



## 2003 Corn Silage Production Budget <sup>1</sup> Conservation Tillage

ITEM	EXPLANATION			PRICE PER UNIT	YIELD (ton/A)			YOUR BUDGET
					12.5	16.5	20.5	
<b>RECEIPTS</b>								
Corn Silage <sup>2</sup>				\$23.00 /ton	\$288	\$380	\$472	_____
<b>VARIABLE COSTS</b>								
Seed	24000	28000	32000	1.10 /1000 kernels	26	31	35	_____
Fertilizer <sup>3</sup>								_____
N (lbs)	80	110	140	0.24 /lb	19	26	34	_____
P <sub>2</sub> O <sub>5</sub> (lbs)	40	50	65	0.24 /lb	10	12	16	_____
K <sub>2</sub> O(lbs)	60	75	110	0.13 /lb	8	10	14	_____
Lime(ton)		0.5		12 /ton	6	6	6	_____
Chemicals <sup>4</sup>					22	22	22	_____
Fuel, Oil, Grease <sup>5</sup>					8	8	8	_____
Repairs <sup>6</sup>					11	11	11	_____
Miscellaneous <sup>7</sup>					12	13	14	_____
Int. on Oper. Cap. <sup>8</sup>		5 mo.		9.0%	5	5	6	_____
Hired Labor <sup>9</sup>					0	0	0	_____
<b>TOTAL VARIABLE COSTS</b>					126	144	165	_____
				<b>-Per Acre</b>	10.10	8.72	8.07	_____
				<b>-Per Ton</b>				_____
<b>FIXED COSTS</b>								
Labor Charge <sup>9</sup>		5.5 hours		9.00 /hr	50	50	50	_____
Mach. And Equip. Charge <sup>10</sup>					39	39	39	_____
Land Charge <sup>11</sup>					50	70	90	_____
Management Charge		5% of gross revenue			14	19	24	_____
<b>TOTAL FIXED COSTS</b>					152	177	202	_____
<b>TOTAL COSTS</b>					279	321	367	_____
<b>TOTAL COSTS</b>					22.30	19.45	17.90	_____
<b>RETURN ABOVE VARIABLE COSTS</b>					161	236	306	_____
<b>RETURN ABOVE TOTAL COSTS</b>					9	59	104	_____
<b>RETURN TO LABOR AND MANAGEMENT <sup>12</sup></b>					73	127	178	_____

- <sup>1</sup> Does not include costs for storage.
- <sup>2</sup> Price based on 7.5 x the price of corn (grain) + \$5 handling charge.  
=7.5 x \$2.40/bu + \$5 = \$23/ton
- <sup>3</sup> Maintenance fertilizer only, corn-soybean rotation, 3.8% O.M., 20 CEC, and soil test values of 25 ppm P/A and 150 ppm K/A. Fertilization program assumes 6 bu. Grain = 1 T. silage.
- <sup>4</sup> Based on use of Bicep II Magnum.
- <sup>5</sup> See table below for specific calculations. Lubrication costs are assumed to be 15% of fuel costs.
- <sup>6</sup> See table below for specific calculations.
- <sup>7</sup> Includes supplies, utilities, soil tests, small tools, crop insurance, etc...
- <sup>8</sup> Interest on all variable costs for 5 months at 9% interest rate.
- <sup>9</sup> Part or all of labor may be a variable cost if paid labor varies with acres farmed.  
It's a fixed cost if labor costs do not change with acres farmed.
- <sup>10</sup> Reflects 1000 acres, conventional tillage. See table below for details.
- <sup>11</sup> Average based on 1999 data. Land charges vary throughout the state, check your local rates.
- <sup>12</sup> Return to labor and management is the revenue less total expenses except operator labor and management.  
It is a measure of the returns to the operator's labor and management.

---

### Machinery Inventory

---

	Number in inventory	Cost	Acres/Hr	Fuel* (\$/A)	Repairs (\$/A)
15 ft. Chisel Plow	1	\$7,800	8.5	0.60	0.28
28 ft. Field Cultivator	1	\$19,400	20.2	0.32	0.33
50 ft. Boom Sprayer	1	\$5,500	25.6	0.11	0.10
8 Row Planter	1	\$21,500	9.3	0.35	0.68
20 ft. Row Crop Cultivator	1	\$6,600	10.3	0.44	0.15
Forage Harvester	1	\$25,700	1.4	3.35	3.47
Forage Wagons	2	\$23,400	1.3	1.20	0.84
Fertilizer Spreader	1	\$10,400	23.80	0.11	0.23
160 HP Tractor		\$94,200			3.84
75 HP Tractor		\$30,300			1.14
Pickup Truck (1/2)		\$12,500		0.10	0.05
<b>Total per Acre</b>		<b>257,300</b>		<b>6.58</b>	<b>11.11</b>
Fixed Costs Rate	15%				
<b>Mach. And Equip Charge =</b>	<b>39</b>			<b>Price of Diesel Fuel =</b>	<b>\$1.00 /gal</b>

---

Machinery and Equipment charge = Total Machine Inventory Cost x Fixed Costs Rate / 1000 acres  
 =\$257,300 x 15% / 1000 acres = \$39/acre

Machines are all assumed to be new and in the first year of use. Older/used machines will likely have lower machinery costs. Size of operation will also effect cost of machinery per acre. For an analysis on machine costs for different sized operations, see economies of scale budgets in this publication

Fixed costs rate includes depreciation, interest, housing, and insurance.

\*Fuel calculations are based on the implement plus tractor.