

Crop Budgets

Nebraska – 2010

Edited by

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This contains information on how the *2010 Nebraska Crop Production Budgets* (EC872) were prepared and tables of input costs used to develop them.

- Crop budgeting procedures
- Machinery operation and ownership costs
- Materials and services prices
- Crop budget production cost summary

Nebraska Crop Budgets, 2010 (EC872), as well as related publications, can be viewed online at <http://extension.unl.edu/publications>.

Table 1. Power unit cost data used for 2010 budgets

<i>Name</i>	<i>List Price</i>	<i>Age</i>	<i>Tach Hours</i>	<i>Est. Hours per Year</i>
100 HP Tractor	\$ 68,000	10	2,500	200
175 HP Tractor	141,262	5	1,500	300
Combine	200,000	5	1,000	200
Windrower	86,912	5	1,500	300
Diesel Pump for Pivot	15,000	3	2,400	800
Diesel Pump for Pipe	15,000	3	2,400	800
Electric Pump	10,000	5	5,000	1,000

Table 2. Machinery cost data used for 2010 budgets

<i>Operation Name</i>	<i>Machine or Head List Price</i>	<i>Annual Use</i>	<i>Units per Hour</i>	<i>Energy per Hour</i>
Anhy Apply (supplier)	Not Owned	Not Owned	40.00 ac	0.00 gal
Anhydrous Apply	\$25,000	500 ac	7.86 ac	6.36 gal
Cart	9,322	90,000 bu	2,600 bu	7.00 gal
Chisel	40,000	500 ac	11.09 ac	8.26 gal
Chop Silage	Custom			
Chop Stalks	18,000	500 ac	12.34 ac	5.74 gal
Combine dryland	25,762	1,000 ac	7.00 ac	10.47 gal
Combine Irrigated Corn	40,000	1,000 ac	4.00 ac	10.50 gal
Combine Irrigated Dry Beans	10,000	300 ac	4.75 ac	8.00 gal
Combine Irrigated Soybeans	28,812	1,000 ac	6.00 ac	10.50 gal
Combine Irrigated Sorghum	28,812	1,000 ac	7.33 ac	10.50 gal
Combine Rainfed Corn	40,000	1,000 ac	5.50 ac	10.50 gal
Combine Rainfed Soybeans	28,812	1,000 ac	5.64 ac	10.50 gal
Combine Rainfed Sorghum	28,812	1,000 ac	7.00 ac	10.50 gal
Combine Rainfed Sunflowers	30,000	300 ac	7.00 ac	10.50 gal
Corrugate	30,183	300 ac	7.02 ac	4.39 gal
Disc	45,905	2,000 ac	10.91 ac	8.29 gal
Ditch Irrigation	NA	1,000 Al	1.80 Al	0.00 gal
Double Windrows	10,000	150 ac	12.39 ac	2.11 gal
Drill	26,953	1,000 ac	7.33 ac	4.99 gal
Dry Grain	Custom			
Fallow Master	30,183	1,000 ac	21.29 ac	8.62 gal
Field Cultivation	30,183	2,000 ac	21.29 ac	8.20 gal
Grass Drill	7,668	160 ac	4.91 ac	4.29 gal
Harrow	15,470	1,000 ac	18.59 ac	2.05 gal
Hill/Ditch	10,816	1,000 ac	6.50 ac	5.33 gal
Hoe	7,210	3,000 ac	14.67 ac	3.67 gal
Large Round Bale	28,617	1,250 ton	13.32 ton	2.88 gal
Large Square Bale	91,781	2,500 ton	16.07 ton	6.19 gal
Lift Beets	75,000	500 ac	5.12 ac	6.19 gal
Load Large Square	12,725	3,000 ton	9.00 ton	3.85 gal
Move Large Bale	12,725	1,250 ton	12.22 ton	3.99 gal
Move Large Round	12,725	1,250 ton	12.11 ton	3.98 gal
No-Till Drill	40,000	1,000 ac	6.84 ac	6.07 gal
Pickett Windrowers	25,000	300 ac	7.02 ac	6.07 gal
Pipe D125' Lift	21,401	2,600 Al	2.25 Al	3.03 gal
Pivot D 125' Lift	50,000	2,600 AI	1.80 AI	3.34 gal
Pivot E 125' Lift	50,000	2,600 Al	1.80 Al	47.78 kw
Plant	40,000	1,000 ac	6.00 ac	2.73 gal
Plant Narrow Row	40,000	1,000 ac	4.11 ac	2.58 gal

Table 2. Machinery cost data used for 2010 budgets (continued)

