

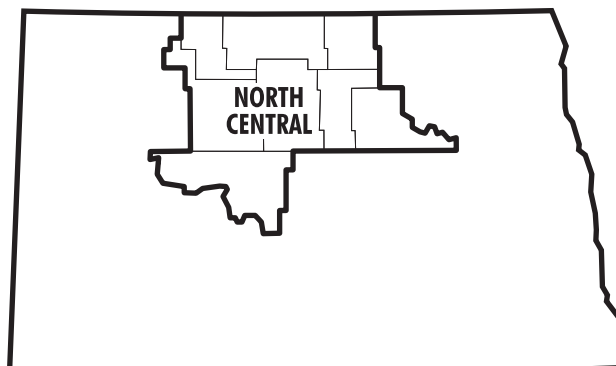
Farm Management Planning Guide



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Projected 2009 Crop Budgets North Central North Dakota

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The 2009 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 2009 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.

NDSU
Extension Service

North Dakota State University, Fargo, ND 58105

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.

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.

Direct and counter-cyclical payments under the Farm Bill are 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 are \$9.00 per acre when averaged over all crop acreage. Counter-cyclical payments, which occur if the national average price of program crops are below a certain level, are not expected with the price levels used in the budgets.

Primary Assumptions:

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

The budgets for the South West, North West, South Central and North Central regions typically represent production systems where soil disturbance only occurs at seeding.

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 2001-2007, after the low and high yield years are removed. Yields for safflower, yellow mustard, buckwheat, millet, rye, lentils 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 - 42 lb
 Phosphorus - 8 ppm
 Potassium - 363 ppm

Fertilizer prices:

Nitrogen - .54/lb
 Phosphorus - .66/lb
 Potassium - .70/lb

Seed Prices:

Spring Wheat 9.40/bu
 Durum 10.25/bu
 Barley 7.60/bu
 Corn grain RR/Bt 2.34/thou.kern.
 Corn grain RR 2.03/thou.kern.
 Soybean RR 40.00/50 lb
 Dry Beans .84/lb
 Oil Sunflower 1.07/thou.kern.
 Conf. Sunflower 1.95/thou.kern.
 Canola 7.90/lb
 Flax 14.00/bu
 Field Peas 11.00/bu
 Oats 4.40/bu
 Lentils .38/lb
 Mustard 1.25/lb
 Buckwheat .50/lb
 Millet .20/lb
 Winter Wheat 8.75/bu
 Rye 5.50/bu

Fuel prices:

Diesel 2.10/gal
 Gas 1.90/gal

Lubrication charge: 15% of fuel cost

Crop Insurance: Coverage levels are 70% on all insurable crops. MPC estimates are used, except for RA-HPO on all wheat, soybeans and canola.

Miscellaneous: soil testing, machinery rent and custom work.

Operating Interest: Direct costs charged 5.50% 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, \$2 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	34		32	
Market Price	5.90		7.24*	
MARKET INCOME	200.60		231.68	
DIRECT COSTS				
-Seed	14.10		20.50	
-Herbicides	21.00		21.00	
-Fungicides**	5.50		5.50	
-Insecticides***	0.00		0.00	
-Fertilizer	52.60		48.17	
-Crop Insurance	11.00		10.00	
-Fuel & Lubrication	9.81		9.75	
-Repairs	12.46		12.42	
-Drying	0.00		0.00	
-Miscellaneous	1.50		1.50	
-Operating Interest	3.52		3.54	
SUM OF LISTED DIRECT COSTS	131.48		132.39	
INDIRECT (FIXED) COSTS				
-Misc. Overhead	4.87		4.84	
-Machinery Depreciation	14.62		14.56	
-Machinery Investment	8.58		8.55	
-Land Taxes	0.00		0.00	
-Land Investment	38.40		38.40	
SUM OF LISTED INDIRECT COSTS	66.47		66.35	
SUM OF ALL LISTED COSTS	197.96		198.74	
RETURN TO LABOR & MANAGEMENT	2.64		32.94	
LISTED COSTS PER BUDGET UNIT	(bu):		(bu):	
-Direct Costs	3.87		4.14	
-Indirect Costs	1.96		2.07	
-Total Costs	5.82		6.21	

Wheat notes:

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

**Includes seed treatment (\$1.50-\$2) and early season foliar fungicide (\$3-\$4.50). Late season fungicide, often not warranted in this region, would cost \$6-\$12, plus application. Trials consistently show yield response of 5-10% with early season fungicide, IF wheat planted into residue, and 15-20% with late application IF weather favors disease development.

