

Flood Recovery Concerns for Beef Cattle Producers

Justin Rhinehart
Professor and Extension Beef Cattle Specialist
Department of Animal Science, University of Tennessee

Recent flooding in Middle Tennessee may have caused immediate problems for beef cattle producers and might still lead to long-term issues in areas where infrastructure has been damaged. The following are some issues to be aware of in the short- and long-term:

Contaminated feed and water supply

Cattle must have an adequate supply of fresh water to survive. Water consumption need will be particularly high during periods of hot or warm temperatures. **Providing fresh water is the first priority.** Use water tanks, and ask for help from neighbors and local fire departments for immediate water needs.

- Dry cows need at least 7.5 gal/head/day of water
- A cow-calf pair needs at least 9 gal/head/day water
- Weaned calves need at least 5 gal/head/day water



Livestock may refuse to consume forages in areas that have been contaminated by waste water because of palatability problems. Be sure to provide livestock with another source of forage or feed until pastures are cleansed by rains or otherwise.

Beware of feeding moldy or otherwise unsafe feeds to livestock. Hay and baleage exposed to the elements or completely submerged will spoil rapidly if not fed immediately. Uncovered baleage is most likely a loss unless it can be quickly re-wrapped. Make sure feed is not contaminated by chemicals as a result of the storm. Watch cattle closely for signs of dis-



stress, and make sure plenty of forage or other roughage is available to cattle along with free-choice quality mineral supplements and clean water.

Young, growing animals may be most susceptible to nutritional disturbances. Damage to feed storage structures or feed handling equipment and disruption of feed supplies can result in abrupt changes to cattle diets. Attempt to minimize these changes as much as possible, and observe cattle closely during this period. Abruptly

changing cattle diets can result in bloat or other nutritional disorders that threaten livestock health. Attempt to slowly shift animals onto new diets by increasing the amount of the new diet offered to animals in 0.5- to 1-pound increments over several weeks.

Trees are often downed as a result of flooding. Trees in Tennessee that could cause potential livestock disorders if their leaves or nuts are consumed include buckeye (horse chestnut), wild cherry (black cherry), and oak trees.

Herd Health

It is important to resume a herd health program in consultation with a veterinarian to address possible disease concerns after a flood or other strong storm. Observe all cattle individually for injuries. Initiate appropriate treatments as determined by acceptable animal husbandry practices and with the guidance of a licensed veterinarian. The lack of electricity caused by a flood can result in a loss of refrigeration for cattle vaccines stored at home or at working facilities. Most vaccines have a very limited shelf life when left unrefrigerated. This means they will not be effective in boosting cattle immunity when administered. Carefully read product labels, and discard unused or unrefrigerated products as appropriate.

Blackleg, anthrax and other clostridials are serious post-flood diseases that can be spread over by standing water. Also watch for and try to prevent foot rot, mastitis, tetanus and botulism. Cases of these occur more frequently when flood waters expose cattle to microorganisms and injury threats that are not normally found in safe pastures.

Carcass Disposal

If flood-related livestock death losses are experienced, those carcasses should be disposed of within 24 hours of death. Burial is the most often utilized method of disposal of dead animals. There are some best management practices which are recommended when using this method. The lowest point in the burial pit should be no more than 6 feet deep in a moderately well drained to excessively well-drained soil. Groundwater should not be able to enter the burial pit. Avoid wetlands, floodplains or areas along a stream bank. The burial pit should be at least 100 feet from any well and surface water. Also, carcasses should be initially covered with at least 6 inches of soil and ultimately with at least 30 inches of soil.

Composting is using the natural decomposition process and accelerating it by the addition of organic waste materials to generate heat. In the state of Tennessee, permits are not required for on-farm composting operations where the compost is considered to be part of normal farming operations and used on the same farm as part of agronomic or horticultural operations.

Incineration is another method of disposal of a dead animal which can be very energy intensive. When using this method, the proper permits and following of local regulations are required.

Damaged Fences and Gates

Downed and damaged fences are likely after flooding. Producers who have access to solar chargers and polywire electric fencing can use these for a quick, temporary fix. Work to keep cattle off roadways. Watch for downed power lines and other hazards in the process of rounding up cattle. Be careful not to overcrowd cattle in small areas for extended



periods of time.

- Dry cows and growing cattle need 30 ft²/head of pen space
- Cow-calf pairs need 150 ft²/unit of pen space

Perimeter fencing is the first priority. Share portable facilities with neighbors when available. Unwanted commingling of cattle and other livestock can create herd health and breeding issues.

Make notes of commingling situations, and separate cattle once necessary facilities are repaired and/or fencing issues are resolved. Use electric fencing with solar chargers to separate cattle temporarily while permanent fencing is down and electricity is unavailable. When multiple livestock species are suddenly managed together, some management practices may need to be altered. For example, common cattle mineral supplements can contain ingredients that are unsafe for horses or sheep to consume.



For additional information about flood recovery concerns for beef producers or other topics related to beef production, contact your local county Extension office.