



**Jefferson County Office of Homeland Security and Emergency Management**

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Animals in Disaster

Sign In Sheet

April 19, 2010

Print Name & Organization	Email	Phone	Sign In
Davis, Mike CERT Volunteer	mjdavis56@comcast.net	(304) 728-8108	
Davis, Pat CERT Volunteer		(304) 728-8108	
Hite, Sandy Jefferson County Health Department	Sandy.d.hite@wv.gov	(304) 728-3309	<i>Sandy Hite</i>
Keith, Maria NHES	eduassist@nhes.org	262-7455	
Koblinsky, Barbara Jefferson County Health Department	barbarakoblinsky@wvdhhr.org	728-3309	
Maggio, Jennifer JCHSEM			<i>Jennifer Maggio</i>
Marken, Joyce	joyce@dalb.com	(304) 725-0300	
McQuain, Vicki	vicki.l.mcquain@irs.gov	264-5678	
Mehling, Terri JCSHEM	tmehling@jeffersoncountywv.org	728-3329	<i>Terri Mehling</i>
Miller, Barbara JCHSEM	bmiller@jeffersoncountywv.org	728-3290	
Parsons, Kelly CERT	kparsons@nicholsdehaven.com	725-6525, Ext. 124 (D)	<i>Kelly Parsons</i>
Pierce, Lucas Red Cross/CERT	piercel@usa.redcross.org	(304) 261-3516	
Randlett, Jill Red Cross/CERT	randlett@mitre.org	(304) 725-1948	

Handwritten notes at the top of the page, possibly a title or introductory text, which is mostly illegible due to fading.

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Jefferson County Homeland Security and Emergency Management  
Animals in Disaster Committee  
April 19, 2010

The Jefferson County Homeland Security and Emergency Management (JCHSEM) Animals in Disaster Committee met on Tuesday, April 19, 2010 at 9:30am in the Emergency Operations Center located in Kearneysville, WV. Those present were: Terri Mehling, JCHSEM; Jennifer Maggio, JCHSEM; Kelly Parsons, Nichols, DeHaven & Associates and Sandy Hite, Jefferson County Health Department.

Call to order

Introductions

Ms. Mehling, JCHSEM Deputy Director opened the meeting with approval of the minutes. Kelly Parsons moved to approve the minutes and Sandy Hite was second to approve. Motion carried.

**Old Business**

Red Cross was unavailable to give an update on their endeavors with the Berkeley County Humane Society and grant objectives. Ms. Mehling noted Jill Randlett is still updating their plans.

Ms. Mehling noted the committee agreed on 2010 Goals and Objectives.

Ms. Mehling reviewed the resources that need updated in the JCHSEM EOP Animal Control & Protection Annex. The committee members are still working to update the resources listed.

**New Business**

Ms. Mehling went over the JCHSEM 2011 Budget and impact on JCHSEM programs. JCHSEM as well as all departments have been cut 5%. Programs that will be impacted: CERT will be cut from 4 times a year down to 2 times a year and at this time; JCHSEM will not be participating in Bark in the Park. Ms. Mehling noted we will still be participating in the Jefferson County Fair. There is a chance there will be some unencumbered funds may roll over July 1<sup>st</sup> that could be used to make up for some of the loss in funding.

Ms. Mehling reviewed with the committee a series of magazine/newsletter articles on animals in disaster.

Ms. Mehling noted there was no information on PETCO's website for National Animal Disaster Preparedness Day on May 8<sup>th</sup>. As of now JCHSEM will not be attending. Ms. Mehling brought pamphlets if anyone wanted to volunteer to place them in local shops and veterinary clinics.

Ms. Mehling noted we will not be participating in Bark in the Park on May 22. JCHSEM cannot be represented without a staff member present.

**Member Sharing**

Ms. Mehling announced there will be a Volunteer Mobilization Center Training on May 3<sup>rd</sup> from 8:00am-4:00 p.m. The training will be located at the Inn at Charles Town with lunch provided. Ms. Mehling handed out brochures.

Ms. Mehling announced Ranson Day will be May 15<sup>th</sup> from 10a-4p. There will be an email sent out shortly asking volunteers to help.

The next regularly scheduled meeting of the Animals in Disaster Committee will be on July 19, 2010 at 9:30 a.m. in the Jefferson County EOC.



Jefferson County Office of Homeland Security & Emergency Management  
Animals in Disaster Committee  
April 19, 2010

- I. Call to Order
- II. Sign in Sheet
- III. Old Business
  - a. Red Cross update on their endeavors with the Berkeley County Humane Society and grant objectives
  - b. 2010 Goals and Objectives
  - c. Update Resources (see form) – Annex O – JCHSEM EOP Animal Control & Protection. The following organizations are currently in the Resource Manual (Type IV):
    1. American Human Association
    2. American Society for Prevention of Cruelty to Animals
    3. ASPCA
    4. Briggs Animal Adoption Center
    5. Department of Agriculture – Kearneysville & Ranson
    6. Jefferson County Animals Welfare Society
    7. Jefferson County Animal Control
    8. Hillside Veterinary Hospital
    9. Jefferson County Fairgrounds
    10. Paws
    11. PIGS
    12. WV Department of Agriculture
- IV. New Business
  - a. JCHSEM 2011 Budget and impact on JCHSEM programs
  - b. Magazine/Newsletter articles on animals in disaster
  - c. National Animal Disaster Preparedness Day – May 8
  - d. Bark in the Park – Sam Michaels Park – May 22
  - e. Member Sharing Time
- V. Adjournment

The next meeting of the Animals in Disaster Committee will be July 19, 2010 at 9:30am and will be announced via email notification.

Jefferson County Homeland Security and Emergency Management  
Animals in Disaster Committee  
January 19, 2010

The Jefferson County Homeland Security and Emergency Management (JCHSEM) Animals in Disaster Committee met on Tuesday, January 19, 2010 at 9:30am in the Emergency Operations Center located in Kearneysville, WV. Those present were: Terri Mehling, JCHSEM; Jennifer Maggio, JCHSEM; Kelly Parsons, Nichols, DeHaven & Associates; Jill Randlett, Red Cross/CERT; Sandy Hite, Jefferson County Health Department and Brandi Bowers & Joanne Griswold, Berkeley County Humane Society.

Call to order

Introductions

**Old Business**

Ms. Mehling gave a report on Bark in the Park that was scheduled in October. The dates had changed several times due to weather related issues. The attendance was low but we will continue to hand out information regarding pet disaster supply kits and talking to the community on what things they should have on hand. According to the website the event was held by the Jefferson County Animal Welfare Society and they would like to have Bark in the Park in the spring. The JCHSEM will be attending that was well.