<i>Operation Name</i>	<i>Machine or Head List Price</i>	<i>Annual Use</i>	<i>Units per Hour</i>	<i>Energy per Hour</i>
Plant No-Till	40,000	1,000 ac	5.39 ac	3.38 gal
Ridge Cultivation	20,000	1,000 ac	6.00 ac	5.33 gal
Ridge Plant	40,000	1,000 ac	5.37 ac	3.41 gal
Rod Weeder	24,035	1,000 ac	13.20 ac	5.35 gal
Roll	NA	300 ac	9.00 ac	5.46 gal
Row Crop Cultivation	14,409	1,000 ac	6.00 ac	3.06 gal
Seeder/Packer	25,000	300 ac	4.91 ac	4.29 gal
Small Square Bale	23,560	1,250 Ton	3.92 Ton	1.91 gal
Spray	10,000	2,500 ac	22.00 ac	2.64 gal
Spray (on disc)	20,553	2,000 ac	66.00 ac	0.00 gal
Spray Liquid Fertilizer	20,553	1,000 ac	13.47 ac	1.68 gal
Spread Manure	Custom			
Spread, Fertilizer	Not Owned	Not Owned	12.70 ac	3.86 gal
Stack Small Square	12,725	1,250 ton	3.13 ton	1.76 gal
Subsoil	11,193	500 ac	8.25 ac	8.25 gal
Swath/Condition Hay	Incl. in Power	500 ac	8.05 ac	5.00 gal
Till-Plant Beets	50,000	300 ac	7.17 ac	9.11 gal
Top Beets	28,971	300 ac	5.79 ac	3.94 gal
Truck	Custom			
Turn Windrows	17,850	300 ac	11.40 ac	2.10 gal
Weed	Custom			
Windrow Grain	Incl. in Power	200 ac	9.50 ac	3.28 gal

Table 3. Material prices used for 2010 budgets

<i>Item</i>	<i>Price</i>	<i>Item</i>	<i>Price</i>
Custom Operation Rates		Insecticides	
Aerial Spray	\$7.50/ac	Brigade	\$1.20/oz
Bale Lg Sq 1200 lb	10.00/bale	Capture LFR	2.15/oz
Chop, Haul, Pack	6.00/ton	Force 3G Smart Box	6.00/lb
Dry 4 Points Removed	0.30/bu	Lorsban 15 G	2.35/lb
Haul Beets	3.00/ton	Mustang Max	2.00/oz
Haul Grain, bu	0.13/bu	Regent 4 SC	5.90/oz
Haul Grain, cwt (Dry Beans)	0.20/cwt	Warrior 11/Zeon	4.00/oz
Haul Grain (Millet)	0.20/cwt		
Haul Grain (Sunflower)	0.25/cwt	Herbicides	
Haul & Apply Manure	2.00/ton	2,4-D Amine	\$2.00/pt
Spray	6.00/ac	2,4-D Ester 4#	2.50/pt
Weeding/Thinning	36.00/ac	21-0-0-26S	0.40/lb
		Aim EW (was Aim)	7.20/oz
Rental		Ally Extra	8.00/oz
Grass Drill	\$8.00/ac	AAtrex 4L	6.00/qt
Seeder-Packer	10.00/ac	Authority First (was Authority)	4.40/oz
		Balance Flexx	4.50/oz
Fertilizers		Bicep II Magnum	12.50/qt
28-0-0	\$0.32/lb	Crop Oil Concentrate	1.13/pt
10-34-0	1.90/gal	Dicamba	0.44/oz
10-34-0-1Z	2.15/gal	Dual II Magnum	16.25/pt
11-52-0	0.22/lb	Expert	11.00/qt
46-0-0	0.43/lb N	Glyphosate	0.16/oz
82-0-0	0.27/lb N	Gramoxone Inteon	4.75/pt
Uncomposted Manure	6.00/ton	Landmaster BW	0.16/oz
		Lumax	17.50/qt
Fungicides		NIS	0.17/oz
Headline	\$3.00/oz	Peak	14.50/oz
Tilt	3.00/oz	Prowl H ₂ O	5.25/pt
		Pursuit	5.16/oz
Seed		Pursuit Plus	7.88/pt
Alfalfa w/Inoculant	\$4.20/lb	Select max	1.17/oz
Corn	175.00/bag	Spartan 4 F	4.00/oz
Corn Bt ECB	225.00/bag	Spirit	13.00/oz
Corn Bt ECB & RW	225.00/bag		
Corn RR ECB & RW	250.00/bag	Crop Insurance	
Corn SmartStax	300.00/bag	Corn – Irrigated	\$21.00/ac
Edible Beans	50.00/ac	Corn – Rainfed	11.00/ac
Grass	2.80/lb	Soybeans – Irrigated	21.00/ac
Millet	0.60/lb	Soybeans – Rainfed	11.00/ac
Oats (alone)	8.00/bu	Drybeans	21.00/ac
Oats (With Alfalfa)	8.00/bu	Sugar Beets	30.00/ac
RR Soybeans	43.00/bag	Grain Sorghum	21.00/ac
Soybeans 2 yield	58.00/bag		
Sorghum Safened/Seed	2.00/lb		
Sorghum Sudan	0.70/lb		
Sugarbeets RR Poncho	130.00/ac		
Sunflower	3.90/lb		
Wheat	0.13/lb		
Wheat (Certified)	0.20/lb		
Wheat (Certified with Dividend Extreme)	0.28/lb		

