



Disaster Preparation for Livestock Producers

By Jackie Nix

As I sit here writing this, Hurricane Ivan appears to be making a beeline toward Alabama. Prior to my moving to Alabama, I lived near the coast of North Carolina. As it so happens, I lived there during some of the most active hurricane years in recent memory with at least 5 hurricanes, including Hurricanes Fran and Floyd passing near my home. With that said, I speak to you about disaster preparation with a bit of experience in the matter. A disaster can come in many forms – hurricane, flood, tornado, blizzard, or ice storm just to name a few. Livestock producers across the country may potentially have to deal with any of these situations. No matter where you live or what kind of livestock you raise, everyone can benefit from having a well-prepared disaster plan. As they say – failing to plan is the same as planning to fail. Here are a few tips on what you can do:

What you can do before a disaster strikes?

First, familiarize yourself with the types of disasters that could occur in your area, including man-made situations such as chemical spills near highways or industrial plants. Develop a written plan of action for each. Include a list of resources (suppliers, trucks and trailers), emergency phone numbers and people who can help during an emergency. These people include your local veterinarian, state veterinarian, local animal shelter, animal control officer, county Extension agent, local agricultural schools and the American Red Cross. These numbers should be kept with your disaster kit in a secure, but easily accessible place. Review this Disaster Plan regularly with everyone involved in your farming operation.

If it becomes necessary to evacuate your animals be prepared by identifying evacuation host sites well in advance of the need. Possible evacuation sites might include state and county fairgrounds, stockyards and private farms, just to name a few. Contact your local Cooperative Extension agent or animal control officer to help you identify evacuation host sites. Once you choose your evacuation sites, you will need to map out routes to each. Alternate routes should also be mapped out in case the planned route is inaccessible. Include these evacuation sites and routes in your Disaster Plan.

If you do not own trailers and/or trucks capable of hauling your livestock, identify and locate suitable transportation well in advance of an emergency. Make sure that the drivers of these vehicles are experienced in hauling livestock. Also, whenever possible, accustom your animals to being loaded into these vehicles in advance so they're less frightened and easier to move when an emergency arises.

Keep vaccinations and boosters up-to-date. Record the dates, dosages and types of medications and health products the animals have received. Keep this information with the Disaster Plan.

Permanently identify your animals. This will help you to recover your livestock or pets in case they escape or are lost in the disaster. Another good idea is to photograph and inventory (by age, sex, weight, breed) your animals. Identify in writing, which animals (such as breeding stock or pets) are of the highest priority or most valuable, in the event only some of them can be saved. Make sure others know your plans. Keep this information with your Disaster Plan.

In case evacuation is not possible or feasible, survey your property for the best location for animal confinement in each type of disaster. Identify food and water sources that do not rely on electricity, unless you have a back-up generator.

If you regularly depend on electricity to feed or water your stock, you should seriously consider purchasing a portable back-up generator. A portable generator can provide substitute power; however it must be properly sized to start the appliances and equipment you want to run. In order to choose the right sized generator; find the wattage of the equipment you want to run by checking the nameplate. Motor- driven appliances may be listed in horsepower, which must then be converted to watts. Motors require four times as much power to start as they do to run. If the running wattage is 400, then the starting wattage will be 1,600. The following table gives some starting and running wattages for electrical motors.

Watts Required		
Motor, hp	To start	To run
1/6	1,000	215
1/4	1,500	300
1/3	2,000	400
1/2	2,300	575
1	4,000	1,000
5	18,000	4,500
7.5	28,000	7,000
10	36,000	9,000

Next, determine how many appliances you want to run at the same time and add or total the wattage. The size of generator must be such that it will start and run the necessary equipment. If you get a generator that is too small to run refrigerators and freezers, they will try to start, but the voltage will drop and their motors will overheat and burn out. If you cannot find the wattage, an estimate can be made from the following:

Typical Equipment Wattages

Essential home equipment	Typical wattage
refrigerator	400-800
freezer	600-1,000
furnace blower	400-600

Optional home equipment	Typical wattage
electric skillet	1,150-1,500
electric stove	3,000-4,000
washing machine	400
water pump	800-2,500
water heater	1,000-5,000
electric fan	75-300
central air conditioner	2,000-5,000

Farm equipment	Typical wattage
ventilator fans	300-800
feed mixing	800-1,500
feed conveyor	800-5,000
bulk milk cooler	1,500-12,000
electric fence	7-10

A transfer switch is an essential part of standby electric power equipment. The National Electric Code and electric power suppliers require that a generator be properly connected to the electric system with a transfer switch to prevent any accidental inter-connection of the generator and the power supplier's power lines. Otherwise, feedback from the generator onto the power lines can endanger the life of anyone working on the lines. The transfer switch also prevents accidental re-energizing the farm equipment or appliances and destroying the standby generator when regular power is restored.

What to do when a disaster is impending?

If you must evacuate, take enough hay, feed and water for your animals for a minimum of 48 hours. A very rough rule of thumb is that an average cow or horse will need 5 to 10 gallons of water and 20 to 25 pounds of hay per day. An average goat or sheep will need 4-5 quarts of water and 4-6 pounds of hay per day. Also, don't forget basic biosecurity measures --especially if you know your herd is under quarantine or has a communicable disease such as CL or pinkeye.

When facing high winds, such as in a hurricane or severe thunderstorms, secure all loose materials on your farm if time permits. Either move them indoors or tie them down. Flying debris can cause you or your livestock injury as well as damage your farm structures and equipment.

Secure and store temporary fencing materials to permit quick, temporary fence repairs. Select fence systems that will contain animals without access to electricity. Permanent repairs can be made at a later date.

Obtain film for your camera and camcorder to document storm damage. If time permits, take pictures of your structures prior to the storm. Review your insurance policy to determine storm coverage then document damage accordingly.

What to do after the disaster?

Check fences and make sure that they are intact. Check pastures and fences for sharp objects and debris that could injure livestock. When there are damaged and down trees, you need to be aware of the possibility of cyanide poisoning from ingestion of wilted

leaves of trees that produce stone fruit (wild cherry, peach, plum, etc.), and/or red maple leaves. Cyanide poisoning symptoms include: weakness, excitability, grasping for breath, incoordination, collapse, convulsions, constipation or diarrhea, bloody urine, and death. Symptoms may result from as little as a few mouthfuls of leaves on an empty stomach.

If you are without water for an extended period, contact your local fire department to request water delivery. Most fire departments will accommodate if you have a large number of animals and are experiencing a prolonged power outage. Make certain you have containers available to hold the water.

If animals are lost, contact veterinarians, humane societies, stables, surrounding farms and other facilities. Listen to the Emergency Broadcast System for groups that may be accepting lost animals.

In summary, disasters are an inevitable fact of life. However, with a little planning you can make sure that you are properly prepared to deal with these disasters and provide the best care possible for your livestock.

Jackie Nix is a nutritionist with Sweetlix (<http://www.sweetlix.com>). You can contact her at jnix@sweetlix.com or 1-800-325-1486 for questions or to learn more about the Sweetlix line of mineral and protein supplement products for goats, cattle, horses, sheep and wildlife.