## Chapter 12 City Planning and Animals: Expanding Our Urban Compassion Footprint

**Timothy Beatley and Marc Bekoff** 

## **12.1 Introduction: Little Attention to Animals in City Planning**

For most of us living in cities or suburbs, there is relatively little recognition of or thinking about the other animals and life forms that occupy our planet, aside from the domesticated companion animals (pets) who share a special place in our households. We often forget that we coinhabit our landscapes and built environments with many "others," a rich and diverse array of animals and life, whose ethical and planning status is ambiguous to say the least. Little or no explicit attention has been given to animals in the planning literature, or in contemporary planning practice, despite the ubiquity of "animal questions", and the extent to which urban policy and urban development affect them. We argue here that this should change and provide many examples here of the ways in which the interests of animals can and should be integrated into planning their policy and practice. The contemporary values that underpin city and regional planning must we believe shift to include animals. The status and condition of animals, so impacted by planning policy at many levels, should become a legitimate and important topic of discussion within professional planning circles, as well as more generally in community planning processes and community engagement discussions.

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In part this call is made more urgent by the growing scientific literature and research that shows compellingly that animals exhibit complex emotional lives and a level of moral behavior perhaps surprising to most. Bekoff's research (2007a, b, 2010, 2013a, b), and others, increasingly paints a picture of the animal world, where cooperation, empathy, justice, and fair play can be seen not only in cetaceans, primates, and elephants but also in mice, chickens, and rats (see especially Bekoff and Pierce 2009; Pierce and Bekoff 2012 for a review of this research and extensive references). Animals share more in common with *Homo sapiens* than we commonly accept, and we must begin to take them seriously as important members of our planning community.

There are, of course, many important (and different) environmental values and arguments that can serve to underpin explicit support for animals in cities: aesthetic and fascination value, the enjoyment and pleasure they provide urban populations (when they see them, hear, know of their existence), the understanding that humans have coevolved and require contact with other forms of life to be happy, productive and to live fully meaningful lives, and of course the belief that they hold intrinsic worth, irrespective of the instrumental values they might provide to urbanites (e.g., see Beatley 1994).

We become more aware of other animals when there are conflicts, of course: growth of deer populations in suburban settings, nesting turkey vultures who are perceived as nuisances, and increasingly the expansion of coyotes, a new presence in many urban environments. But these are, of course, only the most obvious examples of the nature around us, and its diversity even in cities is astounding, from the complex lichen on tips of trees to the millions of migratory birds moving through the city, to the subterranean invertebrates and aquatic species that inhabit spaces that are less visible, but quite proximate to where larger human populations reside. For the most part, we see little connection and form few bonds with this immense and fascinating biodiversity, and little reason to exercise more than casual attention in resolving occasional human-animal conflicts that emerge.

How we treat these "others" becomes a litmus test for our larger ethical sensibilities, and in many ways how we treat other human beings. And aside from our pets, we don't tend to treat them very well. A recent example from California is illustrative: in response to a report that a coyote nipped the toes of a napping visitor to Griffith Park, in Los Angeles, the entire group of seven coyotes was quickly killed by wildlife officials, even though the threat in this case, according to most covote experts, was small to nil and need not have involved killing all of the coyotes in this urban pack. One of us (Marc Bekoff) consulted on this situation and suggested that there was no reason at all to kill the coyotes. Marc has also worked hard to get people in and around Denver, Colorado, to appreciate the presence of highly adaptable and intelligent coyotes (as a scientist who has studied coyotes for decades and as an advisor to Project Coyote (http://www.projectcoyote.org/)) and to understand that we have redecorated their homes and we cannot blame them for returning to what was theirs in the first place. Coexistence and respect must be our main goals because we cannot continue to ignore nature (Bekoff 2013a) and continue to abuse the very animals who have drawn us to where we live and recreate.

