Multispecies Cities for the Anthropocene: Narrativizing Human-Wildlife Relations in an Urban Organizational Niche

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Abstract

Amidst academic debates about how wildlife conservation should adapt in a "postnatural" world, big conservation NGOs have shown an increasing interest in cities as the kind of humanized landscapes that may define conservation for the Anthropocene. This research explores the ways that their emerging focus on urban natures represents a potential friction point with organizations who navigate the urban/wild relationship at close range through direct interventions with everyday human-wildlife encounters. I look at the work of four organizations involved in narrativizing ethical relations with wildlife in a large Canadian city: three "urban wildlife organizations" (UWOs) – defined by their on-the-ground responses to encounters with wildlife and their involvement in urban coexistence education – and, comparatively, a branch of an international conservation organization located in the same city. Through a series of staff and volunteer interviews and a qualitative analysis of organizational grey literature, I consider the evolution of an urban wildlife field, the organizations' different engagements with affective wildlife encounters, and the way ideas of nature and postnature are mobilized in their practice and discourse about human-wildlife relations. I find that 1. Urban wildlife organizations are under-recognized as part of the institutional infrastructure of cities and their practice is characterized by struggles over funding and identity; 2. The big conservation organization's engagement with the city as a site of 'connection' to nature evades the costs and complications of affective encounters that shape UWO practice; and 3. The communications of the big conservation organization reflect in some ways the "new" human-centred conservation, posing explicit challenge to the field's historical attachment to a human/nature divide. The UWOs in this study, in contrast, remained invested in this division as a guideline for a harm-reduced

coexistence. I conclude by exploring how UWOs' fidelity to the human/nature divide speaks to relational theories about urban multispecies cosmopolitics, and how an appreciation of their interventionist niche might inform the aspirational project of the more-than-human city.

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"Nonhumans have always been a part of the fabric of city places; all cities are inescapably multispecies affairs — for better or worse"

- Thom van Dooren & Deborah Bird Rose, "Storied-places in a multispecies city" (2012, p. 16)

Chapter 1: Introduction: The emergence of research problem¹

Twenty years ago, I answered a job ad from the classified section of a local newspaper. The post was for a hotline operator at a wildlife rehabilitation centre. I had little sense of what wildlife rehabilitation entailed, and couldn't imagine what purpose a hotline might serve in such an environment, but the skills desired – handling a high call volume, working with emotional callers in difficult situations – matched the ones I had developed over several years working in crisis response in the mental health field. Beyond a general appreciation for wildlife, however, I knew very little about wild animals themselves or the natural history of the area, a fact that became obvious in the course of the interview. I assumed my ignorance would cost me the job, and was quite surprised to get a call back. I later learned that my limited knowledge about wildlife was actually considered an asset. The training was more difficult, the director told me, when people had a lot of existing (incorrect) knowledge about wildlife. I worked at the organization for 14 years and hired and trained many new employees myself in that time. I came to agree with the position that those with limited knowledge about wildlife were the easiest to work with; it was just simpler to teach people who didn't already think they knew the answer. But I also came to realize that the real challenge lay with trying to imprint the organization's philosophy over strong conflicting ethical orientations. At the heart of the organization's educational practices, from classroom presentations to communication campaigns to telephone assistance in resolving conflict situations or medical emergencies, were contentious claims about social values. Seemingly simple requests for information from the public were undergirded by more complex implicit questions:

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¹ Partial results of this research have been published in two locations. 1. Luther, E. (2018). Urban wildlife organizations and the institutional entanglements of conservation's urban turn. *Society & Animals*, 26(2), 186-196. DOI: https://doi.org/10.1163/15685306-12341587 and 2. Luther, E. (2020). Between Bios and Philia: inside the politics of life-loving cities. *Urban Geography*, 1-18. https://doi.org/10.1080/02723638.2020.1854530

who is *responsible* for wildlife? Which animals are worthy of protection and what are the morally right expressions of care? What do "natural" relationships with urban wildlife look like? How should animal welfare and ecological health be balanced? Who has rights to urban space?

Organizations like the one I worked for – and others involved in interventions with urban wildlife – had both a role and a deep investment in answering questions like this. Since my various jobs at the centre all revolved around outreach and communications, I had a lot of experience talking with staff and volunteers from other city-based wildlife organizations. I found that while these organizations were distinguished from one another by the kinds of services they provided, they all had a prominent presence in public discourse about human-wildlife relationships in the city. When I later moved into an educational design role, one of my goals was to create training and information resources for those people involved in responding to humanwildlife encounters as a way to better cohere the field, a project that later became the focus of my master's degree. But the question of the underlying narratives of such resources – what wildlife professionals (myself and others) were really saying through their advice on conflict resolution or how to protect or manage urban wildlife – remained, for me, complicated. It seemed to me that these varied organizations, in their overlapping interactions with urban residents, were potentially powerful players in defining what relationships with wildlife in the city should look like. My experience in those years came to inspire the present project.

To a more globalized perspective, though, questions of urban co-existence with wildlife have traditionally been parochialisms, of little relevance to the larger project of conserving nature. The institutions of wildlife conservation and management² – the dominant voices in the discourse of

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² These two projects are tightly entangled, and often considered part of the same institution. For ease I refer to them both here as "conservation," though their intersecting evolutions will be described in Chapter 3.

safeguarding the wild – have, historically, been only marginally concerned with urban environments (Adams, 2016; Hadidian, 2009). While there has always been an urban arm of conservation and management, it has remained on the fringes of the field, in part because of its ill fit with the wilderness ideal – wherein pristine nonhuman spaces and systems should be protected against human influence – that has long undergirded the institution of wildlife conservation (Botkin, 2012; Van Dyke, 2008). Urban nature is, in many ways, the antithesis of the "spectacular environmentalisms" that have characterized the rise of big conservation NGOs (Goodman et al., 2016).

Despite the seeming institutional disdain, urban animals themselves have refused to be ignored. Cities thrive with nonhuman life, and both urban sprawl and the trend toward green planning have brought new modes of contact between humans and wildlife (Soulsbury & White, 2016; Sterba, 2011), one that has created a growing demand for services in mitigating and interpreting urban wildlife encounters. Government wildlife conservation/management agencies have failed to adequately meet this service demand (Adams, 2016), spurring the growth of a diverse bricolage of organizations to fill the gap, mostly from private and civic sectors – for example humane societies, wildlife rehabilitation and rescue organizations, nature centres, wildlife advocacy groups, and private removal companies (Hadidian, 2015). Sometimes, municipal government bodies also play a role (e.g., through animal control and education), though these often operate separately from provincial/federal wildlife management offices. While the mandates of these organizations differ in significant ways, they are part of an overlapping sphere of practice that is united by their role in: 1. Providing assistance to human residents with wildlife encounters (e.g., through conflict mitigation, information, animal rescue, care or removal); and 2. Public discourse about how to live with wildlife in the city (e.g., strategies for preventing conflict,

how to protect urban animals from harm). In the present study I refer to the groups united by these tasks as "urban wildlife organizations," abbreviated as UWOs.

A starting goal for my research, then, was to better understand the collective (if not always collaborative) practice of UWOs in navigating this milieu. Grounding my analysis in a case study of three prominent UWOs in a large Canadian city, I focused on two sub-questions in pursuit of this goal:

- 1. Where do urban wildlife organizations (UWO) practices (both discursive and material) align and converge? How do they define their practice and purpose?
- 2. How do they identify with, and how is their work defined in relation to, the broader field of conservation and management?

Conservation's urban turn

The second question introduces a tension point, however, since the broader field of conservation has, in recent years, been characterized by virulent debates over what its purview ought to be in the face of contemporary environmental change. As Bram Büscher and Robert Fletcher (2020) observe, these debates turn fundamentally on the meaning of nature – what it is, where it is, and how it should be protected. While these critical conversations have shaped the field for 50 years, the declared arrival of the Anthropocene have catalyzed the conversation. If humans now are accepted to be the "inherent force which directs the world," should they creatively embrace this control (e.g., through engineering better natures), or should our pervasive influence compel more restraint in our use of earth's resources? Is it, as Erle Ellis (2009) proposes, time for a

³ This meaning is one of three given by Raymond Williams in his well-known exploration of nature as a keyword. (2014/1976, p. 219). The other two are "the essential quality and character *of* something" and "the material world itself, taken as including or not including human beings." The inclusion clause in the latter is also a central point of contention in conservation debates, as I will show.

⁴ The poles of this debate are much explored. See for example Bonneuil (2015) and Davison (2015).

"postnatural" orientation to environmental conservation, where humans can create new, better natures?

These questions are distilled in the recent debate about the need for a "new" conservation. Some mark the beginning⁵ of the debate by the 2012 publication of an article titled "Conservation" in the Anthropocene: Beyond solitude and fragility" (Kareiva et al., 2012). In it, the authors charge that conservation has been unable to slow biodiversity decline because of its failure to centralize human interests in its sphere of concern. They argue conservation has been too ideologically bound to the protection of pristine environments, defined by an absence of people. The new conservation they propose in place of this broken model is framed as a pragmatic one, where conservationists make human benefit their primary concern, and focus their efforts on sustaining places where people work and live – cities and other "working landscapes." The paper was an anchor point for a position that Peter Kareiva – then the chief scientist at The Nature Conservancy – and his colleagues had begun to develop in earlier works (Kareiva & Marvier, 2007) and expounded upon since (Kareiva et al., 2014; Kareiva & Marvier, 2012; Marvier, 2013; Marvier & Kareiva, 2014). The 2012 paper sparked a particularly virulent backlash, however, due to its inflammatory call for conservation to abandon its allegiance to Nature, 6 which the authors argued is nothing but a social construction (see for example reactions by Butler et al., 2014; Doak et al., 2014; Greenwald et al., 2013; Holmes, 2015). It was disdainfully dubbed the "manifesto of the new conservation movement" by conservation biology pioneer Michael Soulé (2013), who earlier had commented that postmodern deconstructionism was as "destructive as chainsaws and

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⁵ For example see Bridgewater (2016), and Holmes et al. (2017).

⁶ I use capital-N Nature here (and throughout) to refer to the idea of iconic natural environments, constructed as sublime or pristine and not containing people.

bulldozers" (Soulé & Lease, 1995, p. xvi) to the work of a discipline geared toward mitigating a real-world crisis (Soulé, 1985).

The new conservation movement is usually seen as part of a wider environmental philosophy known as ecomodernism, which is likewise grounded in criticisms of: 1. The notion that Nature/the environment is a biophysical entity that is somehow separable from humans and human activity; and 2. The ethos of restraint and retreat that has guided the environmental movement. Ecomodernists hold that the apparent "limits" of nature are a problem that can be answered by human innovation and better technology, a conviction that has earned that approach the moniker of *promethean environmentalism* (Dryzek, 2013). It is the linking of these two points of critique that have made ecomodernism so contentious, since environmental philosophies that have embraced the first point (that humans are part of nature) have often rejected the second (that restraint is therefore not required).⁷

While some have bristled at the claim that either ecomodernism and new conservation (on their own or together) constitute a unified ideology (Marris, 2014), critics commonly speak of them as a single "neo-green" or "post-environmental" movement (Campagna & Guevara, 2014; Keim, 2014; Kingsnorth, 2014; Kloor, 2012; Locke, 2014; Miller et al., 2014). Contemporary iterations of ecomodernism are sometimes traced back to the release of Ted Nordhaus and Michael Shellenberger's controverisal essay, *The Death of Environmentalism* (2005), where the authors argued that the environmental movement had allowed itself to become a single issue movement on the political fringe. Several years later, Nordhaus and Shellenberger launched The

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⁷ John Livingston's notable *Fallacy of Wildlife Conservation* (1981) is one example, where he argues that conservation has failed to motivate the restraint that is needed to protect wildlife and wild spaces because we do not see ourselves as part of nature. Humans' interconnectedness with other life has likewise been linked with an ethos of respect for natural limits and sustainable relations in Indigenous cosmologies. See for example Kimmerer (2013), McGregor (2010), and Nelson & Shilling (2018).

Breakthrough Institute (TBI), a thinktank focused on identifying and promoting "technological solutions to environmental and human development challenges." TBI coordinated the 2015 *Ecomodernist Manifesto*, which detailed the ecomodernist view that natures are fundamentally an outcome of human decisions, and expressed optimism that a "good Anthropocene" (Ellis, 2011) can be facilitated through creative intervention (Asafu-Adjaye et al., 2015; see also Ellis, 2011, Marris et al., 2011).

Programming shifts at the biggest conservation NGOs reflect the resonance of new conservation's claim that conservation should re-orient toward serving human interests in working landscapes rather than protecting nature from human interference. A link to changing rhetoric at The Nature Conservancy (TNC) is clear, given that two of the authors of *Conservation in the Anthropocene* were high-ranking employees there at the time of its publication. But a similar turn toward human-oriented conservation has been observed in other large North American conservation groups (Doak et al., 2014; Northrup, 2012; Willow, 2015). Former TNC president Steve McCormick has called it "the new orthodoxy," noting that Conservation International – another of conservation's "big three" NGOs⁹ – also "changed its mission, and it's one that Peter Kareiva could have crafted" (Voosen, 2012).

The foregrounding of human interests and lived environments is better understood as a gradual evolution in the field's prevailing conceptual maps than an abrupt paradigm shift (Willow, 2015). Georgina Mace (2014) has argued that the move toward a view of "nature for people" – one that emphasizes human benefits of conservation – could be cast as the dominant view within

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⁸ See https://thebreakthrough.org/about. Kareiva et al's Conservation in the Anthropocene is cited among the influential pieces to the development of The Ecomodernist Manifesto (Asafu-Adjaye et al., 2015). It was originally published through The Breakthrough Institute, where Kareiva and the other authors were once fellows. Kareiva has been called one of the most "famous ecomodernists" by the BTI founders (Shellenberger & Nordhaus, 2014).

⁹ Chapin (2004) defines the big three as the Nature Conservancy, Conservation International, and WWF.

the field after 2000, followed by a shift toward "nature and people together," a framework emphasizing concepts such as socioecological systems, adaptability, and resilience, rather than the older tropes of endangered species and wilderness protection. A convergence of contemporary factors appear to undergird the push for new value frameworks, including a burgeoning cultural rhetoric about the arrival of the Anthropocene (Lorimer, 2016), the neoliberalization of big conservation (Büscher et al., 2012; Igoe et al., 2010), the rise of nonequilibrium ecology (Heller & Hobbs, 2014), and a growing body of research on novel ecosystems that undermines the field's longstanding prioritization of undisturbed habitats and native flora and fauna (Ellis et al., 2010; Hill & Hadly, 2018; Hobbs et al., 2013; Robbins, 2014; Schlaepfer et al., 2011).

These changing terms of value have several effects of interest to the present study. The first is cities have become a more prominent area of NGO programming, where they are often represented as key contemporary sites of political, cultural, and environmental change. ¹⁰ The second effect is that the changes centralize the idea of living well *with* the more-than-human world, rather than protecting it against human impacts. These changes suggest a curious paradox: that as urban wildlife organizations work to legitimate their practice, long marginalized in a field focused on the protection of Nature, that field is being simultaneously upended by an imperative to adapt to the kind of messy, hybridized environments that have long been the focus of urban wildlife organizations. The result is a unique moment of discursive relation between these spheres of practice that is based on both of them being involved in defining urban natures and the relevance of urban human-nonhuman relations. It also brings a potential set of material entanglements as programming in big conservation organizations focus more on cities. A second

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¹⁰ This emerging attention to the urban is reflected, for example, in The Nature Conservancy's Global Cities Program, Conservation International's "Human Nature" blog, and WWF's "Urban Solutions for a Living Planet" report.

goal for the research thus emerged: to explore the emerging intersection between big conservation and UWOs related to an investment in defining urban nature and the interventions that should take place there. This goal added another question to the docket:

3. In what ways does the recent attention to cities in mainstream conservation represent changing terms of legitimacy for urban animals?

To realize these research goals, I also included a large national conservation organization in my study that was based in the same city as the UWOs, with the aim of elucidating the discursive and material relations between them. As the third question suggests, however, the core concern in this study of organizations is to understand what their work means for urban animals. My sense at the outset was the logics of their respective practices would be grounded in an ethical position on the value of urban wild animals and the kinds of relations we ought to have with them. One more question, then, emerged as a grounding point of analysis for the entire study:

4. How are these organizations defining right relations with wildlife in the city?

I use the term "right relations" here as a way of referring to both elements of relating that often remain in the realm of discourse as ethical ideals – for example, how we should understand our relation to animals, their value, and our duties to them – and to those modes of relation that are more visceral and affective (here *relate* = feel, sense, respond corporeally to). As I explain in Chapter 2, by "define" I do not mean unilaterally determine these relations in the world, though I am interested in the way organizational definitions and staff/volunteer conceptions about right relations are mobilized in the practice of responding to and facilitating human-wildlife encounters.

As the research questions outlined above show, I am interested here in two spheres of inter-organizational relation: one that is focused on points of overlap and divergence between

wildlife service providers in the city, and the other focused on points of connection between UWOs and big conservation. There will be different things to say about these two sets of relationships, since UWOs are entangled in a very clear, material way – they are not only dealing with the same animals in the same spaces, but they are also talking more explicitly about the same things, namely how to respond to wildlife encounters in the city. The other sphere of relation is more oblique – the big conservation organization in this study was not explicitly involved with urban wildlife issues and had minimal interaction with the focal UWOs. Their public discourse was also focused on issues that seem unrelated – what, after all, does the establishment of protected areas for endangered whales have to do with the everyday challenges of living well with urban raccoons? And how is the daily rehabilitation, euthanasia, or removal of a few hundred city animals relevant to high-level policy for habitat conservation?

It may seem at first blush, then, a somewhat contentious move to pull these organizations into a relational framework tethered by their location in the same city. And it is true that to read their work in relation may be, at times, an interpretive art. But it is also true that the lines that separate their mandates are far less clean than they may at first appear. My own experience in urban wildlife intervention suggested, for example, that at least some of the actors involved viewed their practice as important to the wider conservation project, even if others have charged that their work with individual animals matters little to population health. Similarly, the idea that conservation does not dally with individual animals and encounters is undermined by the conservation industries that turn on the "encounter value" of individual wild animals, such as ecotourism, zoos, and safaris (Barua, 2016b; Collard & Dempsey, 2013; Lorimer, 2015). As suggested by the emerging movement for "compassionate conservation" (Ramp & Bekoff, 2015) and a body of scholarship exploring the ethical tension between animal and environmental ethics

(Aitkin, 2004; Clement, 2011; Donaldson & Kymlicka, 2011; Hargrove, 1992; Kheel, 2008; Noske, 2004; Peterson, 2013), it is difficult to shrug off work with individuals and populations as grounded in separate concerns.

I also argue that the seeming disconnection between these scales of intervention is itself deserving of attention. The big conservation organization in this study had a presence in the focal city through both local initiatives and advertising. The glossy images of exotic wild animals that appear in urban ads are also part of the milieu of urban wildlife relations; to fail to consider how these might be read against the messy and conflicted encounters with live animals in cities misses an opportunity to ask why they seem unrelated. The present study aims to look at the conceptual scaffolding that seems to hold apart the project of endangered species protection from urban "pest" control, by asking the question of what it means to be an "urban" animal, how city-based organizations navigate this distinction, and what such navigations tell us about the way urban animals are valued (or not valued). The central argument in this dissertation is that a better understanding of the organizational niche under study here can both broaden our understanding of human-wildlife relations in cities and provide an important perspective to the debates in conservation – and beyond – about human-nature relations in an urbanizing world.

Why cities?

A final qualification is needed at the outset. I begin with an assumption that it is worth homing in on the work of these organizations as a distinctly *urban* practice. There are, of course, difficulties in even defining what "urban" means as a research concept, and I touch on some of these in the following chapter. Here I mean to raise the question of why it is important to differentiate the urban versions of these practices from non-urban ones (assuming these are meaningful categories). The kind of work that the organizations in this study do is not limited to urban space —

animal control, and wildlife rehabilitation and rescue, after all, are activities that also exist in rural areas, albeit with different emphases. I see several compelling reasons to set apart the practice of urban wildlife intervention, and accordingly to suggest that we should look at the actors involved in that practice as a group.

The first is that the more-than-human life of cities is a distinct constellation, one profoundly shaped by the evolution of synurbic species and our relations with them. As Francis and Chadwick (2012) observe, the concept of "synurbic species" has often been used in a vague way, as a sub-category of, or synonym for, synanthropic species, which are wild species associated with areas of human habitation. Rats and pigeons, for example, typically live in close proximity to humans, whether in urban or rural areas. Within a traditional concept of synurbanism, then, rats and pigeons would be defined as synurbic when their populations are present in cities. One problem with this definition, according to Robert Francis and Michael Chadwick, is that it doesn't tell us much beyond what is already contained in the concept of synanthropism – that they are generalists who can adapt to human presence. They argue that synurbic species should instead be "reserved for species that are associated with urban areas to a greater extent than other ecosystems" (515). In other words, they argue that we need a concept that can point to the ways in which some species thrive *uniquely* in cities. So the prominent presence of synurbic species is one dimension of the multispecies constellation of cities. The other side of this coin is the relative absence of species who do not thrive in urban environments. It is their absence that compels nostalgic narratives about the urban "extinction of experience" (Miller, 2005; Samways, 2007) that stems from bio-homogeneity. It also drives a discourse about the threat that cities represent to wildlife.

Together these factors suggest that the kind of animals we encounter in cities are a distinct mix. But there is also evidence to suggest that the kinds of encounters that happen in cities are different. In part, the distinctness of urban encounters is related to the ways animals interact differently with the built environment. On one hand, a densely built landscape, thick with roads and other impervious surfaces, makes some kinds of injuries exceedingly common, such as window and car collisions. On the other, built structures represent different sites of opportunity for those species that are able to exploit them, for example the number of weakened roofs and uncapped chimneys that are available for wild animals to build nest sites to raise young. The food available for many species because of urban consumption and waste is another considerable attractant. These all affect the type and frequency of requests for assistance in navigating encounters. Additionally, there is a fair amount of research in the "human dimensions" arm of wildlife management that has looked at whether urban environments might represent a unique attitudinal milieu that shapes the kinds of wildlife services demands that exist there. Following Stephen Kellert's influential early work in the area, which suggested that American urbanites had less knowledge about wildlife and less utilitarian attitudes than their suburban or rural counterparts (Kellert, 1984), a number of studies since that time have supported the idea of a rural-urban difference. Urbanites have been found to be more likely to favour non-lethal management tactics, for example (Jackman & Rutberg, 2015; Teel et al., 2002; Thornton & Quinn, 2009), and to rate human activities such as resource development as more harmful to wildlife than their rural counterparts (Dubois & Fraser, 2013). Together these factors contribute to what some have suggested is a unique service milieu, one where "stakeholders" are – for example – not typically involved to the same degree in hunting and fishing, which has been a key issue shaping rural management paradigms. Instead, "nonconsumptive" wildlife activities dominate in

urban areas (Adams, 2016), and requests for help tend to revolve around "non-agricultural human—wildlife conflicts; how to attract wildlife and create backyard habitat; the potential effects of wildlife on the health of humans and companion animals; ecotourism opportunities; and what to do when an injured or orphaned wild animal is found" (Lindsey & Adams, 2006, p. 267).

Data on urban/rural trends are important to consider, though it is also wise to be wary of grand narratives about (all) urban attitudes toward (all) wildlife. Michael Manfredo and colleagues' (2008; 2016) assertion that a mutualistic wildlife value orientation¹¹ is coming to prevail over domination-oriented ones in our post-industrial world (Manfredo, 2008; Manfredo et al., 2016), for example, seems to outstretch the attitude data (Jacobson & Decker, 2006). Not all studies have supported a rural/urban difference (e.g., Koval & Mertig, 2004), and the task of distinguishing between urban and rural people is complicated to begin with, since migration in and out of cities means that not everyone living in rural areas represents a "rural epistemology" that might be associated with multigenerational rural living (Heberlein & Ericsson, 2005; Jonker et al., 2006). Other studies have found factors such as gender, education, income, and level of involvement with wildlife or in animal use professions, have mitigating or amplifying effects on urban/rural attitude patterns (Dubois & Harshaw, 2013; Sponarski et al., 2013; Thornton & Quinn, 2009; Williams et al., 2002; Zinn & Pierce, 2002). Perhaps most importantly, unique individual experiences with particular animals are key in shaping perceptions and expectations of different species (Kretser et al., 2009; Naughton-Treves et al., 2003).

At the same time, the now-substantial body of interpretive work on urban wildlife relations in the humanities and social sciences is grounded in the idea that we have (in North America), a

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¹¹ A mutualistic orientation, according to Manfredo (2008) is one in which wild animals are seen as members of an extended family who deserve care and protection.

cultural common sense about wild animals being out of place in cities, positioning them as ontological boundary-crossers. Their liminal status has, for example, been a point of attention in ethics and political theory in recent years, with a number of theorists looking to parse our duties to animals who flout a clean line between wild and domestic classification (Donaldson & Kymlicka, 2011; Michelfelder, 2003; Michelfelder, 2018; Palmer, 2003, 2010). Scholars from a range of disciplines have been interested in how urban animals become a site of "moral panic" (Taylor & Pacini-Ketchabaw, 2017) around which cultural anxieties collect (Cassidy & Mills, 2012; Corman, 2011; Dean et al., 2017; Deckha & Pritchard, 2016; Holm, 2012; Jerolmack, 2008; Luther, 2013; Nagy & Johnson II, 2013; Philo, 1995; Sabloff, 2001).

The inherent contradiction of the urban wilds have made cities a particularly important site of theorization for animal – and now "more-than-human" – geographers (Blue & Alexander, 2015; Buller, 2014; Escobar, 2014; Hovorka, 2008; Lorimer, 2008b; Lulka, 2013; McKiernan & Instone, 2016; Owens & Wolch, 2015; Rutherford, 2018; Srinivasan, 2013; Thompson, 2007; Van Patter & Hovorka, 2018; Whatmore, 2002; Yeo & Neo, 2010). As Steve Hinchliffe (1999) has observed, the idea of urban space as one where wild nature is held at bay is one of the foundational stories of cities. This story is in turn informed by the "moral geographies of wilderness which presuppose an easy coincidence between the species and spaces of a pristine nature" (Whatmore & Thorne, 1998, p. 435; see also Emel & Wolch, 1998, Philo & Wilbert, 2000, Wolch, 1996; Wolch, 2002). Not only have contemporary cities not been designed to accommodate much animal life (Wolch, 1996, 2002), but the work of controlling and transforming nature inside cities – including efforts to expel "bad" natures – has been at the moral heart of modern planning paradigms (Shillington & Hovorka, 2017; Wolfe, 2011).

These efforts have not succeeded in keeping the wild out – indeed, for a contingent of animal and environmental historians, it has been important to re-narrate the story of cities as human habitat by showing that animals have always been important to the making of urban places and the management infrastructure that has evolved therein (Atkins, 2012; Dean et al., 2017; Kheraj, 2012; Ritvo, 1987). But the fact that most animals are not intentionally included in urban life is one iterated through the built environment itself, and means that animals who thrive in cities are typically seen to be doing so against the grain of urban design. In concert, these factors suggest that wildlife organizations who respond to human-wildlife encounters in cities are navigating a relational milieu that is, to some degree, distinct.

Chapter 2: Methods and methodology

As the research questions suggest, a primary point of interest in this study was about the interrelation of wildlife organizations that operate in cities – how their work is connected, and what we
may educe of the service niche defined by their overlapping practices. But I am also interested in
another, wider, dimension of relationality, in which cities are understood as multispecies spaces
and urbanism as a more-than-human affair. Both of these interests inform my approach to the
research from data collection to analysis. In this chapter I explain my decision-making process
and the theoretical tensions I aimed to navigate.

Choosing a sample: Locating points of friction

My research focuses on four wildlife organizations: three that I define as urban wildlife organizations (UWOs), because of their involvement with mitigating wildlife encounters in the city, and in public education about living with wildlife in urban space. The fourth organization is a branch of a national conservation organization based in the same city, whose work includes local initiatives to engage their urban audience.

My attention to the intersections between a nationally focused conservation organization and locally-focused UWOs is grounded in the idea that what happens in cities is intricately interwoven with a broader set of regional, national, and global political processes. Exactly how we ought to think about – and research – geographic scales and their interrelationship is often debated in urban studies. A recent and contentious topic in this debate is Neil Brenner and Christian Schmid's planetary urbanization thesis (2012), which holds that the traditional claims about urban spaces as being qualitatively distinct from non-urban spaces is challenged by contemporary reconfigurations of cities. These reconfigurations include the development of megalopolises that

transcend regional or national boundaries, the restructuring of the traditional "hinterlands" into key sites of production for urban industrialization, and atmospheric changes that have rendered global the rhythms of urban life. Brenner and Schmid's conclusion is that these complex transformations mean that "the category of the 'city' has today become obsolete as an analytical social science tool" (p. 12). Critics have argued that the planetary urbanization thesis is Eurocentric in its claims (Derickson, 2015) and over-emphasizes the deterministic power of capital in producing everyday life (Loftus, 2018; McLean, 2018; Ruddick et al., 2018). The polarized positions in this debate have prompted Kate Derickson (2015) to label their respective approaches to urban theory as *Urbanization 1* and *Urbanization 2*. Urbanization 1, epitomized in the planetary urbanization thesis, "attempts to theorize and understand what this 'watershed moment' as observed from a more-than-global scale means in relation to the history of capitalist development more broadly" whereas Urbanization(s) 2 constitutes "a predictably messier set of interventions" that draw on postcolonial, feminist, and subaltern scholarship "to locate urbanization in and through the 'unimportant acts.'" (p. 648). Urbanization 2 scholarship challenges the capitalcentric lens of Urbanization 1 by seeking to "locate political possibilities in emergent subjectivities and livelihood strategies" (p. 648). Susan Ruddick et al. likewise call for a view of urbanization that can appreciate "the constitutive role of subjects, subjectivity, and struggle" in city-making (2018, p. 4). From this perspective, urbanization is not a process determined from the top-down, but one that is always being re-made in local, material interactions of everyday life.

The critique that totalizing theories occlude situated knowledges is nothing new – indeed, this theme pre-dates the planetary urbanization thesis in debates about scale (Brenner, 2001; Marston, 2000; Purcell, 2003). It serves as an important point of tension for the present study. I am primarily interested in the everyday practice of UWOs and what it means for multispecies

urban life on-the-ground. This interest is behind my decision to include a big conservation organization located in the focal city, rather than doing a broader scale comparison of ideas about right relations between UWOs and in big conservation organizations. Relying solely on such a comparison would miss, I think, the important material intersections of organizations operating in a common space. Consequently, the present study intentionally reads the work of organizations whose work centres on wildlife relations in the city against one whose work is in that city and about wildlife relations. My aim is to elucidate the ways that these organizations are differentially engaged with human-wildlife encounters in urban spaces, an idea I develop largely in Chapter 3. My interest in these material engagements aligns more closely with Urbanization 2 in Derickson's typology.

Still, a commitment to attend to the ways these organizations differentially navigate the meaning and value of urban encounters should not suggest that they have equal influence in defining right relations between humans and wildlife. Big conservation NGOs are major actors on the world stage and have a lot of power in shaping environmental discourse (Igoe, 2014; Willow, 2015). To home in on the messy, "unimportant acts" of everyday encounters in cities should not mean ignoring the ways that these encounters can be enrolled in wider circuits of capital value. As Bruce Braun (2005) has noted, "a common critique of writing on urban environments is its pervasive 'localism' such that the larger economic, political and cultural processes shaping urban natures are largely ignored" (p. 636). Here, then, I am also aligned with the notion of trans-scalar political economic forces that planetary ontologies embrace. I do, as a result, separate the work of the big conservation organization here as uniquely embedded in those trans-scalar dynamics, and thus look at the points of connection between this organization, as an actor in this trans-scalar

conservation project, and the *collective* work of UWOs as actors who are more materially anchored to the messiness of encounters in the space of the city.

My aim in the present analysis is to attend both the particularities of everyday urban life and to the ways in which these particularities are connected to wider urban processes (without being determined by them). Anna Tsing's (2011) metaphor of friction has been a point of inspiration to me and has guided my thinking about the tensions of scale in this analysis. In her efforts to conduct a seemingly contradictory "ethnography of global connections," Tsing explores the way that scale is always being written through cultural projects, but argues that these acts of scale-making never exist in isolation. Rather, they are constantly being articulated and contested in "zones of awkward engagement, where words mean something different across a divide even as people agree to speak" (p. xi). Tsing's theorization is useful for thinking about the kind of oblique relations that I am getting at in my research design, since she points to the ways in which universalist claims are always being reworked as they move across scales. If globalist logics of biodiversity conservation touch down in local spaces, it is never without tension – these are what Tsing sees as points of friction. The universals that conservation seems to be grounded upon – like the value and meaning of "Nature" are thus always unstable and contingent, adapted for local use, a process through which meanings are changed. As Tsing puts it, "Capitalism, science, and politics all depend on global connections. Each spreads through aspirations to fulfill universal dreams and schemes. Yet this is a particular kind of universality: It can only be charged and enacted in the sticky materiality of practical encounters" (p. 1). Attention to these points of connection allows us to see that not only do global forces shape everyday life, but that they "are themselves congeries of local/global interaction" (p. 3). As Thom van Dooren has observed, these spaces of global friction are "simultaneously remaking the world and what it means to 'conserve'

it. The conservation ontologies – always plural – that guide efforts here are a field of heterogeneous, overlapping and shifting ways of imagining and inhabiting our living world" (2015, p. 8).

Alex Loftus (2018) likewise sees much fruitful work to be done in the space between planetary and everyday perspectives, though observes that it comes with challenges. One is that we may throw everyday particularities into the analysis as a "post-hoc gesture," (p. 92) as mere articulations of global economic processes. These superficial engagements with urban politics on the ground, Ihnji Jon (2020) argues, have marked many analyses of inter-scalar relations, where a pre-existing story of neoliberal domination (or resistance) waits to be written through data. I have tried to be attentive to this pitfall in the present project, and I recognize that one risk of framing UWOs as involved in a collective practice is that it may be read as homogenizing their work in order to tell a story about the tentacular reach of conservation logics into urban practice. My grouping-together urban wildlife organizations is not intended to suggest here that the differences between them are unimportant. Many material differences exist between them that have meaningful consequences for animals. For example, animal control and animal care may seem like counterposed projects, and sometimes they are. I aim to attend to these misalignments along the way, but I also want to attend to the underappreciated ways in which their work is entangled, and to create a space for recognition of this sphere of practice as a part of urban infrastructure, even with its points of incoherence.

The organizations

The organizations in this study were selected based on my own knowledge of, and research on, their work in the focal city, including conversations with others in the field about key players in urban wildlife intervention in this urban space. The organizations were known to each other and

well-established in their respective areas; Each has been involved in responding to urban wildlife issues and encounters in the focal city for more than twenty years. For the purposes of confidentiality, the organizations in this study are not identified here by name. Some interviewees wished to remain anonymous, and the analysis is not meant to be a performance review of their particular approaches to wildlife intervention but rather an effort to better understand this service niche. The organizations represented here are:

- Medical and rehabilitation and education NGO with two primary mandates: to provide medical and rehabilitative care to sick, injured, and orphaned wild animals, with the goal of releasing these animals back in the wild where possible, and to educate the public about wildlife through venues such as a busy call centre, public presentations, education campaigns and media work. The bridging goal between these practices, as they define it, is to promote peaceful coexistence between humans and wildlife. Most animals in need of care are brought to the centre by the local residents who find them, though they also have some designated rescue staff to assist in situations too dangerous (or otherwise untenable) for members of the public, as well as a network of volunteers who sometimes assist with transport or in various other program areas, including education, administration, and animal care.
- A wildlife rescue and advocacy NGO. This organization has several program areas that
 centre around its main goal of protecting migratory birds in the urban environment, including
 rescue of injured birds, education, research, policy work, and consulting. While "advocacy" is
 not explicit in their mission statement, interviewees named it as a core element of the
 organization's work. Organizational activity centres around raising awareness about dangers

to birds in the city, and pushing for changes at individual, corporate, and policy levels that could reduce these harms. Rehabilitation is also listed among their program areas, though the group has no medical or housing facilities for animals – rehabilitation consists mainly of supportive on-site care when injured animals are found. Those needing more significant medical attention are transferred to wildlife rehabilitators.

- department, this unit primarily provides services related to domestic animals, including operation of several city shelters that take in stray and surrendered domestics, adoption services (sterilization, microchipping, licensing), and by-law enforcement. Germane to the present analysis, the unit is also responsible for providing "wildlife services" to the municipality, which includes on-site response to situations involving sick, injured, or dead wild animals, as well as public education about living with wildlife in the city through phone and in-person contact with staff, as well as through organizational literature (online as well as pamphlets and booklets available in the shelters). Response staff contain sick and injured animals where possible, but have organizational restrictions that limit their ability in some situations (for example, they are not meant to go up on ladders, or onto private property). Sick or injured wild animals that are contained by animal services are either euthanized at the animal shelter or transported to wildlife rehabilitation facilities.
- A large wildlife conservation NGO. In addition to their connection to a network of
 international branches, this organization has multiple offices across the country, with their
 central office located in the case study area. The organization's activities conservation

projects and research – are largely focused on habitats outside of major urban centres, though the branch I looked at in the present study maintains a local presence through fundraising events, partner/sponsor/funder relationships with local initiatives, advertising and communication campaigns, as well as some programming that takes place in local communities (including within the focal city).

