

POLK COUNTY GRAZIER

July 19, 2022



*An eNewsletter by the Rich Mountain
Conservation District*

The following is an excerpt from "*Drought
Management and Recovery for Livestock
Systems*"

(MP530) by the University of Arkansas,
Division of Agriculture – Research &
Extension

Chapter 2

Managing the Cowherd as Drought Persists

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When it comes to managing a beef cow herd through a drought, there is no plan or answer that fits all situations. Drought is a slow process that progresses over time and one never knows when a drought will end. Cash flow, off-farm income, owning a poultry farm, overhead debt and type of cattle enterprise are examples of why drought management isn't the same for everyone. There are some general rules of thumb that are rather simple but often overlooked during times of drought. They include:

- No rain means no plant growth.
- Drought should never be a surprise – it progresses slowly over time.
- Drought management is the balancing of forage and water supply with forage and water demand.
- The sooner the situation is identified the more management options are available.
- The sooner proper management decisions are implemented the less negative impact the drought will have on the operation.

Drought often becomes an economic question of supply and demand in which the demand for forage and/or water exceeds the supply. The painful choice becomes increasing the supply of forage through the purchase of hay or other feedstuffs or decreasing the demand for forages and/or water through the reduction of livestock dependent on those resources. Granted that question would be a lot easier to answer if the length of the drought was known, but it's never known until it is over. When it comes to making decisions regarding managing through a drought, make decisions on logic, not emotions. Oftentimes that is easier said than done, but it is the logical decisions that will help secure the long term sustainability of the operation, not the emotional decisions. Many will try to "hang on" in the hopes it will rain before initiating a destock plan. The longer one waits before initiating

a destocking plan, the more depleted the forage becomes, which will delay pasture recovery when the rains return.

Culling Cows

If the cow herd is a spring-calving herd going into a summer drought, all cows should have a calf at their side. The first culls should be any cows not with a calf at side. All fall-calving cows should be pregnant; therefore, cull all fall-calving cows not pregnant. When feed becomes limited, open cows become a luxury one cannot afford. Inspect all cows carefully for physical impairments. This would include teeth, feet, legs, bad temperament, extreme size (too large or too small), udders and undesirable calf-at side. Short and broken-mouth cows should be culled first because they will not have acceptable productivity under drought conditions. Consult any production or herd records during this process to prevent overlooking cows with marginal production history. If records are not available, a visual assessment of calf-at-side will have to suffice. Although forced culling is never a pleasant management option, the result may be a smaller herd but the herd may become a uniform, genetically superior herd of beef cows. This smaller but superior group of cows will be the nucleus for a genetically superior cattle herd for the future.

Early Weaning

Weaning calves from their dams at 6 to 8 months of age is an industry norm. However, situations arise when weaning according to the industry norm may not be the best management practice. During drought, cow-calf producers can explore the feasibility of early weaning. The first question that often arises is "How early is too early?" Dairy calves are separated from their dam within a day or two after birth. This is not a recommendation for beef calves but puts the idea of "early weaning" into perspective. One important aspect of how early is too early is rumen development. Calves are not born with a fully functional rumen. The stomach of a very young calf functions more like simple-stomached animals. The functionality of the rumen develops over time and can be hastened with grain feeding (this allows dairy calves to be weaned from the bottle by 1 month of age). Early weaning beef calves between 120 days of age to normal weaning age is most practical. Rumen development will be far enough along by this age to support digestion of high quality forages as well as concentrate feeds. Additional feed management

considerations must be taken if weaning calves at 30 to 60 days of age. Forage is often the limiting factor during drought. If the intention is to retain ownership of early weaned calves, these calves will need to be fed a total mixed ration that is balanced for protein, energy, minerals, vitamins and effective fiber (fiber that promotes good rumen health). Some cow-calf producers choose to introduce calves to their diet before fully weaning. Calves can be introduced to the diet using creep feeders or feed bunks with electric fence that is high enough for calves to walk under but too low for cows to access the bunk. Early-weaned calves must be vaccinated to prevent common clostridial and respiratory diseases, dewormed and the feed lot well maintained (feed and water troughs kept clean). The benefit to early weaning is a cow's energy requirement decreases by approximately 40 percent when she no longer needs to produce milk for a nursing calf. Therefore, a cow can more easily maintain body condition on a restricted diet (quantity and(or) quality).

