

Hurricane Irene –Evolving Agricultural Recovery

By Sharron Stewart, NCDA&CS

On August 27th at 9:00 a.m., Hurricane Irene made landfall near Cape Lookout on the North Carolina coast. According to NC Emergency Management, 7 people were killed, the area had over 660, 000 power outages and many roads were closed due to flooding. The statistics tell us a lot about the intricacies of preparing ahead for hurricanes, the tornadoes that are spawned and the ensuing floods that occur during these annual weather events. Thankfully, the National Weather Service (NWS) forecasts for the track and voracity of the hurricane provided citizens with advanced information to begin the process of preparing their homes, families and businesses prior to the storm.



To begin the traditional hurricane season preparations, agriculture partners attended the annual Ag Emergency Operations Center (AgEOC) activation exercise on August 9th. The addition of the NC Forest Service and Soil and Water Division to NCDA&CS provides additional disaster preparedness expertise and resources to the agricultural team. Over 50 private and public participants reviewed ICS roles and responsibilities, practiced

using the latest event management technology tools and provided input on the partners reporting protocols. The AgEOC activations are held the second week in August to assure last minute fine tuning of our processes and is a great way to be engaged early with your colleagues.

Later in the month on August 19th, Emergency Programs Division held an internal preparations call when the NWS storm tracks indicated that Irene would likely make landfall on the east coast of the United States. The team began developing the Emergency Support Function (ESF) 11 response strategy, setting up the command structure and shifting schedules for the impending hurricane. At the time, the storm was forecasted to be a Category 3 with landfall between Cape Lookout and Morehead City.

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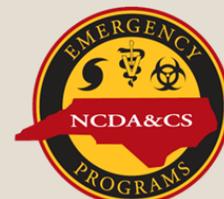


**NORTH CAROLINA DEPARTMENT OF AGRICULTURE &
CONSUMER SERVICES**

Emergency Programs Division

Steve Troxler, Commissioner

Sharron Stewart, Director



AMERICAN HUMANE ASSOCIATION - NC Hurricane Irene Response 2011

By Dean Berenbaum, Resource Manager, American Humane Association

With the approach of Hurricane Irene to the U.S. East Coast, the North Carolina Department of Agriculture and Consumer Services Emergency Programs Division grew concerned about the storm's potential impact on the state's animal populations. Dr. Jimmy Tickel, Veterinary Specialist with NCDA&CS and veteran of North Carolina's animal disaster response, contacted a trusted state partner, American Humane Association's Red Star™ Animal Emergency Services team.

Monitoring Irene's development, the Red Star team knew that this storm could be a devastating one for communities along the coast, and as soon as the request for help was communicated, staff alerted the program's nationwide roster of volunteer responders. A team was quickly selected and flights into Raleigh were arranged. Meanwhile, Red Star's 82-foot semi-tractor trailer rig, along with a heavy-duty 4x4 response truck with a trailer of supplies, was launched to North Carolina. Converging in Raleigh, the team found ideal initial staging at the State Fairgrounds just as Irene began pounding eastern North Carolina's coast and river shorelines. Dr. Tickel relayed the decision that Red Star would be tasked with assisting Beaufort County, one of the harder hit areas. The specific assignment: team up with Beaufort County Animal Control and comprehensively search shoreline areas of the county to provide disaster assessment, locate animals injured, lost, or stranded, perform rescues if needed, and bring them to the shelter to be reunited with their owners.

The Red Star Rescue Rig was staged at the Sen. Bob Martin Eastern Agricultural Center in Williamston. During the storm, this facility served as an equestrian emergency shelter and now became Red Star's base of operations. Each morning, American Humane Association teams met up in Washington, N.C. with Beaufort County Animal Control's Director Sandy Woolard and her staff to receive daily search assignments and tasks.

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AHA team members assess the needs in Beaufort county.

