

\*\*\*\*\*

## **AG SAFETY S.T.A.T. – SAFE TACTICS FOR AG TODAY**

Vol.3 No. 3 March 2010

THOUGHTS from the EDITOR – GRAIN BINS

SAFETY QUOTE of the MONTH

GRAIN RESCUE DEMO at the OHIO SAFETY CONGRESS

AG SAFETY & HEALTH--NOW ON FACEBOOK

DON'T CROWD the PLOW

WOOD STOVE SAFETY

AGRICULTURAL HOUSEKEEPING CAN PREVENT INJURIES

EMERGENCY MANAGEMENT TIP of the MONTH: GRAIN BIN SAFETY

\*\*\*\*\*

### **THOUGHTS from the EDITOR – GRAIN BINS**

#### **Dee Jepsen, State Safety Leader**

Grain bin safety is a significant concern this time of year. If grain is stored on the farm, it should be realized that grain bins are considered confined spaces. In businesses other than farming, confined spaces fall under OSHA regulations and require special attention on the safety plan. See the article below for a review of safety tips when working around grain bins. A more detailed assessment of the health and safety concerns of grain bins will be featured in the March issue of Ohio's Country Journal, Applied Engineering Article.

As the weather changes, so does the condition in the grain bin. Heed caution and never a confined space without considering the risks.

### **SAFETY QUOTE of the MONTH**

*"Complacency will hurt you when you least expect it."*

### **GRAIN RESCUE DEMONSTRATION FEATURED at the OHIO SAFETY CONGRESS**

Each year the Ohio Safety Congress, sponsored by Ohio BWC, provides safety lectures and demonstrations for farm owners or safety managers of agribusinesses. These sessions also satisfy insurance group rating program requirements for safety education.

This year's event will feature a grain engulfment demonstration. The program is not just for farm operators, it will also provide CEU's for fireman and EMS responders. Presenters include specialists from the OSU Agricultural Safety Office, Heritage Cooperative – London branch, and Urbana Fire Division.

Grain bins are a known safety risk on farms. In fact, Ohio has experienced 19 grain bin engulfment deaths in the past 10 years. During the LIVE grain bin rescue demonstration, attendees will learn grain bin dangers and actions to take prior to the arrival of first responders; demonstration of extrication techniques using a coffer dam; and describe types of grain bin injuries and their treatment.

Several agricultural sessions will be offered on April 1, 2010. These sessions are sponsored by the Agricultural and Green Industries:

-Fall should be a season, not an event- 9:15 to 10:15am

-Grain bin safety and rescue for the agricultural community and first responders - 10:30 to 11:30am

-Coping with Farm Stress – 1:00 – 2:00pm

The full Safety Congress runs March 31,2010 through April 1,2010 at Greater Columbus Convention Center, Columbus Ohio. This is Ohio's largest and most established occupational safety and health event. During the three

days, there will be 150 safety and health educational sessions and a tradeshow offering industrial supplies and safety equipment and gear. Visit [ohiobwc.com](http://ohiobwc.com) or call 800-OHIOBWC for complete event information.

## **OSU AG SAFETY & HEALTH - on FACEBOOK**

Stay up to date with OSU Ag Safety and Health by becoming a "fan" on the OSU Ag Safety and Health facebook page. We will continue to update the site with new educational information, programming opportunities, links, pictures, etc.

Please feel free to become a fan! There's safety in numbers!

## **DON'T CROWD the PLOW**

### **Theresa Calip, Program Coordinator**

Spring may be around the corner, but the snow in Ohio keeps falling, and the snowplows are still on call! And while motorists are always grateful for their presence, they should always keep a few safety rules in mind when snowplows are on the road:

- Always use caution when following, passing or approaching snow removal equipment.
- Always maintain a safe distance behind snowplows. They often travel much slower than other vehicles to remove snow, apply sand, and de-icers. In other words, don't crowd the plow.
- If you must pass a snow plow, remember that they are often wider than most vehicles, and that your visibility may be compromised by blowing debris and snow thrown by the equipment.
- Don't travel alongside a snowplow. They can shift sideways after hitting snow packs or drifts (and remember they are often wider than most vehicles.)
- If approaching a plow, allow the plow room to operate by reducing your speed and moving to the right side of the road if there is room to safely do so.
- Do not stop suddenly in front of a snowplow - plows cannot stop as quickly as an automobile.
- If the swirling snow around the snowplow severely restricts your visibility, safely pull to the side (if there is room to do so) or slow down to the point where visibility improves.
- Remember that a snowplow operator's field of vision is often restricted. You may see them, but they may not see you.
- As always, use extra caution on bridges, ramps, overpasses and shaded areas if you are near a snowplow. They may freeze first, further increasing your stopping distance and maneuverability.

## **WOOD STOVE SAFETY**

### **Tim Butcher, OSHA Program Coordinator**

Much can be said about the benefits of heating with wood. It was Henry David Thoreau who remarked about the tree stumps he cut and stacked for his fire "they warmed me twice, once while I was splitting them, and again when they were on the fire, so that no fuel could give more heat." While the cutting and stacking of firewood is the primary chore involved with using a wood-burning stove, it is not the only one. Correctly installing, using and maintaining the stove so that the fire in it does not spread to the rest of the house is more important than having wood for it. The following tips should help:

- Select the right size stove for the area to be heated. Under sizing a stove can lead users to over firing the stove to get more heat from it. This can damage the stove and make it unsafe to use. Also the heat can radiate further than expected and ignite combustibles nearby. Conversely over sizing a stove can lead users to damper a fire to keep it from overheating a small space. Restricting airflow to a fire results in a less efficient burn and the incompletely burned wood smoke collects inside the stack and is at risk of being ignited later.
- Choose the location carefully. According to the National Fire Protection Association wood stoves should be no closer than 36 inches from all combustible materials. The temperature required to burn wooden walls and furniture can be as low as 200-250 °F if the wood has been repeatedly heated. If the stove has already been installed or if it is impossible to provide the 36-inch space, it can be placed as close as 18 inches if the walls are equipped with asbestos millboard or 28 gauge steel placed 1-inch away from the

wall. Protection for the floor is also critical. Note - concrete and mortared fireproof materials do not need supplemental protection.

