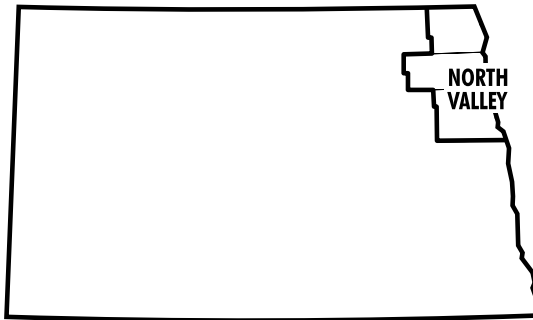




FARM MANAGEMENT PLANNING GUIDE

December 2013

Projected 2014 Crop Budgets



North Valley North Dakota

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The 2014 crop budgets provide an estimate of revenues and costs for selected crops. Each set of budgets are developed for a multi-county region. There is considerable variation in soil type and productivity, weather conditions, as well as management and production practices within each region. Therefore, **THESE BUDGETS ARE ONLY INTENDED TO BE USED AS A GUIDE. EVERY INDIVIDUAL IS HIGHLY ENCOURAGED TO DEVELOP HIS/HER OWN BUDGETS!**

The profitability budget accounts for full economic opportunity costs for land and machinery investment, regardless of farm operator equity position. The bottom line is the return to labor and management. This is the expected "payment" to the producer for the labor and managerial efforts required by the crop enterprise. Each individual must make the decision whether it is sufficient.

The budget can be changed to conform to the more common definition of accounting profit (return to

unpaid labor and management, and owner equity) by replacing the machinery investment and land charge cost items with your per acre interest and rental expense of machinery and land, and real estate tax if land is owned.

The budget can be used for long run decisions if the revenues and costs are realistic for several years. (Crop prices, direct costs, and the land charge are best estimates for only the 2014 crop year, but crop yields are historic averages and machinery ownership costs are an average for the total length of ownership). If the budget shows a high return to labor and management, and is representative for several years, increased acreage and corresponding investment should be considered. However, if long-run returns to labor and management are unsatisfactory the best decision may be to exit the crop enterprise and employ the machinery and land investment, and labor and management, in a different enterprise or investment.

For short-run planning decisions you can omit the indirect costs if the land and machinery required to produce the different enterprises are in place. Simply compare the crop enterprises by calculating return over direct costs. Labor requirements and risk should also be considered. Insurance is not available for some crops.

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The budget can be used to estimate cashflow by making a few modifications. Machinery depreciation should be omitted and the machinery investment number replaced with your per acre principal and interest payment on machinery debt. For owned land, the land charge should be replaced with your per acre real estate tax and principal and interest payment on land debt.

Currently, a Farm Bill has not been authorized. **Direct and counter-cyclical payments** have been omitted from the budgets because those payments are tied to historic farm program base acres and payment yields, not to current crop selection or production. Direct payments for this region have been \$11.75 per acre when averaged over all crop acreage. No counter-cyclical payments are expected. If there is an extension of the current Farm Bill, the Average Crop Revenue Election program may provide payments.

Primary Assumptions:

Crops are planted on dryland recrop ground. Costs of moving crop to local market/storage are included.

Market Price: Best estimates of NDSU extension economists. The greater of projected market price and marketing loan rate is used.

Market Yields: Average yield for the 7 year period 2006-2012, after the low and high yield years are removed. Yields for safflower, yellow mustard, buckwheat, millet, rye and chickpeas are from NDSU extension agronomists and industry sources.

Fertilizer: Cost of fertilizer applied, based on soil test, to meet yield goal of 130% of market yield. N fertilizer can be reduced if previous crop was soybean, dry bean, field peas or lentil.

