

Responding to drought

The Situation

Depending on the area of the state, drought conditions were present early in the growing season and intensified or came on more quickly later in the growing season. Texas, Oklahoma, and broader regions of the country were also impacted placing further demand on limited forage supplies. Global political issues and war put additional upward pressure on all input costs. Reducing cow inventory when drought limits forage resources is one way to adapt to drought, however, trying to replace females after a drought is often cost prohibitive. Drought impacts the quantity of commonly used forages and in some cases creating toxic situations. These toxins are challenging to navigate, and testing is nearly always required. Mis-understanding or inadequate testing could result in the death of livestock. Additionally, producers have been forced to use unfamiliar feedstuffs that may demand different supplementation to meet animal requirements. The disruption in normal feeding plans meant producers faced complex decisions on herd inventory in addition to making numerous management changes based on forage availability all while trying to control escalating costs.

What We Did

In May, a webinar, *Dealing with Drought*, covered basic issues and gave attendees the opportunity to ask questions of the 16 specialists representing Animal Science and Industry, Agronomy, Ag Economics and Ag Stress. Attendees represented 9 states and Canada. Sixty percent of 61 registered attendees viewed live for an average of 59 minutes and an additional 133 have since viewed on our YouTube channel. Drought related tools and information were highlighted on KSUBeef.org. Specialists in Agronomy, Ag Econ and ASI provided 24 articles for 3 newsletters (BeefTips, KLA/KSU Connection and E-Updates) on drought related topics pertaining to livestock, forage, and forage insurance. Several pieces were picked up by national media. Specialists further highlighted drought management topics on *Agriculture Today* and other radio stations. Individual agents covered drought information on a variety of local media outlets, from newsletters to social media.

At the end of the summer, six meetings were held across the state addressing forage management issues and were attended by over 200 producers. Situation specific questions on managing nitrate and prussic acid poisoning were prevalent. County and district agents submitted forage samples for nitrate and prussic acid testing and forage quality, consulted with producers on the results and developed and reviewed rations for given feedstuffs.

Outcomes

As a result of attending the forage management during drought meetings, 31% were extremely likely and 57% somewhat likely to make management changes based on what they learned (80-84 responses from 206 attendees). Over 3/4 of attendees made moderate to significant changes in their knowledge or ability to manage issues related to adapting rations or feeding plans, 72% regarding strategic supplementation, 65%

relating to nutrition and health interactions and 63% on nitrate and prussic acid issues. The most common things producers indicated they would do differently based on what they learned related to altered feed management and supplementation approach including limit feeding.

Below is a summary of effort reported by 33 agents across the state (not limited to livestock PFT) on actions to help producers deal with a lack of forage and forage quality issues. These combined actions prevent deaths and abortions from toxicity issues and will help producers meet nutrient needs, as cost efficiently as their situation allows.

Topic	Total reported	Average report
Samples tested with nitrate quick test	440	22
Samples sent to lab for nitrate testing	548	18
Conversations about nitrate toxicity	1085	35
Samples sent to lab for prussic acid testing	132	7
Conversations about prussic acid toxicity	616	22
Samples sent to lab to determine nutrient content	608	23
Rations balanced	151	11
Conversations about rations	314	17
Other topics related to forage and feeding livestock	1228	50

Success Story

Says one agent of the year:

"I have tested more feed in the last year, than in my 5 years in KSRE...and made new connections with community members."

Comment from a veterinarian that attended a forage management during drought meeting:

"I think this was a great meeting & I gained multiple strategies to benefit my clients."

Regardless of department, PFT or other affiliation, agents and specialists worked together to address producer problems across the state.

Contact

Sandy Johnson

Extension Beef Specialist

105 Experiment Farm Rd, Colby, 67701

785-462-6281

sandyj@ksu.edu