

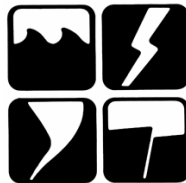
# **Providing for Pets During Disasters: An Exploratory Study**

**By**

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The views expressed in the report are those of the authors and not necessarily those of the Natural Hazards Center or the University of Colorado.

## **Introduction**

There is little extant research on how disasters affect pets, or “companion animals.” Only over the past decade have animal welfare organizations and emergency responders incorporated animals into disaster response plans. No plans were in place when Hurricane Andrew hit southeast Florida in 1992. An estimated 1,000 dogs and cats were euthanized merely for lack of space in which to house them. When Hurricane Charley hit the southwest Florida coast in August 2004, it also left many animals, as well as people, homeless. However, in the years since Hurricane Andrew, efforts to inform the public of what to do with animals in a disaster have increased, and national animal welfare organizations have developed emergency response plans. Consequently, Hurricane Charley provided an opportunity to assess the current state of disaster planning and response for pets. This study highlights two areas of particular interest to disaster researchers: the importance of interorganizational networks and disaster myths.

## **Research Problem and Purpose**

The purpose of this research project was to examine the ways in which pets were provided for poststorm in hurricane-devastated areas. More specifically, this project examined the emergency services provided for companion animals when a disaster causes residents to leave their homes. Because emergency shelters (such as those provided by the American Red Cross) do not admit pets, owner/guardians must find alternative housing for their animals. Free-roaming animals are inevitably lost or left behind. In addition, studies have found that as many as twenty percent of residents will refuse to evacuate because they will not leave their pets (Heath et al. 2001c). In some communities, animal shelters will accept pets during disasters, but disasters can threaten these facilities as well. Moreover, shelters and veterinary hospitals are often overwhelmed, resulting in mass euthanasia of stray animals.<sup>1</sup> As recently as 1998, shelters’ preparations for a hurricane or other type of disaster consisted of humanely killing all the adoptable animals presently occupying the shelter so that the space could be used for displaced animals.

Since Hurricane Andrew, a network of organizations has developed to meet the needs of animals and animal stakeholders during the relief period of a declared disaster. Through memoranda and statements of understanding with the Federal Emergency Management Agency and the American Red Cross, various agencies have become the designated animal responders following disasters. National veterinary organizations, such as the Veterinary Medical Assistance Team (VMAT) of the American Veterinary Medical Association, are responsible for medical care. National animal welfare organizations such as the Humane Society of the United States (HSUS), the American Humane Association, Code 3 Associates, and Emergency Animal Rescue Services will send their disaster programs to stricken areas at the request of an affected state. Often the labor will be divided (as during Hurricane Charley), with VMAT taking primary responsibility for large animals (livestock) and the HSUS taking responsibility for pets.

Individual states, too, have developed their own animal response plans. For example, following Hurricane Floyd, in which over three million animals (livestock and pets) died, the major animal stakeholders in North Carolina developed a cooperative response plan. Labeled SART, for state animal response team, the effort involves a public/private partnership based in a

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<sup>1</sup> This was the case following the nuclear reactor incident at Three Mile Island (see Kronfeld 1979) and after Hurricane Andrew.

nonprofit organization that can obtain grants, accept donations, and subcontract with government agencies. The SART model uses the Incident Command System found in other emergency response organizations. Once in place, a SART facilitates formation of county animal response teams (CART), which can respond to incidents in individual counties or cooperate in multicounty incidents. To date, several states have SART/CART plans, while other states have less formal plans for animal response. Even with a well-developed response network, the animal needs may tax this network of resources when disasters occur in multiple communities at once, as when Florida was hit or threatened by several hurricanes (Jeanne, Charley, Frances, and Ivan) in a span of six weeks in the late summer of 2004.

As the formal organizational structure has improved since Hurricane Andrew, the message of what to do with pets in a disaster has been disseminated to the public. Still, many people do not include their pets in their disaster preparedness plans, if they have any such plans at all. Research on evacuations of households with animals indicates considerable risk of evacuation failure for dogs and cats. In short, many people simply leave their animals behind. Others who are not at home at the time of the order to evacuate have little choice.

Failure to evacuate animals places subsequent risk on people, especially rescue workers. For instance, following a mandatory evacuation because of a hazardous chemical spill in Weyauwega, Wisconsin, in 1996, 40 percent of dogs and 75 percent of cats were not evacuated (Heath et al. 2001b).<sup>2</sup> Most people who did not evacuate their animals reported thinking that they would not be out of their homes for long. However, the 1,700 residents of Weyauwega were kept away from their homes for several days, rather than hours. Shortly after the evacuation, several residents illegally reentered their homes to rescue their pets, at considerable risk to their own safety. 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. This response challenged resources that could have been put to other uses and it jeopardized the safety of rescue workers as well. The Weyauwega study concludes that residents who do not evacuate with their pets could adversely affect the health and safety of many other people and animals during disasters. Consequently, one focus of the research on animals in disasters has been determining the risk factors for the failure to evacuate pets (Heath et al. 1998, 2001a, 2001b, 2001c).

