Introduction

> And of every living thing of all flesh, you shall bring two of every kind into the ark, to keep them alive with you; they shall be male and female. Of the birds after their kind, and of the animals after their kinds, of every creeping thing of the ground after its kind, two or every kind shall come to you to keep them alive.
>
> Genesis 6:19–20

When a disaster strikes, who should enter the ark? It is widely understood that human lives have priority. But our lives are intertwined with those of billions of nonhuman animals. Is there a place in the ark for them? If so, which animals should we save? We have the closest relationships with those who are companions, or "pets."[1] We would surely make room on the ark for them. Many people cannot imagine going a day without eating animal products of some sort, and many make a living by raising the animals who provide these products. Clearly, then, we will have to make room for cows, pigs, sheep, chickens, and turkeys. Every prescription medication and most medical procedures are tested on animals before being used on people. The ark will have to accommodate the dogs, cats, primates, rabbits, mice, rats, and guinea pigs used in research. Many zoos in the United States saw record attendance in recent years. Because people enjoy looking at animals, the ark will have to house countless species from all over the world. The ark is becoming crowded, and we have barely scratched the surface of our connections with animals. From the bristles of make-up brushes to the gelatin that encases vitamin sup-

plements, animals are part of our daily routines. As I tell the students who take my course Animals and Society, we like to think of society as distinctly human, with animals existing "on the side," or somehow in their own world. In reality, it is difficult to imagine society without animals. Thus, any event that affects people is likely to affect animals, too. When disasters strike, people are not the only ones who lose lives and homes. We are not the only victims.

This book examines how we make decisions about the treatment of animals in disasters. It encompasses questions about how we determine the worth of animals' lives and how we make distinctions among categories of animals. For example, recent legislation, known as the PETS Act (discussed in Chapter 1), requires states to include companion and service animals in their disaster response plans. Although the enactment of this requirement is a positive step for dogs, cats, and the people who care for them, it highlights the value we place on certain kinds of animals. We humans have determined that dogs and cats can enter the ark. While we applaud ourselves for considering this minority of animals who share our households, the majority of animals who play other roles remain invisible to us. These include animals confined on factory farms, who also suffer and regularly die in disasters. Even the U.S. Department of Agriculture, which regulates agriculture, has no funding or mandate to rescue animals raised for food.

Following Hurricane Katrina, thousands of volunteers converged in Louisiana and Mississippi to assist with the rescue and shelter of companion animals. The effort was a disaster-upon-a-disaster, as animal welfare groups struggled to find ways to feed, house, and care for the endless stream of dogs and cats brought out of stricken areas. Yet, as rescuers roamed the streets of New Orleans, breaking into homes to rescue dogs, cats, birds, and other companion animals, millions of farm animals died because of Katrina. Most were chickens. Those who did not starve or die of thirst and exposure were bulldozed alive into dumpsters. Over eight million birds died in just one producer's facility. The media reports these, and the deaths of other animals used for food, as "losses" for the producers. Their lives are not noted. As Miyun Park of the Humane Society of

the United States quotes a typical press report: "According to the American Farm Bureau Federation, farmers in southwestern Louisiana were hurt most by Hurricane Rita, which has resulted in the loss of 30,000 cattle and seriously harmed rice fields and the harvest of sugar cane," adding, "the farmers were hurt, but the cattle were merely 'lost.' Serious harm was reserved for the rice fields."[2]

Whereas most people knew of the plight of companion animals following Katrina, the animals used for food, commonly called "livestock," rarely merited mention. Animals used in research received even less attention. In the downtown New Orleans laboratories of Louisiana State University's Health Sciences Center, eight thousand animals used in research died because of Katrina. Poor planning and no regulations meant that most of the animals drowned in their cages or died of suffocation, starvation, and dehydration.[3] With no chance of escape, those who had not died by a week after the storm were euthanized. What news coverage there was of the Health Sciences Center focused not on the loss of animals' lives but on the loss of valuable "data."

