

Dealing with Excessively Wet Conditions on Beef Cattle Operations

Jane A. Parish and Justin D. Rhinehart, Mississippi State University Extension Beef Cattle Specialists

Recent rains in many areas of Mississippi have created challenges and problems for beef cattle operations. September and October are typically some of the driest months of the year, but this year they have been some of the wettest. Potential concerns on beef cattle operations this fall are discussed here.

Nutrition

Nutrition and herd health are likely to be the production areas most impacted by excessive rainfall. Reports from producers indicate that body conditions scores of breeding herds and average daily gains of stocker calves have been lower than expected in many cases, despite providing access to forage and feed that might produce acceptable gains in most years. High moisture levels in pasture plants result in less dry matter consumed for a given quantity of forage. In addition, the nutritional value or quality of warm-season forages tends to drop this time of year. In the event that temperatures become cold during wet conditions, cattle maintenance energy requirements increase as well.

Some cattle may not consume enough dry matter to meet intake and nutrient demands. This can occur on pastures with what appears to be “plenty of forage” available for cattle. It may at first seem counterintuitive to put out hay on pasture with apparent adequate available forage. However, providing hay to these cattle can improve dry matter intake. Hay will also decrease the rate of gut passage, allowing cattle to perform better on pasture. Some producers may balk at putting out hay this early in the winter feeding season because of limited inventories and concerns about having enough hay to make it through the winter. Yet, by not meeting cattle intake and nutrient needs, producers will face even greater challenges later. Cows will calve in poor body condition, will not rebreed on time, and calves will not meet weight gain targets.

In addition to the effects of wet weather on nutrient availability, mud can affect feeding behavior. Muddy areas create a suction effect on the legs and hooves of cattle. This makes it hard for cattle to move around feeders, and they stand still instead. Four to 8 inches of mud can decrease intake by 4 to 8% and slow gains by 14%. Belly-deep mud can reduce intake by 30%. It is extremely important to control mud accumulation so that it does not affect feeding behavior.

It may also be tempting to skip feedings during rainy days or because of challenges with muddy feed storage and feeding areas. For cattle on limit-fed rations, where they are hand fed daily, skipping feedings could lead to digestive upset when feeds are reintroduced to cattle. Skipped feedings also mean less total intake of these rations over time, which will lower performance.

Many operations do not have 4-wheel drive tractors or adequate road beds or feeding surfaces to avoid getting trucks and other equipment stuck in the mud. Even when gravel can be hauled in to the ranch, it may be difficult to adequately spread it during the muddy conditions. Long-term ranch plans should include addressing these facility and equipment challenges as appropriate. Short-term ways of addressing this problem might involve moving feeding areas or working with neighbors to share equipment or feed storage facilities. In extreme cases, where hay supplies are trapped in areas now inaccessible due to mud and lack of equipment to navigate the mud, custom hiring professional help might be needed.

Pastures

Pasture damage from cattle hooves is particularly noticeable during very wet periods. Trampling creates muddy pastures with less available forage for grazing. Pasture damage is often worst in areas where cattle loaf or congregate such as shade or near water and feeding areas. When feeding hay, start towards the back of the pasture and work towards the front to keep mud from blocking pasture access. Pasture damage expands to new areas each time hay or feeding areas are moved.

High stocking rates increase pasture damage. This often occurs within a relatively short period of time. Although pasture damage is largely unavoidable during very wet periods, use of feeding pads, lanes for moving cattle, rotational grazing methods, and lower stocking rates can help limit this damage. Make notes about pasture layout and damage, so that long-term modifications can be made to better control this problem in the future.

Winter forage establishment is greatly affected by fall rains. Fall is typically when winter pastures are planted. Planting delays due to excessively wet conditions will delay forage growth and readiness of winter pastures for grazing. Long delays can push planting dates back to the point that winter forages are less productive or even unsuccessful. In that case, consider different alternatives such as purchased feeds and hay or forages that can be established later. Conditions may also be ripe for blast to develop. Late infestations of armyworms can be problematic as well, particularly when fields are too wet to spray pesticides to control infestations.

Because many beef cattle winter nutrition programs are designed around forages, changes to forage systems affect feeding programs. Producers make hay inventory decisions considering expected winter grazing and expected hay feeding start and stop dates. Having to feed hay earlier and having less winter grazing than expected can create hay supply shortfalls. If this appears to be the scenario on a given ranch, make immediate arrangements to acquire additional hay supplies, additional feeds, and/or reduce animal numbers.

Herd Health

Many Mississippi cow herds calve during the fall. It is important to watch fall-calving herds for calves being born in mud holes or pools of water. If temperatures drop during wet conditions, calves are at increased risk for hypothermia. Providing calving areas

that are relatively dry, free from manure build-up, and with wind breaks will be necessary. In isolated instances, calves may become trapped in mud. Close observation of cattle is critical to identify these situations.

Muddy areas with heavy manure concentrations often have heavy loads of disease-causing organisms such as bacteria. Mosquito populations may also be higher when pools of stagnant water are available to serve as mosquito breeding grounds. Instances of calf scours, naval ill, and foot rot can be increased during these conditions. Consult a veterinarian for advice on disease prevention and treatment. Be sure to treat calf navals at birth with an iodine solution and watch closely for signs of infection. Treat all sick calves promptly.

Cattle may drink from muddy pools of surface water that harbor infectious pathogens. To try to keep this from happening with temporary fencing that will keep cattle out of low-lying areas. Provide fresh, clean water supplies to cattle at all times. Extreme cases, where temporary fencing and intensive rotation are necessary, may require additional water sources. Consider using a tank truck or temporary water lines. Insulate above-ground pipes if the problems continue into winter.

Calves from spring-calving herds, the predominant calving season in Mississippi, are usually weaned in fall. Stress from excessively wet conditions adds to the challenges that calves face at weaning. Calf health and performance can be affected by this. Use low-stress weaning methods, appropriate vaccination and parasite control strategies, and high-quality feeds and forages for weaned calves.

To protect cattle health and ensure acceptable performance, observe cattle closely and take needed steps to improve the production environment during excessively wet conditions. The next instance of excessively wet conditions could occur at any time during the year, so address ranch infrastructure, equipment, and management changes in advance to allow the operation to better deal with these conditions in the future. For more information about coping with excessively wet conditions on beef cattle operations, contact an office of the Mississippi State University Extension Service.

Mississippi State University does not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation or group affiliation, age, disability, or veteran status.