The objectives of the present study were to describe the organizational response to a disaster. Because the study was preliminary and exploratory, the primary question that guided the research was intentionally broad: How does the post-Charley situation for animals compare with post-Andrew?

## **Research Methods**

This study is based on observation of the devastated areas in Charlotte County, Florida, specifically in Port Charlotte and Punta Gorda; the Suncoast Humane Society (Suncoast), which served as the primary staging area for animal response during the hurricane; and the Animal Welfare League, from which dogs were evacuated. In addition, interviews with the director of Animal Control for Charlotte County and the director of Suncoast and field conversations with several staff members and volunteers provided descriptive accounts of prestorm, midstorm, and poststorm animal issues.

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<sup>2</sup> Although this study focuses on pets, it is worth noting that livestock at three dairies were also left behind at the time of evacuation (see Heath et al. 2001b).

## **Preliminary Findings**

The post-Charley situation demonstrates a significant improvement in the treatment of animals in a disaster compared to the post-Andrew situation for two closely related reasons. First, Charlotte County had a well-developed animal response plan, and, second, it relied on interorganizational networks. To say that the situation has “improved significantly” is to say that far fewer animals died and many were reunited with their guardians or were placed in new homes. During Hurricane Andrew, an estimated 1,000 healthy, adoptable dogs and cats were euthanized purely for lack of space. During Hurricane Charley, only two dogs were euthanized, and these euthanizations were because of aggression and injury.

## **Description of the Response**

Hurricane Charley hit southwest Florida early in the afternoon of August 13, 2004. The storm was rated category 4, having winds up to 145 miles per hour. Charley made landfall in the city of Punta Gorda in Charlotte County. Over two million people were evacuated, and the extensive damage was estimated at over three billion dollars (see Figure 1).

The destructive force of Hurricane Charley resulted in numerous problems for pets and animal stakeholders. Several veterinary hospitals were damaged or destroyed. Charlotte County requested assistance from VMAT to restore the veterinary infrastructure. The roof of the Animal Rescue League of Charlotte County was ripped off by the storm (see Figure 2). Thanks to planning and preparation, on August 12, Charlotte County Animal Control (with help from the Charlotte County Volunteer Animal Rescue Committee) had evacuated all the dogs (about 100) from the shelter to a fire tower east of Punta Gorda, where they were safely housed in kennels with three days worth of food and water. All cats had been placed in foster care, many with staff and volunteers.

On August 14, an HSUS disaster animal rescue team (DART) arrived with about two dozen volunteers and immediately set up an animal relief center in Punta Gorda. The facility coordinated care for lost and injured animals and held animals until they could be transported via mobile adoption unit to the Suncoast Humane Society in Englewood, about fifteen miles away (see Figures 3 and 4). Also on August 14, Suncoast transferred its residents (about 100 adoptable cats and 50 dogs) to other Florida shelters, thus making room for animals displaced by the hurricane and the dogs evacuated from the Animal Rescue League.

All animals surrendered by their owners immediately following the storm were transferred to shelters in other areas of the state (some people found themselves in situations in which it was no longer possible to provide a home for their pets). Animals lost and found during the hurricane were kept for a longer than usual period before becoming adoptable to facilitate being reunited with their owners. Suncoast took reports of lost animals, and all facilities tried to match reports with found animals in order to reunite animals and families.

On August 18, Charlotte County printed fliers detailing available disaster services, including those for animals. Postal workers delivered the fliers, which were also made widely available at relief sites throughout the county. By August 19, the HSUS facility had taken in 78 dogs, 49 cats, 3 rabbits, 2 goats, 2 birds, 2 baby raccoons, 1 baby squirrel, 15 cows, and 1 bear (tranquilized and taken to a wildlife sanctuary). Animal control responded to numerous calls about wandering livestock.

The majority of veterinary practices in the stricken areas (Charlotte, Hardee, and DeSoto counties) were affected, so VMATs assisted in providing veterinary services. VMAT reported seeing approximately 30 cases per day, not all of which were related to the storm. Other assistance came from corporate donors that sent food, crates, and other animal-related items (see Figures 5 and 6).

### **Interorganizational Networks**

Clearly, animal response has improved since Hurricane Andrew. Large-scale efforts to organize multilevel animal response teams have paid off. Disaster studies have found that organizational and interorganizational preparedness involves a “physical” component and a “social” component (Gillespie and Streeter 1987; Gillespie et al. 1993). Whereas physical preparedness concerns buildings and their contents, social preparedness refers to planning, training, record-keeping systems, knowledge of hazards, and other actions.

