

Disaster Planning

Community Planning

THE HUMANE SOCIETY
OF THE UNITED STATES™

Developing a Community Disaster Plan for Animals

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Introduction

Disasters, like pets, come in many different shapes and sizes: Hurricanes Andrew, Hugo, and Floyd; the midwest floods of 1993; earthquakes in California; tornadoes in Oklahoma; wildfires in California, Florida, and New Mexico; a train accident involving tankers of propane gas in Wisconsin. These were all disasters that threatened a community, endangering the lives of both people and animals. While there are generally plans in place to help people impacted by disasters, similar planning for animals is a new issue for many communities.

Human nature fosters an “it will never happen to me” attitude about disasters; but “it” does happen, and it happens everywhere. Nearly every community has a highway or railroad on which vehicles carry hazardous materials on a regular basis. Nearly every state in this country is on or near a fault line and could experience an earthquake. A community disaster plan for animals must anticipate all potential disasters, from a fire at the local animal shelter to a hurricane or earthquake that impacts the entire community and surrounding areas. Large-scale disasters get the most attention, but it is the small-scale emergencies that are more likely to strike at any time, in any place.

By considering the issues involving animals in disasters and taking a proactive approach to planning on the community level, instead of a reactive approach after the damage is done, there is a greater chance that animals and their owners will survive a disaster.

The Plan

A community disaster plan for animals is much more than a document with a set of instructions and contact names. It is the end result of a series of actions that require leadership, cooperation and preparation, brainstorming, supply and equipment procurement, volunteer recruitment and training, evacuation preparation,

interagency communication and networking, and public education outreach. The plan needs to be general and flexible, since disasters rarely play out exactly as anticipated and the situation can change from moment to moment.

Possibly the most difficult issue to resolve when formulating a disaster plan for animals is determining where to start and which agency will take the leadership role. An effective disaster plan requires a clear mission statement with defined goals and objectives, established policies for activating and deactivating the plan, and a clean system of management. The plan should include a command structure with a designated lead agency, and it should delineate the roles and responsibilities of all the participating groups and personnel.

For instance, the standard operating procedure for an animal control agency in a disaster should cover such functions as communications, field operations, triage, transportation, and sheltering. The plan should set policies and procedures for such activities as emergency euthanasia and the rescue of wildlife. It must address the resources necessary to do the job, the use of volunteers, and the dissemination of information to the public.

To develop a complete plan that encompasses both small and large disasters, ***it is important to involve local and state government agencies to ensure that animals are part of the community disaster plan.*** Many communities have an office of emergency services (OES) or an emergency management program. This is an excellent place to begin. The emergency management office can provide information on the existing overall disaster plan and command structure, the potential dangers to the community, and any existing plans for taking care of animals. Emergency managers should be consulted to determine the proper channels for obtaining assistance so that any plan developed for animals conforms with the proper format. They can also explain what

mutual aid systems are in place and how they work. The disaster plan for animals should be part of the community's overall emergency plan if it is to be effective.

In some cases, emergency management may need to be educated as to the impact of animal issues on the overall community disaster plan, and why a disaster plan for animals needs to be developed. Other times, the existing disaster plan for animals is inadequate or calls for animal care or control agencies in the community to participate in ways that do not make full use of their resources. Having animal control officers directing traffic or picking up dead animals can be a waste of their valuable skills.

Those involved in developing a community disaster plan for animals should also participate in the overall community disaster plan by becoming members of any local emergency planning council (LEPC). This ensures that animal concerns are considered in all other areas of disaster planning, and it can uncover resources that may be useful in animal planning efforts.

When considering what issues to plan for, determine the likely scope of potential disasters (geographical boundaries, population affected, and duration of the emergency), the types of animals in the community, the services that can be provided to animal owners, the available staffing (volunteer and skilled), other organizations that need to be networked with, and the equipment and facilities needed. As the plan is developed, a major component should be to educate the public about how to plan and provide for their own animals during an emergency.

I. Evaluate the Community

Begin with a description of the service area (including cities and geographical boundaries). Is the community primarily urban, rural, or a mix of both? Then consider what natural

events—such as wildfires, floods, earthquakes, hurricanes, and tornadoes—may impact the community. Next, look at the potential for man-made disasters (including hazardous material spills, structure fires, and oil spills). In some communities in the United States there is growing concern about terrorism. The local emergency management agency can help determine threats to the community. The following are several types of disasters.

Structure Fires

Fire is the most common threat to animal facilities. A fire in an animal facility could necessitate the activation of the community's disaster plan for animals to provide rescue, emergency veterinary care, and transportation to veterinary clinics or alternate housing sites.

Hazardous Materials

Just about any community can be affected by the release of hazardous materials. Every day hazardous waste, chemicals, and explosive materials move through communities via railroads, highways, waterways, and the sky. Chemical plants, hazardous waste storage facilities, nuclear power plants, and other similar types of facilities are located throughout the country. The threat of contamination or explosion may cause the evacuation of an area or entire community on short notice. Plans must be in place to deal with animals left behind in evacuation areas or contaminated by hazardous materials as they evacuate with their owners. Local fire departments generally know where hazardous materials are stored or manufactured in the community.

Wildfires

Wildfires can pose a major threat to a community and its human and animal populations. Almost no part of the country is immune. While some areas of the country experience wildfires on a regular basis, unexpected and prolonged

droughts in other areas help create conditions conducive to wildfire emergencies. The heat and smoke of wildfires can themselves pose problems for animals and humans.

Flooding

There are two major types of flooding to consider:

1. Riverine. This flooding comes from creeks, lakes, and rivers which experience an influx of water too great to reduce through normal methods. Local governments have flood plain maps that show how high the water will rise based on the amount of rainfall for a given period of time. Flooding may occur quickly in hilly areas or when dams burst, or more slowly when flooding occurs upstream because of intense rainfall or melting snow. Some intense rainfall is associated with tropical storms or hurricanes.

2. Storm Surge. This strong surge of waves accompanies hurricanes and tropical storms as they move near land or make landfall. Depending on the category of storm, the waves can be 25 feet higher than normal. Most of the damage caused by landfalling hurricanes or tropical storms is the result of storm surge. Coastal communities generally have storm-surge maps that show where flooding is expected. All humans and animals in these areas should evacuate further inland during a hurricane or tropical storm.

Earthquakes

There are earthquake faults throughout the United States, with the exception of South Florida. Communities should prepare for the possibility of seismic activity, even if the area has not experienced an earthquake in recent history.

Winds

High winds can be caused by tornadoes, hurricanes, tropical storms, blizzards, or severe thunderstorms. Winds can destroy a building by weakening its structure or tearing off its roof.

Damage can also be done by wind-borne debris or falling trees. When high winds are forecast, occupants of manufactured or mobile homes are encouraged to evacuate to a safer location.

Blizzards, Ice, and Winter Storms

Community disaster plans for animals must consider winter storm issues such as extremely low temperatures, power outages, disruption of deliveries of animal feed, roofs collapsing under the weight of ice or snow, and trees falling on containment fencing for animals.

Terrorism

There is growing concern in emergency management agencies about the potential for terrorism in communities of all sizes. Possible scenarios involving animals include terrorist acts in communities with large commercial agriculture operations, the release of hazardous materials into populated areas, or the threat of terrorism, or an event itself, that triggers the evacuation of a community.

Oil Spills

Off-shore drilling and shipping occur along United States coastlines every day, so the effect of an oil spill on wildlife is a real concern for coastal regions. The U.S. Fish and Wildlife Service will probably be involved in responding to any oil spill that affects wildlife, as will relevant state agencies. In some cases, states already have volunteer programs and formal agreements or Memorandums of Understanding (MOU's) with private wildlife groups to provide rescue and rehabilitation services. It is important to check with state wildlife agencies to determine their role in responding to oil spills and other disasters affecting wildlife.

Being a Host Community

When developing the community disaster plan for animals, consider the impact of an impending

ing or occurring disaster in neighboring counties or regions. Communities can be inundated with animals and their owners evacuating from these areas, and the community plan for animals must be implemented to deal with the situation. In major disasters the host community may have to provide long-term care to humans and animals who are not allowed to return to their homes for some time, if ever.

II. Know the Animals in the Community

In order to develop an effective community disaster plan for animals, it is imperative that an accurate and detailed assessment be made of the numbers, types, and locations of animals in the community. A census should be conducted of the animals in the community.

Companion Animals – A rough estimate of the numbers of dogs and cats in a community can be calculated if there are licensing requirements. However, even in communities with high compliance of licensing laws, a percentage of animals are not registered. By following the steps below, a truer picture of the number of

companion animals in the community can be obtained.

1. Determine the number of households in the community. This can be done by contacting emergency management or the property appraiser's office.
2. Using the percentages in the table on page 6, determine the number of households in the community that own dogs, cats, birds, and horses.
3. Multiply those numbers by the average number of each species owned per household. This is the estimated number of each species in the community.

For example, in a community with 100,000 households, the number of households owning dogs would equal 36,500. If each of those households had an average of 1.52 dogs, the total number of dogs in the community would be 55,480.

The math would look like this:

$$\begin{aligned} 100,000 \text{ (households)} \times 0.365 \text{ (percentage with dogs)} &= 36,500 \text{ (households with dogs)} \\ 36,500 \text{ (households with dogs)} \times 1.52 \text{ (average number of dogs per household)} &= 55,480 \\ &\text{(total dogs in the community)} \end{aligned}$$



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Studies conducted by the American Veterinary Medical Association in 1992 revealed the following number of pets per household:

	Percentage of Households Owning a Pet	Number of Pets Per Household
Dogs	36.5	1.52
Cats	30.9	1.95
Birds	5.7	2.16
Horses	2.0	2.54

Below are sample calculations for determining the number of companion animals in a community with an estimated 100,000 households.

Dogs: $100,000 \times 36.5\% = 36,500 \times 1.52 = 55,480$
 Cats: $100,000 \times 30.9\% = 30,900 \times 1.95 = 60,255$
 Birds: $100,000 \times 5.7\% = 5,700 \times 2.16 = 12,312$
 Horses: $100,000 \times 2.0\% = 2,000 \times 2.54 = \underline{5,080}$

Total: 133,127

Develop a list of all known private and public animal shelters, veterinary clinics or animal hospitals, breeders, pet stores, boarding kennels, greyhound kennels or tracks, etc. The easiest place to start is the telephone book's "Yellow Pages." The list should include contact names, addresses, business and home numbers, and emergency contact numbers for "back" lines, pagers, and cellular phones. Encourage these facilities to develop written disaster plans, including evacuation plans. Note the location of the facility so that it can be checked post-disaster for damage and any animal injury or death.

