



# Dealing with Pasture, Hay, Feed, and Livestock Losses During Recovery from Hurricane Michael

Dr. Jennifer J. Tucker, Asst. Professor, UGA CAES Tifton

Dr. Dennis W. Hancock, Professor and Forage Extension Specialist, UGA CAES Athens

Dr. R. Lawton Stewart, Jr., Assoc. Professor and Extension Animal Scientist, UGA CAES Athens

Dr. Jacob R. Segers, Asst. Professor and Extension Animal Scientist, UGA CAES Tifton

(adapted from articles authored by Dr. Matt Poore, Professor and Extension Animal Scientist at North Carolina State University in response to Hurricane Florence in September 2018)

As a result of Hurricane Michael, many producers in the affected areas of Georgia have lost pasture growth, hay stocks, feed supplies, and livestock. Farmers will be assessing damage to fields, stock, and property in the weeks to come. This article is intended to provide recommendations to farmers impacted by the storm that experienced damage to their pasture-based production systems.

## Livestock That Died During the Event

Any animals that died specifically as a result of the storm need to be documented as soon as possible. Photos, time stamped if possible, and a written affidavit to document the losses will be needed to apply to the [Livestock Indemnity Program \(LIP\)](#).

## Damage to Hay

Pasture-based livestock producers need to assess and document loss of hay as soon as it is safe to do so. If a producer experienced hay losses, they should take time stamped photos of the bales (when bales are still on the property), or the place the bales were stored. Make sure to write down the number of bales, type and quality of hay, and the estimated weight (or the size i.e. 4 x 4, 4 x 5, etc.). Contact the FSA office and visit them with this information as soon as possible. Eligible hay losses will be covered under the [Emergency Assistance for Livestock, Honeybees, and Farm-Raised Fish Program \(ELAP\)](#). To qualify for the program, hay had to be baled. The program will not cover hay that was cut and on the ground (not likely in this event due to the advanced notice of Hurricane Michael). Also, this program only covers hay purchased to feed or hay cut to feed. It does not cover hay that was cut to sell, so producers will likely need to document that they do own livestock and planned on feeding the hay that was lost. **Farmers need to file a “notice of loss” to the FSA office within 30 days of the loss.**

## Damage to Silage Crops

There have been a few reports of damage to late season corn, sorghum, or other crops intended for silage. A common issue is that severe wind damage has resulted in lodging of the crop to an extent that it is laying on the ground. Figure 1 depicts a field of severely lodged silage corn. There are very few options when attempting to salvage severely lodged silage crops. Most silage choppers are going to be unable to lift, cut, and chop this material. Even the large drum headers on self-propelled forage harvesters are likely to have great difficulty in harvesting such severely lodged crops. If a producer has such a chopper, it may be worth trying. Custom harvesters may or may not be willing to attempt such a harvest, at least not at standard harvest rates. Attempting to harvest such a severely lodged crop will result in an extremely slow harvest rate and the crop is likely to be very sandy. Custom harvesters will likely need to charge 50-100% more than normal to harvest such crops. Harvesting this crop as baled silage may be an option, but it will require the crop to be mowed and baled. These processes are likely to cause lost yield and increase contamination.



Fig. 1. Severely lodged crop of tropical corn intended to be cut for silage. Note the 3-ft stick in the center of the photo. The crop is lodged to a height of approximately 18". The crop is also damaged by wind, leaf disease, and soil contamination.

Photo credit: Ty Torrance, County Extension Agent for ANR in Grady Co., GA.

Moreover, extensive damage to the leaf from the high winds, disease outbreaks (e.g., rust) and soil contamination may result in a silage crop that is too low value to be worth harvesting. If such crops are ensiled, regardless of method, it is highly recommended to use a silage inoculant (preferably a combination inoculant providing homofermentative and heterofermentative bacteria). Even with proper inoculation, such crops may ferment poorly, be less stable at feedout, and/or be damaged by secondary fermentations (e.g., clostridial fermentation) resulting in poisonous compounds in the silage.

But, inoculation increases the chances of successful fermentation. It is not clear if severely lodged silage crops will be covered under federal assistance programs. Affected producers are encouraged to document the damages with date-stamped photos and discuss options with the FSA office within 30 days of the loss.

## Pastures

In the wake of Hurricane Michael, there was fewer flooding issues relative to other hurricanes (e.g., Florence in the Carolinas, etc.). For those experiencing flood damage, contact your County Agent and/or the UGA Forage Extension Specialist for more specific guidance.

Some pastures have been contaminated with dirt, debris, and other contaminants that came with the wind damage. Livestock are likely to avoid much of these damaged crops, but there are some contaminants (e.g., downed limbs of black cherry and certain landscape plants) that may be potentially poisonous to livestock. Care should be taken to recognize and remove any such material found in the pasture. Some may also need to clip pastures ahead of planting winter annuals, so care should be taken when mowing the affected areas.

Winter annual establishment has been delayed because of recovery efforts. It is possible to establish winter annuals until mid-November, but the earlier they are planted, the higher the potential for fall and winter forage production. The ELAP program will cover losses to pasture, and our understanding that covers up to 150 grazing days, but it is not clear how much will be allowed. At a minimum, producers need to document the extent of the pastures loss. Making notes on a map and keeping a log of the timeline of days of grazing lost is important. If losses are allowed, reports of affected pasture acres will need to be shown to the FSA office.

