Continue To Monitor Grain In Storage

EDWARDSVILLE. ILL.

ROBERT C. BELLM



hanks to a couple of warm and dry weeks in early November, more than half of this year's corn crop has finally made it into storage. Notice that I didn't

say "safely into storage" because that would imply that it has all been adequately dried,

is in undamaged physical condition, and is now cooled down to ambient outside temperatures suitable for safe, long-term storage. In reality, the crop in the bin may not be in all that good of a condition, and it will need to be monitored closely and regularly throughout the winter months. This monitoring probably needs to be much more often than most growers are accustomed to, for a variety of reasons.

One reason is the late planting and, therefore, much higher than normal moisture at which this year's crop was harvested. On-farm grain moisture testers provide an average estimate of the moisture in the grain but do not measure the kernel-to-kernel variability that may exist. While a moisture tester may indicate that a sample of corn has been adequately dried to a level that is safe for storage, there may be individual kernels that are much wetter. In this case, the "average moisture" may be irrelevant because the wet kernels can still spoil and, in the process, spoil the drier kernels that they are

in contact with also.

Another potential problem relates to cracked and broken kernels, and fines. Because this year's crop was so wet, there was a higher potential for kernel damage during both the harvesting and drying process. Cracked and broken kernels are more susceptible to damage from storage molds, and fines will impede airflow through the grain mass, resulting in inadequate cooling. The resulting hot spots can spread throughout the bin, and damage can be significant and occur very quickly if the grain is not closely monitored.

Finally, November and early December temperatures fluctuate greatly, and high humidity and rainfall are common, especially in the southern areas of the state. Unless storage bins are equipped with fans large enough to quickly cool the entire grain mass on those few days when conditions are actually suitable for aeration, then there may be areas of variable temperature and moisture present throughout the bin.

Check bins at least weekly, and be ready with a plan to move and sell, or further dry grain if necessary. Removing and selling the central core once a bin has been filled will help remove fines that have concentrated in the center of the bin, improving air flow. Never enter a bin with crusted grain, especially when unloading augers are operating. $\ensuremath{\Delta}$

ROBERT BELLM: Extension Educator, Crop Systems, University of Illinois



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