Inspect stored corn every 2 weeks

Key Points

- Stored grain should be checked every other week.
- Run fans to detect odors in grain bins.
- Core bins to remove fines, even now.

By **TOM J. BECHMAN**

THE first chore was getting corn in the bin. Widespread pockets of mold, frosted corn and plain wet corn made harvest challenging for many, and a nightmare for some.

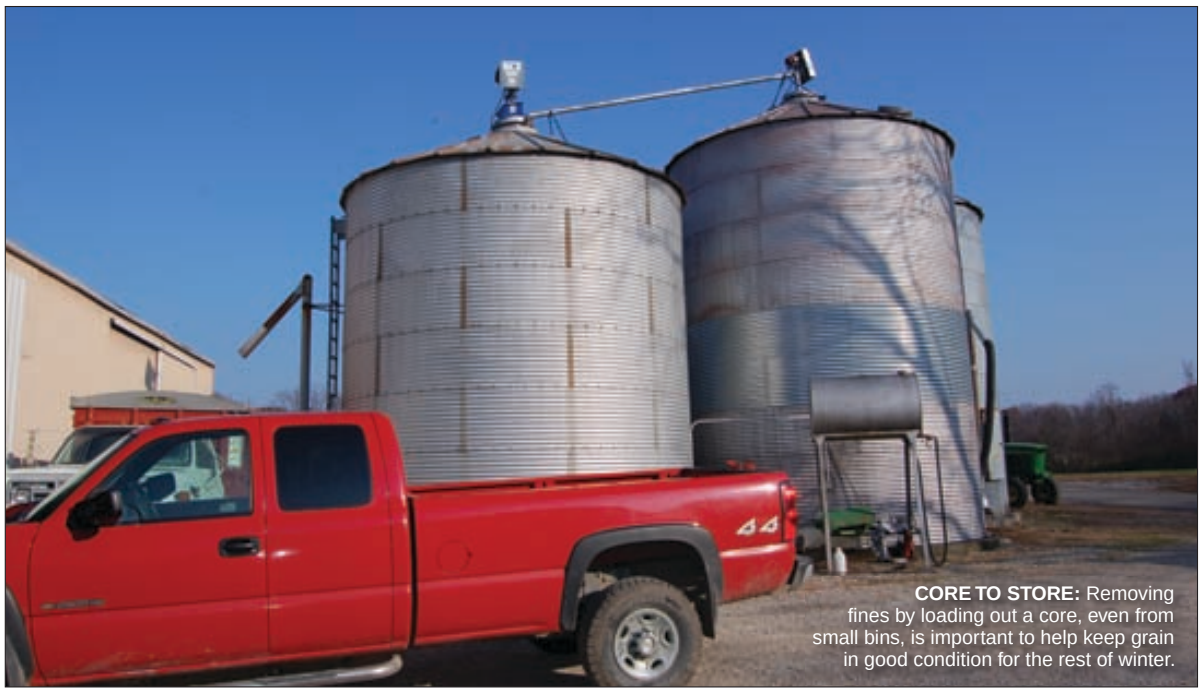
If you've still got corn in the bin, your job isn't over. Don't set yourself up for a second nightmare. Even growers who binned good-quality corn ought to be checking bins once every two weeks, says Richard Stroshine, a grain quality specialist based at Purdue University.

"Let fans run for a few minutes; then check for unusual odors," Stroshine suggests. "Be alert for condensation on the roof inside the bin. That could signal heating issues within the grain mass."

If you've got temperature cables, check temperatures regularly. If not, insert a long metal rod into the grain mass, let it stay there 15 minutes, and then pull and check. A warm steel rod indicates a hot pocket.

"Corn is a good insulator," Stroshine says. "Even when your temperature cables tell you grain is cool, there may be a hot pocket you can't detect a few feet away."

Follow safety precautions when entering bins. Work with a partner, and make sure everyone knows you're going inside the bin.



CORE TO STORE: Removing fines by loading out a core, even from small bins, is important to help keep grain in good condition for the rest of winter.