Soil test - recrop:
 Nitrogen - 34 lb
 Phosphorus - 10 ppm
 Potassium - 280 ppm

Fertilizer prices:
 Nitrogen - .46/lb
 Phosphorus - .42/lb
 Potassium - .39/lb

Seed Prices:

| | |
|------------------|-----------------|
| Spring Wheat | 12.25/bu |
| Durum | 11.25/bu |
| Barley | 11.00/bu |
| Corn grain RR/Bt | 2.90/thou.kern. |
| Corn grain RR | 2.60/thou.kern. |
| Soybean RR2 | .352/thou.kern. |
| Dry Beans | .90/lb |
| Oil Sunflower | 1.42/thou.kern. |
| Conf. Sunflower | 2.45/thou.kern. |
| Canola | 9.70/lb |
| Flax | 19.00/bu |
| Field Peas | 14.00/bu |
| Oats | 7.00/bu |
| Mustard | 1.70/lb |
| Winter Wheat | 11.50/bu |

Fuel prices:

| | |
|--------|----------|
| Diesel | 3.25/gal |
| Gas | 3.05/gal |

Lubrication charge: 15% of fuel cost

Crop Insurance: Coverage levels are 70% on all insurable crops. Yield Protection or APH insurance estimates are used, except for Revenue Protection on all wheat, barley, corn, soybeans, corn, canola, sunflowers and dry beans.

Miscellaneous: soil testing, machinery rent and custom work.

Operating Interest: Direct costs charged 4.25% interest for 6 month period.

Misc. Overhead: Machinery housing and insurance at .5% and .85%, respectively, of average machinery investment. Also, liability insurance and license fees of trucks. In addition, \$3 per acre is assumed for general farm utilities, farm publications, meetings, dues, income tax preparation, legal fees, etc.

Land charge = average cash rent.

Machinery investment: 4.5% real interest rate, over the years of machine ownership, is charged on average machinery investment. The real, or inflation adjusted, rate is the commercial rate minus the inflation rate. Ave. mach. investment = (Purchase price + Disposal price)/2

Depreciation = (Purchase price - disposal price / years ownership)

Spring Wheat

Durum

| | Per Acre | Your Figures | Per Acre | Your Figures |
|---|---------------|-----------------|---------------|-----------------|
| Market Yield | 50 | _____ | 44 | _____ |
| Market Price | 6.87 | _____ | 7.17* | _____ |
| MARKET INCOME | 343.50 | _____ | 315.48 | _____ |
| DIRECT COSTS | | | | |
| -Seed | 24.50 | _____ | 22.50 | _____ |
| -Herbicides | 21.80 | _____ | 21.80 | _____ |
| -Fungicides** | 5.50 | _____ | 5.50 | _____ |
| -Insecticides*** | 0.00 | _____ | 0.00 | _____ |
| -Fertilizer | 70.06 | _____ | 59.77 | _____ |
| -Crop Insurance | 16.40 | _____ | 15.23 | _____ |
| -Fuel & Lubrication | 22.13 | _____ | 21.68 | _____ |
| -Repairs | 18.86 | _____ | 18.70 | _____ |
| -Drying | 0.00 | _____ | 0.00 | _____ |
| -Miscellaneous | 7.50 | _____ | 7.50 | _____ |
| -Operating Interest | 3.97 | _____ | 3.67 | _____ |
| SUM OF LISTED DIRECT COSTS | 190.72 | ===== | 176.35 | ===== |
| INDIRECT (FIXED) COSTS | | | | |
| -Misc. Overhead | 7.40 | _____ | 7.30 | _____ |
| -Machinery Depreciation | 21.94 | _____ | 21.65 | _____ |
| -Machinery Investment | 12.74 | _____ | 12.59 | _____ |
| -Land Charge | 92.70 | _____ | 92.70 | _____ |
| SUM OF LISTED INDIRECT COSTS | 134.78 | ===== | 134.24 | ===== |
| SUM OF ALL LISTED COSTS | 325.50 | _____ | 310.59 | _____ |
| RETURN TO LABOR & MANAGEMENT | 18.00 | _____ | 4.89 | _____ |
| LISTED COSTS PER BUDGET UNIT | (bu) | | (bu) | |
| -Direct Costs | 3.81 | _____ | 4.01 | _____ |
| -Indirect Costs | 2.70 | _____ | 3.05 | _____ |
| -Total Costs | 6.51 | _____ | 7.06 | _____ |

Wheat notes:

*Durum price is for milling quality. There is high risk of lower quality and lower price.