## 12.2 Need for an Animal-Inclusive Vision of City Planning

Our response to the growing presence of urban animals is often one of indifference at best, callousness at worst. There are often trade-offs and difficult decisions, to be sure, for instance, when a needed building or infrastructure adversely affects wildlife, but too often and too easily the animal interest is trumped or considered unimportant. An important but largely unaddressed question for planners becomes: How do we design places and lifestyles that are respectful and compassionate toward the other animals? How do we build corridors of compassion and coexistence?

Caring about and planning for the inclusion of the "others" seem very good goals for city planning, and finding new ways to curtail the huge human impact on global nature (some estimates predicts that global warming could cause the extinction of nearly 40% of current species by 2050) and to make room for animals in our cities (e.g., Block et al. 2001). There are many potential steps that could be taken, such as planting natural landscaping around our homes and buildings, to adopting bird-friendly design standards, as some cities, like Toronto, have done.

Cities could further expand corridors of protected greenspace and design them to allow dispersal, movement, and adaptation in response to growing numbers of people and changing climate. Some cities, like Brisbane, have developed plans designed to connect parks and greenspaces and to provide connections and corridors that will help species adapt in both the short and long term. This city has been installing wildlife movement structures that allow animals to cross over or above roadways (see Beatley and Newman 2009, for more detailed discussion). The animals and nature around us in cities and suburbs offer the possibility for wonder and fascination and contact with wildness and the natural world that is nearby. Nature is not "away"; it is "here," and as the planet becomes increasingly urban, finding ways to accommodate and coinhabit cities with other forms of life will become an even greater challenge.

And of course the animals around us offer the potential to improve our lives in many ways. They are wondrous often in their biology and life cycles, as well as the beauty and meaning they can add to the places in which we live. Jennifer Wolch, dean of the UC Berkeley School of Environmental Design, has written of the concept of Zoöpolis, understanding cities and communities as places where animals can co-occupy space, one important result being the "re-enchanting" of our cities (Wolch 1996; Seymour and Jennifer 2009). We like this idea very much, as a fuller appreciation of and care for the animals and nature around us is really about imbuing cities and suburbs with a new meaning—as places that are profoundly shared by a fascinating and wondrous subset of the planet's biological diversity.

#### **12.3** The Value and Importance of Connections with Animals

There is considerable evidence that urbanites value and appreciate animals and wildness and understand that their presence is life enhancing and improves quality of life in cities. One dramatic example of this can be seen in Austin, Texas, where despite a rocky start, this city has now developed a love affair with its Mexican free-tailed bats who occupy the crevices of the Congress Avenue Bridge in downtown Austin. Thanks in large part to the leadership and advocacy of Bat Conservation International (which moved its offices to Austin), the city has gone from fearing the bats to celebrating them, now as a significant tourist attraction and economic engine for the city. And now the Texas Highway Department is even designing new bridges to accommodate bats, a major shift in the direction of coexistence.

Attending one of the bat "emergences" on a hot August night provides a glimpse into how important these bats have become and how fascinated people are with them. Even several hours before dark, families with coolers and blankets start to arrive, and a buzz of anticipation builds. Eventually the entire hillside east and south of the bridge is covered with people. On this night, a local band plays for the crowd (the Keep Austin Loud Project!), a kind of warm-up act, and as the sky darkens, as many as five tour boats jostle for the best positions to see the emergence. Eerily, people begin to line up along the east railing of the bridge, and a line of human bodies is silhouetted against the Austin sky.

Most heartening are the young children, many sitting spellbound, in the very front, exuding a kind of wondrous anticipation. We interview some of them and get a deeper sense of how drawn they seem to be to these creatures. Perhaps because they've learned about bats in school (several told us this), or because they have grown up in Texas hearing about the Austin bats, there's no fear or revulsion. Quite the contrary: it's an intense interest and fascination that, listening to them tell us why the bats are cool, I can't help but ponder why we tend to lose this perspective as we grow older.

