

# Forage Extension Program

## Caution on Grazing Drought-stressed Grain Crops

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Montana livestock producers should be cautious in grazing drought-stressed cereal grain crops this summer due to potential high nitrate accumulation. Due to the persistent drought for the past three years, the acreage of annual forages such as hay barley, oat, millets, sudangrass and others has increased dramatically. Also many acres of drought-stricken wheat or barley will not produce a viable grain crop, and these are being considered as pasture to salvage some value. Unfortunately, under droughty conditions all of these crops (and many weeds such as kochia) can accumulate levels of nitrate that are toxic to livestock.

Nitrate (NO<sub>3</sub>) from the soil is converted to amino acids and protein when crops are grown under normal conditions, but with drought or temperature stress, the nitrate can accumulate at toxic levels. High nitrate levels can reduce animal performance, but in extreme cases results in abortions and death. The highest risk is for pregnant beef cows in late summer, and bred cows or ewes in the fall.