There are many organizations in the focal city that are involved in some way with wildlife issues that I did not include in this study (e.g., private wildlife removal companies, zoos, nature education centres, conservation education organizations, urban land management and planning groups). I based my selection of urban wildlife organizations on their significant involvement with responding to wildlife encounters and their notable presence in public discourse about urban wildlife (e.g., through media, campaigns, and public services).

The four organizations under study were based in a large Canadian city. Any study of urban phenomena faces the challenge of how to define what is and is not a city, one notoriously complicated by landscape heterogeneity across sub-, ex-, and peri-urban areas, and the mobility of humans (and animals) across and beyond those porous boundaries. For ecologists studying synurbic species, human population density is of limited use as an urban delimiter on its own, since the species adaptations relate to urbanized environments – e.g., the presence of buildings and walls, resource availability – rather than density of people per se (Francis & Chadwick, 2012). Because it is these characteristics of the built environment, and their role as impediments and opportunities to different species, that are at the heart of the kinds of encounters people have with urban animals, it seems appropriate to likewise adopt a definition here that considers landscape features as well as population density. Following Ian MacGregor-Fors (2011), then, "urban" might

usefully be defined here as "populated areas provided with basic services (e.g., homesteads, electricity and water supply, drainage), where more than 1000 people/km2…live or work, and an important proportion of the land (>50%), in a "city-scale", is covered by impervious surfaces (e.g., buildings, streets, roads)." (347). The primary service area for the UWOs in this study met these criteria, 12 though only the municipal animal services unit here had a defined service area that was aligned with municipal boundaries (outside of which service requests would be handled by a different unit). The two NGOs were not constrained by an official service area, but the bulk of their service requests came from the same metropolitan area.

Data sources and collection

As suggested in the research questions outlined in Chapter 1, I was interested in understanding more about organizational identities and inter-relationships, the way they saw the purpose of their practice and the challenges, and the ways that they defined right relations with urban wildlife. I drew on three primary sources of data:

a. Organizational grey literature. I collected text and image data from each of the study organizations' main websites as well as linked microsites (e.g., separate entities on a particular campaign or program run by the organization) where applicable. I also looked at staff reports where available as well as other promotional literature (e.g., pamphlets, newsletters).

¹² As defined by the linked report from Statistics Canada on land cover. Population density also from statistics Canada. (https://www150.statcan.gc.ca/n1/en/pub/16-201-x/16-201-x2016000-eng.pdf?st=8HqQPuSP)

b. Interviews. I interviewed four staff members or volunteers from each organization. I saw interviews as being an important way of capturing insider perspectives on the work and also being a useful reflection of organizational ideas that might be present in communications with the public (e.g., via requests for assistance on the phone, field responses, or educational events). For each organization, I interviewed 1-2 people that occupied senior positions (e.g., senior directors, founders), and 2-3 who carried out the primary activities of the centre but who were not generally involved in strategic planning, higher level program design, or organizational decision-making (e.g., animal care technicians, dispatchers, education and rescue volunteers, program coordinators) as a means of capturing a range of perspectives within the organization. Where these roles were not obvious, I asked organizational contacts to suggest participants I could ask that would align with these categorizations. These groupings were not designed to make categorical claims about the experience of upper level and frontline staff in these organizations, but rather to add some context to potential points of divergence in interviewees' perspectives. In the chapters that follow, interview references are coded by an acronym signaling the type of organization, and whether the interview was with staff involved with organizational strategy and decision making (denoted by an "s") or those more involved with implementation of those higher-level directives (denoted by an "i"). It should be noted that this is something of a rough categorization that does not reflect an explicit division made by organizations themselves. Those defined as "implementers" had differing levels of involvement in decision-making at different organizations. At the big conservation organization, for example, all of the interviewees designated as implementers were involved in decision-making processes for their particular program area – so for this

organization the "strategist" differentiation marks only the top-tier of decision-making. Table 1 shows the breakdown of interviews and their respective acronyms. The majority of the interviewees were women, ¹³ including all of the interviewees at the wildlife rehabilitation and education centre. At the rescue and advocacy organization and at the big conservation organization, all interviewees except one (in each organization) were women, and the two men that were interviewed were in a high-level strategic planning role. At the animal services unit, both management-level interviewees were women, and both interviewees involved in implementation (dispatch and field response) were men. Interview questions were tailored for each organization/interviewee, though questions were aligned with four common themes, selected by me for their perceived relevance in answering the research questions (see coding and analysis for process):

- Organizational identities and inter-organizational relationships (the scope and scale of the work, goals and ideals, interactions and partnerships, relation to conservation and management fields and bodies)
- Interventionist ethics and practice (duties of care to and right relations with wildlife, differential value of species, populations and individuals, organizational decision-making)
- Wildlife and the city (conceptions of the urban nature and wildlife, naturalness and coexistence)
- The role of affective relationships and encounters with animals in their work (how feeling about wildlife is important to, and navigated in, organizational practice)

¹³ Interviewees were not asked to identify their gender, so references to "women" and "men" in this research are used to signify female-presenting and male-presenting interviewees.

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Interviews had a semi-structured format, where I occasionally strayed from the designed questions to pursue points of discussion raised by the interviewees. Each interview lasted approximately one hour. They were conducted in person at the interviewee's location of choice, usually their place of work, though some interviewee's opted to meet in a café. Interviews were digitally recorded with interviewees' permission. Interviewees signed consent forms and consent to the research (including freedom to withdraw at any time) was also explained verbally, along with data storage protocols (data files kept in a digitally encrypted folder, and viewed only by the researcher).

c. Personal experience. As I have noted in Chapter 1, I spent a long time – 14 years – as an insider in the urban wildlife field. I was familiar with many of the practices of the UWOs in this study and with the state of the field more broadly. I attended and spoke at many conferences, read (and wrote) literature in the field, and was immersed in the ongoing professional dialogue both within and between organizations. I draw reflexively on this knowledge throughout the present research project to illustrate some of the commitments and challenges in this sphere of practice from an insider's point of view. This act has the flavour of auto-ethnographic research, which seeks to use personal experience as a member of a culture to provide a detailed description of that culture (C. Ellis et al., 2010). Typically in auto-ethnography the researcher's experience is detailed in conversation with other sources of data like interviews with other cultural members, or study of cultural texts (Bochner, 2002; Marvasti, 2006). It is not the central goal of this research, however, to understand the culture of this group in a phenomenological sense, but to explore organizational perspectives and

practices. I draw examples here from my own experience to supplement and provide context for some of the interviewees' comments and to elaborate context on organizational decisions to capture, provide care for, transport, or euthanize animals.

Organization name and represented job/program areas	In-text acronym	
Wildlife rehabilitation and education NGO		
Director/Senior management	WRs1	
Director/Senior management	WRs2	
Animal care volunteer	WRi1	
Education volunteer	WRi2	
Wildlife rescue and advocacy NGO		
Director/Senior management	RAs1	
Director/Senior management	RAs2	
Rescue volunteer	RAi1	
Rescue and education volunteer	RAi2	
Municipal animal services unit		
Director/Senior management	ASs1	
Director/Senior management	ASs2	
Field staff	ASi1	
Dispatch staff	ASi2	
Big conservation NGO		
Director/Senior management	Cs1	
Program manager/director	Ci1	
Program manager/director	Ci2	
Program coordinator	Ci3	

Table 1: Interview data codes

Coding, Analysis, and Organization

The premise of this study relies on an inductive logic, where this case study of organizations can lay the groundwork for the novel theorization of an underrecognized sphere of intervention and its role in urban multispecies sociality. The goal in data collection was to ground this theorization in the perspectives of the organizations themselves on their own identity and practice. These two elements in concert – to create novel theory grounded in participant perspectives – are the conceptual basis for grounded theory, first elaborated by Barney Glaser and Anselm Strauss (1967), and since adapted by many others, including later re-workings by Glaser and Strauss themselves (e.g., see Kenny & Fourie, 2014; Reichertz, 2019; Timonen et al., 2018). Grounded theory is a much-used approach to qualitative data analysis, especially in the social sciences, and I have aimed to draw from the strengths of this approach in my coding and analysis by:

- A close textual engagement with the data, characterized by repeated line-by-line readings
 where I coded the text into emergent in vivo categories or thematic "nodes." I analyzed all
 data using NVivo 12, a software tool specialized for mapping themes in qualitative research.
 NVivo allows for the coding of any textual unit (words, sentences, paragraphs) to be grouped
 under multiple cross-referenced nodes.
- 2. Constant comparison and memoing. The initial coding categories enabled me to easily compare organizational perspectives on common themes, and to move back and forth between excerpted and whole-source data. While coding I took memos within NVivo, highlighting my perceptions of the data.

3. Successive rounds of coding, looking for relations between the nodes, points of commonality and divergence, considering hypotheses suggested in the data, creating new analytical categories based on theoretical engagements, and re-coding the data.

While there is general agreement that these elements are core principles of grounded theory (Hallberg, 2006; Timonen et al., 2018), how they should be operationalized is a source of disagreement, one often strung to ontological tensions about the relationship between data and theory and the position of the researcher. The pure inductivism of Glaser and Strauss' original formulation envisioned the ideal researcher as occupying an unbiased space outside of the data – which should not be contaminated by prior engagement with theoretical literature, for example – in which an essentially blind analysis could take place, and data could freely speak without being tainted by the researcher's preconceptions or pet theories; only out of this process could a theory grounded in participant perspectives be allowed to emerge. While Glaser and Strauss acknowledged that researchers do not really come *tabula rasa* to the act of data analysis, their method largely retained positivist ideals of a clean separation between theory from data (Alvesson & Sköldberg, 2017).

The question of separation from the data is of central importance in this study, since the research questions grow out of, and are entangled with, my own experience in the field of urban wildlife intervention. While my research questions may be sufficiently 'open' for an explorative grounded theory approach, they are prompted by a specific set of concerns that come out of my own intimate knowledge about this field and the rationale for the research. For example, in defining themes for the interview questions, I viewed it as important to look at affective relationships and encounters. This theme has a perhaps less transparent relationship to the

research questions than some of the others, and I included it because I know from my own experience in the field that much of the work of UWOs is focused on managing emotionally charged encounters. This struck me as an important element in light of the scholarship in political ecology and conservation biopolitics about the institutional valuation of certain kinds of emotional encounters with animals, and I thought it might be a fruitful line of questioning in thinking about overlaps and distinctions in the value of encounters between organizations. While my wondering about these relationships did not represent a well-developed hypothesis to be evaluated, they had a deductive flavour (i.e., an interest in whether this specific case data has a relation to an already developed theoretical category). Moreover, these inklings are themselves grounded in some categorical moral questions that drive the research – notably, is this "touching down" of conservation in urban spaces good for UWOs and urban animals?

A strict Glaserian approach to grounded theory would likely see these starting conjectures as polluting to the resulting data, however subsequent iterations of grounded theory have mostly moved away from the conception of the researcher as a removed observer. These theoretical reworkings have acknowledged that researchers bring personal and theoretical perspectives to the analytical process and that the way to protect the data from bias is through greater reflexivity (Alvesson & Sköldberg, 2017) and a cultivated openness to new interpretive possibilities (Charmaz, 2006). In fact, many grounded theory approaches have come to see researchers' preexisting knowledge not as a handicap but rather a critical part of a reflexive research process that is better characterized as *abduction* than induction (Reichertz, 2019). Abduction is seen to transcend the inductive/deductive divide by defining the research process as a creative one where analysts recursively weave back and forth between data and theory, trying out the data against existing theoretical ideas, making inferences and "provisional hypothesis" about possible

relationships and returning to the data to test them out (Kennedy & Thornberg, 2018, p. 52), thereby relying on both deductive and inductive processes informed by a rich background knowledge. As Stefan Timmermans and Iddo Tavory (2012) put it,

Abduction thus depends on the researcher's cultivated position. The disposition to perceive the world and its surprises—including the very reflection on one's positions in this world—is predicated on the researcher's biography as well as on an affinity and familiarity with broader theoretical fields...Unanticipated and surprising observations are strategic in the sense that they depend on a theoretically sensitized observer who recognizes their potential relevance. (p. 173)

Critically, this sensitization is necessary not only in data analysis but also in data collection. Some critics of the positivist Glaserian approach to grounded theory have noted that researchers must make decisions about what kind of data to collect – that is, its relevance to the research question – before any perspectival grounding in that data can even occur (Flick, 2019). In this study I frame my own experience not only a sensitizing force but also a source of data itself, ¹⁴ in which the first "pass" of the data was really a reflection of my own experience as someone who has held an analogous role to the participants in this study for many years. Indeed, it is this experience that grounds the starting framework of this research as a *case study* rather than a comparative one in which cases are analyzed across various dimensions of difference but usually without a holistic analysis (Flick, 2019). This study, in contrast, begins with a (novel) claim about urban wildlife intervention as a coherent sphere of practice wherein organizations (UWOs) bound by set of material-discursive relations may intelligibly be regarded as a unit.

¹⁴ Even Strauss and Glaser acknowledged researchers' experience as a valuable source of data, albeit one that was still subject to the same ideals of impartiality (Alvesson and Sköldberg, 2017).

Because of my personal embeddedness in the field, however, I was attentive to – and cautious of – an overdetermination of the data. I took care to ask interviewees their perspectives without imparting my own, asking for elaborations even on issues with which I had a lot of familiarity. In coding, my process aligned with the three emphases Timmermans and Tavory (2012) pose as key to abductive analysis. The first of these is defamiliarization from the data. They see textual inscription as an important way of making the familiar and everyday abstract, and more amenable to intellectual consideration. In this project another step helped with defamiliarization. Rather than creating an initial set of codes based on perspectival statements as is typical in many grounded theory studies¹⁵, my initial coding was for concepts or topics referenced by interviewees (e.g., endangered or rare wildlife, definitions of conservation and management). While the starting list of codes had a natural alignment with the interview themes, they also cut across these themes regularly, where – for example – a question about organizational relationships would contain perspectives about human-wildlife relationships in cities. A subsequent close analysis of these thematic groups allowed me to examine interviewees' statements or grey literature text isolated from their larger context and in juxtaposition to other statements on the same theme. This de-contextualization created personal distance from the data and the subsequent comparison of smaller data units allowed surprising perspectives to emerge that weren't obvious to me when the interviews were in their native form, perhaps because of my closeness to the subject matter. This is also in line with Timmermans and Tavory's emphasis on revisiting; the authors hold that perception is not a singular event but rather overflows our initial

¹⁵ For example, in Kathy Charmaz' (2006) writings on her constructivist grounded theory, she suggests that initial coding from an interview on chronic illness might draw from an interviewee's statements codes like "experiencing escalating pain," "accusing daughter of not caring," and "seeing life-threatening risk of losing control" (p. 44). Note that these initial codes contain both concepts related to chronic illness (e.g., pain, control, care), but also the perspectives/experiences of the interviewee that relate to that concept. This is a common approach in grounded theory coding (e.g. See Belgrave & Seide (2019).

Initial codes	Surprising themes/perspectives (and basis for future chapter breakdown)	Theoretical links explored
 Local relations/connections Connections beyond the city (global and other) Changes in the field Organizational self-definitions Definitions of conservation and management Confusion about what organizations do and their inter-relation The environmental field Funding and organizational practice Organizational strategies and practices Science, expertise and professionalization Moral duties to wildlife Individuals and populations Endangered or rare wildlife Limits and tipping points Nature and economy Science, expertise and professionalization Animal rights/extremism Relationships between humans and wildlife Urban species/living with wildlife in cities Anthropocene idea and future 	 Ambivalent identities Stigma of caregiving Schisms with UWOs and big conservation Tensions in sustaining services 	Inter-scale connections/frictions Institutional logics – concept of the field (organizational studies) Privatization of wildlife management Animal ethics – urban wildlife
	 Differential species value – UWOs and conservation values Dualism of vulnerability and adaptability Visibility and viscerality of urban animals Fidelity to human/nature divide and spatial separation 	 Animal geographies (Eco)feminist politics of care New conservation debate and critique Postnatural theory
scenarios Connecting to nature and wildlife encounters Managing emotion/affect Urban focus and relations of scale	 Costs of emotion work Summoning personal nature connections, capturing the value of local connection 	 Political ecology of flows Connection to nature in environmental education Intersection of EE with political ecology Encounter value and conservation biopolitics Flagship species and ambassador animals

Figure 1: Links between data themes and theory

experience, with new things to be discovered on each point of return. As new themes emerged I began to consider intersections with different theoretical perspectives familiar to me. I dug deeper into these literatures, and returned to the data again to think about their potential as analytical tools (see Figure 1). This "casing" of the data – experimentally trying different theories out to determine their fit and explanatory value – is another key emphasis in abductive analysis (Timmermans & Tavory, 2012).

Through the recursive consideration of theory and re-reading of data, I began to notice new relevant details, using these as grounds for provisional hypotheses (see Figure 2).

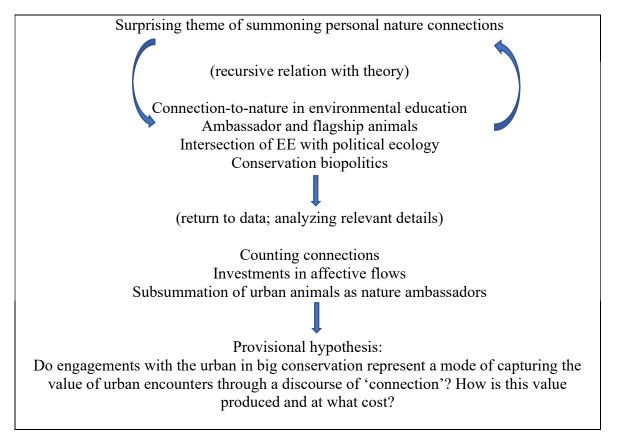


Figure 2: Example of research process from surprising theme to provisional hypothesis

Provisional hypotheses were considered in re-analyses of the data, looking at whether the interviews and grey literature could support these claims and if then in turn, the theoretical lenses could be seen as useful tools for analysis. The sub-groups of surprising themes suggested a chapter breakdown, which shaped the organization of the work that follows. The first substantive chapter (Chapter 3) explores the evolution of UWOs overlapping sphere of practice, looking at systems of meaning, overlapping practices, and points of conflict with the big conservation organization's work in cities. The second (Chapter 4) looks at the way these organizations are involved with and invested in affective encounters with urban animals. I explore the emphasis, in the big conservation organization, on facilitating nature connection through local encounters and how this fits with other modes of encounter value that have been important in the field. I then explore what affective encounters mean to UWO practice and to urban animals themselves. Analyzing who benefits from a connectionist framework and who pays the costs, I consider what this study can contribute to a political ecology of urban nature connection. In Chapter 5, I consider big conservation's growing engagements with ideas about "postnatural" practice, how these engagements compare to critical scholarship on postnaturalism, and the different ways that the organizations in this study are invested in postnaturalist claims. I spend time here looking at how ideas about nature/postnature are mobilized in the work that UWOs do on the ground, and how they shape a vision for right relations with urban wildlife. I conclude (Chapter 6) with some thoughts about what this research can contribute to thinking on urban ethics, governance, and aspirations for the more-than-human city.

Disciplinary perspectives and theoretical tools

Since urban animals wend their way through a wide number of disciplines, so too does my analysis. The following chapters pull into conversation research from organizational sociology,

urban ecology, wildlife management, environmental history, conservation psychology, political ecology, animal geography, and animal, feminist and relational ethics. These are not always uncontentious intersections, since foundational claims in some of these areas of scholarship are at odds. While writings on abductive analysis stress the need to push data against different bodies of scholarship looking for fit, how researchers should deal with multiple areas of fit in philosophically antagonistic fields is often less explicit. My aim as an interdisciplinary scholar is to draw together multiple theoretical perspectives and attend to the points of tension along the way. I do this frequently in the following chapters, for example, looking at much-wrought tensions in animal studies between relational ethics and rights-based approaches; in this section I address some of the macro-level theoretical conflicts that undergird this research.

Institutions and assemblages

Because this is a study of organizations with a shared area of practice, an early theoretical question was whether it is useful to think of them as an organizational field. Literature from organizational sociology and social movement studies provided some important conceptual tools for moving forward. In particular, a key point of interest in this project is the systems of meaning that motivate and legitimize organizational practice in this diverse group of service providers — what neo-institutionalist perspectives have seen as the "institutional logics" that knit together fields of practice. I look more closely at this idea in Chapter 3, using institutional logics as means of exploring the intersective dynamics of these organizations and their overlapping work. I begin by tracing a brief genealogy of contrasting logics in the field — a tool often used in understanding organizational identities and practices (Fligstein & McAdam, 2012; McAdam & Scott, 2005).

Organizational studies has some limitations for this research project as a whole, however, since I am ultimately concerned here with the role of these organizations as part of a wider urban

multispecies relationality. I am interested not just in what their institutional identities and interrelations *are* but what they *mean* in the context of this wider relationality, and how a better understanding of them can move us forward in theorizing the more-than-human city. Neo-institutionalist theory is not the best fit for this goal. Not only has the field shown very little interest in how nonhuman others matter in organizational life (Heikkurinen et al., 2016), but it has also largely been dominated by an anthropocentric interest in discourse as constitutive of organizational life (Weik & Walgenbach, 2016). This focus has underrepresented the corporeal and affective dimensions of social phenomena, although some recent studies have moved toward a greater appreciation of these factors in organizational practice (Ashcraft et al., 2009; Brown & Reavey, 2016; Orlikowski & Scott, 2015).

For much scholarship in animal studies, concepts like the "actor-network" and the "assemblage" have been important theoretical tools for addressing the anthropocentric preoccupation with representation that largely defined the social sciences and humanities until the 1990s. These concepts reimagined the social as a product of interaction between heterogenous entities (both human and non) rather than the expression of human agency, and as such they attended closely to corporeal and affective forces shaping relations, signaling a "recuperation of 'materiality" (Whatmore, 2006, p. 601) in explorations of social and political dynamics. Early theorists in this area stressed their orientation as an ontological shift rather than difference in emphasis, one marked not only by the recognition of nonhuman agents ("actants" in Latourian terminology) such as animals, plants, or nonliving things as important in the constitution of social life, but also by a refusal to privilege human language and ideas as having the power to

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¹⁶ Bruno Latour's work is strongly associated with this concept (see Latour 2005 for example), though Michael Callon and John Law are also notable thinkers in the area.

¹⁷ Gilles Deleuze and Felix Guattari's work (1988) is central in the development of this concept.

"construct" social life. This ontological flattening was a pushback not only against the institutionalist status quo in sociology but also in much scholarship on human-animal relations, which in the 1980s/90s focused largely on human representations of animals, or "the Animal." As Timothy Hodgetts and Jamie Lorimer (2015) show, one thrust of this relational turn in explorations of multispecies spatialities is to find methods that can elucidate animals lived experiences — "animals' geographies" — rather than "the spatial ordering of animals by humans" (p. 286; see also Lorimer & Srinivasan, 2013). 20

I find the concept of assemblage a fruitful one and draw frequently on scholarship in this relational vein to think through the data in this study. This raises the question of why I do not embrace it wholesale – why not leave institutionalism at the wayside and focus this study on an urban assemblage made up not only of UWO actors but a wide range of other nonhuman agents (raccoons, yellow warblers, policy documents, garbage trucks)?

The first is that the ontological appeal of assemblage notwithstanding, what the concept means methodologically is often unclear, with varying claims about the need for thick description, unspecified modes of "attuning," or simply a vague "ethos" of engagement with the world (Kinkaid, 2020). While I am sympathetic to the need for such an ethos, I am also wary of overreaching the data in this study, which is focused on the organizations and the way they approach

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¹⁸ This phrasing comes from Derrida's work challenging the tradition in humanist philosophy of reducing all nonhuman animals into the generic category of "the animal."

¹⁹ I use the term "relational" summarily refer to those approaches interested in affect, vitality, and relational or distributed agency asserted in metaphors like the assemblage or network. Examples representative of this shift include Bennett (2009), Haraway (2008), Thrift (2008).

²⁰The 'turn' away from representationalism is sometimes overstated, and is more prominent in some fields – notably the environmental humanities and more-than-human geography – than in others. Representation and discourse remain a strong trend in studies of human-animal relationships overall. Many have also expressed doubt about whether it is even possible to get beyond representation, suggesting that the specter of humanism continues to shape ideas about the entangled, affective worlds (Laurier & Philo, 2006; Lulka, 2009). I stick close to geographers in this research because of their significance in exploring how multispecies relationships produce urban space, but I acknowledge here they are only one contingent of a much wider field.

and communicate about urban animal encounters. While I draw on research in animal studies – including "animals" geographies and ecologies – my methods were not designed to explore the subjective experience of urban animals themselves. I recognize the agency of animals in shaping organizational practice but in this study their effects on organizational identities and practice are speculative. My hope is that these speculations lay the groundwork for future research that can explore them more fully, a point I discuss in the conclusion. Thus while the lives of animals, and my own embodied experience with the thousands of animals I met in my years in the field, are the driving force behind my research, they may ultimately remain "shadowy presences" within it (Philo, 2005, p. 829).

It is also worth acknowledging, I believe, that the thick philosophical language that often accompanies an ethos of assemblage – rife with concepts like "immanence" and "becomings" – is largely impenetrable to a non-specialist audience, creating barriers for cross-pollination with other approaches, particularly those bound to the real-world contexts of managing human-wildlife conflicts. Wildlife management research, for example, has often been left out of the conversation about urban wildlife relations in the humanities and critical social sciences. This is perhaps an understandable omission, given that research in this field has typically shown minimal interest in the subjecthood of wild animals themselves, and is usually seen to be representative of the "analytical, quantitative and managerial style of social science thinking" (Castree, 2014, p. 255) that characterizes higher-level decision-making in wildlife policy. I feel it is an unfortunate omission, however, since management research is an applied discipline that informs practices on the ground. I feel we should not assume that it could not be more critically robust or that wildlife managers are only concerned with human interests. Whatever it lacks in methodological nuance (from an assemblage perspective), the managerial sciences have been interested in the important

questions of what urbanism means to management practice, and in sorting through the kinds of "stakeholder" conflicts that are consequential for nonhuman animals (see for example Dubois & Fraser, 2003; Hadidian, 2015). One aim of this project is to try and transcend these disciplinary divisions to draw together insights on urban wildlife relations that might be of interest or use to organizations working to promote a more harmonious coexistence with wild animals. It is my conviction that the worthy and complex goal of living well with wildlife requires the perspectives of all those who are interested in realizing it.

Discourse, affect, and agency

The most important critique of assemblage for this study, however, is the charge that its emphasis on nonhuman agency and the radical singularity of encounters can risk under-representing the ways that structural, institutional forces enable and constrain action (Kinkaid, 2020), a tendency that may ignore the ways that animals often have comparatively little power to change the institutional arrangements in which they are enrolled (Srinivasan, 2013, 2015), and likewise undermine a critical urban theory (Brenner et al., 2011). This tension has often resulted in a divide between research in critical animal studies, which directly targets the dismantling of these institutional arrangements to help animals oppressed by them *now*, and the relational approaches that see this kind of rights-oriented activism as being mired in self-defeating binaries that must be performatively challenged in research (Giraud, 2019).

How much human discourse should be seen to matter is often at stake in these divisions, with relational approaches pushing back against the hubristic idea that humans make the world through language (Jones, 2009). Others have argued that to it is critical to recognize the power language does have, even if it is not an exclusive one; as Noel Castree observed in 2004, the thenemergent trend in left-leaning geography to go beyond constructionist views of "nature"

sidestepped the fact that "ideas of nature continue to have some powerful worldly effects" that "we ignore...at both our own peril and that of myriad nonhuman others" (Castree, 2004a, p. 192). Paul Robbins (2011) has questioned whether the commitment to foreground animals' agency—and an accompanying distaste for emphasizing representation—may be its own kind of research bias. On assessing the role of mosquitoes in "managing bureaucracies," he observes that:

A stubborn a priori insistence on the importance of the bug, however, relative to state budgets, public perception, and recent consolidations in the global pesticide industry, for example, might very well *lead us away* from things that matter a whole lot to putting people at risk of contracting disease: political ideologies of personal responsibility, discourses of risk, or the power of corporate entities over state actors. The mosquito matters materially, no doubt, but surely other things do too...maybe more so. (p. 243)

To say that discourse and ideas still matter, of course, is not a satisfactory answer to the question of *how* they matter. As David Demeritt (2002) has argued, the notion of social constructionism is used in many different ways, typically without explicit recognition of its underlying claims.

Demeritt differentiates between construction-as-refutation – in which claims of constructionism are meant to show the ways that false ideas about nature are mapped onto a materially real world – and construction-as-philosophical-critique, where the material world we call natural is always already produced through our interactions with it and thus inextricable from social and political life. In the first case, analyses risk a positivist allegiance to really-real nature that may fail to appreciate the ways that our "true" knowledge about nature (e.g., from science) is likewise socially constructed. In the second, there is little room for anything outside of discourse – nonhuman agency, or other material or affective phenomena – to resist construction or have any role in making the world. As Castree (2005) points out elsewhere, however, many Marxist

geographers who see nature as a human production still resist a pure constructionist view, instead embracing a both/and perspective where the more-than-human world continues to have some autonomy from human ideas about it.

The growing body of theory on affect – an animating force of assemblages – has enormous potential to enrich our thinking about the dynamics and politics of a more-than-human world. The turn in cultural geography toward "more-than-representational" approaches²¹ has sought to maintain the rich tradition of critical work on representation and power (Nayak & Jeffrey, 2013) while finding ways to appreciate how "practices, affects [and] things" are "intertwined with the production of meaning." (Müller, 2017, p. 3). Such approaches re-incorporate discourse, but as an element of relational practice that sits alongside many other material and affective elements, rather than a force that determines those other elements (Robbins & Marks, 2010). The move to transcend divisions between affect- and discourse-oriented approaches has resulted in many fruitful cross-pollinations; an emerging attentiveness to affect in political ecology, for example – a sub-discipline long interested in how unequal power relations are legitimized through discursive claims – has been generative in thinking through the affective dimensions of wildlife conservation (Barua, 2016; Collard, 2014; Collard & Dempsey, 2013; Singh, 2018), while political ecology's focus on structural power provides "a healthy corrective to the exuberance" of affect-oriented approaches (Lorimer, 2012, p. 607).

My position in this research is that discourse and affect are intertwined aspects of practice.

I am inspired by Margaret Wetherell's notion of *affective practice* as a useful way of thinking about how organizational meanings are embedded in, though not constitutive of, affective

²¹ This term makes a contrasting reference to Nigel Thrift's (2008) influential work on Non-Representational Theory.

relations. She suggests that discourse and affect recursively shape each other in a seamless way, where bodies have an affective force in the world but are also "bathed in cultural practice like a fish in water" (Wetherell, 2015, p. 152). Studies of organizational meanings thus seek to examine the "identity work that sets the conditions for current affected subject positions" (Wetherell 2012; p. 100). To better appreciate this intersection, I aim in this research to stick closely to the particular ways that ideas and claims about nature and wildness are mobilized in material practice. For example, in Chapter 5, where I examine organizational ideas about (post)nature, I do not claim that these ideas *somehow* enter the public sphere and influence human-animal relations. Rather, I look for where these ideas are embedded in practices of physical intervention with animals – including whether particular animals are killed or cared for – and through the direct advice staff and volunteers give the public on appropriate ways to interact with animals and ethical expressions of care. Karen Bakker and Gavin Bridge (2006) note that another problem with social construction/production of nature frameworks is that they tend to "move too rapidly from the concrete to the universal, so that diverse materialities become conflated into the unitary category 'nature'" (p. 11). It is not my intent to cast organizational claims about particular animals as metonymic expressions of their views about "nature" in general. I have aimed, in my interview questions, to ask participants directly about these wider concepts (e.g., about "nature" or "wildlife") as related to their work, as opposed to transposing their particular references into general claims. I did include questions on points of relations with two species/species groups raccoons and songbirds – where relevant. In my initial design I saw these species/species groups as being useful points of interrogation about what "urban" practice meant since one (raccoons) was a more paradigmatically urban species, and the other (songbirds) was not generally yoked to an urban identity (but still a frequently encountered animal in cities). But as interviews went on, I

realized I was more interested in interviewees' points of differentiation in practice (e.g., what species they mentioned, whether they were concerned about "pests," babies, animals perceived to be rare/common), so I did not take this line of questioning very far.

My personal connection to this work begs one further qualification. Raymond Bryant notes that it is something of a passé habit in political analysis now to declare one's sympathy for the organizations under study; "dispassionate" studies of those NGOs once duly recognized for their social contributions are now the norm (Bryant, 2009, p. 1548). In fact, political ecologists' interest in shining light on the dark underbelly of ostensibly benevolent environmental industries – such as how their do-gooder reputations can serve to obfuscate abuses of power – has resulted in a polarized body of work on conservation NGOs where they are either represented as humanitarian heroes (a narrative often promoted by the organizations themselves), or corrupt "creatures of power and hegemony" (Larsen, 2016, p. 25). These critiques of the institution of conservation are important, and I draw on them substantially in this research, but I wish to acknowledge here that these critiques risk painting a one-dimensional picture. The unpacking of institutional politics at the macro-scale can sometimes seem to impart a nefarious agenda on anyone working for these organizations, or to suggest that the on-the-ground practices in these organizations do not similarly navigate the messy pluralities of everyday life just as small independent organizations do. As Peter Bille Larsen points out, the polarized narratives of the good/ugly conservationist has often left little room in the middle for seeing conservation actors themselves as being both motivated by compassion and pragmatically accepting of some tactical compromises to achieve greater protections for wildlife and environmental health. The critiques I pose here are with the aim of propelling forward an inter-organizational engagement with the project of coexistence, and

should not overshadow the deep commitment and care evident in the people I spoke to for this project, and the many others I have known in my time as a practitioner in the field.

Chapter 3: Inside a service niche

On any given day in this study's focal city, there's a lot of wildlife activity going on. Animals are falling out of nests, hitting windows, shredding roof insulation, walking unexpectedly in broad daylight, being dragged in by cats, cowering in fireplaces. Geese aggressively defend their nests against passers-by, hibernating bats are shaken out of rolled up carpets, turtle eggs are accidentally excavated on construction sites, opossums unwittingly hitch rides on transport trucks. These encounters result in a lot of requests for information or assistance from urban wildlife organizations. The UWOs under consideration here respond to these requests individually, but many situations also extend dynamically into inter-organizational space. They are linked, firstly, in material ways through encounters themselves. Organizations refer calls, and sometimes also transport animals²² to one another when they deem this suitable. This creates a functional service network, even though these links are not always represented in formal organizational policy. They also have a discursive relationship. Emotionally charged wildlife incidents (e.g., pets being eaten by neighbourhood coyotes, families of ducks hit on the highway) often prompt a flurry of requests and media coverage, where different organizations' voices are pulled together into public conversations about living with wildlife. All three UWOs see public education about humanwildlife encounters in the city as a central part of their practice, one enacted in part through direct response to those encounters as well as through educational events, media, and literature.

How, then, might one best understand the overlapping work of these organizations? Does urban wildlife intervention constitute the focus of an emerging organizational *field*, as some have

²² Most typically the transfer is from animal services, or the rescue/advocacy group to the wildlife rehabilitation centre, but it is not exclusively a one-way relationship as the rehabilitation centre will also redirect people/other animals to the other two organizations when the situation requires.

suggested (Hadidian, 2009, 2015)? Is it a useful lens through which to view their work? The last few decades have seen more formalized networking (e.g., through conferences and collaborative projects) between disparate organizations and actors involved with urban wildlife issues (Adams, 2005; *Urban Wildlife Working Group*, 2012). On the other hand, some of the organizations in this study are also part of a more narrowly defined field, made up of like organizations guided by the same overarching goal. Wildlife rehabilitation, for example, constitutes its own professional community, training resources, literature, professional standards, and networks. Similarly, animal services is most closely aligned with the domestic "animal sheltering" field though some, like the one in this study, also fulfill a municipal contract for wildlife services.

