Exploring Human-Feral Cat Relations in Southern Ontario

by

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ABSTRACT

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Feral cat management is an under-researched human-animal interaction. Feral cats are supported and protected by some, vilified and eradicated by others. Debates about their impacts on native fauna, welfare concerns, and human moral obligations are diverse and complex. This research critically investigates the conceptual, spatial, and ethical dimensions of human-feral cat relations through an empirical case study in southern Ontario, Canada. It explores human placement of cats using semi-structured interviews with community members. It examines more-than-human modes of inhabitation by engaging with feral cats' lifeworlds firsthand through field observations. It also employs a performative approach to consider ways in which both human and feral cat agencies participate in the co-creation of subjectivities in multispecies interactions. Overall, this research emphasizes the importance of attending to non-human difference, subjectivities, and agency in order to challenge the processes through which non-human animals such as feral cats are made killable.

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1.0 INTRODUCTION

1.1 Practical Context

Globally, the management of feral animals represents one of the most contentious cases of human-animal relations. The establishment of human-domesticated animals outside of human control presents a transgression that is frequently complicated by their (usually) non-native origins, and the subsequent involvement of categories such as 'alien' and 'invasive'. Calls for the eradication of these out-of-place animals have conflicted with welfare concerns, and debates have surrounded the ethics of removal campaigns that involve poisoning, shooting or euthanasia. Feral cats have successfully established themselves in many parts of the human-inhabited world, and are frequently blamed for the decline in native faunal populations, for instance small marsupials in Australia and flightless birds in New Zealand. In the North American context, there has been growing public concern about the impacts of feral cats on songbirds over the last decade. Increasingly, magazines and newspapers have featured stories such as "That Cuddly Kitty Is Deadlier Than You Think" (Angier, 2013), "The Biggest Threat to U.S. Wildlife? Cats" (Paramaguru, 2013), and "'Stone-cold serial killers': Domestic cats slaughter billions upon billions of animals in US every year" (Walker, 2013). These sensationalized articles have led to increased public awareness of the prevalence of feral cats, and have tended to exacerbate conflicts between individuals concerned with damage to native fauna ('bird people'), and those opposed to lethal control and/or concerned for cat welfare ('cat people').

In a Canadian context, the Canadian Federation of Humane Societies (CFHS) released a report in 2012 on "Cats in Canada", which divides cat populations into the following six categories: owned-indoor; owned-outdoor; homeless-sheltered; homeless-at-large; feral-

managed; and, feral-independent. Homeless cats are defined as lost or abandoned strays who are human-social, whereas feral cats are unowned and unsocialized, and can live either in managed colonies or independent of human support. The report defines a feral cat colony[1] as "a group of three or more sexually mature animals living and feeding in close proximity to one another" (p. 32). Using a survey of 478 animal organizations and a random sample of 1,000 Canadians, the report estimates the national population of unowned cats at 10.2 million. As there is little existing information from Canada, the report draws heavily on studies from the United States. The report's primary recommendation for the future management of feral cats is to implement a program of "[t]rap-neuter-return (TNR) for feral cats with consistent monitoring to remove new strays and spay or neuter new feral cat arrivals" (p. 34). In TNR programs feral cats are trapped by volunteers, brought to a veterinary clinic to be examined, vaccinated, spayed or neutered, then returned to their colonies. Often this examination includes testing for common transmittable diseases, such as Feline Leukemia Virus and Feline Immunodeficiency Virus, and if cats test positive or are found to have any other serious injury or illness they are euthanized. The colonies are usually managed by a caretaker who provides food, water, and often shelter. The formal position of the Canadian Veterinary Medical Association (CVMA) (2014) on feral cats is as follows:

> The CVMA encourages and supports initiatives to address the issues associated with free-roaming, abandoned, and feral cats – to reduce feral cat numbers, improve the welfare of the cats themselves, and address public health risks. The CVMA recognizes that well-managed trap, neuter, and return (TNR) programs are an important strategy in the management of feral and abandoned free-roaming cats. Managed cat colonies should not be located in wildlife refuges or breeding areas, near habitats of threatened or endangered species, or in other ecologically sensitive areas. The CVMA encourages continued research into the dynamics of feral cat populations and TNR programs. (n.p.)

[1] "Colony" is employed as it is the accepted term for a group of domestic felines in a free-living context in both the scientific/veterinary literature (e.g., Centonze, 2002; Dauphiné & Cooper, 2009; Spotte, 2014) as well as animal rescue/shelter/colony caretaker communities.

Within Ontario, there are very few centralized feral cat management initiatives, with the exception of those in the Greater Toronto Area (GTA). Within Toronto, a Toronto Feral Cat TNR Coalition was formed in 2010; it is composed of the following groups: Toronto Street Cats; Toronto Animal Services; Toronto Humane Society; Toronto Feral Cat Project; Animal Alliance of Canada; Ontario Society for the Prevention of Cruelty to Animals (OSPCA); Urban Cat Relief; Annex Cat Rescue; and Toronto Cat Rescue. The coalition's collective mission is to:

- Help reduce feral cat over-population in Toronto via TNR (Trap-Neuter-Return) and accessible spay/neuter clinics in a coordinated manner.
- Educating and building awareness amongst cat owners and caregivers about the breadth of resources available for TNR and colony management in Toronto.
- Advocating with politicians and supporting the ongoing welfare of Toronto's colonies (Toronto Feral Cat TNR Coalition, 2014)

Through the Toronto Humane Society, Toronto Animal Services, and Toronto Street Cats, the Coalition funds three clinics at which feral cats can be vaccinated and spayed or neutered for free. In order to be eligible for these services, colony caretakers must first complete a colony caretaker training workshop, "Trap-Neuter-Return: How to Manage a Feral Cat Colony", provided by the Toronto Feral Cat Project (Toronto Feral Cat TNR Coalition, 2014). In addition, other services are available to colony caretakers in the GTA. Toronto Street Cats conducts shelter building workshops. As well, two programs are available through The OSPCA: The "Free Feral Food Program" provides a limited amount of free cat food for colony caretakers in order to decrease the financial burden in caring for their colony. The "Feral Cat Trap Depot Program" provides live traps for loan to caretakers when needed to be used in TNR initiatives (Seto, 2013).

Of the animal control bylaws reviewed for this paper, there was no reference to feral cat management except in the City of Toronto bylaw (see Appendix D: Legal Context). It appears that very few other communities in Ontario have any sort of feral cat management program.

However, there are many animal shelters and rescues operating in both urban and rural areas throughout the region that undertake limited TNR. There is also evidence of growing concern about free-living cats in communities within southern Ontario. For instance, within Guelph, a Guelph Cat Population Taskforce (GCPT) has been initiated by the Guelph Humane Society, several departments at the University of Guelph and Ontario Veterinary College, the City of Guelph, a number of smaller animal rescues, and other interested organizations. The GCPT is a collaborative, community-based initiative whose primary goals are to support research on 'community' (stray and feral) cats, promote outreach and education, encourage community involvement in decision-making concerning cats, and eliminate the euthanasia of healthy, adoptable cats (GCPT, 2015). The taskforce is considering a range of possible future community cat population management opportunities, and to this end began a survey in the fall of 2014 to gauge public knowledge on community cats as well as values and preferences concerning their management.

1.2 Scholarly Context

1.2.1 Interdisciplinary Studies of Feral Cats

Feral cats have been studied primarily from within veterinary and wildlife science disciplines. Investigations have included three main areas of research: descriptions of cats and caretakers; management efficacy; and public opinion. The first type of research attempts to analyze the condition of feral cats in colonies, and occasionally studies the humans who are associated with them. Such studies might interview caretakers in order to estimate cat numbers and better understand the types of individuals who choose to care for unowned cats (e.g., Centonze & Levy, 2002; Levy, Woods, Turick & Etheridge, 2003), or else physically examine

cats in TNR programs (e.g., Scott, Levy & Crawford, 2002). The second type of study examines feral cat management strategies, and evaluates them in terms of cat welfare or efficacy in population reduction or damage to wildlife. These studies are based on either primary research (e.g., Levy, Gale & Gale, 2003), or reviews or modelling (e.g., Foley, Foley, Levy & Paik, 2005; Jessup, 2004; Levy & Crawford, 2004; Longcore, Rich & Sullivan, 2009; Loyd & DeVore, 2010; Nutter, Stoskopf & Levine, 2004; Robertson, 2008; Stoskopf & Nutter, 2004; Winter, 2004). The third type of research includes studies undertaken to understand the general public's opinions on feral cats, and preferences for their management. These involve surveying a large number of individuals by telephone or mail on topics such as whether or not feral cats are a problem, how big of a threat they are to wildlife, and how they should be managed. Individuals often are grouped based on characteristics such as urban/rural, level of education, wildlife values, pet/cat owners, or cat feeders (e.g., Ash & Adams, 2003; Dabritz, Atwill, Gardner, Miller & Conrad, 2006; Lord, 2008; Loyd & Miller, 2010).