VRC COORDINATOR	UPCOMING EVENTS:	REQUIREMENTS FOR VRC DEPLOYMENT
<p>Mandy Tolson, DVM Southeast Region Emergency Programs Veterinarian (252) 813-0989 Mandy.Tolson@ncagr.gov</p>	<ul style="list-style-type: none"> • Please see our website for future training and activities. • Check out our sheltering webinars now posted on the website! 	<ul style="list-style-type: none"> • ICS 100,200, and 700 • Biosecurity/PPE Training • Knowledge of NC Emergency Management • Knowledge of Emergency Support Functions • Attendance at VRC Meetings • Sign a Code of Conduct
<p>COMPLETE YOUR VRC REGISTRATION AT WWW.SERVNC.ORG</p>		

VRC SPOTLIGHT: North Carolina Veterinary Conference - November 4, 2011

By Mandy Tolson, DVM, NCDA&CS

The Public Practice track at NCVC is always a fun day and a great time to meet new NCVRC members and reconnect with those we haven't seen in awhile. This year we had an agenda full of interesting and engaging topics. The day began with an overview of the NCVRC by Dr. Christina Law. Dr. Law presented details about how to become involved with NCVRC and how a member may be asked to respond. Dr. Harry Wilson followed and helped the audience understand more about food recalls. Next, Dr. Lee Hunter updated the audience on the new spay/neuter program study and gave us an overview of the Animal Welfare Section of the NCDA&CS. Rebecca Njord gave a very informative talk during which she discussed the myths about raw milk. After lunch, we heard a valuable talk from a panel of experts on rabies. Dr. Carl Williams, Dr. Richard Ford and Dr. Marilyn Haskell offered their insight on vaccinating against rabies, quarantine issues and worked through individual cases with the audience. Dr. Marla Friend and Jeff Denton with USDA, APHIS, Veterinary Services presented an overview of ten foreign animal diseases seen in small animals. The day finished with the annual biosecurity workshop given by Dr. Bruce Akers and Dr. Mandy Tolson. Participants practiced proper donning and doffing of personal protective equipment.



VRC members practicing proper donning and doffing technique.



16th Annual
NC Veterinary Conference

For Veterinarians, Veterinary Technicians, & Other Paraprofessionals

It was exciting to see such a great crowd this year and an interest in the topics that were offered. We hope that the Public Practice track was valuable to those who attended, and we look forward to seeing everyone again next year!

VRC MISSION: Train and prepare professionals in the animal care community to respond to disaster events (all hazards) that affect both production and companion animals. Our members will serve as a resource for our state and the nation.

NOTES: To see recent news and updates, please visit the VRC website at www.ncvrc.org. If you have questions about the VRC or would like to offer suggestions or articles for future newsletters, contact Mandy at mandy.tolson@ncagr.gov.

The United States Animal Health Association and NCVRC

By David Marshall, DVM, State Veterinarian

Greetings from the United States Animal Health Association (USAHA). I recently assumed the Presidency of the USAHA at the annual meeting last month in Buffalo, NY, and am honored to represent North Carolina in leading this important organization.

The USAHA was established in 1897 and is a science-based, voluntary organization of official state and federal animal health agencies, national commodity and allied organizations, and individual members founded to protect animal and public health. Our Board of Directors includes chief animal health officials from all 50 states and 6 foreign countries or territories, 11 federal agencies, and 25 allied organizations, with a membership of approximately 800 individuals. USAHA serves as a forum for communication and coordination among state and federal governments, universities, industry and other groups on issues of animal health and disease control, animal welfare, emergency response, food safety and public health. Through our committee and resolution structure, and the close working relationship and respect we have earned over the decades, the organization has been relied upon by United States Department of Agriculture (USDA), Department of Homeland Security (DHS), Department of Health and Human Services (DHHS), and our animal agriculture commodity groups to play a key role in animal emergency planning and solutions.

I'd like to thank each and every one of you for your willingness to volunteer and contribute to our state's preparedness through involvement with the NCVRC. The national respect and admiration that North Carolina receives for its preparedness capabilities continually amazes me. This stature was earned through the hard work over the last decade of people such as yourself, and the tireless efforts of dozens of NCDA&CS employees and those from other agencies and industry.

Whether it is humane euthanasia at tornado damaged poultry houses in Alabama, hurricane response, Foot and Mouth Disease (FMD) continuity of operation planning for our dairy industry, foreign animal disease investigations, or bioterrorism preparedness, our state continues to be looked to as a leader. That is no minor accomplishment, but we must always press forward and continue to improve.