Vulnerability and Species

As the news from the Gulf Region circulated in August and September 2005, it became clear that some human residents suffered significantly more than others did. Some people were able to leave before the flooding began. The world watched as those who remained, particularly the poor, waited for days on rooftops and highway overpasses for help, which for some never came. The captions to photographs showing New Orleans residents carrying water and other supplies described the residents as "looters" or "shoppers," depending on the color of their subjects' skin.[4] Elderly people died in their wheelchairs, lucky to have identification signs hung around their necks. As conditions deteriorated at the Superdome and the Convention Center, the city's shelters of last resort, accusations of racism raged loud. Many residents claimed that if the majority of those unable to evacuate had been white, help would surely have arrived sooner.[5]

Although claims that racism influenced the response and recovery efforts might have been newsworthy for the public, they were by no means news to social scientists engaged in disaster research. For several decades, researchers have examined how various populations experience differential vulnerability to disasters. In what is known as the *vulnerability paradigm*, researchers have argued that disasters are "human-induced, socially constructed events, that is, the hazard itself—the hurricane, the flood, the attack—does not cause the disaster."[6] Rather, the disaster results in the coupling of the hazard with other factors, such as the physical setting, including the built environment, and the capacity of the population to avoid, respond to, and cope with the effects of the incident.[7] Piers Blaikie et al. give the following definition for *vulnerability*:

> The characteristics of a person or group in terms of their capacity to anticipate, cope with, resist, and recover from the impact of a natural hazard. It involves a combination of factors that determine the degree to which someone's life and livelihood is put at risk by a discrete and identifiable event in nature or in society.[8]

In short, the vulnerability of people and groups creates disastrous consequences. The hazard sets off a social process, the outcome of which varies widely. The vulnerability approach highlights the need to look beyond "disasters as simply physical events and consider the social and economic factors that make people and their living conditions unsafe or insecure to begin with."[9] Unlike the blame-the-victim paradigm, the vulnerability paradigm focuses on how the lack of social power makes people unable to influence where and how they live and deprives them of a political voice.

The vulnerability paradigm has produced numerous studies of how pre-existing social inequalities shape disaster impact, response, and recovery. Although a comprehensive review of the literature is beyond the scope of this book, I offer two examples of works that focus on how disasters reflect the organization of a society or a community. *Hurricane Andrew*, an edited volume, examines how the

social ecology of Dade County in South Florida meant that residents were differentially affected by that event in 1992.[10] A research team assembled by Walter Peacock provides convincing evidence that race, class, age, gender, and ethnicity matter in disasters. Blocked out of home financing because of the inability to obtain homeowners' insurance, Dade County's disadvantaged minorities often lived in poor quality housing, which was more susceptible to damage. Many minority householders who did have homeowners insurance had insufficient coverage or lacked the supplemental options that would cover temporary housing. After the hurricane, women juggled the tasks of dealing with relief organizations and caring for children and elderly relatives, all while coping with the crowding and lack of privacy in "tent cities" and emergency trailer parks.[11] The increase in divorce and domestic violence following Hurricane Andrew told a story that never made the nightly news.

In *Heat Wave*, Eric Klinenberg accounts for why the heat-related deaths of over seven hundred people in Chicago during the summer of 1995 were not randomly scattered but occurred in particular pockets of the city. Although the official reports describe the heat wave as "a unique meteorological event," Klinenberg portrays it is as an "environmentally stimulated but socially organized catastrophe."[12] By comparing two neighborhoods, one primarily African American and ridden with crime and one Latino, Klinenberg reveals the connections between social factors and heat-related deaths. Elderly African Americans, particularly those living alone, were disproportionately vulnerable to the effects of extreme heat. Their fear of crime and the lack of commercial and community life in the neighborhood forced them to stay home, often with the windows closed. Without social ties to neighbors, they lived—and died—in isolation and in large numbers. Meanwhile, the urban ecology of the contiguous Latino neighborhood made its residents far less vulnerable. Strong social ties, an active Roman Catholic Church, relatively safe streets, and other amenities brought people out of their homes and into contact with one another.