**Includes seed treatment (\$1.50-\$2.00) and early season foliar fungicide (\$2-\$4.50). Late season fungicides are often warranted in this region. For fusarium head blight (scab) control, prothioconazole or metconazole containing products are highly recommended when a more susceptible cultivar is grown and/or when conditions are favorable for infection.

***Wheat midge insecticide would cost about \$6. Cereal grain aphid insecticide would cost about \$6.

Malting Barley

Corn Grain

| | Per Acre | Your Figures | Per Acre | Your Figures |
|---|---------------|-----------------|---------------|-----------------|
| Market Yield | 64 | _____ | 121 | _____ |
| Market Price | 5.16* | _____ | 4.00 | _____ |
| MARKET INCOME | 330.24 | _____ | 484.00 | _____ |
| DIRECT COSTS | | | | |
| -Seed | 22.00 | _____ | 88.04* | _____ |
| -Herbicides | 19.00 | _____ | 20.00 | _____ |
| -Fungicides | 5.50** | _____ | 0.00 | _____ |
| -Insecticides | 0.00 | _____ | 0.00 | _____ |
| -Fertilizer | 51.73 | _____ | 88.37 | _____ |
| -Crop Insurance | 17.35 | _____ | 40.73 | _____ |
| -Fuel & Lubrication | 24.31 | _____ | 31.70 | _____ |
| -Repairs | 19.78 | _____ | 25.20 | _____ |
| -Drying | 0.00 | _____ | 25.41 | _____ |
| -Miscellaneous | 7.50 | _____ | 7.50 | _____ |
| -Operating Interest | 3.55 | _____ | 6.95 | _____ |
| SUM OF LISTED DIRECT COSTS | 170.72 | _____ | 333.89 | _____ |
| INDIRECT (FIXED) COSTS | | | | |
| -Misc. Overhead | 7.90 | _____ | 9.97 | _____ |
| -Machinery Depreciation | 23.13 | _____ | 33.43 | _____ |
| -Machinery Investment | 13.94 | _____ | 19.22 | _____ |
| -Land Charge | 92.70 | _____ | 92.70 | _____ |
| SUM OF LISTED INDIRECT COSTS | 137.66 | _____ | 155.32 | _____ |
| SUM OF ALL LISTED COSTS | 308.38 | _____ | 489.22 | _____ |
| RETURN TO LABOR & MANAGEMENT | 21.86 | _____ | (5.22) | _____ |
| LISTED COSTS PER BUDGET UNIT | (bu) | | (bu) | |
| -Direct Costs | 2.67 | _____ | 2.76 | _____ |
| -Indirect Costs | 2.15 | _____ | 1.28 | _____ |
| -Total Costs | 4.82 | _____ | 4.04 | _____ |

Barley notes:

*On average, about 60% of production is feed quality. Use \$3.38 estimate for feed barley price.

**Includes seed treatment (\$1.50-\$2.00) and early season foliar fungicide (\$2-\$4.50). Late season fungicides, prothioconazole or metconazole containing products, for fusarium head blight (scab) control are recommended when conditions are favorable for infection.

Corn notes:

*RR/Bt corn and RR corn without Bt Trait for corn borer refuge. Cost includes insecticide seed treatment for wireworm, rootworm, white grub and suppression of cutworm.