It has been estimated by Bat Conservation International that some 100,000 people come to the bridge to see the bats each year, generating \$10 million in ecotourism revenue. With 1.5 million bats, the Congress Avenue Bridge is believed to be the "world's largest urban bat colony." While originally viewed by local officials as a health threat and nuisance, Austinites are clearly proud of the bats and view their presence as something very special about the city. Each summer day, as evening approaches, thousands of residents and visitors line up on the bridge and surrounding areas to watch the bats' "emergence." It is a major daily event in that city! (see Beatley 2008). Austin's affection for bats is in evidence in other ways as well, including by naming its local hockey after them (the "Austin Ice Bats"). A bat observation deck and viewing area have been built by the Austin Statesman, the local newspaper (they actually call it the "Statesmen Bat Observation Center"). On any summer evening, there are several dinner boats plying waters of around the bridge, offering bat-watching dinner cruises up and down the Colorado. Every labor day weekend is held one of the city's most popular public event, the Bat Fest.

## 12.4 New Ways to Include Animals in City Planning

#### 12.4.1 Creative Strategies for Urban Coexistence

Whether it is the sea lions at Pier 99 in San Francisco, or the bears and moose who inhabit the city of Anchorage, or the coyotes in the Chicago metro area or in and around Boulder, Colorado, urbanites like seeing and experiencing wild nature close by, and it significantly enhances quality of life in these places. This is not to deny that there may be some element of danger and cities need to proactively take steps to plan for humane and effective coexistence. There are alternatives to the scenario that unfolded in Griffith Park, and models of coexistence planning and actions that can be replicated. Cities could also adopt new educational and urban wildlife management efforts and protocols that reflect a new care for and concern about animals and which take a proactive approach to coexistence.

One of the most impressive and effective is the Vancouver's Co-Existing with Coyotes (CWC) Program, in existence since 2001. It emphasizes a combination of education and awareness raising and nonlethal response to coyote-human conflicts. Run by the nonprofit Stanley Park Ecology Society, the program uses the "twopronged approach": short emergency response and long-term education (Worcester and Boelens 2007). The program maintains a coyote hot line and is able to respond effectively and with nonlethal means (noisemakers, for instance; the program shows how to make devices on its website). Long-term education includes visiting elementary schools, teaching "Coyotes 101," and helping students to learn how to identify coyotes, what steps to take in coexistence (no human feeding), and how to stay safe should a coyote approach. The program also conducts interpretive coyote walks through neighborhoods throughout the city. The CWC program is an exemplary example of how, with planning and with a spirit of coexistence, conflicts can be avoided and animals treated compassionately without resorting to lethal force while at the same time imparting a respectful sense of the wildness and value that coyotes can bring to urban life.

Many other common conflicts between wild animals and urban and suburban communities can be addressed through more humane means and techniques. New ways of managing perceived-to-be-nuisance resident populations of Canada geese, for instance, emphasize nonfatal methods such as public education and restrictions to feeding and use of sheep dogs. GeesePeace, for instance, is one effective new set of methods developed in suburban Virginia to address more humanely the yearround presence of Canada geese (see PeaceGeese, undated). Humane coexistence with other forms of life suggest a commitment as well to more effectively address homeowner and building owner treatment of animals (e.g., species such as bats in chimneys and raccoons in attics) that are routinely killed, often cruelly, when avoidance, exclusion, and sometimes relocation are possible. Support for local wildlife rehabilitation and care facilities would also be suggested; animals were truly taken into account in municipal policy and planning. Domestic animals are, of course, a major presence in cities and local communities, and here there is an equally important set of policy and planning questions, again often absent from the usual planning agenda. Cities and counties often operate animal shelters and animal control agencies, raising significant issues about how sentient animals are treated. Many shelters have now shifted to a policy of "no kill," no longer euthanizing loss or unwanted domestic pets. With the rise of interest in urban agriculture and with many localities now modifying their zoning codes to permit farm animals in residential areas, the issues of their human treatment are important as well (e.g., consider the Seattle League for Goat Justice). As well, in many cities, urbanites are also seriously questioning the ethical aspects of their diets, including the impact on animals. Procurement policies in some cities has changed, for instance, to give preference to the purchase of eggs from free-range chickens, as Metro Vancouver, the regional planning agency there, has recently done (e.g., Vancouver Humane Society 2009).

