Urban Carnivores: Ecology, Conflict, and Conservation

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Predators in Our Midst


A few months ago, a mountain lion was seen at three o’clock in the morning in a vacant parking lot four blocks from my house in Berkeley, California. After a brief pursuit, the Berkeley police shot and killed the animal, sparking a fiery debate among community members. A memorial to the slain mountain lion soon appeared, decorated with flowers and lengthy notes opposing the police action. Notes supporting the police soon followed, as well as community meetings. Any doubts I had about the strong and disparate feelings evoked by carnivores living in our midst were quickly dispelled by this incident.

For the first time ever, the majority of people in the world now live in urban areas. Perhaps not coincidentally, interest in urban ecology has boomed in the past several decades, spawning new books and scientific journals. This newfound interest in urban ecology is unlikely to be a passing fad, given current trends in human population growth and urbanization. In Urban Carnivores: Ecology, Conflict, and Conservation, editors Stanley Gehrt, Seth Riley, and Brian Cypher present a timely and thorough overview of the issues surrounding urban carnivores in North America and Europe. This volume is a useful addition to the urban ecology literature, focusing on the taxonomic group that seems to evoke the strongest emotions among people and to create the most challenging management problems. Intended primarily for wildlife biologists, mammalogists, and urban planners, Urban Carnivores is highly readable and carefully edited. The book is a detailed and balanced presentation of the scientific literature, with some interesting anecdotes and striking photographs mixed in.

Stanley Gehrt is an adjunct senior scientist at the Max McGraw Wildlife Foundation and an assistant professor of wildlife ecology at Ohio State University; Seth Riley is a wildlife ecologist with the US National Park Service; Brian Cypher is a research ecologist at California State University, Stanislaus. These editors are widely published in the urban carnivores subfield and have particular expertise in coyote and kit fox ecology. The book chapters are coauthored by other well-known carnivore ecologists, such as Kevin Crooks, Paul Beier, Todd Fuller, and Daniel Decker.

Seventeen chapters follow a short preface that describes the origins of (and justifies the need for) the volume. A short introductory chapter or a longer preface explaining the overall goal of the book would have been useful. The first three chapters provide background information about urban ecosystems, carnivores, and human-dimensions research, introducing critical terminology and concepts. The first of these, “The Urban Ecosystem,” deftly addresses the problem of defining what urban means. As a wildlife ecologist with limited exposure to human-dimensions research, I found the third chapter about the human dimensions of urban carnivore management to be particularly informative. A few explanations struck me as simplistic (e.g., fear of carnivores leads to lower levels of acceptance of carnivores); however, other parts of this chapter introduce interesting concepts, such as impact dependency (the idea that tolerance is determined by the impact of living with a species rather than by the traits of the species per se).

The background chapters are followed by nine chapters devoted to individual carnivore species, including coyotes, mountain lions, raccoons, and red foxes. These chapters offer fairly comprehensive overviews of the species’ characteristics, distribution, behavior, demographics, food habits, diseases, movement patterns, interactions with people and other wildlife, and comparisons among urban and rural populations. The reader with a general interest will likely skim these chapters, whereas the reader with a particular interest in a species will find an abundance of summary tables, data, and other useful information. These species-specific chapters precede five synthetic chapters that address such topics as community ecology and human–wildlife conflicts.

This book is an excellent overview of urban carnivores in North America, with a handful of European case studies thrown in, but other regions of the world are notably absent. International issues are only briefly addressed in a section of the chapter “Responding to Human–Carnivore Conflicts in Urban Areas.” I would have liked to have seen at least one chapter devoted to urban carnivore management in developing countries or an explanation for this striking omission.

In summary, I highly recommend Urban Carnivores to those who are interested in urban ecology or carnivores. The book is informative, easy to read, and stylistically consistent; the species-specific chapters make useful references, and the photographs are striking, such as the one of a mountain lion sitting in a bathroom or of the women encouraging a toddler to feed a raccoon. Although controversy will
continue to surround the predators that call urbanized areas home, Urban Carnivores represents an important step toward healthy coexistence by synthesizing our current understanding of the issues and highlighting fruitful areas for future research and education.

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INDIANA MOFFETT IN QUEST OF ANTS


The cover gives it away, bearing more than a passing resemblance to movie posters for the Indiana Jones franchise. Here, we have not Dr. Jones, but Dr. Moffett relating his adventures among ants across the globe. The author states that his purpose is to “consider what it means to be an individual, an organism, and part of a society.” This may be the “serious” purpose of the book, but a more personal, and ultimately more compelling, purpose is to share his passionate interest in ants with the reader and to present his research as a global adventure. The author is more successful at the latter than at the former. Adventures among Ants: A Global Safari with a Cast of Trillions is science as journalism and cinema.

This is not surprising, because, although he is a research associate at the Smithsonian Institute, Moffett is also successful as a prize-winning photographer, a journalist, and an explorer. His skill as a photographer is beautifully displayed throughout the book, and a journalistic style dominates the text. During the 1980s, Moffett was a graduate student of Edward Wilson, one of the great figures of ant research. Moffett’s studies took him across the globe in search of weird and wonderful ant species in order to unravel some of the compelling mysteries of social evolution. Here, Moffett recounts these adventures, more like a journalist reporting from a war zone than like a scientist from the field.

Throughout the text, Moffett intersperses his descriptions of ant behavior with accounts of challenging experiences in exotic places and of encounters with colorful people. For example, about navigating through the complex levels of Nigerian bureaucracy, he writes:

I learned one way to identify an official’s position in the Nigerian hierarchy. While the director had summoned his secretary with an intercom, and the assistant director had fumbled with an old hand-cranked bell, the lowly director of security had to scream over a shoulder—even though in each case the woman had been sitting close enough simply to talk to.

As a reader, I found myself torn between wanting to know more about the ants and wanting to know more about the people and events along the way. As a result, I sometimes felt disappointed in both respects.

Dividing the book into six sections, Moffett chooses as his subjects some of the sexier, more fascinating, or more annoying species, such as army ants (from Africa), leaf-cutter ants (from South America), weaver ants (from Asia and Australia), and Argentine ants (presently, from just about everywhere). These sections are purportedly ordered on the basis of the progression of human society from hunter–gatherer to world domination, although this link is tenuous at best. His choice of species is limited, and some readers will be disappointed that their favorite species is not included or that their particular area of interest is not discussed. The chosen species all possess massive colonies and dominate the landscapes in which they live. Yet many species live in much smaller colonies and are not so conspicuous. Perhaps world domination is not the inevitable outcome of sociality. However, the book is not intended as an exhaustive treatise on ants.

Moffett describes and explains certain observed patterns of foraging and division of labor within colonies, delivering his insights without the use of too much technical language. To compensate for this, the text is well annotated, so that those with a more technical inclination can follow up leads.

I have two main criticisms of the book—one, as a work of literature; the other, as a work of science. As a story, Adventures among Ants lacks a clear structure or coherent narrative. This is true both within and among sections. Although some overarching themes are visible, the six main sections do not progress from one to the next but stand as separate essays. There is no sense of flow or of a developing narrative. The last brief section summarizes the themes, linking them all together, but not very convincingly. Some sections (e.g., that on marauder ants) place the observations on ants neatly within an entertaining narrative, with the right mix of storytelling and detailed description. Other sections (e.g., that on weaver ants), however, where the linking narrative is strangely absent, read as a series of loosely connected observations and reflections.

The second criticism is that Moffett lends too much weight to the concept of the “superorganism,” which seems to