Soybeans

Drybeans*

| | Per Acre | Your Figures | Per Acre | Your Figures |
|---|---------------|-----------------|---------------|-----------------|
| Market Yield | 31 | _____ | 1570 | _____ |
| Market Price | 11.02 | _____ | 0.31 | _____ |
| MARKET INCOME | 341.62 | _____ | 486.70 | _____ |
| DIRECT COSTS | | | | |
| -Seed | 69.60* | _____ | 45.00 | _____ |
| -Herbicides | 20.00 | _____ | 41.20 | _____ |
| -Fungicides | 0.00 | _____ | 20.00** | _____ |
| -Insecticides | 7.00** | _____ | 0.00 | _____ |
| -Fertilizer | 2.54 | _____ | 39.12 | _____ |
| -Crop Insurance | 18.32 | _____ | 33.49 | _____ |
| -Fuel & Lubrication | 18.75 | _____ | 25.03 | _____ |
| -Repairs | 18.28 | _____ | 23.11 | _____ |
| -Drying | 0.00 | _____ | 0.00 | _____ |
| -Miscellaneous | 1.50 | _____ | 15.50 | _____ |
| -Operating Interest | 3.31 | _____ | 5.15 | _____ |
| SUM OF LISTED DIRECT COSTS | 159.30 | ===== | 247.60 | ===== |
| INDIRECT (FIXED) COSTS | | | | |
| -Misc. Overhead | 7.06 | _____ | 8.75 | _____ |
| -Machinery Depreciation | 21.27 | _____ | 27.55 | _____ |
| -Machinery Investment | 12.23 | _____ | 17.91 | _____ |
| -Land Charge | 92.70 | _____ | 92.70 | _____ |
| SUM OF LISTED INDIRECT COSTS | 133.26 | ===== | 146.91 | ===== |
| SUM OF ALL LISTED COSTS | 292.57 | _____ | 394.51 | _____ |
| RETURN TO LABOR & MANAGEMENT | 49.05 | _____ | 92.19 | _____ |
| LISTED COSTS PER BUDGET UNIT | (bu) | | (lb) | |
| -Direct Costs | 5.14 | _____ | 0.16 | _____ |
| -Indirect Costs | 4.30 | _____ | 0.09 | _____ |
| -Total Costs | 9.44 | _____ | 0.25 | _____ |

Soybean notes:

*RR2 (glyphosate) resistant soybeans. The cost includes \$8 for inoculant and fungicide treatment in addition to seed expense.

**Soybean aphid and/or spider mite insecticide

Drybean notes:

*Acreage limitations existed under the 2008-2012 farm bill with possible forfeiture of government payments on base acres planted to drybeans. Rules for 2014 are unknown as of 12/10/2013.

**Fungicide for white mold. A second treatment may be necessary. Fungicide for rust at \$2-\$4.50 plus application maybe necessary.

Oil Sunflower

Confectionery Sunflower

| | Per Acre | Your Figures | Per Acre | Your Figures |
|---|----------------|-----------------|---------------|-----------------|
| Market Yield | 1400 | _____ | 1170 | _____ |
| Market Price | 0.212 | _____ | 0.313 | _____ |
| MARKET INCOME | 296.80 | _____ | 366.21 | _____ |
| DIRECT COSTS | | | | |
| -Seed | 34.08* | _____ | 49.00* | _____ |
| -Herbicides | 26.70 | _____ | 28.90 | _____ |
| -Fungicides | 0.00** | _____ | 0.00** | _____ |
| -Insecticides | 7.00*** | _____ | 14.00*** | _____ |
| -Fertilizer | 32.72 | _____ | 24.77 | _____ |
| -Crop Insurance | 13.71 | _____ | 20.75 | _____ |
| -Fuel & Lubrication | 21.36 | _____ | 20.81 | _____ |
| -Repairs | 18.51 | _____ | 18.32 | _____ |
| -Drying | 4.20 | _____ | 3.51 | _____ |
| -Miscellaneous | 15.50 | _____ | 23.50 | _____ |
| -Operating Interest | 3.69 | _____ | 4.33 | _____ |
| | ===== | ===== | ===== | ===== |
| SUM OF LISTED DIRECT COSTS | 177.48 | _____ | 207.89 | _____ |
| INDIRECT (FIXED) COSTS | | | | |
| -Misc. Overhead | 7.84 | _____ | 7.72 | _____ |
| -Machinery Depreciation | 23.86 | _____ | 23.50 | _____ |
| -Machinery Investment | 14.41 | _____ | 14.23 | _____ |
| -Land Charge | 92.70 | _____ | 92.70 | _____ |
| | ===== | ===== | ===== | ===== |
| SUM OF LISTED INDIRECT COSTS | 138.81 | _____ | 138.15 | _____ |
| SUM OF ALL LISTED COSTS | 316.29 | _____ | 346.04 | _____ |
| RETURN TO LABOR & MANAGEMENT | (19.49) | _____ | 20.17 | _____ |
| LISTED COSTS PER BUDGET UNIT | (lb) | | (lb) | |
| -Direct Costs | 0.13 | _____ | 0.18 | _____ |
| -Indirect Costs | 0.10 | _____ | 0.12 | _____ |
| -Total Costs | 0.23 | _____ | 0.30 | _____ |

Oil Sunflower notes:

*Cost includes seed treatment for control of wireworm and flea beetle.

