#### **Purdue University**

### Purdue e-Pubs

Purdue University Press Book Previews

**Purdue University Press** 

3-2020

# Cats and Conservationists: The Debate Over Who Owns the **Outdoors**

Dara M. Wald

Anna L. Peterson

Follow this and additional works at: https://docs.lib.purdue.edu/purduepress\_previews



Part of the Communication Commons, and the Environmental Studies Commons

#### **Recommended Citation**

Wald, Dara M. and Peterson, Anna L., "Cats and Conservationists: The Debate Over Who Owns the Outdoors" (2020). Purdue University Press Book Previews. 47. https://docs.lib.purdue.edu/purduepress\_previews/47

This document has been made available through Purdue e-Pubs, a service of the Purdue University Libraries. Please contact epubs@purdue.edu for additional information.

# CATS AND CONSERVATIONISTS

#### NEW DIRECTIONS IN THE HUMAN-ANIMAL BOND

Series editors: Alan M. Beck and Marguerite E. O'Haire, Purdue University

A dynamic relationship has always existed between people and animals. Each influences the psychological and physiological state of the other. This series of scholarly publications, in collaboration with Purdue University's College of Veterinary Medicine, expands our knowledge of the interrelationships between people, animals, and their environment. Manuscripts are welcomed on all aspects of human-animal interaction and welfare, including therapy applications, public policy, and the application of humane ethics in managing our living resources.

Other titles in this series:

Transforming Trauma: Resilience and Healing Through Our Connections With Animals Philip Tedeschi and Molly Anne Jenkins (Eds.)

A Reason to Live: HIV and Animal Companions Vicki Hutton

That Sheep May Safely Graze: Rebuilding Animal Health Care in War-Torn Afghanistan David M. Sherman

Animal-Assisted Interventions in Health Care Settings: A Best Practices Manual for Establishing New Programs

Sandra B. Barker, Rebcca A. Vokes, and Randolph T. Barker

Moose! The Reading Dog

Laura Bruneau and Beverly Timmons

Leaders of the Pack: Women and the Future of Veterinary Medicine Julie Kumble and Donald F. Smith

Exploring the Gray Zone: Case Discussions of Ethical Dilemmas for the Veterinary Technician
Andrea DeSantis Kerr, Robert "Pete" Bill, Jamie Schoenbeck Walsh,

Pet Politics: The Political and Legal Lives of Cats, Dogs, and Horses in Canada and the United States

Susan Hunter and Richard A. Brisbin, Jr.

Free Market Dogs: The Human-Canine Bond in Post-Communist Poland Michał Piotr Pręgowski and Justyna Włodarczyk (Eds.)

Teaming With Your Therapy Dog Ann R. Howie

and Christina V. Tran (Eds.)

Come, Let Me Guide You: A Life Shared With a Guide Dog Susan Krieger

# CATS AND CONSERVATIONISTS

The Debate Over Who Owns the Outdoors

Dara M. Wald and Anna L. Peterson

Copyright 2020 by Purdue University. Printed in the United States of America. All rights reserved.

Cataloging-in-Publication data is on file at the Library of Congress.

Paperback ISBN: 978-1-55753-887-1 ePub ISBN: 978-1-55753-888-8 ePDF ISBN: 978-1-55753-889-5

## **Contents**

Acknowledgments	vii
Chapter 1	
Introduction	1
Chapter 2	
The Cat Problem	23
Chapter 3	
The Science Problem and Framing	47
Chapter 4	
The Values Problem	69
Chapter 5	
The Social Problem	89
Chapter 6	
Conclusions	113
Notes	127
References	131
Index	147
About the Authors	153

### **Acknowledgments**

The idea for this book began when Dara was a graduate student in the Department of Wildlife Ecology and Conservation at the University of Florida. Several months into her second year in graduate school, she brought her adviser, Susan Jacobson, an outline of her dissertation proposal to review. Susan, an extremely supportive and patient advisor, handed the document back and informed Dara that she had written a book outline instead of a thesis proposal and she couldn't possibly complete this effort in four years. Fortunately, with Susan's help, Dara was able to whittle the proposal down to several manageable chapters for her dissertation, but the idea for a book stuck. The interviews and research described here would not have been possible without Susan's advice and encouragement.

This project was made possible by Katie Sieving, who introduced Dara and Anna several years ago and provided valuable feedback on earlier drafts of this book. Thank you to Julie Levy for connecting Dara with members of the TNR community and to Lynette McLeod for graciously sharing her data with us. Special thanks to research assistants Denise Coberley, Emily Haberlack, Madelyn Huinker, Iris McFarlin, Kimberly Nelson, Priscilla Raile, and Amanda Schuler for helping us stay organized.

We want to acknowledge the contributions of all of the research participants and organizations who supported this effort. Financial support for much of the data described in this book was provided by the NSF Doctoral Dissertation Improvement Grant in Decision Risk and Management Sciences, the Morris Animal Foundation, the Doris and Earl and Verna Lowe Scholarship, the University of Florida Department of Wildlife Ecology and Conservation, and the College of Liberal Arts and Sciences at Iowa State University.

We appreciate the helpful comments from two external readers and enjoyed working with the Purdue editorial team, including Justin Race and Katherine Purple.

Finally, we would like to thank our families for their support, advice, and patience.

