

# Never Enter Untrained

WHY THE NUMBER OF INCIDENTS ISN'T DROPPING AND WHAT YOU CAN DO ABOUT IT

The number of grain entrapments in the past seven to 10 years and resulting fatalities in this area are much higher than what we experienced in the 1980s and 1990s. Some of us speculate that this depressing trend line is due to several factors:

- Steel bins are getting larger.
- Handling capacities in terms of bushels per hour have risen dramatically.
- The United States is producing more corn, 10 to 15 billion bushels a year.
- Many operations are holding the grain longer for increased storage retention time.

A case in point is the fact that the number of grain entrapments and related fatalities are tracking higher in the first seven to eight months of 2013 than the total we experienced in all of 2012. (See **Table 1** on page 31.) The recap for 2013 is not complete, just an indicator of where we're going.

## Incidents by State

We see these incidents happening across the entire Midwest. The following incidents are recapped by state for the first part of 2013.

**Michigan** – Jan. 26: Farmer died in bin of soybeans in Shiawassee County.

– April 30: Farm worker saved in corn bin near Port Austin.

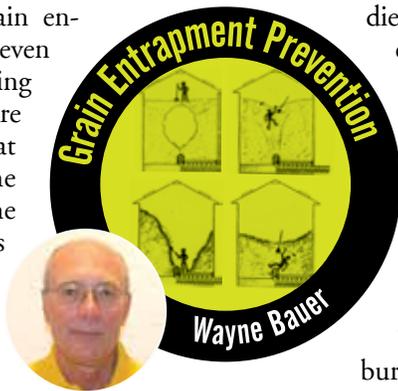
**Georgia** – Feb. 15: Farmer and rescuer both freed from bin of soybeans near Statesboro.

**Kansas** – Feb. 20: Man rescued from bin at Valley View Milling north of Seneca.

**Texas** – Feb. 21: Man died in corn bin at a milling company.

**Nebraska** – March 13: Man rescued from soybean bin at All Points Cooperative in Gothenburg.

**Iowa** – March 14: Father and son



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die at Schneider's Milling elevator in Waverly.

– June 26: Farmer rescued near Owasa, totally engulfed under corn.

– July 9: Farmer died in bin near Dayton.

**Illinois** – March 15: Man rescued at Elburn Co-op grain elevator in Morris.

– April 26: Man rescued in corn bin near Basco.

– May 1: Farmer rescued in corn bin near Woodson.

**Idaho** – March 28: Farmer rescued from grain bin in Bonner County.

**Wisconsin** – April 19: Man died in corn silo at United Ethanol plant in Milton.

**Brazil** – April 21: Silo collapse responsible for four deaths.

**Ohio** – May 28: Ohio farmer died in corn bin at Bethel Township.

**Minnesota** – June 17: Man rescued at Hendricks Farmers Elevator.

**Indiana** – Man died in soybean bin at Stone Bluff Elevator in Fountain County.

Most of these incidents and needless deaths can be attributed or blamed in part on the fact that these operations are ignoring the simple seven Best Management Practices that we have been stressing for the past 10 to 15 years. We will continue to put more emphasis on the following three of the seven Best Management Practices in future articles in *Grain Journal*.

## 1. Stay Out if Possible

This is the zero entry mentality. We need to remove the temptation to jump into that bin, while there is enough grain in it to entrap or engulf someone. We can do this by not letting the grain spoil and designing better reclaim systems. Future articles and training will focus on:

- Better aeration systems (0.2 to 0.3 cfm per bushel), moving more air

under the roofs with additional vents, and just monitoring the grain condition more closely. Grain conditioning and management needs to improve.

- Zero entry systems – Install larger discharge sump holes. Place the intermediate holes eight to 10 feet apart. Use better-designed and safer sweeps and paddle systems. Provide larger service tunnels under the bins to service these systems properly.

## 3. Never Enter Untrained

Anyone entering these bins needs to have hands-on training. Has your workforce received adequate training in the past 12 months? We will address this question more closely in the future: What is adequate training for everyone involved (hourly employees, supervisors, and local emergency responders?

Who should be expected to step up to what levels of training?

- 4-8 hours/year: Awareness level (and annual refresher).
- 12-20 hours/year: Operation level.
- 30-60 hours/year: Advanced/technical rescue level.

At a minimum, anyone you ask to go into a bin should have received enough training to be able to:

- Identify the hazards.
- Mitigate the hazards.
- Use bin entry and rescue equipment.

Have you offered your employees, your farm customers who have on-farm storage, and your local emergency responders *real* training by a qualified instructor in the past 12 months?

## 6. Secure Lifeline

The grain industry, steel bin manufacturers, and OSHA have all but ignored this critical and fundamental issue for the past 20 years. Everyone has refused to address this extremely important and critical element when using harnesses and lifelines.

- How do you secure that lifeline properly, so the attendant can deal with a 600-800-lb. jerk on the line? How do

you prevent the entrant from sinking below the waist in grain, if you have two to three feet of slack in that lifeline?

- If the steel bin and contractor involved installs top and side access doors, they obviously expect people to enter the bin while there may be grain in it. If this is the case, what type of anchor point have they provided you with to secure that lifeline properly? Will it handle 1,800 pounds of force?

- Do you understand the difference between fall protection, fall arrest, fall restraint, and/or work positioning? Which apply to someone walking on grain inside your steel bin?

- Do you have a competent person who can inspect these systems and components every year? Do you have a rescue plan, proper rescue equipment, and trained employees that can respond timely and effectively should the need arise?

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**Form a Team**

We will continue to focus more seriously and comprehensively on these issues in future articles and training seminars.

In the meantime, please consider teaming up with any of the following people or groups in your market area to offer real training in the next 12 months:

- Your farm customers who have

**Table 1**

**Grain Entrapment & Fatalities for 2013**

Unconfirmed Numbers as of August 5, 2013

	Reported Entrapments	Fatalities
As of 8/5/13	21	10
2012	19	8
2011	30	11
2010	57	31
2009	41	19
2008	33	17
2007	33	16

on-farm grain storage.

- 4-H groups and FFA chapters.
- County and state Farm Bureau groups.
- Ag extension.
- Local GEAPS chapters.
- Local fire departments.
- County emergency planning committee, emergency director, and 9-1-1 dispatchers.
- Steel bin representatives and/or contractors in your area.
- Insurance agents.
- Others you may add to the list.

Put a date on your calendar for the next training opportunity for 2014 now. You need to get that date on your calendar and promote it. You need to plan for it and make it happen every year.

If we do not take this seriously, our employees, family members, and customers will continue to die in our grain bins needlessly. You can help prevent that by taking action now.

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**Best Management Practices for Bin Entry**

