Cow Calf Corner Newsletter for June 27, 2011

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COW/CALF CORNER

The Newsletter

From the Oklahoma Cooperative Extension Service
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Oklahoma Drought Region Expanding Rapidly

Derrell S. Peel, Oklahoma State University Extension Livestock Marketing Specialist

The latest U.S. Drought Monitor confirms that the drought area in Oklahoma is expanding rapidly. Over 48 percent of the state is included in the severe or worse (D2-D4) drought rating. Most dramatic of all is the jump in the percentage of the state in the worst drought category (D4 or Exceptional) from 10.32 to 32.55 percent. The percentage of the state in the worst two categories (D3-D4) increased from 33.53 percent to 41.22 percent. The drought region is confined to the middle and western areas of the state with the eastern third holding on to decent moisture conditions. However, in the last 30 days the majority of the state has received no more than 20-40 percent of normal precipitation and the drought boundary is moving back to the east.

Rains in late April and early May provided some relief, particularly in the middle part of the state, and appeared to be moving the drought boundary farther west. Though the La Niña effects appeared to be weakening at that time, improved moisture conditions in the middle part of the state proved to be no match for recent hot and windy conditions as shown by the current expansion in drought ratings. Producers face not only the continuing lack of production due to drought but also the threat of fires that may wipe out existing hay and forage stocks.

Across the region extreme drought effects are increasingly evident. Weekly range and pasture condition ratings in Oklahoma and Texas showed 63 percent in the poor and very poor category. Drought conditions are expanding rapidly in the southeast as well with the percent of poor and very poor conditions increasing from less than 10 percent at the beginning of May to over 33 percent the last two weeks. USDA reported that hay stocks in both Oklahoma and Texas on May 1 were above the previous five year average. However, these hay stocks are likely being exhausted rapidly and hay production will be sharply lower than average this year. Limited forage will be a threat through next winter even if

drought conditions ease late in the growing season.

The lack of forage this spring has increasing impacts on the cattle industry. Since April 1, beef cow slaughter in federal region 6 (Arkansas, Louisiana, New Mexico, Oklahoma and Texas) is 125 percent of the same period last year. This increase in region accounts for the 6 percent increase in entire country for the same period. Beef cow slaughter in the remainder of the country is down nearly one percent during this same period. Continued drought conditions in the southern plains and expanding drought conditions in the southeast have the potential to result in significant additional beef cow culling in coming weeks.

Livestock Drinking Water Quality

by Gene Parker, DVM, Oklahoma State University Area Food Animal Quality and Health Specialist

Summer has arrived. There are many areas of Oklahoma that did not get enough runoff water to adequately fill the stock ponds. Many producers will be forced to move cattle looking for forage and water. When drought causes a great reduction in surface water available in farm ponds, the issue of quality becomes nearly as important as quantity of water available.

Water is the one most important nutrient required by livestock! Decreased intake can adversely affect health, reproduction, and growth. Excessive salinity (salt) in livestock drinking water can upset the animals' water balance and cause death. Unsafe levels of salt and toxins depend on the age of the animal, its stage of production, and the amount of water consumed each day. Water consumption is dependent on many factors, water intake for dry beef cows is around 1-1.5 gallons per 100 pounds of body weight and this estimate can double for cows nursing calves.

Oklahoma has many potential sources for run-off pond water contamination.

- Soil minerals and salt leaching from the ground.
- Oilfield drilling sites and saltwater disposal wells.
- Agriculture application of nitrate and sulfate fertilizer.
- Animal manure and human waste control systems.

Suggested uses of livestock water containing different levels of contaminants are listed below: (remember 1ppm = 1mg/liter of water)

Nitrates: 100 ppm or less should not harm livestock. 100-300 ppm should not harm livestock by itself, but beware of additive effects when animals are exposed to or grazing foodstuffs containing increased levels of nitrates (sudan, haygrazer, and johnsongrass).

Sulfates: Water levels of 2000-2500 ppm and sulfate levels in foodstuffs allowing the animal to attain a level of 4000 ppm or greater; can be associated with a neurological disease in cattle causing blindness.

Total Salts:

Less than 1000 ppm: These waters have a relatively low level of salinity and should present no serious burden to livestock.

1000-2999 ppm: These waters should be satisfactory for all classes of livestock. They may cause temporary and mild diarrhea in livestock not accustomed to them, but should not affect their health or performance.

3000-4999 ppm: These waters should be satisfactory for livestock, although they might very possibly cause mild diarrhea or be refused at first by animals not accustomed to them.

5000-6999 ppm: These waters can be used with reasonable safety for dairy and beef cattle, sheep, pigs, and horses. It may be well to avoid the use of waters approaching the higher levels for pregnant and lactating animals.

7000-10,000 ppm: These waters are unfit for pigs. Considerable risk may exist in using them for pregnant and lactating livestock. In general, their use should be avoided, although older animals may subsist on them for long periods of time under conditions of maintenance and low stress.

Greater than 10,000 ppm: The risk of these high salinity waters are so great that they cannot be recommended for use under any conditions.

A routine water analysis performed at a lab with the help of your county extension educator or local practicing veterinarian, can be very helpful and cost very little. This would take all the guess- work out of trying to decide which animals would be safe to drink the water and which pastures might be able to be grazed? As ponds start drying up the concentration of salt and toxic ions begins to increase in them. Do the young calves in the group have a mild diarrhea due to salty water or coccidiosis? Do the distiller by-product feeds (which can be high in sulfur) have the potential to cause blindness if creep fed to my calves? Are pregnant cows at risk while grazing sudan forage and drinking water possibly containing nitrates? All these questions might be answered by a simple, routine livestock water analysis.