#### **CHAPTER 1**

#### Introduction

#### **CAT WARS?**

Outdoor cats are ubiquitous throughout the United States. Tens of millions of cats live outdoors. Estimates of the country's "feral" (unowned) cat population range from 25 to 50 million, and almost that many owned cats spend at least part of their days outside. They are literally part of the scenery—a brief flash crossing a street at night, a lone sentinel waiting on a corner, or perhaps a minor annoyance digging in the garden or stalking birds on the lawn.

Although neighborhood cats are everywhere, most people around the world pay them little mind, as felines and humans alike go about their daily routines. However, in the past few decades, sporadic irruptions in the press reveal a wellspring of strong feelings about free-roaming outdoor cats and their presumed ecological damage. A recent book, titled *Cat Wars*, refers to the battles being fought on several fronts over the cats. The subtitle—*The Devastating Consequences of a Cuddly Killer*—reflects the perspective of people who believe that outdoor cats kill large numbers of song birds and other wild animals and pose a potential risk to human health. Conservation organizations, especially those concerned with wild birds, have been at the forefront of the effort to remove (and often kill) outdoor cats, as a way to protect birds and other animals, including endangered species. Their goal is to eliminate, or at least limit, the threat that cats pose to native wildlife.

For many conservation-minded groups, outdoor cats fall into the same category as other invasive animals, including domesticated species such as hogs, goats, and exotic (non-native) wild creatures like Burmese pythons. When invaders threaten both native animals and overall ecological integrity, resolving the problem is critical and often requires a lethal solution.

On the other side of the "cat wars" stand people who deny that cats and pythons fall in the same category. They believe that outdoor cats, owned or unowned, should be able to live healthy lives and that lethal management approaches are inhumane. Many people who share this perspective support trap-neuter-return (TNR) projects, which aim to keep cats healthy and limit population growth. Thousands of volunteers participate in TNR projects, and in addition to trapping and returning the cats, they often provide food to "colonies" where outdoor cats congregate and volunteers can watch out for sick or injured cats, orphan kittens, and others in need of care. TNR has widespread support from local and national humane organizations, including cat-specific groups such as Alley Cat Allies, many programs run through public animal services agencies, and countless small, volunteer-led projects (see Table 1). In all cases, the goal is to allow the cats to live outdoors in peace, with the best welfare possible, while limiting excessive population growth through ongoing spay and neuter of new cats.

The two groups—whose identities are often oversimplified as cat-lovers and bird-lovers—oppose each other in a number of venues, from academic journals to public policy debates to on the ground activism. The discussions often turn heated and angry, as the most recent debates over *Cat Wars* have shown. The passions on both sides highlight the significance of the debates, which are important first because in many areas there are so many cats that they have an inevitable impact on natural as well as human communities—although the form and extent of this impact are subject to debate. The "cat wars" also shed light on larger issues, including the way moral debates are framed, the social role of science, the way humans understand and value nonhuman nature, and, not least, the challenges of making good public policy amidst ethical pluralism.

In this book, we seek to provide an accurate, even-handed discussion of the debate about outdoor cats, with an emphasis on the origins of the debate, the role of framing, risk perceptions and uncertainty, and the ways that attitudes, beliefs, and values between vocal stakeholder groups contribute to conflict and common ground. We also offer practical strategies to reduce conflict and contribute to solutions to the great cat debate.

Table 1. A partial list of organizations conducting TNR in Florida.

Organization	City	Website
No More Homeless Pets	Gainesville	www.nmhp.net
Operation Catnip	Gainesville	www.operationcatnip.org
Space Coast Feline Network	Cocoa	www.scfntnr.org
Florida Humane		
Feline Friends of Ft. Pierce	Deerfield Beach	
Stray Aid & Rescue	Fort Lauderdale	strayaid.org
Animal Birth Control	Hollywood	
Cats Exclusive	Margate	
Beyond Nine	Margate	
The Clydey Foundation	South Florida	theclydeyfoundation.org
Humanitarians of Florida	Crystal River	www.hofspha.org
Collier Spay Neuter Clinic	Naples	www.collierspayneuter.org
Animal Birth Control	Palm City	www.animalbc.org
First Coast No More Homeless Pets	Jacksonville	www.fcnmhp.org
River City Community Animal Hospital	Jacksonville	www.rccah.org
Wags & Whiskers Pet Rescue	St. Augustine	www.wwpetrescue.org
Jury Duty—The Fixx	Pensacola	www.jury-duty.org
Flagler Cats	Bunnell	www.flaglercats.org
Caloosa Humane Society	Labelle	www.caloosahumanesociety.org
North Florida PAWS	Jennings	www.northfloridapaws.org
Hardee Animal Clinic	Wauchula	www.hardeeanimalclinic.com
Pet Luv	Brooksville	www.petluv.org
Animal Coalition of Tampa	Tampa	www.actampa.org
SPOT	Pinellas Park	www.spotusa.org
SPAY-LEE	Fort Myers	www.spay-lee.com

Table 1 (continued).

