**Quote Expires:** Apr 11, 2021

Prepared for:

University of Idaho  
 3806 N 3600 E  
 Kimberly, ID 83341-5082  
 p 208-885-7333

Mix Name:

**Soil Builder Blend Forage Mix**

Prepared by:		Ordered by:		FOB:	
Jessica Hoard		Shelley		Davenport, WA	
Rate	Component				
4.0 lbs	Radish Daikon				
3.0 lbs	Vetch				
1.0 lbs	Crimson Clover				
8.0 lbs	Oats Celsia				
8.0 lbs	Forage Peas				
1.0 lbs	Sunn Hemp				
<b>25.0 lbs</b>			<b>Unit Cost:</b>	<b>\$1.261 / lb</b>	

Comments: \$250 minimum on custom blends  
 \$10 or \$0.05/lb blend fee to apply (whichever is greater)  
 Please allow 5-7 business days for order processing

## Production Costs for Direct Seeded Grazing Blend Cover Crop, Northern Idaho

Item	Quantity Per Acre	Unit	Price or Cost/Unit	Value or Cost/Acre
<b>Variable Costs</b>				
<b>Cover Crop Seed:</b>				<b>\$19.96</b>
Grazing Blend	20		\$0.998	\$19.96
<b>Fertilizer:</b>				<b>\$0.00</b>
<i>Base your rate on your soil test results.</i>				
<i>A typical recommendation might include the following:</i>				
				\$0.00
				\$0.00
				\$0.00
<b>Pesticides:</b>				<b>\$6.48</b>
<i>Rates &amp; chemicals will depend on the pests in your crop.</i>				
<i>Consult a certified pesticide applicator or the PNW Pest Control Management Guides.</i>				
<i>The following cost estimates are typical:</i>				
Roundup	36	oz	\$0.13	\$4.68
Ammonium Sulfate (liquid)	100	oz	\$0.01	\$1.13
M90	3	oz	\$0.22	\$0.67
<b>Machinery:</b>				<b>\$27.05</b>
Fuel	2.71	gal	\$2.55	\$6.91
Lubricants	1	acre	\$1.08	\$1.08
Machinery Repairs	1	acre	\$6.56	\$6.56
Machinery Labor	0.63	hour	\$20.00	\$12.51
<b>Custom &amp; Consultants:</b>				<b>\$0.00</b>
Custom sprayer	0	acre	\$8.95	\$0.00
<b>Other:</b>				<b>\$0.00</b>
Crop insurance	1	acre	\$0.00	\$0.00
Storage Facility & Equip. Repairs				\$0.00
Other Labor				
Operating Interest <sup>1</sup>				\$1.34
<b>Total Variable Costs</b>				<b>\$54.83</b>
<b>Ownership Costs:</b>				
Machinery depreciation		acre	\$10.52	\$10.52
Machinery interest on investment		acre	\$8.43	\$8.43
Machinery taxes, insurance, housing, licenses		acre	\$5.02	\$5.02
Land Cost		acre		\$0.00
Overhead <sup>2</sup>				\$3.00
Management fee <sup>3</sup>				\$7.00
<b>Total Fixed Costs</b>				<b>\$33.98</b>
<b>Total Costs per Acre</b>				<b>\$88.81</b>

Notes:

<sup>1</sup>Calculated as 5.75% interest on operating capital for 6 months.

<sup>2</sup>Covers legal, accounting, and utility fees. Calculated as 2.5% of operating expenses.

<sup>3</sup>The management fee is calculated as a 5% of gross revenue.