For the most part, interdisciplinary studies on feral cats have used extensive, quantitative methodologies to produce descriptive or applied research. Two exceptions should be noted. Hutson (2011) explores stakeholder perceptions of feral cats using an intensive interview-based methodology. He identifies four different types of opinions, and classifies them based on nine categories of environmental attitudes developed by Kellert and Berry (1980). These are: feral autonomy-moralistic; cat abandonment-humanistic; nuisance animal-utilitarian; and wildlife conservation-ecologistic. In another study, Thompson (2012) employs ethnographic and field methods to investigate a TNR campaign on a university campus in the United States. She explores the perspectives of colony caretakers and their social stigmatization, but focuses little

on the feral cats themselves. Neither of these studies critically investigate the social construction of feral cats, or explore cat agency, subjectivities, or contested claims to place.

Few studies have investigated feral cats in a Canadian context. One study by Environment Canada (Blancher, 2013) employs extrapolation and results from studies in the United States to estimate the national feral cat population at 1.4 to 4.2 million. This study sought to investigate the overall mortality of songbirds in Canada as a result of predation by domestic cats. Its final estimate is between 100 and 350 million birds killed by cats per year, with feral cats being responsible for the majority of these losses. No studies from Canada have investigated public perceptions of feral cats or preferences for their management; this is an important knowledge gap because public perceptions of feral cats vary regionally (Loyd & Miller, 2010; Wilken, 2012).

1.2.2 Animal Studies and Animal Geography

The research conducted for this paper draws upon recent scholarship in animal geography, as well as related disciplines that fall under the umbrella of animal studies. These areas explore the many and diverse modes of human-animal interactions, and began with what is widely termed the 'animal turn' in the social sciences and humanities. This shift of focus to consider animals' experiences and interactions with humans has been gaining momentum since the mid-1990s. The increased focus on animals is considered to be founded largely upon the contemporary animal welfare/rights movement, and the seminal works *Animal Liberation* (1975) by Peter Singer and *The Case for Animal Rights* (1983) by Tom Regan. Singer's utilitarian argument advances sentience and the possession of interests as determinants for inclusion within our moral community. Similarly, Regan contends that some non-human animals are also

'subjects of a life', and therefore these animals are deserving of certain moral rights. Building off of these challenges to animal exploitation, there has been an explosion of scholarship exploring and critically questioning human interactions with animals. Contemporary animal geography has its origins in a 1995 issue of *Environment and Planning D: Society and Space*, guest edited by Jennifer Wolch and Jodi Emel titled "Bringing the Animals Back In". Much of the interest in animals has centred on challenging the natural sciences' historic treatment of non-humans. Within such knowledge systems animals are objectified and encountered most often at the level of populations or species, rather than as individual subjects. It has been said that what is missing from these disciplines is a perception of animals as "beings with their own lives, needs, and (perhaps) self-awarenesses, rather than merely as entities to be trapped, counted, mapped, and analyzed" (Philo, 1998, p. 54). With this understanding comes an obligation to challenge the natural sciences' "moral authority to speak for the non-human world" (Whatmore & Thorne, 1998, p. 451). Overall, animal geography has sought to critically engage with non-humans based on the premise that "animals matter as political and ethical subjects" (Hogetts & Lorimer, 2014, p. 2).

These areas of inquiry can also align with posthumanism, a framework which critically interrogates and rejects many of the core assumptions of humanist ontologies constructed around the premise of a universal human subject (Braun, 2004). The human has so often been defined in relation to the not-human: the animal. Posthumanism challenges the premise that humans are both finitely separate from and superior to animals, and represent the climax of creation (Badmington, 2004; Wolfe, 2003). It rejects human exceptionalism and anthropocentrism, opening up space for a "decentring of the human subject" (Baker, 1993, p. 26). It destabilizes the boundaries between binaries such as human/animal, culture/nature, domesticated/wild, and

natural/unnatural (anthropogenic). Overall, animal geographers challenge understandings of non-humans both as resource and as sub-human (Lorimer, 2010).

Animal geographers have frequently studied what Philo and Wilbert (2000) term 'animal spaces', or ideas about which animals belong where. This has involved considerations of the discursive construction of animals, including how they are categorized, the spaces that are allocated to them, and where they are seen as in or out of place. Such investigations have often taken a social constructivist approach and explored the cultural, symbolic meanings of animals. For instance, Whatmore and Thorne (1998) discuss the ways in which non-human animals are differentially constructed by different cultures at different times by investigating wildlife in Roman gladiatorial games and modern biodiversity conservation initiatives. The operations of such constructions are illustrated in the following passage:

> Animal participants in the venationes, like the human bestiarii, were trained and coerced to play their part in the choreographed acts of violence and aggression that conjured the wild in the Roman imagination. Animal participants in zoological inventories today are no less disciplined by their naming to behave, breed and live by specific criteria that designate the wild in the scientific imaginary of global conservation. Perversely, the multi-sensual animality of the creatures caught up in these performances of wildlife all but disappears in both cases, as they become symbolic and material units in some human currency – blood and death perhaps for the Roman crowd; genes and resources for the visionaries of planetary management (p. 444).

Others have focused explicitly on the ways in which our understandings of animals influence socio-spatial practices. For example Urbanik and Morgan (2013) discuss the link between conceiving of dogs as family members versus merely animals, and preferences for allocating them urban space in the form of off-leash dog parks.

Animal geographers have also explored human-animal relations by focussing on boundary transgressions, such as the ingression of nature into culture represented by urban wildlife. Wolch (*et al.,* 1995; 1996; 2002) laid much of the groundwork for these studies in her

writings on transspecies spatial theory, and the makings of a zoöpolis, a multispecies, "renaturalized, re-enchanted" city (1996, p. 29). Her efforts to "foreground an urban theory that takes nonhumans seriously" (1996, p. 23) call for us to challenge culture/nature and human/animal dualisms, acknowledge that "subaltern 'animal town[s]'" (1996, p. 32) already exist in cities (also Hovorka, 2008), and to consider the lives and perspectives of animals in our policies. Urban wildlife have also been studied empirically, such as in Power's (2009) investigation of possums in suburban Australian homes. Possums were often encountered as out of place by residents due to their categorization as pests, or because they were believed to lead better lives outside of cities. Power challenges the latter assumption by pointing out that although possums are declining in their 'natural' habitats, they thrive in suburban environments. Another exploration of wild transgressions is Chambers and Main's (2014) investigation of Sirocco, the endangered parrot who crossed the boundary between wild and tame by imprinting on humans. Sirocco's liminality—his ambiguous state between these two categories—and the subsequent challenges associated with 'placing' him are used to illustrate the ways in which thinking about human/animal, nature/culture and tame/wild in terms of binaries "fails to capture the complex series of relations that exist between humans and the more-than-human world" (p. 75).

Researchers have also studied the transgressions represented by the establishment of non-native species. For instance, Lavau (2011) interviewed individuals involved in river management in Australia about which fish did and did not belong. She identifies three conceptions of 'naturalness' that operate in such designations: indigeneity, wildness, and ecological functionality. Notzke (2013) explores differing perceptions on whether or not feral horses belong in the wild in Western Canada. She argues that the dominant government construction of feral horses as an introduced species represents an environmental orthodoxy. Her analysis contrasts

the Eurocentric adherence to nature/culture and wild/feral dualisms, with the First Nations' perspective that the horses have come to fit into the ecosystem over time and therefore do belong. Griffiths, Poulter and Sibley (2000) examine the place of feral cats in Hull, UK. They note that the presence of feral cats generates mixed feelings in urban residents, which range from affection in the individuals who feed and interact with them, to distaste or discomfort in individuals who view them as having transgressed the boundaries of their 'allotted space'. The authors conclude that the desire to purge feral cats from the urban environment is based on an agenda of purification in which animals are seen as unruly and polluting (see also Philo, 1998).