Friends of Gypsy Feral Cat Rescue	Tallahassee	www.friendsofgypsy.org
Animal Rescue Coalition	Sarasota	www.animalrescuecoalition.org
The Cat Network	Miami	www.thecatnetwork.org
Helping Homeless Cats	Tavernier	
Care Feline Rescue	Winter Park	carefelinetnr.org
Spay the Strays	St. Cloud	spaythestrays.rescuegroups.org
Alleys to Eden	Boca Raton	www.alleystoeden.org /index.html
PBC Cats	Loxahatchee	www.pbccats.org
Palm Beach Co. Spay Shuttle	Palm Beach	
Paws 2 Help	W. Palm Beach	www.paws2help.com
PAWS	Port Richey	www.pawsfl.com
SPOT—Stop Pet Overpopulation Together	Pinellas Park	www.spotusa.org
Spay & Save	Oveido	www.spaynsave.org
St. Augustine Humane Society Spay Shuttle	St. Augustine	www.staugustinehumane society.org
Concerned Citizens for Animal Welfare	Daytona Beach	www.ccfaw.org

#### TRAP-NEUTER-RETURN

TNR lies at the heart of the conflict over outdoor cats. The debate over TNR, and thus about outdoor cats, is relatively recent, dating from its growing acceptance in the United States beginning in the early 1990s. The program was pioneered much earlier, however, starting with pilot efforts in England and Denmark as early as the 1960s (Berkeley, 2004). These early programs set the model still followed by most programs today. Individual volunteers set cat-sized humane traps (usually provided by a private animal welfare organization or sometimes a public shelter), baited and placed in areas of known outdoor cat colonies. When cats are caught in the traps, they are brought to a participating shelter, veterinary hospital, or humane

society to be spayed or neutered and, when possible, vaccinated against major feline diseases (especially rabies). The cats are then released, usually in the same location in which they were trapped—thus the "R" stands for "return." However, TNR is sometimes explained as "trap-neuter-release," since in some cases the neutered and vaccinated cats are released in areas other than the ones in which they were trapped. Sometimes this is because the original area would be considered too dangerous for the cats or for local wildlife.

While a few isolated programs started in the US in the 1970s, TNR was really launched in 1990 with the formation of Alley Cat Allies, the first formal network of outdoor cat advocates. At that time, the official position of the Humane Society of the United States (HSUS) and other animal welfare groups was to advocate euthanasia of "feral" cats who could not be adopted. This principle coincided with the common practice at most public shelters, which euthanized all cats labeled feral, usually meaning all adult cats trapped in the area of known feral colonies or even in other areas. Such animals often did not receive individual temperament evaluations that might have placed them in the "adoptable" section, but were automatically considered unadoptable and therefore euthanized.

This blanket policy led to the deaths of many cats who were not truly feral, since many outdoor cat colonies include former pets who are very friendly with humans. In addition, individuals sometimes trap outdoor cats and take them to shelters, saying they are feral, when in fact they may be owned or formerly owned cats. TNR programs often include individual temperament evaluations, so that friendly cats and most kittens can be placed for adoption if there is room. (Since shelters are often full, however, even many cats with the potential of being house pets are returned to outdoor colonies by most TNR programs.)

After about two decades of small and scattered efforts by volunteers all around the country, as well as more systematic advocacy by groups like Alley Cat Allies, TNR has become the favored approach of most animal welfare groups, including the American Society for the Prevention of Cruelty to Animals (ASPCA) and also the HSUS, as well as groups that specialize in helping outdoor cats. At the same time, these organizations recommend that owned cats be kept indoors at all times, on the grounds that this approach keeps both cats and their potential prey safer (ASPCA n.d.; HSUS n.d.).<sup>2</sup> The consensus among animal welfare advocates, in other words, sees outdoor life in general as far from ideal for

domestic cats. In addition to support from large animal welfare organizations, TNR has been accepted by a number of local animal control agencies and city or county governments, some of which have established their own programs or provided support for those already in effect. For these advocates, TNR appears to be a moderate and humane way to manage outdoor cat populations.<sup>3</sup>

Opponents of TNR do not see it as an effective way to control outdoor cat populations or reduce their impact on wild animals. They believe, rather, that it contributes to continued animal welfare problems for both cats and the wildlife they prey on, and that it is supported by cat-loving extremists who lack scientific bases for their position. Opponents of TNR portray any strategy that leaves outdoor cats in place as a disaster for native wildlife and a serious health concern. Leading the charge against TNR are ecological scientists, environmental organizations, and especially bird-lovers, who believe that feral cats (and perhaps all outdoor cats) should be subject to strict, sometimes lethal controls, because of their predation of songbirds and other native wildlife. (Interestingly, as we discuss in chapter 2, the influential animal rights group People for the Ethical Treatment of Animals [PETA] also opposes TNR, though on different grounds.) The American Bird Conservancy and the Audubon Society have been especially active in this debate, joined by a number of wildlife ecologists, ornithologists, and other scientists and professional organizations (e.g., The Wildlife Society [TWS]) as well as environmental activists. They view outdoor cats as invasive, non-native animals who do not belong in wild nature. Their proposed solution is, most often, to trap and adopt the cats that can be rehabilitated (to live as pets) and to euthanize those that are too wild for domestic life.

The state of the debate is well summarized by Wikipedia's entry on TNR, which, in its effort to be evenhanded, presents the hotly debated arguments on both sides. TNR is opposed by wildlife advocacy organizations, PETA, and conservation scientists. TNR advocates claim that the procedure works by stopping the birth of new cats in the colony and letting the colony members live out their lifespan, approximately six years for outdoor cats, with their own group. Opponents claim that TNR is ineffective at reducing colony sizes and only subsidizes a non-native predator responsible for the deaths of more than fourteen billion birds, mammals, reptiles, and amphibians annually in the United States alone (Loss, Will, & Marra, 2013).