In sum, the vulnerability paradigm avoids treating disasters simply as extreme events and instead directs attention to the social

mechanisms that create unequal risks. Studies show how factors including race, class, gender, and ethnicity structure people's options and choices. This book adds species to the list of factors that increase vulnerability. Like us, nonhuman animals have different abilities to cope with and escape hazards. With the exception of wild animals, most have no control over their living conditions. To be sure, different types of animals are vulnerable in different ways. Vulnerability is a variable characteristic, rather than a generalized or intrinsic one. To assert that animals are vulnerable, one must ask which animals are vulnerable, to what, and how.

Among human populations, those most vulnerable to disasters are "those with the fewest choices."[13] As the vulnerability literature has established, the poor, minorities, women, and the elderly often face institutionalized practices of domination and marginalization that limit the choices they can make when faced with natural or technological hazards. By extending this analytical framework to animals, I focus on how different categories of animals are differentially exposed to hazards and are differentially provided opportunities for rescue or escape. For example, although companion animals are vulnerable to abandonment following disasters, they are less vulnerable than animals raised in industrialized farms. Animals such as pigs and chickens, who are locked into cages and dependent on automated systems for food, water, and ventilation, are placed at great risk to numerous hazards and have no chance for escape. Because animals' vulnerability varies by the ways humans have categorized them, it makes little sense to talk about "animals" in disaster, as if they all face the same risk. The discussion must begin by specifying the systematic differences in exposure and protection among different groups or types of animals.

The Sociozoologic Scale

Animals can have many different meanings. As Arnold Arluke and Clinton Sanders put it, "'Being' and animal in modern societies may be less a matter of biology than it is an issue of human culture and consciousness."[14] Whereas some animals are beloved family mem-

bers, others are pests or vermin. We consider some animals "wild," and whether we kill and eat them depends on the meaning they have for us. People who hunt for meat do not consider dairy cows fair game.[15] Animals have different meanings largely because we categorize them along a hierarchy of worth that Arluke and Sanders call the "sociozoologic scale." Since Aristotle developed the *scala naturae*, we have ranked animals below human beings. Although Darwin and others after him challenged systems that place humans above all other creatures, the idea of a hierarchy remains powerful.[16] Thus, we make distinctions among animals as well as between humans and animals. As Arluke and Sanders argue, scientific challenges to any version of a biological hierarchy will gain little traction because people continue to rank animals along a sociological hierarchy. They explain:

> The desire continues to put animals on some sort of ladder, not because people are ignorant about science—although they certainly might be—but because some dominant ideas linger over many centuries. The history of ideas has demonstrated that certain notions become so pervasive and central to the thought of a culture that over time people uncritically apply these ideas anew.[17]

The sociozoologic system ranks animals in a structure of meaning that allows humans to define, reinforce, and justify their interactions with other beings. We grant some animals a nearly human status, as long as they comply with the code of conduct we establish for them. For example, we give domestic dogs and cats the status of "pets," "companion animals," or family members. However, if they do not comply with the rules, if they exhibit aggression or fear at a level we deem inappropriate, we destroy them because they cannot "fit" into human society. Likewise, other animals who violate the code by their very natures are ignored, despised, or killed. We admire a bear or mountain lion as "wildlife," as long as he or she remains at a distance. Once the animal oversteps the boundaries of the position we have allotted him or her and intrudes into human

social space, the "good" creature quickly becomes a dangerous predator who must be eliminated.[18]

Each of the chapters of this book examines a sociozoologic "category" of animals in the context of one or more disaster case studies. For example, hurricanes have posed the most recent and most catastrophic incident to affect companion animals, who occupy a high status on the sociozoologic scale—most of the time. Chapter 1 focuses on Katrina but includes material on Hurricane Andrew, which marked a turning point for the rescue of dogs and cats. Chapter 2 examines the risks faced by the most vulnerable of farmed animals: the chickens who provide meat and eggs. Using two disasters as examples, the chapter shows how different groups of people attribute different value to the lives of chickens and make very different claims about their welfare. In both instances, the factory farming system, not the weather alone, created disastrous consequences. Chapter 3 discusses how oil spills in general affect birds and marine mammals and how specific spills have influenced the rehabilitation of these species. Chapter 4 examines how the location of research facilities can endanger the animals confined within them.

