

Cost Trade-offs for Drying Wheat and Planting DC Soybeans¹

A recent crop report gave the mid-April prices for wheat at \$6.00/bu and soybeans at \$12.40/bu, which are record highs for both crops and much higher than this time last year, which is obviously great news! The bad news is that energy prices are also near record highs, and with LP gas around \$2.50 per gallon, double crop farmers must weigh the annual decision...whether it's better to harvest wheat early and dry it with LP gas so that soybeans can be planted earlier to achieve their maximum yield potential...OR...is it better to let the wheat dry in the field and delay soybean planting a few days. To help put some numbers to that decision, I developed a spreadsheet that takes into account grain and energy prices along with a few other related factors. Together they can be used to calculate gross profits from the soybean and wheat enterprises after subtracting out drying costs.

For both crops, the spreadsheet uses yield, price and yield loss per day. For wheat, a field drying rate is also assumed in addition to the price of LP gas to calculate the drying cost as the harvest season progresses. Of course, towards the end of the harvest season, wheat will be dry enough to avoid a drying charge, but by that time soybean yields will have fallen off dramatically.

To run thru an example, let's consider a situation in KY where the optimum harvest date is June 7. Now we may want to start harvest a few days earlier so we can work through that optimum date. With the grain and energy prices I mentioned earlier, average yields of 43 bu/ac for soybeans and 70 for wheat, a soybean yield loss of 1 bu/day for delayed planting, a wheat yield loss of 0.1 bu for each day that harvest is delayed, and a wheat moisture level of 25%, the drying and handling cost would be about 41 cents per bushel (or \$28 per acre) but the gross returns would be \$414/ac for wheat and \$533 for soybeans, which combine for ~\$919 after paying for drying. So, increased grain prices far outweigh higher drying costs this year (compares to \$580 / ac at this time last year when prices were much lower ~\$4 wheat, \$7 beans and \$1.40 for LP).

So the bottom line is that higher grain prices trump higher energy prices this spring. In fact, farmers can net about \$1.80/ac for each day they harvest wheat before the target and lose about \$10/ac for each day soybean planting is delayed afterward! For this reason, I look for more farmers to be drying wheat this spring to boost their soybean yield and net profits. More information on wheat drying and this spreadsheet is available at county Extension offices or by searching for grain storage on the UK website (www.uky.edu).

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Fig. 1. Cost trade-offs between drying wheat/planting soybeans early vs field drying/delayed planting @ 2008 grain and energy prices (\$12.40 for beans, \$6.00 for wheat and \$2.50 for LP gas).

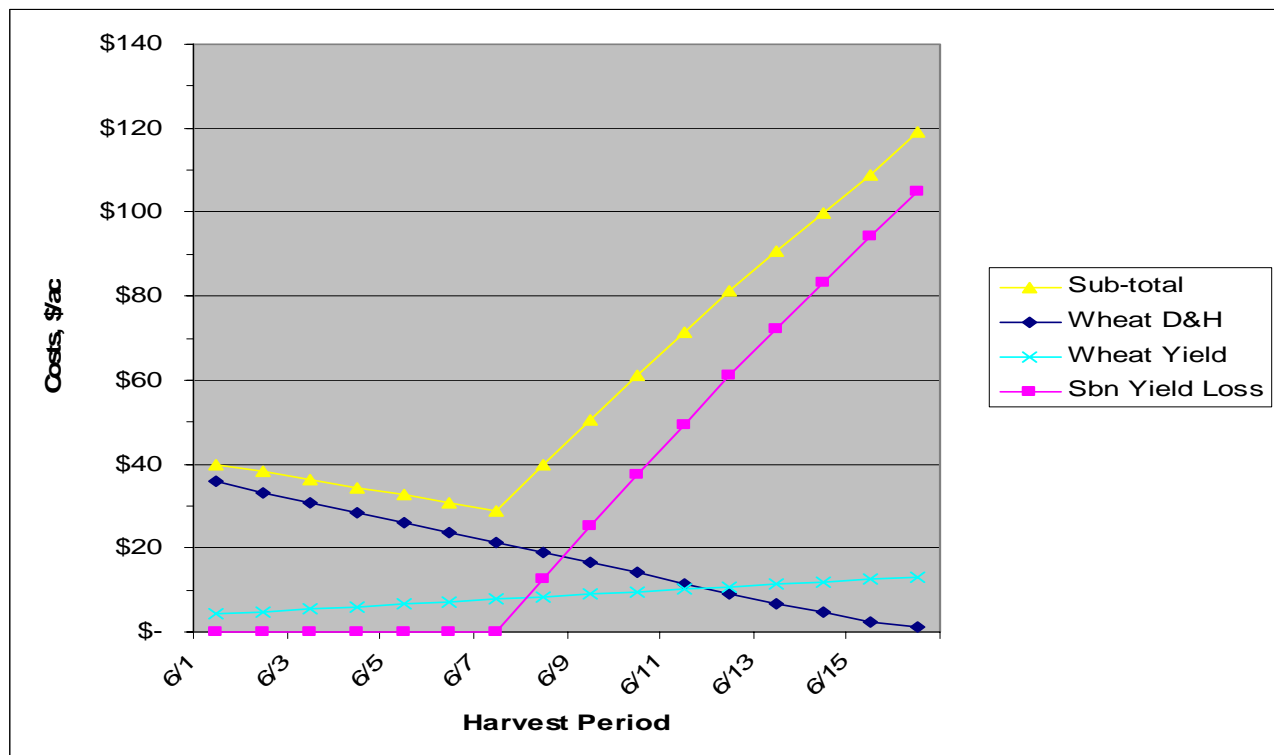


Fig. 2. Gross returns to DC enterprise for 2008.

