

IN THE FIELD

Women in Agriculture

February 20-21, 2014
Kearney Holiday Inn
Kearney, NE

To Register:
1-800-328-2851
<http://wia.unl.edu>

Don't Neglect Stored Grain

As most corn producers know, you cannot assume that the 2013 corn in the bin has not been contaminated by molds. The only defense against mycotoxin contamination in corn is to manage the grain moisture content and grain temperature to minimize mold growth in the grain.

Several recommendations to help you protect your stored grain:

- Dry dryland corn down to 13% moisture if it's to be stored for more than a month.
- Run aeration fans whenever the air temperature was 10°F cooler than the grain temperature since the rate of mold growth is slower at cooler temperatures.
- Cool stored grain down to 30°F (plus or minus 5°F) to stop mold growth. If you have not cooled the grain to the recommended temperature for late fall and winter, do so soon, especially if you plan to keep the grain into the new year.

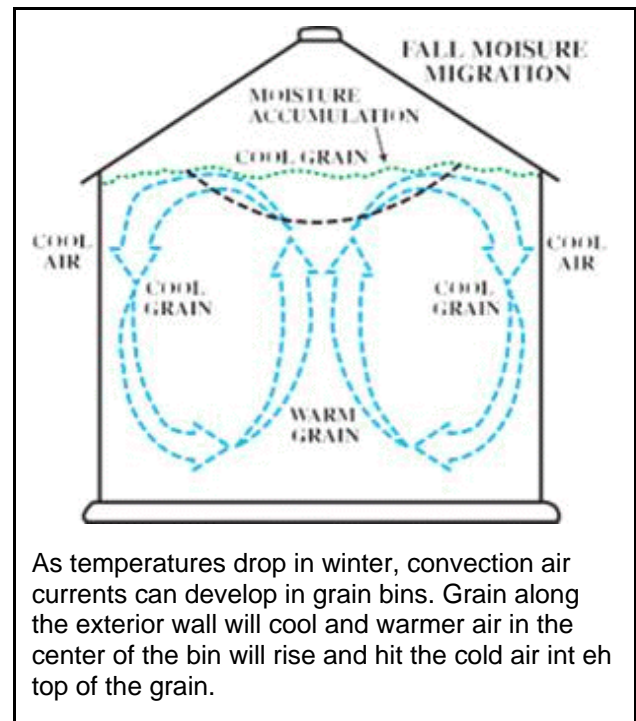
In fall and winter, grain next to the bin wall will be cooled while grain in the center of the bin will stay warmer. The difference in temperature can result in convection air currents migrating through the grain (see graphic). The warmer air in the center of the bin rises and the grain next to the cold bin wall sinks. When the warm rising air encounters the colder air at the top of the bin, the escaping air can go below the dew point temperature of the rising air and deposit moisture on the grain. This can create a wet spot in the top-center of the bin.

If the grain is warm enough for microbial activity, a hot spot can form and molds can grow, even in winter. This includes molds that can produce mycotoxins.

Run the aeration fan(s) at least once a month when the humidity is low and the ambient air temperature is 30–35°F. To conduct a preliminary check on grain quality, start the aeration fan(s), then climb up and lean into the access hatch. If the air coming out of the hatch is 1) warmer than you expected, 2) has a musty odor, or 3) if condensation forms on the underside of the bin roof on a cold day, continue to run the fan(s) long enough to push a temperature front completely through the grain.

A rule of thumb is, the time (hours) to push a temperature front through a bin of grain is 15 divided by the airflow-cubic-feet per minute per bushel cfm/bu.

For example, a bin used for drying grain should be able to produce about 1.0 cfm/ bu so it would take about 15 hours to push a temperature front through the grain ($15/1 = 15$). In another example, a bin equipped with a fan able to push only 0.3 cfm/bu could push a temperature front through in 50 hours ($15/0.3 = 50$).



As temperatures drop in winter, convection air currents can develop in grain bins. Grain along the exterior wall will cool and warmer air in the center of the bin will rise and hit the cold air in the top of the grain.

Pesticide Applicator Training to Cover Standards Plus New Topics

Private pesticide applicators holding licenses that expire in 2014, as well as anyone seeking first-time private applicator certification, should attend a training now.

January 28	1-4 p.m.	Creighton, Walter Larsen Senior Center
January 28	6-9 p.m.	Creighton, Walter Larsen Senior Center
January 29	8:30 a.m. (This is an extended training, "Managing Cropping Challenges" see <i>information below</i>)	Neligh, Antelope County Fairgrounds
January 30	1:00 p.m.	Plainview, City Hall
February 4	1-4 p.m.	Hartington, City Auditorium Basement
February 11	1:30 p.m.	Elgin, KC Hall
February 11	1:00 p.m.	Norfolk, Lifelong Learning Center
February 13	1:00 p.m.	Pierce, County Extension Office Meeting Room
February 13	6:00 p.m.	Pierce, County Extension Office Meeting Room
February 17	1-4 p.m.	Bloomfield, Community Center
February 17	6-9 p.m.	Randolph, City Auditorium
February 18	1:30 p.m.	O'Neill, Holt County Courthouse Annex
February 27	6:30 p.m.	Butte, Boyd County Courthouse
March 1	9-noon	Norfolk, Lifelong Learning Center
March 11	1:30 p.m.	Spencer, Our Savior's Lutheran Church Hall
March 20	6-9 p.m.	Magnet, Community Hall
March 24	1:30 p.m.	Neligh, Antelope County Fairgrounds
March 24	6:30 p.m.	Neligh, Antelope County Fairgrounds
April 10	9:00 a.m.	O'Neill, Holt County Courthouse Annex
April 10	6:30 p.m.	O'Neill, Holt County Courthouse Annex

Licensed private pesticide applicators can buy and use restricted-use pesticides in their own farming operations after completing this training. About 11,000 private applicators statewide are eligible for recertification in 2014.