Body Condition Scoring

Body condition score should be assessed frequently, and the body condition of cows will dictate culling and feeding management decisions. The ideal body condition score of cows is 5 to 6. The easy way to determine if cows are body condition 5 to 6 is to visualize body condition scores 4 and 7. The hind ribs of body condition score 4 females are easy to see, and body condition 7 cows will have a very smooth appearance with fat points at the rear of the tail head. It is common to find body condition score 3 (all ribs visible) and 4 cows during long-term drought, and unfortunately nutritional intervention is not sought until a high percentage of the herd is in thin condition. Allowing cows that are initially in moderate body condition (BCS 5) to lose one to two body condition scores during drought is usually based on finances; however, there are negative economic consequences associated with allowing cows to become too thin. First, thin cows are less likely to breed back until body condition is restored and second, if cattle must be liquidated, thin cows will be discounted because of their lower dressing percentage, plus thin cows are marketed at a lighter weight. Extension publication MP373 discusses feeding beef cows based on body condition score.

Grouping Cows

Regardless of drought, herds are easier to manage if grouped according to similar type, and the most common groups are based on age (growing replacements versus mature cows) or calving season (spring versus fall). Another level of grouping can be based on body condition score. The objective for grouping cows based on body condition score is to minimize feed cost. Additional feed resources will be needed for thin cows compared to cows in moderate and good condition. Information on grouping cows for feeding is available through fact sheet FSA3033. This fact sheet is entitled *Winter Feeding*, but the same concepts apply to feeding during drought.

Substituting Grains and Byproduct Feeds for Forage

When pastures and hay supplies are diminishing, cattle producers can consider using grains and byproducts as sources of nutrients. These feeds are usually limit-fed, but formulation may take two approaches. The most common approach is to blend or purchase a mixed feed that is formulated to meet the nutrient requirements of the group. The blend will usually contain a higher proportion of cottonseed hulls or other low energy/high fiber feedstuff to moderate the feed energy while providing a source of fiber that supports good rumen health. These feeds are often formulated to be 12 percent crude protein and 60 percent total digestible nutrients (dry matter basis) and substituted for pasture or hay as needed. During the 2011 and 2012 drought, some companies that sell commodity blend feeds were marketing this type of feed as "pasture stretcher" or "forage stretcher." Another method of substitution is called programmed feeding. In contrast to the previous method, diets that are program-fed are nutrient dense (75 to 85 percent TDN, dry matter basis) and are limit-fed to meet protein and energy requirements. These feeds only contain 15 to 20 percent roughage and are fed at 50 to 60 percent of normal intake. Special attention to nutrient requirements and change in body condition is important to programmed feeding. Programmed feeding is best accomplished using a total mixed ration, which most likely will require an on-farm mixer. Due to short hay supplies in 2012-13, research was conducted at the Livestock and Forestry Research Station near Batesville, Arkansas, to examine programmed feeding using the approach of limiting the number of hours of access to hay along with feeding a high rate of soybean hulls. Estimated hay intake in that study was high despite the limited access time. This suggests that the total mixed ration is the better

approach to programmed feeding. For more information regarding substitution feeding, read fact sheet FSA3036, *Substituting Grain for Hay in Beef Cow Diets*.

Feeding Grain and Oilseed Crop Residual Plant Material

During extreme drought, producers will often look to nontraditional forage/roughage sources for beef cattle. Common crop harvest residual used include corn stover (also called stubble or stalks), grain sorghum stover, rice straw, peanut stover and cotton gin trash. Before using crop harvest residual as feed, consider what chemicals were applied to those crops and the potential feed restrictions they impose. Once the crop is considered safe to feed from a chemical residue perspective, the next step is to analyze these feeds for nutrient composition and nitrates. Corn stover can test positive for dangerously high levels of nitrates. Of the samples tested during the 2011 and 2012 drought, 16 percent of corn stover samples tested >1,400 ppm nitrate-nitrogen; whereas, 3 percent of grain sorghum stover samples tested >1,400 ppm nitrate-nitrogen. The protein and energy composition of these crop residues can be quite variable. Many producers who utilized these for feed reported a negative experience. Rice straw is high in silica and poorly digested, which results in a negative experience as cows tend to refuse rice straw. To improve the nutritive value of rice straw, some producers reported raising the mower height or waiting for grasses or rice regrowth before mowing and baling. Unlike many grasses, rice leaf can be poorly digested as well. Peanut stubble is probably the most palatable among crop residual options, but harvest requires experience to minimize leaf loss and dirt contamination. Gary Hill, Department of Animal Science, Georgia, indicated baling immediately following peanut harvest results in the best quality and palatability of peanut crop residue. Compared to corn stover, sorghum stover tended to test higher in total digestible nutrients, which may be associated with leaf-to-stalk ratio. Table 1 is a summary of analysis results for harvested crop stover submitted to the University of Arkansas, Agricultural Diagnostics Laboratory during the 2011 and 2012 drought. Crop residues such as corn and grain sorghum are often fed to allow cows to waste stalks and maximize leaf intake. This should improve nutrient intake and reduce nitrate risk. The ratio of TDN to protein of corn and sorghum stover suggests supplemental protein is warranted. Processing stalks into a total mixed ration is the most effective way of using total plant material,