Determining what defines a field has been a key focus in organizational studies. Early organizational research was guided by the notion of the field as a relatively homogenous entity, made up of organizations of the same type, and whose behaviour was driven by the goal of competitive efficiency (Greenwood et al., 2014; Greenwood et al., 2017; Wooten & Hoffman, 2008). Beginning in the 1980s, however, scholars in the then-developing camp of "new" institutionalism began to incorporate more Bourdieusian notions of the organizational field (Scott, 2014) as a unit encompassing the "totality of actors" that constituted a "recognized area of institutional life" (DiMaggio & Powell, 1983, p. 148). In this view, suppliers, consumers, and regulatory groups connected to a product or service – including those both in direct and indirect relation to one another²³ – are considered a field. As this wider view of the field has evolved, it has become more common to think of fields as connected through their particular spheres of social activity, goals, issues, or areas of strategic action (Fligstein & McAdam, 2012; Scott, 2014). One

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²³ For example, two organizations in a field might have structural equivalence—relationships of the same type with other organizations—without having any direct relationship with one another (Dimaggio and Powell, 1983).

of the shifts that came along with the new institutionalism was a focus on organizational behaviour as guided not by rational decisions about efficiency – as was previously assumed – but by a search for legitimacy. Institutions²⁴ represented the broader cultural values and norms – the "social facts" – that informed organizational practice. These facts were seen as the source of common systems of meaning, ones foundational to the terms of organizational legitimacy (Greenwood et al., 2017; Wooten & Hoffman, 2008). In 1991, Roger Friedland and Robert Alford coined these systems of meaning, and the practices through which they are enacted, *institutional logics*. Friedland and Alford proposed that these logics existed at the societal level. Western society, as they saw it, was shaped by five institutional orders: capitalism, family, the bureaucratic state, democracy, and Christianity. Each of these, they suggested, were culturally embedded symbols and associated rituals which individuals, organizations – and even whole fields – adaptively drew on in their claims to legitimacy.

Institutional logics provided a useful tool, then, for further widening the lens of the field, by looking at how these logics acted as a force of coherence for field identity and practice. While Friedland and Alford's notion about fields being nested in societal logics has largely been abandoned (Greenwood et al., 2017; Thornton & Ocasio, 2008), the claim that organizations are bound together by systems of meaning has remained an important pillar in the study of fields (Haveman & Gualtieri, 2017; Thornton & Ocasio, 2008). Richard Scott's early definition positioned the field as "a community of organizations that partakes of a common meaning system and whose participants interact more frequently and fatefully with one another than with actors

²⁴ There are varying views on the precise definition of an institution in organizational research. In some views, organizations begin with an instrumental purpose and evolve into institutions; in others, organizations may have both functional and institutional layers, the latter of which refers to the way organization relates itself "to the norms and conventions of the community and society." (Scott, 2014, p.28). I rely here on Scott's useful definition that "institutions comprise regulative, normative, and cultural-cognitive elements that, together with associated activities and resources, provide stability and meaning to social life" (2014, p. 56).

outside the field" (Scott, 1995, p. 56). A goal of the present chapter – and a framing concern for the research overall – is to try and understand the logics that bind and/or separate the organizations in this study, with a particular eye to the intersections between UWOs and the wider field of conservation.

Conservation/management: evolving ethics and institutions

Where the work of these organizations has been recognized as an interconnected sphere of practice, it has usually been seen as part of wildlife management (Adams, 2016; Hadidian, 2015). Since I have begun with the question of how these organizations are connected to the wider field of conservation, a closer look at the relationship between conservation and management is warranted. These terms are now often used together – and sometimes synonymously – though Robert Brulle has argued that they evolved out of separate social movements, each grounded in their own discursive frames.²⁵ In his typology of U.S. environmental movements (Brulle, 2000, 2009; Brulle et al., 2007; Carmichael et al., 2012), these frames have clear boundaries and differing moral orientations. Wildlife management sees wildlife "as a crop from which excess populations can be sustainability harvested...for human recreation in sport hunting," whereas conservation sees wildlife as "natural resources" that "should be technically managed from a utilitarian perspective to realize the greatest good for the greatest number of people over the longest period of time." (Brulle, 2000, p. 98). These both stand in opposition to preservation, which Brulle contends positions "nature" as "an important component in supporting both the physical and spiritual life of humans" and therefore promotes "continued existence of wilderness and wildlife, undisturbed by human action" (Brulle, 2000, p. 98; see also Carmichael et al., 2012).

²⁵ Brulle (2000, p. 77) defines discursive frames as the narratives that "give an organization its identity and guides its collective actions."

Brulle's research has looked at the relative dominance of these frames by counting the number of environmental organizations that represent each, so while he recognizes that they are not necessarily mutually exclusive in practice (2000), his approach suggests they are separate *enough* that we could easily distinguish between conservation and management organizations.

The evolution of the field, however, seems to preclude simple divisions. Certainly, the divide between the conflicting imperatives of preservation and conservation is a much-referenced point in the story of early American conservation, epitomized in the battle between John Muir and Gifford Pinchot (and later, Theodore Roosevelt) over the damming of the Hetch Hetchy valley in the early 20th century. While their public antagonism undoubtedly represents an important moment in conservation history, many historians suggest the story has been frequently oversimplified, making Muir and Pinchot into caricatures representing the poles of biocentric and utilitarian warrants for wildlife protection (Lewis, 2007; Miller, 2007), and obscuring the cultural and political issues that had become attached to this debate (Brower, 2011; Jarvis, 2007; Loo, 2001; Oravec, 1984). Ben Minteer (2006) has likewise argued that the work of a number of important "third way" figures in conservation's history – characterized by their negotiation of a pragmatic middle ground between ecocentric and anthropocentric values – tell a more nuanced story about early conservation in practice, one marked by ambivalence and compromise. Aldo Leopold, the most famous of these third way figures, has been embraced as a hero by resource managers and deep ecologists alike. Though trained in Pinchot's resource-oriented style of management, the science of ecology – which developed significantly during the 1920s-30s – had a formative effect on Leopold during his career in the U.S. Forest Service and beyond (Franco, 2013; Nash, 1982). His efforts to go beyond traditional methods of game protection to develop a

systems-based approach to wildlife management – a field he is popularly considered to have created "by fiat" (Wagner, 1989) – are well known (Brulle & Benford, 2012).

Indeed, Leopold's interweaving of a wise use imperative with an ecocentric ethos had a profound influence on the institutional logics of conservation. In casting the practice of wildlife management as a type of applied ecology that should be guided by an ethical obligation to maintain the integrity of natural systems as a whole (as well as develop a wildlife "crop" for human use), Leopold not only blended the imperatives of wildlife management and conservation, but also established a conceptual link between the preservationist concerns about deleterious human impacts on nature, and the practices of consumptive use. His philosophy suggested these two ideas were deeply dependent; the whole of nature, as he saw it, was already "artificialized" by human development and required aggressive management to shape anthropogenic effects to the good, since they could not be realistically curbed (Leopold, 1933, p. 21). His view represented a challenge to the idea that wildlife could be preserved by guarding wild spaces against human influence – a core of the preservationist ethos – and rather saw intensive, science-driven management as a tool through which the intrinsic value of wildlife could be recognized.

Leopold's work marks the beginning of the field of wildlife management as it is now commonly understood – as a *merger* of the preservationist imperative (now articulated in the protection of ecological systems or biodiversity) balanced against a duty to serve the public interest (Brulle & Benford, 2012; Peterson et al., 2007). There were tensions in the merger, however. While Leopold's integration of ecological research with value-driven wildlife management held institutional sway for several decades (Jacobson, 1990; Loo, 2006; Meine et al., 2006), Frederic Wagner (1989) argues there was a "parting of the ways" in the 1950s between the developing ecological sciences and the work of wildlife management on the ground, in part

because of a gradual academic re-orientation of ecology away from species population dynamics and toward more complex theoretical models in community and behavioural ecology. Wildlife managers' continuing orientation to species management resulted in a kind of "class dichotomy," Wagner holds, wherein academic ecologists were perceived by wildlife managers as "too theoretical, too ivory-towerish, too unwilling to soil their hands in the day-to-day political, economic, and land-use dirty work of managing wildlife on the land, and belatedly discovering a cause which the wildlifers have been committed to for decades" (p. 358). Some scientists likewise came to look on wildlife managers as "too oriented to the consumptive uses, and not sophisticated enough scientifically" (Wagner, 1989, p. 358).

The tension between theory and practice saw some resolution during the growth of environmental movements during the 1960s and 70s. On one hand, the translation of ecological research by authors like Rachel Carson shaped a public concern about the dangers of heavy-handed intervention in nature, and thus suggested the need for more emphasis on non-interference. The public desire for less invasive management perplexed wildlife managers of the time, who had been trained when aggressive intervention was seen to be the panacea to wildlife management's past failures to protect species from decline (Brulle & Benford, 2012; Loo, 2006). On the other hand, the growing awareness of a global environmental crisis made it increasingly clear to some scientists that they had a duty to facilitate real-life applications of the knowledge in their field (Franco, 2013; Soulé, 1985). More scientists took on roles in policy advising and development, and a number of key advocates working in both government agencies and academic departments fought to maintain "healthy connections between the basic sciences and their application in the resource-oriented disciplines" through the 60s and 70s (Meine et al., 2006, p. 635).

Their integrative efforts came to the fore with the birth of the academic field of conservation biology in the 1980s. ²⁶ The field was conceived as a child of biology and resource management (Jacobson, 1990), or a newer type of applied ecology focused on protecting biodiversity (Aplet et al., 1992; Franco, 2013). While some wildlife managers bristled at the suggestion that conservation biology warranted a unique identity – they contended its goals already lay within the purview of resource management (Aplet et al., 1992; Teer, 1988) – the notion that wildlife ecology should be strongly tethered to interventions in the field strengthened the will to keep the two arms of conservation compatible, a theme with continued emphasis in conservation biology literature (Balmford & Cowling, 2006; Robinson, 2011). A host of newly legislated wildlife protections in the 1970s²⁷ created an additional bridge between the developing core of non-governmental actors who lobbied for such protections and the governmental bodies who administered them (Meine et al., 2006). Wagner (1989) notes that by the 1980s, many management agencies regulated wildlife protections and placed a "heavy emphasis on the preservation of threatened and endangered species" and likewise, a number of wildlife conservation NGOs had "active management programs" (p. 359). While the "class dichotomy" between wildlife managers and conservation biologists is likely still a fault line, an ecological ethic remains a primary identity marker within the field of wildlife management (Organ et al., 2012; Peterson et al., 2007). Within management literature, the terms conservation and

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²⁶ Its beginning is marked by Michael Soulé's influential article What Is Conservation Biology? (1985).

²⁷ For example, the Endangered Species Act (1973) and the Marine Mammal Protection Act (1972), as well as related environmental statutes that affected wildlife, such as the as well as the the Wilderness Act (1964), the Clean Water Act (1972), the National Forest Management Act (1976), and the establishment of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES, 1975)

management are often used interchangeably or in tandem, and the idea that they represent a single institution is common (Jacobson et al., 2010).²⁸

The emergence of an urban practice

The integration of these logics explains, in part, why urban wildlife management has remained on the fringe of the field. Urban environments have traditionally not been seen a kind of wilderness with spiritual or ecological value, nor a place to harvest wildlife "crops", nor a space of valuable natural resources. Although there was some recognition of the need for wildlife conservation in urban environments in the 1960s (Adams, 2005), it has generally been viewed as a less worthy site for ecological research (Chipchase & Glaves, 2015). Research in urban wildlife ecology did not begin "in earnest" until the 1970s, and as of 2012, it still represented less than 2% of the publication volume in conservation journals (Magle et al., 2012). A survey of U.S. wildlife management agencies suggests that despite a high level of acknowledgement of the growing urban demand by wildlife professionals, there is still a very low proportional representation of urban wildlife biologists in management institutions – fewer than 2% – and an inadequate number of designated urban wildlife programs (Adams, 2016).

In part this lack of attention to urban programming has been due to a lack of funding – in the U.S. model, taxes on hunting supplies (e.g., licenses, arms and ammunition) fund a majority of research projects through Fish and Wildlife agencies (via the 1937 Pittman-Robertson Act), a funding structure that has incentivized agencies to focus on issues of interest to hunters and more "traditional" rural stakeholders (Adams, 2016; Hadidian & Smith, 2001; Jacobson et al., 2010;

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²⁸ Although some critiques suggest that wildlife management frameworks underrepresent the ways that its ambit differs from conservation biology (Nelson et al. 2011).

Yarbrough, 2015).²⁹ The result is that urban wildlife management has evolved as a separate professional sphere, characterized by limited acceptance in research institutions and agencies, difficulties in reconciling more varied stakeholder views of management processes, an emphasis on decreasing "overabundant" wildlife populations, and the challenge of navigating multiple (often misaligned) layers of jurisdiction (Adams, 2016). As Erin McCance et al argue, the professional infrastructure and strategies that had been developed to respond to resource scarcity in ostensibly "natural" environments was "a paradigm ill-suited to urban wildlife management situations" (2017, p. 6). Where management agencies have dealt with urban wildlife, then, they have normally been oriented towards a logic of damage control (Adams, 2016; Hadidian, 2015; McCance et al., 2017). This logic is not *unique* to urban management – mitigating property conflicts has been a key part of the field's broader mandate to serve human interests. Unlike in the wider field, however, animal control in urban areas is not attached to an ethos of wildlife protection, as in the "harvesting" of "surplus" animals to promote healthy populations (Brulle & Benford, 2012), sacrificing individuals in the interest of protecting populations (Srinivasan, 2014), or killing invasives to protect native ecosystems (Lidström et al., 2016). Lacking alignment with the primary logics in the larger field means that urban practice has generally been seen as a diminished or less legitimate form.

The marginalization of urban practice within government conservation and management agencies has resulted in a trend "toward increased privatization of wildlife management," where "NGOs, such as private wildlife control businesses, conservation groups, humane societies, and wildlife rehabilitators have stepped in to address public demand unmet by government agencies"

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²⁹ In Canada, allocations of licensing fees are not federally legislated, but many provinces are moving toward filtering licensing fees toward dedicated management funds (Ontario Ministry of Northern Development, Mines, Natural Resources and Forestry, 2014; Organ et al., 2012).

(Adams, 2016, p. xxxvii; see also Hadidian, 2015; Lindsey & Adams, 2006; McCance et al., 2017). As John Hadidian (2009) observes, municipal animal shelters, animal control units, and law enforcement bodies were also part of the organizational assemblage picking up the slack, despite the fact that they "typically do not have a mandate to deal with wildlife issues" (p. 208) but nonetheless attend to a significant volume of human-wildlife encounters.

As in conservation more broadly, there is some evidence that the self-identified field of wildlife management has begun to shift away from its traditional logics, with urban management consequently gaining legitimacy as an important area of practice. McCance et al. (2017) argue that the shift was propelled by two changes. One was that Canadian and U.S. surveys began to reveal a significant interest in "non-consumptive" uses of wildlife, such as wildlife watching, photography, tourism and outdoor recreation. The other was the growing political and demographic power of suburban communities to demand community-based responses from wildlife agencies. McCance et al. propose these shifts had a role in moving wildlife management out of the "population recovery" phase that had shaped the years between 1890s and 1990s, and into a more urban-friendly "impact management" phase oriented toward seeking "a socially and ecologically sustainable relationship between humans and wildlife" (2017, p. 6).

Organizational identities

These shifting logics in wildlife management point to an emerging space for recognition for the diverse organizations involved in its enactment. The ways in which interviewees in this study saw their work as related to wildlife management was, however, quite variable, seemingly based in part on differing understandings of what practices constituted management. One interviewee at the

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³⁰ The 2011 Fish and Wildlife Survey reveal a much higher level of participation in non-consumptive wildlife activities, with 71.8 million reporting some kind of participation, and only 46.8 million reporting participation in hunting and fishing combined (McCance et al., 2017)

rescue and advocacy group (RAs2),³¹ for example, when asked about wildlife management, referenced the official provincial and federal management bodies and discussed the ways in which staff in those organizations were detached from what was happening in the urban context, and didn't know much about the wildlife issues that urban organizations dealt with. As this interviewee commented, the provincial wildlife management agency had "a totally different mindset. They're managing populations, hunting, trapping, shooting, fishing. The conservation officers don't have much to do with [wildlife issues in the city]." In their view, as this comment suggests, wildlife management was something happening primarily elsewhere.

For those that did see wildlife management as an urban practice, it was perceived primarily as focused on addressing, as one wildlife rehabilitator put it, "perceived problem[s]" with wildlife (WRs1). Another strategist at the rehabilitation centre (WRs2), for example, when asked if they were part of wildlife management in the city, replied:

I think so. When an issue comes up I think we're an important voice...a lot of times we speak for the wildlife; coyotes are a good example because they're always being persecuted in the media... if they're trying to cull them or negative things are coming up in the media, [we are] often the voice of reason speaking up, talking about natural history and why we can coexist.

The front-line volunteers at the wildlife rehabilitation organization likewise reflected the idea that conflict resolution was the primary emphasis in urban wildlife management, stressing the direct response to wildlife conflicts in the field, and euthanasia, as key duties of wildlife managers. One

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³¹ The first two letters of interviewee acronyms represent the type of organization they work for (e.g., WR=wildlife rehabilitation), the third letter represents whether they were categorized as a strategist (s) for the organization or primarily involved in program implementation (i), and the number represents the interviewees unique identifier within their respective organizations. For a breakdown of all interviewee acronyms, see Table 1, page 29.

interviewee at the wildlife rehabilitation organization (WRi1), when pressed to define urban wildlife management, said they were the groups that "the public calls" to attend to situations where wild animals were in public space and a physical intervention response was required. While they saw their rehabilitation organization as being involved to some degree, the emphasis on euthanasia and physical response in the field meant that the animal control unit was a more primary player: "[We] triage our calls and say: I don't think we can help this animal, maybe you should call [the local animal service unit] for euthanasia. There is...[also] one company that does humane trapping." Another volunteer suggested that the rehabilitation organization was *not* involved in wildlife management in the city because they were willing to rehabilitate (i.e., not automatically euthanize) even common urban species, implying that management was primarily about animal control: "If someone brings us a pigeon I think it has the same importance as anything else...there's no 'too many squirrels in the city so we won't rehab it'...so there's no management part at all, something that needs help will get it" (WRi2).

Although these comments suggest that some saw the animal services unit as a key player in the city's wildlife management, the unit themselves did not see their work this way. Three of the four interviewees there said they would not describe their work as wildlife management (ASs1, ASs2, ASi1). Rather, they suggested their role was to look at "issues with wildlife in the community" (ASs2), responding to wildlife situations "as [they] relate to the health and safety of the community," and focusing on "harm reduction and supporting community needs through services we have" (ASs1). Moreover, animal services' connection to the *official* government wildlife management bodies (provincial and federal) was largely viewed as tenuous by interviewees. While one strategist suggested that they did "a lot of consulting" with wildlife management officials to get advice on municipal wildlife issues (e.g., a rise in coyote encounters),

all the other interviewees described this connection as weak or, as one strategist put it, "very shallow" (ASs1). Interviewees said that they mostly were in contact with these agencies about occasional violations of a provincial or federal regulation where their assistance was needed (e.g., someone keeping a federally or provincially protected wild animal as a pet) (ASi1, ASi2), and that consultations on wildlife issues were limited (ASs1).

Their descriptions also highlighted that while it was possible to consult with management agencies for certain situations, there was no oversight from these agencies of animal services' practices in responding to wildlife encounters on the ground, and no training was provided in wildlife response. As one interviewee (ASs1) commented, "we sometimes are disappointed by the response we get from certain levels of government. I wouldn't say it's a total clash...but in terms of what we think their job and our job is, that sometimes doesn't mesh very well." Another (ASi1) expressed the lack of support around public demand for a response to disruptive wildlife situations: "the [provincial management] doesn't want anything to do with it, they don't want to come. They don't get involved with calls about coyotes or deer, they basically wash their hands of it. They're no help to us." Because of a lack of expertise and formal oversight, there was a sense that the animal services organization saw their status as primary interveners – let alone official wildlife management – as being a fraught one. As one interviewee (ASs1) stated,

The party line is that we're an animal care and control organization, and our core business is domestic pets. But what fights with that all the time is the demand from the public we feel...we know we're not wildlife experts...there's probably not one staff member who has had any formal education on wildlife. So we know sort of how to handle wildlife...and we get to know trends like distemper in raccoons and things like that, and we know maybe 101 on wildlife conflict. But beyond that we're very aware that there's people in [the city] that

will be able to offer much more than we can on those topics. So I think that we're really just a first responder because it defaults to us, because there's no one else.

Conservation as a warrant for wildlife care

If the UWOs' self-alignment with the project of wildlife management was a site of ambivalence, alignments with conservation seemed more certain, at least for the two NGOs involved in wildlife rescue and care. This was a particularly strong alignment for the rescue and advocacy organization, for whom "conservation" was part of their mission statement and a defining element of their work, though they saw advocacy as their primary identifier (RAs2, RAi2). Their website text frequently referenced the role of their work in saving at-risk species and in contributing to conservation science, both through data collection on injured and dead animals found, as well as through donation of animal bodies to scientific organizations for study and educational display. Of all the UWOs, the rescue and advocacy organization most strongly emphasized the importance of communicating about injured animals as a problem of scale, connecting individual encounters to the issue of population decline. Their website banner featured a dynamic counter of the projected death toll of birds that ticked upward as users browse the site. They also used images of masses of dead bird bodies as part of their public education campaigns. Asked about their emphasis on communicating the scale of the problem, one strategist (RAs1) commented:

It's funny, this comes up in fundraising all the time. Experienced fundraisers, when they look at our work they say you are far better off focusing on one bird, and getting that individual to invest themselves in that one bird, than showing 2-3000 dead birds in a picture. Because as an individual, that's something they can manage, and process in their mind – I can help that one bird, but how can I help 100 million birds? However...[the images we use] bring people back to the root of the problem and shows the magnitude of it,

reminds people without fail that this is real, this is a big problem. And statistics help as well.

While the wildlife rehabilitation and education centre was less explicit about defining their work as conservation in their grey literature, they likewise expressed a clear alliance in interviews. One strategist said that their work was "absolutely aligned with conservation issues" (WRs1) and another stressed that conservation was really their "main interest," opining that "I think it is the overarching thing we should be doing. It's great to put out fires and put band-aids on problems, but really we want to address a larger issue" (WRs2). Their website noted that many animals treated at their facility were species at risk, and both strategists argued that by working with atrisk species (for example, by incubating and hatching displaced turtle eggs) rehabilitators could make a difference to populations (WRs1, WRs2). As in the rescue and advocacy organization, a strategist here commented on their organization's important role in gathering data that could inform conservation:

We're kind of the canary in the coal mine about what's going on at a larger scale with populations, whether it be cat attacks or birds hitting windows or lead [toxicity] in swans, I think what we're seeing is only the tip of the iceberg...if you actually took all the information that wildlife rehabilitators across North America gathered on a subject or species basis you would very quickly start to understand the challenges that wildlife face, certainly common species but also species at risk, or species that used to be common and are now at risk.

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³² As with management, definitions of conservation were not uniform across the wildlife rehabilitation organization. One volunteer (WRi2) made reference to conservation areas as "parkland, areas where we've left it as natural as possible so that wildlife can live...which is not the same as what [our organization] does." They noted that in this kind of model, conservation officials would not be dealing with "particular wild animals," although this interviewee later noted that another difference was that their organization would euthanize animals without a good prognosis, whereas in conservation "you would think of trying to keep animals [alive] at all costs even if they are not going to be releasable or have a quality of life." The interviewee seemed to be referring to conservation as the operation of wildlife sanctuaries, though their understanding appeared anomalous amongst interviewees.

The educative value of rehabilitation in teaching people about wildlife conservation issues was another point of emphasis in their communications. Their website, for example, described their education programs as teaching people about biodiversity. As one strategist (WRs2) commented:

I really do feel like we make a difference in terms of being able to reach people and educate them about conservation issues [thorough our phone service and admissions]....every time someone brings an animal in they can look at our education displays, and we can talk to them and let them know about how to get along with wildlife, why they should care. It may be a slower process but I think it's more organic, we can reach people.

For the two groups involved in rehabilitation and rescue, justification of the relevance of their work to conservation should be understood in the context of a longstanding critique from conservation and management agencies that care for individual animals was as "a waste of time or a hobby" (Thrune, 2002, p. 142), even one monopolizing resources that could be spent on the more worthy work of protecting populations (Fraser & Moss, 1985). It has thus become a prominent trope that rehabilitation is either irrelevant or antithetical to conservation and management (Aitkin, 2004), one that has been much reflected in rehabilitators' defense of the value of their practice to scientists and managers (Dubois & Fraser, 2003; Pospisil, 2014; Shimmel, 2013; Sleeman & Clark, 2003).

The general undervaluing of care work is a longstanding issue of concern for feminist scholars, and the way that care for the nonhuman world is gendered has been a guiding theme in feminist political ecology (MacGregor, 2017; Rocheleau et al., 1996) and ecofeminist thought (Adams & Gruen, 2014; Donovan, 2003; Gaard, 2011; Gruen, 2018a). Ecofeminism in particular has been interested in the ways that care for individual animals is pathologized (Gruen & Probyn-

Rapsey, 2018), a particularly salient factor for individual wild animals, where care bucks against a well-accepted ethic of non-interference with wildlife (Clement, 2011), and threatens masculinist tropes of the "metaphysically autonomous" wild (Davis, 1995, p. 201). Many ecofeminists have accordingly seen caring relations with other animals as a space for resistance to the rationalist, patriarchal hegemonies that marginalize women and animals through an alignment to nature (Davis, 1995; Donovan & Adams, 2007; Gruen, 2018b; S. Michel, 1998; Plumwood, 1993).

Ecofeminist critique is relevant to understanding the animal care practices that are part of the work of some UWOs. As Kendra Coulter and Amy Fitzgerald (2019) note, "the often unpaid caring and emotional work involved in sheltering, rescue, advocacy and activism is highly feminized, both numerically and as socially constructed" (p. 289). Wildlife rehabilitation in particular is a field strongly dominated by women, with some rehabilitators themselves contending the practice is grounded in "a female viewpoint on the human relationship with wildlife" (Pospisil, 2014, p. 128), or that it stems from a female proclivity for work that involves nurturing (Michel, 1998). Sara Dubois' research with wildlife rehabilitators in B.C. found that more than 75% of them "were also caregivers for their own children, special-needs children and adults, ailing parents, spouses, medical patients, or domestic and zoo animals. The majority of these rehabilitators were women and few were paid for these additional caregiving activities" (Dubois & Fraser, 2003, p. 18). The upper echelons of conservation and management, in contrast, have traditionally been dominated by men (Pettorelli et al., 2013; Taylor, 2008). These dynamics were reflected in the gender differences of interviewees in this study, as all but one interviewee (who occupied a senior position) in the rescue/caregiving organizations were women. In the big conservation organization, most interviewees were also women, except for one man (who was the interviewee with the highest-status job).

It is perhaps no surprise, then, that the professionalization of wildlife care work has often turned on a more robust engagement with "sound ecological principles, incorporating appropriate conservation ethics, and an attitude of stewardship" (Miller, 2012, p. v). For many practitioners, this has meant a professional disassociation with the "idealistic" type of rehabilitator that, as Chris Mills (2006) describes, are emotion-driven, disinclined to prioritize any animals on the basis of ecological value or population health, and averse to euthanasia even if the animal doesn't fare well in captivity – what Mills argues could be considered the pro-life arm of the rehabilitation community. Attempts within the field to break from this idealistic ethos has led to "two camps" in wildlife rehabilitation (Frink, 1986). One of the strategists in the rehabilitation centre in this study noted that this division, which had once separated the "more science-based larger [rehabilitation facilities]" from the home-based "Disney-esque" rehabilitators who are "all about the individual" was now starting to shift, with even smaller operations moving toward "or at least pretending to be involved in conservation" (WRs1), but that "Disney-esque" contingent was not gone. A key aspect of their self-differentiation from this camp was a balancing between population or ecosystem welfare and individual welfare:

Even though we focus on caring for individuals on a day-to-day basis we definitely – I don't know what the right word is, I don't want to say sacrifice – but there are definitely lots of times we might euthanize an animal or choose not to release it because it might compromise the population. Like an example would be an animal that has recovered from an illness but may still be carrying that illness. There are others that would release that animal still, but to me that's absolutely unacceptable, because you put others at risk. Or, there are others in our field that would take in an animal not knowing its point of origin, which is another thing important to consider when you're worried about moving diseases around, and just out of their really emotional desire to help that animal they will just release it wherever and bury their heads in the sand about the fact there are other issues to

be concerned about. To me that's not the right approach, we have to be concerned about populations as well as individuals.

The rescue and advocacy group echoed the idea that involvement in animal care and rescue marked their work as a parochial practice focused on individual animals, which obscured their important role in conservation research and education:

I think the vast majority of people out there see us as caregivers...But the fact of the matter is, we're a lot more than that, we've been sort of stigmatized I guess, by that perception of being caregivers, so we're struggling to convey that bigger picture of who we are. And it's...a real tough stereotype to get out of. (RAs1)

The animal services unit showed less of an alignment with claims about biodiversity protection or helping species-at-risk. This is unsurprising, given their focus was primarily (human) community health and safety, though it is notable that conservation themes were not entirely absent in their work. A municipal staff report from 2015 had sketched out options for a wildlife conflict mitigation strategy for the city, which identified that a goal for the strategy should be both to provide guidance on best practices in responding to conflicts but also "support broader efforts to protect wildlife habitats and conserve biodiversity." Animal services interviewees said that these concerns did not guide their work (ASi1, ASs2), but their education programming nonetheless included distribution of information packages on local biodiversity (developed by the city planning office). They also noted that they were sometimes involved through consultations and partnerships with other organizations in community outreach related to ecological issues, for example when organizations teamed up to do public education around normal coyote habitat and natural history following a conflict incident (ASs1), or around the threat free-roaming pet cats represented to bird populations (ASs2). Interviewees also discussed how, in making decisions

about which animals to try and transfer to rehabilitation facilities, the rarity of the species was a factor often considered (ASs2, ASi1, ASi2). As one strategist (ASs2) put it, "[when we pick up] a protected species like some of our tortoises or that sort of thing, we will try to get them [into a rehabilitation centre], so we do differentiate on wildlife themselves and where they fit in the pecking order, so to speak." Another staff member (ASi1) affirmed this sentiment, "if it's a hawk or something rare we definitely take it to [the rehabilitation centre], don't want to euthanize a hawk. But we get so many calls about pigeons and such. Which is not to say we euthanize every pigeon, but most calls are that type of bird. Rare ones we try to help."

Intersections, alignments, and antagonisms

What emerges in these reflections on practice is that the guiding logics of conservation – e.g., population-oriented ethics and at-risk species hierarchies – are threaded through this niche in complex ways. This interweaving prevents any neat separation between efforts in urban wildlife protection and wildlife control. Rather, UWOs collective practice can be better understood as having differential points of emphasis that revolve around the project of promoting urban coexistence, as represented in Figure 3. This graphic should not be taken to suggest that wildlife intervention stayed within the bounds of these interlocked spheres – many other actors that were called into the mix to respond to particular types of encounters, including the local zoo (to tranquilize large animals), the police (to shoot large animals), public health (for possible rabies exposures/testing), city councillors (who brought forward constituent concerns about wildlife conflicts to council), provincial/federal conservation officers (for legal violations related to protected species), as well as many allies in educational campaigns.

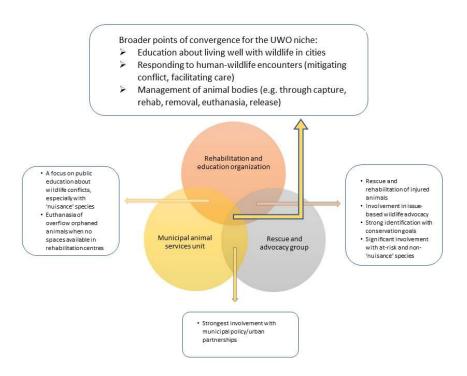


Figure 3: Overlapping services of UWOs

The entanglement of these organizations is, in part, a result of the fact that wildlife encounters themselves are dynamic and often do not fit neatly within the mandates of particular organizations. Rather, interveners often have to stretch beyond their defined roles to provide a suite of services around care (for humans and animals) and conflict resolution. What might begin as a request for help with a "nuisance" situation – a skunk hanging around the yard, say – often turns out to be, on closer assessment, an animal in need of rescue or rehabilitation because it has signs of head trauma, or is stuck in a window well. Affective orientations toward encounters also are constantly shifting, prompting behaviours that seem inconsistent. It is not uncommon, for example, for a person to sympathetically seek help for orphaned baby raccoons – or other prototypical conflict species – after having killed or relocated the mother themselves. So a request for help from an organization focused on animal control may turn out to require some service

infrastructure for animal care. Wildlife care organizations, in turn, sometimes find themselves providing human services that have little to do with wildlife, for example in giving home maintenance advice, or emotional and psychological support for urban residents in distress.³³

A number of interviewees commented on the positive aspects of their organizations' mutual entanglement. The animal service unit noted that they tried to work in coordination with the rehabilitation centre:

Sometimes there's a call we can't even manage because we can't do the field rescue ...so we do try to work with [the rehabilitation centre] as much as we can. And our staff is getting better in terms of [not automatically picking up animals claimed to be] orphans too, sometimes we'll just go and talk to the person and leave again, we'll advise they call [the rehabilitation centre] or try to keep tabs on it ourselves...how's the animal doing, what's going on...it's easier for us to figure out what's going on if we've already been at the address. (ASs1)

As one interviewee at the wildlife rehabilitation centre (WRi1) noted, in addition to admitting animals picked up by the animal services unit, that they also referred calls to them sometimes in cases where the prognosis was assessed to be poor: "I think it's a matter of two different groups doing kind of similar things for animals...[our organization] can't go out to every single wildlife call. So if it's a probable euthanasia I think [and they] can help with that it, makes sense for us to manage our resources." An interviewee at the rescue and advocacy organization argued that their work complemented that of the rehabilitation centre (RAs2). The staff at the animal services unit felt that the organizations were "all on the same page regarding wildlife and the role they play [in

³³ For example, a friend and former colleague of mine who worked in wildlife rescue once reported going to a house to rescue a raccoon that was the hallucination of an elderly women who insisted that the non-existent animal she saw sitting at the rescuer's feet be contained.

the city]" (ASs2) and that "every department or organization who works with wildlife has the same goal" (ASi1).

To note these points of convergence and entanglement is not to gloss over the schisms between their organizational mandates. Even though UWO practice shares an orientation toward individual wildlife encounters, there is obviously a tension between the rescue and rehabilitation organizations that prioritized care for individual animals, and the animal services organization that did not have any resources directed toward this goal. Collaborations between them were therefore not static. Consider the following example, one that was common in my own experience as a front-line responder in this field: if a call to a rehabilitation centre is about an animal deemed to be a poor candidate for rehabilitation – a raccoon with clear signs of distemper, for example – the staff may try to persuade the caller to contact animal services for euthanasia, offering reasons why this is the most humane option for this animal. Here, the rehabilitator enrolls the animal services organization as a collaborative agent of care who will help achieve the most humane outcome for the raccoon. On a different call, however – one about an animal that is a good candidate for rehabilitation, the rehabilitator will likely try to persuade the caller not to call animal services, even if this is a more convenient option, since that organization can do nothing except euthanize the animal. These points of flux highlight the way that organizational relations are being constantly reconstituted around the particular demands of an encounter.

It is important to note, however, that in this study the schisms between the organizations were not about a categorical difference in what they saw as valuable or legitimate. For example, wildlife rehabilitation was recognized by all the organizations as a valuable service in the work of mitigating encounters and serving the public, even though the organizations were not equally involved in this practice. Rather, organizational conflicts stemmed from the need to frame their

work as the *most* important community service in order to compete for limited funding. The fact that only the rehabilitation organization had any significant capacity to care for sick, injured, and orphaned animals³⁴ was a key conflict in this collective, since many members of the public, as well as staff and volunteers from the other organizations, preferred this option to euthanasia. While the rehabilitation centre often took animals transferred from the other organizations, there were difficulties with accepting a high volume of transferred animals. The rehabilitation organization's reliance on public donations (which typically came from people who had found animals themselves) meant that transferred animals represented a lost fundraising opportunity. It also sometimes meant they had inaccurate or incomplete information about the circumstances of the animal's discovery. Information about where and under what circumstances the animal was observed is important in developing care plans³⁵ and also required information for the organization's rehabilitation permit. As a result of these challenges, the UWOs had no formal service relationship, leaving the animal services unit and the rescue and advocacy organization with some sense of tenuousness about their ability to access care services for the animals they picked up. An interviewee from the rescue and advocacy organization (RAs2) commented:

[If we could have our own rehabilitation component] we would likely do it. It's not that we owe an allegiance to [the rehabilitation centre] but they're the only place right now that takes birds. We are forever grateful for them doing that and I know it taxes them tremendously in terms of resources and time. I hope we've established a good working relationship with what we do...I think they use our resources to some degree, but I could see them wanting to reduce the patient load because realistically, we have no way to fund

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³⁴ While the rescue and advocacy organization listed rehabilitation as one of their activities, their ability to provide care (beyond initial emergency response) was limited as they had no facility or staff for this purpose. For any significant treatment or longer term care they transported animals to other rehabilitation organizations.

³⁵ For example, if an animal was known to have been attacked by a cat, or had been given food or water by the person who found them, this would shape the planned treatments.

them, because we are scraping together every penny we have. I know our birds cost them money, [and] I know our volunteers support them financially as well.