Core bins

Coring bins to remove fines, even now, is a key tip for keeping grain in condition.

"Fines are a real concern, especially where molds were an issue," Stroshine says. "Diseased kernels tend to break up easily, so you could have more fines. Get them out, because they make managing stored corn more difficult."

Ear rot fungi that produce mycotoxins don't usually grow below 19% moisture, the specialist notes. However, other fungi grow in stored grain at lower moisture levels.

Grain that was infected with mold is more susceptible to attack by other pathogens. That's why Stroshine recommends drying grain 0.5 to 1 point drier than normal this year. It's insurance against molds that develop in stored grain, he observes.

What holes can you fix?

GOOD yields and wet corn exposed holes in grain handling systems. What simple, low-cost investments can farmers make to improve their system?

"The answer depends upon your needs," says Richard Stroshine, grain quality specialist. "If you're serving a food-grade market and need high-quality corn, you may need more in-bin drying capacity. This past fall proved that you need supplemental heat available for those years when the weather is poor.

"You also need some way to remove fines," he says. "If you don't have a grain cleaner now, consider adding one. One of my first pieces of advice is to get fines out of the system. They're a problem even in good years."

Expanding overall capacity in a grain handling system could be a long-term challenge, he adds. Seed companies are serious about improving yields. Monsanto promotes doubling corn yields by 2030. That means you'll need to beef up your system to handle much larger volumes, Stroshine concludes.

Expanded grain system adds function, flexibility

By **TOM J. BECHMAN**

Key Points

- Drier grain increases throughput for dryer.
- Coning technique gains wet holding space.
- Smaller bins may need to give way for higher-capacity bins.

THE 2009 growing season was full of challenges. If you're looking for a silver lining, perhaps it's that handling wet corn exposed weaknesses in grain handling.

Fortunately, Bryan Kirkpatrick, Greentown, Ind., knew several years ago that he needed to expand his grain system as his operation grew. The original grain system was started by his late father, Robert. Changes Kirkpatrick made paid dividends in 2009. One major plus was added bin capacity.

"We took down three small bins so we could add bigger bins," Kirkpatrick says. "We erected 60,000- and 100,000-bushel bins in their place."

In years past Kirkpatrick filled some bins with seed beans, and then moved them out and refilled with corn. Although he hoped adding larger bins would eliminate that step, he still needed it last fall, thanks to an unusual harvest season and good corn yields.

More drying capacity

One weak link exposed in many systems last fall was dryer capacity. The 2009 season harkened back to days when drying 24% to 25% corn was standard. Some dryers struggled to keep up, even at grain elevators.

The Farm Fans tower dryer Kirkpatrick installed earlier handles 950 to 1,000 bushels per hour at 24% to 26% moisture, and 1,400 bushels per hour at 22% or less. But part of the trick in 2009 was having enough short-term, wet holding capacity. Two techniques helped Kirkpatrick stay ahead of his two 12-row combines.

First, he practiced what's known as "coning" in a 20,000-bushel bin located behind his traditional wet holding bin. "We filled the 20,000-bushel bin partway with dry corn, then added wet corn out of the field," he explains. The dry corn formed a cone, letting wet corn feed to the dryer.

Second, six semitrailers served as mobile wet storage. Kirkpatrick used them to keep combines running.

In the future he's considering coning in the 60,000-bushel bin, if necessary.

New scales keep combines running during wet harvest

OK, it's nice to have new digital scales for the grain center. Weighing each load aids recordkeeping, especially when corn comes from several share-rent farms. However, that doesn't explain why Bryan Kirkpatrick, Greentown, Ind., replaced older scales. Instead, he saw a direct link between installing new scales and keeping both combines running.

"We split-weighed semitrailers before," he says. "The original scales weren't long enough. Eliminating any unnecessary step that takes time makes a difference when you're bringing in corn from two combines."

That was especially true in 2009, when corn was wet and yields were strong. His new scales are 70 feet long, letting him weigh semitrailers without split-weighing.

The time saved helped get trucks back to the field more quickly so combines had more space to dump corn.