**New Business**

Ms. Mehling notified the group that there is a Pet First Aid application by Jive Media LLC that you are able to download to your Apple iPhone/iPod for \$3.99.

Ms. Mehling mentioned if anyone was interested there is a Petco Online Course—Pet First Aid for \$25.00.

Brandi Bowers noted the Berkeley County Humane Society's President wanted her to ask the Red Cross if they will be teaming up for Pet First Aid/CPR classes. They have ordered their animal manikins for CPR classes. Ms. Mehling asked BCHS if they hold the CPR classes. Brandi Bowers replied yes but they need assistance in starting the class. Ms. Mehling asked them to contact Crystal Moran at 304-725-5015 who coordinates health and safety programs through the local Red Cross Chapter. Ms. Mehling noted the Red Cross was able to win a grant to obtain animal cages and other supplies that Berkeley County Humane Society would put in storage. Brandi Bowers replied they do have the disaster supplies. There is an agreement with Red Cross that BCHS will be taking care of the surrounding seven counties if something were to happen. Their staff would also be running the shelter. Ms. Mehling asked BCHS how many animals they are able to house. Brandi Bowers replied they have 15 dog kennels, and 30 cat cages. Once they are no longer under construction they will be able to house 75 cats and 27 dog kennels. Ms. Mehling asked the BCHS if they need additional supplies. Brandi Bowers replied they currently have

blankets and first aid supplies. They are looking for additional supplies such as medical supplies, cat crates, bedding, food and disinfectant cleaners. Ms. Mehling asked the BCHS if they have a way to ID the animals once they come into the shelter. Brandi Bowers replied if an animal comes in there is a certain form the owner would need to fill out. Up in the top corner of the form there is a D10 number for 2010 and they would start with number one and work their way up. The animals are then tagged with the number as well as the cage. Ms. Mehling asked the BCHS if they communicate with the Jefferson County Humane Society and possibly trade animals if one location gets full. Brandi Bowers replied they currently do not have contact with the Jefferson County Humane Society. Ms. Mehling asked what type of public awareness the BCHS does. Brandi Bowers replied she goes to schools, businesses and day cares to train kids/adults on such things as what they should do if a dog bites them. They hand out flyers on pet kits, pet awareness and ways to help the shelter by volunteering. Ms. Mehling mentioned to Ms. Randlett that it would be a great idea to have a press release on the grant they received to buy supplies. She should also include items they still need and hope they receive a large amount of donations. Ms. Randlett asked BCHS if they have back up sites in case the shelter would get full. Brandi Bowers replied they are currently looking into that. Ms. Randlett asked if BCHS had a list of boarding facilities in Berkeley County. Brandi Bowers replied they would have to put one together. Ms. Mehling noted our plan has the boarding facilities within Jefferson County.

Ms. Parsons reviewed the 2010 Goals & Strategies with the committee. Ms. Mehling asked if anyone would like to add anything or make changes. No reply from the committee. Ms. Mehling noted in the future they will add how in a disaster we would work with the BHCS and how they would be called into action. The Red Cross will need to have a plan with the BCHS when a disaster hits and what they need to do to work together. Ms. Parsons commented on continuing to educate the horse owners due to Charles Town Races & Slots not having a disaster plan because they are not responsible for the horses that stay there. Ms. Randlett suggested giving a speech for the National Breeders Association to fulfill educating the owners of the horses.

Ms. Mehling noted the mission of the committee is to be responsible for updating and developing the animals in disasters plan and to work with the JCHSEM to make recommendations regarding the animals annex in the Emergency Operations Plan. We will also identify potential resources for animals before, during and after a disaster. Ms. Mehling asked Ms. Randlett to give her a copy of their disaster plan once they have one in place as far as what kinds of supplies they have and under what circumstances the Red Cross would be activated.

Ms. Mehling noted to the Committee that she would like to see our resources updated for our JCHSEM EOP Animal Control and Protection Annex. Ms. Mehling reviewed the question form. This form will be used to ask vendors what resources they have and that can be included in JCHSEM's Emergency Operations Plan. Ms. Mehling distributed the question form to the committee members and assigned them to different organizations.

Ms. Mehling handed out the new WV Ready Guide. For more information you can visit the website at [ready.wv.gov](http://ready.wv.gov). The Commission for National and Community Service funded the WV Ready Guide. She will be receiving 500 books to distribute.

### **Member Sharing**

Ms. Mehling announced the upcoming Business Continuity Planning Workshop that is being held by Barb Miller and Neal Nilsen from Ask Neal. This is for small businesses interested in COOP planning. There will be two sessions in the same day, one in the afternoon and evening. If anyone is interested please sign up with Jennifer Maggio. Ms. Mehling also announced the Quarterly Partnership Luncheon will be held February 3, 2010 at the Charles Town Races & Slots. If you would like to attend please let her know.

The next regularly scheduled meeting of the Steering Committee will be on April 19, 2010 at 9:30 a.m. in the Jefferson County EOC.

## Pet Shelters: One Size Does Not Fit All

By Michael J. Boldosser, Emergency Planner,  
Talbot County Department of Emergency Services, Easton, Maryland

The United States is a nation of pet lovers. According to the American Pet Products Manufacturers Association's 2009-2010 National Pet Owners Survey, 39% of U.S. households own at least one dog, 33% own at least one cat, and most of them consider their pet as they would a child or family member.

Animals enrich our lives in so many ways. In turn, our pets rely on us for their safety and well-being. There are countless examples of people putting their own lives at risk, sometimes with tragic results, to save their pets. In evacuation situations, one reason people give for not leaving is because they cannot take their pets with them.

### Public Pet Shelter Plan

To prevent those avoidable tragedies, Talbot County, Md., recently became the first jurisdiction in the state to have an approved public pet shelter plan and exercise it. This plan is the result of about a year's worth of hard work by a dedicated corps of animal lovers, emergency management staff, and school board personnel who overcame a number of obstacles and preconceived ideas.

A group from the Talbot Humane Society and local kennel

clubs approached me with their pet shelter plan. Like many other jurisdictions, Talbot County utilizes public schools for its primary shelters. So this group based its plan on one they found from Florida that is set up in a school hallway. The plan was pretty concise, right down to job descriptions and necessary supplies. I was thinking to myself that they had already done the hard part, but I quickly found out that one size does not fit all.