Agricultural Animals – Next, gather information about the agricultural operations (such as dairy, poultry, hog, or cattle farms). The Cooperative Extension Service, large-animal veterinarians, farriers, feed stores, telephone books, and various animal-industry agencies can help in this process. The state's Department of Agriculture can provide data on cattle and horses from records of brucellosis tests and Coggins registrations. These data are helpful, but not complete. Since Coggins tests are not

required for horses remaining on their own property, many horses are not registered.

However, horses being moved from their owner's property must have proof of a negative Coggins test. During an evacuation, this can complicate procedures because some horses will not have a valid Coggins test, or the owner is not able to produce the proper paperwork. Depending on the policies of the state Department of Agriculture, horses without proof of negative Coggins may need to be segregated from other horses until the test can be done or proof of a previous test produced.

Identify the location of commercial and agricultural animal facilities and obtain contact names, numbers, emergency contact numbers, etc. These businesses should be educated about the potential disasters that could impact their area and encouraged to develop written plans for their animals, including evacuation plans and the purchase of generators. They should be added to the list of sites to check post-disaster for damage and animal injury or death.

Other agricultural animal operations may involve goats, sheep, llamas, ostriches, rheas or emus, geese, ducks, and other domestic farm animals.

Small Exotic Pets – A good animal disaster plan recognizes that the animal population of any community is made up of many types of animals, not just dogs and cats. The plan should accommodate nontraditional, or exotic, pets such as reptiles, ferrets, and birds; and the plan should include so-called "pocket pets," such as gerbils, hamsters, and guinea pigs. While it is hard to know accurate numbers, local veterinarians and pet stores that sell the animals and/ or their supplies may provide some information. Some of these animals have special care or food needs that must be planned for in advance.

Exotic Wildlife – Of special consideration in any community disaster plan is the handling of

exotic, more dangerous animals that could get loose in an emergency. These animals may belong to a commercial zoo or other animal facility, or to a private individual. Some states have little or no regulation of personal ownership of exotic animals such as lions, tigers, and venomous reptiles. Other exotics (such as ostriches, emus, and rheas) are being commercially bred or are in game farms where they are commercially hunted.

It is important to first determine the state laws, if any, regarding the ownership of exotic animals. Then, try to determine the scope of exotic animal ownership in the community. If there is a zoo or other wild animal facility, meet with the director to obtain a copy of the facility's current animal inventory and emergency plan. If there is no plan, work with the facility to develop one. The HSUS's *Disaster Planning for Animal Facilities* is a good start, but more information can be obtained from zoological organizations. Part of the facility's plan must include provisions for evacuation or an animal's escape.

Once the zoo has a disaster plan for its animals, encourage its involvement in the community's disaster plan for animals. Its resources, such as trained animal handlers, caging, and vehicles, can be an asset to the plan as it deals with the issue of private ownership of exotic wildlife.

If the state regulates ownership of exotic wildlife, obtain a list of such animals in the community. Note that this is undoubtedly not a complete picture since some people keep such animals illegally, but it is important to locate as many as possible. If there is no state regulation of exotic or dangerous wildlife, try to locate privately owned animals by speaking to veterinarians, feed stores, and local animal clubs and checking the newspaper's classified ads. Some people may not admit ownership or refuse to give information on the types and number of animals in their care. ***An attempt should be made to educate them that an emergency plan is essential to the survival of these***



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animals after a disaster: A lion roaming the streets after a tornado may be killed if emergency workers do not know who the owner is and how to safely and humanely capture the animal.

Encourage the owners of exotic wildlife to join in the development of a community plan. Their knowledge and skills may prove useful in dealing with wildlife of all types after a disaster.

Native Wildlife - A serious challenge in community disaster plans is what to do with displaced or injured wildlife. After a natural disaster, the number of calls about wild animals can skyrocket at a time when the community is having difficulty caring for domestic animals. Wildlife rehabilitation facilities may quickly be overwhelmed.

Disaster relief for wild animals comes with a different set of conditions than companion animal rescue and relief. For example, state fish and game departments generally recommend that all apparently uninjured wildlife be left alone. There are good reasons for this:

- The stress of capture/confinement may be harmful to the animal's health.
- The animal may carry diseases that are transmissible to people and/or domestic animals.

- Wild animals may be susceptible to diseases from domestic animals.
- Wild animals may adapt too well to the care and treatment received during captivity. This will reduce their chances of survival after they are released back to the wild.

Injured wildlife should be transported to licensed, qualified wildlife rehabilitation centers for treatment or euthanasia. Healthy wild animals should be released back to the wild as close to the original place of capture as possible. Some states have strict policies for the release of wildlife. By working with fish and wildlife departments ahead of time, the community disaster plan for animals can outline actions that can be taken to assist wild animals impacted by emergencies.

Pre-Event Assessment Maps

Once an accurate assessment is made of the animals in the community, a map should be made of the locations of all major animal facilities and other large populations of animals (such as residential areas). Work with the local emergency management agency on this effort, since it probably can provide detailed maps of the community. Animal facilities and populations can be highlighted on the map with colored markers or push pins noting their locations. Then, if a disaster occurs in one part of the community, it is easier to visualize its impact on animals. For instance, by tracing a tornado's path on the map, animal rescue teams can narrow the focus of their assessment and response to specific animal facilities or residential areas.

Maps can also be used as part of the public education campaign. Ideally, these maps could be developed in an overlay format where each page shows the specific types of animal facilities and the known hazards in the community such as railroad tracks, highways, chemical manufacturing plants, and nuclear power plants. Facilities in areas with a high potential for evac-

uation could be identified and educated about their specific need for an animal disaster plan.

Some communities are also using Global Positioning Systems (GPS) to pinpoint the exact locations of animal facilities by satellite. This allows for computer models to be made of the maps. In major disasters where traditional landmarks such as road signs and buildings are destroyed, the location of the facilities can still be accurately pinpointed. Check with emergency management to see if this technology is available locally.

III. Developing a Plan

Now that potential disasters have been identified and the estimated number and types of animals in the community determined, it is time to develop the plan. Any such plan should address four phases of disaster planning: mitigation, preparation, response, and recovery. As animal issues are considered, actions that should be taken in each phase of a disaster can be spelled out.

Mitigation – This phase involves making permanent changes to properties or facilities to eliminate or minimize the impact of disasters. In a community plan for animals, this may include such activities as encouraging animal facilities to locate out of flood plain or storm surge areas and requiring owners of dangerous exotics to have disaster plans for evacuating their animals or confining them safely on-site.

Preparation – This phase involves taking steps to prepare for specific emergencies, such as purchasing or arranging for access to generators, additional caging, or other supplies; training volunteers; and finding sites for temporary animal shelters or pet friendly shelters.

Response – This phase involves taking action when a disaster is imminent or is occurring. This may include the activation of animal res-

cue teams, the opening of temporary animal shelters or pet friendly shelters, the distribution of animal feed and supplies, and the operation of emergency veterinary clinics. When planning for the response phase of the plan, consider all dangers to the community, especially those that can occur with little or no warning. The disaster plan should be written for both the “watch” and “warning” phases of disaster notification, and actions should be appropriate to the stage of the emergency. For rapid onset events, such as hazardous materials spills, there may be no warning at all.

Recovery – This phase involves setting guidelines for helping the community return to its pre-disaster state, to whatever extent this is possible. This should include short-term and long-term goals outlining what will take place over the course of days or months after a disaster. For instance, a community disaster plan for animals may set up contingencies for long-term fostering of animals whose owners have lost their source of income or may be seeking housing that will allow them to keep pets.

IV. Community Involvement— Creating an Animal Disaster Planning Committee

An effective community disaster plan for animals will depend on the individuals and organizations that come together to develop, maintain, and implement the plan. There must be good working relationships between the government emergency response agencies (emergency management, fire departments, law enforcement agencies), humane society or animal control agencies, other organizations and individuals involved in animal care professions, support agencies, and private individuals who

want to assist in making the plan succeed.

In considering who should be involved in a community animal disaster planning committee, think *inclusive*, not *exclusive*. The following are some of the agencies and organizations that should be invited to participate in the planning process:

- Emergency Management
- Animal Services/Control
- Humane Society/SPCA
- Veterinarians/Veterinary Technicians
or Animal Health Technicians
- Law Enforcement
- Fire/Rescue
- Animal Groups or Clubs (kennel clubs,
breed rescue groups, ferret rescue groups,
bird clubs, horse associations, etc.)
- Cooperative Extension (4-H Clubs, Future
Farmers of America, etc.)
- Wildlife Agencies
- Wildlife Rehabilitators
- Farriers
- Pet Supply Industry (pet supply stores,
feed stores, etc.)
- Dog and Cat Breeders
- Boarding Stables
- Boarding Kennels
- Commercial Agricultural Industries
(dairy, poultry, cattle, hog, etc.)
- Dog or Horse Tracks
- Livestock Associations/Farm Bureaus
- Fairgrounds/Rodeo Grounds
- Zoo/Wildlife Parks
- Home-owner Associations
- American Red Cross Chapter
- Salvation Army
- National Guard
- Ambulance Services
- Media
- Ham Radio Operators
- Health Department

Other local government agencies (such as Parks and Recreation and Solid Waste Management)

Utilities

Food Banks

Chamber of Commerce (be sure to include franchise associations)

In addition to having representatives on the committee, each of the participating agencies and organizations should educate their own members about disaster planning for animals; and hopefully they will encourage their members' involvement in volunteer aspects of the plan. Some agencies or organizations publish newsletters or put out educational displays for the public. These are excellent vehicles for getting out the message about planning for pets in disasters.

Networking Considerations

The development and implementation of a disaster plan for animals should be a community project. The committee should outline its mission, short-term and long-term goals, and the tasks that need to be accomplished to achieve a viable plan. One of the first items to be discussed by the committee should be the roles each agency or organization will play in developing the plan. A lead agency should be appointed to manage the development of the overall plan.

Generally, the agency expected to take the lead in developing the community disaster plan for animals is the local animal services/control department because its mission involves animals and it is a government entity. However, this agency may not be able to shoulder the primary burden of developing and implementing the disaster plan. Often, it has its hands full taking care of animals in its shelter; its employees may be victims themselves, or its staff may be committed to essential tasks such as capturing animals that are aggressive or a danger to the public, handling animal-bite investigations,

or rescuing animals in impacted areas.