Although in this book I make recommendations for disaster planning and policy, my ambitions are bigger. I make the case for rethinking our use of animals. Consistent with the vulnerability approach, I shed light on our role in putting animals at risk and suggest ways to create more secure conditions. In some instances, "more secure conditions" may mean dramatically changing or ending the use of animals to which we humans have long felt entitled. Also, humans can benefit from reducing the risk to animals. Factory farming provides the best example.

In September 1999, Hurricane Floyd followed closely behind Hurricane Dennis. Together, the storms caused widespread flooding in eastern North Carolina that killed nearly three million animals. Many of these were companion animals, but the great majority were hogs.[19] North Carolina is a major hog-producing state, and most of the animals were housed in concentrated animal feed-

ing operations (CAFOs) on corporate mega-farms. CAFOs for hogs comprise rows of long, low barns or sheds, each of which houses twelve hundred to twenty-five hundred animals. CAFOs use various methods for dealing with manure, but in hog facilities, the animals' waste falls through slots in the floors of the sheds into gutters or pits that are four to ten feet deep. These operations frequently store between three and twelve months' worth of manure beneath the floors.[20] When Hurricane Floyd struck, an estimated 237 hog CAFOs were located on floodplains of eastern North Carolina. Following the hurricane, tens of thousands of hogs drowned in CAFOs, and their carcasses washed into coastal rivers. Waste lagoons on CAFOs overflowed, sending tons of manure into the Pamlico and Core Sounds. The waste produced a dead zone in the coastal areas that caused a massive fish kill. The environmental and public health effects are still being studied today.[21]

Fifty years ago, a hurricane in the same region would not have caused the deaths of so many animals, nor would it have had the environmental impact. The solution to the "problem" of disasters and CAFOs does not involve making the rescue of farm animals a policy priority. Nor does it involve making stronger waste lagoons or creating strict building codes for CAFOs. Rather, the solution lies in changing the practices of factory farming so that animals, and the humans who share their environment, are less vulnerable.

Research Methodology

In this book, I describe recent disasters and their impact on animals, with a focus on how our understanding of those animals gives them varying moral status and thus varying vulnerability. The data come largely from interviews and published materials. I supplement these data with ethnographic data from field work conducted in the staging area for the rescue of animals from New Orleans following Hurricane Katrina, and from participant observation in disaster response volunteer training. In the Katrina research, I traveled with three staff members from the Humane Society of Boulder

Valley to assist in the sheltering operation at Lamar-Dixon Exhibition Center in Gonzales, Louisiana. The four of us had experience working in large sheltering facilities. Our role was to assist in caring for the more than two thousand dogs, one hundred cats, and numerous other animals housed at Lamar-Dixon. During September 2005, Lamar-Dixon was the largest functioning animal shelter in the United States. Over a thousand volunteers came from all over the country to staff the facility. They included animal control officers, veterinarians and veterinary technicians, shelter workers, and people who simply wanted to help. My team and I spent six days working from dawn until after dark, feeding dogs, cleaning kennels, preparing dogs for transfer out of Louisiana, and generally doing any work involved with that massive rescue effort. As I worked, I held field conversations with other volunteers, which I wrote up in extensive notes each evening.