As most of us are aware, pets are not allowed in Red Cross public shelters. However, the Red Cross is not the lead agency for our Emergency Support Function (ESF) 6, Mass Care and Sheltering, so I knew that was one battle we would not have to face. The pet shelter group took a tour of the local high school to plot out where our shelter would be located. We knew it had to be physically separated from the public shelter, yet still close enough for the sake of convenience. We settled on a nice, long hallway that was open to the outside on one end and connected to a lobby on the other. With a separate entrance from the public shelter, a lobby for registration, and another hallway connecting to the public shelter we had it made. Or so we thought.

### Getting Buy-In From School Officials

Armed with "The Plan" and a very nice PowerPoint presentation from Florida, we met with the assistant superintendent of schools to get his approval. The look on his face as he saw this hallway lined with plastic and hundreds of kennels told me this wasn't going to be the slam dunk we thought it was. He countered with the use of the high school's greenhouse. It has running water and a concrete floor with drains for

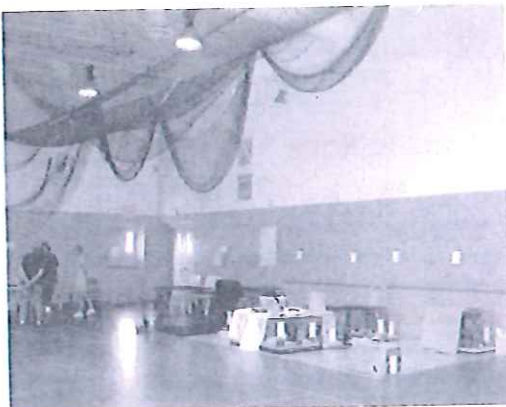
easy cleanup. We thanked him for his time and went to check out the greenhouse, our hopes dimmed but not dashed. At least it wasn't an absolute "no."

Our first thought when we saw the greenhouse was, "This would not withstand any high winds, and we certainly would not want to be in it during a hurricane." We were also very concerned for any animals that might be sheltered in there during a storm. The noise, light and vibration would all surely be upsetting for the animals. So it was back to the drawing board.

We were discussing our concerns about the greenhouse with the school maintenance supervisor when he suggested their auxiliary gymnasium. He led us to this 50' by 40' cinder block building, with no windows and two exterior doors, attached to the main gymnasium by a short hallway. Using the exterior doors would allow the pets to be brought in without going through the public shelter. It was perfect. The best part about this room was it had its own HVAC system, separate from the main school. That had been one of the assistant superintendent's main concerns.

### Flexibility and Positive Attitude Are Essential

With a new and improved location in mind, we sold our plan to the school board. Flexibility and a positive attitude proved essential in coming to an arrangement we could all accept. The final test came several months later when we ran a full-scale shelter exercise, including live animals. The exercise was a resounding success. The lessons learned are another story, but they have already been implemented in preparation for this year's hurricane season. We only hope they won't have to be.



Pet shelter area in high school auxiliary gymnasium during full-scale shelter exercise in Talbot County, Md.

**Terri Mehling**

**From:** National Humane Education Society [cindy@nhes.ccsend.com] on behalf of National Humane Education Society [education@nhes.org]  
**Sent:** Friday, March 05, 2010 4:04 PM  
**To:** tmehling@jeffersoncountywv.org  
**Subject:** Announcing the Cool to Care Camps!



### The Quick Details

Open to children entering Kindergarten - 5th grades.

Encompass fun and creativity, while learning about responsible animal care, kindness, and more!



Includes guest speakers, animal friends, arts, games, and more!

\$75 per camper

[Registration Info](#)

[Camp Info](#)

### Camp Registration is Open!

*We are proud to announce the upcoming season of our annual NHES Cool To Care Camp!*



For the eighth year, The National Humane Education Society and its program service, [The Briggs Animal Adoption Center \(BAAC\)](#) are opening its doors to area children who want to learn about animals!

Our camps feature 15 hours of fun and learning with supervised animal interaction, exciting games, arts, and more!

Camp space is limited and registrations are accepted on a rolling basis. [Register your child today!](#) (Opens to MS Word doc)

Each week runs Monday - Friday, 1 - 4 p.m.

**KIND KIDS**

June 21 - 25

K - 2 Grade

**HUMANE HEROES**

July 12 - 16

3 - 5 Grade

*Hope to see you this summer!*

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# Observer

## Natural Hazards



Volume XXXIV · Number 4

March 2010

Animals in Disasters

## A Thousand Dogs Barking

*An invited comment  
by Leslie Irvine*

**T**WO IMAGES FROM HURRICANE KATRINA made a profound impact on me. The first is the sound of a thousand dogs barking.

I was one of several hundred volunteers who helped in the effort to care for dogs, cats, and other pets rescued from New Orleans (Irvine 2009). I worked at Lamar-Dixon Expo Center in Gonzalez, Louisiana, which was temporarily the site of the largest animal shelter in the nation, perhaps in the world. During September and October 2005, over 6,000 animals, mostly dogs, were cared for at Lamar-Dixon.

The dogs were not only the most numerous residents we had, but also the noisiest. Canines of every size and shape filled the rows of Lamar-Dixon's horse barns. Each stall held as many donated wire kennels and airline carriers as would fit. In early September, when I arrived, the dog population was at its peak. State authorities were not yet allowing animals to be transferred to shelters out of the region. Kennels were stacked on top of each other. Dogs were everywhere you looked.

It was hard to get away from the barking, as long as you were on the Expo Center grounds. It rose as we volunteers fed the dogs, row by row. Those waiting for food called out to be next. It sounded in waves through the night, when teams of rescuers brought in truckloads of dogs found in the streets and houses of New Orleans. Although many of the sweet, sad canine faces that I encoun-

THIS IS NOTHING.  
THE DOGS, PIGS,  
AND CHICKENS  
ARE OUTSIDE.



tered there have faded from my memory, I will never forget that sound.

### Field of Cotton

THE OTHER IMAGE CAME TO ME SECONDHAND, from the reports of rescuers working to save chickens at poultry facilities in rural Mississippi. Rescuers from Farm Sanctuary, Animal Place, and the Humane Society of the United States

*(Please see "Animals," page twelve)*

### SUBSCRIBER NOTICE

Budget constraints are requiring us to suspend the Observer's print version for the next three issues. The May, July, and September 2010 issues will be available online at [www.colorado.edu/hazards/o](http://www.colorado.edu/hazards/o). Please take a minute to update your email address and preferences at [www.colorado.edu/hazards/o](http://www.colorado.edu/hazards/o) to receive Observer issues and notices electronically. We expect the Observer to be back in its print version for the November 2010 issue.