The local humane society/SPCA may be in a similar situation. If it is an animal sheltering facility, the care of its animals would be its top priority in a disaster. The humane society may simply be a small group of volunteers who foster animals, promote humane education, or operate a sterilization program or clinic. They may not have the resources to be the lead agency for animal disaster planning efforts.

Another important group in a community disaster plan for animals is veterinarians. However, they too may be limited in their resources. They may be victims themselves and may be doubly impacted if their clinic and home are damaged or destroyed. They may be overwhelmed with providing emergency veterinary care for their clients' animals and others.

In the final analysis, the lead agency in disaster planning for animals efforts may vary from community to community, but getting the job done is more important than who is doing it. It is vital, however, that the lead group involves the other agencies and organizations in the effort. They should also ensure that the animal plan is integrated into the community's overall emergency plan and into the plans of support agencies and organizations. The lead group should cultivate an awareness of animal issues within those other plans and ensure that emergency management drills and simulations include realistic scenarios involving animals.

There may be agencies or organizations on the animal disaster planning committee whose normal political or business agendas conflict. It is important to put those differences aside. In past disasters, cattlemen have used their trailer equipment to help evacuate large numbers of companion animals, and humane groups have worked with agricultural owners to save farm animals from flood waters.

The community disaster plan for animals should include cooperative agreements with a wide range of organizations and agencies. Such arrangements should be made in advance of disasters, and contact should be renewed periodically to ensure that personnel changes do not result in a breakdown of communications. The disaster plan file should include copies of written agreements with other agencies and individuals and contact information for key individuals and groups. These names and telephone numbers should be filed so they can be found quickly when they are needed, and they should include emergency contact numbers such as cellular phones, pagers, and home numbers.

Cooperative agreements are particularly useful with these types of agencies and individuals:

- All government and nonprofit emergency relief agencies in local and surrounding jurisdictions
- State and national animal protection organizations
- All animal shelters in the state and bordering areas
- Local veterinarians
- Non-animal groups that may be of assistance to the animal efforts in disasters

Be on the lookout for individuals with special training or expertise with wild or exotic animals and livestock, individuals who are licensed animal health technicians, or those who are bilingual.

Those members of the committee representing animal issues are an excellent source of information and contacts on the number and type of animals in the community. They should be able to identify where members of their organizations are located and encourage them to have disaster plans for their animals and facilities.

Once the committee is formed and the mission, goals, and tasks have been agreed upon, divide the group into functional subcommittees. Each

subcommittee is responsible for working on specific aspects of the plan, with recognition of pre- and post-disaster aspects. By breaking the overall workload into manageable pieces, it ensures that each piece is done well and no person or group is responsible for the overwhelming task of developing the entire plan.

Some of the subcommittees that need to be created include:

Temporary Animal Shelter/Pet Friendly Shelter Subcommittee – Responsible for locating buildings that could serve as temporary animal shelters and/or pet friendly shelters. (Sites should accommodate small and large animals and be easy to locate and close to evacuation routes.)

Recovery Site Subcommittee – Responsible for locating sites for emergency veterinary care centers, and for receiving and storing animal supplies and feed.

Animal Care Subcommittee – Responsible for recruiting, screening, and training volunteers who will provide hands-on care for animals. (Volunteers may include veterinarians, veterinary or animal health technicians, animal control or humane society workers, groomers, and obedience trainers.)

Animal Rescue Subcommittee – Responsible for developing a plan for quickly assessing the impact of the disaster on animals. (This includes damage or destruction to facilities housing animals and the escape of dangerous animals into the community. This team should be highly skilled and trained in both animal handling and disaster response.)

Volunteer Coordination Subcommittee – Responsible for recruiting, screening, training, and placing volunteers in appropriate jobs (pre- and post-disaster).

Supply Subcommittee – Responsible for procuring supplies such as medicines, food (for

humans and animals), pet supplies (leashes, bowls, collars), water, blankets, towels, cleaning supplies, and bleach.

Equipment Subcommittee – Responsible for acquiring items that are durable and reusable, such as cages, carriers, traps, generators, fencing materials, ropes, chain saws, tools, tractors, lights, fans, tarps, and signs for animal relief facilities.

Transportation Subcommittee – Responsible for procuring trailers and other transportation equipment for evacuation of animal shelters, vet clinics, stables, boarding kennels, zoos, wildlife rehab facilities, etc., for the transport of injured or lost animals, and the movement of animal supplies between storage facilities and animal relief sites.

Identification Subcommittee – Responsible for developing a system of identification for all animal relief workers and volunteers, as well as a tracking system for identifying animals at temporary animal shelters or pet friendly shelters.

Communication Subcommittee – Responsible for the communication systems between the emergency operations center, animal care centers (animal shelters, temporary shelters/pet friendly shelters), animal rescue teams, emergency veterinary clinics, storage/distribution centers, etc. (Depending on the disaster, standard communication methods such as regular or cellular phones, may not work. If possible, in a major disaster, ham radio operators should be located at each of the major animal relief centers.)

Public Relations/Education Subcommittee – Responsible for educating the media and the public about disaster planning for pets and other animals. (This group would develop public awareness seminars and the creation of a speaker's bureau for all types of disasters. It would oversee the development and distribution of brochures and public service announce-

ments for radio and television, and it would work with local animal facilities in the creation of their disaster plans.)

There should also be a system in place to alert members of the animal disaster planning committee when an emergency has occurred and what steps they should take next. In some cases, they may need to begin implementing their aspect of the plan, while others may need to report to a pre-designated site to regroup and determine the next plan of action. The alert can be done via phone, pager, fax, or e-mail, depending on the magnitude of the disaster and the preparation time available, if any.

All committee members should have written disaster plans for their families, businesses, and animals. If they are prepared for an emergency, they are more likely to be available to help implement the community animal disaster plan.

V. Volunteers

Volunteers are essential to community disaster plans for animals. In any disaster, well meaning people will come forward wanting to help animals. However, if volunteers are not properly screened and trained, they can create additional management problems. The key is to train them in advance. A few well-trained volunteers can subsequently assist in the training of volunteers who show up after the disaster. Trained volunteers already know the organizations directing disaster relief for animals and the policies that have been implemented.

Some communities have developed “volunteer centers.” These are community databases of residents who wish to volunteer their time and skills to different causes. They can be an excellent resource for finding volunteers with an interest in helping animals.

Spontaneous volunteers, those who arrive after a disaster has occurred, can initially fill the niche of performing simple tasks that are



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important but don't require intensive training—emptying trash, organizing files, providing general information to the public, running errands, or even providing food and drinks to trained workers. Those jobs have to be done and can drain the time and energy of trained animal relief workers. As volunteers show more complex skills, they can be integrated more fully into the overall operation.

The ability of volunteers to perform assigned tasks safely and adequately, follow emergency procedures, and carry out the disaster relief plan depends on the quality of training provided. Training programs and practical exercises can be developed in cooperation with local emergency management officials. Basic volunteer training should include first aid (for humans and animals), cardiopulmonary resuscitation (CPR), basic animal handling skills, and safety training.

Ask volunteers to create written disaster plans for their home, family, and pets. The better prepared they are at home, the more likely they are to be available to assist with the community disaster response effort. Volunteers should discuss their involvement in the community disaster plan with their employers to see if they can be released from work without penalty when needed.

Provide volunteers with identification so they can be distinguished from the general public at animal relief sites. This identification can be as simple as color-coded identification badges that are presented in conjunction with other photo identification such as driver's licenses. The color of the badge would designate the duties of the worker or volunteer.

Volunteers should be encouraged to participate in the relief effort but discouraged from moving from their assigned area of operation without permission. This is for their own safety and the safety of the animals. In a temporary animal shelter, persons moving between animal areas can spread disease.

Generally, states have laws governing the use of volunteers in disasters. Local emergency management or other agencies that use volunteers on a regular basis, such as the American Red Cross, can assist the community animal disaster planning committee in determining the legal ramifications of using volunteers in its efforts.

VI. Services to Be Provided

Communities and their animals will need to be provided with a number of services during times of disaster. The following are some of the most important ones:

- Organizing animal rescue teams
- Picking up lost or injured animals
- Evacuating animals
- Organizing temporary animal shelters
- Organizing pet friendly shelters
- Developing foster pet care programs
- Providing for the pets of special needs people
- Providing emergency veterinary care
- Providing information and referral to the public and media

- Procuring and distributing animal food and water
- Record keeping
- Managing offers of donated goods and services

Organizing Animal Rescue Teams

Individuals or groups conducting animal rescues should have extensive experience in disaster response, animal handling (of all types of animals), first aid for humans and animals, and knowledge of local and state laws regarding animals. They should be able to provide proof of training and should agree to work within the local community animal disaster plan. Their knowledge of the type of disasters that impact the area, the type of animals in the community and their locations, and the local emergency response system is vital to their ability to assist animals in danger.

Animal rescue teams need to acquire or have access to an array of equipment, safety gear, clothing, and vehicles. Since this can be an expensive proposition, the community animal disaster planning committee should consider seeking funds to help equip its animal rescue team and assist with the cost of training. The team will also need to have access to four-wheel-drive vehicles, boats, helicopters, and trailers. This may be accomplished through local emergency management or agreements with local companies owning such vehicles.

Ideally, each community would develop and train its own animal rescue team. However, in disasters of a larger scale, teams from surrounding communities, the state, or other parts of the country may be called in to assist. In these cases, it is beneficial for the local team to divide its members among the teams from outside the area. This gives teams from other areas the information they need to operate effectively, including locations of animal facilities, available local resources, back roads to areas that

may be cut off by flood waters or other barriers, and local contacts with law enforcement, fire/rescue or emergency management.

There will also be times when animal rescue teams discover animals who apparently became injured or diseased before the disaster. Teams may also discover sites where they suspect dog-fighting or cockfighting, or other illegal activities. These are situations that should be referred to local animal control, humane, or law enforcement officers. If the animal(s) is not in imminent danger or in an extreme state of suffering, the situation may need to be dealt with at a later date. Local authorities should conduct such investigations and make determinations on the possible seizure of animals.

When areas in a community have been declared restricted or off limits during disasters, animal rescue teams should consult law enforcement and emergency management personnel to determine the safety of entering the area to conduct animal rescues. In some cases, teams may need to be escorted through dangerous sections to search for injured animals or retrieve animals left behind. However, the safety of team members is paramount. If an area is deemed too unsafe for entry, animal rescues will need to be put on hold until authorities give permission to proceed.