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Page: 1 of 1

**QUOTE**

**Quote Date:** Mar 12, 2021  
**Quote Expires:** Apr 11, 2021

Prepared for:

University of Idaho  
 3806 N 3600 E  
 Kimberly, ID 83341-5082  
 p 208-885-7333

Mix Name:

**Grazing Blend Forage Mix**

Prepared by:	Ordered by:	FOB:
Jessica Hoard	Shelley	Davenport, WA

Rate	Component
16.0 lbs	Oats Celsia
2.0 lbs	Crimson Clover
0.5 lbs	Rape Seed
0.5 lbs	Turnip Purple Top
1.0 lbs	Vetch Hairy
<b>20.0 lbs</b>	
	<b>Unit Cost: \$ .998 / lb</b>

Comments: \$250 minimum on custom blends  
 \$10 or \$0.05/lb blend fee to apply (whichever is greater)  
 Please allow 3 business days for order processing

## Production Costs for Direct Seeded Fall Seeded Nitrogen Blend Cover Crop, Northern Idaho

Item	Quantity Per Acre	Unit	Price or Cost/Unit	Value or Cost/Acre
<b>Variable Costs</b>				
<b>Cover Crop Seed:</b>				<b>\$56.85</b>
Fall Nitrogen Fixing Blend	62		\$0.92	\$56.85
<b>Fertilizer:</b>				<b>\$0.00</b>
<i>Base your rate on your soil test results.</i>				
<i>A typical recommendation might include the following:</i>				
				\$0.00
				\$0.00
				\$0.00
<b>Pesticides:</b>				<b>\$6.48</b>
<i>Rates &amp; chemicals will depend on the pests in your crop.</i>				
<i>Consult a certified pesticide applicator or the PNW Pest Control Management Guides.</i>				
<i>The following cost estimates are typical:</i>				
Roundup	36	oz	\$0.13	\$4.68
Ammonium Sulfate (liquid)	100	oz	\$0.01	\$1.13
M90	3	oz	\$0.22	\$0.67
<b>Machinery:</b>				<b>\$27.05</b>
Fuel	2.71	gal	\$2.55	\$6.91
Lubricants	1	acre	\$1.08	\$1.08
Machinery Repairs	1	acre	\$6.56	\$6.56
Machinery Labor	0.63	hour	\$20.00	\$12.51
<b>Custom &amp; Consultants:</b>				<b>\$0.00</b>
Custom sprayer	0	acre	\$8.95	\$0.00
<b>Other:</b>				<b>\$0.00</b>
Crop insurance	1	acre	\$0.00	\$0.00
Storage Facility & Equip. Repairs				\$0.00
Other Labor				
Operating Interest <sup>1</sup>				\$2.26
<b>Total Variable Costs</b>				<b>\$92.65</b>
<b>Ownership Costs:</b>				
Machinery depreciation		acre	\$10.52	\$10.52
Machinery interest on investment		acre	\$8.43	\$8.43
Machinery taxes, insurance, housing, licenses		acre	\$5.02	\$5.02
Land Cost		acre		\$0.00
Overhead <sup>2</sup>				\$5.00
Management fee <sup>3</sup>				\$7.00
<b>Total Fixed Costs</b>				<b>\$35.98</b>
<b>Total Costs per Acre</b>				<b>\$128.62</b>

Notes:

<sup>1</sup>Calculated as 5.75% interest on operating capital for 6 months.

<sup>2</sup>Covers legal, accounting, and utility fees. Calculated as 2.5% of operating expenses.

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Page: 1 of 1

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Prepared for:

University of Idaho  
 Foundation Seed  
 3806 N 3600 E  
 Kimberly, ID 83341-5082  
 p 208-885-7333

Mix Name:

**Fall n Fixing blend Forage Mix**

Prepared by:		Ordered by:		FOB:	
Jessica Hoard		Shelley		Davenport, WA	
Rate	Component				
29.0 lbs	Oats Celsia				
4.0 lbs	Vetch Hairy				
27.0 lbs	Austrian Winter Peas				
2.0 lbs	Turnip Purple Top				
<b>62.0 lbs</b>			<b>Unit Cost:</b>	<b>\$.917 / lb</b>	

Comments: \$250 minimum on custom blends  
 \$10 or \$0.05/lb blend fee to apply (whichever is greater)  
 Please allow 3 business days for order processing

**Machinery Costs (\$/acre) from the University of Idaho Machinery Cost Calculator**

Note: Per hour machinery costs can be changed in this master table and they will update throughout. Per acre costs are calculated in the Machine Cost program using the values listed in the Machinery Complement tab. You can also delete or insert lines in the individual crop machinery cost tables and the budget amounts will be recalculated.