### INSIDE ...

#### EXCLUSIVE HAITI COVERAGE

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Washington's Response, page 10  
Being There, page 11

## Animals...

(Continued from page one)

responded to a call from a resident saying her street was covered with "so many dead chickens, it looked like a field of cotton" (Allan 2005).

The Gulf region is one of several areas in the United States known for its production of broiler chickens. After Katrina, millions of chickens were stranded, starving and dehydrated, in demolished cages and sheds. Those who were not trapped in twisted wire and debris wandered away. Many succumbed to heat and thirst. Others were hit by cars when they reached the roads.

Upon learning of the situation, rescuers located the demolished facilities, which can only be called "farms" in the loosest sense of the word. In corporate poultry production, the people who do the day-to-day work of keeping the chickens do not own them. They could not authorize rescue. The birds were the property of the huge agribusinesses whose labels appear on the packages of chicken in grocery stores. The rescuers nevertheless managed to save over 1,000 chickens. They placed them in safe homes in sanctuaries.

For the poultry producers, the situation was not a rescue effort but a "disposal problem." After several days, the chickens were a loss to them. They bulldozed surviving and dead birds alike into mass graves. The living birds who did not suffocate from the weight of others on top of them were eventually buried alive. The situation received none of the heartbreaking media attention given to the pet rescue operation. While doing research for a book on animals in disasters, a Lexis-Nexis search of national newspapers revealed over 500 articles on pets and Katrina, but only two related to farmed animals.

The canine chorus symbolizes a dramatic, heartbreaking, well-publicized, and costly rescue effort. The "field of cotton" symbolizes its polar opposite: the deaths of millions of birds received no mention. News of the rescue appeared only on the Web sites of the participating rescue groups.

### Zoological Scale

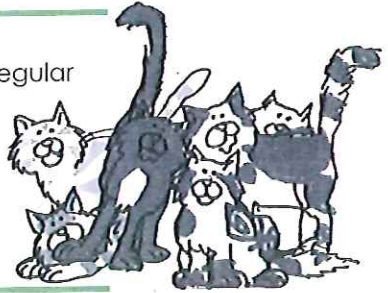
THE TWO SCENES VIVIDLY ILLUSTRATE OUR ambivalent attitudes toward animals. We consider some animals members of the family. We allow them to sleep on our beds, and we may even celebrate their birthdays. Others we consider dinner. Some are worth rescuing, while others are worthless unless they end up on a plate.

The two scenes have profound relevance for disaster planning and response. They highlight the value we place on certain kinds of animals. We congratulate ourselves for the rescue of dogs and cats, but the majority of animals who play other roles in society remain invisible to us. We have the closest bonds with dogs, cats, and the other animals we consider companions or pets. But these species constitute only about two percent of the animals currently living in the United States. The others are mostly livestock: the cattle, sheep, hogs, and poultry raised for food. The U.S. Department of Agriculture reports that ten billion such animals are raised for food annually (USDA 2005a, b). They live in conditions that we would consider inhumane for dogs and cats. These conditions pose serious environmental and public health risks under normal circumstances,

and they can easily escalate into catastrophes.

We human beings put everything in some sort of hierarchy. We rank the intensity of hurricanes and tornados, the quality of hotels, and the value of other people. We rank animals, too, using a hierarchy that sociologists Arnold Arluke and Clinton Sanders call the "sociozoologic scale" (1996:167-186). We place all animals below us, but we also make distinctions among the animals. These are not scientific distinctions, based on biological sophistication, intelligence, or some other objective measure. Pigs are considered more intelligent than dogs, yet we rank dogs above them. Rather, the distinctions are based on how well animals

We allow the "good" animals regular contact with us. For example, the animals we consider "pets" have a nearly human status on the scale.



fulfill the roles we have given them. We allow the "good" animals regular contact with us. For example, the animals we consider "pets" have a nearly human status on the scale. We allow them into our homes and consider them members of our families. But the pet must be tame and well behaved. Pets can keep their status so long as they comply with the code of conduct we establish for them. If a dog or cat does not follow the rules, if they, say, challenge us by exhibiting aggression at a level we deem inappropriate, we banish them. We even destroy them. They do not fit into their designated place as our subordinates.

Even wildlife must keep its place. We admire the bear or mountain lion as long as they remain at a distance. Once an animal intrudes into spaces we designate as ours, the "majestic" creature is transformed into a threat to be killed.

There is a place on the sociozoologic scale for the animals who are useful to us as "tools." Some of these animals provide food. Others are useful because they provide scientific data. But when an animal becomes a "tool," the animal nature must be disregarded or stripped away.

Just as pets must be so thoroughly domesticated that they allow us to treat them as infants, a tool must display few naturalistic "animal" elements. We do not allow them to feel emotions or think thoughts. We question whether they feel pain. They become objects whose existence is justified only by the products they provide.

We describe them using characteristics such as "high yielding carcasses" and "feed efficiencies." The names we call them remove any hint of the existence of a sentient being. We call them "beef," "pork," "legs," or "breasts." We house them in ways that do not allow them to express their natural instincts, such as stretching a wing or turning around. They cannot establish a pecking order or take a dust bath. When their bodies do not meet the requirements we have constructed for them, we consider them worthless. Thus, the chicken who cannot be killed and butchered for meat is a "loss," rather than an animal. In sum, the way we rank animals along the sociozoologic scale allows us to define, reinforce, and justify our interactions them.

No disasters affect animals exclusively. Our lives are so closely intertwined with those of animals that any event that affects animals will also affect people. Nowhere is this more obvious than with the animals we raise in facilities known as "factory farms." For example, many readers know that in September 1999, widespread flooding occurred in eastern North Carolina after Hurricane Floyd, which followed Hurricane Dennis by only ten days. The floods killed nearly three million animals. Most of these were hogs.

North Carolina is one of the top hog-producing states. Most of the animals were in "concentrated animal feeding operations." In CAFOs, hogs are housed in rows of long, low barns or sheds. Each shed houses 1,200 to 2,500 hogs. A typical CAFO consists of numerous sheds. Hog CAFOs commonly store between three and twelve months' worth of manure beneath the floors (Jones et al. 2003). CAFO operators transfer the accumulated manure into outdoor holding ponds called waste lagoons. These are essentially open

cesspools that pose significant environmental problems under normal operating conditions.