As Wikipedia makes clear, the debate over TNR seems to involve mutually exclusive options: either the cats are allowed to live outdoors or they are not. In practical terms, the passion and sometimes anger on both sides make it hard to identify common ground, much less to achieve solutions that will satisfy all parties. Moreover, governments are typically mute and unhelpful in defining or supporting practical policy strategies. However, when we look closely at the debates, we find that the two sides actually share a number of core values. They mostly agree, for example, that the population of cats living on their own should shrink if possible and certainly should not expand. Many people also agree that they do not want the cats (or anyone) to kill large numbers of songbirds, and, further, that the root cause of the problem is human irresponsibility, especially cat owners who abandon their pets and who fail to spay and neuter them. These significant agreements often are lost in the polarizing language of the debate. In addition, conservationists and cat advocates differ on the implications of scientific research on the ecological impact of outdoor cats. They disagree, for example, on whether or not outdoor cats kill large numbers of songbirds and other protected or endangered species, and also on the impact of TNR programs on outdoor cat populations. Without agreement on the data, or even the terms used, it is impossible to expect agreement on policy or management recommendations.

We believe that there are strong arguments on all sides of the issue, and that the best approaches will tailor policies and management strategies to local conditions. We base this conclusion, first, on the fact that outdoor cats do not pose the same threat to wildlife in all places. Particularly in urban and suburban areas that are already ecologically disturbed, and where cats are not killing endangered or threatened species, the worries about an environmental apocalypse may well be unfounded. In such circumstances, where ecologically negative effects are demonstrably minimal and where free-roaming cats can be kept heathy, closely monitored, and carefully managed, TNR programs, in combination with adoption and other efforts (e.g., prevention of abandonment), may help ensure that outdoor cat populations stay healthy and do not increase exponentially. In addition, while it is true that outdoor cats do not live as long as indoor pets, there are grounds for believing that their lives are often satisfying and valuable. Also, many communities do not prohibit owned cats from roaming outdoors, although some do apply leash laws to cats as to dogs.

The environmental, humane, and legal context suggests that in many urban and suburban areas euthanasia is not an appropriate blanket policy for free-roaming or unwanted cats. Moreover, when cat colonies are located close to wild or natural areas, the potential for negative environmental impacts on wildlife suggests that TNR is not an appropriate blanket policy for free-roaming or unowned cats. By searching for middle ground, we hope to identify a combination of approaches that can be crucial tools to avoid, on the one hand, a laissez-faire approach that would leave outdoor cats entirely alone, to reproduce and spread disease without any human intervention, and on the other hand, lethal control in which the cats are summarily eliminated, by being trapped and taken to a shelter to be euthanized or, more rarely, killed on site (usually by poison or shooting).

In addition to exploring the values underlying both sides of the cat debate and identifying new ways to engage stakeholders with strongly held beliefs about cats, this book also will provide an opportunity to highlight the voices of the many millions of people with views that are more nuanced than the ones typically presented in the debate over cats. Their perspectives and concerns are often drowned out by louder interests—represented broadly by TNR proponents and bird advocacy groups. By listening to these "middle voices," we expect to identify new and collaborative approaches to enhancing cat and wildlife safety, and tolerable conditions for residents concerned about cat-related nuisance behaviors. These voices contribute to a narrative that moves away from an emphasis on conflict, stalemate, and blame and toward common ground, shared values, and opportunities for collaboration.

#### FRAMING THE CAT DEBATE

As we see in other political campaigns, the language we use and the narratives in which we embed the issues all shape the ways we perceive an issue, what we think is at stake, and what we consider a successful resolution. The debate over TNR points to the importance of framing, a concept that social scientists use to analyze public debate about various issues. We return to this issue in more detail in later chapters, but because it is so central to our analysis of the cat debate, we offer a short introduction to the concept here.

Social scientists define framing as the narratives that are used, by individuals and the media, to structure the ways an issue, problem, or event

is received and interpreted. Through framing, people construct narratives that promote a "particular problem definition, causal interpretation, moral evaluation and/or treatment recommendation" (Entman, 1993, p. 52). By presenting, emphasizing, or excluding particular features, frames influence public perceptions of environmental issues (Tankard, 1991). Framing occurs all the time, sometimes explicitly and intentionally, as when media want to present an issue in a particular way or when policymakers seek to sway public opinions. However, subtle, sometimes unintentional framing also takes place when people choose particular words to describe an issue, highlight certain examples, or prioritize some values over others. In addition to traditional sources of media (e.g., news), social media, blog posts, and websites can present issues in the context of particular frames, shaping how people understand an issue and what they think is the right way to address it.

On environmental and scientific questions, including the ecological impact of outdoor cats, popular media are a particularly important source of information. On such issues, most people do not have detailed scientific knowledge or direct personal experience. While cats are the most popular domestic pet, and people regularly report seeing outdoor cats, relatively few people have witnessed cat predation directly or participated in a TNR event. Further, most people lack the resources to become well informed about the risks, uncertainty, and ambiguities involved in the cat debate. Thus, they rely on the media and other trusted (by them) sources of scientific information and expertise. This makes the media a potentially important source of information about the cat debate.

Media coverage may influence the debate about TNR in two specific ways. First, the amount of coverage and attention they provide could influence public perceptions of the importance of this issue. Increased media coverage could increase public awareness about this issue, making it appear relevant and even urgent for people who previously did not pay attention to the problems caused by outdoor cats or the fate of the cats themselves. The more the media focuses on the issue of outdoor cats, the more salient this issue may become.