	Fixed Costs (\$/acre):				Variable Costs (\$/acre):				Labor		Fuel Use	Total Cost (\$/acre)
	Depreciation	Interest	Housing, Insurance, License	Total Fixed Costs	Repairs	Fuel	Lubricants	Total	(\$/acre)	(hr/acre)	(gal/acre)	
200HP Trac+Bankout Wagon	\$1.45	\$1.24	\$0.23	\$2.93	\$0.67	\$1.40	\$0.21	\$2.28	\$1.76	0.09	0.55	\$6.97
200HP Trac+60'Harrow	\$0.48	\$0.41	\$0.07	\$0.96	\$0.23	\$0.40	\$0.06	\$0.69	\$0.51	0.03	0.16	\$2.16
200HP Trac+100'Sprayer	\$0.61	\$0.51	\$0.08	\$1.20	\$0.46	\$0.34	\$0.05	\$0.85	\$0.43	0.02	0.13	\$2.48
Fertilizer Tanks+Pumps	\$1.02	\$0.59	\$0.06	\$1.67	\$0.68	\$0.00	\$0.00	\$0.68	\$0.00	0.00	0.00	\$2.35
450HP Tractor+NT Drill, 36'	\$5.27	\$4.23	\$1.57	\$11.07	\$2.79	\$2.68	\$0.40	\$5.87	\$1.49	0.07	1.05	\$18.43
Combine + 36' Header	\$6.85	\$3.94	\$1.78	\$12.57	\$2.91	\$2.16	\$0.32	\$5.39	\$1.93	0.10	0.85	\$19.89
Pickup 3/4 ton 4WD	\$0.88	\$0.62	\$0.73	\$2.23	\$0.24	\$0.80	\$0.12	\$1.16	\$0.00	0.00	0.23	\$3.39
Tandem Axle Truck	\$0.64	\$0.64	\$1.13	\$2.41	\$0.80	\$1.00	\$0.15	\$1.95	\$3.60	0.18	0.39	\$7.96
Tandem Axle Truck	\$0.64	\$0.78	\$1.13	\$2.55	\$0.80	\$1.50	\$0.22	\$2.52	\$3.60	0.18	0.59	\$8.67
Trap Wagon	\$0.48	\$0.25	\$0.17	\$0.90	\$0.40	\$0.04	\$0.01	\$0.45	\$0.24	0.01	0.01	\$1.59
4WD-ATV	\$0.20	\$0.14	\$0.03	\$0.37	\$0.08	\$0.17	\$0.03	\$0.27	\$1.32	0.07	0.05	\$1.96
50HP Wheel Tractor	\$0.30	\$0.27	\$0.06	\$0.62	\$0.08	\$0.26	\$0.04	\$0.38	\$1.32	0.07	0.10	\$2.32
<b>Total:</b>	<b>\$18.82</b>	<b>\$13.62</b>	<b>\$7.04</b>	<b>\$39.48</b>	<b>\$10.14</b>	<b>\$10.75</b>	<b>\$1.61</b>	<b>\$22.49</b>	<b>\$16.20</b>	<b>0.81</b>	<b>4.11</b>	<b>\$78.17</b>

Note: Farm size is assumed to be 2500 acres for the purposes of machinery cost calculations.