Staff at the animal services unit noted that they also "rely on [the rehabilitation centre] whenever we can, but they get full quickly" (ASi1; echoed by ASi2). This interviewee (ASi1) also commented that the wildlife centre's requirement for "finder information" for any animal accepted was frustrating, since the animal services unit would sometimes pick up animals called in anonymously, where they had no way of getting the finder's information. In addition, interviewees at the animal services unit discussed the fact that "even if we wanted to run most of the animals to wildlife centre and they had funding and space to take them, logistically we can't even keep up with the calls even picking them up as it is" (ASi2). They pointed out their calls had tripled over the last two years (ASs1) – in part due to a perceived spike in raccoon distemper – where they were picking up 40 raccoons every day for a year in addition to other wild and domestic animals. As one staff member (ASi1) commented, "it came to the point where we couldn't have any domestics in the truck with raccoons, so if you got a stray dog call, you had to get rid of the raccoons at the shelter first before you could go on the dog call, and you had to keep it separate so they couldn't catch distemper...it was just a mess. Busiest I've seen in 30 years." One strategist echoed that "it was a nightmare, we didn't manage at all...[and] this spring we saw that trend continuing" (ASs1). As two interviewees commented, the paucity of city funds available for animal services was a huge problem both for meeting the demand and coordinating services between responders (ASs1, ASs2).

Meanwhile, the rehabilitation centre saw the funds the city was designating for wildlife services as being spent in "ineffective ways" (WRs1). The animal services unit (as they themselves readily conceded) had limited knowledge about wildlife, so their role as front-line

responders to assess which animals "can be helped" (ASi1) and redirect them accordingly was problematic. The rehabilitation centre had put in many proposals for municipal funding (with limited success), but rather than creating a new funding stream, the city had only considered carving funds out of the existing budget for the animal services unit. Animal services interviewees saw this as a serious conflict, as their budgets were already diminishing each year and spikes in wildlife activity already had to be accommodated through the existing total budget (which covered both domestic and wildlife services). One strategist from the animal services (ASs2) unit noted that the struggle for funding represented a "push-pull" with city organizations:

[Animal services] will protect the funding they have...whereas [the wildlife centre] needs the resources because they are providing important services to residents and the residents don't realize that the city doesn't fund these services in any way. So there's a big disconnect on what our roles are and who's paying for what, it's a very misunderstood part of how the city works and how organizations like [the rehabilitation centre] continue to exist.

Another (ASs1) saw the rehabilitation centre's proposals as not really aiming to take over animal services workload but rather add another service to an already limited budget:

I don't think we're opposed to [the rehabilitation centre getting municipal funding] at all, we'd like to see that happen, our challenge is that we can't have our budget cut. Because even though our staff spend a lot of time picking up raccoons with distemper, it's my understanding that that's not what [the wildlife centre] wants [to take on]. [They] want to continue to do the work they do, and *maybe* take some burden off the city...but it's my perception that [they don't] want to spend time on the euthanasia work. And that's not a criticism...it's not their mandate to do that. It's not ours either but its defaults to us.

These comments pointed to some of the difficulties with a highly fractured service network. One of the staff at the rehabilitation centre, in discussing a recent contract the centre had signed to provide wildlife services to just one a smaller municipality, worried that it resulted in a two-tiered system for animals, where:

...we are full with baby raccoons but we have a contract with [this municipality that requires us to respond] so they get preferential treatment. That's walking a thin line in my opinion, a raccoon [from that municipality] gets preferential treatment...but then if we can't get funding there won't be anyone to look after wildlife, and funding comes from these contracts. You have to do what you have to do to stay afloat.

At the same time, the massive service demand and limited funding available also suggested there would be significant difficulties for any single organization trying to take on the role of responding to wildlife encounters. As one interviewee (WRs1) at the wildlife centre pointed out, this was a serious problem of urban conservation and management infrastructure:

Definitely more resources are needed to deal with this issue...because it is an issue that people deal with every day whether they like it or not – people who have never given wildlife a moment's thought suddenly have that animal crash through the window of their house....there needs to be a lot more resources, and better coordinated ones. Like [in our city] there's a lot of great environmental NGOs, but we certainly don't have even a moment in the day to be networking with them or to be collaborating on programs with them. I don't know if they have more time than us, but I feel like we're always reactively firefighting all the time.

Placing a service niche: Challengers and incumbents

What is clear in these perspectives is that the practice of these organizations is profoundly entangled in a material sense – or, in Scott's (1995) terms, they interact "frequently and fatefully" (p. 56). They share an understanding of the system they work within, the roles they play in that system, and the demands of their constituents. These factors would suggest that they constitute a field bound by some common institutional logics. In Neil Fligstein and Doug McAdam's theorization of fields, they break down the concept of institutional logics into four dimensions of shared understanding that bind fields together: 1. Beliefs about what is going on in the field and what is at stake in field practices; 2. A general consensus on who the actors in the field are and their relative power and position; 3. What forms of action are legitimate and meaningful; and 4. The interpretive frames that give meaning to what other actors in the field are doing. These interpretive frames, they argue, are not identical between all the actors in the field. Rather, actors will "embrace a frame of reference that encapsulates their self-serving view of the field" (Fligstein & McAdam, 2012, pp. 10-11). As above, that the UWOs in this study do different things and see their own priorities as important does not mean they do not share understandings about legitimate practice.

What is more theoretically cloudy is how UWOs' shared reality fits with the wider project of wildlife conservation. As is clear from interviewees' comments, a conservation ethos threads throughout their work, though it is articulated in different ways and their identification with that project is not equal. These differences point to some difficulties in conceptualizing their alignments in a simple way. One difficulty is in precisely defining the process by which these alignments happen. Is conservation a "higher-order" institutional logic (Thornton & Ocasio, 1999, p. 82) from which "lower-order" organizations draw for legitimacy? An overemphasis on top-

down determinism has been a key criticism of the institutional logics approach. Critics have argued that new institutionalism's reliance on a "master hypothesis" that stable higher-order logics drove fields toward homogeneity through coercion or mimesis (Wooten & Hoffman, 2008, p. 59) has resulted in comparatively little attention to organizational difference, agency, and processes of change (Purdy et al., 2017; Spicer & Sewell, 2010). Cross-pollination between organizational theory and social movement studies have brought more emphasis on bottom-up challenges to dominant logics and have reconceived the field as a space of contestation rather than conformity (Kraatz and Block 2008; McAdam & Scott, 2005; Wooten & Hoffman, 2008). This disciplinary blending opened up possibilities for researchers to explore how fields "become constituted around multiple, competing logics" without losing institutionalism's "analytical edge in explaining... 'higher order' effects on organizations" (Schneiberg & Lounsbury, 2008, p. 649).

While the cross-pollination between social movement and organizational studies undoubtedly creates better tools for looking at processes of change within fields, some scholars have argued that it still fails to capture some dimensions of inter-organizational relation. Fabio Rojas and Brayden King (2019) contend that field theories tend to over-rely on notions of competition and conflict, where fields are seen to be shaped by conflicts between incumbents and challengers. Fligstein and McAdam (2012) define incumbents as "those actors who wield disproportionate influence within a field and whose interests and views tend to be heavily reflected in the dominant organization of the strategic action field....the rules of the field tend to favor them, and shared meanings tend to legitimate and support their privileged position." (p. 13). Challengers, in contrast, "occupy less privileged niches within the field and ordinarily wield little influence over its operation. While they recognize the nature of the field and the dominant logic of incumbent actors, they can usually articulate an alternative vision of the field and their position in

it. This does not, however, mean that challengers are normally in open revolt against the inequities of the field or aggressive purveyors of oppositional logics. On the contrary, most of the time challengers can be expected to conform to the prevailing order, although they often do so grudgingly" (p. 13). One problem that Rojas and King (2019) see with this binary is that there is not always a clear distinction between incumbents and challengers, nor a well-defined dispute between them.

The present study illustrates some of muddiness in defining fields through an incumbentchallenger model. In many ways these organizations have evolved their own logics of practice centering on promoting urban coexistence through community intervention and education. These are not separate from conservation imperatives but neither do they pose direct challenge to them. If we home in particularly on wildlife rehabilitation, it reads as perhaps as a more classic conflict, where the care for individual animals must be defended in the face of value frames oriented to population health. But in practice, rehabilitation does not exist in a bubble – it may be, as in this study, tethered to a broader ethos of community practice that also includes organizations who do not rehabilitate. Such relationships create uncertainty around how we might categorize organizations like the animal services group, who are entangled with rehabilitation practice but not driven by an imperative to care for individual wild animals, or the rescue and advocacy group, who depend on rehabilitation but identify primarily with a species conservation rationale. Indeed, despite a longstanding philosophical tension, it is not uncommon for wildlife rehabilitation to be practiced in organizations where conservation is the explicit rationale, such as zoos or conservation centres focused on a suite of programming related to particular species groups, such as turtles or birds of prey. This pluralism illustrates Rojas and King's (2019) point that logics may change not through direct confrontation but through gradual blending at a diversity of intersections.

Strangers in the night? Big conservation in the city

I have, so far, focused on the UWOs in this study and the way their practice is connected to the logics of the conservation *field*, but have said little about what this means for their intersection with the big conservation organization in this study. It is useful here to look at Rojas and King's (2019) final point of critique for the challenger-incumbent model, which is that its view of contentious field politics is grounded in an assumption about direct points of *contact* between organizations, where these struggles over meaning take place. This is a useful anchor for thinking through the dynamics between these big and small players that occupy the same urban space. If UWOs have, to some degree, a defined sphere of practice that – while it may not bypass big conservation entirely – occupies its own material orbit, then what does it mean for big conservation to "touch down" (Tsing, 2011) in this space?

Cities were identified as a focal area for the big conservation organization in this study, which manifested in their practice in two ways. The first was through organizational presence in the city, for example through advertising campaigns, events, and fundraising initiatives (e.g., sponsored competitions, office fund drives). As one interviewee (Ci2) commented, urban institutions like corporate headquarters and schools were an important space for communities to get involved with their organization. The second manifestation of their urban practice was in programming they had designed to facilitate affective connections between people and their local natures, for example through providing grants for community initiatives proposing to foster these connections at the local level. Fundable community programs did not specifically have to be urban, though a strategist in this organization suggested that cities were an emerging priority area:

We're building work in [this city] and other urban areas...we've just started an urban nature centre [in another city] which is going to spread nationally...so we are consciously doing work in in urban areas to reconnect people to nature. [Residents in this city] are going to see a lot more of that, they haven't seen it yet. (Cs1)

Notably, not all implementation staff shared this view that urban practice was on the rise. One staff member (Ci1) noted that although some in the organization had anticipated a shift toward urban centres in the recent strategic plan, that she thought "there was a very concerted or clear decision that [management] made not to go that route and stay focused on the areas we've been engaged with," which were typically more non-urban. At the time of this writing, the organization's websites reflect the strategist's position: urban areas were a prominent theme.

When I asked interviewees at the big conservation organization about whether their work in the city might be perceived as being in conflict with local organizations, they noted this had not been considered (Cs1) and none thought it presented any kind of conflict. One strategist (Cs1) emphasized that their work was simply oriented to different scales, replying that:

We don't want to ever get in the way of [the rehabilitation centre in this study], for example; their work is really important, it's the same with other local organizations. We want to bring the international heft we have to make things more successful...I think people tend to be able to see more clearly risks to charismatic species that are far away...[they] don't see quite as easily or quickly what's happening in their own neighbourhoods or riversheds. So that's a place where organizations like ours need to work.

Some comments seemed to reflect a conception of UWOs' work as being loosely related because of work with wildlife, but not strongly tethered to grand-scale conservation goals, as reflected in this interviewee's (Ci1) comment:

I would hope that people would think that supporting [local] organizations that look at human-wildlife conflict issues, or wildlife being injured because of cars...that they would see that as one important piece of the puzzle but that supporting [our organization] is also important because of, like, yeah, submissions of heavy fuel oil at the international maritime organization for Arctic shipping, as well as science that helps support knowledge on polar bear populations in the Arctic including Canada, and understanding the importance of climate change on *massive* ecosystems and habitats...those kinds of issues.

This tether to high-level markers of global environmental change – shipping emissions and climate disruption – appeared entangled with the big conservation organization's ambivalent relationship with *wildlife* as a central organizational focus. Interviewees pointed to their work as being targeted at environmental policy on issues like climate change and clean energy. One interviewee (Ci3) stated that their purview was "not specifically wildlife conservation, just conservation," and suggested that although species conservation was an important byproduct of the work, that the public sometimes misunderstood the work as just being about species loss:

The issue isn't just that there won't be any polar bears, the issue is the flooding and the warming of our planet – the effects of sea ice [are] much bigger than the polar bears not having anything to rest on...

At the same time, however, interviewees' comments reflected the organization's recent programming changes that were part of an effort to ground their work in lived spaces and reestablish strong connections to wildlife, which one interviewee contended had always been the "driver" behind the work despite a wider environmental framing (Ci2). One strategist (Cs1) noted the longtime focus of the organization on "protecting endangered species and endangered spaces" had been obscured in some past projects that conceptually strayed too far from this mandate –

sustainable transportation in cities was one example of a program too far removed from the notion of wildlife protection, and one that likely confused supporters. One aim in the organization's recent strategic plan development, this interviewee noted, was to streamline their programs for more consistency with core organizational goals. Another interviewee (Ci2) noted this streamlining involved re-conceptualizing conservation projects to centralize their relation to wildlife, such as moving from general renewable energy campaigns to habitat-friendly renewable energy. The emerging programming on facilitating connections to local nature was part of this effort to re-anchor themselves to a more relatable everyday experience.

Ungrounded environmentalisms and everyday practice

The move to re-orient programming toward a more relatable everyday experience can be better understood in the context of the wider evolution in big international conservation and environmental NGOs *away* from a close engagement with lived spaces, and toward big-picture environmental problems. As Dan Brockington (2008) argues, big NGOs' contemporary emphasis on global environmental issues represents a break with early environmental movements, which were defined by a "championing of places which give meaning to people's lives," leaving in their place a now-dominant form of "ungrounded" environmentalism. He contends that international conservation organizations now "spend much of their energy protecting environments far from the everyday experience of their supporters" and also "use concepts and principles which can be alien to the lived experience and identity to the people living in the places designated for conservation." As he argues, contemporary public engagements with environmental causes therefore tend to be "characterized by a *lack* of contact and interaction with the environments they value, or else they are characterized by infrequent, highly staged and carefully framed encounters provided by wildlife safaris or ecotourism trips" (pp. 552-553).

Even as narratives of environmentalism have become increasingly detached from local struggles, on-the-ground practices of big conservation NGOs continue to profoundly affect the lived realities of local communities in the areas where habitat protection takes place. The most notable example of deleterious impacts has been the forcible expelling or disenfranchisement of people from their lived environments in the interest of protecting ecologically valuable land. The protected areas approach – often called "fortress conservation" – thus began to face pushback in the 1970s, and is now a well-wrought critique in conservation analyses (Adams, 2004; Bixler et al., 2015; Chapin, 2004; Igoe, 2014; Robinson, 2011). Resistance to the protected areas hegemony was spurred in part by a changing discourse about the ethics of development in postcolonial spaces (Vaccaro et al., 2013). The new development discourse paid due attention to the ways local communities had wisely managed lands in their own way, and promoted awareness of how conservation projects had unfairly impacted poor communities in the developing world. Additionally, by the 1980s it had become clear that top-down protectionist models had frequently been thwarted through community resistance and conflict (Hutton et al., 2005) and accordingly failed to achieve their conservation goals.

As a result of these conflicts, many conservation initiatives shifted during the 1980s toward community-based conservation approaches (frequently called integrated conservation and development projects [ICDPs], or community-based natural resource management [CBNRM]) which allowed for community management of conservation areas or greater local stakeholder involvement. The efficacy of community conservation models has been a source of notable debate in the conservation literature (Brown & Decker, 2005; Roe, 2008; Schwartzman et al., 2000), with a divide growing through the 1990s between "social conservationists" and "nature protectionists" (Miller et al., 2011) and a subsequent disenchantment with community-based models marked by a

revival of the "barriers" narrative in the early 2000s (Hutton et al., 2005; Sullivan, 2006). The rising popularity of social conservation models were fraught with the complexities, not least of which was the challenge to the ideological foundations of the field; as William Adams has observed, "having fought for much of the 20th century to keep people out of protected areas, by its end, conservationists were struggling to work out how to bring people and nature back together" (2004, p. 12).

To view these efforts as an attempt to re-ground conservation – that is, to bring it back to its localist roots – is a perspective complicated by the massive growth of big NGOs and their increasing integration with corporate and government actors (Hoffman & Bertels, 2010), whose profit-driven ventures had once separated them from social movement actors in pursuit of postmaterial goals (Boström, 2003; Dryzek, 2013; Hajer, 1996). The much-theorized process of ecological modernization saw the transformation of environmentalism from an allied resistance movement to capitalism to a single-issue reformist project with no de-facto opposition to capitalism, industrialism, or bureaucracy (Mol, 2000). The mainstreaming of environmental logics opened the door for natural commodity markets, a shift that many critics have seen as the foundation for the growth of neoliberal conservation, in which imbuing nature with "profit potential" is cast as the only rational way to protect it (Büscher et al., 2012). This separation of environmentalism – as a definitively localist movement – from its political moorings has rendered the environmental field a complex place, where the now multi-billion dollar conservation industry may still retain elements of its identity as an independent idealist fighting against economic growth imperatives (Bryant, 2009; Larsen, 2016). Critics have worried that NGOs' embrace of local engagement (e.g., in community-based conservation models) has been somewhat superficial

and even disingenuous (Büscher & Dressler, 2012; Chapin, 2004), offering little real power for self-determination in affected communities (Sullivan, 2006).

Engaging urban natures

These changes do not mean, however, that environmentalism has become merely a corporate logic. Local resistance movements not only continue to exist, but they are integrated in complex ways in the wider institutionalization of the field, for example, through the alignment of claims between big and small NGOs, or movements of environmental actors between sectors (Rojas & King, 2019; Walker & Martin, 2019). It does mean, however, that the big conservation organization's perceptions of their work as existing benignly alongside urban wildlife organizations should be a claim read through their relative power to capitalize on urban natures. As one strategist (Cs1) framed it, their emerging work in the urban context did not represent a conflict with local wildlife organizations because the tether to an international scale would hold their work apart:

We try to bring a national/international perspective to a variety of issues [in this city] because we're based here and because this is the national media centre....including climate change, including ocean health, and particularly in terms of connecting with [local people] about nature in the city....I think our national/international perspective means that we bring something to the table a little different than purely local organizations and the fact that we're focused on a slightly different issue means we're not stepping on anybody's toes as well when we get into the practical/hands on.

While there were few points of direct contact between organizations to reflect on, the one organization who did describe a direct relationship with this big conservation organization (the rescue/advocacy group) did not seem to agree with this claim that the conservation organization's

engagement with local issues was non-intrusive. Describing a past campaign partnership, one interviewee at the rescue and advocacy organization (RAs1) argued that the big conservation organization's lack of real investment in local issues created conflict for the organizations embedded in that sphere of practice:

Sadly, what happens with these large organizations...is they do a campaign, they raise a ton of dough, and they move on to another campaign. They don't make it an integral part of their initiative. And that frustrates me to death to be quite frank....They provided us with a massive opportunity because it was the first really big launching pad ...that drew attention to our work. That side was very beneficial. But the negative side was they created this campaign...[which was] massively successful, they made so much money from it. And within three months of it coming to a close, they said we're moving on, great partnership, thank you very much, feel free to use the [campaign slogan], its yours, good luck. And they went on to another campaign. And that frustrates me, because on one hand it's reaching a very broad audience, educating them, that we could never reach without their help. But here we are struggling still. They took our expertise, made a lot of money on it by having the infrastructure in place to be able to develop something strong, and then abandoned it.

Adding that the urban issues addressed in the previous campaign had since then become a more "viable" focus for big organizations, this interviewee (RAs1) added that the shift "was beneficial but perhaps also more challenging because now we're in competition with these big organizations. So with that comes the demand for us to grow and try to sustain." These comments suggest that big conservation's engagement with urban natures represents an important point of tension that can play out in the everyday work of urban wildlife organizations. It is the job of the following chapters to explore these engagements in more detail.

Chapter 4: Valuing urban encounters

As the previous chapter suggests, big conservation's interest in cities introduces a point of tension around how these organizations define urban nature and its relevance to conservation. The goal of this chapter is to take a more focused look at these organizations' material engagements with urban encounters. I home in here on big conservation's interest in cities as spaces of affective "connection" to nature. Peter Kareiva (2008) has argued that a disconnection from nature – and therefore a diminished concern about conservation – "may well be the world's greatest environmental threat" (p. 2758), one potentially mitigated through facilitating nature connection in urban environments.

Connection, however, is a poorly defined concept. In specialized fields like environmental psychology there have been some attempts to develop metrics for connection,³⁶ but in much scholarship the concept remains vague, referring variously to feelings of care or affection for, or attraction to, some element or the whole of nonhuman life. It is sometimes (but not always) linked to a thesis about human *disconnection* from nature and the need to remedy it. I do not here define connection as my analysis is not of the phenomenology of connection – in fact it is precisely the vagary around connection that gives this concept such a dynamic political life, one that I aim to explore in this chapter.

In recent years, invocations to connect with nature have come under increasing scrutiny.

Robert Fletcher suggests that the concept itself is an oxymoron, since calls to connect to nature paradoxically reinforce the idea that we are separate from nature, thus reinforcing the very rift that it is posed to challenge. He finds this a particularly backwards imperative for conservation, since

³⁶ For example, the Connectedness to Nature Scale (Mayer and Frantz, 2004), and the Inclusion of Nature in the Self scale (Schultz 2002).

the protected area strategy so central to biodiversity protection is grounded in separating "humans from 'nature' to the greatest extent possible" (p. 5). Others have asked the question of how an ethos of connection might fail to recognize the potential costs to nonhuman others who represent the site of that connection (Candea, 2010; Collard & Dempsey, 2013; Pitt, 2018), and how it can frame other animals as objects for human development rather than subjects with whom we are in ethical relation (Russell & Fawcett, 2020).

These critiques lay the groundwork for a political ecology of connection. In this chapter, I flesh out an urban dimension to this political ecology, as it might be informed by the data from the present study. I look at the different ways in which these organizations are invested in affective connections with urban animals, how these affections are differentially enrolled in their narratives about right relations, and where we might locate the costs of these disparate enrollments. Taking up an evolving body of work on "encounter value" in the biopolitics of conservation, I look at the ways that urban encounters fit with existing theory on this phenomenon and where they suggest new dimensions to explore. In part one, I look at how encounters have been rendered valuable in contemporary conservation. In part two, I look at the politics of urban space as a site of affective connection to nature and at how connective encounters unevenly shape these organizations' practice. In part three, I conclude by evaluating the appeals to a notion of affective flow, in which encounters serve as affective potentials to be harnessed to work for the conservation cause.

Part 1: Affective value

The importance of meaningful contact with the wild has long been seen as central in promoting concern for the problem of wildlife decline. Indeed, it would be difficult to find an idea more commonly accepted in both conservation and environmental education than that an experiential relationship with the natural world is a key factor in learning to care about it and acting to protect

it.³⁷ Early iterations of game protection and preservationism turned on narratives about the importance of encountering the wild (through hunting and wilderness excursions, respectively) as an essential human experience. For hunter-conservationists like Theodore Roosevelt, contact with nature was a critical element of the "strenuous life" that was constitutive of the American character. In Roosevelt's view, preserving these encounters was fundamentally a moral project, for which conservation became the embedded rationale (Brower, 2011). The preservationist arm of the movement likewise saw contact with nature as a source of essential spiritual renewal. In both iterations, cities were cast as the antithesis of nature; John Muir characterized urban life as "stupefying" and leading to "deadly apathy" (Mighetto, 1991, p. 4). Roosevelt railed against the "femininizing effects of overcivilization" on American men (Brower, 2011, p. 60).

Over the last few decades, proxies for wild nature that could offer an affective experience outside of the context of raw wilderness experience have become more deeply embedded in conservation's institutional fabric. The use of "ambassador" animals has featured prominently in these efforts (Myers Jr & Saunders, 2002; Russell, 2019). Conservation-based wildlife tourism (e.g. conservation safaris, research tours) have become a key site for facilitating wildlife encounters (Cousins et al., 2009; Curtin & Kragh, 2014; Skibins, 2015). Zoos have been rebranded as spaces to create an emotional relationship to conservation issues, rather than purely entertainment venues (Bulbeck, 2005; Clayton et al., 2009; Keulartz, 2015). Conservation's urban turn positions cities as a new frontier for affective connection that can be translated into support for the cause.

³⁷ This claim is present across a vast and wide-ranging literature, but for example see Bulbeck (2005), Chawla (2009), Louv (2011, 2019), Kellert & Wilson (1993), Mayer & Frantz (2004), Schultz et al. (2004).

But the embrace of cities as spaces of nature comes with complications – one is well-captured by what Robert Dunn and colleagues (2006) have dubbed the "pigeon paradox," wherein conservation may be compelled to direct its attention to ecologically unimportant "pest" species (such as pigeons) because they are a conduit for urbanites' connection to nature, and thus promote their support for conservation initiatives. Those who work with urban wildlife have often made comparable arguments about the ability of encounters with "everyday wildlife" to "galvanize support" for wildlife protection (Lindsey, 2010, p. 4). As Hadidian (2009) argues:

...urban wildlife will increasingly become a principal forcing factor in determining the future of the average American's relationship to the nonhuman world. Our wildlife institutions and agencies have not yet recognized this in a meaningful way. If a theory and, more important, a praxis for urban wildlife cannot be found, then we ought to look with concern to our future relationship with wild animals and the values they represent. (p. 203)

For big conservation, an alignment with this claim foregrounds cities as a potential new site of affective capital – in the form of impactful encounters – that has normally been attached to charismatic megafauna and, typically, animals with a significant ecological value.

Encounter value: Rendering lively commodities

These interviewees' comments point to an important tension in conservation – that even though the field is grounded in a population or species health imperative, meaningful encounters with individual animals are valuable to their practice. For conservation organizations, the financial support that encounters can generate is a key interest; in studies of pro-conservation behaviours, the revenue-generating potential of particular species is often measured through quantifying a "willingness to pay" for their protection (Skibins, 2015, p. 260).

The value of wildlife encounters for conservation has necessitated new theoretical tools for understanding the ways in which animals are commodified beyond the use of their bodies as the raw materials for production. Some research has drawn on metaphors about animals as exploited labourers under capitalism (Cochrane, 2016; Hribal, 2003; Noske, 1997), though these approaches have not always been able to capture the complex and contradictory ways that our affection for and enchantment with animals is entangled with their exploitation as labourers. Nicole Shukin's work (2009) negotiates this complexity elegantly, illustrating the intersections between valued representations of animals and the material uses of their bodies (e.g., animal photos printed on film stock made from animal bodies) through the double entendre of "rendering." Perhaps most generative has been Donna Haraway's (2008) development of the idea of *encounter value* as a way of elucidating relationships between humans and dogs as sites of "lively capital." For Haraway, encounter value is not neatly encapsulated by Marxist notions of use value and exchange value, since it is produced relationally, a product of human and animal labour expended in the space of interspecies meetings.

While Haraway proposed this concept as a way to explore the intimacies with companion species, a number of scholars have seen it an important tool for exploring relations with wild animals, for whom commodified encounters can have unique consequences (Collard & Dempsey, 2013; Lorimer, 2015; Pütz, 2021). Maan Barua's work has been most notable in extending the concept of encounter value (Barua, 2014a, 2016b, 2017; Barua & Sinha, 2019), emphasizing the ways in which wild encounters are captured into commodity circuits, but also the ways in which these meetings, as a relational achievement always in the making, are volatile and therefore can never "entirely be subsumed by capital" (Barua, 2017, p. 8). Indeed, encounter itself has become a theoretical tool for signifying unpredictability. Spanning a range of disciplinary engagements

from colonial encounters to the meeting of strangers in cities, encounter has been a way to point to the unexpected qualities that emerge in meetings across borders of difference (Wilson, 2017). In animal studies, interspecies encounter has been a key way to "trouble classification" (Barua, 2016a), unsettling ontological divisions and opening up "a space for the examination of animal subjectivity" (Wilson, 2017, p. 28) and ethical recognition (Calarco, 2008; Derrida, 2008). ³⁸ As these applications suggest, an encounter is, by definition, fraught – it is an event of collision that "shocks and ruptures" (Wilson, 2019, p. 25), and one through which the encounterers are mutually re-made through the act of relating (Despret, 2004; Haraway, 2008). ³⁹

The valuation of encounters as a form of conservation capital thus faces a difficulty – the affective power of encounters, linked to the capacity of an intersubjective meeting to rupture and transform, also makes them unstable as a commodity. Helen Wilson has even suggested that "unpredictability and surprise" are so central to the concept of encounter that the idea that one could engineer encounters "in the pursuit of named outcomes is an impossibility" (2019, p. 34). Conservation organizations' wariness around representing individual animals illustrates this instability, since a sense of relation to an individual animal may read against the grain of the species' welfare message that the image is used to promote. The challenge in rendering animals into lively commodities, then, is to facilitate a sense of intimacy without ethical recongition associated with "faciality" (Yusoff, 2012, p. 582).⁴⁰ There is an attendant violence to this

³⁸ These two iterations of encounter have converged in the theorization of the "more-than-human city," an idea I explore in the conclusion chapter.

³⁹ The concept's use in defining interspecies meeting and urban meetings have come together in recent decades, with a growing number of scholars interested in "more-than-human" cities as a space of diverse encounters and an important site of theorization for a politics of living-with (see conclusion chapter).

⁴⁰ This phrasing makes reference to Levinas' formulation of the 'face' as the grounding for ethical encounters. Many animal studies scholars have taken up Levinas' work to interrogate the ways in which animals have escaped moral consideration in the western tradition, e.g., see Calarco (2008). Owain Jones (2000) makes the point the lens of the collective – species and populations – renders wild animals face-less, unencounterable and therefore outside consideration. As Yusoff asks, "with the face as the site that communicates this precariousness and delivers its ethical demand, what kind of faciality delivers this demand on behalf of biodiversity?" (2012, p. 582)

rendering (Biermann & Mansfield, 2014; Chrulew, 2011). Jamie Lorimer suggests that charisma, for those species that have it, is "a mixed blessing. It may do enough to stall the slide to species extinction, but it imposes great suffering upon those individual animal subjects charged with perpetuating the populations and gene pools they purportedly incarnate" (Lorimer, 2015, p. 146). To make lively commodities that are "mobile, tradeable, and ownable," wild animals' connections to their family and habitat must be severed, and new dependencies on humans (for food, socialization) created. The resulting encounterable animals must be lively, "but not too lively" in order to be amenable to commodification (Collard & Dempsey, 2013, p. 2692).

Such acts of alienation are seen as central to neoliberal conservation, where nonhuman natures must be *entrained* to commodification by rendering them into more abstract and consumable forms (Büscher et al., 2012). Some research has drawn on Guy Debord's notion of spectacle to describe this process. James Igoe and colleagues, for example, note how spectacular images obscure the "conditions and relations" that produce them and "impose a sense of unity onto situations of fragmentation and isolation," creating "problem free, generalizable forms" for consumption by remote viewers (Igoe et al., 2010, p. 492). Thus, the making of lively commodities negotiates the complex paradox of capturing the unique affective power that particular animals bring to an encounter, while still asserting a logic of infinite substitutability (Sullivan, 2010), wherein any given elephant can be read as an *Elephant* or, more pointedly, a "living monument to their own disappearance" (Berger, 1980, p. 26).

Promoting connection: the risk of individualizing animals

Conservation's use of "flagship" species has been a much-studied aspect of conservation groups' efforts to harness the power of emotional encounters. Paul Jepson and Maan Barua define flagship species as "high profile, charismatic, or ambassadorial species that act as symbols and rallying

points for conservation projects, issues, campaigns and the wider conservation movement" (2015, p. 95). This mobilization potential depends in the most basic sense on the ability of flagships to act as "surrogate species" that can stand for another species – in an affective sense – or for a wider cause (Skibins, 2015, p. 256). Flagships are not the only surrogates. Conservation organizations have also made prominent use of concepts like "keystone" species valuable in maintaining the balance of the ecosystems in which they live, as well as "footprint" species representing those most impacted by environmental change.

Flagships are unique in that their value is explicitly affective, and while these species are often also at risk, it is not a perfect alignment. Charisma is something of an ineffable property (Lorimer, 2007), and the most affectively generative species may not be those that are otherwise deemed most valuable to conservation.⁴¹ As Barua argues, ecological characteristics are important for framing "flagship potential within epistemic rationales of conservation science" but are "only part of the story: a deeper goal is to shift renditions of flagships from a scientific to an emotional register" (Barua, 2016b, p. 9). The potential conflicts between ecological value and affective value creates a difficult point of negotiation for conservation organizations, as the affective value of particular species may not only clash with conservation priorities but also introduce ambiguity about the importance of feeling in a science-driven field. A further complication is that despite the flagship's designation as a species concept, it is *individual* animals who are its mobilizing force. Invitations to care about individual animals poses challenge to conservation's population logics and invites scrutiny of the individual welfare of those animals.⁴²

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⁴¹ Courchamp et al. (2018) also suggest that, paradoxically, charismatic animals who *are* threatened are not perceived to be at risk because of their ubiquitous presence in commercial media.

⁴² Examples abound of public resistance to the killing of charismatic wild animals (either directly or through neglect) who have come to be seen as individuals, despite the fact that the "necessary" death of individuals within population-oriented models is not itself an area of significant public outcry. See for example Cohen & Fennell (2016) and Nelson et al. (2016).

The big conservation organization included in this study reflected this slipperiness between ecological and affective value. While some of the organizational grey literature defined flagships as iconic species that generate conservation support purely because of their charisma, other organizational literature made reference to flagships' ecological role. One webpage conflated them with keystone species, asserting that flagship species were at the top of the food chain and that protecting them protected "the entire ecosystem." A number of photos on the website appeared geared toward engendering emotional connection – close-up shots of iconic species were common, with rich descriptions of their "endearing" features. These emotive images of individual animals sat in contrast to the emphasis on allegiance to the "best science" for protecting global biodiversity and slowing climate change. Arran Stibbe (2012), in his analysis of WWF-UK's website, observes a similar phenomenon: that the primary text utilizes a "very objective sounding, that is, scientific-based discourse scrubbed clean of sentimentality or evaluative statements," but this emphasis seems in tension with other sections of the site (one focused on education, for example), that make claims to facilitating "our interdependent relationship with nature and the health of our planet, and the life-enhancement and joy that can be had from appreciating this relationship." (p. 71). The photographic images of animals, he argues, seem more in alignment with this focus on relationships than on the rational and analytic tone that dominate the site overall. Charismatic megafauna like leopards, lynx, gorillas, and tigers were featured in close-ups "at 'intimate' distance of an individual animal, 'demanding' a relationship with the viewer by gazing out of the photo (the 'eye-line vectors' meeting the viewer's eyes)" (Stibbe, 2012, p. 75).

Several interviewees at the conservation organization in this study spoke to the tensions in these kinds of intimate representations. One staff member (Ci1) noted:

We have guidelines for our [external communications] that try to move us away from that. So really anything that anthropomorphizes species in pictures, we don't want to use. We don't really like to use photos of animals close up where you can't see them within their environment, we like to try and focus on a species or individual within a larger photo of its habitat, so it's not about this one cuddly little creature, its about the species that's a signifier for a larger thing. So there are nuances like that that we try to push out through our communications but it's not always easy.

Reflecting on my observation that the website still featured such photos of individual animals, this interviewee responded:

Yeah. It's a push and pull between our fundraising and communications team, and conservation, and one message versus another, because they're like yeah, but, those pictures are what brings in the funds and brings in people, that's what they want to see. So its always a balancing act between wanting to represent yourself accurately and honestly and not wanting to hurt your fundraising too much.

A strategist for the organization (Cs1) echoed that many of the organization's supporters "think we do things we don't, and support us because they care passionately about every animal as opposed to species...[but] that's not what we do, we've never done that." This interviewee noted that while they had "an obligation to be clear about those values" that there were also "tricky issues." For example, they noted that "animal rights oriented" types were often upset that the organization didn't take a stand against hunting. In addition, the interviewee noted, stakeholder communities in Arctic regions were often uncomfortable with the use of animals like polar bears and seals as the face of fundraising campaigns, since these images were seen to provoke concern for the welfare of these animals and, often, condemnation of the traditional hunting practices or

conflict management in northern communities. This interviewee also conceded that the organization's default position of "not getting involved" unless affected animals were of endangered species became more difficult if animals were "being killed in a way that's not humane" (Cs1). In these scenarios, it became harder to defend their identity as protectors of wildlife.

Notably, none of the interviewees from this organization discussed the *necessity* of individual animals' deaths for conservation (see for example Srinivasan, 2014). Rather, individual animals' welfare was framed as important but simply not their focus. In discussing some backlash on the organizations' failure to take a stand on bear culls, one interviewee (Ci3) commented:

[It's] difficult sometimes, because people call in impassioned – and rightly so – because they say, how can you say you're doing work for species and you're allowing all these bears to be killed, and then its like of course, we don't think that's a great or good thing, but its just not our thing....we try and convey the message that just because we're not working on a particular issue...doesn't mean it doesn't concern us, it's just not what we work on. We only have so many funds to work with, and you try to get that message across as respectfully as possible.