Particularly in the light of the publication of *Cat Wars* in fall 2016, the issues of outdoor cats and cat management have received widespread attention in magazines, newspapers, on television, social media, and blogs. This media coverage may have highlighted the significance of this issue for people with a range of opinions.

The second way the media influences public debate about outdoor cats is by highlighting specific attributes of cats (for example, their predation of songbirds) or by emphasizing particular perspectives (or frames). When media reports associate cats with ecologically devastating predation, or describe cat owners as "crazy cat ladies," or characterize the debate as a "war," a "fight," or a "battlefield," they may influence the ways all perceive cats, birders, cat advocates, and the debate over TNR or lethal management.

In this case as on other issues, media reports and others use a wide array of frames to tell the "story" at hand. Some common types of frames include the human-interest frame, focused on an individual's story or personal experience; the economic frame, emphasizing the costs or financial benefits of an action or effort; and the morality frame, which highlights ethics, God, and other religious concepts. All of these are relevant to the outdoor cat controversy.

However, by emphasizing the conflict between birders and cat advocates, the media has overwhelmingly employed a conflict frame—focused on tension between opposing viewpoints—and underemphasized examples of TNR and conservation groups collaborating and working together to manage outdoor cats and protect birds. Emphasizing conflict appeals to reporters and other storytellers because it brings drama and suspense, attracting readers and attention. Conflict, novelty, timeliness, and proximity are a few of the characteristics that make news stories newsworthy and help media outlets sell their products. While the conflict frame is appealing, it may contribute to public perceptions that conflict over cat management is intractable. Stories about the conflict may make readers feel helpless and reduce motivation to engage in efforts to manage cats. A conflict frame may contribute to frustration or normative beliefs that encourage groups to continue focusing on past resentments and areas of disagreement. Ultimately, conflict and stories about conflict do nothing to help advocates think about or identify new solutions or techniques that could engender widespread support and humanely reduce the cat population.

# OBJECTIVES AND THEMES: SCIENCE, VALUES, AND FUNCTIONAL POLICIES

No single book can discuss all the research, debates, and programs related to outdoor cats, and no single policy proposal could resolve the conflicts.

Our goals here are more modest. First and foremost, we hope to sort out both the values and the data involved in the conflicts over outdoor cats. We aim to sort through the heated rhetoric and confusing use of "facts" in order to gain a clearer sense, first, of what is really happening: how much damage do outdoor cats cause, and under what circumstances? There have been countless studies of outdoor cats' range, welfare, and impact on both ecological and human health, as well as on the results of TNR programs. However, to date there exists no balanced, accessible overview of the research on public perceptions of outdoor cats' ecological and social impacts. Nor is there guidance on what the data do and do not tell us about the actual ecological and social effects of outdoor cats. The science of cat-wildlifehuman interactions, falling largely within the discipline of urban ecology, is complex and there are no simple take-home messages. Our scientific discussion pertains to work done in the most common "battlegrounds" cities and towns in North America—because it is here that the science is insufficient to guide policy development. In stark contrast, on oceanic islands where cats and other domestic and exotic species (rats, dogs, goats, sheep, cows, snakes, and mosquitos) have been introduced, those locations have had well-documented and devastating effects (localized "mass extinctions") on the vulnerable island biodiversity (Medina et al., 2011; Vazquez-Dominguez, Ceballos & Cruzado, 2004). But continental wildlife species that live in human-dominated environments typically are much more tolerant of exotic predators and competitors. Continental extinctions and even local extirpations of native birds by cats are generally at the heart of the debate that plays out in North America. We evaluate the uses of current types of data, which in many ways are as yet unhelpful in moving toward a functional truce in the cat debate, and identify types of studies that are most needed to empower humane and ecologically sound collaborations leading to peaceful dissolution of the "war."

Second, we hope to clarify the values held by different groups, including advocates of both birds and cats and also the general public—the large majority of people who are not committed to either side but who nonetheless have strong feelings about birds, cats, and nature. Here common ground is evident: all parties to this debate (and indeed, most Americans in general) care about animals, including both cats and birds, as well as about nature in general.

Most Americans in general are opposed to the use of lethal management techniques for charismatic, domestic animals who are otherwise

healthy. And as recent furor over the killing of charismatic megafauna illustrates, public outcry extends to wild, captive, and domestic animals (Actman, 2016; Thornton, 2014; Cunha, 2016). The debate is not about a choice between caring or not caring for nature, in other words, but rather it is about how we define nature and what caring demands.

Third, we provide specific ideas about how communities could communicate or collaborate over the management of outdoor cats. We offer an overview of some of the most important areas for potential collaboration. In addition, we provide the best information available about the successes and failures of different engagement approaches. We believe that effective policy—on this or any issue—should rest on accurate readings of available research and also on attention to shared values. While it may not be possible to satisfy all groups, at least not in every situation, nuanced and thoughtful policymaking can result in less conflict and frustration, as well as better welfare for both birds and cats.

In sum, our aim is not to resolve the issues once and for all, but to support informed, sensitive, and productive conversations about outdoor cats. Such conversations are necessary, at every level, from local to national, if we are to develop and implement policies that support diverse interests of cats, birds, wild landscapes, and human communities.