More recently, animal geographers have drawn attention to the fact that focusing on the discursive constructions of non-humans alone fails to consider animal agency and subjectivities, ignoring their lived experiences. There has subsequently been increased focus on the 'beastly places' forged by animals, "reflective of their own 'beastly' ways, ends, doings, joys and sufferings" (Philo & Wilbert, 2000, p. 14). In terms of animal agency, it is increasingly recognized that animals are actors who have the capacity to "produce a phenomenon or modify a state of affairs" (Jepson, Barua & Buckingham, 2011, p. 230), thereby influencing their own lives and those of others (Hribal, 2007; Rutherford, 2013). Their agency can also have spatial consequences, as their actions have a "tangible impact upon the landscape" (Lulka, 2009a, p. 80). Animals' possession of subjectivities is also considered important, and involves being a thinking, knowing or self-conscious subject (Mcfarland & Hediger, 2009), capable of communication (Nyyssönen & Salmi, 2013). Another area of emphasis is non-human difference. Contributors such as Philo (2005), Lulka (2009b) and Bear (2011) write that animal geographers should attend to animal individuality and attempt to "tease apart nonhuman difference and more closely interrogate the diversity of animal life" (Bear, 2011, p. 297). Overall, new directions are

opening up in animal geographies, centred on the premise that we need to begin moving beyond the "human side of human-animal relations" (Buller, 2014, p. 2). In doing so, we can begin to attend to 'animals' geographies', in order to explore their lifeworlds by better understanding "their agencies, their behaviours, and in particular their place-making" (Hodgetts & Lorimer, 2014, p. 4). Two promising new directions are the study of animals' lifeworlds and lives-in-place, and more-than-human relational approaches. These two directions are described in greater detail in the remainder of this section

Animal geographers are beginning to employ firsthand investigations into the lifeworlds of animals and their lives-in-place. Such approaches often incorporate ethnomethodologies traditionally used to study only human cultures, as well as drawing from ethology, the scientific study of animal behaviour. Of particular interest, Lestel, Brunois and Gaunet (2006) advocate new methods that combine etho-ethnology and ethno-ethology to order to promote a more symmetrical examination of "hybrid human/animal communities sharing meaning, interests and affects" (p. 156). Ultimately, such methods acknowledge animals as subjects capable of possessing cultures, and focus on the relationships that emerge between interacting subjects, both human and non-human.

Drawing on these developments, Bear (2011) presents an individual animal geography of Angelica, an octopus in a public aquarium. He uses ethnographic methods to investigate her life, recounting his own observations as well as stories about Angelica told by aquarium employees. He concludes that such direct engagements permit us to explore the private lives of individual animals while attending to diversity and difference. Similarly, Barua (2013, 2014) employs more-than-human ethnographic methodologies in order to investigate human-elephant relations in India. By "calibrating ethology and ethnography, ecology, and politics" (Barua, 2014, p. 930),

the lives of elephants and their diverse co-habitations with humans are investigated through the lens of a 'dwelt political ecology'. Ingold's (2000) concept of dwelling has also been used elsewhere to investigate animals (Lorimer, 2006). Dwelling involves the notion that we are all immersed in the world materially, and that life is a process of continual perceptual experience (Ingold, 2000, 2011). Johnston (2008) develops a dwelling perspective for more-than-human geographies and contends that animals "dwell in the world in the same processual manner as humans, [which] allows relationships of understanding to grow between them" (p. 642). She uses Ingold's (1988) description of the "mass of spontaneous, non-verbal communication which we share with other animals" (p. 96) to advance "responsible anthropomorphism" as a tool for investigating non-human lives. Overall, there are exciting possibilities that involve exploring the lifeworlds of animals firsthand through the integration of such theoretical and methodological tools as ethno-ethology and responsible anthropomorphism. Another important contribution to theorizations of non-human lives-in-place is van Dooren and Rose's (2012) investigation of urban penguin and flying fox colonies in Sydney, Australia. The authors explore the potential for non-human 'storied engagement' with place, based on "an ability to engage with happenings in the world as sequential and meaningful events" (p. 3), which ties one to place. The authors advance that penguins and flying foxes have the capacity to develop place-attachments and associated ethical claims to place. They conclude that it is our responsibility "to find multiple, life enhancing ways of sharing and co-producing meaningful and enduring multispecies cities" (p. 19).

Animals' geographies are also being explored through material, non-representational more-than-human ontologies. These have been variously constructed around relationality, Deleuzian assemblages, or hybridity. One such approach is actor network theory (ANT). ANT

possesses a "generalised symmetry" (Latour, 1993, p. 94) wherein subjects and objects are treated as radically alike (Nimmo, 2011, p. 111), and agency is accorded to a variety of non-humans including animals, plants, microorganisms, and technological artifacts. Though celebrated for its ability to challenge human exceptionalism and essentializing dualisms, applications of ANT have received a number of criticisms. Namely, the 'flat ontology' employed has been critiqued for neglecting power relations and numerous sites of difference. In terms of animals, these usually involve the difference between minded, conscious beings and inanimate objects (Lulka, 2009b; Risan, 2005). As noted above, animal geographers have emphasized the importance of non-human difference, and the recognition of such attributes as being 'selves' capable of representation (Kohn, 2007), or intentionality (Stewart, 2009).

Other relational approaches have aimed to capture the liveliness of non-human animals. Drawing on feminist scholarship, Whatmore and Thorne (2000) extend ANT to incorporate "visceral preoccupations…with the corporeal" (p. 186). However, this approach has still been critiqued for the limited depth with which non-humans are treated (Lulka, 2009b), as animals "still remain somewhat shadowy presences" (Philo, 2005, p. 829). Another contributor to relational, material more-than-human approaches is Donna Haraway. In *The Companion Species Manifesto* (2003) and *When Species Meet* (2008), Haraway contends that humans and dogs are companion species to one-another, and explores the ethical, cultural and biological consequences of our shared histories. One important contribution is her contention that moral relations with non-human others requires us to abide by the rule "Though shalt not make killable" (2008, p. 80). This describes any process through which animals are removed from our moral community such that killing them does not present a moral dilemma. She elaborates, "There is no category that makes killing innocent; there is no category or strategy that removes one from killing.

Killing sentient animals is killing someone, not something" (2008, p. 106). Haraway also briefly discusses her personal experience with feral cats living in her barn, noting that they are equally alien to North America as she—being of European descent. She writes that the category 'feral' has important consequences for the individuals who are so classified, and questions what obligations arise from coming into contact with them. She concludes that there is nothing "emotionally, operationally, intellectually, or ethically simple" (2008, p. 281) about these relationships.

A final relational framework employed in exploring human-animal interactions is posthumanist performativity, which builds off of the work of Judith Butler. Butler (1990) developed a performative theory of gender in order to challenge the view of gender as a fixed identity feature, rather advancing that it is produced through repeated acts that create an illusion of a permanent property. In the case of non-humans, Barad (2003) advances a posthumanist performativity based on 'agential realism', an ontology that posits a causal relationship between "discursive practices" and "material phenomena" (p. 814). In this account, the basic units of reality are not words and things, but rather phenomena, or agential intra-actions. Barad (2003) emphasizes that these intra-actions can be composed of non-human agencies. Subsequently, Birke, Bryld and Lykke (2004) apply posthumanist performativity to a case study of laboratory rats, suggesting that 'lab rat' is a becoming co-produced by rat agency. The authors contend that performative approaches emphasize the co-creation of human-animal relationships, the participation of animals in discursive practices, and the significance of material, corporeal relatings. Maurstad, Davis and Cowles (2013) employ the concept of intra-action in their investigation of riders and their horses. They conclude that horses and humans are co-beings, with "relational categories arising from engagements in a range of intra-acting practices" (p.

323). Though they discuss horse-human becomings through collaborative engagement, they do not consider the horses' embodied actions as performative, or use this framework to challenge essentialist interpretations of animals.

Despite a wealth and range of literature on animal geographies, there are few critical studies on human-feral cat relations, and none so far that have sought to emphasize the agency, subjectivities and place-practices of the cats themselves. Thompson (2012) investigated a TNR campaign and the social dynamics of colony caretaking at the workplace, but does not engage with the lived experiences of the colony cats. Griffiths *et al.* (2000) discuss the human placement of urban feral cats, but do not discuss more-than-human dimensions of inhabitation and belonging. There are exciting new directions aimed at exploring the beastly places of animals in order to better understand animals' geographies. One such avenue is through direct engagement with animals using ethological and ethnographic tools along with responsible anthropomorphism in order to investigate non-human lifeworlds and place-relations. Another direction involves relational approaches to exploring more-than-human material-discursive practices, such as performativity. There is considerable space for contributions to these developing approaches. Feral cats in particular present great opportunities due to their transgression of domestic/wild and culture/nature boundaries, and the complex, competing discourses that surround the politics and ethics of feral cat belonging.

1.3 Research Aim and Objectives

Building off of the practical and scholarly context described above, the aim of the research was to critically explore human-feral cat relations in southern Ontario. Research objectives were as follows:

1. investigate empirically the conceptual, spatial and ethical dimensions of feral cats from the human perspective using semi-structured interviews;
2. investigate empirically the conceptual, spatial and ethical dimensions of ferality from the feline perspective using observational methods and anecdotal evidence from colony caretakers;
3. explore the agency and place-relations of feral cats; and
4. explore human-feral cat material-discursive practices through the lens of posthumanist performativity.