Members of the animal rescue team may accompany human rescue teams as they conduct their search for people injured or killed in the disaster. Animal rescue teams can then take custody of animals recovered in the search.

It is essential that animal rescue teams keep records of their activities, especially the pick-up or rescue of any animals that are taken to animal relief centers, such as animal shelters, temporary animal shelters, or emergency veterinary clinics. They should record information on where and when the animal was found, by whom, and the condition of the animal (see Record Keeping, page 22).



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Picking Up Lost or Injured Animals

Animal control officers and animal rescue teams should be responsible for the pick-up of lost and injured animals, though in many cases the general public will find animals and bring them to animal shelter sites. Many animals can be dangerous to handle if they are injured or frightened, so the public should not be encouraged to attempt rescues themselves. If possible, phone numbers should be posted or given to the media for the public to use when reporting injured or lost animals to appropriate agencies. However, if the public brings lost or injured animals to animal relief sites, they should be asked to give as much information as they can on the location the animal was found. This could be crucial to efforts to reunite the animal with its owner.

Evacuating Animals

A plan should be in place to assist with the evacuation of animals from part or all of the community. Of course, animal owners should be encouraged to have their own evacuation plan and pet supply kits ahead of time. Animal facilities should have contingency plans for either evacuating the animals or implementing a plan to protect them as much as possible.

The community disaster plan for animals should recognize that in rapid-onset events, pet owners may be at work or on vacation and unable to return home to retrieve their pets. If an emergency occurs at night or on weekends, operators of some animal facilities may not be able to get to the facility to implement their disaster plan, or the number of animals involved may be too great for an evacuation. There is also the likelihood that some animal owners will not take any precautions to prepare for disasters.

In the process of encouraging facilities to draw up disaster plans for their animals, it is possible to determine which facilities may need assistance later on with evacuation. The type and number of vehicles needed for the evacuation should be predetermined and arrangements made for drivers, caging, qualified animal handlers, and evacuation sites. It should be agreed that the animal facility will be responsible for the cost of the evacuation, such as rental of trucks and the purchase of gas, lodging, and food. Many animals can be moved in cattle trucks and horse trailers. The community plan for animals should list volunteers and local government agencies with those resources.

Some facilities can provide temporary animal housing during evacuations. Figure out in advance how many and what type of animals can

be sheltered in the community by the following types of facilities during a disaster:

Animal Shelters

Veterinary Clinics

Boarding Kennels

Horse Farms

Boarding Stables

Temporary Animal Shelters

Pet Friendly Animal Shelter

Portable Corrals for Livestock/Horses

Portable Dog Kennels

Portable Fencing

When a disaster such as a hurricane or wildfire is anticipated, animal facilities should be contacted to begin evacuation procedures immediately. Large vehicles can be a hazard on the road during major evacuations, so the plan should include early evacuation and the use of back roads that may have less traffic than major highways. During summer months, the evacuation should take place, if possible, during nighttime or early morning. Unless the vehicle being used is air-conditioned, the animals inside can experience heat stroke.

In a community-wide evacuation, many of those involved in the disaster plan may find that they cannot assist with implementing the plan until their own family and animals are safe. In such cases, it is important that the disaster plan for animals includes information on contacts in neighboring counties or on the state level through mutual aid agreements.

Organizing Temporary Animal Shelters

In a disaster impacting a community, it could become necessary to relocate an animal shelter operation and/or set up a temporary field animal shelter. While the American Red Cross and others provide shelter, food, and other services to people affected by disasters, usually animals are not permitted in mass-care shelters for safety,

health, and sanitation reasons. Clearly, humane sheltering of those animals should be part of the community plan.

There are two basic scenarios for setting up temporary animal shelters in emergency situations. The first is when the existing animal shelter itself must be evacuated to another location. That temporary animal shelter may also then contain animals evacuated from the community or lost due to the disaster.

The second is when the current shelter is still functional but the number of animals in need of temporary housing overwhelms its capacity. This overflow may come from animals brought in by rescue teams or good samaritans or by owners who have evacuated and cannot find any other place to take their pets on a short-term basis. In some cases, pet owners may need to place their animals in foster care or even give up custody of their animals forever. Good record keeping must be done on all animals brought to the temporary animal shelter, especially information on where the animal was found.

Potential temporary animal shelter sites can include empty buildings, fairgrounds, barns, school gyms, or buildings with fenced-in areas. It is certainly beneficial to find locations near or adjacent to established human shelters to allow owners to search for lost animals or provide care for their own pets housed there. Facilities for temporarily sheltering livestock and horses might include fairgrounds, ranches, or boarding stables.

If possible, the plan should identify several sites in different parts of the community that could serve as temporary animal shelters, in case some facilities are rendered unusable by the disaster. If the facility is one that is rented out on a regular basis, check with its operators to see if they would insert a clause in the renter's contract declaring the agreement null and void during emergencies in recognition of its importance

as a temporary animal shelter.

Note: If local fairgrounds are designated a primary temporary animal shelter in the community animal disaster plan, check with local emergency officials to make sure the facility is not in their plan as a major staging area for human relief efforts and supplies.

Without advanced planning and training, setting up a temporary animal shelter can be a nightmare. Suitable facilities must be pinpointed ahead of time and appropriate arrangements made for transport of animals to the site, caging, fencing, veterinary care, feeding, sanitation, record keeping, identification of animals, etc.

Organizations that shelter people have already learned the lesson of securing a back-up site before an emergency takes place. There need to be agreements signed ahead of time, along with contact names and numbers, so that the temporary facility can be opened at any time of the day or night.

Organizing Pet Friendly Shelters

As public education campaigns are more successful in convincing animal owners not to leave their pets behind during disasters, more families are seeking safe haven with their animals in tow. While temporary animal shelters fill the need by providing a safe place for pets, some owners resist being separated from their animals and some pets do not adjust well to being in a temporary animal shelter without their owners or have special needs that are hard to meet in that environment.

Ideally, pet owners would find hotels or motels, friends or family that would allow them to keep the animal with them. However, sometimes their options are limited by a lack of finances or space in the hotel/motel market, or

family and friends may be displaced or disaster victims also.

Because as a general rule human evacuation shelters do not allow animals, some communities are exploring the option of providing “pet friendly shelters.” These are shelters that put animals and their owners in close enough proximity that the owners can provide the majority of care for their pet(s).

It is important when creating pet friendly shelters to work with those agencies that provide mass-care housing for people, such as the American Red Cross or Salvation Army. These groups can assist pet owners with referrals to pet friendly or temporary animal shelters, provide training in the operation of sheltering facilities, and in some cases provide supplies such as cots, food, and water. The buildings to be used as pet friendly shelters should meet the standards of safety set by emergency management and be free of other obligations during declared emergencies. Again, there should be a clause in the contract with renters that allows for the contract’s cancellation if the site is needed as a pet friendly shelter.

There are three basic types of pet friendly shelter. A community may find that one or all three need to be explored to provide adequate housing for displaced pets and owners. The idea is to keep people and their pets as close together as possible. This allows animal owners to take care of their own pets, it is less stressful for both animal and owner, and it allows the pet shelter to operate with a minimum of staff.

1. People and their pets are in the same room – This is the least labor-intensive arrangement, as the pet owners are almost solely responsible for the feeding, exercising, and clean-up of their animals. Generally, these shelters develop rules outlining their policies, such as removal of animals from crates and proper clean-up of animal waste. It should be made clear to the general public that this evacu-

ation shelter allows animals, so that anyone who is uncomfortable around animals or has allergies that could present health problems can be directed to a non-pet evacuation facility.

2. People and their pets are in the same building, but in separate areas

– This arrangement allows for animal owners to provide for their pets without being in the same room. This is slightly more labor intensive for those operating the facility because there may be periods of time when the owners are not immediately available to take care of their pet's needs. Qualified animal care workers should be on hand to take care of animals when the owners cannot do so. A record should be kept of visits by the animal's owners to ensure that adequate care is being provided.

3. People and their pets are located in separate buildings of varying distances

– This option is more labor intensive than the first two because more qualified animal handlers and volunteers are needed to care for the animals when owners are unable to get to the facility because of conditions presented by the disaster (high winds, rain, snow, etc.) or a lack of transportation.

Any of the pet friendly shelter options should be staffed by qualified animal care staff, veterinary or animal health technicians, and if possible, a veterinarian. Volunteers can assist by managing feeding areas and assisting with the set-up of the shelter and the daily clean up, registration, and enforcement of shelter rules relating to people (such as no smoking or curfews). Animal care staff should monitor and enforce rules applying to pets (such as confinement of animals).

Educate pet owners ahead of time about the supplies they'll need for their animals if they evacuate to the pet friendly shelter. All animals should be in crates or cages; have an adequate supply of food, water, and medications; and have collars, tags, leashes, and proof of vaccinations.

The pet friendly shelter plan should expect that some animal owners will arrive at the facility without adequate supplies. This may be because they were not aware of the requirements, they were unable financially to comply, they chose not to comply, or the disaster developed so quickly that they did not have time to gather supplies. Whatever the case, the community plan should provide for stockpiling of basic supplies.

Plans should also be made for animal owners who do not comply with the rules of the pet friendly shelter by, for example, not providing food and water for their animal or not keeping it confined or under their control at all times. The animal should be removed to another part of the facility or to a temporary animal shelter and cared for by staff and volunteers, and the owner should be moved to a human evacuation shelter, if conditions are safe to do so.

It should be noted that a pet friendly shelter should be the last resort for animal owners. As with human evacuation shelters, there are health concerns due to the crowding together of people and animals. There is little privacy and a lot of noise and other stress-inducing problems. Accommodations with friends, family, or in hotels or motels should be the first choice of the majority of pet owners.

Another option to consider as the community begins its recovery is providing temporary day-care facilities for pets while their owners are returning to the disaster area to retrieve belongings, make arrangements for repairs, or processing applications for relief assistance. The pet owner may be staying in the pet friendly shelter or may be in other housing arrangements where it is not safe to leave the animal unattended.

Developing Foster Pet Care Programs

In smaller events, temporary shelters or other animal housing facilities may be able to handle displaced animals or animals needing care while their owners begin the process of recovery. However, if these resources cannot handle the number of animals needing assistance, an alternative is to place the animals in a temporary foster care program until they can be returned to their owners or the owners are located. Foster care means that an animal is cared for in a private home/stable within the community on a temporary basis.

If the scope of the disaster is very large and temporary shelters are established, a foster program may be considered as animals are reclaimed by their owners and the need for the temporary shelter diminishes. The temporary shelter can then be closed and remaining animals handled through the foster program.