#### **Guiding Themes**

In addition to contributing to practical and philosophical discussions about outdoor cats, we hope to use this issue as a lens for thinking about several broad issues. The first of these is the ways that polarized framing and inflammatory language make it hard to have constructive conversations about controversial issues, and even harder to develop programs that address the values and concerns of multiple sides. The discussions about cats' ecological impact underlines the power of language, and especially the ways that polarized language shapes the terms of debate as well as the positions that different people take on it. The passion and sometimes anger on both sides of this issue make it hard to identify common ground, much less to achieve solutions that will satisfy all parties. Even strategies based on sound science and sensitive to diverse human perspectives and values will fail in such a polarized setting. In order for dialogue and ultimately policy to succeed, we need to reshape the debate so that it can proceed in a more constructive way. This entails using different language, one that enables us to recognize the common ground shared by cats, birds, and people. We are

all enmeshed in overlapping, interactive social and ecological networks. We share communities, resources, and many goals. Community building and conversation about cats can help, in the end, build structures for addressing other dimensions of our complex and often conflicted relationship to the natural world.

Second, we explore the social role of scientific research and data. The ecological impact of outdoor cats is just one of many issues on which opposing sides have vastly different understandings both of what "science" says on a particular question and of the social role of science in general. At the heart of the debate is a question that appears simple: do cats kill large numbers of songbirds? It is a fact that cats kill birds, but the question of "large" numbers is not resolved because large is a relative term, and the standard for small and large has not been defined. Since we know that outdoor cats kill birds and there are "many" cats outdoors, then we can be sure that "many" birds are being killed by cats. But to determine whether the many is actually a relatively large number, we need to quit arguing over estimates of numbers of dead birds and ask "so what"? By reframing the question in a different way, we can focus on the things that will tell us whether millions or billions of cat-killed birds is indeed too many. People on both sides believe that they have data on their side, but in fact raw data is far from conclusive.

For example, if I told you, "I just found \$1,000, but it is not enough money," many questions remain. Before evaluating my claim that it is "not enough," you will want to know the answers to questions such as these: What items do I need to buy and for what purpose? How much do they cost? How much do I have in savings and what other expenses do I have? What other resources could I put toward my goal? The judgment of "not enough" requires diverse evidence and a logical framework for you to assess its validity. In this case, as in other environmental issues such as climate change, the safety of using and consuming pesticides, and the impact of hydraulic fracturing, there is a great deal of data but even greater disagreements about what the data means, what we should do about it, and how much risk we are comfortable with. This uncertainty, combined with the values that influence our beliefs about these topics, complicate the debate not only about outdoor cats, but also on a number of other ethical and social issues. We will unpack the nature of the uncertainty inherent in simple body count data and identify productive scientific contributions

that can guide people out of the anxious mire created by the contentious "cat war" narrative.

Third, we use the discussion about cats and TNR to explore the ways that we define and value nonhuman nature and the appropriate place of nonhuman animals in it. Advocates on both sides of the cat debate care greatly about nonhuman creatures. What divides them is their understanding of natural processes, the role of humans and other animals in those processes, their support for the use of lethal management strategies, and the relative value of categories such as "wild" and "domestic." The differing definitions of nature in this debate underline the role of values, and especially the underlying moral claims that are rarely made explicit but that nonetheless have a powerful effect on the debate. These claims are based on deep-seated, not always scientifically supported attitudes about animals and nature, and about humans' relations to both. Both cat advocates and bird advocates love nature, love animals, and want to protect creatures they see as threatened. Advocates on all sides need to recognize these shared commitments, since agreement on foundational principles can help strengthen practical collaborations. Bringing values to the fore can help us understand just what is at stake in the great cat debate and will help shape future research and management strategies.

#### **METHODOLOGY AND SOURCES**

The ecological and social significance of outdoor cats is a complex issue, involving many perspectives and scholarly disciplines. In order to present as full and balanced a portrait as possible, we draw on a broad range of sources. These include primary published research in social sciences, mainly conducted by Dara Wald, as well as discussions from animal and environmental ethics, mainly written by Anna Peterson. The sections reviewing the ecological evidence of cat predation and TNR models was written with support from Katie Sieving. While Wald and Peterson each have been primarily responsible for specific parts of the book, we have collaborated throughout, and the arguments and conclusions presented here represent our collective position.

#### Social Scientific Research: Surveys and Interviews

Dara Wald and her research assistants, with support from her adviser, Susan Jacobson, conducted extensive research on stakeholder and public perceptions about TNR over the past several years. Wald began by identifying ten TNR organizations across four counties in North and South Florida. These groups were identified as the most active in Florida with large membership/volunteer lists and ongoing TNR efforts throughout each county. Wald identified active Audubon chapters across the same ten counties with large membership lists. The final four counties were Alachua, Duval, Broward, and Miami-Dade, selected because they included active stakeholder groups (both TNR and Audubon), represented both North and South Florida, and agreed to participate in this research.

Survey questions were developed in consultation with experts in the fields of wildlife ecology and animal welfare. Wald then conducted six focus groups with stakeholders across Florida to develop survey items addressing beliefs about outdoor cats, cat impacts, test survey terminology, and question wording. Finally, survey questions were tested through an in-person survey with undergraduate students at the University of Florida (Wald & Jacobson, 2013, 2014).

Briefly, from April 2012 to September 2012, Wald sent a mail-back questionnaire to randomly selected individuals belonging to two stakeholder groups: (1) members of organizations supporting and participating in TNR efforts (n = 800), (2) members of the Audubon Society (n = 796), and randomly selected residents across the aforementioned four counties.