1.4 Thesis Structure

This thesis is arranged into five chapters. The next chapter builds off of the introduction, and describes the methodological approach taken in addressing the research aims and objectives. The third and fourth chapters present the two manuscripts which report the primary outcomes of this research. The first manuscript (A, Chapter 3) details the empirical findings of interviews and observations, and discusses them in the contexts of the importance of spatial considerations in human-animal relations, and of non-human place-making and place-attachments. The second manuscript (B, Chapter 4) applies a theory of posthumanist performativity to interview results in order to explore how non-human identities such as domesticated and wild are co-created by both cat and human agencies. The fifth chapter provides a summary of this thesis, outlines the practical and scholarly contributions, and details some limitations of this study and avenues of future research.

2.0 METHODOLOGY

The purpose of this chapter is to describe and justify the methodological approach employed for this project, along with the research design, including the study site, data collection, and data analysis.

2.1 Methodological Approach

The methodological approach for this research is based on a weak constructivist ontology, and a feminist-posthumanist conceptual framework.

Overall, constructivist ontologies run counter to positivism, which purports that there is one true reality which can be understood through objective, empirical study. To the contrary, constructivism holds that we cannot know for certain the true nature of reality. Weak or soft constructivism does not deny the existence of an objective reality, but understands our knowledge of this reality to be based on factors such as individual experiences, worldviews, and cultural understandings of phenomena (Notzke, 2013). Using a weak constructivist paradigm, my research aim was not to uncover the 'truth' about feral cats and their interactions with other species, but rather to gain an understanding of various perceptions of feral cats and to analyze the implications of competing constructions.

The underlying ontology of this project is also based on a feminist-posthumanist conceptual framework. This framework was selected as it effectively allows a shift away from anthropocentric doctrines to perspectives that can encounter non-humans more equitably. A feminist approach entails a rejection of hierarchical dualisms such as the separation and privileging of subject over object, masculine over feminine, culture over nature, human over animal, and reason over emotion (Plumwood, 1993). It challenges the privileging of certain

groups above others, and recognizes the intersecting systems of oppression which result in the marginalization of women, animals, and other groups (Gaard, 2003). Rather than focusing exclusively on abstract, universal principles which are central to masculine rights-based and utilitarian theories as they might apply to animals, attention is given to relationships, context and particularity (Donovan & Adams, 2007). A feminist approach can effectively challenge the scientific designation of non-humans as types or objects through an appreciation of the subjective embodied experiences of animals, and an affective encountering of individuals. As explained in the Introduction, working from a posthumanist framework destabilizes the boundaries between humans and animals, nature and culture, and domesticated and wild. Overall, a feminist-posthumanist conceptual framework represents an effort towards a non-anthropocentric investigation into human-animal relations, and a centering of the animal, the cat, within this investigation.

This study's methodological approach can be classified most broadly as feminist, qualitative, and critical. It draws on feminist theories to challenge positivist methods as the only means of obtaining knowledge about the world. Feminist epistemologies understand knowledge to be situated, subjective, and power-laden (Haraway, 1988). Based on this understanding of situated knowledges, this project sought to explore a variety of perspectives on feral cats by interviewing a range of individuals with differing perspectives and experiences. Qualitative methods were selected as they permit the exploration of human perceptions of reality, which are socially, politically, and culturally mediated. Features of qualitative research methods that are applicable to this project include: emphasis on context and social interactions; acknowledgement of the value-laden nature of research topics; and attention given to cultural meanings and social constructions (Neuman, 2003, p. 16). In support of this, Seymour and Wolch (2010) state:

> [Q]ualitative methods are particularly useful in exploring the ways that emotions are woven into the fabric of space and place…. attention to the emotional geographies of human–animal relations via qualitative research can not only elucidate a wide range of research questions centered on humans, but also — given their rich emotional lives — on animals too. (p. 317)

This project's epistemology can also be described as critical. Contemporary animal geography in general can be classified as a critical geography. Critical approaches in social sciences seek not only to describe a situation, but to change it (Neuman, 2003, p. 81). According to Kincheloe and McLaren (1994), "Inquiry that aspires to the name critical must be connected to an attempt to confront the injustice of a particular society or sphere" (p. 140). As stated by Hodgetts and Lorimer (2014), "animal geographers (and others) think that animals matter as political and ethical subjects and there is thus a need to comprehend and possibly improve their life experience" (p. 2).

The primary tools employed in this research were semi-structured interviews and field observations. Semi-structured interviews were employed to investigate the social construction of feral cats by individuals with a range of opinions and experiences. Interviews were selected over surveys, as surveys have the potential to "oversimplify attitudes and fail to capture the complex, contradictory feelings, and ideas that people have about animals" (Seymour & Wolch, 2010, p. 308). Additionally, a community survey of preferences concerning unowned cats was already underway by the Guelph Cat Population Taskforce (GCPT) at the time this project was undertaken. More information on the GCPT is discussed in Section 2.2.

For two reasons, my project also employed field observations. First, similar to the work of Michel (1998) in her study of eagle rehabilitation and the politics of care, my research employed observational methods in order to investigate caretaking practices and the relationships between colony caretakers and feral cats. Although human research participants with a range of

perspectives concerning feral cats were interviewed, special attention was given to the perspectives of colony caretakers. Individuals who care for unowned cats are often marginalized, facing social stigmatization because their actions are seen as deviant (Thompson, 2012). According to Wylie (2011) a contingent epistemic privileging of the standpoint of certain disadvantaged outsider groups can sometimes be justified. This is due to the complex knowledge required for them to inhabit the insider-outsider margins. In the case of colony caretakers, they have knowledge of feral cats' lives and the cat rescue system, and experience in navigating the political currents of conflicts surrounding feral cats. I therefore granted special attention to colony caretaker perspectives because of their intimate knowledge of feral cats, marginalized status, and the dearth of investigation into their experiences in the primary literature.

Second, field observations were used to acquire data on the cats themselves. In an effort to centre the animal in this project, I wanted to be able to speak about the lives of feral cats, their subjectivities, and their agency through firsthand experience in feral colonies. This type of multispecies ethnography has been increasingly employed by researchers from a variety of disciplines (e.g., Alger & Alger, 1999; Baynes-Rock, 2013; Fuentes, 2010), and has the potential to "facilitate work that can interrogate nonhuman dimensions to the Anthropocene" (Hodgetts & Lorimer, 2014, p. 4). The major challenge of including animals as social research subjects, as acknowledged by many animal geographers (e.g., Buller, 2014; Hodgetts & Lorimer, 2014; Seymour & Wolch, 2010), is the difficulty in communicating with them in the absence of a shared language. One methodological opportunity for doing so stems from the incorporation of ethology into critical research on animals. As stated by Seymour and Wolch (2010), "Ethology is a way for us to engage animals on their own terms in addition to interpreting their experiences through documents and other accounts from humans" (p. 313). Because of constraints of time

and resources, it was not feasible to incorporate formal ethological training as part of this project. However, I contend that even in the absence of formal training, observations of feral cat behaviour and cat-human interactions were a valuable supplement to the other methods employed in my research.

In observing feral cats directly, I followed Johnston's (2008) call for 'responsible anthropomorphism'. Anthropomorphism has historically been met with disapproval from the scientific community, but this is increasingly challenged. For instance, Jickling and Paquet (2005) object to the "reflexive rejection of anthropomorphism" (p. 130), explaining:

> "We are constantly imagining the world through the eyes of others — our friends, our family, our lover. This is one way that we come to understand them. It then seems a short empathetic step to imagine the world through the eyes of more-than-humans" (p. 129-130).

Building on Ingold's (1988) "mass of spontaneous, non-verbal communication which we share with other animals" (p. 96), Johnston (2008) promotes the "power of an intuitive, sentient ecology, one which is open to the understandings which come from direct experience within relational environments" (p. 643). Similarly, Buller (2014) discusses multi-species ethnographic approaches which employ "empathetic and interpretive observation" (p. 4). All of these discussions point towards an intuitive understanding of the behaviours of non-humans based on affective encounters (Bear, 2011; Smuts, 2001), aesthetic understandings (Johnston, 2008), critical (Burghardt, 1991; Irvine, 2004) or responsible anthropomorphism (Johnston, 2008), and long shared histories of non-verbal communication (Alger & Alger, 1999). Additionally, I would contend that leaving studies of non-human behaviour exclusively to those trained in the natural sciences reinforces human/animal and subject/object dualisms that the disciplines of animal studies and animal geography, as well as feminist and posthumanist frameworks, strive to dismantle. I would further add my personal experience with cats (especially the amount of time I

have spent with my 6 year old companion, Finnigan) as significant contributions towards informal training on cat behaviour, and human-cat communication. In support of the value of informal knowledge in studying animals, Lestel *et al.* (2006) write: "the non-specialist's representations of animals are no less 'right'…than those of the scientist because they are contextual and not objectivized" (p. 169).