However, fostering into the community at large should be a last resort and the program used with caution. It can become chaotic when animals are moved away from a central location where their owners can reclaim them easily. Unless care is used in record keeping, it may be impossible to locate the foster home at a later date.

Foster homes should be thoroughly screened before animals are placed in them to ensure the safety of the pet and the foster family. Foster animals should be matched with a foster family according to the same principles used in regular animal adoptions. Some of the questions may include:

1. What other animals does the foster family have? Are they compatible with the type of animal being fostered?
2. Are there children in the family? What are their ages?

3. What are the living conditions for the foster pet? Will it be kept indoors or outdoors?

4. Does the family have a fenced-in yard? Where do they intend to keep the foster pet?

5. Do they have the financial resources to provide for the animal?

6. Will they be willing to give up the animal if the owner shows up to reclaim it?

On the animal side of the equation, a proper evaluation must be made of the pet:

1. Is it known whether the animal being fostered is good with children? With other animals?

2. Does it have any medical or behavioral problems that may be difficult for the foster family to live with?

3. Does it have a valid rabies vaccination? If not, a scratch or bite of a family member may mean the animal has to be quarantined or even euthanized to be checked for rabies.

In many cases, once the animal is in foster care, it is the responsibility of the fostering family to provide for all its needs. Before the animal goes to the foster home, the foster family should enter into a contractual agreement with the animal's owner, or with the agency coordinating the foster program, stipulating the conditions for provision of food, water, humane housing, and veterinary care to the animal in their charge. The agreement must stipulate who will be responsible for the cost of maintaining the animal; this in some cases may be substantial.

The owner of the animal, or the agency coordinating the foster program, should agree to follow up with the foster family to determine if the placement is working out. In the agreement, there should be a date by which the owner of the animal must retrieve it from foster care or lose custody. In some cases the owner may in essence abandon the animal in foster care.

Unless the owner makes arrangements with the foster family to continue care for an extended period of time, custody should revert to the foster family or the agency coordinating the foster program.

Ideally, a community plan would include an already developed foster pet program with a list of previously screened foster homes. If these families are not impacted by the disaster and are available for fostering, that resource should be depleted before fostering into the community at large, or beyond.

Providing for the Pets of Special Needs People

Some communities are making special provisions in their community animal disaster plans for taking care of the pets of people with special needs. These are people who have mental or physical handicaps or medical problems that require assistance in evacuation during emergencies. Some special needs people have companion animals, and the bond they share with their animals may be particularly strong. In some cases, the pet is their primary companion 24 hours a day, seven days a week.

In many communities with special needs people, an annual survey is conducted to assess the level of care the people would need during and after an evacuation. The agency conducting the survey should be approached to include a question regarding the existence of any pets. If there is a companion animal, members of the community animal disaster planning committee can contact the owner or caregiver to determine if provisions have already been made for care of the pet during emergencies. If no plans have been made, a brochure on disaster planning for pets should be sent and a follow-up phone call made to discuss options that are available for the animal, such as private housing with a friend, relative, veterinarian, or boarding kennel.

If no such option is available, the community

disaster plan should include procedures for evacuation of the pet, with the proper pet supplies and papers, to a safe location. Make arrangements for the animal to be evacuated before or with the owner. The animal may be moved to a previously arranged veterinary clinic, animal shelter, or temporary animal facility. While animal shelters are discouraged from taking pets from the public during emergencies, they can probably handle the small number coming from the special needs program. The key is to make sure proper record keeping is done so the animal and owner can be reunited at a later date.

Providing Emergency Veterinary Care

Because of their expertise in animal health and care, veterinarians can assist animals directly in need because of injuries or disease, they can offer advice on setting up temporary housing that will prevent the spread of disease to humans and other animals, and they can address special disaster-related medical concerns such as contaminated water and food, the risks from mosquitoes and biting flies during a flood, stress related to heat, and potential rabies situations. The community disaster plan should make special reference to veterinarians who specialize in the care and treatment of horses, livestock, birds, wildlife, or exotic animals.

Often veterinarians are involved in local, regional, or state veterinary associations. These associations can provide indispensable assistance to veterinarians and the communities impacted by a disaster. Associations can take the lead by matching veterinary clinics in evacuation zones with clinics in safer areas, by allocating veterinarians and veterinary supplies to clinics providing emergency care or temporary animal shelters or pet friendly shelters, and by providing veterinarians for field rescue involving animals that cannot be safely or humanely transported.

Veterinary clinics that are designated as emergency veterinary care sites should either be equipped with a generator or have access to one immediately after the disaster occurs. Additional veterinary supplies and medicines should be stockpiled at the facility, or nearby. If possible, animal clinics chosen as emergency care sites should be located close to animal sheltering sites, they should be easy to find, and they should have access to major roadways.

Providing Information and Referral to the Public and Media

Animal rescue and relief efforts are only effective if those who need the services know of their existence. Efforts should be made everyday to educate the general public about providing for their animals during emergencies. However, once a disaster is imminent or has occurred, there must be continuous efforts to inform local citizens about what is being done for the animals in the community. This can be accomplished through local media (radio, television, newspaper); through fliers posted at human

evacuation shelters, feeding stations, or disaster relief centers; or through other human relief agencies working in the area. The public will need to know about hotels/motels that allow pets, the existence of pet friendly shelters or temporary animal shelter sites, animal rescue operations, availability of pet supplies, emergency veterinary care, and locations where pet owners can search for lost animals.

Pet owners whose animals were left behind in restricted areas should be encouraged to file a report with the agency in charge of animal rescue efforts. If the animal is confined, the owner should give keys to the building to animal rescue teams so that pets can be retrieved. Pet owners should be discouraged from trying to enter restricted areas themselves to attempt to rescue their animals.

Procuring and Distributing Animal Food and Water

In most disasters, dog and cat food is donated abundantly by major pet food manufacturers, pet supply stores, and the general public.



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However, it can be more difficult to acquire proper feed for horses, livestock, exotic animals, birds, and wildlife. Those members of the animal disaster planning committee with special interest in these animals can advise on proper types of food and potential suppliers.

In many disasters contaminated water or lack of water is a real concern. The community animal disaster plan should make provisions for drinking water for animals and humans alike. Animals and people can go for some time without food, but water is essential. In non-flood situations, if well water is used for horses or livestock but the electricity is out, hand pumps or small generator-operated pumps can be used to draw water. If there is a concern about water contamination, only bottled water should be used for drinking by humans and animals.

Record Keeping

Good record keeping is essential when alternative housing arrangements are made for displaced pets. Paperwork may be fairly simple but should include a description of the animal, especially any distinct markings or other identifying characteristics such as scars, color, or injuries. If there is no known owner, the record should include information on where the animal was found, by whom, and on what date. Each animal should be assigned a tracking number that should be part of the written record of the animal as it is integrated into the temporary sheltering or foster care program. Establishing the record keeping system before an emergency can save time, energy, and a lot of frustration when a disaster strikes.

An essential part of the system is taking Polaroid photos of all incoming animals. Whenever possible, the photo should include the animal's tracking number. This can easily be accomplished by placing a small piece of paper (4" x 5" cards are ideal) with the tracking number next to the animal when the photo is taken or by writing the number in marker in

the lower right hand corner of the photo after it is taken. Check to make sure the photo is clear, since it may be the best identification of the animal available throughout its stay.

Place the photographs in a book so that owners can find their pets by scanning the photos instead of walking through the animal shelter facility. It can be disruptive and stressful to animals to have a constant stream of people walking by. By using photo books of lost pets, the amount of human traffic through the shelter's animal areas can be reduced dramatically.

If the owner requests foster or short-term sheltering, the photo should include both the pet and owner. Obtain as much information as possible on the owner, including address, phone number, and where he or she is currently staying. If the owner is in a mass-care human shelter, hotel/motel, or other temporary lodging, try to get contact information on other family members or friends who could help locate the pet owner when necessary.

An up-and-coming method for reuniting pets and owners is the use of computer databases that put a lost pet's photograph and basic information on the Internet. Pet owners can search for their animal by computer via Internet web sites even if the animal was moved a distance away or the pet owner is now living in another area. The databases also are useful in locating foster homes and new homes for animals, if it becomes clear the owners are not searching for them.

Caution should be taken in returning lost animals to possible owners. There are people who will try to claim animals who do not belong to them. To reduce the chance of a pet being given to the wrong person, very little information on individual animals should be made available to the public. Photographs should display only the animal's tracking number. When someone claims an animal using the photographs, check the paperwork to ensure that the personal information of the person matches that of the



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pet. For example, if a dog was found in one area but the person claiming him lives in a different area, it most likely is not a match.

Unfortunately, there should also be a system for identifying dead animals, and it should include photographs and paperwork detailing location and possible cause of death. In some cases, animal owners need this information for closure in their search for their pet; or if the animal has economic value, this information can be used as proof to insurance companies of the loss.

Managing Offers of Donated Goods and Services

The management of donated goods and services is often overlooked in disaster planning efforts. However, a good system must already be in place to catalog donations as they come in and then retrieve the information when the product or service is needed. Donations can range from animal food and supplies to offers of the use of helicopters or boats.

A storage facility must be located where donations of material goods can be cataloged and organized. This site should be near animal relief sites so that supplies can be acquired

quickly, but not so close that the vehicular traffic, including large trucks, bringing donations does not interfere with operations of the animal facilities.

A master list should be maintained so that an overabundance or shortages of necessary items doesn't occur. Some items, such as veterinary supplies, may need refrigeration. The storage areas should be off-limits to those not assigned to work at the facility, since theft of supplies can sometimes be a problem.

Once the community has entered the recovery phase, those agencies or companies that provided goods and services to the animal effort should receive special recognition of their donation. This gives proper acknowledgment for their donation and increases the chances that assistance will be forthcoming in future emergencies.

VII. Equipment and Supplies

The community disaster plan for animals should include a list of equipment and supplies needed for various emergencies, an inventory of which supplies are on hand, and what supplies and equipment must be secured during an

emergency (and from where). Each subcommittee should have its own list of the items its members need to perform their tasks. Some members will have personal equipment that will be useful in the animal relief effort.

The following is a basic list of priority items; arrange ahead of time to get access to these items the moment disaster strikes:

Communication Equipment and Supplies

Mobile radios

Portable radios (hand sets)

Cellular phones (portable or bag phones)

Base station equipment

Ham radios

Family service radios

Fax machines

Pagers

Fresh batteries

Vehicles

Animal control trucks

Four-wheel-drive trucks

Horse trailers

Recreational vehicles

Boats (pontoon boats, jon boats,
air boats, canoes, etc.)

