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Ready or Not: Evacuating an Animal Shelter during a Mock Emergency

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ABSTRACT The signing of the Pets Evacuation and Transportation Act into law will require states to include companion and service animals in their disaster response plans. Consequently, animal stakeholders across the United States are or will be involved in assessing their response capabilities as a part of developing or improving plans to evacuate and house animals. This paper reports on a mock disaster response exercise involving the evacuation of an urban animal shelter. A simulated emergency provided the opportunity to test the shelter's disaster evacuation capabilities and to illuminate issues that animal stakeholders should address when creating and refining emergency response plans. The participants successfully evacuated all animals from the building in good time, but the exercise highlighted two pitfalls. The first concerns the use of volunteers who have no training in disaster response but who nevertheless want to help. In situations involving animals, large numbers of well-meaning but untrained people will volunteer, and animal stakeholders should anticipate and manage their arrival. The second concerns the inevitable presence of the media and the need for a single point of contact for information about the incident.

Keywords: animal shelters, disaster planning, disasters, emergencies, volunteers

Non-human animals face risks in disasters, just as humans do. Some researchers point out that all disasters are human-caused, because we make ourselves vulnerable by living, working, and playing in disaster-prone areas. Researchers define disasters as events concentrated within a specific time and space in which a portion of society experiences significant danger and loss, accompanied by a loss of social structure that prevents society from engaging in its essential functions (Fritz 1961; see also Caporale 2000). As geographer Kenneth Hewitt puts it, a disaster "is defined by the destruction of living space or ways of life" (1997, p. 12; see also 1983). The geographical and meteorological causes of disaster, such as earthquake, wind, and rain, are not, in themselves, problematic or out of the ordinary. It is the location of people, or the human ecology, that makes disasters what they are.

When we humans incorporated animals into our everyday lives, we also exposed them to hazards. Because companion animals share our homes, they face the same risks from fire, weather, and other hazards that might cause injury, threaten lives, or require evacuation. Following Hurricane Andrew, which devastated much of south Florida in 1992, national and local animal welfare organizations developed their disaster response capacities (see Crisp and Glen 1996). No plans were in place when Hurricane Andrew struck. An estimated 60,000 companion animals were abandoned (Lawson 1992) and, according to anecdotal reports, 1,000 dogs and cats were euthanized merely for lack of space in which to house them. Following Hurricane Floyd in 1999, over two million animals died in North Carolina, including companion animals, horses, and livestock (NRCS 1999).[1]

Although many animal welfare organizations had responded to the needs of animals in previous incidents, the scale of Hurricanes Andrew and Floyd and the numbers of animals lost or abandoned highlighted the need for a systematic response. Through memoranda and statements of understanding with FEMA and the Red Cross, various agencies became the designated animal responders following disasters. National veterinary organizations, such as the Veterinary Medical Assistance Teams (VMAT) of the American Veterinary Medical Association, are often deployed to restore disrupted veterinary infrastructures.[2] National animal welfare organizations such as the Humane Society of the United States, the American Humane Association, Code 3 Associates, and Emergency Animal Rescue Services send their disaster response teams to stricken areas at the request of an affected state.

In 2005, Hurricane Katrina revealed that much work remains to be done to prevent the loss of animal lives and the separation of animals from their guardians. The Humane Society of the United States and the Louisiana Society for the Protection of Cruelty to Animals estimate that 727,500 companion animals were affected by Katrina just in the city of New Orleans. Over 15,000 animals (including horses and livestock) were rescued after the storm (see Bryant 2006; Scott 2006). Only around 2,300 companion animals were reunited with their guardians. Although the number of animals who died is not known, reliable estimates place it well into the thousands.