## 12.4.2 Elevating the Status and Treatment of Animals in Cities

Cities are also home to various entertainment venues and activities that also raise serious questions about the status and treatment of animals, from zoos, to circuses, to rodeos. The City of Vancouver recently banned rodeos on the grounds of cruelty to animals (e.g., especially events such as calf roping), and many other localities in North America have taken or considered similar steps. The recent case of the Mirage Hotel in Las Vegas, importing two dolphins, with a NOAA permit allowing them to do so, is an especially egregious recent example of inhumane treatment, this following the death of many other dolphins at this hotel. The National Marine Fisheries Service, within NOAA, issued the dolphin permit for Mirage despite protracted opposition by groups such as Jean-Michel Cousteau's Ocean Futures Society, as well as Born Free USA and the World Society for the Protection of Animals (WSPA). Cousteau makes the case eloquently: "The more we learn about dolphins, the more we must admit they are our counterparts-intelligent, social, self-aware, capable of complex relationships, emotions, and learning. To consign them to a place like the Mirage hotel, with its 75 percent mortality rate for dolphins, and solely for our entertainment, is to impose a death sentence on innocents...In addition, the display of marine mammals for commercial gain does not represent the values we should be passing on to future generations" (Born Free 2009).

Animals and nature also inspire us in important ways (Bekoff 2010, 2013a, b), and we are increasingly learning much from them to solve contemporary problems. Janine Benyus has made a compelling argument about *biomimicry* and the many hidden lessons to be learned from nature (Benyus 2002). Nature reflects 3.8 billion years of research and development. But to learn from and be inspired by animals and nature, they need to be close by, and we need to appreciate how easy it is to have access to the amazing fauna and flora that live in our environs.

## 12.4.3 Practices and Policies That Make Cities More Hospitable to Animals

Planning practices and policies could be significantly adjusted to reduce the impact on animals. Urban development codes and design guidelines could easily be modified in many ways to make buildings and urban landscapes more hospitable to animals and other nature. New green areas and habitat can be found through the installation of green rooftops and green walls, by encouraging the planting of native vegetation around homes and buildings and reenvisioning the many leftover spaces in cities (from median strips to alleyways) as opportunities to support animals and nature.

Buildings in cities could be designed and redesigned to give more attention to the animals who come in contact with them. Notably many birds are harmed and killed by glass and lighting designs of high-rise buildings in cities. In cities like Chicago and Toronto, millions of migratory birds move through these cities at key times of the year. Toronto, perhaps more than any other city, has taken steps to lessen the impact of building on birds by developing a set of bird-friendly development guide-lines and developing a program of recognizing developers and building owners who go above and beyond in designing their structures. In Toronto, as well as other cities like Chicago, "lights-out" campaigns have been underway to encourage building owners to turn off nighttime lights at key times of bird migration.

Recently, the Toronto environmental organizations Ecojustice and Ontario Nature have brought new attention to this problem by bringing legal actions against the owners of a complex of high-rise buildings, Consilium Place, found to be particularly dangerous to birds. Another local nonprofit, FLAP (Fatal Light Awareness Program), has documented very high bird mortality in response to the reflective glass of this complex, estimating the complex alone is responsible for some 7,000 dead and injured birds per year (FLAP, undated). The legal action, taken under Ontario's Environmental Protection Act as well as the Ontario Society for the Prevention of Cruelty to Animals Act, is in response to the unwillingness of the building owners to take fairly easy steps to prevent the carnage. That this issue is one of compassion for animals is clear when one considers how these birds die when they hit these building facades. In the words of one of the lawyers in the case: "Most of these birds die of traumatic injuries such as fractured skulls or broken backs" (Javed 2010).

