

Stored Grain Management Tied To Profits

PRINCETON, KY.

Lower grain prices this fall caused many of the state's producers to store their crops. With much of that grain now in storage bins, it's important to manage it well to maintain quality and retain profits, said Sam McNeill, engineer at the University of Kentucky College of Agriculture.

Spoiled grain can prevent producers from getting the best price at grain elevators. Exact loss amounts can vary between 1 and 5 percent, and often are related to the level of storage facility management. McNeill said producers should remember that proper management is vital to preserving their grain's value.

"Grain prices are down, but with current corn prices at around \$3.50 a bushel and the average new storage bin holding 50,000 bushels, that's \$175,000 in one bin," he said.

To effectively manage grain crops, producers should check inside bins for insects, mold and damaged kernels and take several samples from different locations below the surface to check grain temperature and moisture composition.

Grain should be stored within 10 degrees of the average monthly temperature, which for December in Kentucky is 37 degrees. This temperature is cold enough to keep insects at bay. But if a "hot spot" develops below the surface and goes unchecked, temperatures in that area can reach 70 degrees or higher, which causes rapid insect growth. Producers should look for these spots, where the temperature is higher than 45 to 50 degrees, and run aeration fans if those conditions are found.

While it can be difficult to check grain temperatures below the surface, it is important in controlling insect activity. Temperature cables, although expensive, can aid in this task. Bins that are unloaded are often easier to check. So another chance to inspect grain conditions is when some of the grain is moved from the bin and sold.

Also, producers can install insect traps to capture any insects that may have found their way into the grain bins. Typically, these are relatively inexpensive, but they should be checked frequently.

Outside of bins or storage facilities should be checked for rodent activity. Once a portion of the crop is sold, producers should clean up any spillage left around the bin because it is an attractive food source for rodents.

Inspections inside and outside of the storage facility should take place at least once a month.

"A producer's job is not done until the grain has passed the grade at the elevators and is sold," McNeill said. "The diligence that they had scouting their fields during the growing season should transfer over to managing grain during storage."

Always take safety precautions when inspecting stored grain. In the past, a few producers were trapped or suffocated in bins when unsafe practices were used. More information on managing storage bins is provided in UK extension publication AEN-45, "Aeration, Inspecting and Sampling of Grain Storage Bins," which is available at county extension offices. Δ