***Orange wheat blossom midge insecticide would cost about \$5 per acre plus application.

Malting Barley

Corn Grain

	Per Acre	Your Figures	Per Acre	Your Figures
Market Yield	56	_____	80	_____
Market Price	4.12*	_____	3.45	_____
MARKET INCOME	230.72	_____	276.00	_____
DIRECT COSTS				
-Seed	11.40	_____	51.26*	_____
-Herbicides	16.50	_____	17.00	_____
-Fungicides	1.50	_____	0.00	_____
-Insecticides	0.00	_____	0.00	_____
-Fertilizer	54.79	_____	68.60	_____
-Crop Insurance	5.90	_____	18.80**	_____
-Fuel & Lubrication	11.32	_____	13.99	_____
-Repairs	13.49	_____	15.35	_____
-Drying	0.00	_____	16.00	_____
-Miscellaneous	1.50	_____	1.50	_____
-Operating Interest	3.20	_____	5.57	_____
SUM OF LISTED DIRECT COSTS	119.60	=====	208.06	=====
INDIRECT (FIXED) COSTS				
-Misc. Overhead	5.45	_____	6.51	_____
-Machinery Depreciation	16.43	_____	22.34	_____
-Machinery Investment	9.87	_____	12.84	_____
-Land Taxes	0.00	_____	0.00	_____
-Land Investment	38.40	_____	38.40	_____
SUM OF LISTED INDIRECT COSTS	70.15	=====	80.09	=====
SUM OF ALL LISTED COSTS	189.74	_____	288.16	_____
RETURN TO LABOR & MANAGEMENT	40.98	_____	(12.16)	_____
LISTED COSTS PER BUDGET UNIT	(bu):		(bu):	
-Direct Costs	2.14	_____	2.60	_____
-Indirect Costs	1.25	_____	1.00	_____
-Total Costs	3.39	_____	3.60	_____

Barley notes:

*On average, about 45% of production is feed quality. Use \$2.75 estimate for feed barley price.

Corn notes:

*RR/Bt corn is planted for corn borer control on 80 percent of acres and RR corn without Bt Trait is on 20 percent of acres for corn borer refuge. Cost includes insecticide seed treatment for wireworm, rootworm, white grub and suppression of cutworm.

**Crop insurance only available by written agreement in some counties of region.

Soybeans

Drybeans*

	Per Acre	Your Figures	Per Acre	Your Figures
Market Yield	26	_____	1330	_____
Market Price	8.09	_____	0.24	_____
MARKET INCOME	210.34	_____	319.20	_____
DIRECT COSTS				
-Seed	46.56*	_____	42.00	_____
-Herbicides	17.00	_____	33.30**	_____
-Fungicides	0.00	_____	0.00	_____
-Insecticides	0.00	_____	0.00	_____
-Fertilizer	9.59	_____	28.70	_____
-Crop Insurance	12.00	_____	19.50	_____
-Fuel & Lubrication	8.23	_____	12.01	_____
-Repairs	11.09	_____	14.84	_____
-Drying	0.00	_____	0.00	_____
-Miscellaneous	6.00	_____	9.75	_____
-Operating Interest	3.04	_____	4.40	_____
SUM OF LISTED DIRECT COSTS	113.51	=====	164.50	=====
INDIRECT (FIXED) COSTS				
-Misc. Overhead	4.50	_____	5.41	_____
-Machinery Depreciation	13.69	_____	19.00	_____
-Machinery Investment	7.59	_____	10.74	_____
-Land Taxes	0.00	_____	0.00	_____
-Land Investment	38.40	_____	38.40	_____
SUM OF LISTED INDIRECT COSTS	64.19	=====	73.55	=====
SUM OF ALL LISTED COSTS	177.70	_____	238.05	_____
RETURN TO LABOR & MANAGEMENT	32.64	_____	81.15	_____
LISTED COSTS PER BUDGET UNIT	(bu):		(lb):	
-Direct Costs	4.37	_____	0.12	_____
-Indirect Costs	2.47	_____	0.06	_____
-Total Costs	6.83	_____	0.18	_____