**Fungicide for rust would cost \$4 plus application.

***One spraying for head feeding insects (red seed weevil, lygus bug and banded moths). Custom application cost of \$8 is under "Miscellaneous."

Confectionery Sunflower notes:

*Cost includes seed treatment for control of wireworm and flea beetle.

**Fungicide for rust would cost \$4 plus application.

***Two sprayings for head feeding insects (red seed weevil, lygus bug and banded moths) at about \$7 per application. Each custom application cost of \$8 is under "Miscellaneous."

Canola

Flax

| | Per Acre | Your Figures | Per Acre | Your Figures |
|---|----------------|-----------------|---------------|-----------------|
| Market Yield | 1630 | | 23 | |
| Market Price | 0.197 | | 13.14 | |
| MARKET INCOME | 321.11 | | 302.22 | |
| DIRECT COSTS | | | | |
| -Seed | 48.50* | | 15.20 | |
| -Herbicides | 20.50 | | 19.60 | |
| -Fungicides | 0.00** | | 0.00 | |
| -Insecticides | 0.00 | | 0.00 | |
| -Fertilizer | 67.98 | | 31.15 | |
| -Crop Insurance | 16.53 | | 12.24 | |
| -Fuel & Lubrication | 18.95 | | 21.77 | |
| -Repairs | 17.33 | | 19.77 | |
| -Drying | 0.00 | | 0.00 | |
| -Miscellaneous | 7.50 | | 1.50 | |
| -Operating Interest | 4.19 | | 2.58 | |
| SUM OF LISTED DIRECT COSTS | 201.48 | | 123.81 | |
| INDIRECT (FIXED) COSTS | | | | |
| -Misc. Overhead | 6.97 | | 7.44 | |
| -Machinery Depreciation | 20.09 | | 22.26 | |
| -Machinery Investment | 11.94 | | 13.74 | |
| -Land Charge | 92.70 | | 92.70 | |
| SUM OF LISTED INDIRECT COSTS | 131.71 | | 136.13 | |
| SUM OF ALL LISTED COSTS | 333.19 | | 259.94 | |
| RETURN TO LABOR & MANAGEMENT | (12.08) | | 42.28 | |
| LISTED COSTS PER BUDGET UNIT | | | | |
| | (lb) | | (bu) | |
| -Direct Costs | 0.12 | | 5.38 | |
| -Indirect Costs | 0.08 | | 5.92 | |
| -Total Costs | 0.20 | | 11.30 | |

Canola notes:

*Cost includes insecticide seed treatment for flea beetles.

