

## Feeding Cattle Following Wildfire

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Maintaining cattle immediately following a wildfire is challenging because of the lack of available feedstuffs, because both grazed and harvested forages are generally diminished. Dehydrated cattle will voluntarily consume ash-contaminated sources of water but should not be allowed to do so if preventable; ash may contain a variety of toxic contaminants.

Cattle are often moved to temporary confinement situations or allowed to graze non-burned, available forage resources (typically lush, green forages that did not ignite). Cattle abruptly turned out on lush green forages, especially mature, lactating cows, may be at risk for hypomagnesemia or “grass tetany,” a condition characterized by low blood magnesium and associated with grazing lush, green, fertilized, cool season grasses or small cereal grain pastures (wheat, barley, triticale) during the winter months. It is recommended that cattle abruptly relocated to lush forages be provided ample access to loose stock salt. Salt may be force fed if not readily consumed by top-dressing or hand-blending salt with concentrate feeds.

Animal care providers should be cautioned against trying to provide greater amounts of magnesium directly in the form of a self-fed mineral supplement. Although this can be a viable means to address hypomagnesemia, inorganic sources of magnesium (eg, magnesium oxide) tend to be bitter. Consumption of supplemental inorganic magnesium may be inadequate unless it is blended with a palatable grain source, such as dried distiller’s grain, soybean meal, or dried molasses.

Cattle will consume smoke-damaged hay, silage, and wet distiller’s grain but do not appear to prefer them. Smoke-damaged feedstuffs should be offered in limited quantities or diluted with clean feedstuffs when possible. Grinding smoke-damaged hay may help disperse the smoke smell and appears to moderately improve palatability. Feeding fiber-based energy sources (dried distiller’s grains, corn gluten feed, or soybean hulls) or starch-based energy sources (corn, sorghum, barley, or wheat) should be considered for cattle confined temporarily. The caloric density of fiber and starch-based concentrates are usually greater than that of hay; thus, the energy requirements of more animals can be met with less delivered feed when concentrates are used in combination with hay. Cattle can be successfully maintained on concentrate-based diets that contain only 10% to 20% roughages. The nutrition and management of confined cattle require special attention.

Following wildfire, pasture resources require rest before livestock grazing can be reinitiated. Forage yields after wildfire can be diminished. This is generally not the case when wildfires occur in the spring during years with normal precipitation. In contrast, wildfires that occur during drought conditions, during the dormant season, or upon sensitive soil types (sandy soil) can be expected to diminish yields and effective carrying capacities for 1 or more years.

The length of grazing bouts is generally simpler to manage than the number of animals allowed to graze a given pasture or range. Pay close attention to forage availability and end grazing at or before 50% of peak production has been removed. In locations with clay pan soils and adequate rainfall, stocking rates during the year following wildfire should be 75% to 100% of normal (depending on forage yield). Stocking rates can be returned to normal the second year following wildfire.

In locations with loamy, finely textured soils, stocking rates in the year following wildfire should be reduced to 65% to 70% of normal. In the second year following wildfire, stocking rates can be increased to 90% to 100% of pre-fire levels.

In locations that are drought prone or with coarsely textured, sandy soils, stocking rates in the year following wildfire should be reduced to 25% to 50% of normal. Stocking rates may be increased to 50% to 75% of normal in the second year following wildfire and returned to normal during year 3.

For more information, please contact the local K-State Research and Extension Office. K-State Research and Extension is an equal opportunity provider and employer.

Information from “Feeding and Watering Beef Cattle during Disasters” – Justin Waggoner and K.C. Olson, Kansas State University