Many animals were left behind in New Orleans because legislation prohibited guardians from transporting them on buses and other public vehicles. Numerous media accounts depict National Guardsmen letting dogs and cats run free as guardians watched in distress during the evacuation of the Superdome and Convention Center.[3] One of the most infamous accounts describes a little dog being torn from a boy's arms. As Mary Foster, of the Associated Press, reported:

> At the front of the line, the weary refugees waded through ankle-deep water, grabbed a bottle of water from state troopers and happily hopped on buses that would deliver them from the horrendous conditions of the Superdome. At the back end of the line, people jammed against police barricades in the rain. Refugees passed out and had to be lifted hand-over-hand overhead to medics. Pets were not allowed on the bus, and when a police officer confiscated a little boy's dog, the child cried until he vomited. "Snowball, Snowball," he cried.[4]

Other evacuees left their animals behind because there was nowhere to take them. Emergency shelters, such as those established by the Red Cross, do not allow animals, and many hotels have a "no pets" policy. The subsequent rescue and sheltering of companion animals cost millions of dollars and inestimable labor hours.

In response to the Katrina debacle, Congressmen Tom Lantos (D-CA), Christopher Shays (R-CT), Ted Stevens (R-AK), and Frank Lautenberg (D-NJ) introduced the Pets Evacuation and Transportation Standards Act, referred to as the PETS Acts. On October 6, 2006, President George W. Bush signed the Act into law. The PETS Act requires state and local emergency management agencies to include companion and assistance animals (such as seeing-eye dogs) in their disaster response plans. The Act gives the Federal Emergency Management Agency the authority to assist in the creation of disaster plans for animals and it makes funding from FEMA contingent on

compliance. It also authorizes federal funds to establish pet-friendly emergency shelters, which shelter animals as well as people.

Because of the PETS Act, state and local governments will have to create or revise disaster response plans to incorporate animals. In the United States, the model for responses involving animals is the State Animal Response Team. SARTs are non-profit organizations that bring together governmental and non-governmental agencies to provide a coordinated response to incidents involving animals. The goal is to create a public-private partnership capable of responding to any animal incident within a particular state. SART members may include local emergency managers, animal control personnel, animal shelter administrators, representatives from statewide veterinary organizations, state departments of agriculture, departments of public health, kennel clubs, breeders, equestrian groups, concerned citizens, and others considered animal stakeholders. The first SART was organized in North Carolina, following Hurricane Floyd in 1999.[5] The major animal stakeholders came together to develop a partnership that could mobilize sufficient trained personnel and equipment to respond to large-scale incidents. Because all disaster response begins at the local level, the goal is to have Animal Response Teams in each county that assess hazards, provide mitigation, and coordinate response and recovery efforts. At the time of this writing, 12 states have active SARTs; another 11 have Teams in development.[6]

SARTs rely heavily on volunteers, from the community at-large as well as from within animal care professions. Although volunteers usually have some experience in animal handling, most do not have experience in actual disaster response procedures and protocols. SARTs provide training at the local level and through FEMA's online training and certification system. However, it is well documented that, following a disaster, numerous well-intentioned but completely untrained volunteers will converge on disaster sites (Stallings and Quarantelli 1985; Quarantelli 1986; Auf der Heide 1989; Mileti 1989, 1999; Scawthorn and Wenger 1990; Dynes 1994; Drabek and McEntire 2003; Wachtendorf and Kendra 2004). The convergence of volunteers is one of the "emergent phenomena" that regularly occur following disaster events (see Wenger 1989; Drabek and McEntire 2003). Indeed, volunteers provided much of the labor involved in the rescue and sheltering of animals following Hurricane Katrina. More than 1,000 people, myself included, are on record as having worked in the staging area for the animal rescue operations outside New Orleans (see Anderson and Anderson 2006; Irvine 2006).[7] Countless others simply showed up to help without completing the registration paperwork. Volunteers slept on the ground or in cars after spending grueling days in the heat and humidity cleaning kennels, walking dogs, calming frightened cats, and feeding and watering all sorts of animals. They provided the infrastructure that the rescuers who ventured into the city required. As one writer put it, "rescue workers get all the headlines. The volunteers get all the soiled newspapers" (Carman 2005; see also Falconer 2005).