The interorganizational network responding to the animal needs in this storm was socially strong and complex. It included national organizations such as VMAT and the HSUS, local responders such as Charlotte County Animal Control and the Volunteer Animal Rescue Committee, and animal welfare organizations such as the Suncoast Humane Society and the Animal Welfare League. Suncoast had a foster network in place prior to the storm and began an emergency network once the storm approached. For the most part, the network was also physically strong. Suncoast had two weeks’ supply of food for animals and shelter staff. The exception was a lack of physical preparedness at the Animal Welfare League. Specifically, the roof was not sound enough to withstand the hurricane’s winds. In addition, the building’s close proximity to the shore made it vulnerable to flooding. This resulted in the need to evacuate its dogs. However, the high level of preparedness in other dimensions accounts for the overall success of the animal response.

Charlotte County had a well-developed and practiced plan for animals, but they also relied on the HSUS’s DART to set up temporary animal shelters in two additional locations, which multiplied the capacity to respond. Although DART and similar efforts are needed and welcome, their availability raises the question of whether they will deter local efforts to develop animal response plans. States, counties, and local governments must begin or continue to develop plans that incorporate all animal stakeholders, including pet owners, breeders, veterinarians, ranchers, shelter managers, farmers, zookeepers, and anyone who would be affected by an emergency. While individual animal stakeholders need to prepare for animal emergencies, the disaster research literature emphasizes the importance of state government in such efforts (see Durham and Suiter 1991; Tierney, Lindell, and Perry 2001).

In Charlotte County, many regional and national animal shelters came forward to take in adoptable animals and make room for hurricane animals in a common practice known as “transfer.” For example, 60 dogs from five Florida shelters were transferred to shelters in Colorado. The Florida Association of Kennel Clubs paid the \$17,000 transportation costs. The Humane Society of Sarasota County asked animal welfare organizations throughout the country for help, and Colorado was among several states that responded. These and other networks were essential during and after the hurricane.

The vital interorganizational communication was hampered by the destruction of communications towers during the storm. The radios used by animal control officers were rendered useless, as were both land and cellular phones.

## **Disaster Mythology**

This research revealed anecdotal evidence of a “disaster myth” surrounding animals. Disaster mythology is the term researchers have given to the numerous misapprehensions people hold about behavior during and after a disaster (see Fischer 1998, Wenger et al. 1975). As Fischer (1998) explains:

Most of us assume that individuals cease to act in a predictable, orderly fashion, i.e., that the norms which govern our behavior collapse into Durkheim’s anomie. They are expected to flee in panic, suffer from psychological dependency and disaster shock. It is often believed that evacuation of these people must not be called too soon for fear of causing massive flight behavior. It is believed that shelters overflow beyond capacity with organizers unable to deal with the mob mentality. Both survivors and those converging to the scene are believed to be driven by base, depraved instincts. These individuals are commonly perceived as likely to loot property, price gouge one another, and generally behave in other selfish ways—most of which are imagined to spread from individual to individual in a contagious fashion (13).

Consistent with this, numerous houses in Port Charlotte and Punta Gorda were spray-painted with messages of “Don’t loot or I’ll shoot,” as a warning to potential looters. Myths are exacerbated because emergency personnel believe them as well.

Combined with the myths about looting and price gouging, Hurricane Charley revealed the myth of the “dangerous dog pack.” This refers to the belief that stray dogs will band together and attack people. In Charlotte County, one woman reported being bitten by a stray dog, and, coincidentally, several dogs were seen traveling together in the vicinity. The police assumed the dogs were guilty and shot and injured one dog, who then ran off. Animal Control officers later caught the dog and took him to Suncoast, where his injuries were treated. He was available for adoption at the time of this research (given the name “Bullet”). Clearly, local officials believe in the power of “pack mentality.” This potentially harmful disaster myth needs more study.

## **Additional Issues**

The Animal Control director believes he called in his resources too quickly after the storm, and this hampered his handling of emergent tasks following the storm. Immediately after the storm, officers from other counties arrived to help and were left sitting around with little to do, whereas a week or two later, when the county’s officers were exhausted, they could have used the extra help. In short, the timing of resources seems to be important.

Related to this, effective animal response plans should have “reserve” teams of volunteers. Although Charlotte County had a team of volunteers who were trained to respond to animals’ needs, many of these citizens were facing their own hurricane crises and had to make home and family their first priority. Thus, a recommendation would be to have two tiers of volunteers, the second consisting of reserve volunteers who take the place of those who may be unavailable because of the circumstances.

