



CLIPPINGS a weekly column from Iowa State University Extension and Outreach

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For Immediate Release

Wet Corn 2019

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This year will go down as a very frustrating harvest, with late planting and the coldest October in more than a decade. Here are four tips to keep your sanity at this time of the year.

1. Keep the grain cool. There is a common statement made that more grain goes out of condition because of temperature problems than high moisture each year. A hotspot is often caused by warm fines that allow bacteria to start spoiling the grain. The bacteria can double in number every 20 minutes and grow at exponential rates above 60 degrees Fahrenheit, so we need to keep the temps below 40 degrees Fahrenheit. Frozen corn keeps well, and the weather does not seem to give us good drying conditions. If you have corn above 40 degrees, run the fans to cool it down.
2. Control the fines. In small bins, spreaders help to prevent the fines from all accumulating in the center where it will plug the air space, preventing the air movement to control the temperature and dry the corn. Fines are often wetter than the corn and have lots of exposed surface for mold and bacteria to grow. Coring the bin when half full and clear full will also help remove fines. If these loads are taken to market, use the damage information to evaluate the quality of the rest of the bin. Test weight readings to less than 56 pounds per bushel will mean that the corn will not keep very well, and plans need to be made on how to market it.
3. Get it dry. With propane need high and only so many trucks to deliver it, many farmers have not been able to keep high temp dryers operating 24/7. If you are in this boat and the corn is testing below 22 percent moisture, it can be kept cold in a full floor aeration bin until it is put through the dryer. The temperature in the dryer should not be turned down in cold weather because the drying capacity of the heated air goes down faster than the cost of burning more propane to maintain the temperature. While it seems like lowering the drying temp should save gas, the lower temps actually burn more gas because the time goes up faster.
4. Calculate the drying rate. Corn will dry when the temperatures outside are above 40 degrees for highs. The following table provides a good approximation of how many bushels can be dried per day with a 10 hp fan and moisture removed to 14 percent for a 10,000-bushel bin.

Moisture	Moisture Removed to 14%	Bushels Dried per Day	Days
22	8	120	83
20	6	160	63
18	4	240	42
16	2	480	21

When the time exceeds 50 days, you have to be very concerned that there are not enough 40- to 50-degree high days to get the grain dry before spring. Be sure to run fans for at least 24 hours until the grain is cold and shut them off in the morning. Fans can run when it is raining, but not when it is snowing. The grain on top of the bin will stay as wet as the day it was put in until the drying front comes through. Plan to check your bins weekly, if they are not dry and cold, checking the surface on the northeast side of the surface grain where crust often develops if wet grain.

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