**Machinery Costs for No-Till Cover Crop (\$/acre) from the University of Idaho Machinery Cost Calculator**

	Fixed Costs (\$/acre):				Variable Costs (\$/acre):				Labor		Fuel Use	Total Cost (\$/acre)
	Depreciation	Interest	Housing, Insurance, License	Total Fixed Costs	Repairs	Fuel	Lubricants	Total	(\$/acre)	(hr/acre)	(gal/acre)	
<i>Annual costs:</i>												
Pickup 3/4 ton 4WD	\$0.88	\$0.62	\$0.73	\$2.23	\$0.24	\$0.80	\$0.12	\$1.16	\$0.00	\$0.00	\$0.23	\$3.39
2-Ton Truck	\$0.64	\$0.64	\$1.13	\$2.41	\$0.80	\$1.00	\$0.15	\$1.95	\$3.60	0.18	0.39	\$7.96
40' Grain Trailer+Tractor	\$0.64	\$0.78	\$1.13	\$2.55	\$0.80	\$1.50	\$0.22	\$2.52	\$3.60	0.18	0.59	\$8.67
Trap Wagon	\$0.48	\$0.25	\$0.17	\$0.90	\$0.40	\$0.04	\$0.01	\$0.45	\$0.24	0.01	0.01	\$1.59
4WD-ATV	\$0.20	\$0.14	\$0.03	\$0.37	\$0.08	\$0.17	\$0.03	\$0.27	\$1.32	0.07	0.05	\$1.96
50HP Wheel Tractor	\$0.30	\$0.27	\$0.06	\$0.62	\$0.08	\$0.26	\$0.04	\$0.38	\$1.32	0.07	0.10	\$2.32
<i>Seasonal operations:</i>												
200HP Trac+60'Harrow	\$0.48	\$0.41	\$0.07	\$0.96	\$0.23	\$0.40	\$0.06	\$0.69	\$0.51	0.03	0.16	\$2.16
200HP Trac+100'Sprayer	\$0.61	\$0.51	\$0.08	\$1.20	\$0.46	\$0.34	\$0.05	\$0.85	\$0.43	0.02	0.13	\$2.48
450HP Tractor+NT Drill, 36'	\$5.27	\$4.23	\$1.57	\$11.07	\$2.79	\$2.68	\$0.40	\$5.87	\$1.49	0.07	1.05	\$18.43
Fertilizer Tanks+Pumps	\$1.02	\$0.59	\$0.06	\$1.67	\$0.68	\$0.00	\$0.00	\$0.68	\$0.00	0.00	0.00	\$2.35
<b>Total:</b>	<b>\$10.52</b>	<b>\$8.43</b>	<b>\$5.02</b>	<b>\$23.98</b>	<b>\$6.56</b>	<b>\$7.19</b>	<b>\$1.08</b>	<b>\$14.83</b>	<b>\$12.51</b>	<b>0.63</b>	<b>2.71</b>	<b>\$51.31</b>

<b>Machinery Complement for Direct Seed Planting, Over 18" Precipitation, Northern Idaho</b>										
Type of Machine	Replacement Value \$	Age When Purchased	Years of Life	Annual Hours of Use	Salvage Value \$	Annual Repairs (Materials & Labor) \$	Gallons of Fuel/Hr.	Taxes, Housing, Insur., Licenses %	Labor Multiplier	Acres per Hour
<i>Tractors, ATVs:</i>										
4WD-ATV	8,500	0	10	150	3,500	200	1.2	1.2	1.1	
50HP-WT w/Bucket	16,000	5	20	150	3,500	300	3	1.2	1.1	
200HP FWA Tractor	95,000	5	15	300	35,000	1000	9	1.2	1.1	
450HP 4WD Tractor	180,000	10	10	250	80,000	4,000	20	1.2	1.25	
<i>Equipment:</i>										
Bankout Wagon	18,000	0	15	200	3,500	1000	9	0.6	1.1	-
100' Pull Sprayer	42,000	0	20	200	6,000	2000	9	0.6	1.2	51
60' Harrow	12,000	5	15	75	1,000	500	9	0.6	1.1	37
30' Shredder	30,000	0	10	115	5,500	2000	9	2.5	1.2	16
Fertilizer Tanks & Pump	30,000	0	20	-	-	1000	-	-	-	-
36' NT Drill	150,000	6	10	200	75,000	5,000	20	3	1.25	15
36' Combine	300,000	2	10	225	100,000	8,500	14	2.6	1.25	13
<i>Trucks:</i>										
				Miles/year:			MPG:			
Tandem Axle Truck	40,000	10	15	7,500	16,000	2,000	6	10.1	1.2	
Tandem Axle Truck	40,000	10	15	7,500	16,000	2,000	6	10.1	1.2	
Trap Wagon	17,000	10	10	500	5,000	1000	12	3.8	1.2	
3/4T 4WD Pickup	38,000	0	10	15,000	16,000	600	12	6.8	1.2	

*Note: Farm size is assumed to be 2500 acres for the purposes of machinery cost calculations.*