Despite the value of their labor, the topic of volunteers during disasters represents a persistent problem for professional disaster responders. The mass convergence of well-meaning., self-motivated people interested in helping with the response can distract and overwhelm those in charge (Quarantelli 1986; Auf der Heide 1989; Wenger 1989; Scawthorn and Wenger 1990). However, volunteers are often essential to disaster response efforts, especially because they usually live near the incident site, arrive quickly, and know details about the area and the event that outsiders can miss (see Mileti 1989, 1999; Dynes 1994). Disaster researchers have documented how local volunteers can foster recovery at the individual and community level by helping to deliver services to high-risk populations, particularly underrepresented groups (Rosse 1993). Yet, the handling of or "Spontaneous Untrained (or Unsolicited) Volunteers," or "SUVs," as responders call them, constitutes one of the most challenging public relations issues in a disaster. The issue of SUVs poses particular public relations problems for non-profit organizations that rely on public support. Turning volunteers away without giving them information and/or other opportunities to help can alienate and disillusion well-meaning people.

Existing research on animals in disasters has only begun to address the issue of volunteers (Irvine 2006). Thus far, studies have focused largely on evacuation, showing that people are less likely to follow orders to evacuate their homes if they cannot take their companion animals with them (Heath et al. 2001a). Consequently, research has explored the risk factors for the failure to evacuate pets (Heath et al. 1998, 2001b; Heath, Voeks and Glickman 2001). Factors that make it more likely that people will evacuate with their pets include a stronger human–animal bond (measured by greater attachment and commitment, see Staats, Miller and Carnot 1996), recent visits to a veterinarian (for dogs), and having proper carriers (for cats). Studies document that the rate of failure to evacuate cats is nearly twice the rate for dogs (Heath et al. 2001a).[8]

Research has also documented, and Katrina recently showed, that the failure to evacuate animals poses subsequent risks and complications for emergency personnel during the response (Heath et al. 2001a). For example, in a 1996 train derailment and chemical spill, 40% of pet owners who evacuated without their pets reentered the evacuation zone illegally to attempt to rescue their pets, at considerable risk to their own safety. Following protocol, emergency managers prevented residents from attempting to enter their own homes. A group of citizens made a bomb threat on behalf of the animals, which directed considerable negative media attention at the response. Four days after the evacuation, the Emergency Operations Center organized an official pet rescue, supervised by the National Guard and using the Guard's armored vehicles.

The literature on animals in disasters has also examined the importance of integrating veterinary care providers into disaster response plans (Dee 1993; Heath et al. 1997). Not surprisingly, veterinarians care for injured animals (AVMA 1994), but they also monitor food safety (Moore, Kaczmarek and Davis 1991), assist in the prevention and management of infectious diseases following disasters (Blake 1989), and help restore disrupted veterinary services in devastated areas (Suttel 1993). Other studies have evaluated the success of a centralized phone hotline and record bank for reuniting lost pets with owners (Heath et al. 1998). In addition, research has assessed the results of an existing animal response plan immediately following its implementation (Irvine 2004).

In this paper, I present data that highlights specific issues of untrained volunteers. These issues have been raised in the literature on disaster responses in which humans were (or were thought to be) the victims. Examining and addressing them in the context of an animal response can prevent animal stakeholders from encountering similar problems.

The Scenario

A metropolitan sheltering facility, known here only as "City Shelter," had to relocate temporarily during construction. The relocation provided an opportunity for an exercise in getting animals out of a building. The exercise had three goals. The first was to establish a model operational structure for use in the evacuation of shelters, boarding kennels, veterinary hospitals, and similar facilities. The second was to establish the logistical needs in such incidents. The third goal was to identify concepts and issues for incorporation into statewide protocols used by animal control officers and emergency responders.

The scenario for the exercise was that an explosion had occurred at a natural gas facility within a few blocks of City Shelter. The shelter sustained minor damage during the explosion and utilities had been cut off, but the physical structure was sound. However, the fire department and engineers had determined that all animals would have to be evacuated from the building while repairs were done. The aim was to relocate all dogs and cats while maintaining kennel records and any medications. Because the building was structurally sound, there was no time pressure to evacuate the animals. However, the intention was to conduct the evacuation as quickly and safely as possible. Thirty-eight dogs and eleven cats were housed at City Shelter at the time of the exercise. The temporary facility, about five miles from City Shelter, had been set up during the preceding week. Consequently, this was not a full-scale disaster exercise in which sheltering had to be set up at the same time as the evacuation. Instead, it was an opportunity to determine how quickly the animals could be evacuated.