Staging encounters

This process of spectacularization is not only applicable to the production of animal images, but also to encounters in the flesh that depend on modes of "staging" to facilitate a sense of intimacy without promoting ethical recognition. Wildlife tourism is one venue where this process has been documented (Barua, 2016b; Duffy, 2014). Zoos and natural history museums have likewise been much studied as spaces that narrativize a natural and moral order through visceral experience. In these spaces, animal bodies themselves operate as texts, to be read through a wider institutional

discourse about mastery over nature and human heroism (Davies, 2000; DeLuca & Slawter-Volkening, 2009; Haraway, 1989; Milstein, 2009; Ritvo, 1987). As Wilson (2019) puts it, zoos are "dependent on staging intimacy between humans and nonhuman animals to encourage visitors – even discipline them – to care" (p. 33). Limiting the power of animals to disrupt institutional narratives is crucial to the staging process. For example, the agency of animals is often constrained in venues for "teaching" encounters (Bear, 2011; Lloro-Bidart, 2017; Nxumalo & Pacini-Ketchabaw, 2017), both through direct physical interventions (e.g., clipped wings, muzzles, cages) as well as through institutional narratives. As Joshua Russell (2019) observes:

...ambassador animals are often spoken of in a way that suggests [they have a lot of agency], such as when their behavior makes them unsuitable on any given day for participation in an educational program. Educators may tell the audience that animal x is not going to come out today because she is feeling shy, tired, or some other anthropomorphized description of the animal's emotional state. One challenge to this kind of speech is that it hides a greater system of control over that animal's movements, feeding, and freedoms than the human audience may be aware of and so is perhaps more of a figure of speech than a sign of an animal's choice. (p 123)

Staging is not necessarily tied to captivity. Tourist industries like whale watching depend on commodified wildlife encounters with free-living species. Katherine Neves (2010) argues that these kinds of encounters are spuriously cast, in the language of wildlife management, as "non-consumptive" wildlife activities, but in actuality constitute of a new dimension of ecosystem services which include "entertainment, amusement, catharsis, and even therapeutic healing" (Neves, 2010, p. 732) for consumers. The seeming spontaneity of these encounters obscures human interventions – attracting animals to a tour site by feeding them, for example – that are in place to assure animals' encounterability (Bulbeck, 2005). They also rely on interpretive

narratives that limit the ways in which the consumers of these experiences might be made uncomfortable (for example, by recognizing that animals are negatively affected by tourist activity) (Lloro-Bidart & Russell, 2017). Robert Fletcher and Katherine Neves argue that a key goal of these material and discursive practices in ecotourism is to mobilize desire for more experiences of the same kind, transforming animal encounters "into sites of virtually limitless capital accumulation by promising a satisfying experience yet usually delivering instead a mere "pseudocatharsis" that paradoxically stimulates a desire for further experience in pursuit of the fulfillment continually deferred" (2012, p. 61).

Animals speaking back

Despite these practices being oriented toward stabilizing lively commodities, however, spaces for disruption remain. As Traci Warkentin and Leesa Fawcett (2010) argue, even in captivity animals still make choices and have opportunities for resistant, creative expression (see also Bear, 2011). This is less of a factor with visual representations of animals (e.g., in awareness campaigns and other organizational grey literature). Kathryn Yusoff, questioning the costs of "making visible," observes that represented animals "are not present in this encounter as themselves, as full sovereign beings, but as a kind of haunting configured around a profoundly human sensibility" (2012, p. 585). A spectacular image, in other words, has limited ability to "speak back" in the moment of encounter. Instead, it becomes a mode of gratification for the viewer that is severed from the conditions that make that sense of intimacy possible. This process is well reflected in Bart Welling's notion of "ecoporn," where the possibility of intersubjectivity is obliterated within the "tyranny of the visual" (2009, p. 53).

Others have argued, however, that while images of animals undoubtedly are different from fleshly encounters, it is a mistake to dismiss them as merely objects of passive, narcissistic

consumption. Rather, encounters with representations of animals have not only affective, but also ethical, force. Sociological studies have suggested images of suffering animals are a central catalyst for involvement in animal advocacy movements by acting as "moral shocks" (Jasper & Poulsen, 1995). Analyses in visual culture have similarly taken up the notion of a "rupturing effect" of some animal imagery that prompts real-world action for other animals (Burt, 2002, p. 13; Nabi, 1998; Wrenn, 2013). Drawing on Barthes' notion of the "punctum," for example, Matthew Brower argues that some photographs may incite a "wounding experience" wherein we are thrust into the "life outside the image" and its ethical demands (2009, p. 320). These analyses suggest that representations can, at least sometimes, speak back – that is, subvert their framing – but how relevant this is to the kind of flagship images that NGOs rely on is less certain. Notably, in James Jasper and Jane Poulson's study, as in Jonathan Burt's exploration of animals in film, it is depictions of *suffering* bodies that have a mobilizing effect. This may be less relevant to conservation, as the field has generally "sought to distance itself from these narratives and engagements with violence [that is foregrounded in animal rights and welfare discourse]. Instead, it has stressed the practices of care, attention and forms of valuation of the bios" (Yusoff, 2012, p. 581).

Part 2: The politics of connection

Local encounters: A new frontier

For proponents of new conservation, these older appeals to care for "the bios" have fallen flat.

The paradigm shift they propose thus emphasizes the need for direct local experience with the natural world to engage people, urbanites in particular. This emphasis raises the question of how we might think about urban wildlife encounters as a new frontier for encounter value, in which

emotionally powerful meetings with urban animals could be rendered into behaviours of interest to big conservation groups. The dynamics of staged encounters suggest this is a risky frontier, since those encounters far removed from the staging process ostensibly have the greatest disruptive potential. Urban animals have not featured heavily in the body of work on encounter value, since these encounters have not historically been seen as very valuable to conservation, and in some cases have even posed a labour cost for wildlife management organizations (e.g., in the case of wildlife conflicts).

Interviewees at the big conservation organization in this study affirmed that facilitating nature connection in local communities had become a key focus in recent years, one supported by several organizational programs. Urban areas were cast as an important focus for reconnection programs. As one strategist noted (Cs1), the organization had developed "several programs [in which] we're trying to engage people within cities [to] think about *their* nature." Interviewees noted the importance in such programs of getting people outside, driving "on the ground type engagement" (Ci1) As one staff member (Ci3) noted, hands-on outdoor activities were important especially for people in urban areas:

They can be quite disconnected from nature. If it's not a personal connection, not something they can relate to on a really personal level, they're just not going to be that interested in how to help...so it's a matter of getting them outside and get their hands dirty, and to take ownership over something in their community that we would hope they feel the need to take care of.

Sometimes these initiatives were framed as encouraging people to take conservation action in their own communities. In describing the kinds of community projects the connection to nature programs might fund, for example, one interviewee (Ci1) noted that they might involve:

People getting involved in their communities by, say, planting pollinator gardens, going out on a day and pulling up invasive species, doing riparian restoration on riverbanks, planting rain gardens, doing all those kinds of on the ground activities.

More often, however, interviewees cast connection-to-nature programming as directed toward building affective relationships rather being about addressing urban conservation issues. So while the above comment on planting pollinator gardens might be an iteration of "connectedness" that also had a positive conservation impact on endangered species, other interviewees put more emphasis on active engagement in whatever form it might take. For example, one strategist (Cs1) noted that sites of urban engagement included the local river, park, as well as coyotes – a common conflict species in the focal city – and "escaped creatures from [the zoo]." These forms of "nature" were seen as offering "a unique opportunity" for connection in the city that the organization was trying to embrace. As another interviewee (Ci2) echoed, the goal of the programming was to home in on connection as it was defined by program participants:

Conservation connotes different things in people's minds but mostly I think it has the flavor of science about it...there's an exclusivity associated with that, and we really wanted to break that down...one way [scientists] connect to nature is in very sciencey terms, they're measuring and monitoring and hypothesizing and researching – but that's not the way most people connect to nature. So we wanted to validate that there are other ways that people connect to nature that are meaningful, and that we can't impose...what it means for everybody to connect to nature...So the point of the [nature connection programming] is to ask people, well what does connecting to nature mean to you? And how would you connect people in your community to nature?

This interviewee noted that, accordingly, many projects funded through their connection programming were more "feel good or celebratory" than science-based. When asked whether a connection-oriented community project that would have no (ecological) conservation value – such as building nest boxes for an introduced species – might still be fundable through the program, this interviewee responded:

It could be. It would depend on the project, how many people would be engaged, there are other factors. It is still early days in the program, we'd like to have a way of aggregating the results, so it's easy to know how many people participated, but [also] what is their experience, what is the story, but then there is [the question of] did this project help the species – if that was its goal.

What began to surface in these conversations was a sense that while cities were seen by the organization as a key site for human engagement, they were not cast as important sites of wildlife protection or intervention *per se*. Nothing suggested that the emphasis on building urban connections represented a change in their core organizational focus on "endangered species and endangered spaces" (Cs1). In commenting on how important local animals were to their work, a strategist (Cs1) commented that they weren't likely to include those animals in significant ways in their own communications and conservation programming:

We're probably not going to fundraise off coyotes. And we're probably not going to feature stories about coyotes in our newsletters. But there is a real importance – we see part of our role as, not just reconnecting people with nature, but reconnecting in a way that helps them to support the rebuilding of nature....We want people not just to go into [the local] park, but to do something active, physically...that [activity] applies to lots of everyday, non-charismatic but important local species.

This comment stands in contrast to the argument made by Mark Weckel and Anastasia Wincorn (2016) that coyotes are well-suited to be a flagship species for urban conservation because they are "symbolic of changing perspectives on nature and wilderness" (p. 13) and because their natural history "is a useful parable to frame and communicate complex issues that have come to define (and challenge) the field of urban conservation, specifically, ecosystem novelty, resilience thinking, and the human-nature divide" (p. 11). This contrast foregrounds a tension around big conservation's interest in urban issues, suggesting it is critical to attend to distinctions between an interest in cities as a space of ecological abundance and importance – as it is conceived in urban ecology/conservation – and as "centers of economic, political, and cultural power, key nodes in networks of global governance" as it has appeared in some conservation NGOs (Lorimer, 2015, p. 165).

Connections that count

There are two intersecting themes that emerged in these interviews that support the notion of urban encounters as a new frontier of encounter value. The first, posed above, is that strategists for this organization pointed to the idea of affective encounters having a conservation value that operated in its own register, detached from traditional conservation outcomes such as biodiversity or endangered species protection. The second theme – which affirms this notion of affective valuation – is that interviewees emphasized the importance (and difficulty) of *counting* these connections. Their connection-to-nature programming was driven by a quantitative goal to connect a defined number of people to nature within a five-year time frame. Progress toward this goal was tracked through a number of different criteria, such as the number of grants given and the number of people involved in each funded community project, each of whom could seemingly be considered "connected" through their participation. Notably, this number included both

projects designed to support nature-connection as well as ones designed with ecological (and not primarily affective) goals in mind.

Numbers of connected people were additionally tracked through a separate microsite that invited users to document the ways in which they "count" for nature, including a forum to share personal stories or photos representing their own nature connections. While two interviewees emphasized that the granting stream sought to fund "concrete" expressions of connection (Cs1, Ci1), it was also acknowledged that the website inviting people to share their connective experiences was "quite broad in accepting what people want to share" (Ci1). This interviewee (Ci1) speculated that, "I guess it could be somebody letting us know they have a connection by writing a poem about nature..." The website let participants know they could also "count" as part of the nature-connected "movement" by donating money to the organization or participating in fundraising events. This wide range of countable connections challenges the notion that the organization necessarily had a significant role in facilitating them; rather, the emphasis was on *capturing* connections – including ones that already existed as part of participants' everyday experience. As one staff member (Ci2) summarized it, the goal of the nature connection program area was to:

...look at how we can deepen the connection, foster a greater impact, with the connection that people have to nature. Some of it may be introducing people more to nature. But many people are already connected to nature or feel that they are, so it would be deepening that connection and translating what their connection might be into something that has stronger impact.

What is noteworthy about the work of this "translation" is that it involves, in at least some cases, a performative dimension. Users of the microsite were invited to elaborate their own specific

experience of nature connection as a way of performing their membership in a nature-connected movement – a way of both making their connection *count* (in terms of being made meaningful to conservation) and being literally *counted* in program success metrics.

These performative dynamics speak to a mode of affective capture that is largely unstudied in research on encounter value, but which is important to understanding big conservation's engagement with urban natures. One noteworthy feature of this performative aspect of nature connection is that because users self-enroll their personal wildlife encounters by narrativizing them as part of the nature-connected movement, even spontaneous (i.e., unstaged) encounters can be captured. This allows not only for a limitless storehouse of affective potential from each person's idiosyncratic experience to be harnessed and redirected toward programs with "stronger impact," but also opens the door to harnessing the transformative potential of "true" encounters characterized by shock and surprise (Wilson, 2019). Unlike in staged encounters, in which animals have already been rendered encounterable (i.e., made into "problem-free, generalizable" forms for consumption) before the encounter, here the messy, embodied encounters of everyday life are retroactively summoned into a value scheme. This raises some key concerns about resistance, which has been an important point of attention in theorizing animal labour. As Jason Hribal (2003) has argued, agricultral production systems evolved in response to modes of animal resitance – the development of fences to better thwart escapes, for example. As commodity capture is, in the case of urban wildlife, a post-facto event, no space for resistance exists. The narrative of nature connection means that only those encounters that subjectively read as postive, connective experiences are summoned. Conflicted encounters that are not felt to align with either the idea of nature or connection do not "speak back" to this kind of categorization; they simply are not performed and not counted. The self-enrollment of these individual experiences as personally

meaningful examples of the wider phenomenon of connection to nature also means that the organization bears no further association with, or responsibility for, animals that might compel a sense of connection, including those considered invasive and generally seen as problematic for conservation. This mode of capturing encounters thereby is able to avoid the organization having to comment on the worth of any particular urban animals (i.e., they are not bound to advocacy for coyotes), and also resists the risk of individualizing animals that has often marked efforts to capture encounter value.

These dynamics raise some important questions about what politics are enacted through a connectionist narrative, wherein fleshly, personal, and diverse encounters can be subsumed and homogenized within a universalizing narrative about love of life. The dangers of universalizing narratives in losing relational specificity is a critique with a long history in feminist thought. Early ecofeminists, applying this critique to a call for a politicized, contextual notion of care for animals and environment (Curtin, 1991; Davis, 1995; Donovan, 2003; Donovan & Adams, 2007; Kheel, 2008) were decidedly wary of deep ecology's overly romantic and universalist notion of oneness with nature that could be found in the "deep ecological self" (Gaard, 2011, p. 40). Cheryl Lousley's analysis of biologist E.O. Wilson's writing points to the universalizing trope of "charismatic life," which collapses the diverse and "meaning-laden acts of living" into "subtitutable icon[s]" of our love for nature. By posing charasmatic life as a "self-replicating force that exceeds mortal bodies," the specific is rendered abstract, marshalled as merely reinforcing examples of our innate attraction to the nonhuman world (Lousley, 2016, pp. 705-709). Lousley's analysis suggests that connection operates much like spectacle, except that instead of producing a sense of intimate encounter with an exotic animal that would normally be inaccessible to everyday experience, here the process begins with an intimate experience and abstracts it. In other words,

rather than collapsing scale to render a global problem immediate and personal, here personal experiences are rendered meaningful to the project of global conservation. These scalar dynamics point to another dimension of encounter value that has not yet attracted much theoretical attention.

Managing connections

The UWOs in this study were also deeply invested in the affective force of wildlife encounters, though their investment was different in some important ways. For the two NGOs, donors and volunteers were often brought to the organization through an impactful wildlife encounter (e.g., finding an injured or distressed animal). Organizations also relied heavily on people who had found animals to contain and sometimes transport them to the centre, efforts often driven by an affection for the animal. As one interviewee (WRs1) noted:

[It helps us] that people are willing to do a lot to help animals. Even out in the field, I remember for example one time [people] who drove several hours from their cottage with a nest of baby squirrels that came down in a storm, without calling first, and I insisted that they take it back. They were very unhappy with me but really wanted to help [the squirrels], and they did take them [back] and the mother retrieved those babies very quickly. I think its only because they cared at all that they were willing to do that, they could have been like forget you, its your problem now. And of course donors and volunteers, we wouldn't survive at all if they didn't care about the work we do.

While felt connections to animals were less of a critical feature for the municipal animal services unit (i.e., they did not rely on public donations for their work with wildlife, nor did they ask people to bring the animals anywhere), they also were dependent on some level of public approval of their wildlife response practices, and public cooperation, to make their work run smoothly.

There was also a sense in all three organizations – as in the big conservation organization – that feeling generated in an encounter is a powerful force that can be harnessed and redirected to positive effect. The public education imperative that binds UWO practice is grounded in the idea that encounters are a key means through which they can teach people about wildlife issues and promote concern for wildlife. While staged encounters sometimes figure into this work, spontaneous encounters are how most members of the public come into contact with UWOs, and thus seen as an important way to promote concern about wildlife issues. As one strategist (WRs2) at the rehabilitation centre noted,

I think everyone recognizes we're not going to change populations by saving another squirrel or raccoon – in those cases I think that's where we can do the public outreach, because people care [about the animal they have found].

In another iteration of their interest in affective potentials, two organizations in this study commented on the usefulness of organizational initiatives that allowed people to report sightings or other experiences with wildlife, as these were seen to create a sense of resolution for feelings generated in the moment of encounter. In the rescue and advocacy organization, this reporting (via an interactive digital map) was positioned as a mode of citizen science that facilitated a broader understanding of species at risk. Interviewees from this organization (Ras1, Ras2) suggested that reporting encounters gave people a way to feel like their experience was not isolated but part of a wider phenomenon. As one strategist commented, when people can go into the database and "see

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⁴³ For example, the rehabilitation centre in this study used some non-releasable animals in their community education programs to teach the public about threats facing wildlife. This is a common practice in their field; see Pospisil (2014).

their entries, they can see they've been part of the mass of people supporting the movement and their very record could play a key role...people can be part of a united front' (RAs1).

The animal services unit likewise hosted a website tracker where people could report coyote sightings or "incidents" within the city, though here the purpose of the site was not to facilitate concern for wildlife but to reduce it. Staff at the organization commented on the utility of these maps (ASs1, Asi2) in giving people who felt uneasy at seeing a coyote something concrete to *do* with that feeling by positioning that encounter within a wider context. As one strategist (ASs1) put it, the tracker had been introduced in part so that:

...people can see there are coyotes all over the city, it's not unusual. Like if you look at the map, every corner of the city has some sightings on it. So it helps us to support that message, this coyote [you have encountered] is not the only one in the city, to support that they're normal urban wildlife.

These comments alluded to the idea situating encounters within a broader context was a way of giving that feeling a place to go.

Unlike the big conservation organization, however, UWOs did not portray the affective potential of encounters as a benign reservoir to be tapped. Rather, they emphasized that felt connections to urban animals – especially as they were expressed in individual encounters – often had unintended consequences for the animal(s) involved, and sometimes also for people. Their comments reflected that the work of coexistence education centred on the need to mitigate these unintended consequences of expressions of affection or care for wildlife, and that their work was much more pointedly directed toward managing affective encounters rather than trying to promote or facilitate them.

I elaborate in the following sections the ways that this management represents a kind of underrecognized emotional labour for the organizations involved in navigating urban encounters. This concept requires some clarification at the outset, since there are several overlapping terms that have been used differently in different disciplines. Typically, the term emotional labour has been used by psychologists to refer to the work of managing one's own emotions in a work context in order to meet what is expected or socially desired within the tacit rules for emotional expression in a given organization. This may or may not intersect with the gendered labour of caring, whose societal devaluation has been a long-time focus of feminist scholarship. Another idea to add to this mix is the notion of affective labour, most famously developed by Antonio Negri and Michael Hardt, who posed it as an important aspect of the immaterial forms of labour that have come to increasingly define the labour force since the shift toward an information or service-based economy in the 1970s. The "creation and manipulation of affects" (Hardt, 1999, p. 91) are central to jobs in the service sector, 44 a characteristic that make the sector's products somewhat intangible. The notion of affective labour has been important to the concept of encounter value because it opens the door to think about other animals' roles in producing value by considering what "affordances" they bring to an encounter (Gibson 1979). As Jepson and Barua (2015, p. 96) observe, "nature is not infinitely malleable: a species (or individual animal) also causes us to think and act in certain ways by virtue of its physical and behavioral attributes." If a person is enchanted by the trumpeting call of an elephant, it is in part because the musicality of that call affords the enchantment. But the experiences of the perceiver matter, too – the same call might be perceived as grating to someone who lives with it everyday and for whom elephants

⁴⁴ This sector, as Hardt describes it, revolves around industries linked strongly to information communication and affect, such as in health care, education, entertainment, finance, and advertising.

represent a form of pestilence, a feeling that might thwart efforts to capitalize on human-elephant connections. In this way the commodification of encounter is seen as a "constant interplay between lively biological energies and characteristics and the formative, generative, forces of commodification and capital" (Collard & Dempsey, 2013, p. 2685). ⁴⁵ In the present study, I use the term emotional labour to refer to an interweaving of these three concepts, in which the organizations involved are tasked with managing the feeling generated in relational interspecies encounters – including their own feelings – a practice sometimes complicated by the feminization of care-work that has undermined their legitimacy.

The labours of love

Interviews with staff at all the organizations in the present study revealed that managing expressions of affection for wild animals (both within the organization and outside of it) was a primary difficulty in their work. It was the people who loved animals too much, commented one strategist at the rehabilitation centre, that were "more of a problem than people who hate them, to be honest" (WRs1). Those who become attached to the animals they encounter, another interviewee noted, "want what's best for themselves and not necessarily what's best for the animal, so they'll try to prevent us from doing the best thing for the animal, or not bring the animal in [for treatment]" (WRs2).

During my own years in wildlife rehabilitation, I likewise encountered many expressions of human affection that had disastrous consequences for animals: a lactating (human) mother attempting to breastfeed a nestling robin, and a man force-feeding a shivering ("excited") starling

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⁴⁵ On emotional labour for example see Brotheridge (2003). On labour of care for example see Gilligan (2018); Held (2006). On affective labour for example see Hardt (1999); Oksala (2016). On affordances see Gibson (1979).

last sight before death was the closing-in of a human face – agape, teeth-bared – because the bird's stress-induced gasping was interpreted as a plea for "mouth-to-mouth resuscitation." These are punctuative examples, but the unintended consequences of care shape the entire field of urban wildlife intervention profoundly. Perhaps most notably, the removal of healthy babies from their environment because they are believed to be orphaned or in danger (what some UWOs refer to as kidnapping) is a primary factor in the huge volume of requests for care of juvenile animals in rehabilitation centres. Resource limitations mean many babies must be euthanized by the organizations created to provide care for them. This emotional labour spills over into animal control organizations that must respond when there are no spots left for babies in rehabilitation organizations, or when they are found by people unmotivated to transport them there. In this study, it fell upon the staff at the animal services (domestic) shelter to euthanize all these spillover babies at the end of their shift.

As one rehabilitator (WRi1) commented, the unintended harms stemming from attempts to help animals are extremely "sad and frustrating" for staff in care organizations. Wild babies raised by their finders often become habituated to people, laying the ground for potential conflicts. As one animal services interviewee noted of her personal experience with neighbours raising a litter of raccoons: "they just let them go and it was awful, they were coming right up on the deck and putting their paws on our legs, even I was uncomfortable" (ASs1). Exacerbating such frustrations are the uncertainties accompanying a complex suite of legal prohibitions and professional ethics that dictate that no untrained/unlicensed person may assist with the care of wild animals even if

they desire to do so.⁴⁶ This means that UWOs must often remove animals from a member of the public who wants to raise the animal in order to euthanize them, another significant source of emotional stress.

These difficulties highlight one type of emotional labour that characterizes the field – the witnessing of animal suffering that results from some human expressions of affection for wild animals. Indeed, staff and volunteers at UWOs are the *only* witnesses to the wider landscape of suffering that stem from these urban multispecies entanglements. The wildlife rehabilitation organization and the animal services unit – whose activity is primarily driven by public requests for assistance – each reported more than 25,000 calls about wildlife per year, many of which represent animals who are sick, injured, orphaned, or dead. Even this significant number fails to fully represent the experience of UWOs or the number animals involved: many of those requests for help involve multiple animals – litters, typically – and the volume of encounters is exponentially higher in the spring and summer because of babies being born, creating periods of extremely high demand and staff burnout. ⁴⁷ The estimate also doesn't begin to account for numerous requests for assistance received by wildlife removal/pest control companies or by other organizations that provide conflict-resolution advice, nor those distressed or dead animals located independently by staff or volunteers of such organizations.

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⁴⁶ Legal factors include requirements around licensing for wildlife "custodians" which vary based on levels of federal or provincial protections for the animal in question, as well as public health restrictions (e.g., on handling rabies vector species). For injured animals, access to veterinary care can be an issue since most veterinarians are not trained to work with wildlife and those who are may be difficult to access for members of the public. Because caring for sick, injured, and orphaned wildlife without adequate training and/or appropriate resources is considered to pose a threat to the animal's well-being, many wildlife rehabilitators see it as an ethical conflict to give out information on how to do so on an ad-hoc basis (though some rehabilitators have foster programs where they train caregivers to raise certain species of babies under the rehabilitators' supervision).

⁴⁷ Compassion fatigue and burnout in animal care fields has been well documented, typically related to the difficulty of witnessing animal suffering and to decision-making about and performing euthanasia. See Hill et al. (2020) and Morris (2012).

A second, related, type of emotional labour is expended in navigating the emotional reactions of humans in such encounters. A number of interviewees (WRs1, WRs2, ASs2, ASi2, RAi1) commented on the challenges of dealing with the extremes of public feeling about wild animals, where people either "wanted to kill them" (WRs1) or were inclined to "save everything" (ASi2). Oscillating between these poles left staff exhausted, tasked with trying to encourage a hands-off coexistence from both directions:

[With] the people who want to kill all the wildlife, you're trying to convince them that leaving them alone means not killing them, and the people who want to take them into their homes and feed them and let their children play with them...you're like no, that's not leaving them alone either. (WRs2)

As one rehabilitator commented, those in the latter category represented a particular difficulty for staff trying to explain cases where animals were not good candidates for rehabilitation. 48 Unlike those inclined to harm animals, they observed, who could usually be talked out of "whatever bad thing they have in mind," the same "logic" would not work on those "humaniacs, where they're just crazy and won't accept your explanation of why you can't help that animal, why you can't release it with one leg or no eyes, or why you can't take it home as a pet" (WRs1). One interviewee at the animal services organization (ASi1) commented on the difficulty of trying to pick up injured animals with people looking on: "They're screaming at you, watching you, saying don't do this or that, then a crowd forms…most people are involved so heavily their emotions go rampant, they just lose it." Some people would get upset, this interviewee (ASi1) said, seeing an animal struggling to escape a snare pole: "We're not trying to hurt the animal, just trying to get it

⁴⁸ This is not an insignificant number of cases. The rehabilitation facility in this study had a release rate of around 40%, which is consistent with norms in the field (Grogan & Kelly, 2013). While not all of those remaining 60% are euthanized (many animals die in care on their own), euthanasia is a regular part of the practice.

the safest way we can... it's sick and they want us to grab it with our bare hands and cuddle it." A strategist at the animal services organization echoed, "part of the conflict education that we do a lot is trying to get people to understand it isn't Bambi and Thumper. It's something different. But a lot of times that's how people relate to them. Sometimes people feel an emotional connection to them like they would to a dog or cat, and that becomes a problem" (ASs1). Interviewees emphasized that much of the work of coexistence education centres on trying to convince people of the potential harm that might come from their desire to form physical or emotional connections with wild animals – by attracting or habituating animals through feeding, say, or handling them while they are incapacitated and frightened – and to encourage a more emotionally moderate view (RAs2, RAi1, WRs1, WRs2, ASs2, ASi2, RAi1). As one manager put it, "You can't hate them or overlove them, you just have to live with them" (WRs2).

Several interviewees also commented on the ways in which the feelings generated in encounters could amplify through social and other media, leading to a reverberating chain of effects. Two animal services staff (ASi1, ASi2) discussed the way that a story about a distressed animal or conflict situation in the city would immediately prompt a wave of calls expressing concern or fear about the situation or the species involved. One interviewee from the rehabilitation centre (WRi2) described an instance where a picture of a raccoon "hanging from its claws in front of a building" was posted on social media: "Within hours I had calls from Global News, CBC, PETA, everyone was calling wanting to know why [our organization] wasn't responding. I was like, really, we're a charity! We just got the call and our rescue team is [in another municipality]." In the end, noted this interviewee, a news helicopter went to take pictures of the raccoon for a story and scared it off the ledge:

...it fell and eventually had to be euthanized because the stupid helicopter spooked it. So, it's sensationalizing things that wouldn't necessarily be talked about [otherwise] and then it causes an awareness of organizations'...inability to react [in the desired way]...[our organization] was getting a lot of bad press because one person posted this, and then it goes viral. So then we spend half a day trying to put that to rest.

It is not only UWO's work with the public that is marked by efforts to discipline overly effusive affections, but also their internal practice. This is a particular point of emphasis in those organizations that offer rescue and/or rehabilitation services, since close encounters with humans are stressful for most wild animals, and stress has deleterious – and sometimes fatal – effects on animals' health. Rehabilitation facilities commonly take measures to minimize contact between humans and animals, for example covering patients' heads during medical procedures to prevent eye contact (Myers, 2006) and providing hiding areas in enclosures so animals have an opportunity for "predator avoidance" (Miller, 2012, p. 28). For those animals too young to have developed avoidance behaviours, limiting human contact is equally important, since too much contact may habituate the animal to humans and inhibit the development of their avoidance responses. To tame a releasable wild animal with affection, for many rehabilitators, is to do profound harm. Concerns about this kind of de-wilding include its potential to negatively impact an animal's ability to socialize with conspecifics and find appropriate food. Perhaps most prominently, too much close contact with humans is seen to produce human-friendly behaviour that can ultimately result in the animal's harm or death (since they may approach people or not behave in a species-typical way). For these reasons maintaining emotional distance from the wild animals they care for is of great importance to many wildlife caregivers, a way to enhance survivability through separation. Even the animal services staff, who did not share a mandate to care for animals, were concerned about overly-affectionate orientations toward animals – ones

that left residents "literally hugging and holding raccoons" (ASi1) – and their impacts on community welfare.

Another reason for maintaining emotional distance is to protect staff and volunteers against attachments to animals when there is no possibility of an ongoing relationship. Nearly all animals in the facility will either be released or die, and when euthanasia is required, it is staff themselves who must do the killing. One rehabilitation manager noted that they had euthanasia protocols in place to try and minimize what another rehabilitator (WRs2) called the "emotional toll" of the work. These included guidelines on what injuries represented too poor a prognosis for a given species, and clear rationales on why there were upper limits on the number of babies they could responsibly take. These guidelines did not always provide easy answers, however, and the centre would sometimes try to rehabilitate animals – where resources permitted – whose prognosis was guarded. These "long shots" were often hard for staff and volunteers who had regular contact with the animal through feeding and cleaning, and the management had worked to improve both internal communication about the animal's progress and prognosis, and "knowing when to end things before it becomes a big problem." In recognition of people's particular emotional attachments, vets and senior staff took care to keep other staff and volunteers informed about long-time patients and not euthanize them on the days that invested staff or volunteers were off work.

Even though staff and volunteers' emotional attachments to animals presented challenges, there was also an acknowledgement that this is often what drove people to volunteer or work for the organizations. As a strategist at the rescue and advocacy organization noted, volunteers who went out looking for injured animals and couldn't find them would often not continue on as volunteers, even though their failure to encounter injured animals represented a good for the

animals and the organization (i.e., finding no animals potentially meant fewer were injured, or that the organization had a critical mass of volunteers). As this interviewee emphasized, "they *need* that experience [of direct encounter] in need of help in order for them to feel justified to continue to volunteer for the organization."

These reflections in concert pointed to a significant organizational trepidation in UWOs about the ways in which the feeling generated in encounters might go rogue and create problems for their organizations and/or negatively affect animals' welfare. The organizations had the same set of concerns but with different points of emphasis – the rehabilitation centre focused more on preventing harm to animals, and the animal services unit more on the difficulties that affective encounters presented for getting their work done efficiently.

Part 3: Affective flows

The differing perspectives on affective encounters between the big conservation organization in this study and the UWOs raises some critical questions about affective *flows* and the political arrangements by which they are harnessed. Despite widespread belief that affective encounters feed a broader concern for nature, the particular dynamics of such flows have been considerably harder to trace. Constance Russell (1999) has challenged the much-accepted linearity of the relationship between nature experience, caring, commitment, and ultimately pro-conservation action. Fletcher (2017, p. 155), reiterating Russell's point, notes that:

Experience within particular spaces is assumed to inspire caring for a generic 'nature' writ large. The crux is that the chain of causation can break down at any of these points. An experience may provoke caring without necessarily compelling commitment; by the same token caring can inspire commitment without necessarily leading to action. Further, action inspired by commitment need not result in any progressive change.

A growing body of research in conservation psychology and wildlife tourism has sought ways to operationalize these flows, homing in on how the intangible aspects of affective encounters (Curtin, 2009) are translated into pro-conservation behaviours (e.g., Ballantyne et al., 2011; Clark et al., 2019; Clayton et al., 2011; Tisdell & Wilson, 2005). For example, some studies have looked at quantitative assessments of "conservation caring," a factor that links the affective component of caring-about to the action component of caring-for (Rabb & Saunders, 2005; Skibins & Powell, 2013). It has been suggested that it may be more generative to think of a circular feedback loop wherein care and connection incite pro-conservation behaviours, and then the performance of those behaviours in turn reinforces a sense of connection (Mayer & Frantz, 2004; Vining, 2003). These studies exist in intersective parallel with a larger body of research in environmental education on the importance of nature experience in facilitating future pro-environmental behaviours, from recycling to community advocacy (e.g., Chawla, 2009; Wells & Lekies, 2006; Zylstra et al., 2014). Precisely how such affects might take flight from a moment of encounter and be transformed into "conservation caring," however, remains poorly understood (Jepson & Barua, 2015). Russell and colleagues' own research with whale watching tour participants suggests a much more complex process at work in emotional engagement with whale encounters, in which both participants' prior experiences, as well as the narratives through which they framed expected encounters, were important in the way these experiences resonated (Lloro-Bidart & Russell, 2017; Russell & Hodson, 2002).

The contradictions of connective flows

In the case of urban wildlife, the claim about affective flows rests on something of a contradiction, given the historical (and lingering) disdain of urban environments in conservation logics. Wild

animals present in these environments occupy a sort of liminal status where they neither seem fully wild nor domesticated but rather something in between (e.g. see Donaldson & Kymlicka, 2011). As many feminist thinkers have pointed out, cultural ideas about domestic animals illustrate the ways in which bodies that do not align with a masculine, free, and sublime wild are seen as diminished or even aberrant forms (Davis, 1995; Haraway, 2008; Russell & Fawcett, 2020; Taylor 2014). Intimations about urban encounters as a point of nature connection, then, suggest that the very animals that have been cast as *illegitimate* representatives of nature are still assumed to be able to represent it in an experiential way, so as to serve of conduits of care for the nonhuman world more broadly. The pigeon paradox does not refute this idea but reinforces it – the "paradox" is that though we may deem these natures less worthy, we may be forced to conserve them anyway because of their affective value.

That such flows exist on an experiential level is, itself, a questionable claim.

Unsurprisingly – given cultural tropes about nature and wildness – there is evidence to suggest that encounters with urban animals are not cleanly encoded as nature experiences (Leong, 2009). Rather, they are often read through a more complex lens of multispecies sociality where domestic and wild are not defining categories. Leesa Fawcett's (2014) exploration of children's ideas about common urban animals describes young children's tender stories of kinship and friendship with wild animals, suggesting that these animals did not read as representatives of a separate nature but were instead seen as part of a textured multispecies world.

But neither are urban animals neatly divorced from their wildness. As Angela Cassidy and Brett Mills (2012) analysis of urban foxes shows, the threat of wildness remains embedded even with familiar and companionable others, entangled with other cultural anxieties (see also Charles, 2014; Corman, 2011; Fine & Christoforides, 1991; Holm, 2012; Jerolmack, 2008). Multiple

readings, they show, can coexist and overlap. Colin Jerolmack's research on urban pigeons (2013) makes the point that the idea of connection to nature – undergirded by the belief that we are fundamentally alienated from nature – primes us to miss the ways in which our relations to other animals are not neatly defined by such concepts, and also limits the places where we might imagine a feeling of connection to go. As Jerolmack (2013) observes:

While the child who takes heed of the birds around her might feel more connected to nature, she might also – or might instead – feel more connected to her neighborhood. And glimpsing a rare piping plover is meaningful to the bird-watcher not only because she experiences a novel animal encounter, but also because she shares the experience with a community of birders. (p. 23)

These arguments cast doubt on the notion of a natural flow between encounters and nature connection, one that should direct our attention to the scalar dynamics of encounter value. It is well-recognized that lively commodities, like other commodities, are always at once global and local, dynamically taking on new meanings and forms at different points in their circulation (Castree, 2004b; Collard & Dempsey, 2013; Tsing, 2011). Barua has suggested that a key feature of spectacular accumulation is that it attaches to multiple dimensions and venues of liveliness. An image of a charismatic animal has a "speculative dimension," that holds the "promise of potential encounters, yet to come" (Barua, 2017, p. 285). Real-life encounters (e.g., in safaris or wildlife tours) can likewise amplify the value of a species-encounter in other forms (such as wildlife documentaries) as well as constrain it (in cases of conflict or other undesirable encounters). Spectacular forms and representations of animals intersect in complex ways with their conservation on the ground (Barua, 2014a; Collard, 2016; Lorimer, 2015), with global commodity forms attached in varied ways to local experience. Encounters with elephants are attractive to

western consumers, but those same encounters can be frustrating to those who navigate conflicts with elephants in everyday life. Local experience with abundance of a certain species may stand in contradiction to scientific narratives of decline (Laforest et al., 2018), or vice versa where a species may be threatened only at the local level (van Dooren, 2015).