Helicopters

VIII. Public Health and Safety Issues

Trained animal workers and volunteers must take steps to protect themselves from potential health risks that come with working in a disaster area. Some of the risks, such as chemical spills, are obvious; some are more insidious but still endanger the health of those trying to help animals in their time of need. “Safety First” should be the motto of those working to protect animals in disasters. A sick or injured worker is of little assistance in an animal relief effort.

Numerous vaccines and medications figure into the health and safety equation. Some are the routine childhood vaccinations that most people get before they enter elementary school. In advance of a disaster, the two most important vaccinations for persons having direct contact with animals are rabies pre-exposure and tetanus. (Several recommendations regarding personal hygiene should be strictly followed as well.) It should be noted that vaccines and medications are not substitutes for common sense.

The following recommendations are basic precautionary measures only. They are based largely on information from the federal Centers for Disease Control and Prevention (CDC) and pertain to people involved with emergency work in the United States.

Vaccinations

Childhood Vaccines – Anyone working in the field during a disaster should know if they received the following routine childhood vaccinations and required boosters:

Diphtheria

Tetanus/Pertussis

Measles

Mumps

Rubella

Poliomyelitis

Haemophilus influenza

Tetanus – Generally, initial vaccinations are given in childhood and booster vaccinations administered every 10 years. Workers and volunteers assisting in the response and recovery phases of the disaster plan should provide proof of having received a tetanus shot within the last 10 years. Wounds received during disaster work should be examined by a physician as soon as possible for cleansing and so an assessment can be made as to whether another booster should be given. Puncture wounds are most susceptible to tetanus.

Rabies Pre-Exposure – Because of the fatal nature of rabies, anyone planning to have contact with animals other than their own in a disaster situation should receive pre-exposure rabies vaccinations. Since this initial series consists of three injections over the course of a month, it is important that it be done before an emergency. The injections can be given either under the skin (intradermally) or in the muscle (intramuscularly), depending on the type and amount of vaccine used.

To determine the effectiveness of pre-rabies vaccinations, blood should be drawn every two years to determine serum titers. If the serum titer is less than 1:5, a booster vaccination will be necessary. A booster vaccination can be given in lieu of checking the titer. Some public health departments, in fact, recommend that boosters be administered every two years.

Rabies Post-Exposure – Although unvaccinated dogs, cats, and livestock may be infected with the rabies virus, the primary rabies vectors in North America are raccoons, skunks, bats, foxes, and coyotes. Human exposure to rabies can occur through a bite wound, scratch, abrasion, open wound, or contamination of the eyes or mouth with saliva or other infectious material from a rabid animal.

Part of the community disaster plan for animals should outline steps on how to deal with workers, volunteers, or members of the general public who may come into contact with possibly rabid animals. Since many parts of the country are rabies endemic, there is a real potential for a rabies outbreak to occur. One animal in a temporary animal shelter could infect a large number of workers or volunteers through everyday handling.

Not all rabid animals are aggressive; some are docile and fearful. If there is concern that an animal could have rabies, it is important to notify local animal control officials and the public health department immediately.

Unvaccinated persons who think they have been exposed to rabies should clean all wounds immediately and seek medical treatment within 24 hours of exposure. They will be given a series of injections to prevent the disease's development. Persons with pre-exposure rabies vaccinations should clean the wound and get two follow-up injections of the vaccine.

Other Potential Vaccinations

Hepatitis-Viral-A – This disease is transmitted by person-to-person contact, contaminated water, ice, shellfish, raw fruits, raw vegetables, undercooked foods, or infected food handlers. It is found throughout the developing world, but is less common in the United States. However, during disasters Hepatitis A is a serious risk because of problems with sanitation. Certain precautions, such as washing hands thoroughly before handling food and boiling potentially contaminated water, are important.

Plague – Wild-rodent plague exists in the western third of the United States, particularly in the Southwest. Wild rodents are the reservoir for the disease, as are the fleas that feed on them. Other mammals such as dogs and cats can serve as a link to infection in humans. Physical contact, skin abrasions, or bites can all result in the disease.

Other Public Health and Safety Guide-lines

Water Purification – Given the decreased sanitation levels during many disasters, members of the community disaster plan for animals should make plans for water purification for humans and animals in the relief effort. Bottled water should be used whenever possible. If bottled water is not available, boiling water is the most reliable method of purification. Iodine is the most reliable method of chemical purification but chlorine tablets can also be used.

Personal Medical Records – Workers and volunteers should carry personal identification that gives their organ donor status, blood type, drug allergies, and other essential medical information, including current vaccination status.

Dead Animals – The community disaster plan for animals must also deal with the serious public health risks posed by the bodies of dead animals. Plans must be made for the documentation, transportation, and disposal of the bodies. In smaller disasters it may be possible to hold the bodies of companion animals in a freezer for return to owners who wish to bury or cremate their pet. However, in major disasters there may be too many animals and no working freezers. There may also be situations in which a large number of animals die all at once, such as when a farm is flooded. In these cases, state agencies such as public health, agriculture, or environmental protection may be involved. It is their responsibility to determine the best method of disposal of the bodies which may include burning, burying, or rendering.

IX. Public Education

A major focus of any community disaster plan for animals should be educating the public about the need to include animals in their individual disaster plans. Public education is vital because every animal whose owner plans and cares for him is one less animal who has to be provided for after a disaster. Many communities distribute brochures or fliers with basic tips on how to care for pets in disasters via veterinary offices, animal shelters, community meetings, pet supply stores, booths at public events, or utility bills.

A speakers' bureau is great for public education. Presentations can be offered in areas with a high number of companion animals or where the potential for an emergency or evacuation is high, such as mobile-home parks that allow pets. It should be recognized, however, that mobile home parks, apartments, or rental prop-

erties with “no pet” policies often have residents who keep small animals who stay indoors.

There should also be brochures to help owners of large animals, such as horses, prepare them for disasters. Some horse owners do not own trailers and may be unable to evacuate their animals quickly in emergencies. Part of a horse owner's disaster plan should be to acquire a trailer or make arrangements with nearby horse owners to share their trailer during an emergency. Horse owners should practice putting their horses in the trailers on a regular basis so it's not a novel experience during an emergency.

Ask local emergency management personnel to review the fliers and brochures to ensure their information is in line with that agency's message. Be certain to include the following key points:

Planning for an Evacuation

Evacuation Precautions – Animal owners should be advised that some emergencies may force an evacuation, and many communities do not have evacuation shelters that allow pets. They should also be aware that in some situations kennels, veterinary clinics, and animal shelters may not be operational since they have to evacuate also.

Even if there are community plans for animal sheltering of pets, it should be explained to animal owners that they would be more comfortable, and so would their pets, at a hotel/motel or with family or friends. An animal who is crated with proper identification, health records, and her own food supply is more likely to be welcomed in facilities or homes that do not usually allow pets.

Maintain a list of hotels/motels that allow pets and update it annually. Some hotels/motels do not normally allow animals, but lift the restriction during emergencies. One goal of the com-

munity animal disaster planning committee should be to encourage local hotels/motels to do this. At the same time, animal owners should be encouraged to practice responsible pet ownership by keeping their animals confined and quiet and preventing them from damaging hotel property. This gives animal owners more alternatives to abandoning their pets or turning them in to a temporary animal shelter.

Never tell people to leave their pets behind in an emergency. Evacuations are implemented when there is a risk of death or injury. If an area is not safe for people, it is not safe for animals. If people are told to leave their pets behind with food and water, they get the message that the danger is not as great because their animals are expected to survive. This can encourage people to ignore evacuation orders. It can also create difficulties later when owners want to retrieve their pets but conditions are still dangerous. The animal owner may try to reenter the area illegally, or animal rescue teams must enter to rescue the pets, if they survived, since the danger has decreased.

Evacuation Equipment and Supplies – People evacuating with their pets should have the following supplies:

1. A leash and a collar or halter with identification tags for most animals. Animals, such as birds and some reptiles, who cannot have identification on their bodies, must have proper identification on their cage if they are to be returned to their owner.
2. A portable carrier in which the animal can easily move around. Since the pet may have to live in the crate for several days, it is important that the crate be large enough for the pet to be able to stand, stretch, and turn around. For cats, the crate must be able to hold a small litter box and still leave room for the cat to move around.
3. Water in gallon-size plastic containers, dry pet food, and food dishes. There should be a one- to two-week supply of food and water for the pet.

For cats, also include a small litter box and a two-week supply of litter.

4. A supply of the pet's regular medications, such as heartworm medicine and flea-prevention products.
5. Up-to-date health records, including vaccination history. Many veterinary clinics or kennels will not board dogs and cats without proof of vaccinations. Without that proof the pet owner may have to pay for the animal to be re-vaccinated.
6. Written instructions on the pet's feeding schedule and diet, medications, and any special needs.

Proper Identification of Animals

Identification Tags – Animals should have identification tags that include the name, address, and phone number of the owner. It is also useful to include an emergency contact number for family or friends out of the area. That way, if the pet owner has been evacuated and the animal is lost, whoever finds the pet can locate the owner through the emergency contact. If the tag cannot be attached to a collar or harness, it should be attached to the animal's cage.

Rabies tags are not adequate identification. In some communities the tag information is kept only at the veterinarian's office, which may be closed or destroyed in a disaster. Tags that have the owner's address tell people where to post signs in case the owner returns to look for the animal.

Microchipping – Microchipping is useful but should not be a pet's only form of identification. Because chips are inserted into the animal, there is no external way to know they are present. Every animal has to be scanned completely using specialized equipment, since the chips can migrate through an animal's body. Once a chip is found, the scanner reads only its number.

The chip manufacturer must then be called for the name and address of the owner.

In the early phases of a disaster, identification by microchip may be too time consuming for rescue or shelter workers. In a major disaster in which there is no electricity or phone service, the process of scanning and following up on microchips may not be possible for some time. If the owners have moved since having the microchip inserted into the animal and have not updated the registration, the information may be out of date.

However, microchips do provide positive identification. This is useful in situations where identification tags cannot be attached to a collar or harness or when several persons are claiming ownership of the same animal. Since in a major disaster the claimants may not have proof of ownership (photographs, veterinary records, or Coggins papers), a microchip could prove to be the only way for ownership to be determined.