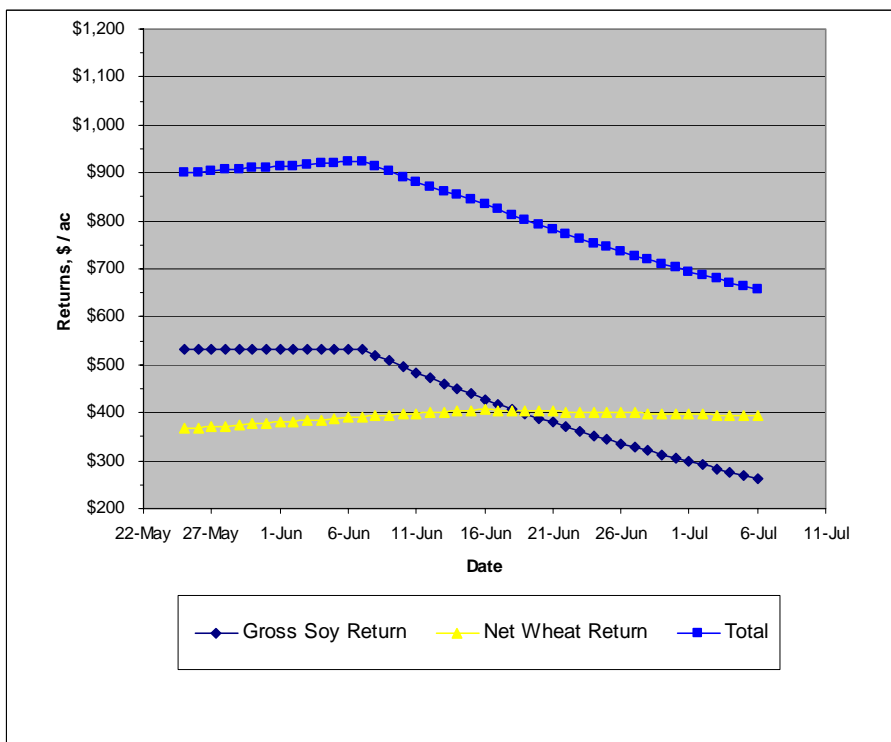


Fig. 3. Cost trade-offs between drying wheat/planting soybeans early vs field drying/delayed planting @ 2007 grain and energy prices (\$7.25 for beans, \$4.17 for wheat and \$1.40 for LP gas).

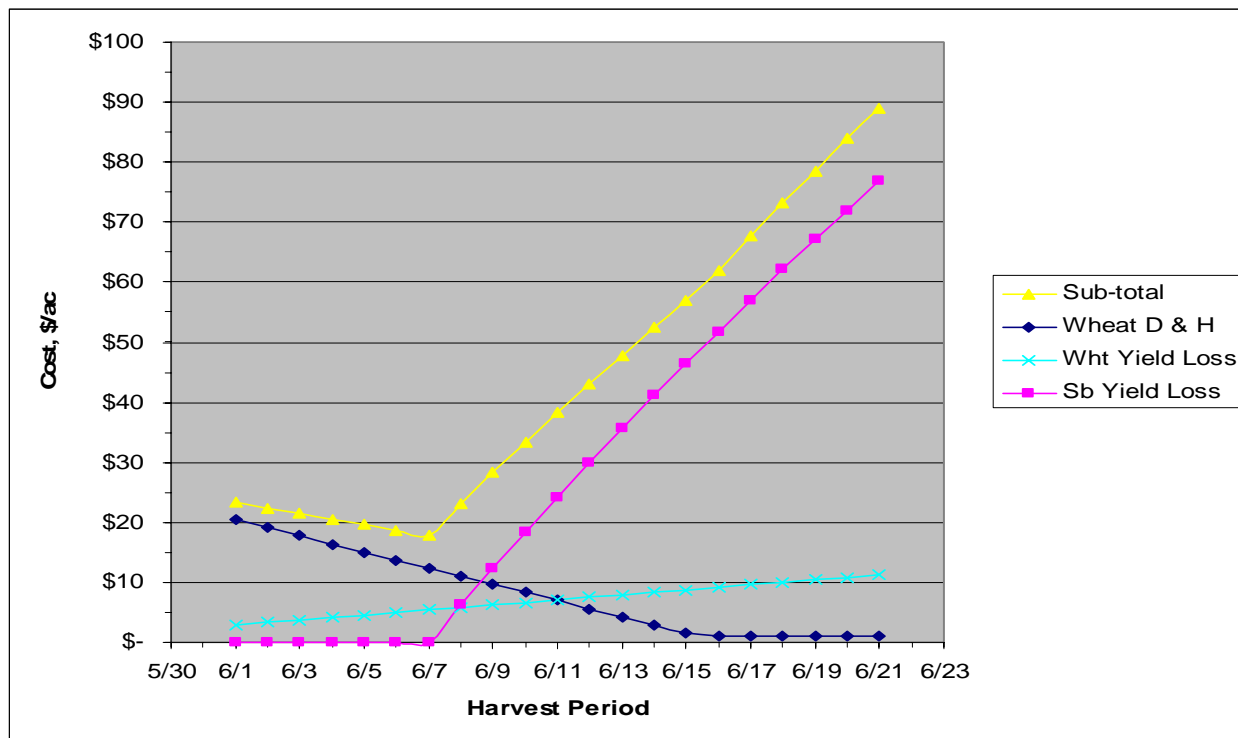


Fig. 4. Gross returns to DC enterprise for 2007.