Largely, however, analyses of these global-local connections have focused on particular species and the ways that encounters are connected across venues and scales. The logic of affective flows from urban encounters to *nature* requires an analytical lens that can capture more dynamic modes of commodity formation, one that crosses species lines to gather affective potentials. This demands a closer understanding of the kind of lateral flows that Jerolmack suggests. Some studies in conservation psychology have begun to dig at the idea of lateral dimensions of affective flow and its impact on encounter value. For example, drawing from marketing theory on "oppositional brand loyalty," Leo Douglas and Gary Winkel (2014) found that charismatic flagships have unintended "contrast effects" wherein they may succeed in their goal of attracting funds for conservation, but in so doing engender a negative feeling for other similar species that are not featured as flagships. Douglas and Winkel's study explores contrast effects with similar species (two kinds of endangered parrots), but the idea that contrast effects exist between conservation's charismatic "exotic" species and everyday local species – wherein spectacular natures render our immediate natures mundane and comparatively less valuable – is a common claim (Barua, 2011; Stibbe, 2012; Sullivan, 2016). Research supports the idea that exotic wildlife is valued more highly than local wildlife (Ballouard et al., 2011; García-Mira et al., 2005; MacDonald et al., 2015), though how much these values have reciprocal effects on one another – wherein the allure of global natures actually *makes* the local mundane, or vice versa – has not been well established.

More-than-human political ecologies

These examples suggest that affective flow, as it is positioned in claims about the value of urban encounters, is neither simple nor linear but rather carefully configured and disciplined to serve a particular end. This discipline compels attention to whose interests are served by the process. As Lorimer (2015) has observed, the commodification of encounter cannot be said to be inherently bad, nor its absence inherently good, but rather it is an invitation to "flag the human politics performed by its commodification, [by] attending to whose values are performed in situations of discord" (p. 158).

This question falls within the ambit of political ecology, which has been an important analytical lens in exploring the dynamics of encounter value. In using the metaphor of "flow" here, I have borrowed loosely from the generative explorations of politics of scale in urban political ecology, wherein flows of natural resources (water is a paradigmatic example) are traced against flows of capital, eliciting metabolic relations that wend through multiple scales, producing complex socioecologies (Kaika, 2005; Keil, 2003; Swyngedouw, 2004; Swyngedouw & Heynen, 2003). The theorization of affect as a force of perpetual mobility (Thien, 2005) suggests it may be useful to think about an *affective politics of scale*, wherein feeling is also a kind of resource to be harnessed and reconfigured.

In another way, though, metaphors of harnessing and reconfiguring flow may be imperfect for affect. A key point of emphasis in affect theory is that affect is always an "excess" – a volatile force that resists discipline and containment (Thrift, 2008). It has often been defined as a non- or pre-linguistic intensity that operates within and between bodies, a sensing that operates

As such, it defines the limits of human discourse to "construct" the world, and the growing attention to affect in the social sciences and humanities has been a way to displace poststructuralism's overreliance on "talk and texts" (Wetherell, 2012, p. 3). At the same time, affects are a key target of powerful interests. As Ben Anderson has argued, this quality puts affect at the heart of a paradox, where on one hand it is "unassimilable" within "systems of signification or narrativization," but on the other hand, it has become a key mode through which power operates "from below," wherein ideologies can "saturate" affects of everyday life (Anderson, 2010, p. 162/164). Here we might see, for example, difficult-to-define shifts in mood or structures of feeling that underpin neoliberalism and become central to its pervasiveness (Anderson, 2016; see also Ahmed 2004, 2013).

These complexities are centre stage in contemporary efforts to widen the scope of political ecology. Affect is a relatively new consideration in the field (Hayes-Conroy & Hayes-Conroy, 2013; Singh, 2018), and clean comparisons between affective and material commodities are sometimes difficult. For example, while it is easy to think of how feeling might be enrolled in political networks, how we might think of concepts like scarcity is more difficult. Encounter value likewise challenges traditional Marxist notions of commodity because the value is relationally produced with actors that have not normally been seen to be political subjects under capitalism. This makes it impossible to cleanly separate the "resource" that provides the raw material for commodities from the labour that produces the commodity, as would be typical in political economic analyses (Wadiwel, 2018). The kind of encounter value described in this chapter, where

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⁴⁹ Brian Massumi's influential early work in the field (1995) was pointed in its positioning of affect as distinct in this way from emotion, since emotion was the "socio-linguistic fixing" of an affective experience, an act of taming that shut down affect's wild and infinite possibilities.

the process of commodification is detached from the moment of unstaged encounter, also raises questions about where exactly the act of consumption happens and who the consumers are, and further complicates the idea of how we might understand animal labour, which is normally linked to the contexts where animals are rendered encounterable.

This muddiness presents some difficulty for an analytical approach centrally concerned with how natural resources are controlled through relations of power (Bakker, 2010), and the disenfranchisement that results from blocking or limiting particular people's access to those resources (Robbins, 2011). Nonhuman animals, traditionally, have been considered on the "resource" side of the equation and, while they have not been seen as totally inert, neither has their agency in networks of power and governance been a point of emphasis – they are rather the backdrop through which we can determine who the human winners and losers are. This perspective has begun to shift over the last decade, where an increasing number of analyses in (or borrowing from) political ecology have begun to reimagine animals not as "objects of power struggles" but rather "likewise subjects of and in spatially uneven practices" (Hobson, 2007, p. 253). These shifts toward the recognition of animals and affect are entangled, since affect opens the door to a broader view of world-making than a focus on discourse has allowed. 50 It is accordingly a strong emphasis in more-than-human political ecology, which aims to move beyond a purely representational politics (Barua, 2014b; Dempsey, 2011; Hinchliffe et al., 2005; Lloro-Bidart, 2017; Margulies & Bersaglio, 2018; Singh, 2018; Tzaninis et al., 2020).

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⁵⁰ Affect is seen as a key force in animating assemblages in an evolving body of work on more-than-human sociality. Deleuze and Guattari's (1988) concept of "becoming-animal," for example, has become a prominent heuristic in animal studies for exploring affect as the reorganizing force of encounter, in which the fantasy of the sovereign, individuated subject is undone. See for example Baker (2002), Dave (2014), Lorimer (2007).

Winners and losers

A first key question in evaluating the emergence of urban animals into a new realm of encounter value, then, is what is at stake for urban animals themselves in this process? As I have illustrated here, connectionist narratives that fail to attend to the consequences of diverse expressions of connection represent a significant labour for UWOs, and can negatively affect individual animals. The flipside of this, perhaps, is that these narratives also assert a value for animals that have not normally had any positive value in conservation – individual animals we might encounter in everyday urban living, including those that represent common and even invasive species. The valuing of connections with any kind of urban nature seems to have, in this sense, a redemptive potential those animals that are not generally considered ecologically valuable.

A closer look at connectionist narratives, however, suggests that not all life is valued equally. In Wilson's writing about biophilia, the 'bios' that would serve our need for connection was not in any given life, but in the *diversity* of life (Wilson, 1984). Wilson's was a conservationist's plea, and biophilia seemed largely a way to add an emotional dimension to the cold scientism of biodiversity as a value signifier (Lousley, 2016). As Donald Maier has argued, Wilson's yoking of biophilia to biodiversity was a conceptual reach, since the "diversity required for the purpose of nurturing biophilic tendencies appears to be vanishingly small" (2012, p. 5). The seeming equitability suggested by the reference to the *bios – all* life – seemed to not hold up in Wilson's later lament about the possibility of a future dominated by monocultures – domesticated plants and animals and, presumably, the kind of resilient wild species that thrive alongside humans (Sandilands, 2014) – which represented an emotional wasteland he calls the Eremocene: the age of loneliness (Wilson, 2016). The loneliness of life with pigeons and rats betrays the equal valuation of all life that biophilia seems to suggest.

Many efforts to promote urban nature experience as valuable seem similarly conflicted about where exactly to place the value of affective connections when they do not align with biodiversity goals. Michael Samways (2007) contends that the generalist species found in cities may be enough to sustain children to adulthood, when they can then be properly exposed to the "nuances of endemism" (p. 1996). Others justify that real nature experience can still be found in cities because many of them fortunately "retain substantial elements of biodiversity that are of relatively high quality" (Miller, 2005, p. 431). Assessments of how particular species contribute to the "quality" of biodiversity is itself a shifting target, and the way these definitions are reflected in actual species protections is not always consistent (Van Dooren, 2011). As Jessica Dempsey (2013) has argued, the neoliberalization of biodiversity conservation has meant that even common native species have an increasingly precarious status. As she demonstrates, the transformation of biodiversity into a human-insurance metaphor has shaped a bio-economic framework that seeks to "identify the differential contributions of nonhuman living things" (p. 2565) to ecosystems services provision. This framework is informed by Buzz Holling's resiliency theory, which draws on the hypothesis that only "a few key species are needed to keep [ecosystems] in motion," and the rest are "passengers" (Dempsey, 2013, p. 2566), ultimately expendable.

Clearly, the value of many urban species and individual animals are rendered unstable in this kind of ecosystem services model. This instability can be seen in the unstated inverse premise of the pigeon paradox: that undesirable encounters with urban animals might, through the logic of affective flows, *diminish* our concern for the natural world and thereby justify the destruction of maligned species. This does not bode well for the "trash animals" that most visibly populate the urban landscape (Nagy & Johnson II, 2013), who often fall into the ranks of what Deborah Bird Rose and Thom Van Dooren call "unloved others" (2011, p. 1). The emerging literature on

ecosystem *dis*services highlights their vulnerability: in such a framework, we might rationally compute the benefits of contact with nature against the unpleasantness that comes with urban animals straying inside buildings, defecating in public spaces, or simply "looking ugly" (Lyytimäki, 2014).

Rosemary-Claire Collard and Jessica Dempsey's (2017) analysis of the ways that nonhuman life matters to capitalism likewise finds that valuations are unstable. They observe that, as in the human case, a diverse body of unwaged nonhuman labourers create the conditions for capitalism. Urban "pests" have normally been unvalued, historically rendered a threat to capitalist production (see also Corman, 2011). The valuation of urban encounters suggests a category jump for threatening animals into the "reserve army," those with "future exchange value" that are "waiting in the wings to be called into production processes" (Collard & Dempsey, 2017, pp. 79, 87). As the authors note, though, this value is unstable. Members of the reserve army may swiftly be relegated back to the fold of "threat" if they are damaged or cause damage.

Stephen Kellert and E.O. Wilson's (1993) theorization of biophilia lays bare the fate of "unloved others" at the level of connective expression. They argue that our attraction to Life exists as part of a set of "hereditary learning propensities" that include both affectionate *and* aversive feelings toward more-than-human others, each adaptive in its own way. Kellert's work contributes to this perspective a typology of nine biophilic values wherein, for example, human affection and attachment to nature (a humanistic value) helps us develop cooperation, trust, sociability, and self-confidence, while our fear and anxiety about nature (a negativistic value) can simultaneously help us avoid harm (2005). Kellert's typology suggests an insidious moral legitimization of harm to those animal others we feel threatened by. As he describes it:

Aversive reactions to nature can at times lead to destructive practices. Still, the inclination to fear and occasionally harm elements in nature is more typically expressed at moderate levels. Avoiding threatening aspects of the natural world is a functional tendency in any species that helps avoid harm, injury, and even death. When it is rationally manifest, *people benefit from isolating and sometimes eliminating fearful natural elements...*Lacking this awareness, people frequently behave naively, taking unnecessary risks and ignoring their inevitable vulnerability before powerful and unpredictable natural forces...By recognizing a power greater than ourselves—forces that can defeat and destroy us—we can cultivate feelings of deference and respect." (Kellert, 2005, p. 56)

If Kellert's argument has any value to evolutionary theory – a claim that has been the subject of much critique⁵¹ – it clearly is a flawed model for considering the interests of animals themselves. The extreme harms that face many animal species attempting to live in proximity to humans – our regular mass extermination of "pest" species is one example – neither seem "moderate" nor driven by a "rationally manifest" sense of self-preservation. There is little evidence to suggest that conflicted encounters with "pest" species ultimately provoke, as Kellert's argument suggests, a sense of "deference and respect."

These theorizations highlight that despite the inclusive air of connectionist narratives, affective valuation is not necessarily beneficial for urban wildlife, does not assure their mattering as either species or individuals, and may justify harm toward them when this serves its affective purpose. It pins animals' value, in other words, to the whims of our affection. These are important concerns, obviously, for maligned animals. Treatises on the more-than-human city have thus been

⁵¹ Many have taken umbrage with Wilson and Kellert's claims about biophilia's evolutionary role. Adrian Franklin, for example, writes that "this paradoxical and confused argument claims that contemporary love for nature derives from an evolutionary past and is a necessary part of our development, but it is clear that in fact, the argument flows the other way, namely, contemporary concerns for, and expressions of value in nature are being projected *back* into deep history, about which Kellert and Wilson know very little, and across the length and breadth of human diversity, about which they also appear to know very little." (Franklin, 2002, p. 237).

understandably wary of the ways in which these feelings can inform a politics of selective inclusion in urban re-naturalization efforts. As Jonathan Metzger asks, who, in a more-than-human city, is "a worthy urban commoner and who is merely a passive resource or even a pest and a nuisance? And at what costs are these decisions made? Who pays the price, and how are they taken into account in these decisions?" (2015b, p. 43).

The production of encounter value

A final pressing question for a political ecology of urban connection is how we might think about the relationship between big conservation's interest in cities as spaces of connection and the labour of UWOs. I do not mean to suggest, in looking at these organizational points of overlap, that big conservation's interest in urban connection *drives* the harmful expressions of affection that shape UWO practice. At the same time, it would also be remiss to not look at the wider picture of how the cultural resonance of connection-to-nature underlies some material shifts (e.g., urban greening initiatives, and programs to facilitate closer encounters) that may have unintended consequences for both urban animals and those who mitigate encounters with them. And it is also clear that, first, the labour associated with those unintended consequences falls disproportionately on UWOs, and second, it is possible for connectionist narratives to evade explicit reckonings with these biopolitical trade-offs.

The differential weight that UWOs carry demands closer interrogation of how they themselves are involved in the production of this lively commodity, and thus its potential for capture into conservation's circuits of capital. In Tsing's phrasing, what work must be performed to *conjure* urban animals' potential for economic performance in schemes of conservation value? (Tsing, 2011, p. 57). One dimension of this issue is the discursive work of defining right relations. If UWOs do, at least in some ways, reproduce the idea that urban animals are proximal conduits

for care about a nature more worthy or legitimate, they become part of a system of value generation for conservation projects that do not benefit those animals directly. They are, in a sense, caught on the horns of a dilemma, wherein the narrative of the pigeon paradox legitimates their work within current systems of value, but may ultimately reinforce it diminished status. This dilemma is complicated by the fact many UWOs may also see cities as a space for building connections to nonhuman others. Several interviewees from the UWOs in this study spoke to their perception of an urban disconnect from the more-than-human world and a need for local organizations to address it (WRs2, WRi1, RAi1). In other words, despite the labour that comes with undisciplined affections for wild animals, whether or not they themselves would see this labour as problematizing narratives of "connection" to urban nature is uncertain. Defining these commitments will be a useful point of attention for UWOs as urban natures gain legitimacy in the wider field of conservation.

It is also possible to look at the question of conjuring value through a more material lens: by providing response to individual wildlife encounters, UWOs give the feelings attached to those encounters a place to go – this is perhaps most notable in the case of organizations that provide care for injured or displaced animals, since their rescue and rehabilitation services affirm the felt connections of the person who has encountered that animal and sought help for them. However, the public's sense of affective resolution to an encounter may take many other forms that involve UWO labour – for example, information given by UWOs may serve to mitigate anxiety and uncertainty about wildlife encounters, and even the bare fact of an animal's removal from public space (even if that animal is to be euthanized at a city shelter) provides a means of relieving distress for onlookers. In this way UWOs can be seen as shock absorbers both for encounters that do not intuitively read as experiences of nature connection – conflicts and other collisions – as

well as facilitators for the encounters that do read that way. Theorization of affective labour has had to grapple with this notion of "positive externalities," where holders of capital can benefit from the attachments and passions that affective labour produces without having to subsume or organize labour. Instead, capital may simply appropriate "autonomously produced common wealth such as knowledges, languages, codes, information, social relationships, and affects" (Oksala, 2016, p. 292). If we consider a feeling of safety or resolution that comes with a wildlife response infrastructure a kind of externality of the work, it is not then out of place to think of UWOs as having an important role in maintaining the affective resource that narratives about urban connection require. As Loftus observes, it is not only daily life that is "transformed by capital; capital is utterly reliant on human and non-human acts that go into producing and reproducing those everyday lives" (2018, p. 94).

For political ecologists, the cachet of rhetoric about local community engagement in big conservation has been worrisome, because it stands to undermine the local as a key site of resistance to globalist networks of resource control (Ogden et al., 2013; Robbins & Moore, 2015). The way that our lived, embodied relations with nature – those captured in Tim Ingold's influential theorization of dwelling (e.g., see Johnston, 2008; Lorimer, 2006; Willow, 2015) – inherently undermine an "economy of appearances" has been of great interest to analyses of conservation politics (Igoe, 2010; Tsing, 2011). As Lorimer (2015) observes, critical research on commodification of nature has often sought out those unalienated encounters, rich with idiosyncrasy, that resist logics of market exchange. The idea, then, that conservation might still be able to extract the value from these idiosyncratic encounters through a narrative of nature connection appears to threaten the divide between "lived ecologies" and "the appearance of

things" (Barua, 2017), suggesting some new elements for consideration in the operation of lively commodities.

The critique posed in this chapter needs some final qualifications. To interrogate the politics of urban nature connection is risky, because it may seem to undermine the undoubtably real personal importance of affective relations with nonhuman others, as well as the many expressions of human connection to nature that are beneficial for animals and humans alike. This is not my intent – I share the sentiment expressed by all organizations in this study that affective relations with other animals are deeply meaningful and important. I likewise do not mean to suggest that organizational programming that focuses on facilitating nature connection has not had important positive outcomes for many individuals. But it is the easy resonance of this idea that makes it vulnerable to co-option by powerful interests – it is the intuitive truth of our intrinsic attraction to life that seems to "confer innocence" on notions like biophilia as a conservation ethos (Lousley, 2016, p. 709), making it possible to sidestep explicit conversations about who benefits from connection (both human and nonhuman), and to evade what Metzger has called the "daunting questions of nurturing and killing" that are part of navigating human-wildlife relations in the city (2015, p. 43). What I hope to have illustrated here is that the degree to which organizations calling for connection are embedded in the local environment – where complications of affective interspecies meetings play out – is an important consideration.

Another qualification is that to observe the ways some lives are marginalized in a schema of ecological value should not suggest that this is not an important and necessary schema. Rather, ecology is critical to understanding the systems that support multispecies life more broadly, and to guide our ethical responsibility in preserving that life. But, as many ethicists looking at urban animal relations have argued, it is also incomplete in its consideration of who can matter

(Acampora, 2004; Donaldson & Kymlicka, 2011; Michelfelder, 2003; Palmer, 2003). A question that both inspired this study and continues in its wake is how UWOs do – and might – navigate alternative value frameworks that might engender a more expansive notion of nonhuman worth.

Chapter 5: Urban (post)natures

A guiding problematic for this study has been whether big conservation's growing engagement with urban natures creates a friction point with organizations who navigate human-wildlife relations in the city at close range. In the previous chapter, I explored the tensions around the notion of connection to urban nature; in this chapter I focus on the concept of nature itself, the ways that the organizations in this study navigate the concept, and what those navigations mean for urban intervention practices. I begin with an interrogation of the apparent shift toward a postnatural framework in some big conservation organizations, which demands, new conservationists contend, a re-orientation of the field to focus on conservation in the spaces where people live and work. I then look at how this shift is reflected in the big conservation organization in this study. Finally, I focus on what UWO practice may tell us about how ideas about postnaturalism fit with their navigation of human-wildlife encounters in urban spaces.

New natures?

The first question that needs attention is: to what degree we should read new conservation's call to abandon the pristine as a true ontological shift? As the data from the previous chapter affirms, some fidelity to the concept of nature as a category marker persists in concepts like connection to nature. In proposals for new conservation, arguments have tended to weave between emphasis on the *impracticality* of protecting nature from humans, and a challenge to the actual concept of nature.

New conservation's clarion call (Kareiva et al., 2012) emphasized that the re-orientation was grounded in an ontological problem. The pristine wilderness that conservation has

traditionally sought to protect, the authors argued, has always been a working landscape shaped by human imperatives (see also Distinctive Voices, 2011). As Kareiva et al. argue:

One need not be a postmodernist to understand that the concept of Nature, as opposed to the physical and chemical workings of natural systems, has always been a human construction, shaped and designed for human ends. The notion that nature without people is more valuable than nature with people and the portrayal of nature as fragile or feminine reflect not timeless truths, but mental schema that change to fit the time. (2012, section 3, para 4)

In place of the pristine, new conservation has embraced the metaphor of nature as a garden in the making (Keim, 2014). Kareiva et al. note the global garden is not "a carefully manicured and rigid one, but a tangle of species and wildness amidst lands used for food production, mineral extraction, and urban life." (2012, Section 3, para 5). In her 2011 book *Rambunctious garden:*Saving nature in post-wild world, Emma Marris calls for an approach that "is proactive and optimistic; it creates more and more nature as it goes, rather than just building walls around the nature we have left" (p. 2). An earth-as-garden metaphor aims to reorient conservation to dynamic and future natures, unsettling the moral authority of the "Edenic" sciences like invasion biology and restoration ecology, which seek to protect originary natures or restore landscapes to an arbitrary historical baseline (Robbins, 2014, p. 104).

This conceptual challenge to nature exists alongside another new conservation argument, however, that traditional land protection approaches must change not because they are ontologically nonsensical, but because they just haven't *worked*. Thus the call to better serve human interests by focusing on environmental benefits for humans like "clean air" (Voosen, 2012) was seen to be a necessary move away from what Kareiva has called the "dead end concept" of biodiversity preservation that appeals only to "white suburbanites" (Collard et al.,

2015, p. 324; see also Marvier & Kareiva, 2014; Marvier & Wong, 2012). Engaging people in cities is a key element of this pragmatism – as Kareiva argues, "the majority of the world's people are urbanites. If conservation is not relevant to city dwellers, what hope of success do we have? Relevance to urbanites is not a sellout or a compromise of principles. Relevance is a strategy for success" (Kareiva, 2014, p. 635).

It was here where new conservation fails to align with the more radical notions of postnaturalism that have emerged in the critical social sciences and humanities over the last several decades. Kareiva's claim that nature is a social construction echoes a robust body of scholarship on this topic that rose to prominence in the 1990s.⁵² The interrogation of nature as an empirical category rather than a biophysical entity is now de rigueur across a wide range of theoretical traditions (Castree, 2005; Ginn & Demeritt, 2008; Jones, 2009). Since the 1990s, however, numerous academic turns toward relationality, vitality, and materiality have shifted the terms of this critique. Those theoretical positions we might now define as postnatural are interested not only in challenging the nature-culture binary, but unsettling binary ways of knowing more broadly – including those that divide subject/object and self/other (Jones, 2009), along with other universalizing categories of knowledge (Van Dooren et al., 2016). In Latour's influential actor-network theory (Latour, 2005) or Haraway's naturecultures (Haraway, 2008), the world is relationally made, down to its microbial interactions. There is no nature, but neither is there any "human" – every entity is a "relational achievement" dynamically enacted by networks of living and nonliving agents (Whatmore, 2002, p. 14). As Noel Castree has noted, the growing fascination with the postnatural has "fundamentally altered explanatory and normative

⁵² William Cronon's *The Trouble with Wilderness* (1996) is considered the foundation of this canon but it is one of many astute treatments. See Evernden (1992), Livingston (1981), Merchant (1989), Plumwood (1993), and Wilson (1991).

vocabularies" in which "hybrids, chimeras, rhizomes and actor-networks are now all the rage" (Castree, 2004a, p. 191). Shifting orientations have given birth to many new explorations of "multinatural" worlds and their attendant politics (Lorimer, 2012).

Whether this kind of radical postnaturalism informs the trend in big conservation to move beyond nature is suspect, though they likely draw from common influences. For at least some flavours of postnaturalism, the rise of the "new ecology" paradigm in the sciences – one emphasizing chaos, complexity, and nonequilibrium⁵³ – has been an important source of inspiration in re-conceptualizing social life (Braun, 2009; Ginn & Demeritt, 2008; Zimmerer, 2000). This interaction between the humanities and the natural sciences has not always been a reciprocal exchange, however (Castree, 2014). While new conservation's claims about nature do, on one level, read as the "conservation biology version" of this idea – that "nature' is in reality always plural 'socionatures'" (Büscher & Fletcher, 2020, p. 8), the kind of postnaturalism put forward in more radical relational ontologies does not merely seek to extend the definition of nature to include humans, but to "pluralize and animate conservation as a political ecology for a multiplicity of biodiversities" (Lorimer, 2012, p. 606; see also Braverman, 2015; Hinchliffe, 2008; Münster, 2016; Van Dooren, 2011; van Dooren, 2016). The performative detachment of wildlife from wilderness has been important in these relational ontologies, embracing it as a "fluid property" that is produced through a "constantly evolving collection of interactions...between people and animals," rather than a natural characteristic of any ecology or space (Biermann & Anderson, 2017, p. 8). As Lorimer (2015) puts it:

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⁵³ This paradigm challenged earlier assumptions about the balance of nature linked to Frederic Clements' theory of the climax community, which held that nature remained in a steady state absent of external (i.e., human) disturbance strongly shaped ecological thinking and research in the early decades of the twentieth century (Botkin, 2012).

...wildlife lives among us. It includes the intimate microbial constituents that make up our gut flora and the feral plants and animals that inhabit urban ecologies. Risky, endearing, charismatic, and unknown, wildlife persists in our post-Natural world. (p. 7)

This kind of radical detachment is not strongly reflected in new conservation discourse. Indeed, Kareiva and colleagues were quick to clarify, in response to critiques that new conservation promoted a dangerous relativism, that the abandoning the ideology of the pristine did not mean that all natures should be seen as equally valuable, nor that the protected areas approach should be abandoned:

That no place is free of human influence does not mean that a large, mature forest has the same conservation value as a plantation or an urban playground. (Kareiva & Marvier, 2012, p. 966)

Kareiva and Marvier go on to stress that the point of extending the definition of nature is to recognize that seemingly pristine landscapes are impacted by people and, in those spaces, conservation must work to protect these people in order to protect biodiversity – a value that itself appeared to remain stable.

These differences are enough to cast doubt on new conservation's call to abandon Nature. But for many, it was the alignment of postnaturalism and pragmatism in new conservation discourse that was most worrisome, since for Kareiva et al. (2012), pragmatism meant the embrace of corporate partnerships to further conservation goals. Their call to "stop scolding capitalism" (Section 3, para 5) seemed to align a postnatural ethos with the not-very-new natural commodity market logics that have come to dominate the government approaches to environmental problems over the last few decades (Dryzek, 2013; Hajer, 1996). Kareiva et al.'s call to abandon Nature accordingly reads a way to enable greater partitioning of life to amend it to

commodity forms that can be traded and sold (Collard et al., 2015; Turnhout et al., 2013). One risk of this partitioning is that unvalued parts are rationally expendable (Biermann & Mansfield, 2014; Dempsey, 2013; Srinivasan, 2014), leaving questions of ethical value that don't fit neatly into cost-benefit analyses at the wayside. This commodification of nature's "services" stands in opposition to the more radical articulations of postnaturalism, which are generally grounded in a left-leaning critique of capitalism (Collard et al., 2015; Haraway, 2016). Büscher and Fletcher (2020) have argued that the pairing of postnature with capitalism is in fact fundamentally incoherent, since capitalist logics are premised on, and continue to reproduce, a separation between people and nature.

This re-casting of market logics as a kind of radical solution was, for many, an insidious sleight of hand, knitting together disparate claims under the aegis of the field's overblown allegiance to Nature. For example, Kareiva et al. lament conservation's checkered history of human violence and displacement as a result of this allegiance, as is an unwillingness to work with corporations. As Paul Robbins quips, "the central thrust of the authors' argument – that exclusionary, anti-human and anti-poor models of conservation are doomed to fail – need not lead us to a solution that demands its quick, chummy afterthought: "partnering with corporations."

Coupling one with the other is discouraging in an otherwise visionary statement" (2012, para 7).

Many conservationists bristled at the charge of a monolithic and overly purist conservation, arguing that conservation had long worked in lived spaces and reckoned with human interests, and that practices on the ground were highly diverse (Butler et al., 2014; Doak et al., 2014; Greenwald et al., 2013; Holmes et al., 2017; Suckling, 2012). Some, accordingly, accused new conservationists of constructing a straw man of "old" conservation in order to knock it down (Hettinger, 2014; Kingsnorth, 2014; Meine, 2014). These critiques intimated that the appeal to a

postnatural ontology was really a hanger for an argument about being a more strategic player in the increasingly corporatized environmental sphere. For radical postnaturalists, parsing the politics around fidelity – or resistance – to Nature have been important in determining whether movements like new conservation or ecomodernism can be the seat of a more liberatory politics. As Bruno Latour (2015a) has asked,

...is ecomodernism a clever trick, a well packaged product of some PR, much like the electronic cigarette? ["A great technical fix which will allow the addicted to behave just as before"] Is it a somewhat risky political invention trying to allow for alliances between irreconcilable movements—there are many such efficacious oxymorons, think of "compassionate conservatism," Christian democrat, or, let's say, national socialism? Or is it a genuine attempt at exploring a situation about which we are all in the dark? (p. 221)

New natures in practice

While the big conservation organization in this study was clearly striving to challenge older conceptions of Nature, there was some ambivalence about the break. Their promotional material reflected efforts to move beyond, as one interviewee put it, the "traditional concept of wildlife" and show instead that "we are part of nature as well" (Ci2). Their programming had expanded from its historical focus on habitat protection into many initiatives focused on human welfare such as helping build sustainable industries (e.g., in fisheries and shipping practices). A strategist noted that their organizational perspective on the complex "relationship of people and wildlife" marked a point of divergence from traditional conservation (Cs1). A promotional brochure cast the imbrication of human and wild lives as a uniquely contemporary reality – an Anthropocene narrative (Bonneuil, 2015) – where climate change was affecting both human and animal migrations, demanding a change over how we share the spaces that both desire. The same

strategist (Cs1) from the organization showed me a recent promotional brochure with a close-up photo of a person on the cover – one that featured no animals or iconic landscapes – and cast this prominent foregrounding of humans as "incredibly provocative...in our little narrow [conservation] world." This brochure (and other promotional materials) also featured other images of humans in nature, challenging the traditional spatial logics of conservation, normally concretized in images of "animals in their habitat, distinct from ours," (Yusoff, 2012, p. 583). Multiple pages on the organization's website sought to redefine conservation as protection of wildlife/nature to protection of not nonhuman life but "all" life, which was framed as entangled in processes of environmental change. The promotional images for a public awareness campaign on this theme likewise asserted that humans are also a kind of "wildlife," using chimeric images of human and animal faces stitched together.

Clearly, these communications did resist tropes of a pure Nature that exists outside of human activity. But they also existed alongside older protectionist tropes, such as a continuing emphasis on protecting "endangered species and endangered spaces" (Cs1). The grey literature remained populated by spectacular images of wild landscapes and charismatic megafauna. While some of these images, as noted above, now included humans in various "natural" landscapes (on beaches, in woods, digging gardens), there were no images of wildlife in *human* landscapes (e.g. swifts in urban chimneys, birds colliding with office buildings), suggesting – as in new conservation – that the the flexibility on the bounds of the natural seemed mostly oriented to reframing humans as part of the natural world rather than the other way around. Their website still reflected a significant amount of risk language about "plunging" wildlife populations and the urgent threat of reaching a tipping point. One strategist's (Cs1) argument that conservation must begin by respecting "the laws of nature," for example, marks a point of divergence from the more

radical iterations of eco-modernist thinking that challenge the field's long-time embrace of Malthusian tipping points (instead posing technology as an infinitely flexible modifier of supposed limits to growth) (Dryzek, 2013; Isenhour, 2016).

As in new conservation, communications about the depurification of nature seemed tied to a desire to be more pragmatic about partnerships with powerful actors, where traditional appeals to protect nature could potentially be alienating. While the images of human-animal chimeras were suggestive of a more radical ontological shift, the text associated with this campaign made it clear that the visual overlay of humans and wild animals were intended as metonyms of "the economy" and "nature." As several interviewees noted (Cs1, Ci1, Ci2), this campaign was part of a strategic shift in the organization to show that environmental projects were not antithetical to economic interests, an idea that had gained much political traction in the years prior to that shift. A key goal of this re-framing – noted by interviewees and reflected in grey literature – was to show that the protection of nature was aligned with human self-interest. "If we destroy it," remarked one interviewee, "we're going to go down with it" (Ci1). Interviewees emphasized needing the support of community partners and the governments that served them to make protections more "enduring." As one strategist (Cs1) noted, in discussing setting some principles for their recent strategic plan:

One of them was, we have to be an organization that brings these ideas [of nature and economy] together. When we talked it through it became very clear that, if you don't engage community and meet their needs: a) they are going to be resistant and you're going to be fighting, so that goes against our history of collaboration, and b) the results won't be enduring. Because if you manage to say, draw a line on a map for marine protected area because you have a cooperative government, when you have a new government come in, if

the community doesn't support it the line will disappear. So it's a really powerful insight and it's made us focus the way we work quite strategically and deliberately.

It would likely be an oversimplification to read these divergent and coexisting organizational discourses as merely part of a marketing attempt to capture a wider audience, since this organization's conservation scientists are embedded in the same debates as others in their field about how to adapt to socioecological complexity on the ground. These internal navigations are bound up with questions of how to navigate their organizational identity in a time of rapid environmental change. As one interviewee (Ci1) noted, the ways in which traditional protectionist language failed to capture socioecological complexity sparked much internal debate about how to describe their work for the public:

The language of protect and restore came up a lot when [the present director] started, in terms of some of the wording they were using. Some of the conservation staff jumped on it and said we can't say protect and restore, we can't go back!...And I don't know that we actually really landed on any solid place, and I think probably for people who don't work in the field or our supporters, [they] are just like, yeah protect and restore, great, but if you're in the [conservation] world you understand it's a lot more complex.

Postnatural urbanisms and wild-life in the city

The key question of interest for this project is how we might understand powerful articulations of postnaturalism in relation to discourses about nature that grow out of on-the-ground mitigations in the socioecological space of cities. The *explicit* articulation of postnature has been the purview of big conservation and critical scholars (in their respectively different ways), but tacitly UWOs seem deeply invested in this idea. For one, they undoubtedly challenge – by virtue of their existence – the spatial imaginary wherein wildlife is attached to wilderness. Their work is also

grounded in individual interspecies encounters, which for many postnatural theorists have been an important anchor in getting beyond the moral authority of Nature as a category. Postnatural theorists have called for an orientation to the micro-scale processes of composing common worlds rather than predefined ontological categories, one guided by questions like, "What forms and trajectories of difference matter? Who decides? On what grounds? And through what processes?" (Lorimer, 2012, p. 438). Attending to these processes of composing means attuning to the material practices through which relations are performed. Studies of conservation informed by relational ontologies have focused on deeper engagement with scientists and volunteers involved in enacting wildlife protection, research, or management on the ground (Barua, 2014a; Barua & Sinha, 2019; Braverman, 2015; Collard, 2014; Cousins et al., 2009; Lorimer, 2008a, 2010; Van Dooren, 2011; van Dooren, 2015). As Bruce Braun argues, thriving multispecies worlds must grow out of "institutional spaces and procedures that allow us to work through, in an agonistic manner, how this composition of common worlds should proceed" (Braun, 2009, p. 31).

UWO practice, grounded as it is in navigating the messy material spaces of encounter, seems to typify the kind of agonistic working-through so central to a postnatural ethos. In addition, because UWOs often work with synurbic species that have limited (or negative) ecological value – and who are seen to be unnatural because they live in cities – they are perhaps a key site for evaluating the tenacity of commitments to Nature. Nicholas Holm has argued that the "new ecology," which is supposedly grounded in an embrace of anthropogenic landscapes, is only really interested in "halfway" spaces like farms and rangelands. Cities, and the "vermin" that live within, remain the "limit case" for expanding definitions of nature, except that in a postnatural framework their exclusion is "more deeply embedded and sheltered from explicit articulation and argument" (Holm, 2012, pp. 70-71).

