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FOR IMMEDIATE RELEASE
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Preventing Baler Fires

As we are now into the month of May and winter has pretty much given up the fight, we will soon be making hay for next winter. As we do, getting equipment ready is always part of the job. I read the information below in the Beef Blog recently and thought it provided some good points to consider as we move toward hay season. Katelin Spradley, who is a student at Oklahoma State University, studying agricultural communications and animal science, points out several tips to consider before taking your baler to the field.

After months of planning and preparation, the last thing you want is to watch your efforts and equipment go up in flames. In a few minutes, a baler fire can devastate an operation, something easily prevented. “For one thing, it doesn’t make any difference what brand or color the baler is,” says Jim Bailey, who owns a custom baling operation and has been baling hay south of Fort Worth, Texas, for more than 30 years. “They’ll all burn.”

Bailey’s own baler and 5 acres of his field burnt down in 2002. Even though he used a water fire extinguisher, Bailey’s baler was gone when firefighters arrived 20 minutes later. A bearing in the bottom of the tailgate caused the fire, Bailey says. A common cause of baler fires is mechanical issues, primarily problems with bearings within the baler like in Bailey’s case, says Carol Jones, a biosystems and agricultural engineering professor at Oklahoma State University. “Baler fires generally start because of friction,” Jones says. “Something catches on fire because of the friction from a belt that has gotten too loose. The belt starts slipping or a bearing has gotten hot and ignites dust, loose material and the bale itself.” Faulty or worn bearings can cause “hot spots” on the baler, which when exposed to forage at a moisture content below the recommended 20 percent can ignite disaster, says Tracey Erickson, South Dakota State University Extension dairy field specialist. “Baler fires can happen to anyone who puts up hay, so there are some basic preventative things to keep in mind.”

To prevent problems with bearings or other mechanical parts, visually inspect the baler before heading to the field, Erickson says. A simple walk-around can give producers a good idea of the condition of their balers to allow for maintenance and repair before heading out to bale where a fire might occur. Performing a visual walk assessment of the baler also provides an opportunity to inspect bearings for signs of wear. A purple discoloration of the rollers on large round balers or an accumulation of net wrap or twine around the rollers are good signs a bearing might be wearing out, says Jared Heston, owner of Heston Farms Baler Repair in Rush Springs, Oklahoma. The business performs maintenance on more than 200 balers a year.

An easy and inexpensive tool to use when checking the condition of bearings is an infrared heat thermometer. Infrared heat thermometers have a variety of uses around the farm, including checking the temperature of baler bearings and the internal temperature of hay bales in storage, Jones says. To reduce the incidence of a fire, the baler should be blown off before and periodically during baling.



Dry matter can accumulate on flat surfaces of the baler and quickly ignite if not removed, Heston says. Many producers have an air compressor on their truck that allows them to blow debris off their baler every 50 bales. “When blowing off the baler, make sure you shut off both the baler and the tractor completely so you won’t risk entanglement,” Erickson says. After clearing a baler of debris, greasing bearings daily provides another good opportunity to check for wear, says Heston. Hoses and belts can also be sources of a fire and should be checked for wear as well. “If you’re making repairs and welding, make sure you aren’t near any pipes or hoses that a weld spark could melt through and start a leak,” Erickson says.

Just like you would have a plan if your house caught on fire, you should have a plan if your baler caught on fire. Simple maintenance helps prevent most baler fires, but being prepared is just as important in the rare case one does occur. “Read your operating manual so you’re familiar with how the baler works, so if you have to do something in a hurry, you don’t have to hesitate.” Before heading to the field, make sure you carry an ABC extinguisher rated to extinguish wood, liquid and electrical fires. Just as importantly, you should regularly ensure the fire extinguisher works and everyone who operates your equipment knows how to use it. In case of a fire, producers should have 4 to 5 gallons of water and a shovel or spade to throw dirt on the fire, Erickson says.

Communication should be a key element of your plan should a baler catch on fire. “On the personal side of things, make sure you have a good charged cell phone and know where you’re at, especially if you’re a custom baler, so you can give accurate directions to 911 if a fire did occur.” In the unfortunate event a fire does occur, producers should use the resources they have to put out the fire. If at all possible, empty the baler of the bale to eliminate the combustion source and unhook the baler from the tractor. The most important thing to remember is your own safety. “A baler can be replaced, but you getting home at the end of the day is most important,” Erickson says.

Dates to Remember

May 14 Pesticide and Fertilize Applicator Testing at the Old Y Restaurant at noon. Pre-register at <http://pested.osu.edu> or call Ohio Dept. of Agriculture at 800-282-1955.