Animal control officers (hereafter ACOs) and the director of the State Animal Response Team were in command. In the United States, the ACOs in a given community are typically the first responders for disasters involving animals. Depending on the situation, ACOs would likely direct the rescue of animals. In Colorado, the state in which this exercise was conducted, municipal Animal Control agencies also participate in the SART.

A local training program for veterinary technicians provided volunteers. Other volunteers affiliated with City Shelter or with the State Animal Response Team brought the total to 35. The majority of volunteers were assigned to one of several teams headed by an ACO. The remaining volunteers assisted at entry and exit points, labeled stations "A" and "B" at both sites. Animal Control vehicles and mobile adoption units, (recreational vehicles outfitted with kennels for off-site adoptions) from other shelters provided transportation. All volunteers and ACOs had maps to the temporary facility. Three observers watched the process, recording comments that were conveyed during a debriefing after the exercise.

To begin the evacuation, teams were sorted into four squads consisting of two or three teams each. The activity coordinator assigned each squad to an exit station (A or B). Each squad was to use a single station, using the same letter on exiting City Shelter and on arriving at the temporary facility. Squad leaders determined how many animals each team could transport, and then directed their teams one at a time into the building to begin the evacuation. Shelter supervisors were on hand to assist in selecting appropriate animals based on the carrying capacity of vehicles. Squad leaders gave their team members the following instructions:

- Cats must be transported in carriers.
- Dogs must be transported in ACO vehicle cage berths.
- Each animal must wear a paper collar listing kennel number.
- All dogs must be moved using slip leashes placed around the neck rather than attached to the collar.
- Any animals showing signs of aggression must be handled by an ACO.
- Take each animal's water bowl (after emptying it) from the kennel to be transported with the animal to the temporary facility. Keep water bowls with each animal for disease control.
- Any medication must accompany the relevant animal (ideally with the water bowl).

As each volunteer passed the exit station, s/he showed the kennel card and collar to the exit station leader, who verified the number and recorded in a log containing the animal's species, breed, sex, and color. After exiting the building, animals were loaded into transport vehicles. When the last team for each squad exited the building, the next squad leader instructed his or her teams to enter.

Squads were to travel together to the temporary facility. On arrival, each squad worked with the corresponding station (A or B) from which they removed the animals. Entry station assistants with copies of the Shelter's records logged the arrival of each animal just as exit assistants had done. As each squad arrived, entry teams assured that the numbers of animals at entry and exit matched. Kennel numbers in the temporary facility corresponded to those in City Shelter. All animals had an identification card in front of their kennels. This card listed the animal's identification number and the cage number, as well as other information. Any medications were in plastic bags clipped to the kennel cards. After the last teams arrived with their animals, the entire group reconvened at City Shelter for debriefing.

All animals were successfully evacuated from the building and situated in temporary housing in two hours and fifteen minutes. Total time just for exiting animals from the building was 90 minutes.

Several problems emerged during the exercise. Despite a short briefing beforehand, in which the assignment to "squads" and "teams" was made, volunteers were unclear about whom to take directions from as well as why it was important to stay with a particular squad or team. In addition, the volunteers from the veterinary technician program had no experience handling shelter animals.

To be sure, they had experience in handling companion animals, but the protocol for handling shelter animals differs significantly. Because most shelters know little about the history and temperaments of the dogs in their care, they generally do not allow dogs to encounter one another nose-to-nose. There was one incident when a bottleneck occurred at an exit station. Dogs and volunteers were crowded into a narrow hallway, and two dogs began to fight. A second incident occurred when a cat escaped from her cage at the temporary shelter. The volunteer had turned away to check some paperwork and left the cage open. An escape by a tame cat, especially in a new area, can result in a long process of trying to recapture the escapee, and recapture can be especially difficult and even dangerous when the escapee is feral or semi-feral, as shelter animals often are.

During this exercise, crews from several local television stations arrived to film the move for the evening's news. Their stories focused on City Shelter's relocation to the new facility and reporters had no knowledge of or apparent interest in the disaster exercise. In this instance, the presence of the media provided good public relations for the Shelter, with the news coverage potentially encouraging adopters to come to the new facility. However, the crews' presence also raised several issues for the management of an actual emergency. Trucks, cameras, and reporters interrupted the ecvacuation to film the animals. Moreover, reporters questioned several of the volunteers, who knew little about the animals. Volunteers could not easily locate those who were "in charge" of the shelter or the exercise.