reducing the cost of feed waste. The digestibility of crop fiber can be improved by 15 percent or greater through chemical treatment with anhydrous ammonia, calcium oxide (quicklime), calcium hydroxide (hydrated lime or slaked lime) or sodium hydroxide (caustic soda). Treatment is applied at the point of storage. Anhydrous ammonia is applied to sealed stacks; whereas, the other chemical treatments are applied during forage chopping and hydration. Treated forage is stored for approximately 20 to 30 days before feeding. Safety precautions and equipment cleanup procedures should be established before implementing chemical treatment as these chemicals have hazardous and corrosive properties. Popular press during the 2011 and 2012 drought regarding treating forages with calcium oxide or calcium hydroxide resulted in some cattle producers believing treating hay with limestone (calcium carbonate) would improve forage digestibility. Limestone does not have the effect of calcium oxide or calcium hydroxide. In addition, do not ammoniate moderate to high quality forages. Visit with your local county Extension office to obtain specific detail on chemical treatment of crop residues.

Feeding Broiler Litter

Feeding poultry bedding waste (litter) is common during drought in areas where litter is easily accessible. A common question to feeding litter is "Is it legal?" Feeding litter has remained legal as long as the feed fed to the flocks did not contain rendered mammalian proteins. Some cattle buyers will not purchase cattle fed poultry litter; therefore, this should be considered. In addition, poultry are sometimes treated with antibiotics; therefore, at least a 14-day withdrawal between feeding litter and marketing cattle should be implemented. This is important to consider during drought management because herds are sometimes forced into liquidation when feed and water supplies or finances dwindle. Two common concerns with a litter-based diet include hardware disease and milk fever. A common mistake with feeding litter is not adding supplemental energy. A common statement is "I don't remember dad or granddad mixing feed with litter." Selection of beef cattle over time for growth, mature size and milk production is a good reason to not feed cows the same today as someone may have fed them 30 or more years ago. Gestating and lactating cows will need 20 percent and 30 percent, respectively, corn, soybean hulls or hominy added to the litter to balance energy needs. Salt and vitamin A supplementation must be addressed. If

using injectable vitamin A, pay attention to withdrawal time on the label. Once again, herds are sometimes forced into liquidation during drought, and during severe drought, many of these cows will be purchased for slaughter instead of replacements. As a final note, reducing litter intake by 50 percent, beginning 30 days prior to calving, is recommended to minimize chances of milk fever. For more details on feeding litter, read fact sheet FSA 3016, *Feeding Broiler Litter*.

Tax Considerations

During times of drought, some livestock producers may reduce their herd size through larger than normal sales of livestock. For example, because of a lack of forage, a cow-calf producer may cull heavily and sell more cows than usual. Other animals may have been sold earlier than they normally would have been sold. For example, a producer whose normal business practice is to carry calves through winter and sell them as yearlings may, because of a shortage of forage, have sold the calves at weaning. In any case, weather-related conditions could cause producers to have higher than normal taxable incomes in the drought year and lower than normal taxable incomes in the subsequent year(s). Income tax law allows farmers affected by weather-related conditions to defer reporting of this income to even out their income and avoid potentially higher taxes. Farm income averaging, which was enacted after the weather-related provisions, is another alternative which could result in lower income taxes for producers in some situations. Effective tax management involves consideration of several tax years rather than minimizing this year's tax bill.

Weather-Related Sales of Livestock

There are two provisions in tax law which attempt to cushion producers from the consequences of the weather-related sales of livestock. Livestock held for draft, breeding or dairy purposes and sold because of weather-related conditions are provided a two-year reinvestment period under the first provision (this replacement period can be extended if drought conditions persist). The second provision, which applies to all livestock (other than poultry), allows cash basis taxpayers whose primary trade or business is farming a deferral of receipts from sales in excess of normal business practice because of weather-related conditions resulting in a disaster area declaration. Both provisions apply only to those sales which are in excess of the normal business practice of the producer.

