

Weigh Risk of Leaving Corn Stand Through Winter



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October, 2009

The October 26, 2009 Wisconsin Crop Progress Report from the Wisconsin Field Office of the National Agriculture Statistics Service stated only 9% of the Wisconsin corn crop has been harvested, far less than the 5-year average of 37%. Moisture spot checks are indicating very wet grain with unfavorable drying weather in the near-term forecast. Even if grain moisture was dry enough for harvest, saturated soils will likely cause further delays. This situation has caused some corn growers to consider leaving corn stand in the field until spring. Lauer (2004) examined the amount of yield loss during winter months at the University of Wisconsin Arlington Research Station in 2000-2001 (Table 1).

Table 1. Grain yield (bu/A) change of corn left standing in the field through winter at Arlington, WI.

Year	<u>Harvest Month</u>						
	Oct	Nov	Dec	Jan	Feb	Mar	Apr
2000	204	206	113	86	83	72	127
2001	220	208	208	200	181	205	199
Mean	212	206	165	145	134	145	162

Many factors influence the decision to harvest yet this fall or delay until spring. Some factors can be assessed now, such as stalk strength, ear health, insect damage, and shank attachment. A crop that has weak plant integrity now is at greatest risk of crop losses if harvest is delayed. Fields with good stalk strength and a soundly attached ear might be good candidate fields for delaying harvest; however, crop health only has one direction to go...down. Beyond plant integrity, factors such as wildlife damage and weather will play a major role in ear retention the following spring. For example, in 2000, a year with heavy snow cover, the percentage yield loss was much greater than in 2001, a year with little snow cover (Table 2).

Table 2. Percent yield loss of corn left standing in the field through winter at Arlington, WI.

Year	<u>Harvest Month</u>					
	Nov	Dec	Jan	Feb	Mar	Apr
2000	No Loss	45%	58%	59%	65%	38%
2001	5%	5%	9%	18%	7%	10%
Mean	3%	22%	32%	37%	32%	24%

If a corn grower is seriously considering leaving corn stand through winter, the most important question that needs to be answered is, "**Will the revenue lost by winter crop damage be less than the cost of drying this fall?**" If the value of corn loss over winter from ear drop, fungus, or animal feeding is more than the drying bill would have been if harvested this fall, then it doesn't make sense to leave corn stand until spring. Table 3 identifies the breakeven point for total drying cost per bushel the grower would want to pay this fall compared to harvesting in spring. The table provides a total drying cost compared to a 5% to 40% winter yield loss at prices ranging from \$3.00 to \$4.25 per bushel. As corn price increases, the producer can tolerate paying a greater price for drying. Additionally, as the percentage of yield loss through winter increases, the producer also can justify paying a greater drying cost. For example, if this winter has heavy snowfall, similar to 2000, with a 38% yield loss by April harvest, the producer would be able to pay just over \$1.31 /bu for drying

corn worth \$3.75 /bu (2009 price) to generate the same amount of revenue. If conditions are more like the winter of 2001 with only a 10% yield loss and a price of \$3.75 /bu, then the grower keeps more revenue by letting the corn stand in the field if drying costs are more than \$0.38 /bu. If in an average year 25% of corn yield is lost over winter, at \$3.75 /bu, the grower can pay up to \$0.94 /bu for drying and breakeven with field loss. For growers that view field drying as a secondary form of storage; thereby reducing storage fees, then the total of drying and storage costs should be combined and compared to the percent yield loss through winter.

Table 3. Breakeven point between total drying cost versus field loss during winter field drying.								
Corn Price (\$/bu)	<u>Percent Yield Loss Through Winter</u>							
	5%	10%	15%	20%	25%	30%	35%	40%
	Breakeven Drying Cost (\$/bu)							
\$3.00	\$0.15	\$0.30	\$0.45	\$0.60	\$0.75	\$0.90	\$1.05	\$1.20
\$3.25	\$0.16	\$0.33	\$0.49	\$0.65	\$0.81	\$0.98	\$1.14	\$1.30
\$3.50	\$0.18	\$0.35	\$0.53	\$0.70	\$0.88	\$1.05	\$1.23	\$1.40
\$3.75	\$0.19	\$0.38	\$0.56	\$0.75	\$0.94	\$1.13	\$1.31	\$1.50
\$4.00	\$0.20	\$0.40	\$0.60	\$0.80	\$1.00	\$1.20	\$1.40	\$1.60
\$4.25	\$0.21	\$0.43	\$0.64	\$0.85	\$1.06	\$1.28	\$1.49	\$1.70

Rather than leaving the crop stand in the field until the following spring, which can create problems preparing for the next crop, the grower might consider harvesting sometime in mid-winter. Data from the Arlington Research Station gathered over five winters found mid-May planted corn had the following grain moistures: December=22%, January=22%, February=18%, March=16%, and April=10%. Drying continues through winter but at a slower rate than fall.

Unfortunately, it is very difficult to predict in October if there will be heavy snowfall or ice sheeting come January so the decision largely becomes a matter of risk management. The 2009 corn crop was one of the most expensive corn crops ever grown and the financial losses from a large yield decline could be large. Once the grain is harvested, dried, and securely stored the harvest risk largely has been managed.

Corn crop insurance in Wisconsin ends at the earliest of: (1) total crop destruction, (2) harvest, (3) final adjustment for a loss, (4) December 10, 2009 for grain or (5) abandonment of the crop (USDA 2009). With the December 10th deadline, insurance does not extend to crop losses when harvested the following year. If the grower feels they have no other choice but to leave the crop in the field, they should contact their insurance agent prior to the deadline to discuss options.

Corn already sold for delivery through a forward contract also increases price risk if the field fails to hold yield and the grain is short of the contracted delivery amount. Another increased risk is the potential for more pest management problems such as more volunteer corn in the following crop. Deciding when to harvest this wet crop will be a tough decision, largely depending on weather factors outside of the grower's control. In times of great volatility, the decision that best manages risk is the most sensible.

References:

Lauer, Joe. 2004. Some Pros and Cons of Letting Corn Stand in the Field Through Winter. Wisconsin Crop Manager. <http://corn.agronomy.wisc.edu/WCM/W160.aspx>

USDA Risk Management Agency. 2009. Commodity Insurance Fact Sheet, Corn, Wisconsin. http://www.rma.usda.gov/aboutrma/fields/rma/mn_rso/