

Feeding Cattle after Fire or During Drought

Craig Gifford¹

• Cooperative Extension Service •

The College of Agricultural, Consumer and Environmental Sciences is an engine for economic and community development in New Mexico, improving the lives of New Mexicans through academic, research, and Extension programs.

INTRODUCTION

Unfortunately, the mega-drought gripping the Southwest has led to deteriorating forage conditions on NM rangelands. In some cases, drought and fire have completely destroyed rangelands which means that ranchers are facing complete forage replacement rather than supplementation. If faced with this situation, the first thing to consider is where cattle will be fed and what challenges the location faces. If temporary dry lots are needed, electric fencing can be an economical and effective method to contain



cattle in a smaller footprint. Removing cattle from damaged rangeland is preferable to feeding cattle while allowing them full access to the range. Restricting cattle to a smaller area with easy access can also reduce the daily costs associated with feeding while taking full advantage of the nutrients you are supplying. The more cattle have to travel for feed and water results in increased energy demands and thus more feed. However, cattle in close proximity allows easier spread of disease should the herd be exposed to a pathogen; it is crucial to monitor the herd for disease frequently.

Once a location is set, deciding what to feed can be another challenge. In the current economic climate, inflation has driven up the prices of many commodities as well as the cost to transport them. Cows can utilize a wide variety of feedstuffs as long as the diet meets their requirements. Consider cost per unit of protein and/or energy in purchasing and feeding these ingredients and include transportation and storage losses. NMSU Extension can help balance rations for ingredients available to you. The guidelines in this article are general recommendations, but talking with your County Agent is recommended to tailor a feeding program to meet your needs.



FEEDING CONSIDERATIONS

The label contains all the information necessary for the use. In general, cattle will eat 2.4% of their body weight on a dry matter basis. For example, a 1000 lb cow will eat approximately 24 lbs of dry matter per day. The key to feeding cattle is making sure the ration meets the animal's daily nutrient requirements. In NM, it is likely that the majority of forage replacement will be filled with hay. It is imperative to have your hay tested to know the energy and protein levels, and it is impossible to determine this by visual inspection of the hay. Some hay is of high enough quality that no additional supplementation is required other than mineral and lower quality hay will require supplementation with energy and/or protein.

Alfalfa is an excellent forage that typically fulfills protein requirements while providing a good energy and mineral content. It is best to mix alfalfa with other forages rather than feed a straight alfalfa diet. Depending on costs and quality, 5-7 lbs of alfalfa/head/day will usually meet the protein requirements for cows, but can be fed to as much as 50% of the diet. Certainly more alfalfa can be fed per day, but typically there are cheaper options and gut health can become a concern.

Sorghum, sudan, millet, wheat, beardless wheat, oat, barley, and other "small grain" hays can also be an excellent forage source. Nitrate levels can be a concern if the forage was stressed prior to harvest and quality depends on several factors including fertilization level and plant stage at harvest. High quality hays in these classes can be sufficient to comprise 100% of a cow's diet when supplemented with mineral.

Though there are exceptions, **grass hays** are usually too low in protein for lactating cows and some lower quality grass hay may be deficient in energy as well. Grass hay is a great option to mix with alfalfa.

Wheat midds are a high fiber and high energy supplement. They are an excellent forage replacement option in rations but must be accompanied with a good mineral supplement. North Dakota researchers have used diets of 16.7 pounds of wheat midds, 10.5 pounds of straw and 5.5 pounds of alfalfa/grass hay daily along with a vitamin/mineral supplement for lactating cows.

Soy hulls and cottonseed hulls are also good energy supplements that can be economical depending on market conditions. They make excellent additions if hay supplies are difficult to find.

Aside from alfalfa, **dried distillers grains (DDGs)** are an excellent protein source that also benefits from a high fat content in some cases which boosts the energy value. If you have high levels of sulfate in your water, that can be a concern when coupled with DDG supplementation.

Cottonseed meal, commercial tubs, cubes, blocks, etc. can also be used to boost protein levels in a ration as needed. Cubes or other commercial supplements in combination with average quality grass hay can be an economical option if available.

Corn and other high starch feeds can be excellent sources of energy especially when used in combination with protein supplements like alfalfa. However, feeding corn in combination with low quality hay can actually depress forage digestibility. It is important to balance the amount of corn fed to meet the animal's needs as well as ensure the remaining diet has sufficient protein to keep the rumen microbial population healthy.

In summary, there are numerous options for feeding cattle. However, the current economic climate may be cost prohibitory. Talking with your County Agent and Extension Specialists will help identify the lowest cost option available to you. Also consult with your local feed dealers to see what options they may have. Under extreme conditions, it may also be more economical to place the cows in a feedlot or look for pasture elsewhere.