Focus on Fires for 2012 Harvest

AMES, Iowa—Nationwide, combine and tractor fires are believed to have caused tens of millions of dollars in property losses each year. Harvest is a prime time for agricultural fires, even when the weather has not been warm and dry. This year, the normal harvest dryness will be intensified since Iowa has been experiencing drought conditions. The normal potential for agricultural fires also is increased, warns Chuck Schwab, agricultural safety specialist with Iowa State University Extension and Outreach.

“The three parts of any fire – fuel, oxygen and ignition source – are in Iowa’s agricultural fields,” said Schwab. “Fuel sources such as husks, leaves, dust and grains are always present when harvesting, and so are many sources of ignition found on combines, trucks and other vehicles that include exhausts, hot engine compartments, bearings and electrical wiring.”

Minimize risk of harvest fires

Schwab said there are several ways farmers can minimize the risk of harvest time fires.

- Clean stalks and debris from the combine often. How often depends upon the wind and field conditions.
- Monitor tractors for similar buildup of dry materials that are a fuel source for fires.
- Watch closely when trucks and other vehicles enter those fields with dry materials. The catalytic converter located on the underside of these vehicles can easily serve as the ignition source.
- Carry a fire extinguisher and know how to use it.

Using fire extinguishers

Carrying a fire extinguisher in these vehicles might make the difference. Be prepared for combine fires by carrying two ABC-type extinguishers – one in the cab and one at ground level. Use a 10 pound extinguisher in the cab or operator’s station and a 20 pound size nearer to ground level. Tractors and other vehicles can have one ABC-type extinguisher and the size depends on the space available.

“Make sure the extinguishers you have on your vehicles are ready and fully charged for use,” Schwab said. “Just having the extinguisher is not enough; you should know how to use it effectively.”

Ideally it is best to have practiced putting out a fire with an extinguisher in a controlled training session before confronting an actual fire, according Schwab. However that is not always possible so he suggests remembering the acronym PASS when using any portable fire extinguisher. PASS stands for:

P – Pull the pin in the fire extinguisher handle. This allows you to squeeze the handle and release the extinguishing agent.
A – Aim the fire extinguisher at the base of the fire. If the spray is not directed at the base then the chance of extinguishing the fire is lost.

S – Squeeze the handle firmly to start the flow of extinguishing agent. Starting and stopping extinguishing agent flow is controlled by the squeezing the handle.

S – Sweep the fire extinguisher back and forth – not too fast or too slowly because it does make a difference in how effective you’ll be in extinguishing the fire.

Not all fire can be extinguished by an individual with a portable fire extinguisher. A large 20 pound fire extinguisher does not contain an infinite supply extinguishing agent. These portable extinguishers only last a few minutes at most and that means the time to control the fire is limited. A fire extinguisher can be effective when properly used if the fire is discovered early, when it is still small.

Fires that have been discovered too late or that have grown too big for a fire extinguisher to handle require a different response. Call for professional help during the first sign of fire. Instead of fighting the fire, retreat to a safe distance and wait for the professionals. In some cases, farmers barely have enough time to exit the operator station before the fire can trap them. Avoid getting caught or trapped by a large fire while trying to extinguish it.

“Personal safety must be the top priority and the equipment that is on fire secondary,” said Schwab. “Make smart decisions about safety as you choose to fight or flee a fire. The value of that equipment that is on fire is never worth your life.”