



Hay and Cows and Chaff and Stuff

By Howell N. Wheaton

I started my August column on the first of July (Josh needs copy about 30 days prior to publishing) but somehow due to procrastination, old bones, summer visitors, etc., it was never finished. So now it is August 1st and this is for the September issue of the *Trails*.

Things were pretty rosey back in late June - plenty of rain, hay quality very good, although quantity was down and I was complaining about weeds and weed control (or lack of) in my pastures and in my neighbors' fields as well. Early summer had produced a bonanza of ragweeds, both common and giant (called horseweeds in my youth). Boy, have things changed in the past 35 days since then. The Wheaton ranch has not had any rain since the first of July and daytime temperatures have ranged from 90 to 106 and the nights around 75. This year has reverted into a typical Missouri summer. Oh, I almost forgot, millions of tiny grasshoppers have appeared during the last couple of days. My reed canarygrass pastures are still producing, but that is about the only one. Of all the cool season grasses reed canarygrass (RCG) is by far the most productive during the summer, and with RCG there is no toxicity and summer slump. It fits well with fescue - whereas fescue is at its best in the spring, fall and early winter, RCG starts its spring growth later than fescue, is very palatable during the summer, but loses palatability in the fall months. It boggles my mind that a tax supported state agency in Jefferson City wants to designate RCG as an invasive species and eradicate it from the state. Of course that same agency has long belittled fescue. They seem to have tunnel vision ignoring the contribution these two species make not only to the cattle industry, our largest agricultural enterprise, but that these two grasses are major players

in controlling erosion on Missouri's steep hillsides.

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A great number of articles have been appearing this summer in the press about this summer's heat wave and how it affects the cattle industry. Heat has been a real villain in the country this year. Thousands of cattle have died from heat stress and feed lots have been hit especially hard. This should come as no surprise as fattening cattle in feed lots are more susceptible to death from heat than grazing beef cows.

Excess body heat in cattle has two major sources. Air temperature plays a role, but much of it is a result of fermentation of rumen material. Since grain is higher in energy than forages feed lot cattle generate more body heat than cattle on pasture.

That doesn't mean that cow herds and owners don't have losses related to the heat. Any time day temperatures are above 85 degrees and 75 degrees at night a cow will lose performance. All cowboys and girls are aware that cattle don't graze as long or as often in hot weather, that milk production falls and cattle do not gain and so lose condition. Fly control is more difficult and cattle handling is more restricted during a heat wave. Heat stress will/can reduce birth weights 10 percent or more and will shorten the gestation period. Many times this double whammy factor results in small, weak calves that have a higher than normal mortality rate at parturition and into the first weeks of their lives. Heat stress also lowers the quality of the dam's colostrums as well as reduces her total milk production during this lactation by 12 percent. This, according to research from the University of Maryland.

Excess heat also affects cows following the birth of their calves. Their estrus periods are often delayed and are very brief in duration and once bred embryonic death rates increase to about twice the normal rate.

Kansas State University says that the greatest chances for early embryonic deaths occur between 5 and 45 days following breeding. Any type of stress - during this time frame increases the chances for this to happen. They specifically advised against transporting, working cattle through chutes, and similar activities of cows that fit into this time frame during this critical period of their

early pregnancy.

Herd bulls also have lower semen output and quality when stressed by high temperatures. So one could guess that we might have more open or late bred cows at preg checking time this fall. This could be especially true among cows that calved in March, April and early May.

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It is time for some frivolous data as it sort of ties into this heat stress talk. The following information is from Cornell University. When it is hot, dry and windy cows will stand with their backs to the wind almost all of the time. It was suggested that they do this because facing away from the wind allows for exposure of a larger body surface to help them dissipate body heat. As most of us have observed, cows sweat very little, only about 10 percent as much as humans or horses. So the major ways cattle have of coping with excess body heat is by panting and letting the environment, i.e., wind, water, cool temperatures, help them.

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Things may come to those who wait, but they are the things left behind by those who hustle. J. Newman.

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Eldon Cole, who is kind enough to share his newsletter with me, recently presented an article about a survey of Arkansas farmers and their observations regarding fescue toxicity. Thirty-five percent of the owners surveyed said that cattle standing in ponds was a major symptom of fescue toxicity. I am not so sure about that. Toxic fescue does cause problems in cattle's feet, ears and tails because of blood transfer through restricted capillaries. This results in an increase in body temperature as well as pain in those areas. But cattle also stand in water and mud to cool themselves and for other reasons that none of us humans understand. And for you young folks who can't remember farther back than 65 or 70 years, cattle stood in ponds in that by gone era too! This was long before fescue took over (FTO) and pastures were mostly bluegrass, timothy and in some cases sassafras, persimmon sprouts and broom sedge. When I was between the ages of 6 and 15 it was usually my job to bring

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