

What's Your Contingency Plan?

Attention to herd health may help your cattle weather a natural disaster.

by **Kindra Gordon**

Mother Nature can throw some unexpected — and extreme — curve balls at cattle ranchers from time to time — from drought and floods to hurricanes that come ashore or tornados that touch down.

Most recently for South Dakota, it was the Oct. 4-5, 2013, blizzard that started with heavy rain followed by three to four feet of snow and 60 mph winds killing 20,000 to 30,000

head of livestock in the Black Hills region. Temperatures had been in the 70s just days before, and livestock did not have their winter hair coats to help protect them from the elements.

“A lot of producers prepared as best they could. It was really a freak storm,” says Adele Harty, a cow-calf field specialist with South Dakota State University (SDSU) Extension.

SDSU Extension Veterinarian Russ Daly examined many of the cattle carcasses after the South Dakota blizzard. He reports that stress on the animals' bodies resulted in pulmonary edema, which killed many of the animals. Harty and her colleagues spent weeks after South Dakota's blizzard helping livestock producers cope and emphasizing that in a catastrophic weather event



— be it a blizzard, a tornado or devastating flooding — many things are unpreventable.

That said, the best that cattle producers can do for their animals is to have them well cared for and in a good state of health at all times so that they are able to weather whatever storm strikes as best they can. Then, after the storm, producers should be prepared with adequate feed on hand to help animals recover.

For instance, after the South Dakota blizzard, Harty and her SDSU Extension colleagues worked with producers to ensure that nutrient requirements of calves and cows which survived were being met. “We wanted to make sure these animals’ immune systems could work to keep them healthy. Their nutrient requirements — especially for energy — were higher after they survived the blizzard,” Harty says.

Management checklist

While no one can fully prepare for any disaster, SDSU Extension specialists say there are some management strategies that may help livestock — and producers — through the stress of a catastrophic event.

The adage “Prepare for the worst, hope for the best” is a good rule-of-thumb to keep in mind.

In being prepared for an unexpected weather event, Harty offers this management checklist:

- ✓ Strive to keep livestock in good body condition — especially going into winter and calving. A body condition score 5 at calving has been shown to produce the best breed-back rates.
- ✓ Have adequate feed on hand and located relatively close to animals.
- ✓ Maintain an annual herd health and vaccination protocol so that animals have strong immune systems.

Discuss some type of emergency preparedness planning with your family or employees.

- ✓ Recognize that animal identification is important. In a storm cattle can drift for miles and some form of identification is essential to retrieve live animals or to document dead ones.
- ✓ Discuss some type of emergency preparedness planning with your family or employees. Consider different scenarios — a blizzard, a drought or the possibilities of a tornado, extreme flooding, even a disease outbreak. Who should be contacted, which animals will be given priority and how/where will you dispose of dead carcasses?

After a stressful event, surviving cattle may need special management for a while, reports Daly. Following the South Dakota blizzard, some cattle showed signs of “transport tetany,” including hyperexcitability, tremors and then recumbency. He explains this condition is brought on by long-term feed and water deprivation and then rapid resumption. It is exacerbated by grass tetany caused by the fall green-up in pastures.

Calves were also more prone to bloat from disruptions in feedings.

Increased aggression in cattle was also observed.

Daly also shares that weeks after the storm, cattle still had increased blood cortisol levels, which cause shifts in the immune system that reduce vaccine response and increase susceptibility to bovine respiratory disease (BRD).

Based on these things, Daly offers this management advice following a stressful event on the herd:

- Manage feed resumption, keeping it a gradual return to feed and water, if possible.
- Allow for stress levels in cattle to level out by minimizing your movement or working with them, especially consider delaying vaccinating.
- Seek help from veterinarians, nutritionists and/or Extension specialists in assessing any nutritional or health needs of the herd.
- Remind yourself that you can’t control everything.
- Daly concludes by noting that sometimes good management and proper animal care may not always be enough against Mother Nature. **HW**

Advice on preparedness

“Another way to be prepared is to think negatively. Yes, I’m a great optimist, but, when trying to make a decision, I often think of the worst-case scenario. I call it ‘the eaten by wolves factor.’ If I do something, what’s the most terrible thing that could happen? Would I be eaten by wolves? One thing that makes it possible to be an optimist is if you have a contingency plan for when all hell breaks loose. There are a lot of things I don’t worry about, because I have a plan in place if they do.”

— From *The Last Lecture* by Randy Pausch