Given these alignments, it may seem somewhat counterintuitive that the organizations in this study showed a strong fidelity to the idea of nature in defining right relations, and especially the human-nature divide. In contrast to new conservation rhetoric, where humans are welcomed into the sphere of nature, all three urban wildlife organizations in this study emphasized the *unnaturalness* of humans. Multiple interviewees from every organization commented on the ways in which humans have invaded natural spaces, creating problems for wildlife. This notion of humans as interlopers was expressed in a few different ways. Some interviewees commented on human populations and interventions throwing the "balance of nature" out of alignment (WRs1, ASs1, RAs1), a concept that reflected more traditional conservation frames. Both strategists and front-line staff/volunteers commented on the ways in which humans had altered animals' natural habitats through urbanization. Some focused on how human behaviours – like feeding wildlife – created problem animals whose own welfare was then compromised by these behaviours. ⁵⁴ (WRs2, ASs1, ASi1). Others emphasized how the publics they dealt with frequently saw wildlife as interlopers into human space when it was really the other way around (ASi2, RAs1).

What might one make of these fidelities? In one sense they resist the ideas we might expect from organizations navigating city environments, which are traditionally seen as definitively unnatural spaces. While some interviewees acknowledged that humans are embedded in ecological systems – as one rehabilitator noted, human proximity to urban animals meant both were part of the same ecosystem (WRs2) – the resulting ecologies were largely viewed as

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⁵⁴ Feeding wildlife is associated with a number of problems including nutritional deficits, facilitating spread of disease (e.g., by drawing animals to common feeding stations), and habituation to humans. The latter is a major issue of concern for wildlife managers, since habituated animals often become bolder around people which can result in humans being injured or animals being injured/killed because their behaviour has become intimidating to people. As Bulbeck puts it, "feeding animals in national parks is often tantamount to signing their death warrants." (2005, p.44).

malfunctioning systems because of human activity. This is an important point of difference from new conservation rhetoric, which has focused on including humans within the bounds of the natural, thereby making human habitats a legitimate focus for conservation. UWOs positioning of humans as outside of natural systems also stands notably in opposition to the perspective of urban ecology, which is grounded in the "demise of the 'balance of nature' paradigm," in which ecological systems were seen to exist in steady state absent human disruption (McDonnell, 2011, p. 13). These UWOs emphasis on the balance of nature paradigm is perhaps an important point of distinction in considering the identity of the emerging "urban wildlife" field, which has been posed by John Hadidian as "better regarded today as belonging in urban ecology" despite its historical attachments to traditional wildlife conservation and management (2015, p. 1093).

UWOs' fidelity to the human/nature divide raises important questions about how we might understand their work with wildlife in the city, and in particular those synurbic species — popularly, "urban wildlife" — who are notoriously rendered out of place in this binary, constructed as "deviant or damaged" specimens of nature because of their ability to thrive in degraded (i.e., humanized) environments (Holm, 2012, p. 77). As Hinchliffe and colleagues have argued, their ill-fittedness has left them underrepresented in the binary "chambers of Science and Politics" where they are "not pure enough to be true and not human enough to be political." As a result, they contend, the "urban wilds have no constituency" (Hinchliffe et al., 2005, p. 645).

It is this tension point that has made cities and the wildlife within them such an important site of theorization for a new urban politics, one denoted by the concept of the *more-than-human city*. This concept has been prominently guided by Isabelle Stengers' notion of cosmopolitics, which emphasizes finding new ways of recognizing and valuing diverse others. The cosmopolitical ethos has been an important inspiration in efforts to re-work the parameters of the

social (Latour, 2011), and in proposals for how we might better get on together in a multispecies world (Haraway, 2008). Accordingly, it has proved an anchoring construct for thinking through the process of recognizing rich relations beyond the limitations of the nature-culture binary (Bird Rose, 2012; Duhn, 2017; Hinchliffe et al., 2005; Hinchliffe & Whatmore, 2006; McKiernan & Instone, 2016; Metzger, 2016; Narayanan & Bindumadhav, 2019). An argument could be made, following this, that UWOs' emphasis on a human/nature divide is nonsensical in the city (Hunold, 2019), and potentially ontologically out of synch with the species UWOs work with and the spaces they work in.

A tale of two cities: Narratives of loss and resilience

These UWOs' fidelity to the human/nature divide, then, warrants a closer look at the way they frame urban animals themselves, and whether their discourse supports the tropes of the human/nature divide as embedded in traditional conservation, in which:

...one form of nature is poisoned by the city, while other lesser forms thrive: the first form represents the power of life to somehow hold on within the pollution and stress of urban life, and is therefore to be protected and encouraged. The second form, however, lives because of the pollution and stress, or at least because of their corollaries of waste and urban structures. This second form of nature is less likely to be the subject of conservation and protection than of deterrence, control, and culling. (Holm, 2012, p. 74)

In other words, do UWOs distinguish between a more authentic, distant wildlife and a second, less wild form that thrives in cities? The answer to this question is not a simple one. There was a dualism present in the way UWOs talked about "urban wildlife," the species who "thrive in the city" (ASi2), and other types of wildlife who do not thrive there and whose survival is imperiled by urban development. In discussing urban wildlife, the city was framed by UWOs as a space of

opportunity for synurbic animals to exploit, and in the second, a space of threat. These narratives were not equally present in the different organizations. The rescue and advocacy organization, which was founded to address the impacts of urban infrastructure on imperiled species, unsurprisingly reflected narratives about risk and ecological threat more than the other two UWOs, who worked proportionately more with synurbic species. The rescue and advocacy organization emphasized most strongly the notion of a static, ahistorical nature, one that made the constant and dramatic change of the urban environment an impossible challenge. Their website emphasized, for example, that the "artificial" urban elements like lights and buildings interfered with animals "instinctive behaviours," such as birds' ability to follow "ancient migration routes." As one strategist commented,

It's [humans] that are out of place. The birds are doing what they've been doing for thousands and thousands of years. The industrial age, population booms and emerging technologies have changed the natural landscape. And we have thrust ourselves right into those landscapes that are part of the subconscious of these birds. (RAs1)

The city was thus framed, for at least some animals, as a space of unique threat, one described in their organizational literature as "bleak," "hostile" and "inhospitable" to other life, as well as "confusing" and "disorienting" to animals who were guided either by instinct or by attending to changes in natural elements (e.g., stars, bodies of water). Interviewees at this organization remarked on the failure to accommodate other species in urban development and design (RAs1, RAi2, RAs2) as a central conflict for multispecies habitability:

If we made a more welcoming urban environment, some [animals] would even be likely to stay. Because of lack of essential types of landscapes, they are forced to find other areas. (RAs1)

The organization's grey literature also alluded to catastrophic tipping points linked with rapid urbanization, asserting that wildlife deaths would increase in tandem with urban growth unless enough collective action is taken to "minimize our human footprint" and to change the ways that humans "alter and pollute the landscape." This narrative was also present in interviews with the wildlife rehabilitation centre, similarly linked to non-adaptive species:

We need to reinforce to people what this was before we came here. There were wolves here, and we're on the migration route for all these birds who are still coming through here and bashing their heads on windows because we threw up glass buildings in their path, and wolves won't live here anymore. To me that means we should be responsible to do everything we can to mitigate these challenges we've made for wild animals. (WRs1)

In contrast, when talking about "urban wildlife," UWOs emphasized the adaptability of those species rather than the need to protect them from risk of extinction. Of their experience visiting schools with the public education program, one interviewee from the wildlife rehabilitation centre commented:

[I've heard them talk about how] because of global warming, opossums have been able to migrate north which is why they are here in [the city] because it's now warm enough for bare feet, ears, tails. We've made really cozy spots for them in stairwells and basements and stuff. And American robins have been able to thrive here because everyone loves the lawn which is like the perfect place to find worms. So the message is more on how we've changed the environment but [animals are] kind of adapting to it. (WRi1)

Interviewees use of the term "urban wildlife" typically was a reference to this adaptability (WRi1, WRi2, ASi2). For example, staff at the municipal animal services unit noted that in talking to the

public, "we use the term urban wildlife...they're [the animals that are] always going to be in the city, so it's a matter of trying to coexist."

Reparative justice and coexistence

The comments of UWOs described above seem in many ways to reify the kind of human/nature divide that has been the focus of postnaturalist critique. Certainly, the notion that animals belong to an ahistorical nature – something that exists apart from the cultural world of humans – has been roundly rejected by critical theorists. Rosemary Collard has argued that this ontology may be inherent to wildlife rehabilitation⁵⁵ which "essentially seeks to restore a "first-nature," a wilderness and wildlife "out there," pristine and untouched" by the polluting influence of humans. (2014, p. 161). It is possible, then, to critique UWOs' fidelity to nature as reinforcing not only of the spurious division between humans and nature, but also to map this division onto animals themselves, separating essential from urban nature. I would argue, however, this reading would miss some important elements of UWOs' work, a gap that speaks to a need to attend to ways in which postnaturalism – and naturalism – are wielded in particular contexts.

A first point to note is that the divide between humans and nature was, for the UWOs in this study, a way to talk about reparative duties to other animals, a concept important in explorations of urban animal ethics (Donaldson & Kymlicka, 2011; Palmer, 2003). As one volunteer quipped,

My husband laughs at my [inclination to volunteer here], he says, just let nature be nature. And I say, but it's not nature, it's human-wildlife conflict, right? The types of things [our

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⁵⁵ Notably, Collard's (2014) analysis is based on an organization that focuses on returning animals to the wild who have been trafficked in the exotic pet trade, where undoing human-friendly behaviours that animals may have learned in captivity would be a defining imperative. For North American rehabilitation centres this is not generally a strong focus, rather it is animals who have become injured, sick, or orphaned in the wild who are brought in for rehabilitative care.

organization] is dealing with is because there is a conflict between that animal and a car, or a telephone wire, or a window, or the mother was hit by a car and now we have orphaned babies. (WRi2)

For the two NGOs involved in wildlife rescue and care (WR and RA), the deleterious effects of human activity on wildlife stood out as the primary rationale for the work they were doing, both in interviews and organizational literature. The natural system was seen to be out of malfunctioning because of humans' "sense we are better than other living creatures or more entitled than them to the resources of the planet" (WRs1). In this interviewee's reflections, the concept of the natural balance was used not to refer to steady-state ecosystems but an ethical orientation, where restraint should check the pursuit of human interest:

I would be very supportive of having some really serious conversations about how we actually create a world where humans and nature live in better balance for both – not just for the good of wild animals as individuals but because our planet needs nature. (WRs1)

The rehabilitation organization emphasized in their outreach material that their work was driven by urban sprawl, and that "almost every animal" they treated was injured or otherwise affected by human activity, whether they were from an urban-adapted species or not. A number of interviewees expressed frustration about people failing to see the connections between their own behaviours and the wildlife behaviour they found disruptive (WRs1, WRs2, ASs1, ASi1). As one rehabilitator put it, "stop interfering with natural things and then be upset that the animals are too friendly or coming near your dog" (WRs2). For those in caregiving organizations, they saw human interference as imposing a duty of care for individual animals. Even staff at the municipal animal control— where there were no treatment options for wildlife — emphasized the responsibility that stemmed from the human impacts. As one staff member put it,

I think we have to realize whether we intend to or not, we are affecting every creature on this planet. So therefore we should also be taking responsibility to correct what problems we create. (ASi2)

A second noteworthy point is that UWOs' distinctions about urban wildlife (vs. imperiled-wildlife-in-the-city) was not suggestive of a lesser, poisoned form of nature or one out of place. If anything, interviewees' comments alluded to respect for urban animals' tenacity in adapting to urban life, often in the face of much public antipathy. As one strategist at the rehabilitation centre wryly observed:

People just don't really like successful species...as soon as a species gets too successful, I think, people feel threatened by them – [they feel] there's too many of them, the geese are doing too well, starlings doing too well, there's too many of them, too many pigeons. We like them when they're endangered. (WRs2)

It was clear in interviewees' reflections that the focus of coexistence education was in fact to challenge the idea that urban adapters were somehow aberrant. Rather, they emphasized that animals were not only normal to see in the city, but also legitimate residents: "Coyotes will hunt next to [the mall]," commented a field officer from animal services (ASi1) and "raccoons will sun themselves on your garage roof...this is where they live." Conversations with the public about urban wildlife, noted another interviewee, often centred on trying to convey that "we both have space here...yes, the humans have changed the habitat but the animals have adapted to that. So it's a matter of us figuring out how to share the space together in a better way" (WRi1). A strategist at the rehabilitation centre (WRs2) commented that teaching people that animals belong in the city was really the reason for their organizational existence: "To let people know they need

to coexist with wildlife, that wildlife are part of the environment and an important part, and we need to understand them...and help them." These allusions to urban animals being legitimate coresidents of the city align with the argument of many ethicists that we might better conceive of urban wildlife as denizens (Donaldson & Kymlicka, 2011), neighbours (Acampora, 2004), dependents (Palmer, 2003), or community members (Michelfelder, 2003) rather than as members of sovereign ecological communities. What these proposals have in common is the assertion that wild animals can have social value as well as (or even instead of) ecological value. Common synurbic species like pigeons and raccoons, who have little ecological value to conservation, may still be recognized as having rights to the city (Shingne, 2020).

UWOs' framing of humans as outside of nature, rather than marking urban wildlife as unnatural because of their association with humans, was mobilized to show that the city itself was a space of nature, originally occupied by wildlife (of both types) and now marked by human interference. Conflicts with urban wildlife were cast as *caused* by disruptive human activity, either at a macro-scale (e.g., by building cities over animal habitat), or a micro-scale (e.g., by providing food/shelter opportunities for animals that habituated them to human presence). "We provide everything they need to survive" commented an animal services interviewee (ASi2), "[and] they've learned to live here." Importantly, human interference marked a debt to urban wildlife just as it did to imperiled-wildlife-in-the-city. As one animal services interviewee commented, in discussing the common perception that animals don't belong in urban neighbourhoods, "people almost feel like the animal is trespassing...I want to say no, you built and moved into the raccoon's backyard and he has nowhere to go" (ASi2).

Fidelity to nature: A question of ethics?

The way in which a human-nature divide acts as an ethical tether has been an important issue in the debates around postnatural conservation as well. Irus Braverman's (2015) extensive interviews with conservationists working across the in situ/ex situ divide revealed that even though their practice defied neat boundaries around a separate and singular "Nature," fidelity to the concept remained prominent in the way they discussed their work. Irus Braverman (2015) offers as an explanation of this fidelity that:

...behind the attachment of many of my interviewees to traditional articulations of nature lie the practical implications of letting go of this nature. Their concern, specifically, is that 'without a Nature to protect and a Science to unequivocally define its properties and mark its boundaries, real world experiments risk becoming aligned with the interests of the powerful,' and with corporate interests in particular. (p. 39)

Others have made similar points about the danger of an anything-goes ethic if there is no nature to protect from exploitation (Collard et al., 2015; Cuthbert et al., 2020; Derby et al., 2015). Critiques of new conservation have pointed to its worrisome potential to greenwash the destruction of important ecological spaces (Soulé, 2013; Wuerthner, 2014) by eroding the boundaries of what we consider natural. This is not a concern limited to postnaturalism as it is articulated in new conservation, however – concerns about the risks of casting nature as "tabula rasa" have plagued even the more radical iterations of postnaturalism and their efforts to re-work the social (Braun & Castree, 2005, p. 4; see also Zimmerer, 1994). The Anthropocene metaphor has given new life to this concern, since the idea has often been used to justify business-as-usual on a human-dominated planet (Davison, 2015; Lorimer, 2015). As in new conservation, one worry is whether a postnatural orientation absolves us of a responsibility to preserve existing

natures and enables an instrumental valuation of particular life forms as they become partitioned from nature as a whole. As Collard et al. (2015) argue, the devil is in the details – while it is not a postnatural ontology *per se* that promotes a neoliberal instrumentalization of life, we should not shy away from asking how they are aligned in particular processes of composing.

These concerns raise the important question of whether nature might still be of use in thinking through the multinatural articulations of conservation – that is, whether it could have a positive effect in the work of composing common worlds. This possibility is sometimes brushed off in critical analyses. As Latour (2015a) opines:

Everyone of you here who knows anything about controversies regarding human and non-human entities entangled together are fully aware that there is not one single case where it is useful to make the distinction between what is "natural" and what "is not natural." It does not work for gay marriage, for organic food, for abortion, for conserving redwoods, for fighting drought, etc. "Nature" isolated from its twin sister "culture" is a phantom of Western anthropology. (p. 221)

For Latour – and other ANT-inspired relational approaches – nature is little more than a "ratchet" that shortcuts "the work of politics by creating a second power...[that is] out of the reach of political assemblies" (Latour 2015a, p. 221). Nature's "crude maps with thick boundaries, marking hard-and-fast differences" are seen as a "political dead weight" (Hinchliffe et al., 2005, p. 643). But as noted above, critics (including Latour himself) worry that postnaturalism can also be dangerously wielded. Collard et al. (2015) worry that in the eagerness to get beyond Nature, that we may fail to reckon with our responsibility for past damage: "Nature might be dead for Kareiva and Latour," they argue, "but its ruins remain" (p. 325).

UWOs' fidelity to Nature as an anchor for moral responsibility is interesting, since the space that they work in is not normally seen as the *kind* of nature that is made vulnerable when there is no Nature to define and protect its boundaries. Indeed, a central critique of new conservation was that it seemed to undermine the idea that certain natures have greater relative value to conservation (Caro et al., 2014); critics worried that unsettling the concept of the natural might then mean that there would be no line to differentiate ecologically important rainforests from highly degraded habitats like cities. For UWOs, the category of nature protected not at-risk species or ecosystems but individual lives rendered vulnerable by human activity. Even if the protection of those lives is a worthy imperative, of course, it does not mean that Latour is not correct that Nature can shortcut ethical recognition of difference in less-than-ideal ways. UWOs work within a fractured, resource-limited system may exacerbate the tendency to do so. For example, debates about what is more and less natural – and therefore where our ethical debt is owed – is sometimes at the seat of decisions about resource allotments in this niche. Several staff at the animal services organization commented that they would make an extra effort to transport animals that they picked up to rehabilitation centres if they had clearly been harmed by humans (ASs2, ASi1). As one strategist noted (ASs2), those animals who had been "whacked around," were "much different than your diseased animals," whose deaths could be attributed to seemingly natural forces. In my own experience in rehabilitation, decisions about resource allotments are likewise often shaped by principles about how much animals had been affected by human activity. While no additional consideration was given to "whacked around" animals on an individual basis, internal deliberations were common about whether the organization should devote resources to treating animals debilitated by parasites or viruses that were normally present in their populations (sarcoptic mange, for example, was seen to be human-caused – and

therefore worthy of organizational resources – because it was introduced into coyote and wolf populations in the early 20th century for the purposes of lethal control). These are fraught deliberations. In Collard's analysis (2014), she acknowledges that despite concerns around rehabilitation's embrace of a categorical human/nature divide, it is hard to disregard the value of the work, since ideals of nature are here mobilized to decommodify animals that had been removed from the wild and facilitate their "ecological re-entanglement" (p. 161). Collard's example highlights ways that conceptions of nature might be important in resisting certain forms of violence.

Inclusions/exclusions

A question that remains, then, is how these views of nature inform UWOs perspectives on how humans and wildlife should live together in the city. The more-than-human city is a resonant idea in contemporary scholarship on multispecies relations, though it is still fairly new. The first real challenge to the humanistic framework of urban theory and planning was issued in Jennifer Wolch's influential early work in animal geography in the mid 1990s, where she issued a call to re-think cities to "invite the animals back in" (Wolch, 1996, p. 29; see also Wolch, 2002; Wolch et al., 1995). As Wolch's original treatment makes clear, this call to invite animals in was not a denial of the significant nonhuman life already existing in cities. She observes that "many animals do, in fact, inhabit urban areas. But most are uninvited, and many are actively expelled or exterminated. Moreover, animals have been largely excluded from our *understanding* of cities and urbanism" (Wolch, 1996, p. 29).

These two kinds of exclusion – material and conceptual – were, for Wolch and her colleagues, entangled. Factors that they saw as making the city unwelcoming for animals included material obstacles for some species, such as a lack of appropriate food or shelter, an intolerance to

human presence, and habitat fragmentation. But these physical impediments, they argued, are imbricated with the ideological forces that shape urban environments, such as the transformation of space to maximize commodity flows under capitalism, the influence of rationalist planning movements that disciplined urban nature into defined, sanitized spaces (zoos, parks), the values of urban residents living at a remove from integrated natural environments, and – not least – the mandates of urban institutions responding to the presence of animals in the city. At the time of these proposals, Wolch and colleagues noted that little research existed on these institutional responses, though they largely seemed to frame animals in urban space as pests (a threat to be controlled), or as pets (an aesthetic amenity) (Wolch, 1996; Wolch et al., 1995). The renaturalization efforts that could potentially "re-enchant" cities, then, was not *only* a material project to improve habitat connectivity and create green infrastructure for other species, but also a multi-level challenge to the cultural ideologies and economic systems that define the presence of (non-captive) wild animals in urban space as aberrant.

The politics of visibility

This intersection between conceptual and material inclusion introduces an important tension around the visibility of urban animals (and the related dimension of viscerality). On one hand, animals are not conceived of as integral to cities because they are often not highly visible, and they are not highly visible because we have not designed cities to include them. The importance of visibility in legitimizing animals in cities has been a staying theme for both geographers and ethicists (Arcari et al., 2020; Donaldson & Kymlicka, 2011; Hunold, 2019; Michelfelder, 2018; Urbanik & Morgan, 2012), prompting many suggestions for increasing animals' visibility, for example through artistic representations (Luther, 2013), the creation of spaces for human-wildlife interaction (Michelfelder, 2003), nest cams (Hunold, 2019), and experimental research

methodologies that illuminate animals' presence in urban space (Hinchliffe et al., 2005; Hinchliffe & Whatmore, 2006). A growing movement around ecological design – or "habitecture" ⁵⁶ – likewise explores methods for integrating "biological and ecological agents into the built world" (www.theexpandedenvironment.com; see also Forlano, 2016; Foth & Caldwell, 2018; Grose, 2014; Hocking, 2015; Jönsson & Lenskjold, 2014).

On the other hand, though, recognizing animals as legitimate in particular spaces is more than a function of raw visibility. The presence of urban animals is always read through our understanding and expectations of urban space, and so even when they are ubiquitous, they can be seen as out of place (Hunold, 2019). In other words, if their material inclusion in cities precedes their conceptual inclusion, it is likely to provoke conflict with people who feel that animals don't belong. It is important to note that animals don't bear the brunt of this vulnerability equally. The increased visibility of reviled animals can trigger more aggressive control actions, such as the way that "increased sightings of brown rats trigger the deployment of rodenticide bait boxes in most U.S. cities" (Hunold, 2019, p. 95). These risks pose challenge to interventions like architect Joyce Hwang's design for a "pest wall" that would create habitat for bats (and other urban species) in plain view, with the rationale that visual presencing of a feared species like bats is a way to "provoke our own discomforts toward animals and the unpredictability of nature" (Dodington, 2011). As Holm (2012) argues, differences in how we react to the presence of different animals in cities is not always considered in theorizations of a more-than-human politic. In Hinchliffe et al.'s (2005) much-cited work for example, they focus on the power of presencing animals in urban space, using as an example water voles who live in cities but are typically unseen. The unexpected

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⁵⁶ This term was made popular by J.B. MacKinnon, who defined it as "the integration of habitat for other species into structures designed for human purposes" (2013, p. 158).

presence of the water vole in Birmingham – determined only through careful tracing of signs – serves as a powerful signal, for Hinchliffe and colleagues, that cities are not outside of nature, and remain important sites for conservation of recombinant ecologies. Because, in other words, voles are animals who are already "discursively aligned against the degraded city environment," they "represent the extension of conservation priorities into the city, rather than a challenge to those priorities" (Holm, 2012, p. 73). To "presence" voles in the city is to ecologize the city in line with dominant systems of ecological value, and not to render voles themselves vulnerable.

It is clear that an ethos of presencing leaves maligned species more vulnerable, though even beloved species face certain risks. One risk stems from the human drive for contact with them, discussed in the last chapter. For example, Diane Michelfelder (2018) suggests that rather than using nest-cams to increase visibility – which she sees as still reinforcing a sense of separation form wildlife – that it might be better to disclose where those animals "are actually hanging out, appearing, and disappearing" so that people might experience them in a more direct physical way (p. 115). But whether such a proposal is in the animals' interest is uncertain, particularly if such disclosures represent significant disturbance to the nest site from people seeking closer contact. There is also the issue that presencing animals can generate new ways of confining visibility (Letts & Sandlin, 2013). As one example from this study, the rescue and advocacy organization noted that increasing awareness of the problem of injured birds around buildings spurred subsequent trespassing bans by some building owners, wherein the conflict was addressed not by removing the dangers for animals but blocking access to nosy advocates.

Differential visibility

The differential risks that animals face complicate a presumedly straightforward link between ethical recognition and visibility. For UWOs in this study, the divided narrative between urban wildlife and imperiled-wildlife-in-the-city was embroiled in a distinction between those animals that had a strong material presence in everyday urban life – urban wildlife – and those whose presence was largely invisible. Interviewees linked the hyper-visibility of certain animals to a few different factors. One, as discussed above, was the differential adaptability of some species to urban environments. Another factor was abundance. One rehabilitator (WRs1) suggested that abundant animals were more likely to be involved in conflicts, and valued less because they were perceived to be more common:

There are people that assign values to wild animals, like raccoons or pigeons or Canada geese that are common typically would have a lower value, both because there's lots of them, but also because there are lots of them, they tend to be the ones involved in those conflict situations. So yeah, people are less willing to help them, sometimes will actually do things to hurt them intentionally or unintentionally, sometimes to solve a problem – sometimes because they just don't want them around.

Interviewee comments also alluded to a third, more difficult-to-define factor that we might call the *viscerality* of certain kinds of wildlife. This was the unavoidable physical presence of animals that was at the seat of many reported conflicts, especially when animals' bodies or their waste had a disruptive effect (e.g., a defensive goose flying at employees trying to enter their workplace, raccoons leaving feces in a children's sandbox). One animal services strategist noted that residents were very vocal with their complaints about urban wildlife when they felt that their "personal space [had] been compromised" (ASs2). Some of these comments seemed to reflect what many

studies have observed about the cultural anxieties provoked by the sense of disorder associated with animality in the ostensibly civil space of the city (Corman, 2011; Luther, 2013; Philo, 1995). Interviewees at the animal services agency commented on the public's sense of urgency around them picking up animals quickly. One strategist noted that callers "demand that these animals are removed immediately" (ASs2), even if the animals are deceased. Another staff member commented:

You'd be surprised how many people want dead animals picked up because 'my son is going to school and he's going to walk by this and see it!' I'm like, I'm sorry, I don't know what to tell you, there's dead animals everywhere. (ASi1)

The viscerality associated with synurbic species stood in notable contrast to the imperceptibility of imperiled-wildlife-in-the-city. Interviewees at the rescue and advocacy organizations remarked on how this imperceptibility posed a challenge for their work. One volunteer noted:

It's hard to convince people that [wild animals are] *here*. That's the weird thing – that people don't even know that there's nature in the city. (RAi1)

This difference in emphasis could in part stem from the fact that the conservation and advocacy organization work focused particularly on birds; viscerality is entangled with mobility, and the physiology and mobility of birds tend to make them a less visceral element of everyday urban experience. But a strategist at this organization (RAs1) also believed that one of the things that made it so difficult to convince people that birds were at risk was that *some* kinds of birds are very visible in the city, which challenged the idea that there was a problem of decline for others:

People just compartmentalize them as one. And in many cases, the average urbanite, when they think of birds, they think of pigeons, gulls, starlings, the birds that are perceived as pests. They're not necessarily aware of, or even care to be aware of, that species of warbler or sparrow that's population is plummeting.

The idea that some urban animals are not visible enough, while others marked visibility predisposed them to human-wildlife conflicts, was reflected in conflicting conceptions of how they should be accommodated in urban space, wherein adapting cities for coexistence meant both welcoming imperceptible or imperiled species and minimizing the visibility of abundant/adaptable species. These differences can be seen in the following comments by one strategist (RAs1) at the rescue and advocacy organization (italics mine):

Let's face it, mankind [sic] is going to continue to grow and spread and we're taking up more and more of what's left for [wildlife] to breed and feed in, those parcels of land are going to get smaller – that's already been demonstrated in why [wildlife] populations are plummeting anyway, there's just less and less opportunity for them to breed...[In one case where a building was deemed to be unsafe to migrating birds, the property owner] went out and marked all the trees on their property to be cut down. So instead of just making the glass safe for birds, they went, let's get rid of some of those things drawing them there in the first place. And that's the exact opposite of what we need to be doing, we should be introducing more greenery around the urban landscape, inviting these birds in, and providing them with all of the opportunity to thrive and survive in that environment.

The same interviewee later commented that:

Part of what makes our job challenging is dealing with scavengers like raccoons, gulls, crows, squirrels, chipmunks; they scavenge [the bodies of the animals we're trying to help]. When we share this information through media or website, people see this as another reason to be annoyed with raccoons or gulls. And we say no, no, no, they're just doing

what they're designed to do, they're opportunists and we're providing them with opportunities. We need to find a way to remove these opportunities, and who knows, the less opportunity there is for them, they might even help reduce those populations because they're going to find other areas to populate themselves in where there is better opportunity. If we take the example of the raccoon, they've just introduced that new green bin to prevent them from getting in – that's the way we have to think – there's no way around it, [humans are] going to exist in urban centres but so are these other forms of wildlife that are perceived as pests. All we have to do is design the urban landscape in a way that doesn't provide them with these opportunities. Then we can coexist.

Creating distance

These contrasting perspectives, tethered to animals' differential visibility and vulnerability, highlights an important aspect of UWOs work of facilitating coexistence: it necessarily involves minimizing the viscerality of animals in certain spaces and situations, even if on the whole they might hope to make the city more welcoming for wildlife. In situations where human-wildlife conflicts were not seen to be resolvable through information only (i.e., about animals' natural history and expected behaviour), advice from the UWOs in this study typically focused on altering the environment where the conflict was happening (e.g., inside an attic den) so as to make it seem threatening or otherwise inhospitable to wildlife. Limiting attractants (e.g., food and shelter opportunities) to discourage unwanted animals was emphasized by all the organizations (either in interviews or on their respective websites). Other techniques, drawn from deterrence strategies in wildlife damage management, were more physically invasive, including erecting fences and bird-proof netting, as well as the use of hazing or "negative conditioning" methods meant to disturb or frighten animals from a given space (Hadidian et al., 2007, p. 25, Conover, 2001), such as ultrasonic alarms, visual barriers, bright lights, predator statues or silhouettes, and aggressive

human body language. Collectively these techniques emphasized a need for greater spatial separation where human and animal activity might overlap in problematic ways.

If we view such efforts with the assumption of a straightforward link between visibility and urban inclusion, they might read as overly divisive. Christian Hunold's (2019) analysis of urban animal control discourse makes this argument. He observes that while the animal control organization in his study affirmed that the presence of wildlife in the city was normal and that healthy animals should be left alone, they also provided resources to deter wildlife near the home for residents that wished to do so (for example, by keeping garbage secured and buildings in good repair). Hunold maintains that this rhetoric about deterring animals from residential space is grounded in the "unhelpful nostalgia" of the nature/culture binary in which human space can be purged of animals, and rubs up against organizations' simultaneous assertions that wildlife are legitimate residents of the city (p. 102).

What is perhaps underemphasized in the charge that deterrence discourse asserts that urban wildlife don't belong is that these techniques are typically applied to impose some degree of separation between humans and animals where conflicts have already been experienced (say inside a house), and not to residential area more broadly, and certainly not to urban spaces in general. None of the interviewees in this study suggested that animals should be pushed out of cities and did not seem to create any expectation that urban residents could live a life free of interference from or interaction with wildlife, ⁵⁷ and neither were these claims apparent in the

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⁵⁷ Even in the field of for-profit wildlife removal, there is an emerging set of best practices that focus on humane removal of animals *only* from inside structures, not from wider outdoor spaces like individual properties or neighbourhoods. In this kind of model removal usually consists of temporarily capturing or chasing away a denning animal, repairing the entry hole, and then releasing them right outside the den site with family groups intact. For non-structural problems, no fee-for-service intervention is offered in this model: "The raccoon in the trash or opossum that visits the dog bowl on the patio every night are not 'problems' for which 'solutions' need to be found. Rather, these tend to be issues associated with negligent human behavior, and that's where AAA [the removal company] would

official communications of their organizations. They did, however, advocate for exclusion strategies in situations where human or animal safety was a potential issue (as an animal nesting in an active chimney), and when the first-choice recommendation of tolerance was not seen to be a realistic option for the person experiencing the conflict. That is, although these techniques can cause distress for animals, they are seen by rescue and rehabilitation organizations to be preferable ways to mitigate conflicts that have the potential to harm animals *more* if they persist (for example, where frustrated homeowners are likely to use lethal control to resolve the problem). Efforts to facilitate some spatial separation were thus entangled with the need for affective separation (which, as discussed in the previous chapter, was also grounded in an imperative of harm reduction for both humans and other animals). As one animal services staff commented, finding solutions was a "balancing act" that necessarily began with acknowledging that animals are legitimate residents of the city, but that finding ways to not attract them into situations of potential conflict was central to the project of "trying to coexist" (ASi2).

That these coexistence strategies are grounded in a harm reduction rationale does not, of course, mean that UWOs are always right about what may happen to animals if conflicts are not prevented or mitigated through social distance. Collard (2014) has argued that the kind of aggressive actions that UWOs might recommend to deter wildlife – or indeed, those that might be used in a rehabilitation context to instill a fear of humans in overly habituated animals – are misanthropic practices, premised on the idea that humans are cruel and future contact with them will cause animals to suffer. This concern may result in overemphasizing how much power animals' biographical experiences with some humans have in shaping their encounters with other

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attempt to diplomatically intervene by giving proper garbage disposal and storage advice." (Gates et al., 2006, p. 508).

humans (and little relative emphasis on animals' agency). The potentially enriching aspects of human-wildlife encounters are not given much due here, and UWOs may moreover take an overly conservative stance because of the ways that their own labour may be implicated if human-wildlife conflicts are not mitigated through distancing. But it is also important that UWOs' wariness is grounded in a significant body of experience. Because they see negative outcomes of close contact more than positive ones (of which they would naturally be less aware), there is perhaps reason to doubt their sense of proportionality – how *likely* it is that animals will be harmed in conflicts – but not their understanding of the negative outcomes themselves, which they see first-hand.

Thin vs. thick coexistence: interdigitating spaces

These potential conflicts raise some questions about what kind of spatial interdigitation is ideal for a multispecies city. Proposals have often disagreed over whether we should pursue a thin or thick model of coexistence. Sue Donaldson and Will Kymlicka's elaboration of a political citizenship model, for example, argues that domestic animals should be seen as co-citizens of a shared society, and wild animals as members of their own (relatively) sovereign societies, but acknowledge the difficulty of "liminal" urban animals, who do not fall cleanly in either category:

...on the one hand, liminal animals are residents of the political community and their interests need to be taken into account. On the other hand, there is an important sense in which liminals inhabit a parallel plane – a different city spatially and temporally, and one which operates by mechanisms (e.g., laws of nature) much closer to those that operate in sovereign animal communities than in the mixed community of humans and domesticated animals." (Donaldson & Kymlicka, 2011, p. 251)

Thicker versions of coexistence, in contrast, suggest these worlds are inextricably tangled and should be embraced as such, with interspecies interactions guided by an ethos of conviviality and deep inclusion (Hunold 2020). Michelfelder, for example, argues that Donaldson and Kymlicka's notion of the "parallel plane" reflects too thin a conception of coexistence. She contends that this idea undergirds the contemporary organization of urban spaces, which are set up to "discourage opportunities for informal contact and interaction with urban wildlife" (2018, p. 106).