Our state will have a unique opportunity this coming October 20-24, 2012 when the national USAHA meeting will be held in Greensboro. Hosting it in our backyard will allow North Carolinians to attend at much less travel expense than at other farther away venues. Of particular interest might be the Committees on Animal Health Emergency Management, Foreign and Emerging Diseases, or any of the species specific committees. Many of our nation's current emergency policies were discussed and crafted all or in part over the years in these committee meetings, including the National Veterinary Stockpile, FMD and Foreign Animal Disease (FAD) response plans, FAD disease modeling, and the National Animal Health Emergency Response Corps. I think you'll find that a wide variety of interesting emergency related topics will be discussed, and I would like to personally invite you to the meeting and encourage you to visit the USAHA web site for more information on the organization. <http://www.usaha.org/>



American Humane Association - NC Hurricane Irene Response 2011

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Ultimately, Red Star teams drove hundreds of miles of shoreline roads in the county, in search of stranded or injured animals, and daily assessment reports were passed to the Agriculture Emergency Operations Center (AgEOC). One windy morning, Red Star technical specialists and Sandy Woolard donned dry suits and personal flotation devices (PFDs) for a choppy boat ride to Indian Island in the middle of the Pamlico River to confirm that no animals were stranded there. After all areas assigned were assessed and cleared, the county and the state released Red Star and the team headed back to its Colorado base of operations.



An American Humane worker assessing an area for animals in need.

Two weeks on the ground, twenty team members, a multi-million dollar response trailer, response vehicles, boats and rescue equipment were all brought to bear for the assistance of North Carolina's families and animals. The cost to the state and county might have been significant- but it wasn't. American Humane Association's Red Star Animal Emergency Services deploys numerous times a year across the U.S., at no cost to the state or local jurisdiction, thanks to the generosity of its donors and supporters. *More information about American Humane Association's Red Star Animal Emergency Programs can be found at www.americanhumane.org*

Charlotte-Mecklenburg Animal Control Assists Hyde County after Hurricane Irene

By Bill Morrison, Animal Care and Control Field Supervisor

On Tuesday, August 30th Charlotte-Mecklenburg Police Department's Animal Care & Control's Emergency Response Unit was deployed to Hyde County, North Carolina as a result of flooding and damage caused by Hurricane Irene. Mark Balestra, Division Director for the Animal Care and Control Unit activated their emergency response teams (ERTs) and assembled the unit that would make the initial response. A contingency was developed for their secondary team to relieve them should the assignment extend beyond four days. The initial response team was comprised of Enforcement Supervisor, William Morrison; Animal Control Officers Matthew Marler, Adam Lockler, and Chloe Hankinson; Vet Supervisor, Robbi Porter; Vet Technician, Mary Ermold; and Kennel Attendant, Amy Yeager.



Charlotte-Mecklenburg Animal Control Team

The mission was to set up their emergency response trailer at a Red Cross Shelter near Belhaven, NC for residents who were utilizing the shelter due to being displaced by the hurricane. In addition, the team was prepared to assist the Hyde County Animal Control Officer with removing and transporting companion animals of residents whose homes had been flooded and condemned.

On Wednesday, August 31st was the Charlotte-Mecklenburg Animal Care & Control's first full day in Hyde County. That morning they set up their ERT in front of the Red Cross Shelter. At the morning incident command meeting, it was announced that the unit was up and running and available to all residents who needed a place to keep their companion animals during their displacement. Charlotte-Mecklenburg then met with the Hyde County Animal Control Officer, James Eakes. Officer Eakes had informed the team of two homes in the county that had many companion animals and that the owner's home was possibly going to be condemned due to flood damage. The team arrived at the first home and met with the resident. Just prior to arrival, the resident's home had been inspected and deemed repairable. The owner elected to stay in the home and keep his pets with him as well. Char-Meck's Certified Rabies Inoculator assisted Officer Eakes with giving rabies vaccinations to the resident's unvaccinated canines.

The group then proceeded to the next home that had been targeted for assistance by Officer Eakes. Upon arrival at this home, it was determined that this residence had also been approved for restoration. The companion pets at this residence were dry, safe and secure in an outbuilding that had not been affected by the hurricane. As post storm conditions improved, there were no new arrivals at the Red Cross shelter or at a temporary shelter provided by the Charlotte-Mecklenburg Animal Care & Control Unit.