Tattoos – Tattooing is one of the most difficult identification systems to use. While it is a permanent and visible form of identification, there is no central registry for tattoo information. Tattoos can often be found inside the mouth or ear or on the underbelly of an animal. They can be symbols, letters, numbers, or a combination thereof. Some agencies tattoo the social security number of the owner onto the animal. However, the federal government does not release information on social security numbers to the public, so the animal cannot be matched with its owner through that system.

Without a central registry of all tattoos, it can be impossible to find an owner. It may prove useful, however, in cases in which the ownership of an animal is in question. The person who properly identifies a tattoo is most likely the true owner of the animal.

X. Working with the Media

Working with news media is one of the best ways to get the messages of animal relief and rescue efforts to the general public. However, when you communicate with the media, make sure the information provided is clear, concise, timely, and packaged properly for each type of media. Those that are generally involved in covering emergencies on a daily basis are radio, television, and newspaper. Much of their information is posted on the Internet, which is itself quickly becoming a source for information on disasters.

Since it's the media's job to inform the public, they are the best way to get information out daily on emergency veterinary clinics, temporary animal shelters, pet friendly shelters, availability of animal food, animal rescue efforts, the need for volunteers or pet supplies, etc.

Ideally, public information officers should be trained to work with the media to get information out to the public on animal rescue and relief efforts. Once the human tragedy of a disaster is told, many reporters look for stories related to animals impacted by the emergency. Without proper direction, the wrong image or information can damage public support for those agencies and organizations working hard to assist animals in a disaster.

When developing the media plan, consider the different media:

Radio

There are two primary formats for radio broadcast: news and public service announcements (PSAs). In non emergency times information on disaster planning efforts generally is considered a PSA. PSAs are short blurbs of information, such as disaster preparedness tips for pets, that stations interject into programming. News items focus on events that are timely. Some

radio stations also air talk programs that encourage in-depth discussions. These programs may be recorded and aired at a later date. After a disaster, information on animal relief efforts can be distributed as news or a PSA.

Radio can be an important medium before, during, and after disasters. Here's how:

- It can be used to urge pet owners to take their animals with them or to provide the locations of temporary animal shelters or pet friendly shelters.
- It may be a primary source of information for the public after a major disaster in which electrical power is disrupted for a period of time. Most people have a battery-operated radio just for emergencies.
- Radio stations often drop almost all other programming to give constant, detailed updates on disaster efforts. Even when electricity returns, television sometimes provides minimal information. Television returns to regular programming more quickly because of the economics of advertising (for example, television stations depend on advertising by national companies; radio often depends more on local companies, which are probably also affected by the disaster).
- Radio gives quick updates on information such as the opening or closing of pet shelters and emergency veterinary clinics and the availability of pet food. The information is often repeated throughout the day.
- Radio tends to focus on local news, while television tends to focus on disaster relief activities in larger communities. Most small communities have a local radio station that provides news specific to the area.

Television

Generally, news stories on television are not very detailed, but they can have tremendous

emotional appeal. Animal issues in a disaster often become the focus of television news stories once reporters believe the human tragedy has been covered.

Because of the time constraints on TV news programs, it may be difficult to get TV stations to run general information on animal efforts. Updating information aired earlier may be impossible. PSAs are rare in television, but a well-produced 30-second tape can reach thousands. Check with local television stations about talk shows produced in their studios that may be interested in having a guest speak on local disaster planning for animals.

Television can be useful in the following ways:

- It can generate supplies, volunteers, foster homes, or financial support by broadcasting video of animal relief and rescue efforts. The images have an emotional impact on viewers that exceeds the spoken or printed word. (A picture is worth a thousand words.)
- People will begin watching television for information once electricity is restored. If the animal rescue and relief message is covered, the number of people receiving it can be phenomenal.

When working with radio or television stations, keep information short and to the point. Most stories run for one minute or less, so it is important to choose the message wisely. For example, if rescue teams need to know the location of animals left behind in an evacuation, that should be the focus of any interview on radio or on television.

Radio and television stations can also be given reports by phone, but since there is then no written text, it is easier for them to make a mistake and give incorrect information.

Newspapers

Newspapers generally print information on dis-

aster planning tips for specific disasters at timely points in the year. For instance, before hurricane season at the beginning of June, many newspapers have an insert with extensive emergency information. It is important to get correct information to newspapers well in advance, since these inserts are often designed and produced several weeks before distribution.

With a pending or occurring disaster, it is important to provide information to all local newspapers for publication in news stories or in special sections outlining available emergency assistance. Make sure all contact phone numbers and locations of animal relief sites are correct; there is little chance of reaching the same readers later with the proper information.

Newspapers can help in the following ways:

- They provide detailed information on animal efforts. A feature story can be in-depth and is a permanent record of activities.
- Their information can be copied and handed out to the public, other emergency response agencies, volunteers, and anyone else who needs to know what services are available for animals.

In general, the best way to reach media is through press releases. These are one- or two-page documents that give essential information about an event or activity. The press release should be kept simple by stating the basic facts of “who, what, when, where, why, and (sometimes) how.”

Press releases should offer information about the location of temporary animal shelter facilities, pet friendly shelters, animal rescue operations, and other important information. Basic press releases can be developed on some topics before the emergency and then add detailed information when the disaster occurs.

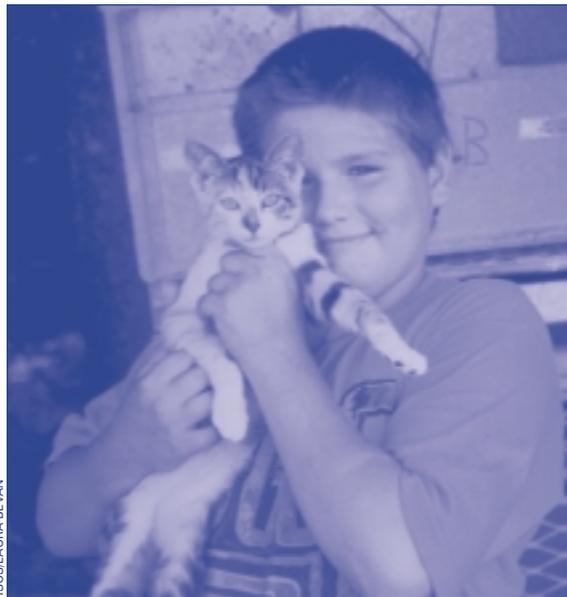
Most community emergency management departments have public information officers. It is good to coordinate your press releases with

these individuals; in addition to checking for accuracy, they can help disseminate information to media sources.

XI. The Human-Animal Bond

The United States is home to almost as many pets as people, with an estimated 140 to 210 million pets. While an estimated 38 percent of households have children, 43 percent have pets. Psychological studies have proven that the elderly live longer and stay in better health if they have pets for companionship. The connection that people have with their pets is called the “human-animal bond.”

Many communities have not considered disaster planning for animals as an integral part of their emergency planning for people. Perhaps emergency management officials are assuming that animals will pose few problems if left to fend for themselves. Or they worry that the public will question the value of spending tax dollars on animals instead of people. These officials may never have considered the significance of the human-animal bond, or they may believe that bond will somehow cease to exist during an emergency.



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However, studies have proven that in a disaster the human-animal bond is of more concern to the public than many would believe. In a 1983 Ohio State University poll, 28 percent of pet owners said they would ignore nuclear attack evacuation orders if they were told to leave their pets behind.

A 1980 report by the Federal Emergency Management Agency (FEMA) titled “Evacuation Planning in the TMI Accident” described the problems associated with evacuees and companion animals during the Three Mile Island nuclear incident. The report concluded that “the problem of what to do with pets and livestock must be seriously addressed in detail. Arrangements for pets and livestock were among the weakest areas of risk planning. While it was recognized as a factor affecting the performance of evacuation plans, the task of planning for animals was regarded as separate from that of planning for people. The potential impact on the public’s morale and willingness to cooperate received relatively little attention.”

In 1993 a survey was conducted on the emergency evacuation of horses in Madison County, Kentucky, which is home to the Lexington-Bluegrass Army Depot. This site holds a stockpile of toxic chemicals such as nerve and blistering agents. In the survey, 70 percent of the respondents said they would consider their family first and their animals second and that they would try to evacuate. However, a large majority

said they would try to evacuate some of their horses or provide some means of protection on the farm. According to the survey’s conclusion:

“In a rapid-onset event, this suggests that some owners would provide safety for their animals to the detriment of themselves. Moreover, the primary criterion used for the choice of horses to evacuate—46 percent would choose horses to be taken on sentimental value—suggests a propensity to evacuate horses no matter what the time frame.”

People and their animals often come as a package deal. Emergency management agencies across the country are beginning to realize that their communities are not prepared to respond to the animal care aspect of a disaster, and the consequences of failing to do so are potentially catastrophic. Planning for animals within the existing emergency management plan for people is the only way to ensure the success of the overall community plan.

Conclusion

A community disaster plan for animals needs to be a living document that requires ongoing leadership, review, and adjustment. As the community changes, the plan needs to be updated. It must be tested through drills with local emergency management to locate weaknesses. While a drill cannot completely simulate a real disaster,

it can uncover basic deficiencies in a plan that might have looked just fine on paper. Finally, the plan must not stand alone but must be intertwined with the overall community disaster plan.

Disasters show that the lives of people and animals can be destroyed in a manner of seconds. Preparing for the worst is one way of reducing the chance that the worst will happen.

Appendix 1: Good Samaritan Act—Immunity from Civil Liability

This is an excerpt from the “Good Samaritan Act” in Florida. It is a good example of a law that can protect people assisting in disasters. States that do not have such a law should endeavor to get one passed.

AN ACT relating to civil liability, prescribing the conditions under which such a person rendering aid at the scene of a motor vehicle accident or disaster will be held liable for civil damage; providing an effective date.

WHEREAS, a person who is present at the scene of an accident or emergency is under no legal duty to aid the victim or victims thereof, and

WHEREAS, the fear of a suit for damages based on civil liability may cause laymen and doctors who might otherwise be inclined to help a victim at an accident or emergency to be reluctant to offer their aid, and

WHEREAS, the provisions of this act, known as the Good Samaritan Act, may erase this deterrent and may save a life by rendering assistance to a victim in an accident or emergency, NOW THEREFORE, BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF FLORIDA:

(1) This act shall be known and cited as the “Good Samaritan Act.”