The volunteer response to Hurricane Charley highlights the presence of institutionalized volunteering, or “permanent emergency volunteers” who routinely respond to disasters (Britton, Moran, and Correy 1994). As states and counties work to build their own animal response teams, permanent volunteers will provide the backbone of these efforts, as they did in Port Charlotte, and institutionalized volunteer programs will provide the context for their activities. Disaster

researchers point out the need for more research on volunteer activity in general (see Tierney, Lindell, and Perry 2001, pp. 111-114). The emerging state and county animal response teams would provide ideal subjects for such research.

## **Conclusion**

The animal response following Hurricane Charley indicates dramatic improvements since Hurricane Andrew. The directors of Animal Control and the Suncoast Humane Society called HSUS' DART "a godsend." Both also praised the communication across local agencies.

There is still a need to reduce the number of lost animals. The public still needs information about what to do with pets when the order to evacuate is given. One solution is to increase the number of what are known as "pet friendly" shelters. These are shelters for human residents that have a nearby area designated for animals. A fairground serves as an ideal example. People can be housed in exhibition buildings, while other enclosed areas and stables can shelter animals, including livestock.

Reducing the number of lost animals would lessen the burden on local shelters, most of which operate on limited resources and with limited staff even under normal conditions. The Suncoast Humane Society resumed adoptions one month after the hurricane. This meant that animals lost or abandoned during the storm were available to new families. During the month "holding period," however, Suncoast had no revenues, while it incurred the expenses of housing animals displaced by the storm. Other shelters that do not have Suncoast's level of preparedness would have been forced to euthanize healthy animals simply for lack of space.

In conclusion, planning and interorganizational communication made the difference for animals and their people after Hurricane Charley. Efforts at the state, national, and local level should look to Charlotte County for lessons in preparation and response.

## References

- Britton, N.R., Moran, C.C., and Correy, B. 1994. "Stress Coping and Emergency Disaster Volunteers: A Discussion of Some Relevant Factors." Pp. 128-144 in *Disasters, Collective Behavior, and Social Organization*, edited by R.R. Dynes and K.J. Tierney. Newark, DE: University of Delaware Press.
- Durham, T., and Suiter, L.E. 1991. "Perspectives and Roles of the State and Federal Governments." Pp. 101-127 in *Emergency Management: Principles and Practice for Local Government*, edited by T.E. Drabek and G.J. Hoetmer. Washington, DC: International City Management Association.
- Fischer, H.W. 1998. *Response to Disaster: Fact versus Fiction and its Perpetuation*. Lanham, MD: University Press of America.
- Gillespie, D.F., and Streeter, C.L. 1987. "Conceptualizing and Measuring Disaster Preparedness." *International Journal of Mass Emergencies and Disasters* 5:155-176.
- Gillespie, D.F., Colignon, R.A., Banerjee, M.M., Murty, S.A., and Rogge, M. 1993. *Partnerships for Community Preparedness*. Boulder, CO: University of Colorado, Institute of Behavioral Science, Program on Environment and Behavior. Monograph No. 54.
- Heath, S.E., Beck, A.M., Kass, P.H., and Glickman, L.T. 2001a. "Risk Factors for Pet Evacuation Failure After a Slow-Onset Disaster." *Journal of the American Veterinary Medical Association* 218:1905-1910.
- Heath, S.E., Beck, A.M., Kass, P.H., and Glickman, L.T. 2001b. "Human and Pet Related Risk Factors for Household Evacuation Failure During a Natural Disaster." *American Journal of Epidemiology* 153:659-665.
- Heath, S.E., Voeks, S.K., and Glickman, L.T. 2001c. "Epidemiological Features of Pet Evacuation Failure in a Rapid-Onset Disaster." *Journal of the American Veterinary Medical Association* 218: 1898-1904.
- Heath, S.E., Kass, P.H., Hart, L., and Zompoli, G. 1998. "Epidemiological Study of Cats and Dogs Affected by the 1991 Oakland Fire." *Journal of the American Veterinary Medical Association* 212:504-511.
- Kronfeld, D.S. 1979. "Evacuation! What About the Dogs?" *American Kennel Gazette* July: 68-69.
- Tierney, K.J., Lindell, M.K., and Perry, R.W. 2001. *Facing the Unexpected: Disaster Preparedness and Response in the United States*. Washington, DC: Joseph Henry Press.
- Wenger, D.E., Dykes, J.D., Sebok, T.D., and Neff, J.F. 1975. "It's a Matter of Myths: An Empirical Investigation of Individual Insight into Disaster Response." *Mass Emergencies* 1:33-46.





*Figure 1:* Debris lining a residential area in Punta Gorda.



*Figure 2:* The Animal Rescue League of Charlotte County.



*Figure 3:* Mobile adoption vehicle used for transporting animals.



*Figure 4:* The Suncoast Humane Society served as staging area for lost and rescued animals.



*Figure 5: Crates stored at the Suncoast Humane Society.*



*Figure 6: Some of the donated food and supplies.*