In September 1999, an estimated 237 hog CAFOs were on floodplains of eastern North Carolina (Mallin et al. 2002; Wing and Band 2002; Mallin and Corbett 2006). After Hurricane Floyd, tens of thousands of hogs drowned and their carcasses contaminated coastal rivers. Waste lagoons overflowed. Tons of manure washed into the Pamlico and Core Sounds. The waste caused a massive fish kill. The environmental and public health effects are still being studied.

There are many other examples of how events that affect animals have an impact on us. Some disasters we think of as affecting animals exclusively or primarily can have far-reaching consequences. For instance, large-scale livestock disease outbreaks have serious economic repercussions, but their impact extends well beyond the economy. The 2001 outbreak of foot and mouth disease in

(Please see "Animals," page fourteen)

## Santa Clara County Builds an Animal Rescue Plan

The passage of the Pets Evacuation and Transportation Standards Act has emergency managers preparing new efforts to take care of companion animals in disaster. Several well-publicized, heartbreaking stories during Katrina got Congress interested enough to pass the legislation in 2005—technically an amendment to the Stafford Act—by a House vote of 349-29. It passed the Senate by unanimous consent.

Rep. Tom Lantos (D.-Calif.) said in the *Congressional Record*, "The scene from New Orleans of a 9-year-old little boy crying because he was not allowed to take his little white dog Snowball was too much to bear. Personally, I know I wouldn't have been able to leave my little white dog Masko to a fate of almost certain death."

Cindy Stewart, emergency planning coordinator for California's Santa Clara County, says, "Animals are not considered property any more. We're mandated to rescue them when we rescue people, and provide for them during a disaster."

Santa Clara County is the residence of about 1.8 million people and includes the city of San Jose. No one's done a pet census, but based on national averages, there would be an estimated 600,000 cats and dogs living with families. There are also the occasional birds, snakes, fish, feral animals, cat ladies, and animal breeders, probably bringing the total number of animals up considerably.

About three years ago, Stewart says, she pulled together the animal control agencies in the county, of which there were about seven. "We started looking at some of the issues around trying to shelter animals. The Red Cross started to back off their statement that they wouldn't let animals near a people shelter. They made this chapter-specific. We agreed with our local Red Cross that we would stand up an animal shelter next to a people shelter so people could bring their animals to keep them next door. They'd be close."

According to a Red Cross advisory, "Local and state health and safety regulations do not permit the Red Cross to allow pets in disaster shelters. Service animals which assist people with disabilities are the only animals allowed in Red Cross shelters. It may be difficult, if not

impossible, to find shelter for your animals in the midst of an evacuation, so plan ahead. Do not wait until disaster strikes!"

In order to put the animal shelter proposal into operation, Stewart says, "We needed several things. We needed a plan. Who would be in charge? What jurisdiction would take responsibility and how would we follow through? What happens if its injured, or an exotic? All we were going to do was cats and dogs. Everything else would be transported to permanent shelters."

The county built four 15-foot trailers at a cost of about \$25,000 each. Each has shelving and boxes to make them "animal command posts." They store the supplies necessary to put up an animal shelter. Each one can ideally house 30 to 40 animals—although they can keep up to 100 if necessary. "But we're shooting for 30 to 40," Stewart says.

The trailers have 800 Mhz radios to communicate with the emergency operations center. They have solar panels for power as well as battery power, as well as directional lights and flashers. "It's a pretty cool trailer," Stewart says. They still need to be outfitted with food and laptop computers to track the animals. "Our plan is still in draft form," she says. "It has not been approved by our board of supervisors. One appendix of the plan has a resource guide for all of the suppliers and all of the partnerships. We got some grant funding to update that information.

"This year, it's about training personnel to use the trailers. We're going to exercise the trailers for the first time in March."

Stewart stresses the necessity for practice and preparation. Last year, neighboring Santa Cruz County had some significant wildfires and asked Santa Clara animal control agencies for assistance in dealing with pets. "The first time we were called, they didn't know any better. Our animal shelter people went over there without any paperwork. They put our animal control people in harm's way, up in the hills with no radio, no maps, on two lane roads. We don't want to do that anymore."

—Dan Whipple

## Animals...

(Continued from page thirteen)

Britain paralyzed the agricultural infrastructure and cost the equivalent of \$12 billion. The response involved the “depopulation,” or killing, of over four million cows, pigs, and sheep. Most of these animals lived in affected areas but did not have the disease. The economic impact included direct costs such as lost animals, carcass disposal, and response effort itself. When beef production halted because of the outbreak, slaughterhouse workers lost their jobs. Livestock haulers and rendering facilities experienced a downturn.

The outbreak caused significant indirect costs to trade in Britain and Western Europe when travel was restricted to control the disease. Many pubs and inns in the affected areas closed down. The economic ripple effect was \$150 million per week. The outbreak also had non-monetary consequences. Farm families in stricken areas were ostracized. Some of the animals were “legacy” herds, raised by families for generations. For them, the loss of their animals meant the loss of a way of life. Over 80 suicides were reported among farmers and other animal stakeholders.

### What's the Answer?

THE SOLUTION TO DISASTERS INVOLVING FARMED ANIMALS does not involve rescuing as many as possible. Some situations may indeed call for rescue, but the solution lies in another direction. It involves rethinking our uses of animals. It involves reducing and eventually ending the industrial farming practices that make animals—and people—so vulnerable. This may seem far-fetched and outright radical. In fact, it is not as radical as it may initially seem, and reports from organizations such as the Pew Commission on Industrial Farm Animal Production (2008) and the Union of Concerned Scientists (Gurian-Sherman 2008) suggest that it is not at all far-fetched. These reports conclude that current practices not only pose harm to animals, but also to communities and public health. By recognizing and acknowledging the connections between animal welfare and human communities, the Pew and UCS recommendations can reduce the impact of disasters on animals and people.

Both reports promote more sustainable animal agriculture. The Pew report defines sustainability as a “balance between agricultural inputs and outputs and ecosystem health, given the human population and rate of consumption.” (2008:23). The Pew Commission recommends phasing out “the most intensive and inhumane production practices within a decade to reduce . . . risks to public health and improve animal well-being.” (2008:85). The practices considered inhumane include veal crates for calves, gestation and farrowing crates for pigs, and battery cages for chickens.

Eliminating these practices would mean that animals would still be confined, but they would have greater freedom of movement. This would greatly improve the odds for animals in a disaster. It would introduce the possibility of evacuation, or at least escape to “critter pads,” or elevated areas to which animals can move during flood. These have already saved cattle, chickens, and turkeys in Washington State (FEMA 2008). To encourage the phase-out of the “most intensive and inhumane” practices, the Pew Commission recommends tax incentives for regional and family operations. Phasing out inhumane farming practices while favoring family farms over corporate operations can make

animals and human communities less vulnerable.