Sale With Replacement

The gain on the weather-forced sale of livestock held for draft, breeding or dairy (not sporting) purposes does not need to be reported as income if the proceeds are used to buy replacement livestock within two years after the end of the tax year of the year of sale. Although declaration of the area as a disaster area is not necessary, a producer must be able to show that weather-related conditions forced the sale of more livestock than would normally be sold. For example, a beef producer who normally sells five cows per year may sell 20 cows in the drought year because of limited forage and feed supplies. Gains from the sale of the extra 15 cows would not be reported as income if the producer purchased at least 15 replacement animals before the end of two years of selling the 20 cows. The new livestock must be used for the same purpose as the livestock which was sold. Thus, beef cows must be replaced with beef cows. To make the election under Section 1033(e) to defer recognition of gain, a producer does not report the gain and attaches a statement to the current year's tax return. The statement shows the following:

- (1) Evidence of weather-related conditions which forced the sale of the livestock.
- (2) Computation of the amount of gain realized on the sale.
- (3) The number and kind of livestock sold.
- (4) The number and kind of livestock that would have been sold as normal business practice without the weather-related sales.

Sale Without Replacement

Producers who are forced to sell livestock because of weather-related conditions may be eligible for an exception to the rule the livestock-sale proceeds must be reported as income in the year they are received. This exception allows producers whose principal business is farming to postpone reporting these receipts as income for one year for both income and self-employment tax purposes. Although the livestock does not need to be located in a declared disaster area, there must be a relationship between the livestock and an area declared a disaster area. The animals can have been sold before or after the disaster area declaration. However, only the livestock sales in excess of a producer's normal business practice qualify for deferral. A declaration must be attached to the tax return for the year in

which the weather-related sale occurred. To make the election the statement should include the following:

- (1) A declaration that the election is being made under Section 451(e).
- (2) Evidence of the weather conditions which forced the early sale on the livestock and when the area was declared a disaster area.
- (3) A statement explaining the relationship between the disaster area and early sale.
- (4) The total number of animals sold in each of the three preceding years.
- (5) The number of animals that would have been sold as normal business practice if the weather-related condition had not occurred.
- (6) Total number of animals sold and the number sold because of the weather-related event during the tax year.
- (7) Computation of the amount of income to be deferred for each classification of livestock.

Further Information

For additional information on these tax provisions and details of the elections, see IRS Publication 225, *The Farmer's Tax Guide*. This publication is available on the IRS website at www.irs.gov. Search under Publication 225 in the publication search menu. For specific tax questions or concerns, consult your tax consultant. **Source:** George Patrick and Michael Langemeier, Department of Agricultural Economics, Purdue University

COPIES OF THIS FULL PUBLICATION ARE AVAILABLE UPON REQUEST

Drought Monitor

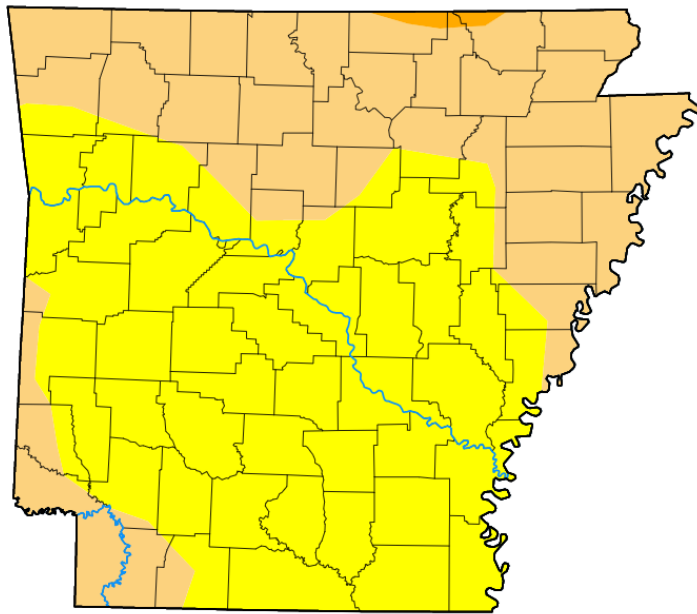
The most recent version of the drought monitor shows western Polk County to be in a D1 area (Moderate Drought) and eastern Polk County to be in a D0 (Abnormally Dry). A new version will be released on July 21st.