Soybean notes:

*Roundup (glyphosate) resistant soybeans.

Drybean notes:

*Acreage limitations exist under the farm bill. The general rule is drybean acres can not be planted on base acres. If farm or producer has drybean history, drybean can be planted on base acres but government payments on those acres will be forfeited.

**Includes dessicant prior to straight cutting.

Oil Sunflower

Confectionery Sunflower

	Per Acre	Your Figures	Per Acre	Your Figures
Market Yield	1450		1370	
Market Price	0.154		0.208	
MARKET INCOME	223.30		284.96	
DIRECT COSTS				
-Seed	22.47*		35.10*	
-Herbicides	27.50		27.50	
-Fungicides	0.00		0.00	
-Insecticides	6.00**		12.00**	
-Fertilizer	42.27		38.69	
-Crop Insurance	10.90		14.20	
-Fuel & Lubrication	11.34		11.27	
-Repairs	13.12		13.08	
-Drying	2.90		2.74	
-Miscellaneous	7.25		13.00	
-Operating Interest	3.95		4.61	
SUM OF LISTED DIRECT COSTS	147.71		172.18	
INDIRECT (FIXED) COSTS				
-Misc. Overhead	5.55		5.52	
-Machinery Depreciation	17.33		17.25	
-Machinery Investment	10.53		10.49	
-Land Taxes	0.00		0.00	
-Land Investment	38.40		38.40	
SUM OF LISTED INDIRECT COSTS	71.81		71.66	
SUM OF ALL LISTED COSTS	219.52		243.84	
RETURN TO LABOR & MANAGEMENT	3.78		41.12	
LISTED COSTS PER BUDGET UNIT	(lb):		(lb):	
-Direct Costs	0.10		0.13	
-Indirect Costs	0.05		0.05	
-Total Costs	0.15		0.18	

Oil Sunflower notes:

*Cost includes seed treatment for control of wireworm and flea beetle, \$6.

**One spraying for head feeding insects (red seed weevil, lygus bug and banded moths). Custom application cost of \$5.75 is under "Miscellaneous."

Confectionery Sunflower notes:

*Cost includes seed treatment for control of wireworm and flea beetle, \$6.

**Two sprayings for head feeding insects (red seed weevil, lygus bug and banded moths) at about \$6 per application. Each custom application cost of \$5.75 is under "Miscellaneous."

Canola

Flax

	Per Acre	Your Figures	Per Acre	Your Figures
Market Yield	1360	_____	20	_____
Market Price	0.159	_____	7.73	_____
MARKET INCOME	216.24	_____	154.60	_____
DIRECT COSTS				
-Seed	39.50*	_____	9.80	_____
-Herbicides	18.00	_____	25.50*	_____
-Fungicides	0.00**	_____	0.00	_____
-Insecticides	0.00	_____	0.00	_____
-Fertilizer	66.15***	_____	29.50	_____
-Crop Insurance	12.60	_____	9.10	_____
-Fuel & Lubrication	9.94	_____	9.45	_____
-Repairs	12.45	_____	12.39	_____
-Drying	0.00	_____	0.00	_____
-Miscellaneous	1.50	_____	1.50	_____
-Operating Interest	4.40	_____	2.67	_____
SUM OF LISTED DIRECT COSTS	164.54	=====	99.91	=====
INDIRECT (FIXED) COSTS				
-Misc. Overhead	4.83	_____	4.71	_____
-Machinery Depreciation	14.84	_____	14.31	_____
-Machinery Investment	8.69	_____	8.46	_____
-Land Taxes	0.00	_____	0.00	_____
-Land Investment	38.40	_____	38.40	_____
SUM OF LISTED INDIRECT COSTS	66.76	=====	65.88	=====
SUM OF ALL LISTED COSTS	231.30	_____	165.79	_____
RETURN TO LABOR & MANAGEMENT	(15.06)	_____	(11.19)	_____
LISTED COSTS PER BUDGET UNIT	(lb):		(bu):	
-Direct Costs	0.12	_____	5.00	_____
-Indirect Costs	0.05	_____	3.29	_____
-Total Costs	0.17	_____	8.29	_____