"The main topics that applicators will learn about are Nebraska's pesticide laws and regulations, the pesticide label, personal safety, the worker protection standard, environmental protection, integrated pest management, pesticides and application, application equipment and equipment calibration," said UNL Extension pesticide safety educator Clyde Ogg.

New training topics for 2014 include pesticide drift awareness near sensitive sites like apiaries and vineyards, how to use the Driftwatch website, and control options for prairie dogs and pocket gophers.

Glyphosate resistant weeds are now appearing in Nebraska. Training will cover strategies to reduce chances of developing weed populations resistant to herbicides.

"During pesticide training, applicators will be reminded of methods to reduce pesticide drift, to protect human health as well as sensitive crops and commodities such as grapes and bees," said Ogg. "An online tool called Driftwatch is available to help applicators determine if they will be managing land near sensitive crops."

Private applicators needing recertification in 2014 should have received a letter notifying them of that fact from the Nebraska Department of Agriculture in mid-December, Ogg said. The letter includes a bar code, which eliminates the need to complete the standard NDA application form for those wanting to recertify, he said. Applicators having the bar-coded letter with them at training sessions will not have to fill-out the application form.

UNL Extension provides the educational training for recertification, while NDA is responsible for licensing. Cost of UNL training is \$30 per person. After completing private applicator training, certification applications will be sent to NDA, who will then send a bill to the applicator for the \$25 state license fee.

There is also another option for becoming certified or recertified through completion of an online course consisting of ten modules and quizzes. Pesticide applicators can purchase access to the online course via <http://marketplace.unl.edu> and going to the Pesticide Education section. Cost for the course is \$60.

Managing Cropping Challenges

Schedule

8:50 – 9:00	Welcome
9:00 – 9:50	“Resistance Management – Make it Work on Your Farm”
10:00 – 10:15	Break
10:15 – 11:05	“Ensuring Efficient Center Pivot Management” @ Ord, Neligh & Ainsworth “The Role of Soil Health in Profitable Crop Production” @ South Sioux City
11:15 – 11:45	New Products for 2014
12:00 – 12:30	Lunch (Provided)
12:45 – 1:35	“Making the Most of Your Fertilizer Dollars”
1:45 – 2:35	“Ag Public Policy Update”
2:45 – 3:00	Evaluation/Break

Locations:

January 28, Ord @ Valley County Fairgrounds
January 29, Neligh @ Antelope County Fairgrounds
January 30, Ainsworth @ Community Center
January 31, South Sioux City @ Goodwill Campground



Cost: \$20.00 without pesticide, \$45.00 with private pesticide training
Pre-registration not required but appreciated at (402-336-2760)

Crop Production Clinics

The sixth annual Crop Production Clinics will be held at nine locations across Nebraska in January 2014. The Clinics will provide valuable information to help crop producers and agribusiness professionals improve their profitability and safety. The Crop Production Clinics succeed the Crop Protection Clinics which had been conducted annually since 1974.

Clinics in our area:

January 21 at the Community Center in Atkinson
January 22 at the Lifelong Learning Center in Norfolk

The Crop Production Clinics will feature presentations from extension specialists and educators on soil fertility, soil water and irrigation management, crop production, ag. business management & policy, pesticide safety, and disease, insect and weed pest management.

Pesticide Applicator Recertification - Representatives from the Nebraska Department of Agriculture will be present to verify attendance.

Commercial & Noncommercial Pesticide Applicator - The Crop Production Clinics will be the primary venue for you to renew your license in any of the following categories:

Ag Plant (01)
Regulatory (REG)
Demonstration/Research (D/R)

Private Pesticide Applicators - The Crop Production Clinics will serve as a venue for you to renew your license.

For Certified Crop Advisors (CCA) - Certified Crop Advisors may earn CEUs in the following categories: Integrated Pest Management (CEUs), Soil and Water (CEUs), Nutrient Management (CEUs), Crop Production (CEU) and Professional Development (CEU). Attendees can earn a maximum of 6 CEUs at a location. Certified Crop Advisors are required to bring their CCA number to apply for CEU credits.

For more information and to register contact your local extension office or go to <http://cpc.unl.edu/>.

Revised Publications from UNL Extension

The following publications were recently revised by UNL Extension and are available on the Extension Publications website at <http://ianrpubs.unl.edu/epublic/pages/index.jsp>. Those listed relate to agricultural crop production or rural living. View hundreds of other publication free online at this site. For a printed copy, contact your local Extension Office.

- **Corn Insects – Quick Reference Guide**, EC1562
- **Chinch Bug Management**, G806
- **First Generation European Corn Borer Scouting and Treatment Decisions**, G1782
- **Second Generation European Corn Borer Scouting and Treatment Decisions**, G1783
- **Corn Cutworms**, G1153
- **Yellow Dwarf of Wheat, Barley, and Oats**, G1823