Certainly, urban planning has not engaged until quite recently with the dynamism of non-human life of cities (Shillington & Hovorka, 2017). Mike Davis has observed that on land use and planning maps, "the division between 'developed' and 'undeveloped' areas is drawn as a straight-edged border. Spuriously precise boundaries likewise define parks, wildlife refuges national forests, and official wilderness areas. In reality, there is an infinitely more intricate interpenetration of the wild and the urban" (Davis, 1998, p. 204 in Wolch, 2002, p. 731). Early planners designed nature into the heart of cities, in the form of iconic – and well-defined – green spaces that could fight social degeneration and provide a respite from city life (Olmsted, 1870/2015). A growing interest in urban conservation and ecological planning has embraced a more complex map. As Lorimer (2015) observes, this shift – which has put the urban wilds "in vogue" – is grounded in a different spatial imaginary:

The principal metaphor used to describe these emerging topologies of landscape-scale connectivity is the network, alongside variations on this node-and-link-based spatial imagination. A biogeography of discrete territories is being overlaid with maps of intersecting lines of nonhuman mobility. Conservation planning talks frequently of ecological networks, green infrastructure, ecological corridors, and stepping-stones. These will connect fragments of valued habitat and conserve ecologies of continuous mobility. (p. 170)

Even in these models that legitimate greater blending of nature into the city, however, there is still disagreement over what constitutes a real recognition of wildlife as belonging in highly humanized spaces. Wildlife corridors are a useful example of the difficulty. Some have seen these as embracing a thick coexistence because they allow wildlife to move more easily through the city, breaking with the assumption that nature somehow stays in well-defined, and fractured, green spaces (Hunold & Mazuchowski, 2020). Others have suggested that corridors continue to promote a thin model of coexistence wherein wildlife move through their own, separate city without much interaction with humans, emphasizing "ecological refugia" rather than the real ways that animals move through the city (Palmer, 2003, p. 71). Such emphases may have their own exclusionary effects. As James Evans notes, the existence of corridors may continue to "embody an implicit geographical imaginary of where nature should and should not exist, reproducing very specific spatial arrangements of humans and non-humans" (2007, p. 130). Even as they seem to embody integrated multispecies living, then, they may not really represent "connectivity" thinking as a deep ontological shift (Houston et al., 2018), but instead suggest that non-naturalized parts of the city are "impermeable to species movement" (Evans, 2007, p. 134) and should thus be safe from nonhuman interference.

For UWOs, these little natures – zones of wildlife habitat – come with complications. As is well-known in wildlife management, the creation of "wildscapes" designed to attract animals often end up creating conflicts when too many animals – or undesired species – respond to the call (Adams, 2016, p. 11). The two NGOs in this study were quick to point out the ways in which urban greening initiatives made their work "much more difficult" (WRs1) since they created wildlife habitat where interspecies collisions were likely, leaving underfunded organizations to deal with those implications. As one strategist at the rehabilitation centre (WRs1) noted, urban

wildlife in particular rarely seemed to factor into either environmental or recreational planning initiatives:

I've seen some really silly things happen over the years – like there was an off-leash area created in a local park right on the edge of a ravine. There was a coyote den like 40 feet away, and the area wasn't even fenced, so people were coming before work – i.e., at dawn [when coyotes hunt] – and letting their teeny apartment-sized dogs off leash and then chatting with other people while their Pomeranians were running around 40 feet from a coyote den. And there was another development proposal recently...to put a mini wetland in at the end of [an urban airport] runway! And I put up my hand and was like, 'Uh, do you think you should be drawing all the birds to the end of the runway where all the jets are taking off and coming down??' And they're like, 'Huh?' They just didn't understand the question.

The enthusiastic promotion of green roofs as a quintessential element of urban re-naturalization (Beatley, 2011, 2016; Kellert et al., 2008) provides a useful example of unintended consequences of trying to blend nature into settings ultimately designed for human use. It is not uncommon for organizations involved with wildlife rescue or removal to receive requests to assist in relocating waterfowl families from green roofs (as well as re-naturalized courtyards and apartment patios). These flat and secluded areas are favoured spots for Canada geese, who normally lead their goslings away from the nesting site on foot shortly after hatching. In the case of green roofs, adult geese will often fly to ground level during this dispersal process and vocalize for their young, who either cannot follow on foot (due to a barrier around the roof) or meet their death in doing so. These types of rescues are stressful for the animals involved and also precarious for human rescuers (since they involve catching healthy babies with protective parents). They also represent a considerable resource drain for organizations that do not operate on a fee-for-service model.

It is not only urban wildlife like geese that pose problems as accidental invitees drawn in by urban greening projects; even for species that are positioned as possible beneficiaries of greener cities – the ones seen by the rescue and advocacy organization as under-accommodated in urban design – invitations can go wrong. One interviewee from the rescue and advocacy organization (RAs2) noted that lush vegetation on condo rooftops can become a danger to smaller migratory birds, who alight in these areas and then collide with the clear glass balconies that surround the rooftop when they try to depart. These problems often lack satisfactory resolutions. As two interviewees noted (RAs2, RAi1), cutting down trees beside buildings may prevent migratory birds from colliding with the glass, but also reduces the urban canopy that birds require (not to mention killing the trees themselves). These examples suggest that while the rise of green/eco-city models are heralded as part of the shift toward more nature-integrative cities, they do not necessarily represent due attention to the conflicts of coexistence with other animals. While Wolch and colleagues are surely correct to pose physical and conceptual changes as interconnected parts of the move toward more-than-human cities, UWOs' experiences suggest that physical changes are ahead of the game, and that this may present some real-time problems for the animals who live in cities. When asked about whether we should be striving for design that is more integrative of other urban animals, one interviewee (WRs1) commented:

I'm actually kind of on the fence with that [...] A very wise colleague of mine once said that he thought cities should just be completely paved over with not a tree growing anywhere so that no wildlife lived in the core – and it sometimes seems to me that might be the best solution for everybody. I don't want to live in a city like that personally, but I can see how it would solve a lot of problems.

Deeper integration, more dire costs

The conflicts associated with urban greening only represent one dimension of risk with intersecting planes of multispecies coexistence. Others arise outside of naturalized spaces, where animal presence is most strongly seen as aberrant. The animals living "against the grain of expert design" (Hinchliffe & Whatmore, 2006, p. 127), on balconies and roads, in attics, warehouses, and sewers represent the most radical separation of wildlife from wilderness, and are central in the mitigative work of UWOs. These animals undoubtedly cause difficulties for UWOs in aligning their work with conservation; while there may be some charm to re-framing the spontaneous plant compositions that grow in a brownfield development as tendrils of nature in the city (Marris 2017), a rat swimming up an apartment toilet pipe is a harder sell. That "pest" species pose challenge to the embrace of a more-than-human urban ontology is a much-observed point (Escobar, 2014; Ginn, 2014; Holm, 2012; McKiernan & Instone, 2016). In their analysis of urban wildlife management plans, Hunold and Mazuchowski (2020) conclude that the principles of an integrated multispecies city are beginning to be reflected in these plans, with a growing emphasis on nonlethal management, and a greater accommodation and normalization of animals in urban space. They worry, however, that the acceptance of urban animals is contingent on them behaving well – for example, acting wary and keeping their distance from people. Rats, as notorious boundary-breachers, are accordingly afforded fewer accommodations, and these seemingly depend on the animals' ability to remain unnoticed.

There is more for UWOs to consider when navigating the boundary-breachings than urbanites' dislike. Living in close proximity (e.g., in an apartment) with a thriving rat population can represent a health risk to humans, so here a push for greater spatial separation between people and rats seems in the interest of a more harmonious coexistence. How this separation is achieved,

though, is an issue of contention. The kind of advice UWOs might give in other situations might not be appropriate here. For example, it is common advice to request that homeowners 'wait out' an animal nesting under a deck or in an outbuilding, with the understanding that the animal will likely abandon this space once the young disperse. This reasoning does not always apply to commensalist rodent colonies living in buildings, so in these cases organizations may advise more aggressive action to expel the colony. The degree to which organizations see lethal solutions as acceptable varies. The animal services unit in this study, for example, was part of the municipal department responsible for maintaining building standards, so the need to mitigate potential code violations could potentially conflict with a more humane or laissez-faire response to rat colonies in buildings. But rats themselves are accepted as part of city life when living in spaces where interdigitation is not seen to pose a risk (e.g., under an outdoor woodpile). The rehabilitation organization in this study accepted rats as patients for rehabilitation like any other wild species, regardless of whether they were found in a more paradigmatically natural space (e.g., a ravine) or stuck to a glue trap inside a building.

What is important here is that deep interdigitations between human dwelling space and rat dwelling space represent a potential harm, either to human health or to rat safety. Safety concerns are related to the fact that rats are a highly "killable" species (Haraway, 2008); lethal control of rats is not only culturally acceptable but is also supported by its own service and product industry. Clearly, in the view to a more equitable more-than-human city, it is the killable-ness of rats that points to our shortcomings in recognizing urban animals as political subjects. If rats' killable-ness is entangled with the visceral way in which they infringe on "human" space, one might argue the necessary remedy is to challenge the humanist thinking that makes them killable in the first place, rather than disciplining greater spatial separation. The discomfort that comes with occupying

multispecies spaces – such as the feeling many people have about living in close proximity with rats – is often theorized as important in the agonistic work of composing common worlds. 58

Lorimer has deemed the unsettling mix of feelings we have in interspecies encounters a productive kind of "awkwardness" (2014; see also Taylor & Pacini-Ketchabaw, 2017). In exploring the emergence of the Australian White Ibis as an urban "pest" species, Shaun McKiernan and Lesley Instone (2016) aim to "think through the multi-species city as a site for mutual cohabitation with ibis where modes of living-with are never fully comfortable" (p. 476). For UWOs, however, this awkwardness represents consequences for animals – and sometimes also humans – in real-time. While UWOs' coexistence discourse includes challenges to think differently about urban animals, the advice they give to mitigate conflicts is also bound to their estimates about the least-harm outcomes where humanist biases are thought to currently prevail. If we extend UWOs logic of right relations, as it appears here, to an ethos for a more-than-human city, it becomes clear that efforts to make-visible or to let-be (i.e., to not deter or discourage) must aim to not compromise urban residents in vital ways.

These tensions suggest that it is important to attend to the *ways* that the idea of nature is enrolled in discourse about right relations. UWO narratives about loss and resilience, and related tensions around inviting and excluding, suggest an interesting hybridization of ideas about static and changing natures evolving in this institutional niche. While they echo some old ecological ideas about human interference and the nature-culture divide, they also resist the often-affiliated idea that this devalues the liminal animals whose lives are profoundly shaped by human culture. I

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⁵⁸ The 'common worlds' concept has become important for some scholars in environmental education in theorizing children's relationships with nature. It is cast as a guiding framework for "the ethical and political challenge of learning how to live well together and flourish with difference" (Taylor & Giugni, 2012, p. 109; See also Taylor & Pacini-Ketchabaw and The Common Worlds Research Collective http://commonworlds.net/)

would suggest that here nature provides a map for the work of composing common worlds, but that the goal of these naturalist narratives is not to fundamentally disentangle human life from other urban animals. Rather, it is to infuse that entanglement with a sense of responsibility, and to promote the safety of the mixed community. Because UWOs need to focus on short-term solutions to human-wildlife conflicts, their sense of right relations may be necessarily bent more toward harm reduction than toward a more long-term view of how to promote thriving cities. As one rehabilitator (WRi1) commented:

The idealist in me would say that humans and wildlife could definitely co-exist and thrive together, but I don't think everyone is interested in that...In more of a real-world situation, given that not everyone is on the same page, I think harm reduction is great first step toward a world where we could one day thrive together.

Chapter 6: Conclusion

Contributions of the research: Ethics, entanglement, and the more-than-human city

One prominent idea that emerges in this analysis is that, for UWOs, right relations in a

multispecies city are marked by some degree of affective and spatial separation between humans
and wildlife – a thin rather than thick coexistence. As I have suggested, this emphasis in some
ways resists many of the more radical iterations of postnaturalism. Scholarship in this vein has
tended to take a relational (or variably, cosmopolitical) approach to knowledge, calling for an
embrace of multispecies entanglement, the kind of entanglement that would likely be seen as
being *occluded* in the human/nature binaries that shape UWO practice. Relational approaches
have been interested in how we might cultivate an affective sensitivity to encounters as radically
singular, shaped uniquely by a coming-together of more-than-human agencies (Despret, 2004;
Latour, 2004; Haraway 2008). This relational emphasis has been highly influential in aspirational
proposals for the more-than-human city (Hinchliffe et al., 2005; Hinchliffe & Whatmore, 2006;
Houston et al., 2018; Maller, 2018; McKiernan & Instone, 2016; Rose, 2012).

Certainly, such perspectives have much to offer in challenging the homogenizing frame of connection-to-nature, which obscures the complexity of individual encounters. A growing body of critique, however, has raised questions about what might be missed in the emphasis on affective entanglement (Giraud, 2019; Pitt, 2018). With regard to wild animals in particular, some geographers have stressed the need for a politics of distance and detachment (Candea, 2010; Collard & Dempsey, 2013; Ginn, 2014). These critiques stress that an over-enthusiastic embrace of entanglement can come at a cost of misremembering the violence that has created these entanglements (Collard et al., 2015), or a failure to critically assess who benefits from them (Giraud, 2019; Lorimer, 2012). As Ginn argues, "a focus on connectivity, vitality and belonging

obscures as much as it reveals. Any practice of relation has a constitutive violence – it is also an exclusion, an act of prioritizing one possible connection over another, and to ensure it lasts, it may involve the subjugation or death of outside others" (Ginn, 2014, p. 533). The experience of UWOs as elaborated here, I believe, adds force to these claims.

It is not that relational approaches to the more-than-human city are insensitive to the possible consequences of encounter for nonhuman others in multispecies spaces. Houston et al. argue, for example, that an ethos for the multispecies city must remember the grace of "leaving be" (2018, p. 11). Cecily Maller's (2018) call to facilitate urban interspecies connections through practices like feeding wildlife and backyard gardening is, likewise, tempered by caution about possible harms that animals face as a result of these practices. For the most part, however, references to emotional discipline in this body of work have focused on challenging the antipathy toward nonhuman others, rather than on guarding against over-zealous affections (McKiernan & Instone, 2016; Metzger, 2016). This emphasis also means that the need for detachment and distance sometimes appear as something of a sideline. For example, despite recognition that feeding wild animals may lead to spread of disease, habituation, and even large-scale ecosystems impacts, Maller ultimately concludes that feeding wildlife is an example of "caring and ethical mindfulness that show how humans and other urban species are constantly entangled in processes of becoming- and being-for-the-other" (2018, p. 124). This stands in contrast to the perspective of the UWOs in this study. The animal services unit and the wildlife rehabilitation centre actively discouraged feeding, characterizing it as a major problem for the welfare of urban animals; the rescue and advocacy organization also acknowledged some undesirable outcomes of feeding. While their views do not preclude the possibility of ethically mindful forms of feeding, these organizations certainly did not see that as the default.

As I have discussed, Nature was the semantic tether for UWOs' ethic of respectful distance, but the concept did not seem to function as a way to obscure the singularity of encounters. UWOs work is tightly bound to context, since they are called on to provide customized advice and care based on their assessment of a given situation. In my own experience in urban rehabilitation, locating the place where the interpreted dictates of what is "natural" cease to serve particular animals, or mixed-species communities, is an ongoing struggle for those organizations navigating the terms of urban coexistence. For an urban starling, the gap behind a storefront sign is a normal nesting site, but whether people can or should be compelled to leave a flightless fledgling on the sidewalk amidst rush hour traffic is the kind of issue that UWOs must, and do, debate. The existing relations in which animals are embedded, for example, are one consideration in evaluating their prognosis for survival in the wild. A raccoon with a bad leg visiting someone's backyard over multiple winters may be judged to be thriving against the odds and left alone, even if the same animal might be deemed non-releasable in the hospital setting. Likewise, a pigeon in a flock regularly fed by the same person may trigger different criteria for releasability, since the animal is seen to be part of an extended care network wherein their health can be monitored over time.

Still, that UWOs pay attention to context does not invalidate the critiques that holding on to Nature as a moral guideline can foreclose some relational possibilities. UWO decisions may be context sensitive, but they are also a probabilities game, based on best predictions about how encounters are likely to unfold. How much these predictions are unfairly biased by work they do—where harmful outcomes of encounter are the norm—is uncertain. Some degree of misanthropy may indeed be wedded to the practice of conflict response and rehabilitation, as Collard (2014) suggests. What we can draw from this study, though, is that UWOs' emphasis on thin coexistence

– where humans and nature retain some separation – did not here seem to represent a fetishized trope of nature that was present in big conservation's claims about local connectionism, in which urban animals can stand as an undifferentiated site for building social/emotional capital, or where urban species were degraded wild forms polluted by human contact. Rather, it seemed grounded in the recognition that maintaining some sovereignty of those worlds is often protective for the welfare of both.

What might we glean from UWO perspectives, then, in crafting an ethical vision for the more-than-human city? While they are tethered unavoidably to the particulars of encounter, they do not share the "antipathy for rules and principles" (Srinivasan, 2015, p. 2) that generally characterize relational approaches. Their attention to context, which exists in tandem with a fidelity to nature that defines our moral debt to nonhuman others, seems more aligned with the kind of relational ethos developed in ecofeminist thinking than the flavour that has been associated with a postnatural cosmopolitics. Ecofeminist thinking has long been grounded in a call to orient ethics to the particular contexts of embodied encounters rather than hold to universal principles, though this theoretical lineage is often not acknowledged in contemporary relational scholarship (Gaard, 2011). While ecofeminists have stressed the need to attend to the voices of individual animals and their singular contexts, this emphasis has not meant that no normative principles could apply, but rather that these principles must be grounded in an understanding of positionality if they are to be means for enacting intersectional justice (Gaard, 2017). Concepts like Curtin's (1991) "contextual moral vegetarianism," for example, acknowledge that care ethics should have core normative principles, but also must acknowledge the way that these principles

pose unequal demands on people based on a variety of economic and cultural factors. ⁵⁹ As another example – one germane to the present study – Grace Clement (2011) argues that a principle of non-interference should guide us in our relations with wild animals, even as we recognize that this principle needs bending when we encounter suffering individuals. These ecofeminist perspectives bristle against a more contemporary relational ethos, where we can never decide what right relations should look like in advance, but rather must commit only to "stay with the trouble" (Haraway, 2016) of working through ethics of particular encounters. As Eva Giraud (2019) has argued, however, the call to "stay with the trouble" is often "inadvertently positioned as an end in itself" (p. 202) and ignores the way that relational narratives, just like normative or universal principles, can also sometimes "foreclose responsibility" (p. 96). Rejecting the category of nature, in other words, does not ensure that no dangerous politics are enacted in decision-making.

A second contribution of this research is that it highlights the ways in which urban wildlife organizations are bound together by a common sphere of practice, suggesting the need for greater recognition of this service niche as a critical part of the institutional infrastructure of cities. This infrastructure tends to not be a central point of focus in most proposals for a multispecies urbanism. One exception is Timothy Beatley's work on biophilic cities (2011), where he argues that urban organizations play a key role facilitating urbanites' relationships with the natures around them, although he is largely focused on the work of building connections – for example he references zoos, botanical gardens, and natural history museums as potentially important actors – rather than on the work of managing the affective encounters with other urban life.

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⁵⁹ How ecofeminism should navigate universalist principles in regard to eating animals has remained an important area of debate amongst ecofeminist scholars, though most continue to rely on some normative claims. See Richard Twine (2014) for a useful genealogy of these conversations.

The data in this study suggests that a wider view of urban infrastructure is needed, with important implications for city planning and governance. UWOs represent a largely untapped source of data and expertise about urban multispecies relations, suggesting the need for a betterestablished role for them as consultants in planning. A lack of adequate city funding is a clear barrier here; as this research demonstrates, UWO practice is currently not tightly cohered around a common identity, but rather marked by competition over which set of organizational practices are most worthy of state and public support While the organizations in this study would no doubt agree that the importance of their work is under-recognized, they would not necessarily agree on what the organizational niches should ideally look like. The wildlife rehabilitation and education centre might wish to take over the practice of intervention and education entirely, if funds were available for them to do so. The rescue and advocacy organization might wish to continue working on the more focused issue of bird conservation in cities. The call to cohere this service niche does not mean it has to exist as is; a clear problem emerging in the present case study is that the government organization with the most (staff) resources to respond to encounters in the field has – by their own admission – no expertise in assessing those encounters to determine the best course of action, and no formal arrangements or adequate funding to provide care for animals in need. The remaining option – removal and/or euthanasia of sick or injured animals – is not only unsatisfactory to many human urban residents, but also clearly raises questions about how the treatment of urban animals can be better recognize them as rightful residents of the city. One would expect that greater recognition of this field as an essential service niche would usefully bring with it an evolution toward greater specialization and more organized collaboration.

Areas for future research

Interdisciplinary conversations about sustainable cities

One consequence of the under-recognition of the urban wildlife field is that these actors are often not engaged in high-level urban planning and management decisions. It was clear from this study that some would like to be more involved if space was made for them at that table, and if funds permitted. UWOs' absence in urban planning and management can in part be explained by the fact that many wild animals are not typically considered rightful or desirable residents who should be accommodated in urban programming and design; even those species that are desirable (from an aesthetic or ecological perspective) have not generally been considered political subjects of the city. The growing body of work on the more-than-human city has begun to challenge the way we think about urban citizenship as an exclusively human concept (Houston et al., 2018; Maller, 2018; McKiernan & Instone, 2016; Metzger, 2015a, 2016; Owens & Wolch, 2015; Shingne, 2020; Stokes & Chitrakar, 2012; see also Donaldson and Kymlicka, 2011), though more-than-human perspectives remain on the fringe of urban theory and planning. Research on sustainable/green/eco-cities, in contrast, is becoming a centre-stage focus for planners. The benefits of human contact with nature as a means of promoting well-being and productivity is an emerging area of interest in urban sustainability research (Andersson et al., 2015; Beery et al., 2017; Cox et al., 2017; Kellert et al., 2008; Tzoulas et al., 2007).

Due to differing onto-political commitments, there has been relatively little cross-pollination between these two bodies of research. Proposals for a more-than-human city tend to draw prominently on relational ontologies that seek to unsettle the category of nature, where sustainable cities research that seeks to operationalize connection to nature as a new dimension of ecosystem services leaves the pillars of humanism intact. This theoretical tension creates some

difficulty for finding a practical guideline for what thriving and equitable "connections" to nonhuman life might look like on the ground. The present study suggests an important opening for thinking through the complications of living with other animals as part of an affective or relational dimension of sustainability, one underserved by the more generic "social" or "cultural" pillars of sustainability models. This dimension unites these two sub-fields of geographic research with overlapping interests in interspecies connections, but there is a critical need for more conversation between them.

Exploring affective ecologies

One thing that was clear in this study is that right relations – as UWOs conceive them – are not simply a set of ideas about wild animals in the city, but rather a suite of affective practices whose reverberating effects on animal life, and the more-than-human city, are not yet well understood. Using this study as an example, it is not unreasonable to think that many hundreds of humanwildlife encounters were being shaped by the advice of just these three UWOs every day. This estimate includes, certainly, the encounters that are directly affected through UWO responses in the field. But it also includes the encounters impacted by the information they give out over the phone, much of which involves advising people to take some kind of material action in response to a current or anticipated encounter. In my own years of work on a rehabilitation centre's helpline - where staff would respond to up to two hundred requests a day - advice for callers frequently involved giving callers directives that shaped the lives of animals in significant ways. Recommendations included – for example – chasing and catching injured animals, putting them in covered transport boxes, barricading them out of buildings, tolerating their presence during nesting season, checking their skin turgor for dehydration, or watching from a distance for parents returning. The impacts of UWOs' advice to callers is likely amplified by people sharing this

information with others they know, not to mention the uncounted visitors to organizational websites that provide a lot of the same kinds of advice.

More research is needed to quantify these effects and to understand their impact on the multispecies relationships in the city. Ecologists have been interested for some time in the affective forces in shaping urban ecologies, even if they might not be described in such terms (Hustak & Myers, 2012). The effect of fear – of humans or associated stimuli in urban environments – has been a particularly rich area for urban ecology research, since it is thought to be a primary difference between those species who can live well in urban environments and those who can't – as represented in the much-used distinction between urban "exploiters" vs. "adapters" vs. "avoiders" (McKinney, 2002). The neatness of these distinctions has been complicated by comparative and long-term studies showing differential adaptations in urban and rural populations of the same species (Kitchen et al., 2011; Luther & Baptista, 2010; Nemeth & Brumm, 2009), rather than hard lines that divide adaptive from avoidant species. Some studies have also begun to explore how individual difference in animals (i.e., in "temperament" or "emotionality,") shape these affective ecologies, since bolder animals are less vulnerable to fear effects (Lowry et al., 2013; Martin & Réale, 2008; McDougall et al., 2006; Runyan & Blumstein, 2004). This line of research suggests that urban ecologies are affective constellations, produced through dynamic modes of sensing and responding. Other studies have suggested that, in aggregate, animals' avoidance responses represent a "landscape of fear," in which different topologies associated with varying degrees of predation risk that influence how animals use them (Laundré et al., 2001; Laundré et al., 2010). In human-dominated spaces, humans are an important part of this predatorial landscape (Ciuti et al., 2012).

Research exploring these ecological effects would be most generative, I would argue, as an interdisciplinary project. A nascent body of work in more-than-human geography seeks connections between these kinds of studies in ecology – and also research in ethology – and the theoretical concepts of affect and mobility. 60 As Barua and Sinha note (2019, p. 1173), the substantial literature on urban mobilities has not yet considered animals very much⁶¹ in its quest to elucidate "how and why cities are produced through cross-scale, inter-city relationships and movements" and the ways in which affective multispecies encounters underlie the production of urban space. Lorimer, Hodgetts, and Barua (2019) have recently explored how the concept of "atmospheres" might be used to better elucidate the lived experience of other animals. One benefit of using atmospheres as an interpretive concept, Lorimer et al. argue, is that it provides a way to extend our thinking about biopolitics, by looking at how the engineering of atmospheres can be central to the project of controlling life – for example, the extermination of insects through DDT could be considered a kind of atmospheric warfare. They frame wildlife management as relevant actors in this engineering, pointing to the suite of sonic, visual, or physical deterrents used to engineer the atmospheres of "pest" species in order to "secure the productivity of a small number of agricultural plant and animal species." (p. 13). As detailed in this study, UWOs advocate many of these deterrent practices to promote multispecies welfare and have an ambivalent relationship with their identity as wildlife managers, so a further exploration of how their work is enrolled in the biopolitics of management would be an interesting line of study.

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⁶⁰ In human geography, the concept of mobility explores not only at how movement is enabled and constrained, but also how enabling and constraining factors shape the experience of movement and gain meaning for moving or still bodies – see Hodgetts & Lorimer (2020).

⁶¹ Some notable exceptions are Cresswell (2014) and Hodgetts & Lorimer (2020).

⁶²Atmosphere is a concept that has gained some traction in geographies of affect. Lorimer et al. define atmospheres as the "affective intensities of a particular space that gives rise to events, actions, feelings and emotions" (2019, p. 2).

Narrativizing multispecies ethics: Defining right relations in and with the Anthropocene

One of the points of curiosity that compelled this study was the sudden ubiquity of conversations about the Anthropocene when I began my graduate studies. Certainly, one could hardly read analyses in the humanities and social sciences without bumping into the idea that humans had now officially colonized the planet. But far from being just a heuristic for critical theory, it seemed as though the concept was everywhere, crossing into far-flung disciplines and making regular appearances in political discourse, mainstream media, and pop culture.

As I have documented in the previous chapters, in academic circles where nature was already a contested concept, the emergence of the Anthropocene metaphor has been less of a paradigm shift than a catalyst for long-running conversations, lending an epochal force to the call to abandon the binaries of human/nature as a moral map. While new conservation knit together a diverse set of claims, one that it shares with more radical postnatural thinkers is the idea that we must ground intervention in a view of the world as it is, not as it should be, and refocus our efforts on better ways of living-with nonhuman natures in less-than-ideal conditions. What struck me about this tenet was how much it seemed to reflect the work that urban wildlife organizations had long been doing, though without the associated cultural clout. I wondered what the arrival of the Anthropocene as a new cultural buzzword meant, or could mean, for them. Should UWOs be laying claim to this metaphor, making their alignment with postnaturalism or the Anthropocene more explicit? In one sense, the de-purification of Nature – and associated naturalization of cities - seemed to portend a new legitimacy for their work, opening the door for new intersections with a wider environmental practice. Under the aegis of the Anthropocene, honing strategies and principles for better multispecies coexistence is not merely a technical problem for cities but, rather, a defining question of our time.

Undoubtedly, the Anthropocene has some potential as a narrative tool. Some have seen it as useful in facilitating conversations across theoretical and practical borders. As Lorimer (2016) has argued:

It is useful to understand the concept of Anthropocene as a 'boundary object' (Star, 2010) or a 'charismatic mega-category' (Reddy, 2014) that enables new conversations and collaborations across significant forms of epistemic difference...In King's (2014) terms, the plasticity of the Anthropocene enables generative discourse across the 'transcontextual tangles' of contemporary political ecologies. (p. 2)

The ways in which grand metaphors can become sites for crossover and collaboration is, of course, not an insight unique to the circulation of the Anthropocene concept. Research in organizational sociology and social movement studies draws on a rich bank of concepts for exploring these crossovers. For example, Ernesto Laclau and Chantal Mouffe's (2014) notion of "floating signifiers" that have an organizing effect on the discourses they inhabit but no independent meaning⁶³ has been a generative concept in studying the dynamics of metaphors in political and organizational discourse (Walton & Boon, 2014). These signifiers become important sites of political struggle, and also of opportunity. In social movement studies, for example, there has been much interest in *frame alignment* (Snow, 2004; Snow et al., 1986), a process by which social movement actors attract or persuade new adherents by linking frames that are already resonant – reflecting, say, common interests or values shared by potential adherents – with ones they wish to advance. Maarten Hajer's concept of *storylines* similarly looks at how short

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⁶³ For example, "communism" or "democracy." Environmental and sustainability have been positioned as floating signifiers in a number of analyses. See Epstein, C. (2008). *The power of words in international relations: birth of an anti-whaling discourse*. MIT Press.; Tregidga, H., Milne, M., & Kearins, K. (2014). (Re) presenting 'sustainable organizations'. *Accounting, Organizations and Society*, 39(6), 477-494.

statements or metaphors that simplify complex environmental problems can create points of convergence for discourse coalitions, even between parties whose interests are at odds (Hajer, 2005). This coalition-making was also the focus of Laclau and Mouffe's concept of *chains of equivalence* (2014) in which groups may forge a relation of solidarity by discursively aligning themselves as for or against a common identity or phenomenon (such as the diverse movements aligned with an anti-globalization imperative) (Epstein, 2008; Poudel & Aase, 2015; Spicer & Sewell, 2010; Stephan, 2012). Other organizational research has pointed to Michel de Certeau's development of the idea of *bricolage* in everyday life, in which social actors inventively adapt dominant cultural and economic logics for their own interests (Duymedjian & Rüling, 2010).

These ideas provide a fertile ground for thinking about the Anthropocene as a discursive tool for urban wildlife organizations to claim legitimacy. On the other hand, strategies of discursive alignment are also available to powerful actors. Spicer and Sewell (2010) note that while de Certeau sees bricolage as a tactic for "weak" actors to invert or subvert the status quo through creative re-working, that it can also be a "counter-insurgency tactic" for powerful actors to adopt new language for what is actually a preservation of the status quo, which continues to serve those in power (p. 935). Critics have worried about these power effects in discourse about the Anthropocene, which — like the aligned notion of postnature — can obscure important details about uneven responsibility for environmental change as well as uneven vulnerability. Some have pointed, for example, to the ways that the Anthropocene tacitly codes environmental destruction as a natural outcome of population growth and technological advancement rather than an effect of particular political-economic projects, leading to alternative metaphors like the "Capitalocene" (Moore, 2017) and "Plantationocene" (Haraway et al., 2016; see also Davis & Todd, 2017).

That the Anthropocene narrative can function to obscure difference – such as uneven vulnerability – is something of an irony, since for many, the postnatural ontologies that the Anthropocene denotes are a way to *foreground* difference by unsettling universalizing categories like Nature. Thus, while the term is contentious, many are enamored of the concept for what it enables – an embrace of distributed agency (Latour, 2014), a dynamic multinaturalism (Lorimer, 2012), or an orientation to the small-p politics of everyday life (Taylor & Pacini-Ketchabaw, 2015). Whether these everyday politics *can* be privileged through a grand narrative is an important question, however. Giovanna di Chiro (2019) has observed that the grand narrative of the Anthropocene "meme" has not "broken into the world of environmental justice politics" (p. 375) on the ground as it has in scholarly discourse, despite the fact that activists and organizations on the ground regularly navigate environmental changes that define the Anthropocene. As she argues, those on the ground are engaged with messier politics, and "the generativity of these diverse political assemblages cannot be captured in the universal 'we' of the Anthropocene story" (p. 375).

That none of the UWO discourse in this study made use of the Anthropocene concept might support di Chiro's claim, but there was no evidence this was a conscious rejection – in fact none of the interviewees in this study's UWOs had ever heard of the Anthropocene, and their fidelity to nature does not suggest an eschewal of universalist concepts. When I briefly described to UWO interviewees some of the ideas associated with writings on postnaturalism – that humans ought to embrace our role as planetary gardeners and engineers of new natures rather than focus on trying to restore nature to an earlier baseline (as argued in work like Ellis, 2012; Latour, 2011b; Marris, 2011; Shellenberger & Nordhaus, 2011) – their reactions were ambivalent. Many agreed with the sentiment that human activity had changed nature irreversibly, and that there was a need

to adapt interventions to a "new reality" (WRs2). As one strategist from the rescue and advocacy organization (RAs1) commented:

I think it's a new world, and don't get me wrong, its still worth saving, but its not going to be what we remember it to be. It's going to be something different.

A strategist at the animal services unit (ASs1) opined that this new reality reinforced the need for an ethos of harm reduction. In discussing the emergence of wildlife corridors built over highways, they said that:

I support them because [while] it's not great for the animals, its better than them getting schmucked. And we're not going to do away with the highway so animals don't die, some of those things are past the point of no return. Realistically we're going to have the highway, so why wouldn't we have the corridor over top of it? Just to mitigate [harm]. To me it's not black and white, much more grey.

At the same time, however, the fidelity to nature I have already documented in UWO perspectives was also echoed in discussions of the Anthropocene, where interviewees were wary that "designing nature for what we want isn't necessarily in the animal's best interest" (ASs1). Some stressed it was important that someone was still "a voice for these animals and spaces and ecosystems" and that an unqualified embrace of earth as a human garden could undermine the need to "preserve as much as we can" of wildlife habitat and wild lives themselves (WRs2). They worried, in other words, about the consequences that declaring our world post-Natural would have for animals who were already vulnerable in human-dominated spaces.

A multispecies urban praxis

A final question prompted by this study, then, is what UWOs' ambivalence about narratives of postnature – and the Anthropocene – should mean. How might their ambivalence speak to Hadidian's (2009) prescient call for theory and a praxis for urban wildlife? How well do theory and practice in this area speak to each other, and where can these efforts be improved? Clearly, the UWOs considered here were not engaging with theoretical concepts like the Anthropocene to characterize their work. Given its metaphorical slipperiness, I would argue that doing so may not provide any clear benefit, however, it did seem in this study that the official communications of the UWOs did not fully represent the complexity of their practice and often fell short of a highlevel conceptualization of their work and its relevance for urban life. The richness of multispecies entanglements that shape city life are what make UWOs service network so essential, and yet few outside of this professional field have a macro-level view of these entanglements. UWOs could make a stronger case for why they matter, and why their unique niche is important, by bringing to the foreground arguments about urban animals as residents, which sometimes take a back seat to UWOs' appeals to traditional conservation frameworks (where the ecological value of animals is paramount). A stronger integration, in other words, of ethical arguments developed in the interdisciplinary body of theory on more-than-human politics and planning stands to better define – and perhaps cohere – their service niche.

Whether this body of knowledge is accessible to them, however, is another question.

Aspirational visions for the more-than-human city, while generative, are often grounded in the thick theory of the environmental humanities/social sciences and have perhaps limited resonance or translatability for those in front-line planning and management, not to mention the general public. Another concern is whether this kind of theoretical work is open to being informed by the

experience of UWOs. On face it would seem so – if there is anything common to come out of the different theorizations of more-than-human cities and multispecies cosmopolitics, it is that these politics should be grounded in the heterogenous encounters of everyday life matters. UWOs are clearly a rich source of expertise about acts of everyday relating in cities and the underrecognized points of tension where human and animal interests collide. As Barua and Sinha argue, if we want to move toward better recognition of animals' experience and mutually beneficial narratives of relationality in multispecies spaces, "working with those who are 'with' animals can offer us some of the best possible indications of how such narratives may *alternatively* be told" (2019, p. 1166, italics in original). But, as Eva Giraud (2019) has argued, not all the actors in multispecies politics on-the-ground are equally beloved by theorists. As she observes:

In theoretical contexts the mundane affects that are generated as experts or specialized workers interact with animals in their everyday caretaking and conservation work are often portrayed as holding ethico-political potential, in giving rise to sustained relations of care. In contrast, *activist* emotions are often portrayed as lying at the root of paternalistic or irrational responses to political issues." (p. 17, italics mine)

Because activists come with a normative moral narrative, she contends, they are often seen to fail in recognizing or reflecting the "irreducible complexity" (p. 2) of multispecies cosmopolitics. Undoubtedly some will see the work of some UWOs in this way, leaning too far toward an activist or – in the case of animal services – managerial orientation to be theoretically informative. I think they have more to offer, and that a theory for urban wildlife that takes praxis seriously must recognize their deep experiential knowledge. As Giraud notes, irreducible complexity is a worthy idea, but one that is difficult to translate to a practical ethic to guide work on the ground. This difficulty, she notes, "can prove paralyzing" and indeed can undermine the "scope for

political action" (p. 2). A more reflexive relationship, in which theory works to draw ethical principles from practice, and practice pulls from theory a more cohesive narrative framework, has great potential to contribute to thriving, equitable multispecies cities – a goal that should guide us.

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