**Fungicide for white mold would cost about \$18 plus application.

Field Peas

Oats

| | Per Acre | Your Figures | Per Acre | Your Figures |
|---|----------------|-----------------|----------------|-----------------|
| Market Yield | 37 | | 69 | |
| Market Price | 7.20* | | 3.03 | |
| MARKET INCOME | 266.40 | | 209.07 | |
| DIRECT COSTS | | | | |
| -Seed | 42.00** | | 14.00 | |
| -Herbicides | 27.80 | | 5.20 | |
| -Fungicides | 1.50 | | 0.00 | |
| -Insecticides | 0.00 | | 0.00 | |
| -Fertilizer | 7.39 | | 46.82 | |
| -Crop Insurance | 11.50 | | 10.84 | |
| -Fuel & Lubrication | 21.34 | | 24.69 | |
| -Repairs | 20.10 | | 19.91 | |
| -Drying | 0.00 | | 0.00 | |
| -Miscellaneous | 6.00 | | 7.50 | |
| -Operating Interest | 2.92 | | 2.74 | |
| | ===== | ===== | ===== | ===== |
| SUM OF LISTED DIRECT COSTS | 140.55 | | 131.70 | |
| INDIRECT (FIXED) COSTS | | | | |
| -Misc. Overhead | 7.47 | | 7.98 | |
| -Machinery Depreciation | 23.42 | | 23.37 | |
| -Machinery Investment | 13.39 | | 14.07 | |
| -Land Charge | 92.70 | | 92.70 | |
| | ===== | ===== | ===== | ===== |
| SUM OF LISTED INDIRECT COSTS | 136.98 | | 138.12 | |
| SUM OF ALL LISTED COSTS | 277.53 | | 269.81 | |
| RETURN TO LABOR & MANAGEMENT | (11.13) | | (60.74) | |
| LISTED COSTS PER BUDGET UNIT | (bu) | | (bu) | |
| -Direct Costs | 3.80 | | 1.91 | |
| -Indirect Costs | 3.70 | | 2.00 | |
| -Total Costs | 7.50 | | 3.91 | |

Field Pea notes:

*Yellow pea food quality price. Use \$9.25 for green pea food quality and about \$5.00 for feed quality peas.

**Yellow pea seed cost, use \$54 per acre for green peas.

Yellow Mustard

Winter Wheat

| | Per Acre | Your Figures | Per Acre | Your Figures |
|---|---------------|-----------------|---------------|-----------------|
| Market Yield | 1000 | _____ | 52* | _____ |
| Market Price | 0.388 | _____ | 6.25 | _____ |
| MARKET INCOME | 388.00 | _____ | 325.00 | _____ |
| DIRECT COSTS | | | | |
| -Seed | 20.40 | _____ | 14.95 | _____ |
| -Herbicides | 13.50 | _____ | 23.70 | _____ |
| -Fungicides | 0.00 | _____ | 9.00 | _____ |
| -Insecticides | 6.00* | _____ | 0.00 | _____ |
| -Fertilizer | 30.87 | _____ | 73.49 | _____ |
| -Crop Insurance | 0.00** | _____ | 16.68 | _____ |
| -Fuel & Lubrication | 17.44 | _____ | 20.57 | _____ |
| -Repairs | 16.86 | _____ | 18.33 | _____ |
| -Drying | 0.00 | _____ | 0.00 | _____ |
| -Miscellaneous | 1.50 | _____ | 7.50 | _____ |
| -Operating Interest | 2.26 | _____ | 3.91 | _____ |
| SUM OF LISTED DIRECT COSTS | 108.83 | ===== | 188.13 | ===== |
| INDIRECT (FIXED) COSTS | | | | |
| -Misc. Overhead | 6.71 | _____ | 7.25 | _____ |
| -Machinery Depreciation | 19.25 | _____ | 21.36 | _____ |
| -Machinery Investment | 11.48 | _____ | 12.17 | _____ |
| -Land Charge | 92.70 | _____ | 92.70 | _____ |
| SUM OF LISTED INDIRECT COSTS | 130.14 | ===== | 133.49 | ===== |
| SUM OF ALL LISTED COSTS | 238.97 | _____ | 321.61 | _____ |
| RETURN TO LABOR & MANAGEMENT | 149.03 | _____ | 3.39 | _____ |
| LISTED COSTS PER BUDGET UNIT | (lb) | | (bu) | |
| -Direct Costs | 0.11 | _____ | 3.62 | _____ |
| -Indirect Costs | 0.13 | _____ | 2.57 | _____ |
| -Total Costs | 0.24 | _____ | 6.18 | _____ |

Yellow Mustard notes:

*Insecticide seed treatment for flea beetles.

**Crop insurance is not available in this region.

Winter Wheat notes:

*Yield is per harvested acre. There is some risk of acreage abandonment in spring.

