

Preventing Combine Fires During Fall Harvest

Autumn weather conditions have led to an increase in combine fires. Two recommendations to prevent injuries and property damage include: preventative maintenance and pre-planning for fire emergencies.

Ohio ranks fourth in the nation for combine fires. Other states leading the list include Minnesota (1st), Iowa (2nd), Illinois (3rd), Kansas (5th), Nebraska (6th) and South Dakota (7th).

Most harvester fires start in the engine compartment. Contributing factors for heat sources include faulty wiring, over-heated bearings, leaking fuel, or hydraulic oil. The dry crop residue makes a ready source for rapid combustion to occur when the machine is operated in the field. Birds and wildlife are known to make nests in the engine compartment or exhaust manifolds – which can add fuel sources for unsuspecting combine operators.

TIPS TO PREVENT COMBINE FIRES INCLUDE:

- **Have a daily maintenance plan during the harvest period.** Keeping machinery well-maintained plays a large role in preventing fires from these sources. Cleaning up spills, blowing off chaff, leaves, and other plant materials on a regular basis, proper lubrication of bearings/chains, and checking electrical connections should be part of the daily routine. Farmers may choose to do their daily maintenance in the morning while waiting for the dew to burn off the crops. However, performing maintenance at night will highlight any hot spots or smoldering areas as the machine is cooling down. Removing chaff at the end of the day will reduce the number of debris available to spark a fire.
- **Eliminate static electricity.** A chain may also be mounted on the bottom of the machine to drag on the ground while in the field. This decreases the buildup of static electricity.

IF A FIRE BREAKS OUT, IT'S IMPORTANT TO HAVE AN EMERGENCY PLAN IN PLACE:

- **Call 911 or your local first responders at the first sign of a fire.** Don't wait to know if you can contain a fire yourself, rapid response is important to saving valuable equipment. Combine fires are often in remote locations where a specific address may not be available, and access is limited. Emergency response times will be longer in these situations.
- **Have (2) ABC fire extinguishers mounted on the combine.** A 10-pound ABC dry chemical fire extinguisher in the cab or near the ladder of the cab is quick access to protect the operator. A second extinguisher (20-pound ABC) is recommended to be mounted on the outside of combines where it is accessible from the ground. It's possible that one unit will extinguish a small fire; having the second unit will help with any additional flare-ups. Don't forget to check that the extinguishers are fully charged at the beginning of the season. Not having extinguishers ready when needed leads to a helpless feeling of watching one of your most expensive pieces of equipment go up in flames.
- **Have a water truck positioned by the field.** Hot mufflers and catalytic converters from other vehicles driving in the field can pose a risk to the dry field fodder. Smoldering materials may take 15 to 30 minutes before being noticed. A small gust of wind could rapidly turn that smoldering into a fire. In extreme dry conditions, a water truck may help protect against field fires. Never use water on fires that are electrical, or fuel sourced.

- **Have an emergency plan in place and discuss it with the other workers or family members.** Knowing what to do in the event of a fire emergency is important. Knowing the address to the field and how to contact fire departments directly instead of through the 911 system are important safety conversations for the entire harvest crew.

Don't get caught thinking it can never happen on your farm. Take preventative action and be prepared. October is National Fire Prevention Month. It is always recommended to check your fire extinguishers and smoke detectors around the end of daylight savings time.

The above article is a cross-posting originally released in the Crop Observation and Recommendation Network Newsletter.

Upcoming Events & Reminders

2023 Beginner & Small Farm College for Adams, Brown, Highland, and Clermont Counties is a college designed to help landowners examine ways to increase profits on their small acreage properties. This is open to all new or aspiring farmers, rural landowners, and farm families looking for new ideas. Registration is limited to the first 50 participants. The cost to register is \$100 for the first person and \$75 for each additional person. These series of courses will be from 6:00-9:00 pm on November 30th, December 7th, December 14th, and December 21st. This is a great opportunity to develop realistic expectations for your farm. For further information, please contact your local extension office. Adams County can be reached at 937-544-2339 or stoneking.24@osu.edu