You can go to the drought monitor site by going here:

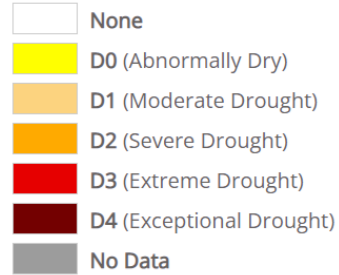
<https://droughtmonitor.unl.edu/CurrentMap.aspx>.

Map released: Thurs. July 14, 2022

Data valid: July 12, 2022 at 8 a.m. EDT



Intensity



Authors

United States and Puerto Rico Author(s):

Brian Fuchs, National Drought Mitigation Center

Pacific Islands and Virgin Islands Author(s):

Brad Rippey, U.S. Department of Agriculture

*The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying **text summary** for forecast statements.*

*"Take Care of the Land and the
Land will Take Care of You"*

Plant of the Week

Johnsongrass



- Johnsongrass is a perennial warm season grass originally from the Mediterranean area and was brought to the US in the 1800's.
- Stems and leaves are completely hairless and the plants can be identified by a white streak down the middle of the leaf blade.
- Mature Johnsongrass plants can reach a height of 7 feet.
- It is aggressive, spreads by seed and rhizomes and is considered a noxious weed in 19 states.
- Johnsongrass has some desirable forage traits and can be used in a grazing system.

- Johnsongrass has high palatability nutritional value and is preferred by cattle before it matures. Once it starts flowering cattle will avoid it.
- Cattle often kill Johnsongrass in grazed pastures due to overgrazing since it can't stand grazing below 6 inches.
- Johnsongrass can be managed in hayfields by periodic grazing.
- Both Nitric Acid and Prussic Acid poisoning are a problem when grazing Johnsongrass after fertilization or after a drought.

You can learn more about plants at the USDA – NRCS
PLANTS Database ([USDA Plants Database](#)).

Upcoming Grazing Meetings and Seminars:

⇒ **TODAY! July 19, 2022 – Siphon Installation on an Existing Pond Dam Demonstration (1PM—online seminar)**

You are invited to attend the weekly grazing training sessions by Jeremy Huff, the USDA/NRCS state grazing specialist. He offers these training sessions as a Zoom meeting and the instructions for logging in are included in attached flyer. If you have the Zoom app on your phone you can just scan the QR code on the flyer. If you want to watch the presentation on your computer there is a link included in the attachment. The sessions are normally every Tuesday at 1pm so see the attached flyer.

⇒ **July 26, 2022 – Electric Fence Components, Materials, and Installation Demonstration (1PM—online seminar)**

Next week's online seminar by Jeremy Huff. The sessions are normally every Tuesday at 1pm so **see the attached flyer**.

⇒ **July 29-30, 2022 – 2022 Arkansas Cattlemen's Association Convention & Trade Show (Hot Springs, AR)**

This 2 day convention will be held at the Hot Springs Convention Center. Click here to register: [2022 ACA Convention & Trade Show | arbeef](#)

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**Take a picture with your cell phone to
visit the RMCD website —>**



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Archived copies of the "POLK COUNTY GRAZIER" are now available on the Rich Mtn. Conservation District website at:
[Publications - Rich Mountain Conservation District \(rmcd.org\)](http://Publications - Rich Mountain Conservation District (rmcd.org))

Sent on behalf of the Rich Mtn Conservation District.
Thanks for your interest in grazing management and conservation,

Steve Swall

District Conservationist
USDA-Natural Resources Conservation Service
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The Tuesday Pasture Talk

Learn about Pasture
Topics with us



Anyone is
Welcome to Join



July 12, 2022
1:00pm CST

Spring Development for
Livestock Water Systems

Presenter: Derek Hall,
Soil Conservation
Technician, Salem AR

July 19, 2022
1:00pm CST

Siphon Installation on an
Existing Pond Demonstration

Presenter: Tony and LeVonna
Uekman, Faulkner County
Cow/Calf Producers

July 26, 2022
1:00pm CST

Electric Fence Components,
Materials, and Installation
Demonstration

Presenter: Jeremy Huff, AR
NRCS, State Grazing Lands
Specialist

Expect to Learn:



Learn how spring developments have been successfully implemented to facilitate a watering systems.



Watch a demonstration of a siphon being installed on an existing pond to facilitate water to livestock.



Understand the components of an electric fence system, the materials needed and watch electric fence being installed.

Join by these Methods:

Direct Link:

[Click Here
to Join](#)

Phone:



Website:

Zoom
Meeting ID: 838 1208 8585
Passcode: 167933

Questions or
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