Canola notes:

*Cost includes insecticide seed treatment for flea beetles, \$6.

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

***Fertilizer cost includes 20 lbs sulfur.

Flax notes:

*Includes pre-harvest dessicant on one-half of acres.

Field Peas

Oats

	Per Acre	Your Figures	Per Acre	Your Figures
Market Yield	34		60	
Market Price	6.48*		2.29	
MARKET INCOME	220.32		137.40	
DIRECT COSTS				
-Seed	33.00		8.80	
-Herbicides	25.90		9.00	
-Fungicides	0.00		0.00	
-Insecticides	0.00		0.00	
-Fertilizer	14.53		48.34	
-Crop Insurance	14.10		8.40	
-Fuel & Lubrication	9.69		11.44	
-Repairs	12.89		13.55	
-Drying	0.00		0.00	
-Miscellaneous	6.25		1.50	
-Operating Interest	3.20		2.78	
SUM OF LISTED DIRECT COSTS	119.56		103.82	
INDIRECT (FIXED) COSTS				
-Misc. Overhead	4.87		5.50	
-Machinery Depreciation	15.82		16.55	
-Machinery Investment	8.57		9.93	
-Land Taxes	0.00		0.00	
-Land Investment	38.40		38.40	
SUM OF LISTED INDIRECT COSTS	67.65		70.39	
SUM OF ALL LISTED COSTS	187.20		174.21	
RETURN TO LABOR & MANAGEMENT	33.12		(36.81)	
LISTED COSTS PER BUDGET UNIT	(bu):		(bu):	
-Direct Costs	3.52		1.73	
-Indirect Costs	1.99		1.17	
-Total Costs	5.51		2.90	

Field Pea notes:

*Food quality price. Use \$3.75 price estimate for feed quality peas.

Lentils

Yellow Mustard

	Per Acre	Your Figures	Per Acre	Your Figures
Market Yield	1250	_____	950	_____
Market Price	0.240	_____	0.294	_____
MARKET INCOME	300.00	_____	279.30	_____
DIRECT COSTS				
-Seed	26.60	_____	15.00	_____
-Herbicides	31.00*	_____	17.00	_____
-Fungicides	0.00	_____	0.00	_____
-Insecticides	0.00	_____	6.00*	_____
-Fertilizer	8.90	_____	35.67	_____
-Crop Insurance	30.80	_____	0.00	_____
-Fuel & Lubrication	9.59	_____	10.11	_____
-Repairs	13.42	_____	12.84	_____
-Drying	0.00	_____	0.00	_____
-Miscellaneous	6.25	_____	1.50	_____
-Operating Interest	3.48	_____	2.70	_____
SUM OF LISTED DIRECT COSTS	130.04	=====	100.82	=====
INDIRECT (FIXED) COSTS				
-Misc. Overhead	4.93	_____	4.93	_____
-Machinery Depreciation	16.08	_____	15.21	_____
-Machinery Investment	8.84	_____	9.26	_____
-Land Taxes	0.00	_____	0.00	_____
-Land Investment	38.40	_____	38.40	_____
SUM OF LISTED INDIRECT COSTS	68.25	=====	67.80	=====
SUM OF ALL LISTED COSTS	198.29	_____	168.62	_____
RETURN TO LABOR & MANAGEMENT	101.71	_____	110.68	_____
LISTED COSTS PER BUDGET UNIT				
	(lb):		(lb):	
-Direct Costs	0.10	_____	0.11	_____
-Indirect Costs	0.05	_____	0.07	_____
-Total Costs	0.16	_____	0.18	_____

Lentil notes:

*Includes pre-harvest dessicant.

