

Economics of Strip till Corn into Wheat Stubble under Pivots and Linears

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With fuel prices soaring, producers growing corn after wheat under pivots may want to look to strip tillage as an option to save fuel, time, and money. This is how I envision the switch to strip till to work. After wheat harvest, producers would irrigate to get volunteer wheat to emerge. After volunteer emergence, producers would spray with glyphosate herbicide instead of disking. It is important to keep all volunteer wheat under control to reduce spreading of diseases such as barley yellow dwarf and wheat streak mosaic to other wheat in the area. In the fall, before it gets too wet, strip till the field using GPS or marking wheel tracks. In the spring, plant corn into the strips made. With strip till, producers would have the option of placing nutrients down each shank of the strip till unit or using traditional methods.

How much could this save producers? Assuming the producer would exchange a glyphosate application for one disking; eliminating plowing, another disking and cultivation; using January 2007 custom rates for tillage and spraying costs, I have estimated the reduced costs of eliminating operations. Since no custom rate for strip till has been established, fuel and labor costs for operating strip till unit is estimated as was the calculated the savings to go toward purchase of a strip till unit and maintenance. I estimate the cost of an 8 row (22 inch rows) strip till unit at \$40,000 plus and additional \$10,000 if you go with GPS. Yearly payments including GPS would be \$12,748 for 5 years which includes 10% interest. A six row unit would probably be a better fit for 250 acres. For strip tillage the number of rows and width per row must match your planter.

<u>Reduced Costs</u>	Labor and Machinery	Herbicide and Fuel	Total	Your Estimate
Disking	\$13.25		\$13.25	
Plowing	\$27.00		\$27.00	
Disking	\$13.25		\$13.25	
Groundhog	\$12.50		\$12.50	
Total			\$66.00	
<u>Added Costs</u>				
Spraying Glyphosate	\$12.45 ¹	\$4	\$12.45	
Fuel and Labor Strip Till ³	\$3.50	\$1 ²	\$4.50	
Savings left per acre to pay for strip till unit ³			\$49.05	

¹2007 cost for a custom application of glyphosate at 0.38 lb ae/acre. Herbicide portion \$4/acre.

² Fuel cost assuming 7 acres per hour and 1.7 gal/acre and \$4 gal.

³ No custom rate is available for strip till so fuel and labor is separated out as is savings to apply for purchase of unit and maintenance of the unit.

Number of acres strip tilled	Amount left per acre to pay for equipment	Total amount per year to service debt	Years to pay off strip till unit applying all savings to debt	Life Expectancy of Unit (years) ¹	Total Savings after 10 years ²
250	\$49.05	12,263	5	57	\$58,875
500	\$49.05	24,525	2	28	\$181,500
1000	\$49.05	49,500	1	14	\$426,750

¹Life expectancy for equipment is generally estimated at 2,000 hours.

²Savings, after purchase of strip till unit and carrying the loan all five years.