## 12.4.4 Reducing the Impacts of Urbanization and Development

Reducing the spatial footprint of urban and suburban development is another important planning implication. Greater concern for animals and nature gives further support for curtailing sprawl, as western cities like Denver seem largely able to ignore impacts, for instance, on black-tailed prairie dogs, whose habitat has shrunk dramatically over time.

Animals, with the exception of federally or state-listed endangered or threatened species, receive little attention in the community planning and development process. This should change, and an animal-considerate community planning approach might look quite different. At a minimum, we must modify our environmental impact and development review processes and mechanism to better account for impacts on animals and animal communities. The loss of an oak forest in the process of building a new suburban shopping center take little account of the sentient animal life killed or displaced in the process, and indeed we have few analytic tool or methods to conduct such assessment, again because of largely indifferent view about animals. Few, if any, contemporary community plans include discussion of animals and their welfare, suggesting the need to fully and squarely include animals in the community of life for which we design and plan.

Another kind of detrimental urbanization occurs in waterways and ocean environments in the form of boat traffic and noise pollution. By one estimate, endangered North Atlantic right whales, known as the urban whales because they inhabit zones the heavily trafficked eastern US seaboard, are able to hear much less (only about 10%) than what they heard just a hundred years ago (Kraus and Rosalind 2007). The "acoustic smog" of oceans has increased dramatically from anthropogenic causes, and it is believed has significant implications for reproduction and long-term survival for cetaceans like the right whale, but there are other threats including entanglement in fishing lines and, most importantly, boat strikes. Opportunities exist here as well to plan, manage, and regulate with animals in mind. Evidence suggests that shifting shipping lanes can reduce boat strikes, and a recent NOAA rule now requires ships of a certain size (65 ft or greater) to reduce their speed to 10 nautical miles per hour in designated zones, seasonal management areas (SMAs). Preventing the death of these long-lived mammals must be a planning priority, and to be adopted and implemented often requires overcoming industry opposition and fears of negative economic impacts from such restrictions. Similar success can be seen in reducing boat strikes of manatees in Florida, through boat speed reduction zones.

The possibilities for protecting a wide variety of marine life have been given a lift in recent years with the new importance given to ocean and marine planning. A number of US state coastal management programs now include ocean management elements, and some regional planning agencies, such as the Cape Cod Commission, have now extended their planning jurisdiction well beyond the usual terrestrial environment (e.g., see Cape Cod Commission, undated).

#### 12.4.5 Making the Presence of Animals More Visible in Cities

We are not likely to care for or about the life forms we cannot see, so finding new ways to make the animals more visible would also help. Aquatic and marine creatures represent a special challenge in this regard, and as Sylvia Earle, National Geographic oceanographer and marine explorer, eloquently notes, there is much biological diversity in the ocean (and in deep water) well beyond the usual attention of our terrestrial human world (Earle 2009). Recent efforts to track and monitor the movement of large ocean predators, many whose existence, including bluefin tuna, sea turtles, and whales, are yielding new insights about the biology and life cycles of these animals and, when their movements are mapped and overlaid, provide some helpful ways for distantly remote urban population to perceive and understand them.

We should also explore other creative ways to make animals in our cities and communities visible. These might include new ways of mapping the vertical diversity that exists in cities and finding ways to record, for instance, contrails of birds flying through our neighborhoods. Making camera traps available to neighborhoods interested in better (and more viscerally) understanding the nighttime animal life and equipping new urbanites and suburbanites with ecological owners' manuals that describe the fauna (and flora) likely to be encountered (and to be watched out for) would also help. Expanding our *compassion footprint* (Bekoff 2010) and "rewilding our hearts" (Bekoff 2013b) in cities may require other things of us, including time spent volunteering in urban habitat restoration projects and in no-kill animal shelters, helping to find homes for unwanted domestic pets, and in many other ways expanding the humane treatment of animals. The compassionate conservation movement (www.compassionateconservation.org; http://www.bornfree.org.uk/comp/compconsymp2010.html) is dedicated to achieving peaceful coexistence between human and nonhuman animals (Bekoff 2013a, b).

