Messenger-Inquirer

K Cooperative Extension Service



Farm Update

daviess.ca.uky.edu AGRICULTURE & NATURAL RESOURCES EDUCATION Clint Hardy Daviess County Extension Office

August 31, 2024

When to Begin Corn Harvest

I receive one question a lot this time of year. How do I determine when corn moisture is at an appropriate level to begin harvest despite the cost of drying and shrink. There is no doubt corn can be dried on the farm for a lower cost than paying elevator drying charges, but the grain must still be handled. You either pay the elevator or your utility provider. In other words, the cost of shrink is unavoidable unless it dries naturally in the field. We know field drying also has a cost of increased harvest loss by dropped ears and header loss. So, at what moisture does it no longer pay to delay harvest? Let's consider some scenarios.

Let's assume the yield potential of an acre is 200 bushels at 22% moisture with a cash price of \$3.53. Using local buyer discount charts, the drying cost per bushel for 22% moisture is \$.28 and the shrink is 8.63%. The cost to dry that 200 bushels is \$56 and the shrink is 17 bushels. 183 bushels multiplied by \$3.53 is 645.99, subtract \$56 for a \$589.99 revenue.

Harvest loss, phantom yield loss, whatever you want to call it, is real but difficult to measure. Let's assume it's severe. 3% of the 200 bushel potential field when allowed to field dry from 22% to 20% moisture. The 200 is now 194 bushels. Using the same charts as above, the drying cost per bushel for 20% moisture is \$.20 and the shrink is 6.31%. The cost to dry 194

Messenger-Inquirer

bushels is \$38.30 and the shrink is 12 bushels. 182 multiplied by \$3.53 is \$642.46, subtract \$38.30 for a \$604.16 revenue.

Let's keep going. We assumed harvest loss could be 3% when field dried from 22% to 20% moisture. Let's use 6% loss field drying from 22% to 18% moisture. The 200 bushels is now 188 bushels. Using the same charts, the drying cost for 18% moisture corn is \$.12 and the shrink is 3.99%. The cost to dry that 188 bushels is \$22.56 and the shrink is 8 bushels. 180 multiplied by \$3.53 is \$635.40, subtract \$22.56 for a \$612.84 revenue.

Using these scenarios and estimated harvest loss, the difference between harvesting 200 bushels of 22% corn or waiting until it is 18% is \$22.85. That's about \$115 for every 1,000 bushels.

The amount of drying capacity installed in the county over the past 20 years has been impressive but is required to keep up with the combine and hauling capacity. The cost to operate each of these systems is different from the next. The estimate of harvest loss is different for each farm. All a person can do is determine what they think is best for their personal business.

There will be a lot of corn shelled in the next two weeks from the corn that was planted in April. Then there will be a waiting period until the late May and June corn dries down. The risk in allowing corn to dry in the field is not 6% yield loss but that unexpected wind and rainstorm that results in 20% yield loss and greater harvest difficulty. Harvesting wet corn has a cost that is relatively easy to calculate. Letting it stand in the field is probably more economical, but the savings are not great enough or worth the weather risk to delay starting once moisture levels get to the 19-21% range. Whether you are drying it on the farm or delivering it out of the field to the elevator.

Messenger-Inquirer

Another consideration is that small but worthwhile incentive to store grain in temporary storage until December, rather than accepting the low harvest price this fall. The UK Department of Ag Engineering has several excellent spreadsheets and calculators to help you make the determination of when to begin harvest as this article has discussed. There are also several tables on calculating how to estimate flat storage volume based on building width, length dimensions, and pile height. All of this can be found at https://bae.ca.uky.edu/extension/grain-storage-systems/grain-calculators.

Labor Day

The Daviess County Extension Office will be closed Monday, September 2, in observance of Labor Day. The Office will reopen at 8:00 a.m. Tuesday, September 3.

The Martin-Gatton College of Agriculture, Food and Environment is an Equal Opportunity Organization with respect to education and employment and authorization to provide research, education information and other services only to individuals and institutions that function without regard to economic or social status and will not discriminate on the basis of race, color, ethnic origin, national origin, creed, religion, political belief, sex, sexual orientation, gender identity, gender expression, pregnancy, marital status, genetic information, age, veteran status, physical or mental disability or reprisal or retaliation for prior civil rights activity.