Table 3. Material prices used for 2010 budgets (continued)

<i>Item</i>	<i>Price</i>	<i>Item</i>	<i>Price</i>
Scouting		Other	
Corn – Irrigated	\$9.00/ac	Electrical Connect Fees	\$3.25/ac
Corn – Rainfed	6.00/ac	Electrical Usage Charge	0.0783/Kwh
Soybeans – Irrigated	8.75/ac	Electricity (Fence/Water)	2.00/ac
Soybeans – Rainfed	6.00/ac	Water Charge	35.00/ac
Drybeans	6.00/ac	Twine Large Bale	0.59/bale
Sugar Beets	6.00/ac	Twine Large Round	0.70/bale
Grain Sorghum	6.00/ac	Twine Large Square	0.45/bale
Wheat	6.00/ac	Twine Small Square	0.14/bale
Wheat	8.00/ac	Fence/water repairs	2.00/ac
Real Estate		Move Cattle	12.00/hr
Rainfed (State)	\$1,441/ac	Taxes, Insurance, and Housing	2 % of value
Rainfed (Panhandle)	464/ac	Investment Interest Rate	4.00%
Gravity (State)	3,109/ac	Operations Borrowing Rate	8.00%
Gravity (Panhandle)	1,495/ac	Operations Borrowing Time	6 months
Pivot (State)	3,304/ac	Real Estate Tax Rate	1% of value
Pivot (Panhandle)	1,535/ac		

Table 4. Conversion of diesel to electricity, propane, gasoline, and natural gas*.

<i>Energy Source</i>	<i>Units</i>	<i>Multiplier</i>
Electricity	Kilowatt- hours	14.12
Propane	Gallons	1.814
Gasoline	Gallons	1.443
Natural Gas	1000 cubic feet	0.2026

*(Source: *Estimating the Savings From Improving Pumping Plant Performance* by Darrel Martin)

Table 5. Table for adjusting the amount of diesel fuel required for center pivots for lifts and pressures other than the 125 feet of lift and 35 psi used in the budgets. Gallons of diesel fuel required to pump an acre inch of water at pump performance ratings of 100 percent*. (From *Estimating the Savings From Improving Pumping Plant Performance* by Derrel Martin).

<i>Lift</i>	<i>Pressure at Pump, psi</i>							
<i>Feet</i>	<i>10</i>	<i>20</i>	<i>30</i>	<i>35</i>	<i>40</i>	<i>50</i>	<i>60</i>	<i>80</i>
0	0.21	0.42	0.63	0.74	0.84	1.05	1.26	1.69
25	0.44	0.65	0.86	0.97	1.07	1.28	1.49	1.91
50	0.67	0.88	1.09	1.20	1.30	1.51	1.72	2.14
75	0.89	1.11	1.32	1.43	1.53	1.74	1.95	2.37
100	1.12	1.33	1.54	1.65	1.75	1.97	2.18	2.60
125	1.35	1.56	1.77	1.88	1.98	2.19	2.40	2.83
150	1.58	1.79	2.00	2.11	2.21	2.42	2.63	3.05
200	2.03	2.25	2.46	2.57	2.67	2.88	3.09	3.51
250	2.49	2.70	2.91	3.02	3.12	3.33	3.54	3.97
300	2.95	3.16	3.37	3.48	3.58	3.79	4.00	4.42
350	3.40	3.61	3.82	3.93	4.03	4.25	4.46	4.88
400	3.86	4.07	4.28	4.39	4.49	4.70	4.91	5.33
*Multiplier when pumping plant performance rating is less than 100 percent								
Rating %	100	90	80	70	60	50		
Multiplier	1.00	1.11	1.25	1.43	1.67	2.00		