## **Physical damage to Fences and Grazing Lands**

Removal of debris, repair of land, and repair of fences may be covered by the [Emergency Conservation Program \(ECP\)](#). This program is designed specifically for dealing with the cleanup following a storm and the repair of damage that occurred. A field inspection by FSA is recommended to determine eligibility for that program. It is critical that producers experiencing the loss take good pictures and document the number of feet/miles of fence that were lost. Restorations of fence lines are paid by linear foot and there must be at least \$2,000 worth of damage, or \$500 for limited resource farmers. The ECP program is a cost share program in which FSA can cover up to 75% of cost.

## **Loss of feed.**

Feed that farmers had on hand (including commercial feed and harvested commodities) will be covered by the ELAP program. Farmers need to document the amount and type of feed that was damaged. Flood-damaged feed, commodities, and crops are considered adulterated and need to be considered a loss.

There will inevitably be questions about feeding alternatives given that some pasture is severely impacted and some producers may have no hay to feed. Cows can be fed on concentrates but need some forage or other fiber source (roughage) to maintain in good digestive health. Cows can be fed up to 15 lbs of whole shell corn or other concentrates, and about 2 lbs of a protein supplement along with 5 lbs of hay. If trying to limit-feed hay, the hay should be put out in such a way that all animals can eat at the same time (by dispersing square-baled hay or unrolling round bales. Sheep, goats and horses also may be fed limited hay rations, but horses should receive a minimum of 10 lbs of hay, while sheep and goats should receive a minimum of 2 lbs of hay daily.

Some producers have feed on hand for other livestock species (e.g., poultry, etc.) that they may wish to give to their livestock, but **be aware there are many of these feeds that should not be fed to grazing livestock** unless the company manufacturing the feeds can attest that they do not contain ruminant meat and bone meal (for all species but horses), and that they do not contain any antibiotics or other drugs not approved for the livestock.

## **Maintaining Health of Grazing Livestock**

It is too early to know how many cattle, horses, sheep, and goats were lost as a direct result of the storm, but regardless of that chronic health problems with livestock develop over time. Death loss as a result of the storm needs to be documented with time stamped photos and reported to FSA as part of an application to the [Livestock Indemnity Program \(LIP\)](#). Extension specialists from NCSU have documented severe dermatitis in some animals in the weeks following the floods, and that is thought to be as a result of contact with the flood waters and potentially to the ingestion of poisonous plants. Affected animals may lose body condition, have very weak offspring, and experience higher than normal sickness and death loss. These conditions may also be the result to some extent on chronic malnutrition during the aftermath of the storm. Once it is possible, start feeding animals to regain the body condition these livestock may have lost in the aftermath of the storm. Pregnant animals will need a good supply of protein and energy for normal fetal development, so pay special attention to them.

Be aware that feeding levels for animals that have been short on feed for several days or a week need to be higher than normal maintenance rations usually fed this time of year. Animals that have lost significant body condition due to feed restriction will need to gain weight significantly and are likely to need supplemental energy in addition to good quality hay or pasture. Make sure that a good quality mineral supplement is being provided and that the livestock are eating it. These are always our recommendations going into winter, but this year it will be especially important given the elevated level of stress on the livestock. Remember, maintaining an adequate nutritional plane of impacted animals is a key to development of a high level of immunity to disease.

## **NRCS Environmental Quality Incentives Program (EQIP)**

In response to hurricane Michael, USDA-NRCS has initiated a series of special [Environmental Quality Incentives Program \(EQIP\)](#) sign-ups for producers in the 13 counties designated under the Individual Assistance declaration from FEMA. These counties include Baker, Crisp, Decatur, Dougherty, Early, Grady, Lee, Miller, Mitchell, Seminole, Terrell, Thomas, and Worth. Some possible damages that assistance may be provided include livestock mortality, destroyed cross fences, damaged trees, loss of vegetation, and excessive erosion.

The first of these special sign-ups is focused on agricultural livestock mortality and carcass disposal, by burial, incineration or composting methods, or disposal at landfill if available and approved Type D landfill. This sign-up is focused primarily on poultry. The first sign-up period ends October 26, 2018. A second batching period will begin soon with the sign-up period ending November 16, 2018, and additional sign-ups will be announced. Through these programs, producers can receive financial and technical assistance to implement conservation practices that can aid in recovery and provide protection in future storm events.

For more information on disaster assistance programs for farmers and ranchers, visit [farmers.gov/recover](http://farmers.gov/recover).

## **Summary**

Farmers experiencing pasture growth, hay stocks, feed supplies, and livestock losses need to document losses as soon after the event as possible and provide a “notice of loss” to their local Farm Services Agency county office. Most damage to forages (hay and pasture), feed, and infrastructure will be covered by one of the FSA programs available. Nutritional management of impacted animals is critical to a positive outcome in the months following the event. For more help with the issues described in this communication contact your local UGA Extension Agent, veterinarian, or other advisor.