Implications and Discussion

Although all animal stakeholders, including farms, ranches, kennels, veterinary clinics, zoos, breeding facilities, and pet guardians, should develop emergency plans, animal shelters must prepare on two fronts. Because shelters often serve as staging areas for disaster response (see Irvine 2004), the staff must plan for taking in stray and abandoned animals from the community. In addition, shelter administrators need to make plans for the evacuation of their resident animal population if the facility itself is threatened.[9]

Although this exercise took place in the United States and used its standard disaster protocols, the same protocols are used internationally, making it likely that the same issues arise around the globe. The Incident Command System, or ICS, constitutes the "heart" of most emergency response plans. The ICS has its roots in firefighting, particularly in brush and forest fires that cover large areas and consequently involving several different jurisdictions (see Wenger 1990; Dynes 1994; Drabek and McEntire 2003).[10] The ICS model has numerous advantages that make it efficient and economical; most notably, it uses standard operating procedures and a pre-established division of labor. An Incident Commander establishes a command post from which to control the ICS hierarchy. The Incident Commander has a command staff consisting of a Liaison Officer, who defines and coordinates the activities of the responding groups, such as police, fire, and animal control, as well as relief agencies such as the American Red Cross; a Public Information Officer, who authorizes the release of information to the public and the media; and a Safety Officer, who is responsible for the safety of responders and the public. On the next level are the four parts of the general staff, who oversee Operations, Planning, Logistics, and Finance. Since the 1970s, emergency responders have considered the ICS the universal model for disaster response (see Wenger 1990). The ICS allows incident commanders to adapt the structure of the response to the needs of the event or jurisdiction.

In this exercise, the problems caused by volunteers' inexperience with the ICS, as well as the handling of the media, became evident. City Shelter was fortunate to have had an adequate number of volunteers for this exercise. However, their mishaps point out that they were a mixed blessing. It is essential to have the Public Information Officer inform SUVs that due to insurance regulations, disease control measures, and injury prevention, untrained volunteers cannot be used in disaster evacuation or response. Because the ICS has no capacity to integrate "unattached" or independent volunteers from the general public, shelters (or other organizations) that depend on volunteer responders should anticipate and plan around the inevitable arrival of strangers interested in

helping (see Stallings and Quarantelli 1985; Wachtendorf and Kendra 2004). To address the potential problems with "SUVs," shelter emergency plans should include lists of people who are interested in being trained for incident response. Then, regular training, preparation, and communication are essential. In addition, the list of emergency volunteers could include people willing to foster shelter animals to make room for animals left homeless in the community after an emergency.[11] In an actual emergency, a liaison officer should appoint someone to inform potential volunteers of other ways to help, such as donating money.

None of the volunteers involved in the exercise had previously experienced a true emergency evacuation. For the inexperienced, and for civilians, in general, the quasi-military terminology of the ICS requires explanation, if not justification. In any case, the system for organizing people in a disaster response should be simple and straightforward. In addition, volunteers and authorized personnel should be readily identifiable. This is often accomplished by having responders wear brightly colored t-shirts with visible lettering on front and back. Other possible means of identification include colored vet wrap as wrist or armbands. In this exercise, the situation with reporters raised the need for an easily identifiable Public Information Officer within the ICS, who is authorized to respond to the media. The issues surrounding communicating with journalists have been well addressed in the disaster literature (McCarthy 1986; Wilder 1986; Bussey 1987; Peltu 1990). Misleading or alarming information can shape the public's view of the disaster's cause and response efforts, and influence people's perception of risk. In a genuine emergency, one person should be assigned as Public Information Officer. This "point person" would provide a single, consistent voice for the press. Volunteers should be instructed to refer any reporters to the person in charge of public relations.

