Tips for Dealing with Drought on Range

John Lacey, Extension Range Management Specialist
Montana State University

Drought is a serious obstacle to successful range livestock management. Producers must understand how drought affects plants, grazing animals, and livestock management, and what options exist.

• Forage production is decreased dramatically, but reductions are less on ranges in good and excellent ecological condition.

• Ability of perennial plants to recover after drought is closely related to their vigor before and during the drought. Excessive grazing (more than 60 percent of current year’s growth) decreases the ability of some plants to recover. Moderate use (25 to 55 percent) does not seem to affect the recovery rate.

• Livestock numbers must be reduced according to forage supply. Yearlings should be marketed early, while calves should be weaned early and fed at home, at another feedlot, or sold. Cull low-producing cows.

• Retaining a rotational grazing system during drought is recommended over continuous grazing. Periodic rests help plants maintain vigor. Plants are not able to regrow if grazed repeatedly.

• Concentrating more animals into a single herd is recommended over having several smaller herds. By having more animals in a pasture, the entire pasture will be grazed more uniformly, and more use will be made of the less-preferred plants.

• Supplement low-quality feed. Feed supplements can often be used to correct low forage quality. However, feed supplements are usually not an economical substitute for range forage.

• Try not to buy, or put up, weed-infested hay. The future cost of feeding weed-infested hay far outweighs its feed value in the short-run. If weedy hay must be fed, feed in an area or holding pasture that is removed from streams, riparian areas, and wooded areas. Be sure to keep your stock confined for several days after feeding the bad hay to prevent them from spreading viable seed through their digestive tract. Observe holding pastures and feeding areas closely, and treat weed infestations.

• Try to take advantage of areas dominated with annual species. They should be grazed early in the season when their nutrient value is high. This will allow grazing deferment on the higher-condition range dominated with perennial plants.

• Graze crested wheatgrass early and longer than normal. It is one of our plants most tolerant of grazing.

• Keep cattle on subirrigated sites longer than usual. Fertilizer could be used to increase forage production on many of these sites. However, fertilizer is a cash cost, and soils should be tested before fertilizer is applied.

• If irrigation water is less than usual, concentrate it on your best-producing hay meadows. Graze the rest.

• Keep accurate cost data during normal years. Management decisions are easier to make if production costs during a drought year can be compared to the normal situation.

• You must maintain adequate water for the livestock. Dry cows use less water than lactating cows and will graze farther from water. In some areas you may be able to develop a spring or seep (a flow of 1/2 gallon per minute amounts to 720 gallons per day). Consider the possibility of installing a larger storage tank and piping water to troughs. You may need to install high-pressure plastic pipe to carry water from a central source. Although expensive initially, pipelines will prove useful for many years. Hauling stock water is expensive. However, it may be a viable strategy in some situations.

• Do not restock until you are certain that your range has recovered.