2.2 Study Site: Southwestern Ontario, Canada

Initially, this project was designed as a case study exclusively of human-feral cat relations in the City of Guelph. It was subsequently expanded to southern Ontario (see Figure 1) for a number of reasons detailed in the following section. Guelph is a mid-sized city with a population of approximately 120,000 (Economic Development, Finance & Enterprise Services, n.d.), around 100 kilometres from Toronto, the province's capital. The City of Guelph was chosen as an ideal location in which to undertake this research for several reasons. There is evidence of community concern surrounding cats. In 2013 an online petition was advanced to have cats incorporated into The City's Animal Control Bylaw. The petition states that cats should be prevented from roaming freely outdoors as they are a threat to native wildlife (Guelph Animal Nuisance Bylaw Petition, n.d.).

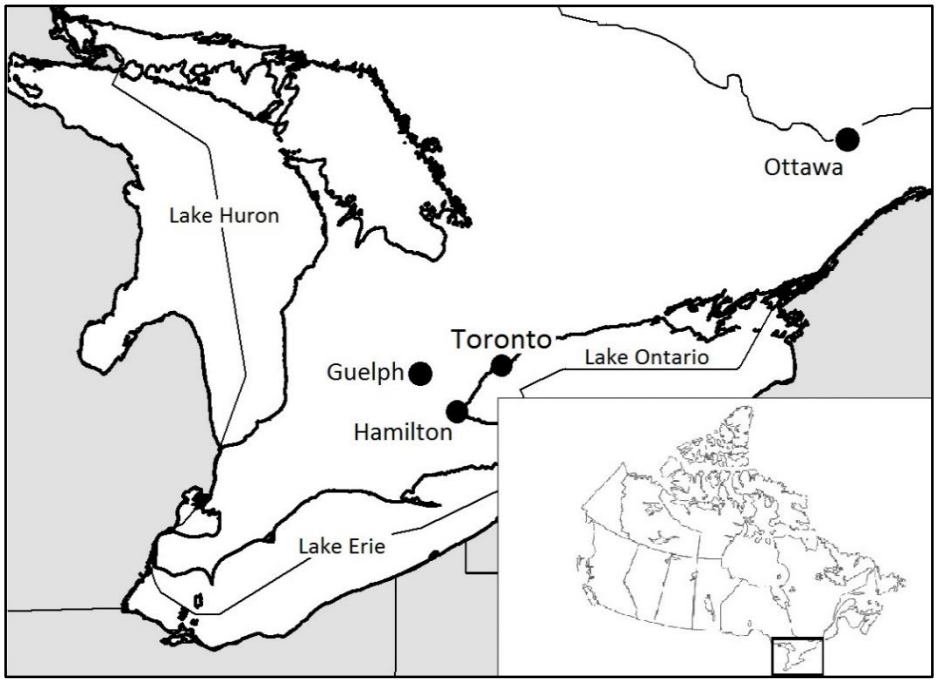

Figure 1 - Map of southern Ontario, Canada

Guelph is also well suited to this research as there is concern surrounding the management of cats in the city, but currently no centralized, coordinated management of the feral population. The Guelph Humane Society (GHS) is the largest local animal welfare organization, and has been in operation since 1893. It is a non-profit, registered charity, and is also under contract with the City of Guelph to provide Animal Control Services. The current intake rate for cats is close to 1400 individuals per year (The Guelph Humane Society Incorporated, n.d.). At present, any feral cat brought to the GHS who is too old to be socialized and adopted is euthanized. Several additional smaller, no-kill shelters in the area are involved with the management of feral cats, namely The Grand River All Breed Animal Rescue, Cats Anonymous, and New Hope Animal Rescue. Although these organizations all conduct some TNR in the area, they have very limited capacity, and as a result few feral cats in Guelph are managed in this manner. Furthermore, The City of Guelph initiated a review process for their Animal Control Bylaw in 2014. The process involves a review by a working group, public consultations,

adjustments and presentation to Council. One part of the review process involves considering cats, which are currently not mentioned in the Animal Control Bylaw (H. Prinold, personal communication, October 2, 2014).

In 2014 the Guelph Cat Population Taskforce (GCPT) was initiated, which aims to "facilitate community understanding and decision-making regarding cat overpopulation in the region" (GCPT, 2014, n.p.). The goals of the GCPT are as follows:

1. provide unbiased and scientifically accurate information to the public,
2. develop and implement scientific studies to help to answer additional questions,
3. facilitate opportunities for the community to provide input and guidance on future action or study,
4. develop and implement collaborative projects and solutions that have community support or scientific merit (GCPT, 2014)

Current initiatives of the GCPT include public education through a website, pamphlets, and community engagement meetings, as well as a community-wide survey that is designed to gain an understanding of community members' knowledge of feral cats and preferences for their management. I collaborated with the GCPT while undertaking my research, and spearheaded their survey development. Overall, the City of Guelph presented a promising community in which to conduct research on human-feral cat relations.

2.3 Data Collection

There were three phases of data collection, which took place concurrently between May and October of 2014. The first involved an empirical investigation into human-feral cat relations using semi-structured interviews with study participants. The second involved field observations of feral colonies to inform a multispecies ethnographic consideration of feral cats and colony

caretakers. The third involved a document review of secondary sources and key informant interviews to inform the research context. These three phases are outlined in detail below.

2.3.1 Semi-structured Interviews

The first phase of my research involved an empirical investigation into human-feral cat relations using semi-structured interviews. The purpose was to gain an improved understanding of the social construction of feral cats in terms of the relevant conceptual, spatial, and ethical factors. In order to elicit this information, semi-structured interviews were selected as the most appropriate tool. In-depth and/or semi-structured interviews were employed by both Lavau (2011) and Notzke (2013) in their animal geography studies on fish and feral horses, respectively, and belonging. Semi-structured interviews allow for a conversational tone and the exploration of topics that arise as being most important to the participant (Longhurst, 2010). According to Longhurst (2010), semi-structured interviews can be useful for investigating "complex behaviours, opinions and emotions" (p. 113), which is important because of the multifaceted nature of human-animal relations. Questions that drove the development of the interview guide included: *How do participants think of feral cats? What type of animal do they see them as being? What spaces are feral cats seen as belonging and not belonging in? Should they be allocated any space in our society? What are our ethical obligations to this animal?*

In order to investigate the dynamic nature of human-feral cat relations in the greatest depth, I decided to interview individuals who fell at the two extremes of the position: animal welfare advocates/colony caretakers who believe we have strong ethical obligations to feral cats and that they can belong in our society, and conservationists/wildlife advocates who believe that feral cats are a threat to native species and do not have a place in our society. I decided that since

this is an issue that has not received very much attention in the scholarship, well-developed and extreme opinions on the subject would be most likely to demonstrate clear classifications, spatial preferences, and related views on ethical responsibilities. They would therefore provide the greatest opportunity for understanding the underlying assumptions and deeper dimensions of the 'feral autonomy/moralistic' and 'wildlife conservation/ecologistic' categories identified by Hutson (2011).

The sample size was set at 40, and recruitment proceeded using several nonprobability, purposive sampling techniques, namely opportunistic and snowball sampling. In purposive sampling the goal is to obtain participants that fit a particular criteria (Neuman, 2003). For this project, the criteria was a strong opinion concerning feral cats, whether from an animal welfare or conservationist perspective. My sampling strategy was opportunistic, as participants were recruited whenever opportunities arose. Along with predetermined sampling strategies, any leads that emerged while conducting my research were pursued until a sufficient number of participants were recruited. Recruitment took place through organizations that were likely to have members who fell into one of the two groups. For conservationists the following local organizations were contacted: Nature Guelph; Nature in the Neighbourhood; Wild Birds Unlimited Bird Watching Club; Guelph Environment Network; Guelph Lake Nature Centre; Guelph Trail Hiking Club; and the University of Guelph Arboretum. Participants from the animal welfare perspective were initially recruited through the four local animal welfare organizations: GHS; New Hope Animal Rescue; Cats Anonymous; and Grand River All Breed Animal Rescue. Organizations were called, emailed or visited in person, and recruitment posters were circulated through email or hard copies were posted in offices. Social media was also employed by posting images of my recruitment poster throughout the summer on the Nature

Guelph, GHS and Nature in the Neighbourhood Facebook pages. Printed posters were also affixed to locations around the city where they might be seen by desired participants.

Though initially I was only recruiting participants from Guelph, the study was modified in approximately mid-June as a result of a number of complicating factors and challenges. One challenge involved the amount of time and effort required to recruit 40 participants. By mid-June recruitment was still proceeding much slower than anticipated, despite intensified efforts in the above-listed strategies. At the same time, there was increasing interest from participants outside of Guelph. I therefore began accepting these participants, conducting interviews mostly by telephone. At this time I also contacted several organizations in other southern Ontario communities, such as the Kitchener Waterloo Field Naturalists, Songbirds Only Avian Rescue, and Ontario Wildlife Rescue. I also agreed to a request from the Ontario Spay Neuter Coalition to disseminate my recruitment poster through their listserv.