- Stovepipes - those pipes connecting the firebox to the chimney - should be as short as possible. Stovepipes should be no longer than 75% of the vertical length of the chimney measured from where the pipe enters the chimney. Also if the stovepipe is not vertical, it should slope at least ¼" up for every foot of length. When sections of stovepipe must be joined together, the crimped section should be on the side of the union further from the firebox. This is contrary to the way many people assemble stovepipe and is intended to force any dripping creosote to stay inside the stovepipe.
- Use the appropriate thimble when the stovepipe passes through a wall or ceiling. Stovepipe thimbles stabilize the stovepipe where it passes through the wall or ceiling, and more importantly function to maintain a distance between the stovepipe and surrounding combustible material. Appropriate thimble materials are prefabricated for the size of the stovepipe and surrounding material, or a fire clay thimble surrounded by noncombustible material.

Besides installation, there are several tips that will help to keep the wood-burning stove safe:

- Chimney and chimney connectors require regular inspection and cleaning to remain reasonably safe. Chimney fires are a common problem.
- Small children must be taught to stay away from the stove. Some kind of barricade should be around the stove if there are crawling tots who are too young to be verbally warned.
- Place ashes in a lidded metal container. Because they might be hot, clean up any ashes or cinders that spill on the floor.
- Take down the stovepipe at least once or twice during the heating season and clean out the soot. Removing the accumulated soot saves fuel, increases heat and minimizes the danger of fire.
- Install a smoke and carbon monoxide detector in an adjacent room to avoid false alarms when you recharge the stove or from back puffing because of wind.

Choosing to heat a home with wood can be an affordable and comfortable choice. Making sure the wood-burning stove is installed, used, and maintained correctly can make sure it is also a safe choice.

## **AGRICULTURAL HOUSEKEEPING CAN PREVENT INJURIES**

### **Kent McGuire – Ohio AgrAbility Program Coordinator**

Sometimes you have to make a mess to make progress. Take a look around your shop area. Your shop area is probably being used to the fullest extent this time of year in preparation for springtime activity. Shop areas and specific work areas must be considered for creating dangerous conditions or work hazards. Lack of housekeeping can create such hazards. Some general housekeeping guidelines for your shop area should include:

- Keep aisles and high traffic areas free from debris to prevent a trip / fall hazard
- Clean up all spilled materials. Oils, grease, and cleaners can cause a slip / fall hazard if left on the floor.
- Put tools, materials, and unused supplies in their designated places and continue to put them back in the proper locations after use. No one wants to waste time looking for tools.
- Make sure materials that are stored on shelving are secure and stable to prevent an injury from a falling object.
- Organize chemical storage areas, keeping herbicides, pesticides, and flammables separated to prevent an environmental, fire, or health issue.
- Do not allow an accumulation of waste to build up. Properly dispose of unwanted boxes, paper, bubble wrap, wood scraps, metal, or broken parts.
- Keep torch and welding areas free from debris to prevent a fire hazard.
- Spending 15 minutes at the end of every day, to clean up and organize your work area, may prevent hours at the emergency room with an injury.

For more information about the Ohio AgrAbility Program, please contact Kent McGuire, OSU Agricultural Safety & Health, at [m McGuire.225@osu.edu](mailto:m McGuire.225@osu.edu) or 614-292-0588.

## **EMERGENCY MANAGEMENT TIP of the MONTH: *GRAIN BIN SAFETY***

### **Aletha I. Reshan, Emergency Management Planning and Education Program Coordinator**

Working with grain bins is an occupational hazard in the agricultural industry. Entrapment is a leading hazard and often results in death. There are three main types of entrapment; flowing grain, collapse of a grain bridge, and avalanche of a vertical grain wall. Grain flowing out of the bin with the use of an auger is similar to quick sand in that it draws the worker under the grain and can quickly result in suffocation. A worker who walks across a seemingly crusted grain surface will apply weight that will very likely cause the crusted surface to collapse resulting in the worker becoming submerged. A worker trying to dislodge caked grain can be buried by the grain. In all of the instances, the worker is at risk because of being inside the grain bin. Therefore, a worker should never enter a bin with flowing grain or if they are uncertain of its condition. If entering a bin is unavoidable, the following safety precautions should be taken:

- Always have additional individuals on site in case of an emergency
- Non-verbal communication should be agreed upon beforehand
- Lockout/tagout procedures should be followed
- A positioning device should be used so that the entrant cannot be pulled into grain that begins to flow.
- Never stand on the grain
- Always work from the top to the bottom on vertical grain walls

For more information on grain bin safety, please visit <http://ohioline.osu.edu/index.html>.

\*\*\*\*\*  
Ag Safety S.T.A.T. - Safe Tactics for Ag Today is an e-mail newsletter prepared by Dee Jepsen, Extension Agricultural Safety Specialist and team members from the State Safety Office, in the Department of Food, Agricultural and Biological Engineering at OSU. The primary goal of this monthly newsletter is to help you stay connected to everyday safety news and activities that may be used in your own newsletters or programs. If you have safety-related questions or program ideas that you would like to share, please contact Dr. Jepsen at [jepsen.4@osu.edu](mailto:jepsen.4@osu.edu)  
\*\*\*\*\*