

Mitigating the Effects of Severe Drought on Forage-Based Livestock Enterprises via Rapid-Response Extension Programming

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Climate outlook released in early April 2007 predicted conditions that favored the development of a severe drought in Georgia and the Southeast region. Extension faculty of the University of Georgia College of Agricultural and Environmental Sciences (CAES) recognized the potential disastrous impacts of drought. A rapid-response extension program was developed to provide management recommendations to forage-based livestock managers who would eventually suffer extensive yield losses (up to 80% deviation from normal). A series of nine Extension Special Bulletins, one computerized decision-aid, 8 popular-press articles, and two Extension Circulars were written and assembled in late April and May. These publications detailed specific grazing herd and hay production practices that producers could put into place that would minimize the long-term effects of a severe drought, and prevent livestock-poisonings resulting from the accumulation of toxins in some forage species. Furthermore, eight regional meetings were held between June and August throughout Georgia to present and discuss these best management practices for grazing herd management and safe forage utilization during a drought. Over 430 producers attended these meetings. Twenty seven additional presentations on drought-mitigation practices were made to local livestock organizations and other stakeholders throughout the state. Post-meeting surveys indicated that nearly all of the producers improved their knowledge about the practices presented at these meetings and how the practices could be implemented on their farm. Nearly 75% of the producers in attendance stated they better understood how to properly meet the nutritional demands of their animals during drought. Roughly 78% of the respondents indicated they would be making specific management changes as a result of these meetings. Most respondents who do not routinely grow winter annuals for winter/spring grazing indicated that they planned to do so in 2007-08, which has turned out to be a fairly productive winter. These meetings may also have mitigated another source of potential economic loss: nitrate poisoning. Approximately 80% of respondents indicated that, as a result of these meetings, they intend to sample forages they suspect to be high in nitrates. Records at the CAES Agricultural and Environmental Services Labs (AESL) indicate that these producers have followed through on their intentions to sample their forages for an analysis of quality and toxin content. In the first five months of fiscal year 2007-08, over 2100 forage samples were received in the labs, whereas only 2075 samples were processed through the lab during the entire 2006-07 fiscal year. Of those samples being received from forage species prone to having toxic nitrate concentrations, nearly 20% have been above the 4500 ppm threshold. The true impact of this rapid-response program may not be fully known until the region recovers from the drought, but early successes have shown that these regional meetings helped forage-based livestock producers to better mitigate the historic drought of 2007.

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