Insulation and Plastic from Tornados May Not Mix Well With Livestock

MARSHFIELD, Mo. -- Agriculture and livestock specialists with University of Missouri Extension have been getting questions from southwest Missouri cattle producers wondering about the danger fiberglass insulation in fields can pose to cattle.

“Since the May 22 tornadoes, when lots of fiberglass insulation was scattered throughout area hay fields and pastures, we have been getting this question. For many land owners, it is not practical to pick up every bit of insulation blown onto their land,” said Bob Schultheis, natural resource engineering specialist with University of Missouri Extension.

The main concern has been whether spun-glass insulation will cause damage to livestock if they ingest it when the hay or silage is fed.

Food animal clinicians, toxicologists and pathologists at the University of Missouri’s School of Veterinary Medicine agree that small amounts of insulation will likely not cause damage.

But that doesn’t mean farmers should not attempt to clean up their fields as much as possible.

“Fiberglass has no toxic chemical properties. However, any indigestible foreign material eaten by cattle can cause blockage in the digestive system. That means the risk associated with intestinal obstruction would likely be associated with the size of the insulation swallowed,” Dr. Monty Kerley, division of animal science at the University of Missouri.

There is general agreement among veterinarians at the University of Missouri that cattle would avoid larger pieces of fiberglass insulation. However, small pieces mixed in with hay and silage is another matter.

“If an animal eats enough small pieces of insulation in hay or other feed, it could bind together and create a large mass of insulation that could block the digestive tract and cause serious, even fatal, problems. We sometime see these types of blockages if cattle consume twine or net wrap or plastic bag material,” said Kerley.

The other main concern focuses on whether the glass particles in fiberglass would penetrate the intestinal tract in livestock and cause a tissue reaction.
“This has been associated with the inhalation of asbestos. There is some disagreement among veterinarians on this question. I have not been able to find definitive research that provides information that would allow us to assess the degree of risk for cattle that ingest lots of smaller pieces of insulation,” said Kerley.

As a result, area extension specialists are generally recommending that producers pick up larger pieces of insulation in their fields and discard forage from a field area that is heavily contaminated with fiberglass.

“Small pieces of fiberglass that cause forage to only be lightly contaminated pose a low risk to cattle and livestock,” said Kerley.

For more information, contact any of the MU Extension livestock specialists in southwest Missouri: Eldon Cole in Mt. Vernon, (417) 466-3102 or Dona Goede in Cedar County, (417) 276-3313. Another possible contact is Dr. Monty Kerley, division of animal science at the University of Missouri, (573) 882-0834.

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