Mailing addresses for the public were purchased from InfoGroup USA (n=2,800). Wald followed the four-wave tailored design method. The first mailing was a pre-notice letter and the second mailing included a cover letter, survey, and postage-paid return envelope (Dillman, Smyth, & Christian, 2014). A reminder postcard was sent to nonrespondents two weeks later. The final mailing, sent two to three weeks after the reminder, included another full copy of the survey, envelope, and letter.

The 28-question survey measured experiences with cats, perceptions of the risks and benefits related to cats, general beliefs and attitudes about cats, TNR and lethal management, preference for cat management, general beliefs about cat-related impacts on wildlife and the environment, and environmental worldviews. The survey concluded with three demographic questions about gender, cat ownership, and cat feeding. In the survey, we use the neutral term *outdoor cats* to describe socialized or feral, free-roaming, owned, and unowned animals because this expression was

identified in focus groups as the most neutral and easily understood term that would engender the least amount of bias from survey participants. The survey specifically asked respondents to answer questions about outdoor cats not owned by them. The Institutional Review Board (IRB) for the University of Florida approved the survey methods and study design (UF-IRB-2010-U-0730).<sup>5</sup>

#### **Ecological Science**

In addition to our primary social scientific research regarding attitudes toward TNR and related issues, we draw on the vast and sometimes confusing scientific data regarding outdoor cats' predation and other ecological impact. We did not conduct our own primary research on this topic, but rather collected, analyzed, and evaluated some of the research that already exists. We paid particular attention to the setting in which research was done, the protocols employed, the perspectives and goals of the researchers, and the ways the research was presented and promulgated. This approach enabled us to make sense of some of the significant disparities between different accounts, particularly regarding the scope and scale of cat predation, effectiveness of TNR programs, and related issues. It also permitted us to identify and evaluate the different sources used by some of the parties to the "cat wars," and thus understand more deeply the ways that scientific work is framed and used in the public sphere.

#### **Other Primary Sources**

We also consider as primary sources the position statements of various organizations involved in the debate, including wildlife and bird groups as well as animal welfare and cat advocates. We have sought information from both national and regional or local organizations in order to identify themes that are broadly represented. We have read these carefully and analyzed them with particular attention to their reading and use of scientific data, and their explicit and implicit value claims.

#### **Additional and Secondary Sources**

We also draw on a diverse set of secondary sources. These include works in moral theory, sociology, and policy discussions, as well as a review of online news stories, blog posts, stakeholder websites, and special interest magazines conducted by Lynette McLeod. Using these sources, our exposition will extend beyond an evaluation of primary sources to explore the framing, discourse, and (often unstated) moral claims behind stakeholder perceptions and positions.

#### **BOOK OUTLINE**

#### **Chapter 1: Introduction**

The first chapter introduces the topic and the larger issues that we will discuss in relation to feral and outdoor cats. We begin with the perception of the conflict as between "cat people" and "bird people," and the polarized, often heated character of the current debate. We then discuss the ways we will pursue an alternative approach to this problem, emphasizing the need for sound science, incorporation of multiple voices, and attention to moral, ecological, and civic concerns. The introduction also lays out the organization of the remainder of the volume and explains our methods and sources.

#### **Chapter 2: The Cat Problem**

This chapter provides an overview and initial analysis of the "cat wars." We begin with the local-level discussions about management options, often focused on TNR programs. Even at this smallest scale, all the big issues arise: questions about outdoor cats' ecological impact; the effectiveness of TNR in controlling population growth; public health effects; and the intrinsic value of the cats, birds, and other creatures involved. The same questions arise when we turn to larger scales. Here we discuss public debate in more detail, focusing on different interpretations of the scientific research on cat predation. We look both at the readings that portray cats as major threats to native ecosystems and also at the approaches of scholars who do not believe that outdoor cats cause major ecological damage. We do not aim to resolve the disagreements, but we do show that the research is far from clear-cut, that local and methodological variability is high, and that different stakeholders read the evidence through the lenses of their own commitments.

After presenting the positions and arguments of the major players in the cat debate, we provide a larger scientific, sociological, and philosophical context for the conflict. In particular, we outline the intersections between wild and domestic animals, between animal welfare and ecology, and between native and invasive species. We also look at discussions of public health and community responses to coexisting with feral animals, including an overview of different policies and laws in representative settings. By the end of the chapter, readers will be familiar with the contours of the debate, including key players, issues, and perspectives. They also will

appreciate the considerable ambiguity involved in readings of the scientific data, on both cat predation and TNR programs. This information will provide a context for later chapters that analyze specific aspects of the cat debates in greater detail.

#### **Chapter 3: The Science Problem and Framing**

This chapter looks at how the science behind the "cat wars" is framed and how this framing relates to uncertainty about the effects, especially, of feral cats' predation of native wild animals such as songbirds. We look at the results of a wide range of studies conducted in different areas, asking not only who cats kill, but also about the broader effects of cat predation within different ecosystems. A strength of our review lies in weighing the relative impacts of cats versus other important urban-adapting predators on bird mortality, and we highlight various research approaches that are needed to understand fully the direct and indirect relationships between free-roaming cats and their prey. Indeed, the sum of scientific information available for understanding the effects of cats in urban ecosystems is biased—not willfully, but via omission, because proper ecological studies of this complex issue are difficult, expensive, slow, and not very sexy compared to "kitty cams" and billion-bird body counts.