(2) (a) Any person, including those licensed to practice medicine, who gratuitously and in good faith renders emergency care or treatment either in direct response to emergency situations related to or arising out of a state of emergency which has been declared pursuant to § 252.36 or at the scene of an emergency outside of a hospital, doctor’s office, or other place having proper medical equipment, without objection of the injured victim or victims thereof, shall not be held liable for any civil damages as a result of such care or treatment or as a result of any act or failure to act in providing or arranging further medical treatment where the person acts as an ordinary reasonably prudent person would have acted under the same or similar circumstances.

(3) An person, including those licensed to practice veterinary medicine, who gratuitously and in good faith renders emergency care or treatment to an injured animal at the scene of an emergency on or adjacent to a roadway shall not be held liable for any civil damages as a result of such care or treatment or as a result of any act or failure to act in providing or arranging further medical treatment where the person acts as an ordinary reasonably prudent person would have acted under the same or similar circumstances.

Florida Statutes § 768.13 1991

Appendix 2: Selected Key Terms and Definitions

Courtesy of the American Red Cross and the Weather Channel

■ **AFTERSHOCKS:** Tremors that occur in the hours or days after a “main shock” (initial earthquake).

■ **BLIZZARD WARNING:** Announcement that severe winter weather with sustained winds of at least 35 miles per hour is expected.

■ **COASTAL FLOOD:** Flooding along the coastline, which may cause extensive erosion and property damage. May be caused by a tropical storm or hurricane offshore combined with the effects of the tides, waves, and wind.

■ **CYCLONES:** Hurricanes south of the equator and in the Indian Ocean.

■ **DISASTER:** A disruption that reaches such proportions that there are injuries, deaths, or property damage and many or all of the community's essential functions (i.e., water supply, electrical power, roads, and hospitals) are affected.

■ **EMERGENCY:** An event that reaches such proportions that it disrupts a community's essential functions.

■ **EMERGENCY MANAGEMENT:** The process of preparing for, mitigating, responding to, and recovering from an emergency.

■ **FLASH FLOOD:** A very swift-moving flood that may form a "wall of water" and causes much damage. Can be caused by intense storms or dam failure.

■ **FLOOD WARNING:** Announcement that flooding is already occurring or will occur soon. People are told to take precautions at once, be prepared to go to higher ground, and if advised, evacuate immediately.

■ **FLOOD WATCH:** Announcement that flooding is possible. People are told to stay tuned to NOAA radio and be prepared to evacuate and tune to local radio and television stations for additional information.

■ **HAZARDOUS MATERIALS:** Substances that are either flammable or combustible,

explosive, toxic, noxious, corrosive, oxidizable, an irritant, or radioactive.

■ **HURRICANE:** Large tropical storm with winds of 74 miles per hour or more, moving counterclockwise. In addition to intense winds, it is accompanied by heavy rains, coastal and inland flooding, and sometimes tornadoes. (*See Saffir Simpson Scale of Hurricanes, page 34*)

■ **HURRICANE WARNING:** Announcement that a hurricane will hit land within 24 hours. People are advised to take precautions at once and evacuate immediately.

■ **HURRICANE WATCH:** Announcement that a hurricane is possible within 24 to 36 hours. People are told to stay tuned to local radio and television stations for additional information. An evacuation may be necessary.

■ **MITIGATION:** Activities that can help people avoid a disaster or minimize its impact, such as building outside of flood-prone areas or instituting seismic building codes.

■ **PREPAREDNESS:** Activities that enhance the abilities of individuals, communities, and businesses to respond to a disaster, for example disaster exercises, disaster preparedness training, and public education.

■ **RECOVERY:** Efforts to return the community to "normal," including getting financial assistance to rebuild damaged structures and issuing business loans.

■ **RESPONSE:** Activities during the aftermath of a disaster that deal with emergency needs and restore essential community services.

■ **RICHTER SCALE:** The scale used to measure the magnitude of an earthquake against a "standard earthquake," measured 100 kilometers from the epicenter.

■ **SEVERE WINTER STORMS:** Heavy snow, ice, strong winds, and freezing rain.

■ **SLOSH:** Sea-Lake-Overland Surges from Hurricanes. A way of estimating the volume and depth of storm surge caused by tropical cyclone activity.

■ **STORM SURGE:** A large amount of water forced up on shore in advance of an approaching tropical cyclone. Combined with wind-driven wave action, a storm surge can cause extensive property damage and destruction.

■ **TORNADO:** An incredibly violent local storm that moves along the ground with whirling winds that can reach 300 miles per hour or more. (See Fujita-Pearson Tornado Scale, *below*)

■ **TORNADO WARNING:** Announcement that a tornado has been sighted in the area or is indicated by radar. People are advised to take shelter immediately.

■ **TORNADO WATCH:** Announcement that tornadoes are likely. People are advised to be ready to take shelter and stay tuned to radio and television stations for additional information.

■ **TRAVELER'S ADVISORY:** Announcement that severe winter conditions may make driving difficult or dangerous.

■ **TYPHOON:** Hurricanes east of the International Date Line (i.e., the western Pacific).

■ **WINTER STORM WARNING:** Announcement that severe winter weather is expected.

■ **WINTER STORM WATCH:** Announcement that severe winter weather is possible.

Appendix 3: Measuring Scales

Saffir-Simpson Scale of Hurricanes

- Category One: Winds 74–95 mph or Storm Surge 4–5 feet above normal
- Category Two: Winds 96–110 mph or Storm Surge 6–8 feet above normal
- Category Three: Winds 111–130 mph or Storm Surge 9–12 feet above normal
- Category Four: Winds 131–155 mph or Storm Surge 13–18 feet above normal
- Category Five: Winds over 155 mph or Storm Surge over 18 feet above normal

Richter Scale Measure

- 4: Minor Earthquake
- 5: Moderate Earthquake
- 6: Strong Earthquake
- 7: Major Earthquake
- 8: Great Earthquake

Fujita-Pearson Tornado Scale

- | | | |
|-----|------------------|---------------------|
| F0: | Less than 72 mph | Light Damage |
| F1: | 73–112 mph | Moderate Damage |
| F2: | 113–157 mph | Considerable Damage |
| F3: | 158–206 mph | Severe Damage |
| F4: | 207–260 mph | Devastating Damage |
| F5: | 261–318 mph | Incredible Damage |

Appendix 4: Disaster Planning Tips for Pets, Livestock, and Wildlife

Pets

Whether it's a large-scale natural catastrophe or an unforeseen emergency that causes you to leave your home temporarily, your family can benefit from having a household evacuation plan in place before disaster strikes. Every disaster plan must include your pets!

The HSUS offers the following tips to pet owners designing an emergency safety plan:

- If you evacuate your home, **DO NOT LEAVE YOUR PETS BEHIND!** Pets most likely cannot survive on their own; and if by some remote chance they do, you may not be able to find them when you return.
- For public health reasons, many emergency shelters cannot accept pets. Find out which motels and hotels in your area allow pets—well in advance of an emergency. Include your local animal shelter's number in your list of emergency numbers; it might be able to provide information concerning pets during a disaster.
- Make sure identification tags are up to date and securely fastened to your pet's collar. If possible, attach the address and/or phone number of your evacuation site. If your pet gets lost, his tag is his ticket home. Have a current photo of your pet for identification purposes.
- Make sure you have a secure pet carrier, leash, or harness for your pet so that if he panics, he can't escape.



- Take pet food, bottled water, medications, veterinary records, cat litter/pan, can opener, food dishes, first aid kit, and other supplies with you in case they're not available later. While "the sun is still shining," consider packing a pet survival kit that's ready to go when disaster hits.
- If you are unable to return to your home right away, you may need to board your pet. Most boarding kennels, veterinarians, and animal shelters require your pet's medical records to make sure vaccinations are current. Include copies in your pet survival kit along with a photo of your pet.
- If it is impossible to take your pet with you to a temporary shelter, contact friends, family, veterinarians, or boarding kennels to arrange for care. Make sure medical and feeding information, food, medicine, and other supplies accompany your pet to his foster home. *NOTE:* Some animal shelters will provide temporary foster care for pets in times of disaster, but this should be considered only as a last resort.

Not only are pets affected by disaster, but other types of animals are too. The HSUS offers basic tips for people who encounter wildlife or have livestock on their property:

Wildlife

■ Wild animals often seek higher ground that during floods becomes partially submerged forming an island and stranding the animals. If the island is large enough and provides suitable shelter, you can leave food appropriate to the species (for example, sunflower seeds for squirrels). Animals have a flight response and will flee from anyone approaching too closely. If an animal threatens to rush into the water, back away.

■ Wild animals often seek refuge from flood waters on upper levels of a home and may remain inside even after the water recedes. If you meet a rat or snake face to face, be careful but don't panic. Open a window or other escape route and the animal will probably leave on his own. Never attempt to capture a wild animal unless you have the training, protective clothing, restraint equipment, and caging necessary to perform the job.

■ Be aware that an increased number of snakes and other predators will try to feed on the carcasses of reptiles, amphibians, and small mammals who have been drowned or crushed in their burrows or under rocks.

■ Often during natural disasters, mosquitoes and animal carcasses present disease problems. Outbreaks of anthrax, encephalitis, and other diseases may occur. Contact your local emergency management office for help.

■ If you see an injured or stranded animal in need of assistance or you need help with removing an animal from your home, please contact your local animal control office or animal shelter.

Livestock

■ **EVACUATE LIVESTOCK WHENEVER POSSIBLE.** Make arrangements for evacuation, including routes and host sites, in advance. Alternate routes should be mapped out in case the planned route is inaccessible.



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■ Evacuation sites should already have—or be able to readily obtain—food, water, veterinary care, and handling equipment.

■ Trucks, trailers, and other vehicles appropriate for transporting each specific type of animal should be available along with experienced handlers and drivers. Whenever possible, the animals should become accustomed to these vehicles in advance so they're less frightened and easier to move.

■ If evacuation is not possible, you must make a decision whether to move large animals to available shelter or turn them outside. This decision should be based on the type of disaster and the soundness and location of the shelter (structure).

■ All animals should have some form of identification that will help facilitate their return.

Your disaster plan should include a list of emergency phone numbers for local agencies including your animal's veterinarian, the state veterinarian, local animal shelter, animal care and control, county extension service, local agricultural schools, and the American Red Cross. Keep these numbers with your disaster kit in a secure but easily accessible place.

For more information, contact Disaster Services, The Humane Society of the United States, 2100 L Street NW, Washington, DC 20037. Visit us on the Web at www.hsus.org

Promoting
the protection
of all animals

**THE HUMANE SOCIETY
OF THE UNITED STATES**

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