One cannot plan disaster research in the ways other research can be planned. Moreover, disaster-related data are highly perishable. One cannot go back and study the staging area for a rescue once it is no longer operating. Consequently, some of the evidence for this book comes from interviews I have conducted with rescuers, volunteers, and other who experienced various disasters. For example, in July 2004, I had a long conversation over lunch with Sally Matluck, who had been instrumental in setting up the first MASH unit for animals following Hurricane Andrew, which struck Dade County, Florida, in 1992. About a month after that conversation, Hurricane Charley struck Charlotte County, Florida, on the southwest coast. I traveled to that area a week later and observed the devastation in Punta Gorda, Port Charlotte, and environs. I interviewed the director of Animal Control for Charlotte County and the director of the Suncoast Humane Society, which was the staging area for the response. Both were the key players in what turned out to be a highly organized and effective animal response effort. In other cases, I have relied on interviews published in print or on Web pages. I also make extensive use of reports and manuals designed for field responders, training mate-

rials, and other similar materials. In addition, I have analyzed the content of over nine hundred articles related to animals in disasters that appeared in national newspapers and were located through LexisNexis.

I use these materials to examine how disaster response decisions regarding animals are made, and by whom. I focus on how the sociozoologic scale influences how institutions consequently "think," in Mary Douglas's use of the term, about the needs of animals and about organizational roles in the disaster response.[22] I use the idea of institutional "thinking" as a metaphor for the interpretive practices that appear in discourse. Institutions "think" for those within their purview by offering models through which experience is processed. As a guiding metaphor, institutional "thinking" reveals how the discourse and activities of a group or organization produce and reproduce characteristic definitions of and solutions to the problems within their scope.[23] In the chapters that follow, I discuss how institutional thinking justified both the spending of over $80,000 per animal on rehabilitating sea otters following the *Exxon Valdez* oil spill and the bulldozing of live chickens trapped in battery cages after a tornado.

What Is a Disaster?

Thinking about disasters begins with questions about hazards. Hazards can be defined as sources of danger that may lead to emergencies or disasters. Hazards are inescapable realities of living in the physical world. They are intrinsic to the natural and built environments. Many hazards occur exclusively or most frequently in specific regions or times. Earthquakes occur along fault lines. The midwestern United States has earned the nickname "tornado alley," and the designated hurricane season runs from June through early November. Emergency management involves assessing risk, or the likelihood that a hazard will occur. When a risk is realized, the result can be an emergency, which is an unexpected incident that creates the need for an immediate response that can usually be addressed

by local fire, police, animal control, or other entities. When the incident exceeds the capacity of local resources to respond, it is considered a disaster. Both kinds of events can harm lives and property and disrupt "normal" life.

When local and state agencies lack or lose the resources to respond, a governor may request that the President declare a major disaster. The request is prepared jointly by state officials and staff members from one of the ten regional offices of the Federal Emergency Management Agency (FEMA). After consideration at the regional level, the staff at FEMA's Washington, DC, headquarters reviews the request. FEMA then makes a recommendation to the President. The presidential declaration activates numerous resources through twenty-seven federal departments and agencies, which are coordinated through FEMA under the Federal Response Plan. Federal assistance is intended to supplement state and local efforts. FEMA and other federal agencies do not take control of disasters; the governor and local officials maintain oversight and control of relief efforts.

Disaster response is coordinated through the National Incident Management System (NIMS) and the National Response Plan. The NIMS orchestrates the activities of local, state, federal, and tribal governments and standardizes the practices for the response through the National Response Plan.[24] According to the Department of Homeland Security, the National Response Plan

> establishes a single, comprehensive framework for the management of domestic incidents. It provides the structure and mechanisms for the coordination of Federal support to State, local, and tribal incident managers and for exercising direct Federal authorities and responsibilities. The NRP [National Response Plan] assists in the important homeland security mission of preventing terrorist attacks within the United States; reducing the vulnerability to all natural and man-made hazards; and minimizing the damage and assisting in the recovery from any type of incident that occurs.[25]

The National Response Plan categorizes the kinds of assistance needed into emergency support functions, such as firefighting, housing, communication, and transportation, and support annexes, which provide administrative assistance. In addition, a series of incident annexes detail plans for specific events, such as biological terrorism, nuclear accident, or an oil and hazardous materials accident. For example, the Food and Agriculture Annex outlines a coordinated federal response to incidents involving food and livestock.

