

# Wildfire damage to cattle may be more than the eye can see

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## AgriLife TODAY

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AMARILLO – Livestock caught in the path of the recent wind swept fires across the state of Texas could suffer death, severe damage from burns and smoke inhalation.



Smoke from fires can cause breathing problems for cattle, even if they are not actually caught in the fire. Texas AgriLife Extension Service personnel advise cattle owners to have their animals checked out by a veterinarian. (Texas AgriLife Extension Service photo by Kay Ledbetter)

Since April 6, Texas Forest Service has responded to fires that have burned more than 1 million acres. While many structures have been protected and some lost, the untold number is the amount of

livestock injured and dead in the wake of the fire.

“Locate them, provide adequate nutrition and then consult your veterinarian,” said Dr. Robert Sprowls, assistant agency director of the Texas Veterinary Medical Diagnostic Laboratory in Amarillo.

“If they can be moved to unburned ground, it is best,” Sprowls said. “Get them to fresh water and then rotate their feeding area to prevent the build-up of pathogens.”



Texas AgriLife Extension Service personnel advise cattle owners that it is important to get cattle that have been stressed by wildfires to fresh feed and water and to have them checked out by a veterinarian. (Texas AgriLife Extension Service photo by Kay Ledbetter)

The most important thing is to provide livestock with high-quality forage that includes a protein and mineral supplement and good water, Sprowls said. If the livestock don't get adequate nutrition and water

immediately, their health can deteriorate rapidly.

The fires came at a very inopportune time for ranchers who are in their calving season, said Dr. Ted McCollum, AgriLife Extension livestock specialist. Not only will there be damage to the animals, but the dry soil profile doesn't promise any recovery of those rangelands anytime soon, unless significant rain falls.

“We probably had a lot of calves that were laying out susceptible to the fire, as fast as it was moving across there,” McCollum said. “They had no place to go. Also there will be a lot of mothers with potentially scorched udders. The calves that survived won't be able to suckle the mothers who have sore udders.”

Analyzing injuries to cattle following a wildfire is important to minimize losses, said Dr. Floron “Buddy” Faries, AgriLife Extension veterinarian in College Station.

“It might look like they've made it and there was no visible physical damage,” Faries said.

“However, it’s important to have them looked at by a veterinarian as soon as possible because there could be secondary problems that lead to infections and further problems.”

Health disorders, such as burned eyes, feet, udders, sheaths and testicles, as well as smoke inhalation with lung inflammation and edema, are the most common problems, he said.

“One of the problems we’ve run into in the past is with the feet,” said Ron Gill, AgriLife Extension livestock specialist in College Station. “It may take 10 days to two weeks for the damage to start showing. The cattle will start sloughing the hoof wall and become crippled.”

AgriLife Extension and veterinarians are working on determining major symptoms to look for and what actions to take if lameness begins to appear, he said.

“To assure the welfare of the affected animals, veterinarians need to be consulted,” Faries said. “If, in the event the animal is not going to be able to be treated, decisions concerning sending them to market need to be made immediately, before secondary complications develop.”

Damage can also be done by livestock inhaling smoke, he said. Smoke can move for miles, and cattle that are not near the flames or heat could suffer some damage. Contact with burning grass, weeds and brush causes immediate burns, with severity determined by the degree of heat.

However, inhalation of smoke causes immediate irritation to the lining of the respiratory system, including nasal passages, trachea and lungs, Faries said. This can lead to inflammation, edema and emphysema, with the severity determined by the duration of inhaled smoke.

“The time it takes to cause damage might only have to be a few minutes with high quantities of smoke and may be hours in low quantities of smoke,” he said.

In addition, the lining of the eyelids and eyeballs can be irritated and lead to secondary infections which can be fatal, Faries said.

Once the fire has passed, immediately consult a veterinarian for any animals with severe burns or direct smoke exposure. Other livestock should also be evaluated for possible health disorders and treatment or determining if the animal can be salvaged, or, for humane reasons, should be slaughtered or euthanized, he said.

The prognosis of mild cases may be good with treatment and will be cost-effective, Faries said.

Monitoring should continue for weeks after the event, he said. Secondary complications could be indicated by a cough or cloudy eyes in the animals.

“Before these secondary complications of infection occur, immediate slaughter for human consumption may be the most appropriate, humane procedure,” Faries said. “Prior to slaughter, an antemortem inspection will be conducted by veterinary meat inspectors to determine safety and wholesomeness for human food.”

For more information on care of animals and pastures after wildfires, AgriLife Extension has posted information on the Texas Extension Disaster Education Network or EDEN at <http://texashelp.tamu.edu/004-natural/fires.php>

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