Conclusion

In the wake of the 2005 hurricane season, the vulnerability of companion animals came to public attention (see Newman 2005; Wan 2006).[12] Despite a growing awareness of the needs of animals during disasters and emergencies, animal stakeholders still have much work to do. When Hurricane Charley struck Florida's southwest coast in 2004, only two dogs were euthanized, and these because of aggression and injury (see Irvine 2004). No reliable numbers of animal lives lost are available from the 2005 hurricane season, but the HSUS documents that over 8,000 companion animals were rescued just from New Orleans. The Pets Evacuation and Transportation Standards Act would require state and local emergency preparedness plans to include companion and service animals in their evacuation plans in order to qualify for federal funding. Although governmental entities are important resources in disasters, their availability is neither immediate nor reliable, nor can it replace the need to develop local response capacity related to animals. Animal stakeholders of all kinds, including companion animal guardians, breeders, zoo keepers, farmers, veterinarians, and others have unique needs in disaster planning and response. Shelters and other animal care facilities play an integral role in this network. Planning and preparation of the sort illustrated in this case study can protect animals and the people who care for—and about—them.

A count of disasters that have received international attention in recent years includes the World Trade Center bombing, the European heat wave of 2003, Hurricane Katrina, the South Asian tsunami, and the Pakistani earthquake, just to name the major ones. These were subject to nearly non-stop media coverage, but attention to the plight of animals was noticeably lacking. Disasters offer a compelling opportunity to re-examine what we know about relationships between humans and animals and the status of certain kinds of animals. This is only the beginning of a longer list of anthrozoological concerns that disasters raise. Disaster "agents," such as hurricane, earthquake, or terrorist event, may be unpredictable but five decades of disaster research show us that the responses and aftermath are not. They reflect the social, political, and economic arrangements that characterize contemporary societies. For example, research shows that characteristics such as race, class, and gender increase vulnerability to disasters and limit the capacity for recovery (e.g., Peacock, Morrow and Gladwin 1997). As evidenced by Hurricanes Andrew

and Katrina, the same goes for species. Being an animal makes one vulnerable to the hubris, as well as the kindness, of human beings. Anthrozoologists are uniquely qualified to ask—and answer—questions about the risks animals face in disasters and what people can legitimately expect to do to help. Those qualifications alone are worth the price of admission into the world of tragedy and hope that is disaster research.

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Notes

1. Impact reports from the North Carolina Floodplain Mapping Program put this number as high as 2.9 million. See <www.ncfloodmaps.com/pubdocs/historicdata.htm> Accessed January 20, 2007.
2. VMAT is deployed to areas of federally declared disasters upon request. States can request VMAT assistance in other emergencies, but have to pay the full cost of deployment. Most veterinary services in emergencies/disasters are performed by local veterinarians with VMAT deployments entering the picture only in extraordinary situations, such as Hurricane Katrina.
3. See, for example, <www.la-spca.org/tails/lily.htm> and <www.hsus.org/hsus_field/hsus_disaster_center/recent_activities_and_information/2005_disaster_response/hurricane_katrina/refusing_to_leave_them_behind_evacuees_smuggled_their_pets_out_with_them.html> Both accessed January 20, 2007.
4. See <www.wwltv.com/sharedcontent/nationworld/katrina/stories/090105ccwcKatrinaCoptershot.14dc330e.html> Accessed January 5, 2007.
5. See <www.ncsart.org> Accessed November 29, 2006.
6. For a comprehensive resource assessing current state animal disaster plans, see <www.friendsofanimals.org/programs/animal-disaster-plans/index.php> Accessed January 20, 2007.
7. See <www.hsus.org/hsus_field/hsus_disaster_center/disasters_press_room/archives/2005_disaster_response/hurricane_katrina/volunteers_sustain_katrina_disaster_response_efforts.html> Accessed January 21, 2007.
8. One suggestion for improving the rate of cat evacuation involves providing carriers to cat-owning households as part of the disaster response.
9. This occurred in New Orleans following Hurricane Katrina, when the LA/SPCA, the New Orleans Humane Society, and several other Gulf region shelters had to evacuate.
10. For a history, see <http://www.firescope.org/firescope-history/past%20present%20future.pdf> Accessed January 31, 2007.
11. An organized foster program worked well to alleviate overcrowding in the southwest Florida shelter that was the staging areas following Hurricane Charley (see Irvine 2004).
12. A LexisNexis search of United States newspapers revealed nearly 900 articles about pets in the six months following Hurricane Katrina.

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