A second complication was the extent of the vulnerability of the position of colony caretakers in Guelph, which I believe made many individuals reluctant to speak with a researcher. Through a review of the literature, I gained a prior sense of the potential social stigmatization of colony caretakers. This stigmatization often stems from the perception of feral cat caretaking as deviant, given the 'out of place' designation of unowned cats in many communities (Thompson, 2012). Additional stereotypes of 'crazy cat ladies' and cat hoarders exacerbate the stigma around individuals who chose to care for community cats (see Appendix E on the Politics of Caretaking). Based on this foreknowledge, I had intended to approach colony caretakers with special care and sensitivity to their vulnerable positions (see Appendix A on Ethical Considerations). Despite awareness of this vulnerability, I had believed that personal contact with the smaller rescue organizations would easily put me in contact with willing

participants. I began my research in early May with calls to these rescues and assurances of maintaining participant anonymity and confidentiality of details concerning their colonies. However, this failed to provide colony caretakers from within Guelph who were willing to participate. Contrary to the hesitancy in Guelph, I received enthusiastic interest from colony caretakers outside of the city, and began to include these individuals as participants.

I feel justified in this expansion for a number of reasons. Firstly, although Guelph appeared to be an ideal location for this research given the contextual considerations listed in the preceding section, there were no reasons that led me to believe that other communities in the region would not also prove to be good locations for this research. Aside from the context in the GTA, many communities in southern Ontario have similar experiences with feral cats, with no coordinated management and a great deal of conflict surrounding how cats ought to be managed. Secondly, expanding beyond one community provided greater opportunity to explore a diversity of perspectives and experiences, all within a relatively homogenous demographic context. Furthermore, this expansion enabled comparisons of urban and rural experiences, which I believe proved valuable to this project. Thirdly, and most importantly, this decision decreased the risk of potential harms to colony caretakers and feral cats in Guelph, without any reason to suspect increased risk of harms to participants (human or feline) in other communities (see Section 2.3.2).

In addition to purposive and opportunistic sampling, snowball sampling was employed. In snowball sampling existing participants assist with recruitment through their acquaintances. Snowball sampling was a useful tool for my project as it is designed to identify cases within a network (Neuman, 2003), which in this context would be the conservationist, birder, animal welfare/rescue, and colony caretaker networks in the area. The majority of participants,

especially those interviewed earlier in the study, were asked if they knew any other individuals who may be interested in participating. I passed out business cards as well as printed recruitment posters, or emailed PDFs of my poster if participants preferred. For details on study participants see Appendix C.

Interviews took place either in person at 10 Carden Street, in participants' homes, or by telephone. 10 Carden Street is a community-oriented space with a variety of rooms that can be rented (10 Carden, 2014). It represents community space, and fulfills all three of Longhurst's (2010) recommendations for fostering a comfortable environment for both researcher and participants: it is neutral, informal, and accessible. Located centrally in downtown Guelph across from the City Hall, it was easy for participants to locate. Some participants expressed concerns about meeting at this location, preferring to conduct the interview in their home for reasons including mobility, work schedules, and childcare. I decided to conduct interviews at participants' homes as long as the following conditions were met: they initiated the suggestion and seemed to strongly prefer it; there was a quiet space for the interview to take place; and it was sufficiently private that concerns would not be raised with respect to confidentiality. Interviews with participants located outside of Guelph were generally conducted by telephone, unless the participant was considered particularly important to the study or the community was being visited for field work.

Interviews lasted between twenty minutes and one hour and ten minutes. This variability in time occurred for a number of reasons. Primarily some participants were keen to share their wealth of experience or opinions, while others had more limited personal exposure to feral cats, and had less to say about many of the questions. Furthermore, earlier interviews tended to last longer, as questions were tested out, refined, and possibly discarded. Interviews occurring later

in the data collection process tended to be shorter because questions had been modified to elicit the desired information more efficiently.

In order to explore the conceptual dimensions of human-feral cat relations, interview questions were designed to elicit participants' categorization of feral cats. For example, participants were asked how, in their opinions, feral cats were similar to or different from wild animals. This question was designed to understand what features of feral cats caused participants to classify them as wild animals or domesticated pets. In order to explore spatial considerations, participants were asked what they would think or feel about encountering feral cats in an urban area, compared to a rural area, or a natural area. Participants were probed about how these context might be different, where feral cats belonged more, whether or not there was or could ever be a role for feral cats in these differing environments. To investigate ethical considerations, participants were asked questions such as: *Do you think feral cats lead good or bad lives? How should we be managing feral cats?* Participants were also probed about our moral obligations to feral cats compared to native wildlife. They were asked questions such as: *What would you do if you found an abandoned litter of kittens? What if you found an abandoned litter of fox kits? What do you think about the argument that we have greater moral obligations towards cats/native wildlife compared to native wildlife/cats?*

Participants were also asked different questions depending on opinion type demonstrated. For instance, members of the animal welfare group were asked what they thought about the concern surrounding bird loss as a result of feral cats. They were also asked what they would say to someone who contended that all feral cats should be exterminated because of their impact on native species. Their concerns with cat welfare were probed by asking how much feral cats' survival rate or length of life mattered, and whether they would be less concerned if we were to

learn that these factors were comparable to those of wild animals. Conservationists were probed about their concerns for native species, using such questions as: *Are you concerned about the impact of cats on common species, like robins, or only rare or endangered species? What if we learned that cats preyed primarily on non-native species like house mouse, starling, or house sparrow?* Demographic information was also obtained, including: number and type of pets; age; occupation; and highest level of education. See Appendix B for the complete Interview Guide.

I also was interested in hearing specific stories about experiences with feral cats, and therefore asked participants if they had any such experiences. Especially in the case of colony caretakers, I was interested in hearing about individual cats, and would often probe for more information. This was part of the effort to acknowledge the subjective lived experiences of the cats, emphasizing individual feral cats as valuable research subjects in themselves. This is supported by Seymour and Wolch (2010), who write that "interviews present an opportunity to partially confront the methodological challenge of understanding interspecies relationships and animal experiences through a human informant alone by asking interviewees questions that can elucidate aspects of the animal's life experiences" (p. 309). This further represents an attempt to avoid the critique presented by Bear (2011) that animal geographers tend to focus on collectivities, and that individual animals' experiences can illuminate non-human difference and decrease anthropocentric homogenizing tendencies.

2.3.2 Field Observations

The second phase of my project involved field observations in feral colonies. I had two primary reasons for using this approach. The first was to investigate colony caretakers and their relationships with cats. The second was to gain firsthand exposure to the lives of feral cats in an

effort to centre the cat in this study. Initially field observations were to take place exclusively in Guelph. However, for the reasons discussed in the previous section, observations were expanded to include other locations in southern Ontario. Of particular note, in addition to the vulnerability of colony caretakers the vulnerability of the cats themselves became a very important consideration. I had understood that many individuals think that feral cats do not belong in urban environments, and can often react with threats of relocation or forcible removal. I had therefore prioritized the confidentiality of the locations of any feral colonies I discovered. Although the search for colony caretakers to accompany to colonies in Guelph yielded no results, I had considered using a GHS database to locate possible colonies. This database contained the locations of origin of all animals that had entered the shelter in the past five years. Within this data set, it should have been possible to search for cats identified as stray, map their locations of origin, and look for higher concentration areas that might suggest possible colonies. This plan was discarded after an interview with a key informant who was aware of the historical and political context surrounding feral cats within the City of Guelph. This individual informed me that caretakers often wish to avoid attention being drawn to colony locations, and therefore advised me not to seek out colonies in Guelph, saying "this is life and death we're talking about, not getting a PhD". Based on their request, I decided to not pursue any field observations of feral cat colonies in Guelph.