On Thursday, September 1st, the team proceeded to the Hyde County Animal Shelter and assisted Officer Eakes with debris cleanup. After this had been accomplished, they patrolled areas of the county searching for residents that may need relocation or assistance with housing their animals. The residents they encountered had already made arrangements with friends and family for themselves and their animals.

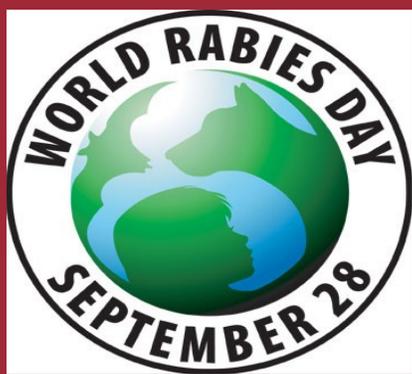
On Friday, September 2nd, the Charlotte-Mecklenburg Animal Care & Control Unit was informed by the incident commander that they could demobilize and prepare for departure back to Charlotte. Even though full services were not required by Hyde County residents, it was a wonderful opportunity for the team to utilize the experience to evaluate their emergency response plan to better serve the state in future deployments.



The Charlotte-Mecklenburg Animal Control Team using their response trailer.

What is World Rabies Day?

By Marilyn Goss Haskell, DVM MPH, NC DHHS, Veterinary Public Health



The purpose of World Rabies Day is to raise awareness about the impact of human and animal rabies, educate about rabies prevention measures and how to eliminate the main global sources.

World Rabies Day (WRD) is the brainchild of a group of researchers and professionals that in 2006 formed a Global Alliance for Rabies Control (GARC). The group has built important partnerships throughout the world through the development of Partners for Rabies Prevention in 2008. Key partners at the international level include the World Health Organization (WHO), the Food and Agricultural Organization of the United Nations, the World Organization for Animal Health (OIE), the WHO rabies collaborating centres, research scientists, representatives from the Bill and Melinda Gates Foundation and representatives from industry. GARC efforts have succeeded to involve every major human and animal health partner at the international, national, state/provincial, and local levels as well as veterinary, medical and other specialized professional and student organizations, corporate and non-profit partners.

The goal of World Rabies Day is to raise awareness and resources in support of human rabies prevention and animal rabies control, and ultimately the mission is to eliminate the global sources of rabies. The first World Rabies Day took place in 2007, and the related events typically occur annually on or around September 28th. World Rabies Day events have been held in 135 countries; educating 150 million people and vaccinating 4.6 million dogs, according to the website.

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Hurricane Irene—Evolving Agriculture Recovery

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On August 23rd, the Command team invoked the Memorandum of Agreement (MOA) with American Humane Association (AHA, www.americanhumane.org/) knowing that their travel time would put them in North Carolina pre-landfall. AHA is a partner within the National Animal Rescue and Sheltering Coalition (NARSC) which enables the organization to have significant surge capacity when needed for catastrophic events. AHA has maintained an MOA with NC Department of Agriculture and Consumer Services (NCDA&CS) over the last 2 years to assist with animal search and rescue, sheltering and equipment.

Governor Perdue declared a State of Emergency on August 25th, to ensure protections for the citizens, seek federal agency assistance and reimbursement for expenses attributed due to the emergency (www.governor.state.nc.us/NewsItems/ExecutiveOrderDetail.aspx?newsItemID=1983). The NC Veterinary Response Corps was alerted to begin making preparations for potential deployment to provide local assistance if requested by the ESF-11 Operations.

As the storm entered the Gulfstream waters, the energy built inside the storm allowed the system to gain momentum growing to a Category 3 on August 24th and remaining that strength until late in the day on August 26th. The storm finally began to break apart and slowed to a Category 1 just prior to landfall at Cape Lookout NC on 27 August. However, the storm created inland flooding and wind resulting in structural and infrastructure damage across the Coastal Plain counties of North Carolina. The areas from I-95 East to the coast are where most of NC's crops and animal agriculture thrives. Agribusiness has a two-fold impact on the state's economy compared to other business sectors and the impacted area generates tremendous revenue.

