

Hurricane Ike Agriculture Case Study



Texas Engineering Extension Service

Knowledge Engineering

800-541-7149

KE@teexmail.tamu.edu



HURRICANE IKE IMPACT REPORT

Storm History

1986 – Hurricane Bonnie

2001 – Tropical Storm Allison

2005 – Hurricane Rita

2008 – Hurricane Ike

AGRICULTURE CASE STUDY -

COOPERATION CRUCIAL TO MANAGING LIVESTOCK DURING A DISASTER

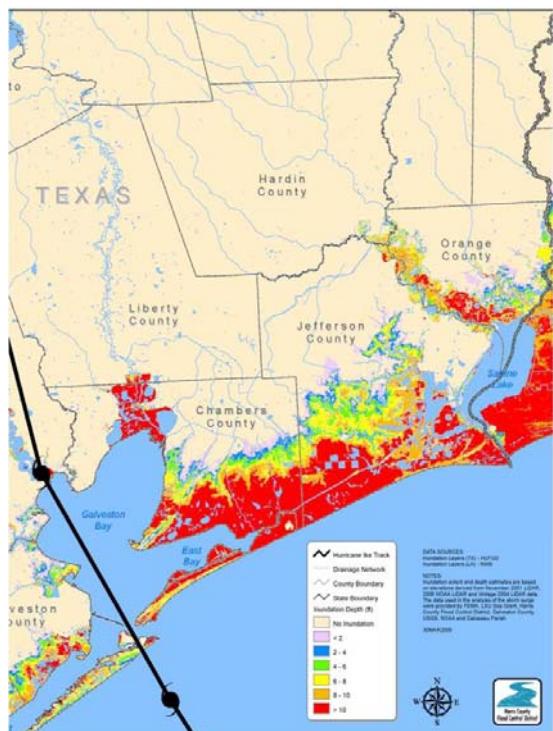
Liberty, Tyler, Chambers and Jefferson Counties along with several others comprise a region in southeast Texas that includes the coastal prairie and derives a substantial portion of its economy from agriculture. Common crops in the area include rice, soy, cattle, sorghum, and sheep. Logging the natural abundance of timber is also a local source of income. The area itself is primarily rural, but the cities of Houston and Beaumont are nearby.

Case Facts

On September 13, 2008, Hurricane Ike made landfall with category two winds; however, it was the storm surge, not the wind, that caused real damage. More than half a million acres of land used for farming and

ranching in southeast Texas were submerged in salt water as a result of the storm surge. “It’s the worst storm we can ever remember,” said rancher Dan Hankamer of Hurricane Ike.

Before Ike, Southeast Texas had over 30,000 head of cattle. At least 4,000 were lost during the storm, and due to 17,000 miles of fencing being destroyed and the increase salinity in the soil since Ike, the number of cattle in this region has been reduced to 7,000. In fact, Ike’s overall effect on Texas agriculture is estimated to be \$433 million.



Key Decisions

Many animals perished during the storm from flying debris and flood waters or in the days afterward from lack of food and water. Removing carcasses became a pressing public health and sanitation issue. It seemed that no one had the

**Texas Agrilife's
Operation No Fences**

9,000 hay bales

165 tons of feed

400 water troughs

12,000 head of cattle fed
and watered

time or resources to deal with the increasing problem of animal remains. The United States Department of Agriculture Natural Resource Conservation Service stepped in, and with just a phone call identifying the location, species and quantity of the dead animal, NRCS would remove and dispose of the remains free of charge. "In several storm-ravaged counties in East Texas, large numbers of cattle, horses and poultry caught in Hurricane Ike died," said Don Gohmert, NRCS state conservationist for Texas. "We are working with soil and water conservation districts, local county governments and the Texas Animal Health Commission to properly dispose of carcasses to protect public health and safety."

The salt soaked earth ruined the ground for grazing, and all freshwater ponds and tanks had been flooded out with the storm surge. Southeast Texas had become unlivable for livestock. Even before the floodwaters had fully receded, it became a race against the clock to round-up all living animals into areas where they could be fed, watered and treated for sickness, without regard to who technically owned the cattle.

In what the Texas Agrilife Extension Service termed "Operation No Fences," volunteers took on the initial responsibility to recover and care for the livestock. Later they would organize and return cattle to their proper owners. Assisting Agrilife in "Operation No Fences" was the Texas Department of Agriculture, Texas Animal Health Commission, Texas and Southwestern Cattle Raisers Association, and the Independent Cattlemen's Association, as well as numerous other organizations.

In total, Operation No Fences delivered more than 9,000 hay bales, 165 tons of feed and 400 water troughs for ranchers who were unable to feed their cattle. As a result, the volunteers gathered, fed and watered 12,000 head of cattle. While the cost of Hurricane Ike damage was substantial, the savings resulting from this recovery effort are estimated at \$8.3 million.



Six months after the storm, the Texas Department of Agriculture hosted another event called "Operation New Fences" with the goal of donating fencing and feeding supplies to help area ranchers begin again. "Operation New Fences" distributed over \$100,000 of



Texas Animal Health Commission is now the primary agency for responses to animals in emergencies

donated supplies to almost 100 ranchers in the southeast Texas area. "Hurricane Ike landed on Texas soil six months ago, but its wake of destruction still exists," Commissioner Staples said. "The massive storm destroyed the land, homes and livelihoods of Southeast Texas ranchers, but it did not destroy their spirit. These cattle raisers need our help to resume business and restore their agricultural production, which impacts the state economy by more than \$130 million." "Operation New Fences" distributed over \$100,000 of donated supplies to almost 100 ranchers in the southeast Texas area.

Conclusions

Since Hurricane Ike, the Texas Animal Health Commission has been identified as the primary coordinating agency for responses to animals in emergency or disaster situations. They have developed a number of state and local planning guides that could help communities develop emergency animal shelters, evacuations and carcass disposal plans in the event of a major catastrophe.

Brazoria County Texas AgriLife Extension Service released a document advising livestock owners to have a plan for handling livestock in the event of hurricane evacuation. Agrilife knew that in the event of a major storm, it could be necessary to keep animals out of the county for weeks

or even months. For those who would need to shelter their livestock in place, Agrilife recommends pasturing horses and cattle away from barns in areas where they might reach higher ground and where loose debris have been removed or totally secure.

No amount of planning can stop a hurricane in its tracks or undo the damage that Ike has already caused, but it can mitigate losses and damages from future storms.