Both the Pew Commission and the Union of Concerned Scientists make extensive recommendations that can provide a more humane environment for animals with far less toll on the environment. These changes will involve some costs. For example, improved housing for animals will require more land. Production could be less predictable than it is under the current, industrial conditions. Raising animals will involve more labor.

To conduct research that can help farmers incorporate profitable, sustainable practices, both the UCS and the Pew Commission call for reform in the funding of agricultural research. Companies involved in industrial farming currently fund much of this research. Consequently, research often recommends implementing products and practices developed by agribusiness. Decoupling research from agribusiness, and instead providing funding from the federal government, could reduce the bias that currently exists.

These recommendations mean little unless we address the issue of meat eating. At our current rates of consumption, factory farms are unavoidable. Our consumption of chicken has risen 150 percent in the last 80 years. If we continue to demand cheap meat at every meal, we will have to live with the consequences of factory farms, for animals as well as humans. But if we reduce our consumption of meat and support sustainable practices when we do consume it, we can make a difference. The current system makes all of us victims of the disaster known as factory farming.

The position of animals on the sociozoologic scale justifies our treatment of them. It also determines how we make decisions about animals' fates. Because we consider farmed animals as “tools,” we have for too long been interested mainly in what they can do for us. Our treatment of them creates vulnerability in disasters—for them, and for us. In the context of disaster planning and response, rethinking our treatment of farm animals is simply good policy.

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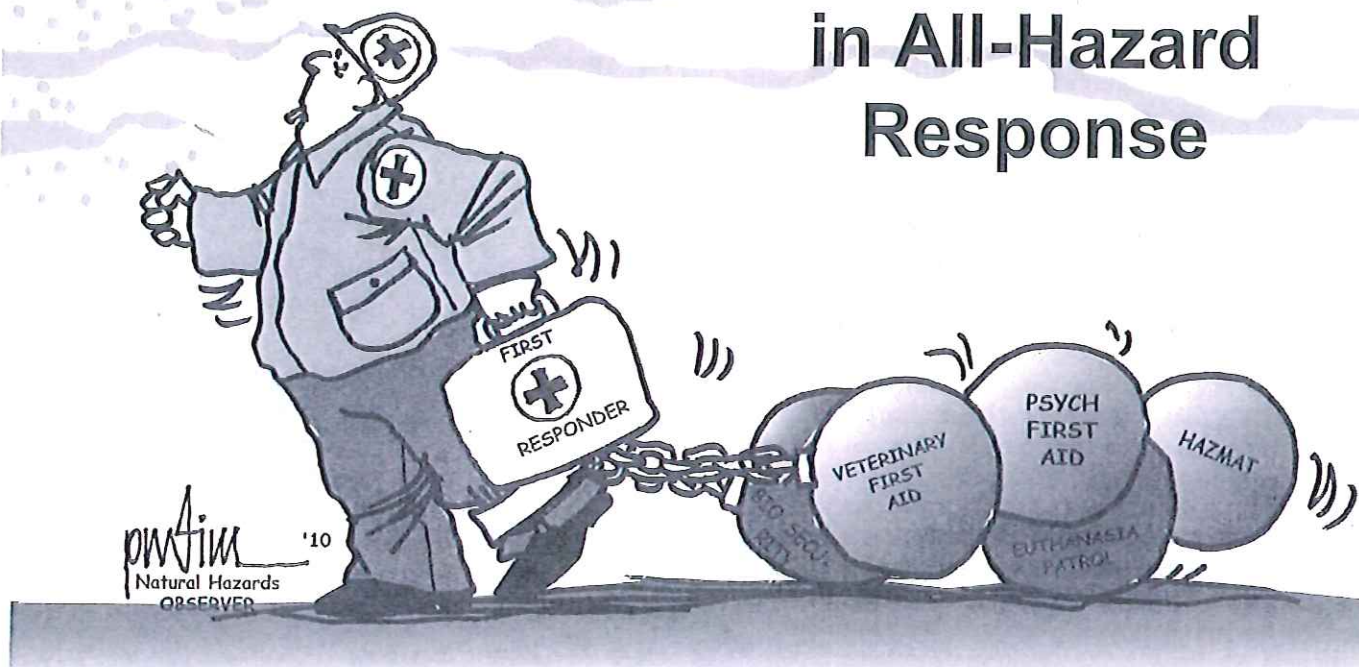
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## Animals in Disasters

# Training Veterinarians in All-Hazard Response



*An invited comment  
by Dianne Dunning*

**W**E LIVE IN A TIME CHARACTERIZED BY BEWILDERING social and scientific complexity (Eyre 1999; Baker et al. 2003; Eyre 2004). Climate change, bioterrorism, agro-terrorism, natural disasters, and an ever growing emergence of drug and multidrug resistant pathogens populate the list of concerns facing the United States and the world (Baker et al. 2003; Horney, Sollecito, and Alexander 2005; King et al. 2008). Solutions to modern complexity, particularly in public health and disaster preparedness, dictate multidisciplinary collaboration and a holistic analysis of issues.

Developing new partnerships among academia and public health agencies at the federal, state and local level will foster a new integrated multidisciplinary approach to community health. Currently, public health professionals receive their education and training in diverse disciplines and settings, including schools of medicine, nursing, den-

tistry, social work, allied health professions, pharmacy, law, public administration, veterinary medicine, engineering, environmental sciences, biology, microbiology, and journalism. A broad view across disciplines of public health practice is necessary in the development of curricular and training programs to ensure optimal communication, information transfer and collaboration (Committee on Assuring the Health of the Public in the 21st Century 2003). Although various federal, state, and local agencies make important contributions through training, research, and service, these functions are central to the mission of academia. Therefore, academia is the logical place for training programs and educational curricula that embrace a wide, cross-disciplinary mandate, addressing the needs of all—humans, animals, and the environment.

### Veterinary Role in Disaster Planning

VETERINARIANS PLAY A CRITICAL ROLE in caring for animals after natural and human-caused disasters. Hurricane  
*(Please see "Vets," page sixteen)*

Katrina and the 2007 wildfires in California illustrate the necessity of including animals in disaster planning to avoid compounding the emotional and economic toll on individuals and communities (Kahler and Nolen 2005). Today, in light of the increasing importance of the human-animal bond, more emphasis is being placed on anticipating the needs of animals and preparing for a potential emergency or evacuation before a disaster strikes.