I did, however, receive enthusiastic requests from several individuals in other communities in southern Ontario to visit the colonies they cared for and share their experiences. My field observations therefore consisted of data collection in 20 colonies throughout the GTA, Bolton, and Brantford. All colonies were visited in the company of the caretaker. I observed and/or assisted with caretaking activities such as putting down food and water, moving shelters,

constructing shelters, trapping cats, and transporting cats. I took notes on caretakers' actions as well as what they said about cats, colonies, and any other relevant information. I took notes about the cats including their body condition, behaviour, interactions with one-another, and interactions with caretakers. I took pictures and videos in order to document behaviour, as is suggested by Hodgetts and Lorimer (2014). I also gained secondary anecdotal evidence on the lives of feral cats from caretakers. This method was based on the premise that individuals who spend the most time with the animals will have important, if informal, intimate knowledge of the animals (Costall, 1988), or 'epistemic authority' (Cox & Ashford, 1998). In support of this, Johnston (2008) writes:

> Those who share their lives with nonhumans for any reason – food, work, or companionship – may share this potential to know with and about them. In fact, these notions might lead us to broader questions, not only about these relationships and the ways in which they are formed and understood, but the ways in which they might encourage a responsible and informed anthropomorphism that might speak to a more intuitive animal ethics. (p. 643)

2.3.3 Key Informant Interviews and Document Review

Key informant interviews and document reviews were employed in order to inform the context surrounding human-feral cat relations in my study. This review focused most particularly on Guelph, but also examined southern Ontario, and Canada more broadly. Key informant interviews were undertaken with individuals who had extensive knowledge and experience concerning feral cats. These individuals were most often founders or presidents of cat rescue organizations, or those with extensive experience with feral cat colonies. In mid-July, 2014, I travelled to Victoria, British Columbia and conducted several key informant interviews for contrast. The context in Victoria is very different from that of southern Ontario, and I decided that information from key sources in this location could be beneficial to my study. I therefore

interviewed the presidents or founders of The Greater Victoria Animal Crusaders, Barn Rats Need Barn Cats, and Victoria Cat Rescue.

Along with key informant interviews, key documents were reviewed to better understand aspects of human-feral cat relations in southern Ontario that were not obtained through participant interviews or the peer-reviewed literature. Firstly, relevant contextual documents such as the Canadian Federation of Humane Societies' "Cats in Canada" report were reviewed. Secondly, content analyses of Animal Control Bylaws were performed in order to gain an understanding of the legal structures influencing feral cats in key locations in southern Ontario. Location selection criteria included: being proximate or having characteristics similar to Guelph; study participants being located there; colony observations occurring there; or participants or key informants discussing initiatives occurring in that location. In the end, the selected communities for review were: Guelph; Waterloo; Kitchener; Brantford; Vaughn; London; and Toronto. For the results of this bylaw review, see Appendix D.

2.4 Data Analysis

Interview results were analyzed using discourse analysis, which is "qualitative, interpretive, and constructionist" (Hardy, Harley & Phillips, 2004, p. 19). It is qualitative because rather than measuring the frequency of certain words, etcetera, the content and meaning of statements were of primary interest. It is interpretive as meaning is being inferred from statements based on their context, and the researcher's knowledge of the participant and the subject matter. It is constructionist because meaning is understood as fluid and socially determined, not fixed and based solely on material phenomena (Hardy *et al.*, 2004). A discourse analysis allows one to "map a multi-factorial meaningful domain" (Houle, 2013, p. 29). It allows

for connections to be made between superficial words and deeper, situated meanings. To illustrate, the simple word 'belong' in the context of certain interviews would have an underlying meaning situated in discourses of indigeneity, temporal immersion in certain environments, and scientific beliefs about ecosystem balance; whereas in other interviews, 'belong' would refer to beliefs about an animal's behaviour, wellbeing, and human responsibility. Overall, discourse analysis permitted a depth of understanding on the very complex, and often contradictory thoughts expressed about human-feral cat relations.

Participant interviews were transcribed into Microsoft Word then transferred to NVivo where they were coded into themes, or 'nodes'. An initial coding pass was designed to select for general themes that became apparent while transcribing interviews. Throughout the first coding pass, potential new themes or topics for analysis that became apparent were recorded as nodes for future passes. Three additional coding passes were designed through this process, each with a specific goal. The second coding pass was designed to investigate the conceptual, spatial and ethical dimensions of human-feral cat relations. Several nodes were developed for each of these three dimensions. In this pass I was attempting to answer the following questions: *How are feral cats conceptualized and categorized by study participants, or what kind of animal are they seen as being? In which spaces do participants see feral cats as belonging and not belonging? What do participants see as the welfare concerns associated with feral cats, and our ethical responsibilities towards them?* The third coding pass was designed to inform more specific topics for potential manuscripts that emerged through my review of the literature and the second coding pass. These themes were: feral cat agency; place-making or claims to space; performativity; and feminist theory and the ethics/politics of caretaking. The fourth and final coding pass was designed to inform applied management considerations. It focused on what

participants saw as the source of feral cat issues, and opportunities and challenges for addressing these issues. In this pass information was sought to assist with participant feedback, and community and organization outreach. For a description of the goals of coding passes and list of associated nodes, see Table 1. Coding was not done in isolation, but as part of an iterative process of answering previously-identified research questions, as well as generating questions for further examination. For instance, while the first coding pass was ongoing, a list of ideas for future passes was being generated. Although many nodes were identified in advance, if new themes or topics became apparent while coding, 'In vivo' coding was employed, wherein a new node is created through the selection of source text.

Key informant interview transcripts and document review texts were not coded using NVivo. These were designed to contribute to an understanding of the broader context concerning public opinions of feral cats, and the relevant historical, political, and legal factors. As a result, these documents were read with the aim of answering specific predetermined questions, and direct highlighting in Word or PDF documents sufficed. Field observations were typed into Word documents, and read through and highlighted over several passes while considering questions such as: *How do colony caretakers behave in colonies? How do colony caretakers interact with colony cats? What is the state of feral cat health and safety? What kind of conditions do feral cats live in? What are the colonies like in terms of spatial location, features and composition?* Images and videos taken in the field were also reviewed in order to complement written notes.

Table 1 - Description of coding pass aims and nodes

PASS	NODES
FIRST Identify general themes that became apparent throughout the interview process and interview transcription.	Belonging Care Cats as disposable, expendable Conflicting thoughts Ecosystems Feral Humans Nature/culture dualism Non-native Science
SECOND Investigate empirically the conceptual, spatial and ethical dimensions of feral cats and the nature of belonging.	Conceptual: Domesticated pets Conceptual: Wild animals Conceptual: Non-native, invasive species Conceptual: Transgressive Conceptual: Metaphors Spatial: In colonies Spatial: Indoors Spatial: Natural areas Spatial: Rural areas Spatial: Urban areas Spatial: Outdoors, general Ethical: Harms, risks Ethical: Ethical responsibility
THIRD Investigate larger themes and theoretical explorations for the discussion.	Feminist care theory Cat agency Home-making, claims to space Performativity
FOURTH Identify problem origins and practical management considerations to inform policy recommendations and community outreach.	Source of feral cats, responsibility Owned cat management Trap neuter return Accessible, low cost spay neuter Bylaws Cat rescue: people, politics Caretaking challenges: barriers, hardships Other

2.5 Conclusion

This chapter sought to outline the methodological approach and research design employed in this project. Both descriptions and justifications for the research design were presented in terms of study site, data collection, and data analysis. Ethics approval for participant interviews and field observations were obtained through The University of Guelph Research Ethics Board and Animal Care Services, respectively. For further details, see Appendix A. The following chapters present the primary findings of this research in the form of two manuscripts, followed by a discussion of the practical and scholarly contributions, study limitations, and areas of future research.

3.0 MANUSCRIPT A

‘Of place’ or ‘of people’: Exploring the spatial dimensions of human-feral cat relations in southern Ontario

Abstract

Feral cats are contentious and transgressive, with conflicts surrounding their classification as abandoned pets, wild animals, or invasive species. Concerns about their welfare often conflict with fears that they are impacting native species. This paper presents the results of a case study of human-feral cat relations that took place in southern Ontario, Canada in 2014. This study investigates the social construction of feral cats and the discursive understandings of their ‘animal spaces’ using semi-structured interviews. Additionally, following recent calls in animal geography to move beyond human representations of animals and better integrate “animals’ geographies”, this study also sought to address the material lives of feral cats. In attending to feral cat agency and subjectivities, the ‘beastly places’ of feral cats were investigated using direct observation and secondary anecdotal evidence from colony caretakers. Through this investigation, feral cat health, the diversity of free-living contexts, and the tenuousness of their safety and spaces was emphasized. This paper concludes with a discussion of non-human place-making, considering the possibility of feral cat colonies as homes, and their consequent claims to these spaces.

1.0 INTRODUCTION

"Feral I think is…in this kind of grey area of not really belonging. But maybe not through their own choice…they are between those two things, accepted and not accepted" (study participant)

Feral cats are contentious and transgressive, traversing the socially-constructed boundaries between nature/culture and domesticated/wild. Recent concerns for the impacts of cats on declining songbird populations in North America have heightened the tension between opposing understandings of feral cats and conflicts over their management. A recent Environment Canada study estimates the Canadian feral cat population at 1.4 to 4.2 million, and states that they are responsible for the majority of the 100 to 350 million birds killed by cats each year in the country (Blancher, 2013). While such discourses paint a picture of feral cats as non-native killing-machines threatening our valuable endemic species, counter-discourses exist that paint a different picture: of animals in need of assistance, or that belong as community members. At the same time as some individuals call for intensive, widespread eradication of feral cats, other individuals are dedicating large amounts of time and resources to maintaining feral colonies through the provision of food, shelter, and veterinary care. These conflicts over whether or not feral cats can belong in the spaces in which they have established themselves result from divergent understandings of what kind of animal feral cats are.