Yellow Mustard notes:

*Insecticide seed treatment for flea beetles.

Buckwheat

Millet

	Per Acre	Your Figures	Per Acre	Your Figures
Market Yield	950	_____	1300	_____
Market Price	0.192	_____	0.065	_____
MARKET INCOME	182.40	_____	84.50	_____
DIRECT COSTS				
-Seed	25.00	_____	5.00	_____
-Herbicides	16.00	_____	9.00	_____
-Fungicides	0.00	_____	0.00	_____
-Insecticides	0.00	_____	0.00	_____
-Fertilizer	19.03	_____	18.52	_____
-Crop Insurance	0.00	_____	0.00	_____
-Fuel & Lubrication	9.81	_____	10.39	_____
-Repairs	12.38	_____	12.99	_____
-Drying	0.00	_____	0.00	_____
-Miscellaneous	1.50	_____	1.50	_____
-Operating Interest	2.30	_____	1.58	_____
SUM OF LISTED DIRECT COSTS	86.02	=====	58.98	=====
INDIRECT (FIXED) COSTS				
-Misc. Overhead	4.80	_____	5.05	_____
-Machinery Depreciation	14.85	_____	15.49	_____
-Machinery Investment	8.74	_____	9.40	_____
-Land Taxes	0.00	_____	0.00	_____
-Land Investment	38.40	_____	38.40	_____
SUM OF LISTED INDIRECT COSTS	66.79	=====	68.34	=====
SUM OF ALL LISTED COSTS	152.81	_____	127.32	_____
RETURN TO LABOR & MANAGEMENT	29.59	_____	(42.82)	_____
LISTED COSTS PER BUDGET UNIT	(lb):		(lb):	
-Direct Costs	0.09	_____	0.05	_____
-Indirect Costs	0.07	_____	0.05	_____
-Total Costs	0.16	_____	0.10	_____

notes:

Winter Wheat

Rye

	Per Acre	Your Figures	Per Acre	Your Figures
Market Yield	44*	_____	40	_____
Market Price	5.08	_____	3.61	_____
MARKET INCOME	223.52	_____	144.40	_____
DIRECT COSTS				
-Seed	8.75	_____	6.60	_____
-Herbicides	17.00	_____	7.00	_____
-Fungicides	9.00	_____	0.00	_____
-Insecticides	0.00	_____	0.00	_____
-Fertilizer	74.74	_____	65.88	_____
-Crop Insurance	11.00	_____	5.80	_____
-Fuel & Lubrication	9.90	_____	9.82	_____
-Repairs	11.95	_____	11.67	_____
-Drying	0.00	_____	0.00	_____
-Miscellaneous	6.00	_____	6.00	_____
-Operating Interest	4.08	_____	3.10	_____
SUM OF LISTED DIRECT COSTS	152.42	=====	115.87	=====
INDIRECT (FIXED) COSTS				
-Misc. Overhead	4.80	_____	4.77	_____
-Machinery Depreciation	14.29	_____	14.19	_____
-Machinery Investment	8.04	_____	8.09	_____
-Land Taxes	0.00	_____	0.00	_____
-Land Investment	38.40	_____	38.40	_____
SUM OF LISTED INDIRECT COSTS	65.53	=====	65.45	=====
SUM OF ALL LISTED COSTS	217.95	_____	181.32	_____
RETURN TO LABOR & MANAGEMENT	5.57	_____	(36.92)	_____
LISTED COSTS PER BUDGET UNIT				
(bu):	(bu):		(bu):	
-Direct Costs	3.46	_____	2.90	_____
-Indirect Costs	1.49	_____	1.64	_____
-Total Costs	4.95	_____	4.53	_____

Winter Wheat notes:

*Yield is per harvested acre, 2001-2007 acreage abandonment averaged 12%.