As a result of the Pets Evacuation and Transportation Standards Act of 2006, all states are required to incorporate the needs of animals and their owners in their disaster planning and preparation. This bill is an amendment to the Stafford Act, which provides a cost-sharing mechanism between the federal government and state or local governments during response to and recovery from major disasters. The PETS Act provides for expenses related to services for people with household pets and service animals. The law also allows the Federal Emergency Management Agency administrator to support animal-related state and local planning processes with grants (Wingfield and Palmer 2009).

Despite the obvious threat of disasters, U.S. veterinary colleges have not comprehensively incorporated disaster management education within their curricula (Heath and Linnabary 1993). Given the demands on an already broad curricular agenda, it is not surprising that colleges emphasize the traditional core clinical and didactic training in veterinary medicine. However, the effect of not incorporating key disaster preparedness and management skills needed to work in a multidisciplinary environment into the veterinary curriculum is cumulative. It may lead to a profession that is out of touch with society's needs, particularly in the public health and service sectors (Heath 2003; 2002).

Recent natural disasters, disease outbreaks, and terrorist events highlight the need for medical and veterinary professionals certified in emergency management and disaster preparedness. In the United States, health care workers are the second largest work force behind military professionals (Markenson, Dimaggio, and Redlener 2005). In 2003, there were nearly 2.43 million registered nurses, 700,000 physicians, 350,000 dentists, and 450,000 public health workers, as well as significant numbers of students enrolled in hundreds of different allied medical professional training programs. Approximately 2,800 new veterinarians are trained each year with about 80,000 licensed veterinarians in practice (American Veterinary Medical Association 2003). It is essential for these health professionals to be prepared to respond to public health and animal emergencies.

### Veterinary Credentialed Responder Training

IN THE FALL OF 2007, NORTH CAROLINA STATE UNIVERSITY'S College of Veterinary Medicine established a Veterinary Credentialed Response training program based upon core competencies adapted from the veterinary and human literature. This new program is part of an initiative to provide the training necessary for all veterinary students—beginning with the class of 2009—to achieve entry-level federal credentials in emergency response. This first of its kind in

the nation, it's a collaborative effort among CVM, the North Carolina Department of Agriculture and Consumer Services, the University of North Carolina-Chapel Hill's Gillings School of Global Public Health and the NC State Animal Response Team.

Training within the VCR program is multidisciplinary, focusing on skills and knowledge needed to respond to disasters holistically. As a part of the core curriculum, all professional veterinary students receive training to ensure the physical, mental, societal, economic, and emotional health for all animals (including humans) as well as an awareness of the importance of the ecosystems within which they reside (Conrad et al. 2009). All of our senior veterinary students and graduates will be able to assist emergency responders in the event of a disaster. Students are required to complete six hours of classroom training (euthanasia, psychological first aid, general principles and theory of emergency management, and Hazmat awareness), nine hours of online training, and an eight-hour scenario-based disaster and community response lab. The response lab includes material and training, scenario based disaster and community response exercises, and personal protective equipment training at the CVM Teaching Animal Unit, which is a dynamic teaching lab and farm where veterinary students learn husbandry, production management, and routine procedures used in livestock production.

This is the first cooperative program in emergency management and response at a U. S. veterinary institution that is also a part of the required core academic curriculum.

### Incident Command Training

AS PART OF THE COURSE REQUIREMENT, all students are required to complete IS-100a, IS-200a and IS-700a level courses through the self-directed, self-paced, on-line training programs provided by FEMA. This training prepares students to function as first-line supervisors, single resource leaders, field supervisors, or emergency management and response personnel. ICS-300 and 400 level training is not required, but it's encouraged if the individual wants to function in a command staff position.

Psychological first aid is the provision of mental and emotional support to disaster victims. It's the mental health equivalent of medical first aid. It is primarily focused on providing support to individuals affected in a disaster (Schoenfeldt 2008). It's designed to create and sustain an environment of safety, calm, connectedness to others, empowerment and hopefulness (Center for the Study of Traumatic Stress 2005).

In the immediate aftermath of a disaster, PFA is intended to reduce the initial distress for children, adolescents, and adults. It is thought to ameliorate long-term mental



# Survival of the Cutest

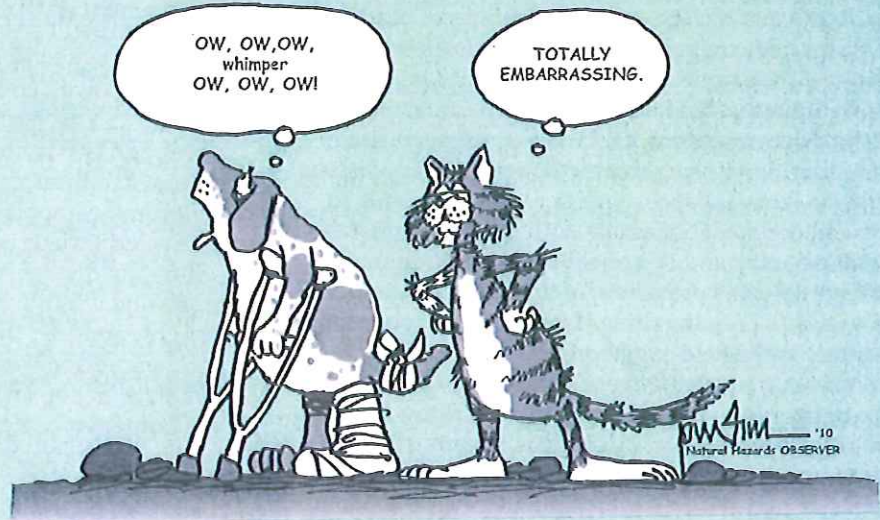
It will come as no surprise that the animal most likely to need assistance in a disaster will be a dog. According to an Associate Press-Petside.com poll conducted in October 2009, 74 percent of U.S. households have a dog, 47 percent have a cat. Only about two percent have horses.

The poll found that four percent of adults dislike dogs—two percent dislike them a little, two percent dislike them a lot. Cats inspire stronger feelings, with 26 percent of all adults saying they dislike cats either a little or a lot.

A study from *The American Naturalist* found dogs are popular because they've evolved to be. Calling it "survival of the cutest," biologists Chris Klingenberg, of the University of Manchester and Abby Drake, of the College of the Holy Cross looked at the shape of dogs' skulls, finding "the skull shapes of domestic dogs varied as much as those of the whole order Carnivora."

"This means, for instance, that a collie has a skull shape that is more different from that of a Pekingese than the skull shape of the cat is from that of a walrus," said a release.