There are many different types of disasters, and some that uniquely affect animals. Disasters can be roughly categorized as natural or technological. Natural disasters include hurricanes, tornadoes, blizzards, extreme heat, flood, fire, and drought, as well as geological incidents, such as earthquakes, landslides, tsunamis, and volcanoes. Technological disasters include fires, nuclear accidents, and incidents involving hazardous material or biological or chemical weapons. In this category, too, are the hazards posed by terrorist attacks, bombings, power blackouts, and computer viruses. In addition, biohazards pose significant risks to animals through large-scale disease outbreaks, such as avian flu, foot-and-mouth disease (FMD), and bovine spongiform encephalopathy, or mad cow disease. Hazards often overlap in disasters; for example, an earthquake or flood may create technological risks when containers of chemicals are damaged and seep into land or water. Moreover, as this book makes clear, different species or "categories" of animals face different risks. Livestock and wildlife are at risk for biohazards, such as disease. Their status as commodities places different value on their lives. Companion animals face the risk of abandonment following flood or fire. Captive marine species rely on electricity to make their water environment habitable, and electrical power is often lost during disasters. Most of the ten thousand fish in the Aquarium of the Americas, for example, did not survive after New Orleans lost power and the aquarium's generator failed. Penguins, sea otters, and other animals were transported to other facilities. In short, how we use animals largely determines the kinds of risk they encounter.

Who Responds? What Happens to Animals during Disasters?

There is no Red Cross for animals. The U.S. Department of Agriculture, which oversees numerous issues related to animals in food production and research laboratories, has neither money nor mandate to provide for animals in disasters.[26] The United States has no comprehensive plan for zoos and marine parks (although most have individual plans). When declared national disasters involve animals, the response typically involves a patchwork of organizations and individuals, including local and state veterinarians, departments of agriculture and public health, humane societies, local emergency managers, animal control agencies, animal shelter administrators, kennel clubs, breeders, equestrian groups, concerned citizens, and others considered animal stakeholders. The incident and the type of animals involved influence who responds. Different events within the same animal population also determine who responds, and how.[27] For example, an outbreak of a disease among livestock would involve state and local veterinarians and, in some cases, the state department of agriculture.[28] It would also bring in the U.S. Department of Agriculture's Animal and Plant Health Inspection Service. The response would involve euthanasia of affected animals and "pre-emptive slaughter" of others. The disease agent would determine the appropriate measures to safely dispose of carcasses and sanitize soil. Carcass disposal can raise public health and environmental issues, including odor and pollution. Depending on the cause of the disaster, officials from the Environmental Protection Agency and the Department of Natural Resources might monitor disposal.

An occurrence of livestock disease could easily become a disaster. For example, the 2001 outbreak of FMD paralyzed Britain's agricultural infrastructure and cost the equivalent of $12 billion. The outbreak resulted in the "depopulation" of over four million cows, pigs, and sheep, the majority of whom lived in affected areas but were not infected with the disease. The economic impact included direct costs such as lost animals, carcass disposal, and response and

eradication efforts. When meat processing was suspended, workers employed in slaughterhouses lost jobs. Hauling companies and rendering facilities experienced dramatic downturn. The outbreak also caused significant indirect costs to tourism and trade in Great Britain and western Europe, as well, when travel was restricted to control the spread of the disease. Many small businesses in the affected areas, such as pubs and inns, closed. The economic ripple effect is estimated at $150 million a week. In addition, the outbreak had nonmonetary consequences. Some of the animals in Great Britain were "legacy" herds, raised by particular families for generations. Depopulation on an unprecedented scale meant the loss of a way of life. As one farmer explained, "To see your life's work lying dead in your yards and fields is something no one can imagine until you see it for yourself."[29] As researchers point out, in rural communities, "sending animals for slaughter may be routine under normal circumstances, but during FMD it happened in an indiscriminate way on a massive scale. It was sometimes cruel and poorly managed and, more importantly, it happened in the back yard of the farmers and their children—in front of their very eyes." Farm families in stricken areas were ostracized, and over eighty suicides were reported among farmers and other animal stakeholders affected by the outbreak.[30]