We also look at the research that has been conducted about the effects of TNR programs on cats' ecological impact and explore the conclusions that scientists from both sides of the debate draw from the data arising from cat populations where TNR is applied. In listening to both sides, we find that TNR scientists are quite realistic about the limited potential of TNR for resolving the "cat" problem on its own. Yet, while they seek other alternatives too, TNR remains their preferred management strategy. We hope to bring into focus the specific kinds of conditions where TNR really can and cannot possibly be used to reduce cat numbers and ecosystem impacts. What we hear in listening to "bird" and "cat" scientists are different values, assumptions, and constraints on the work they can do but, collectively, they bring to bear sufficient intellectual and research tools needed to address the science of the problem, if only they could work side by side. We conclude the chapter with some clear and simple takeaway lessons about what current science tells us and where the critical gaps are, about the importance of knowing local conditions before actions are taken, and we give an optimistic view of current and future science needed to guide policy strategies.

Above all, we hope to shine a spotlight on the sources of confusion about outdoor cats' environmental impacts, so that the emphasis on conflict can be set aside in evaluating and planning different management approaches. This confusion and the resultant emotional intransigence hampers policymaking because it eliminates the possibility for open-ended, constructive discussions among stakeholders about shared values and opportunities for collaboration. Often productive discussions must be protracted and explorative to get anywhere when dealing with complex social-ecological issues like this one. Formulation of constructive and effective policies with management procedures that communities can accept requires lengthy discussion and collaborative problem-solving within legal, ethical, and socially sensitive frameworks based on factual truths. This chapter will highlight the characteristics of case studies where solutions were achieved, reveal how different situations may call for different approaches, and identify crucial scientific perspectives that need to be weighed.

#### **Chapter 4: The Values Problem**

The cat problem does not only involve debates about scientific research, ecological processes, and the effectiveness of management strategies. Underlying these discussions are worldviews and value commitments that shape how different individuals and groups interpret the science. This chapter examines the values that are in conflict in the debates about outdoor cats. We are especially interested in the sometimes explicit, often implicit moral claims that undergird the positions of both "cat people" and "bird people." We explore this issue in light of several different ethical discussions. One important dimension of the debate about cats is the presumed division between animal ethics, which focuses on the value of individual sentient creatures, and ecocentric environmental ethics, which values wild ecosystems. We explore different approaches to this debate, including efforts to bridge the divide between individual and collective, domesticated and wild, to think more broadly about the value of nonhuman nature and human obligations to it. In order to make sense of these conflicts, we also discuss broader issues in moral theory.

In particular, we ask whether particular ways of thinking about ethics have led to the present polarities. We also investigate alternative models that can open up possibilities for constructive dialogue and consensus. We are particularly interested in the ways pragmatism provides a resource for a pluralistic, empirically grounded, and open-ended approach to moral and

policy debates. With this discussion, we hope not only to shed light on the ethical dimensions of the "cat wars," but also to suggest constructive models for thinking about other instances in which science and nature have become the subjects of heated public debates.

#### **Chapter 5: The Social Problem**

This chapter focuses on the positions of different stakeholders. Drawing on our research with focus groups and surveys, we explore a wide range of positions, ranging from those that advocate killing all outdoor cats to those that advocate a completely hands-off approach. We explore assumptions about the factors driving social conflict over cats (e.g., cat-lovers don't know that cats kill birds, bird-lovers hate cats). Our results challenge whether the polarized views commonly expressed in the media really exhaust the debate over cats, and whether the outdoor cat controversy requires people to choose either animal welfare or ecological integrity. We highlight the importance of conducting research with multiple interest groups and avoiding the use of biased terms in surveys that can inadvertently influence survey responses and pressure respondents into providing a "desirable" response to a controversial issue. In this chapter, we discuss the benefits of including neutral questions and terminology in surveys about controversial environmental topics and explore the beliefs, attitudes, and potential areas of agreement we identified.

The final section of this chapter describes several broad areas of agreement among different parties involved in the debate, focused on their concern for nonhuman nature and their desire to protect animals. We suggest that a pragmatic, pluralist approach to cat management will be the most constructive and effective, and we discuss the failure of current messages aimed at reducing the outdoor cat population. To advance efforts to promote collaboration, we also provide concrete examples of why existing messages may backfire and suggest several message types that might be more effective. Finally, we include a number of ways that policymakers, animal advocates, and others who hope to reduce the conflict on this issue might turn the focus to common ground and shared interests, in order to encourage consensus and collaboration among opposing groups.

#### **Chapter 6: Conclusions**

In the conclusion, we summarize some of the main themes and arguments we have reiterated throughout the book. One of the most significant is the need for scientists and others to gather and also present data carefully, with attention to ambiguity, local variation, and uncertainty. Another central theme is the need to acknowledge and make explicit the moral commitments of all parties in the conflict and to pursue shared values and goals, rather than clinging to inflexible positions. An overarching premise, running through our discussions of both science and ethics, is the fact that the "cat wars"—like so many conflicts about nonhuman nature, animals, and conservation—is as much a social problem as it is an ecological one. Without addressing the perspectives, practices, and interests of the humans involved, we will never break through the intractable oppositions that characterize so many discussions about cats.

While we do not offer any definitive resolution to the debates regarding outdoor cats, we do suggest that potential solutions should be grounded on sound science and also capable of gaining support from diverse constituencies. One way to pursue such programs is to democratize the process of gathering and interpreting scientific data, through citizen science, public forums, and better communication by scientists and their allies. Consensus must also be based on explicit attention to the values and worldviews that shape not only public interpretation of scientific evidence but also the work of scientists.