2014 Machinery List

| Machine | Purch. Price | Annual Use | Years to trade | Trade in | Deprec. | Invest. | Repairs | Ac/hr |
|---------------------------|--------------|------------|----------------|----------|-----------|-----------|-----------|-------|
| FWA 140HP Tractor | 125000 | 400 hr | 20 | 39106 | 10.74 /hr | 9.23 /hr | 12.35 /hr | |
| FWA 180HP Tractor | 169300 | 500 hr | 15 | 48623 | 16.09 /hr | 9.81 /hr | 16.73 /hr | |
| 4WD 340HP Tractor | 223100 | 500 hr | 15 | 64074 | 21.20 /hr | 12.92 /hr | 12.60 /hr | |
| SP Combine (base unit) | 271000 | 250 hr | 12 | 65426 | 68.52 /hr | 30.28 /hr | 42.70 /hr | |
| Tandem Truck (used) | 37300 | 150 hr | 15 | 11900 | 11.29 /hr | 7.38 /hr | 7.53 /hr | |
| Semi & Trailer (used) | 41800 | 150 hr | 10 | 12000 | 19.87 /hr | 8.07 /hr | 9.20 /hr | |
| Pick-up Truck | 29500 | 300 hr | 10 | 5800 | 7.90 /hr | 2.65 /hr | 3.40 /hr | |
| Swather 30 ft | 29400 | 1000 ac | 20 | 6971 | 1.12 /ac | 0.82 /ac | 0.48 /ac | 13.1 |
| Sprayer 90 ft | 37300 | 5000 ac | 10 | 18559 | 0.38 /ac | 0.25 /ac | 0.48 /ac | 42.5 |
| Chisel Plow 38 ft | 41600 | 3000 ac | 15 | 24336 | 0.38 /ac | 0.49 /ac | 0.92 /ac | 19.6 |
| Field Cultivator 48 ft | 47700 | 3000 ac | 15 | 27862 | 0.44 /ac | 0.57 /ac | 0.84 /ac | 24.7 |
| Tandem Disk 28 ft | 33000 | 800 ac | 20 | 9442 | 1.47 /ac | 1.19 /ac | 0.84 /ac | 13.6 |
| Heavy Harrow 70 ft | 29800 | 2000 ac | 20 | 17400 | 0.31 /ac | 0.53 /ac | 0.33 /ac | 39.7 |
| Row-crop cultivator 12-22 | 14300 | 800 ac | 15 | 7847 | 0.54 /ac | 0.63 /ac | 0.73 /ac | 8.5 |
| Air Seeder 40 ft | 173800 | 2400 ac | 10 | 88823 | 3.53 /ac | 2.46 /ac | 6.01 /ac | 17.0 |
| Planter 24-22 | 130100 | 1600 ac | 15 | 54074 | 3.17 /ac | 2.59 /ac | 4.90 /ac | 15.6 |
| Bean cutter | 12900 | 400 ac | 20 | 3641 | 1.16 /ac | 0.93 /ac | 0.70 /ac | 6.5 |
| Corn head 12R w/chopper | 112700 | 1000 ac | 15 | 21579 | 6.07 /ac | 3.02 /ac | 2.38 /ac | 7.5 |
| Grain head w/pu | 15000 | 800 ac | 20 | 1470 | 0.84 /ac | 0.46 /ac | 0.24 /ac | 10.2 |
| Grain str. cut 30 ft | 25000 | 1000 ac | 15 | 5083 | 1.33 /ac | 0.68 /ac | 0.39 /ac | 10.2 |
| Head w/sunf pans 30 ft | 30100 | 600 ac | 20 | 3079 | 2.25 /ac | 1.24 /ac | 0.47 /ac | 10.2 |
| Flex head 30 ft | 37100 | 1000 ac | 20 | 3400 | 1.68 /ac | 0.91 /ac | 0.57 /ac | 10.2 |
| Head w/drybean pickups | 30100 | 400 ac | 20 | 3207 | 3.37 /ac | 1.88 /ac | 0.53 /ac | 8.9 |
| Grain Cart | 29300 | 100 hr | 20 | 5000 | 12.15 /hr | 7.72 /hr | 7.40 /hr | |
| Grain auger | 12200 | 50 hr | 20 | 710 | 11.49 /hr | 5.81 /hr | 4.60 /hr | |

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