If we consider the same herd of livestock but change the scenario to an outbreak of a zoonotic disease or one that can spread to the human population, the response would involve public health officials in addition to the agencies already mentioned.[31] Emerging zoonoses, such as the H5N1 strain of avian flu, have potentially serious impact on human health and the global economy.[32] The response would also involve euthanasia, "pre-emptive slaughter," and carcass disposal. Finally, still considering the same animals but changing the scenario to an animal disease that is foreign to the United States or to North America (known as foreign animal disease, or FAD), an outbreak would bring worldwide attention and response. FADs have significant and even devastating impact on the livestock industry. Because they can affect trade on an international level, the World Trade Organization oversees FADs

through the World Organization for Animal Health. As a member of the World Trade Organization, the United States monitors FADs through the Department of Agriculture's Animal and Plant Health Inspection Services.[33]

The decision-making process and other aspects of the response vary by incident and by the type of animals affected. I begin with the most familiar: companion animals, and in the first chapter examine the response following Hurricane Katrina. Then, in the chapters that follow, I discuss situations that may be less familiar to readers. Specifically, I examine animals raised for food, marine birds and wildlife, and animals in research labs. My goal is to show that although we must incorporate animals into existing response plans, it makes better moral and economic sense to reduce animals' vulnerability in the long term.

I want to make one final point before going further. This book is not about animal rights. It is about animal *welfare*, and I want to make the distinction clear. From the perspective of rights, animals have the right not to be treated as "things," particularly as the property of others. Thus, we cannot confine them for food, entertainment, companionship, or clothing. We cannot breed them to serve as research subjects. Implementing the rights perspective would abolish many of the institutionalized uses of animals. In doing so, we would indeed eliminate many of the conflicts in disaster response, especially the one about whether to save humans or animals. As Gary Francione writes:

> If we recognize that animals have a basic right not to be treated as our resources, and we abolish those institutions of animal exploitation that assume that animals are nothing but our resources just as we abolished human slavery, we will stop producing animals for human purposes and thereby eliminate the overwhelming number of these false conflicts in which we must "balance" human and animal interests. *We will no longer drag animals into the burning house, and then ask whether we should save the human or the animal.* (Emphasis in the original.)[34]

I agree that not treating animals as our property would solve many of our existing human-animal conflicts, including many of those in disaster policy. But my aims in this book are more practical. I recognize that animals and their products play an enormous role in the economy. I understand that, at most, only about 3 percent of the U.S. population lives on a plant-based diet. I also understand that most people associate the idea of "animal rights" with the blood-tossing antics of People for the Ethical Treatment of Animals and thus see the entire movement, and the idea, as extremist. Consequently, I take a welfarist perspective that acknowledges our deeply entrenched uses of animals and attempts to see that the animals "are healthy and have what they want."[35] This is the simplest, most straightforward definition of *welfare*. I take a welfarist perspective because I recognize the conditions that exist and hope to improve the situation of animals within them. By incorporating welfare considerations into our existing uses of animals, we also reduce vulnerability—overall and during disasters. I believe we can accomplish this goal without imposing undue hardships on people. In this book, I suggest numerous ways we can do so.

We have brought billions of animals into existence to satisfy our pleasures, our needs, and our appetites. For a long time, it was impossible for us to step outside our position of dominance and ask what moral obligations we have to those animals. Recently, however, the tide has begun to turn. More people are asking whether the animals in a given situation "are healthy and have what they want." More people are recognizing that all living beings are connected, that we are all vulnerable. Thus, the time is right to begin to question and reform our uses of animals. Doing so does not mean that we will eliminate all situations in which animals need rescue, but it will eliminate the majority of such situations. I realize this will seem like a radical proposal. I hope the evidence that follows will convince you that it is also sensible.