Drake said, "We usually think of evolution as a slow and gradual process, but the incredible amount of diversity in domestic dogs has originated through selective breeding in just the last few hundred years, and particularly after the modern purebred dog breeds were established in the last 150 years."



health issues, but its skills can be applied to almost any situation. Understanding the manifestations and impacts of the human-animal bond, as they relate to an animal's function and utility—companion, agricultural commodity, or service role—has important implications for disaster management. Hurricane Katrina demonstrated that animal owners are willing to risk danger to themselves, sometimes refusing to evacuate disaster areas unless they are assured of their animals' well-being (Hall et al. 2004).

The 2007 California wildfires, outbreaks of natural pandemics of foreign animal disease, and agro-terrorist threats also indicate how large numbers of people can have their lives disrupted by events that injure or kill, destroy property, and cause emotional upheaval (Vernberg et al. 2008). The pain and anguish caused by trauma elicits a natural impulse to help and emphasizes the importance of integrating mental health into disaster preparedness and response (Haskett et al. 2008; Nusbaum, Wenzel, and Everly 2007; Peck et al. 2002).

The PFA training program includes a guided group discussion (or table top exercise) of a simulated disaster, where the emphasis is on a group problem solving processes. Once the disaster event is introduced and described, the students receive a 45-minute lecture on psychological first aid. Common stress factors affecting adults and children in disasters are discussed, along with the symptoms of compassion fatigue. In the second portion of the program, the students are asked to demonstrate active listening skills, prioritize and respond to human needs, recognize mild

psychological and behavioral reactions, and recognize potentially incapacitating psychological and behavioral reactions. To complete the course, students participate in a role-playing exercise of a family being asked to evacuate their home due to an approaching hurricane.

## Euthanasia

TAKING AN ANIMAL'S LIFE is one of the most challenging tasks a veterinarian faces, requiring the expert use of technical and interpersonal skills (Hart, Hart, and Mader 1990). Despite this, surveys of veterinarians and veterinary students reveal they have not received adequate training on this topic (Cohen-Salter et al. 2004).

According to the 2000 AVMA Guidelines on Euthanasia (2001), a good death is characterized by minimal pain and distress for the animal. As veterinarians, it is our responsibility to ensure that if an animal's life must be terminated, the procedure should be performed with the highest degree of respect, making the death as painless and distress-free as possible.

Ideally, it is the standard of practice that humane euthanasia should re-



(Please see "Vets," page eighteen)

sult in rapid loss of consciousness followed by cardiac or respiratory arrest and the ultimate loss of brain function. Ensuring that the animal loses consciousness prior to cessation of cardiac or respiratory function minimizes distress and anxiety experienced by the animal. However, it should be noted that a humane death cannot always be achieved during foreign animal disease outbreaks or disaster situations when large numbers of animals may need to be terminated in a short period of time.

The program's unit on euthanasia includes 3.5 hours of lecture. Topics are: the definition and physiology of death; methodologies and recommended guidelines of death for variety of species (companion animal, equine, food animal and wildlife); the emotional and psychological issues surrounding euthanasia; and an informal expert panel discussion with student questions. Discussions are devoted to ritual and traditional slaughter methodologies, legal issues dealing with carcass disposal, particularly pertaining to wildlife, and depopulation (mass euthanasia) techniques.

#### Biosecurity and Personal Protective Equipment

Biosecurity is the protection of the economy, environment, and health of living things from diseases, pests, and bioterrorism. In the field, it embodies all the cumulative measures that can or should be taken to keep disease—viruses, bacteria, fungi, protozoa, parasites—from a farm and to prevent the transmission by humans, insects, rodents, wild birds, and animals from an infected farm to neighboring farms (Hegnig 2004). In practice, it involves the same principles medical professionals employ every day in the operating room or at any medical facility. A key component of biosecurity includes personal protective equipment. It encompasses all clothing and other accessories—like goggles, hard hats, gloves, respirators and so on—designed to create a barrier against workplace hazards.

The two-hour unit on biosecurity and PPE starts with a lecture and video. The students then assemble their own protective kits, specific for visiting a farm with an infectious disease outbreak. The students are then taken to our Teaching Animal Unit for a simulated investigation of an infected farm. All students are expected to don PPE, handle and collect "infected" rubber chickens and then take it off without contaminating themselves. Ultraviolet detectable powder is used to "infect" the rubber chickens to provide an authentic learning experience and to simulate a disease outbreak. Students experience firsthand the importance and function of PPE.

A hazardous material is any biological, chemical, or physical agent which has the potential to cause harm to humans, animals, or the environment, either by itself or through interaction with other factors (Office of Hazardous Materials Initiative and Training 2008). The one-hour introductory lecture on hazmat awareness provides the class with an understanding of what hazardous materials are and the risks associated with them.

#### All Hazard Approach to Emergency Preparedness

THE STUDENTS PARTICIPATE IN FACILITATED GROUP DISCUSSIONS involving two simulated disaster events: an avian influenza outbreak and a hurricane. Both animal and hu-

man health issues are addressed during these two sessions. Students assume one of four different roles during the exercise—individual, private practitioner, county health professional, or state or public health professional. The exercise uses an "all hazards" approach, emphasizing personal and business continuity planning. Students complete both a personal and business continuity plan prior to the exercise. Both exercises explore the various possible responsibilities of a veterinarian during a disaster at the local, state, and national level.

The VCR program is a collaborative effort among multiple disciplines to train vets to protect health not only of the animals that are usually their patients, but of people and the environment they come in contact with in the course of a disaster. The training provides veterinary students with fundamental skills to be effective leaders in crisis situations. It also provides formal communication training and a working knowledge of the mental and emotional support needed by disaster victims.

Through two facilitated group discussions involving two simulated disaster events, students are exposed to the concepts of the importance of providing community leadership as veterinarians and also as health professionals.

Situating disaster training during the formative years of professional training will allow students to carefully and thoroughly consider the civic and professional responsibilities of their personal and professional lives, prepare leaders for the state, nation and the world, and quickly build capacity in disaster and emergency management.

If the VCR program is an effective model of "One Health" disaster and emergency management training, then capacity and leadership in preparedness will increase. While this will take years to evaluate, the VCR program has been successful at securing a position within the core curriculum of the professional program at the North Carolina State veterinary school. The lessons learned may be used by professional veterinary educators as a model for disaster training in an attempt to alter the paradigm in disaster preparedness and public health training within veterinary medicine by the broad distribution and application of the program; creating a new generation of veterinarians with these critical skill sets and knowledge.

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