2009 Machinery List

Machine	Purch. Price	Annual Use	Years to trade	Trade in	Deprec.	Invest.	Repairs	Ac/hr
2WD 100HP Tractor	59900	400 hr	20	19314	5.07 /hr	4.46 /hr	6.10 /hr	
2WD 160HP Tractor	98600	500 hr	15	29193	9.25 /hr	5.75 /hr	10.05 /hr	
4WD 280HP Tractor	144600	500 hr	15	42789	13.57 /hr	7.43 /hr	8.41 /hr	
SP Combine (base unit)	184200	250 hr	12	45827	46.12 /hr	20.70 /hr	29.91 /hr	
Tandem Truck (used)	31000	150 hr	15	10300	9.20 /hr	6.20 /hr	6.33 /hr	
Semi & Trailer (used)	37000	150 hr	10	10600	17.60 /hr	7.14 /hr	7.87 /hr	
Pick-up Truck	21500	300 hr	10	4400	5.70 /hr	1.94 /hr	2.93 /hr	
Swather 25 ft	19700	1000 ac	20	4674	0.75 /ac	0.55 /ac	0.34 /ac	12.1
Sprayer 90 ft	30600	5000 ac	10	13828	0.35 /ac	0.25 /ac	0.39 /ac	42.5
Chisel Plow 35 ft	28700	1600 ac	15	16787	0.50 /ac	0.64 /ac	0.77 /ac	16.2
Field Cultivator 45 ft	36000	3000 ac	15	19866	0.36 /ac	0.42 /ac	0.64 /ac	23.2
Heavy Harrow 70 ft	25000	2000 ac	20	14581	0.26 /ac	0.45 /ac	0.28 /ac	39.7
Air Seeder 35 ft	93400	2200 ac	10	44034	2.29 /ac	1.72 /ac	3.70 /ac	14.8
Planter 12-30	45900	800 ac	20	15256	1.92 /ac	1.72 /ac	2.53 /ac	10.6
Corn head 6-30	28800	400 ac	20	2852	3.26 /ac	1.79 /ac	0.80 /ac	5.7
Grain head w/pu	12600	800 ac	15	2611	0.83 /ac	0.43 /ac	0.24 /ac	8.5
Grain str. cut 25 ft	17000	1600 ac	8	6819	0.80 /ac	0.33 /ac	0.31 /ac	8.5
Head w/sunf pans 25 ft	21200	400 ac	20	2235	2.37 /ac	1.32 /ac	0.39 /ac	8.5
Soybeans str. cut 25 ft	24700	800 ac	20	2285	1.40 /ac	0.76 /ac	0.46 /ac	8.5
Rock picker	18000	50 hr	20	5730	0.41 /ac	0.36 /ac	0.27 /ac	29.1
Grain auger	7800	50 hr	20	590	7.21 /hr	3.78 /hr	4.00 /hr	

Example Sequence of Operations

Field operations sequence for spring wheat and durum

OP. NO.	DESCRIPTION	(FEET) WIDTH	(MPH) SPEED	(AC/HR) Fld Cap	(\$/AC) FUEL & LUBE	(\$/AC) EST. REPAIRS
1	NH ₃ Application	45	5.0	23.2	\$ 1.28	\$ 1.00
2	Pick Rocks				0.37	0.48
3	Spray (burn-down)	90	6.0	42.5	0.25	0.53
4	Plant	35	5.0	14.8	2.00	4.27
5	Spray (120%)	90	6.0	42.5	0.30	0.64
6	Combine	25	4.0	8.5	2.88	3.84
7	Heavy Harrow	70	5.5	39.7	0.43	0.53
	Trucks*				1.05	0.56
	Grain auger (pto)				0.15	0.08
	Pickup truck allocation				1.10	0.53
Total					9.81	12.46

* Truck costs will vary between crops.

For more information on this and other topics, see: www.ag.ndsu.edu