Handling Pasture, Hay, Feed, and Livestock Losses During Hurricane Michael Recovery

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Adapted from articles authored by Matt Poore, professor and Extension animal scientist at North Carolina State University, in response to Hurricane Florence in September 2018.

Stuart Griffin Farm in Decatur County, Georgia
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 publication is intended to provide recommendations to farmers that experienced storm 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. To apply to the U.S. Department of Agriculture (USDA) Farm Service Agency (FSA) Livestock Indemnity Program (LIP), producers will need to provide photos, preferably with time stamps, and a written affidavit to document the losses.

**Damage to hay**

Pasture-based livestock producers need to assess and document the 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 size (e.g., 4x4, 4x5). Contact the FSA office and visit them with this information as soon as possible. Eligible hay losses will be covered under Emergency Assistance for Livestock, Honeybees, and Farm-Raised Fish Program (ELAP). To qualify for this program, hay had to have been baled. The program will not cover hay that was cut and on the ground, which is not likely the scenario in this event due to the advanced notice of Hurricane Michael. The program also only covers hay purchased or cut to feed. It does not cover hay that was cut to sell, so producers will likely need to document that they own livestock and planned on feeding the hay that was lost. **Farmers must file a notice of crop 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, and 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 crops that are lodged this severely. If a producer has such a chopper, it may be worth trying. Custom harvesters 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 moved and baled. These processes are likely to cause lost yield and increased contamination.

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 in value to be worth harvesting. If such crops are ensiled, regardless of method, it is highly recommended to use a silage inoculant (preferably a

![Figure 1. Severely lodged crop of tropical corn intended to be cut for silage. Note the 3-foot stick in the center of the photo. The crop is lodged to a height of approximately 1.5 feet. The crop is also damaged by wind, leaf disease, and soil contamination.](https://example.com/figure1)
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. Inoculation increases the chances of successful fermentation. It is not clear whether severely lodged silage crops will be covered under federal assistance programs. Affected producers are encouraged to document the damages with date-stamped photos and to discuss options with the FSA office within 30 days of the loss.

**Pastures**

In the wake of Hurricane Michael, there were fewer flooding issues relative to other hurricanes, such as Hurricane Florence in the Carolinas. For those experiencing flood damage, contact your county Extension agent for more specific guidance.

Some pastures have been contaminated with dirt, debris, and other contaminants resulting from 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 materials 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 due to 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 that covers up to 150 grazing days, but it is not clear how much will be allowed. At a minimum, producers should document the extent of the loss. Making notes on a map and keeping a log of lost grazing days is important. If losses are allowed, reports of affected pasture acres will need to be provided to the FSA office.

**Physical damage to fences and grazing lands**

The Emergency Conservation Program (ECP) may cover the removal of debris, repair of land, and repair of fences. This program is designed specifically to handle cleanup following a storm and the repair of storm damage. A field inspection by the FSA is recommended to determine eligibility for the 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**

Lost feed that farmers had on hand (including commercial feed and harvested commodities) will be covered by the ELAP program. Farmers should document the amount and type of feed that was damaged by the storm. 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 good digestive health. Cows can be fed up to 15 pounds of whole shell corn or other concentrates, and about 2 pounds of a protein supplement along with 5 pounds 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 may also be fed limited hay rations, but horses should receive a minimum of 10 pounds of hay per day, while sheep and goats should receive a minimum of 2 pounds of hay daily.

Some producers have feed on hand for other livestock species (e.g., poultry) that they may wish to give to their livestock, but be aware that many of these feeds 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 the 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 the number, livestock develop chronic health problems 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 North Carolina State University have documented severe dermatitis in some animals in the weeks following the floods, and that is thought to be a result of contact with the flood waters, and potentially, the ingestion of poisonous plants. Affected animals may lose body condition, have very weak offspring, and experience higher-than-normal sickness and death loss. To some extent, these conditions may also be the result of 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 high 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 to provide a high-quality mineral supplement and ensure 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 adequate nutrition is key for impacted animals to develop a high level of immunity to disease.

NRCS Environmental Quality Incentives Program (EQIP)

In response to Hurricane Michael, the USDA Natural Resources Conservation Service (NRCS) has initiated a series of special Environmental Quality Incentives Program (EQIP) sign-ups for producers in the 20 Georgia counties designated under the individual assistance declaration from Federal Emergency Management Agency (FEMA). These counties include Baker, Calhoun, Clay, Crisp, Decatur, Dougherty, Early, Grady, Laurens, Lee, Miller, Mitchell, Randolph, Seminole, Sumter, Terrell, Thomas, Tift, Turner, and Worth. Assistance may be provided for damages including 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 by disposal at a landfill (if there is an available and approved Subtitle D landfill). This sign-up is focused primarily on poultry. The first sign-up period ends Oct. 26, 2018. A second sign-up period will end Nov. 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.

Summary

Farmers experiencing losses of pasture growth, hay stocks, feed supplies, and livestock must document losses as soon after the event as possible and provide a Notice of Loss to their local FSA office. Most damage to forages (hay and pasture), feed, and infrastructure will be covered by one of the FSA programs available. Nutritional management of affected animals is critical to a positive outcome in the months following the event. For more help with the issues described in this publication, contact your local UGA Extension agent.