#### 12.4.6 Looking Beyond City Borders

Compassionate and biophilic cities will also look beyond their borders to understand how their patterns of consumption and resource use impacts species and nature around the world (Beatley 2010). We know that the ecological footprint of a major city is tremendous in size and that supply lines for food, materials, wood, and energy are lengthy and often severely impacting on nature. Consumption of tropical wood by North American cities, for instance, is substantial, with direct impacts on the animals dependent on these habitats for long-term survival. Many cities are beginning to better understand these extra-local impacts on nature and take steps to curtail them. The City of New York, for instance, spends about \$1 million per year on wood harvested in Brazil. It has recently made the decision to immediately reduce consumption by 20% and has developed a longer-term plan to further reduce its tropical wood consumption in the future. In Western Australia, the Perth Zoo has been leading a campaign to label products with palm oil and to raise awareness about the impacts of palm oil plantations on the plight of orangutans in Indonesia (Perth Zoo, undated).

Urban residents and city leaders can certainly have a significant impact in expressing care for our planet's animals, even creatures hundreds or thousands of miles away. When Tim was researching conservation success stories in Australia, he discovered the campaign to save Ningaloo Reef, a pristine fringing reef system in Western Australia, home to great biodiversity, notably spectacular whale sharks, but threatened by a large coastal development. Residents of Perth rallied to support the reef and were actually able to stop the development, even though most had never visited reef or seen the whale sharks and would likely never visit in the future (Beatley and Newman 2009). More recently, Australian port cities (e.g., Fremantle) have denied access to Japanese whaling vessels, in a clear demonstration of care and concern about whales. In a variety of ways, larger and small, cities could also help support—with money, technical support, or volunteer labor—conservation programs and projects in other parts of the world, in part a recognition of the need to offset or compensate for the large ecological impacts associated with their lifestyle and consumption.

# 12.5 Concluding Thoughts: City Planning with Animals in Mind

Ultimately, there will be many good reasons, including economic, to incorporate animals more explicitly into planning practice and to give them more consideration in the theory and literature of planning (e.g., consider the tourism dollars generated from whale watching, for instance, and from watching the Mexican free-tailed bats in Austin). Protecting animals in turn serves to protect larger ecosystems and the ecological services, from retention and moderation of stormwater runoff to sequestering carbon, they provide. Animals are also a significant and important part of what makes a place or community distinctive, and evidence suggests that, even with a degree of danger or inconvenience, urban residents appreciate the value of these coinhabitants. A survey of attitudes about wildlife in Anchorage, Alaska, found, for instance, that while residents understood that moose in their city created certain problems, this wildlife also serves to make life there "interesting and special" (Alaska Department of Fish and Game 1999). Indeed, in large part, it is animals and nature that do much to define the special qualities of a place.

Perhaps most importantly, animals present the possibilities of profound wonder and wildness in the midst of urban and suburban grayness and banality. As with other aspects of nature and the natural world, direct access and exposure to animals and other forms of life have the potential to make us happier and more productive (Bekoff 2010, 2013b). And there are important ethical reasons why we must do a better job taking the interest of animals into account in city planning: we owe it to our fellow co-travelers—to acknowledge their inherent right to exist and in turn the ethical obligations we have to ensure that their survival and welfare are adequately taken into account in plans, policies, and decisions in communities large and small. The new research and emerging consensus about the moral and psychological complexities of animals further strengthen these ethical claims and, while not explicitly mentioned in our professional codes of ethics, suggest that planners have an ethical duty to plan for and humanely treat the many "others" with which we share this delicate world.

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