# Monitor Hay For The Threat Of Fire

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Haying season is in full swing in the Ozarks and with it comes the imminent threat of hay that is baled too wet catching fire.

High moisture content of hay can be a serious problem within days or weeks after it is stored according to Tim Schnakenberg, University of Missouri Extension agronomy specialist.

"Hay should be not be baled at moisture levels of higher than 18 to 20 percent. Hay that has high moisture levels will lose large amounts of dry matter and excessive heating and mold can occur. Spontaneous combustion is possible in some cases," said Schnakenberg.

Monitoring stored hay, especially during the first six weeks after it is baled, is important if hay is wetter than desired when baled. Excessive moisture is a common cause of hay fires.

"Hay stacks can be probed with a long probe with a thermometer at the end. Some producers have made home-made probes using a long pipe no wider than three-fourths of an inch with a flattened end to probe between bales," said Schnakenberg.

Holes are drilled near the flattened end for heat to enter the pipe. A thermometer tied to a wire is dropped into the probe into the middle of the hay stack for monitoring. After 10 to 15 minutes, the thermometer can be retrieved to read the temperature.

"It's not uncommon for the temperature to reach 130-140 degrees Fahrenheit. If it goes above 150 degrees, the temperature will most likely continue to climb. At this point you can move the hay to provide air circulation and cool it down," said Schnakenberg.

Once the temperature reaches 175 degrees or above, fire is imminent and the fire department should be called.

"Moving the hay and exposing it to air at these temperatures may actually ignite a raging fire," said Schnakenberg.

Temperatures of 200 degrees or above means fire is present and water must be injected into the stack before moving hay.

"If you see or smell smoke coming from the bales, avoid walking on top of the stack since a burned-out cavity may have formed that you could fall into. If you must get on top, walk on plywood or a ladder placed on the top, have a second person nearby and a tie onto a lifeline," said Schnakenberg.

For more information contact the nearest MU Extension Center. The following University of Missouri Extension specialists can also help: Tim Schnakenberg at (417) 357-6812, Jay Chism at (417) 682-3579, Eldon Cole at (417) 466-3102 and Bob Schultheis at (417) 859-2044. Δ

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