Estimated agricultural losses include crops losses which are estimated at \$320 Million; forestry losses estimated at \$80 Million; aquaculture losses at 2 Million; and equipment and infrastructure losses estimated to be \$92 Million. The total estimated losses are just under \$500,000,000. Meetings were held across the impacted area to hear directly from the farmers and agricultural community leaders about their losses and suggestions for improvements to the recovery process. At the meetings, leaders in the communities said while their crop losses were significant, the big loss is in the rural economies which depend on the money and taxes provided by agriculture. They estimated billions would be lost in those local farming communities due to the impacts of Hurricane Irene.

There are still many lingering recovery issues for the people of North Carolina, and the farm community is certainly at the epicenter of the recovery discussion. Federal, state and non- governmental organization (NGO) recovery programs do a good job of getting people back in a home or help with living arrangements until more permanent lodging can be found. For those with insurance, homes can be replaced and lives restored to some semblance of normalcy.

Recovery for agribusiness is an evolving issue and one that states wrestle with because the solutions are complicated and not easily resolved. Our local communities need help with basic recovery activities that are not covered by traditional programs. As we enter into 2012, NCDA&CS will be heading an effort with many partners like NC Farm Bureau, NCSU Cooperative Extension, farm commodity groups, the private sector and others to provide assistance to our rural communities within the first two weeks following a disaster. Stay tuned for more information on this new initiative and other ways that you can get involved to help with disaster recovery efforts.

What is World Rabies Day?

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The risk for rabies exposures and transmission outside of the United States and in less well developed countries is cause for concern. More than 55,000 people, mostly in Africa and Asia, die annually because of exposures to rabies infected dogs; about one person every ten minutes. This major source of rabies in humans can be eliminated through ensuring adequate animal vaccination and control, educating those at risk, and enhancing access of those bitten to appropriate medical care. Children less than 15 years of age represent 40% of people who are bitten by suspect rabid animals, and dogs are the source of 99% of human deaths. The behavior and nature of children, curious and playful coupled with their attraction to animals place them at greatest risk to be bitten by dogs. The shorter stature of children predisposes them to more severe exposures with multiple bites about the head and upper body areas. Unfortunately, in most underdeveloped countries, there is little if any public health infrastructure nor is there a system or legal authority in place for control of strays and requirements for domestic canine vaccination.

Human and animal rabies cases are nationally notifiable conditions in the United States. Overall there have been a total of 25 human cases of rabies reported in North Carolina through the NC surveillance system and documented in the NC DHHS Communicable Disease Morbidity Reports (established in 1918). The last reported case was in 1955 due to canine variant rabies. The chart below shows a decreasing trend in number of animals submitted and testing positive to rabies over the last 10 years. Each year over the last five years about 4,000 animals (domestic and wild) were submitted for rabies testing to the NC State Laboratory of Public Health. In 2010, NC had the lowest percent positivity in ten years of animals submitted, about 10% or 397 animals submitted were positive; over 90% of those were wildlife. All rabid terrestrial mammals were infected with the eastern raccoon variant in 2010.

Rabies in humans is 100% preventable through prompt and appropriate medical care (including thorough washing of bite wounds) and rabies biologics that are easily obtainable in the US (vaccines and immune globulin). Since 2000 there have been 23 humans that acquired rabies in the United States. Of these indigenous human cases, 96% (22) were due to bat variant rabies; 15 cases were associated with a bite or direct contact with a bat, information elicited from the patient or family members during the exposure assessment of the patient after he/she had developed clinical signs of rabies. Four people woke to find a bat in a room and 3 could not recall a bat or potential exposure to a bat. This highlights the need to be vigilant about bat infestations in buildings that are inhabited by people and/or domestic animals and to immediately contact a professional Wildlife Damage Control Agent to eliminate access of bats to living spaces. Only one human case, in Virginia (2003) was variant-typed to eastern raccoon variant, the predominant terrestrial reservoir in NC.

Questions pertaining to the interpretation and application of rabies vaccination law for domestic pets in North Carolina should be directed to:

Veterinary Public Health
Division of Public Health, Epidemiology
Section
N.C. Department of Health and Human
Services
1902 Mail Service Center
Raleigh NC 27699-1902
Phone: (919) 733-3410

