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## Check Stored Grain

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# Extension Extra

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COLLEGE OF AGRICULTURE & BIOLOGICAL SCIENCES / SOUTH DAKOTA STATE UNIVERSITY / USDA

## CHECK STORED GRAIN

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Grain spoilage is evident in some grain being removed from storage in South Dakota. The best way to prevent, or control, the problem and maintain the quality of the stored grain is to never let the storage problems get ahead of you.

Grain in storage should be checked regularly, particularly in a year, when the average temperature is above normal. Insect activity and spoilage are most apt to occur when the grain temperature is about 80 degrees F. Checking the grain once every week is recommended and once every other week would be an absolute minimum during the summer.

To check the grain, climb into the bin. If the bin is peaked or filled to the roof, move, sell or feed enough so you can level it and safely get on the grain surface, then Durland advises:

- Check the bin roof and look for signs of moisture condensation or accumulation.
- Look for crusting, wet, sticky or frozen grain. Grasp a handful of grain from the surface and at arm depth in the grain and check for musty or moldy odors.
- Run the aeration fan and check the exhaust for odors.
- Poke a small-diameter stiff rod down the center and outward to the sides of the bin. Check for hard, compacted, or moist masses.
- Use a temperature probe to accurately check temperature varia-

tions and to locate potential "hot" spots.

- Grain should be cooled in the fall, and warmed in the spring, with the aeration system at night or other times when the temperature is below 70 degrees.
- Always run the fan continuously during a complete cooling cycle. Stopping midway through a cooling cycle guarantees a deposit of condensed moisture that will encourage spoilage. A complete cooling cycle is when all of the grain has been stabilized at the same temperature.
- Continue weekly grain inspections throughout the rest of the summer and fall.
- If there are signs of heating or hot spots in the grain, no matter what the season or the weather, run the fan continuously until no heating can be detected.
- Remember that if a problem is detected, it is better to sell the grain with a little spoilage, than to do nothing and lose the whole bin.
- For more information consult Extension Fact Sheet 774, Aeration of Grain in Storage, which is available in your County Extension Office or from the Agricultural Engineering Department at South Dakota State University.

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