Birke (2014) notes that feral animals are most often studied in natural science disciplines, and within such studies "the framework remains with wild species – how they use territory, for example – rather than how they engage with humans or with our social spaces. For that, we need analysis from other disciplines, such as geography" (p. 47). Animal geographers are well situated to consider animal engagements with humans, along with the coproduction of spaces by multispecies actors. Human socio-spatial practices pertaining to animals derive from our

understandings of their nature, or inherent characteristics. In this way, the "nature of belonging" (Lavau, 2011) of animals is dependent upon our social constructions of them, wherein our categorizations determine what we take to be their appropriate spatial occupations.

As the descendants of domesticated pets transported to North America by humans, many see free-living cats as out of place. In one interview, a study participant made the following interesting comment with respect to rural cats: "Cats are of the barn…[farmers] don't bring the cats with them. So the cats almost are of place as opposed to of people." As descendants of domesticated animals—animals 'of people'—can cats that have feralized ever be 'of place', or both? Can they forge an identity independent of individual human owners, and be considered to belong in free-living contexts?

This research seeks to address these questions using the results of an empirical investigation of human-feral cat relations that took place in Ontario, Canada in 2014. This study employed semi-structured interviews to investigate the social construction of feral cats, and field observation to explore cat lives and spaces. This paper begins with a brief overview of animal geography scholarship relating to human-animal socio-spatial practices. It then describes the research methods and results. It concludes with a consideration of the subjective spatial experiences and place-making of cats, asking how we might begin to share space in a diverse multi-species city. Ultimately, the goal of this paper is to illustrate the importance of spatial considerations in understanding the complex spatial and ethical dimensions of human-animal relations.

2.0 ANIMAL SPACES, BEASTLY PLACES

Animal geographers are interested in exploring the spatial dimensions of human-animal interactions. Much of the existing scholarship has centred on what Philo and Wilbert (2000) term "animal spaces" (p. 14), or human ideas about the spaces in which animals belong. This has involved explorations of the discursive construction of animals, including how they are categorized, the spaces that are allocated to them, and where they are seen as in or out of place. Investigations into animal spaces have frequently focussed on transgressions, such as the boundary-crossings of wild animals into urban spaces, which represent a breach of nature into culture. Wolch (1996; 2002) laid much of the groundwork for these studies in her writings on transspecies spatial theory, and the makings of a zoöpolis, a multispecies, "renaturalized, re-enchanted" city (1996, p. 29). Her efforts to "foreground an urban theory that takes nonhumans seriously" (1996, p. 23) call for us to challenge culture/nature and human/animal dualisms, acknowledge that "subaltern 'animal town[s]'" already exist in cities (1996, p. 32), and consider the lives and perspectives of animals in our policies.

Other studies have investigated the transgressions presented by the establishment of non-native species. For example, Lavau (2011) investigated the "nature/s of belonging" of several fish species in an Australian river system, and Notzke (2013) examined stakeholder perceptions on whether or not feral horses belong in Western Canadian nature. On the subject of feral cats, Griffiths *et al.* (2000) explore the ways in which human constructions of urban spaces result in feral cats being seen as either sources of affection or abjection. Echoing Philo's (1998) observations on motivations behind the exodus of agricultural animals from urban areas, Griffiths *et al.* (2000) write that agendas of purification drive the desire to purge feral cats from the urban environment.

Recently, animal geographers have argued that focusing on the discursive constructions of animals alone fails to consider animal agency and subjectivities, ignoring their lived experiences. The result has been increased attention on the "beastly places" of animals, the places they forge for themselves "reflective of their own 'beastly' ways, ends, doings, joys and sufferings" (Philo & Wilbert, 2000, p. 14). These enlivened "animals' geographies" (Hodgetts & Lorimer, 2014, p. 2) seek to move beyond the "human side of human-animal relations" (Buller, 2014, p. 2). For example. Bear (2011) employs responsible anthropomorphism (see Johnson, 2008) and ethno-ethological approaches (see Lestel *et al.*, 2006) to undertake an individual animal geography of Angelica, an octopus in a public aquarium. The author concludes that by attending to the lives of animals as individuals, we can move beyond merely human representations and allow them to speak for themselves. This is also part of a broader call to attend to non-human difference, and develop an understanding of animals as diverse, unique individuals (Bear, 2011; Lulka, 2009b; Philo, 2005). Overall, Hodgetts and Lorimer (2014) write that "it is the various geographies of animals – their agencies, their behaviours, and in particular their place-making – that is increasingly recognized as essential" (p. 4). In keeping with this growing recognition, this paper seeks to contribute to the animal geography scholarship by addressing the discursive construction of feral cats, as well as their material lives in-place and relationships to place.

3.0 METHODOLOGY

For the purposes of this study, feral cats were defined as members of the species *Felis silvestris catus* who were born outside of human ownership. This can be contrasted with stray cats, who were once owned but were abandoned, and thus are generally socialized to humans.

'Free-living' would encompass both strays and ferals. Additionally, 'true feral' cats can be distinguished from 'semi-feral' cats; the former avoid human interaction and are behaviourally more like wild animals, and the latter are those that are, as stated by a participant, "kind of half feral, and…you can possibly work with".

The study took place in southern Ontario, Canada. In the largest city, Toronto, trap-neuter-return (TNR) programs have been formalized through the Animal Control Bylaw as the appropriate management strategy for feral cats. In TNR programs, cats are trapped, brought to a clinic, vaccinated and spayed or neutered, then returned to their colonies. A Feral Cat TNR Coalition provides free spay/neuter clinics for feral cats, and education and training for colony caretakers. Apart from Toronto, no other communities in southern Ontario have centralized feral cat management initiatives, and unsocialized, unadoptable cats are generally euthanized. Many small cat rescues undertake TNR throughout the region in both urban and rural areas, but they often have issues with capacity, as well as conflicts with community members who do not want cats to be maintained in colonies. Some communities are considering future potential feral cat management initiatives. For example, a collaborative, community-based Cat Population Taskforce has been initiated in Guelph. Altogether, southern Ontario has many characteristics which combine to create a complex and diverse context in which to study human-feral cat interactions.

Data collection involved two primary methods. First, semi-structured interviews were employed to investigate the social construction of feral cats. Questions were designed to gain an understanding of individuals' perceptions of the 'proper place' of feral cats in human society. Forty participants were interviewed, including 21 holding animal welfare/colony caretaker perspectives, and 15 classified as conservationists. Four fell into an intermediate group, holding

strong views aligning with both positions. Participants with these polarized perspectives were selected on the basis that they would represent well-developed or extreme standpoints on the subject and were likely to demonstrate clear conceptualizations and spatial preferences, providing the greatest opportunity for understanding the underlying assumptions and deeper dimensions of conflicting opinions. Participant recruitment took place through purposive, opportunistic, and snowball sampling. Interviews were audio-recoded, transcribed, and coded for themes.

Secondly, field observations were made in 20 colonies throughout the region to investigate the lives and places of feral cats. Colonies were selected through opportunistic sampling wherein advertisements were used to recruit colony caretakers who could be accompanied to their colonies. The 20 visited colonies contained approximately 300 cats altogether, and colonies ranged in size from 2 to 100 cats. Approximately 100 cats total were observed during visits to the 20 colonies throughout this study. Data collection included field notes, photographs, and videos. Topics of observation included: cat health in terms of illness, injury and body condition; cat-cat and cat-human interactions; and other behaviours such as feeding, marking, and occupation of shelters. In absence of formal ethological training observational methods were based upon literature on feline biology and behaviour, more-than-human social science methodologies such as responsible anthropomorphism (Jickling & Paquet, 2005; Johnston, 2008) and affective encounters (Bear, 2011), as well as informal training through many years of living with companion cats. One limitation of this methodology is that because of the reclusive nature of ‘true feral’ cats, the majority of observations apply to ‘semi-feral’ cats who can be observed directly. Anecdotal information was also gleaned from colony caretakers on topics such as caretaking routine and impressions of the lives of colony cats. In

particular, stories about specific events and individuals were recorded, as these anecdotes were best able to provide glimpses into the lives of feral cats, revealing insights on their subjective lived experiences (Bear, 2011). Data analysis involved coding for themes and triangulating direct observations, anecdotes from caretakers, and primary literature on free-living cat biology and behaviour.

4.0 FERAL CAT SPACES

This section presents the results of semi-structured interviews concerning participants' views on feral cat spaces and the nature of belonging. Overall, as one participant noted, "there seems to be a lot of very, very strong opinions about them and where they fit and whether they should be there or not". The spaces that will be discussed in this section are human homes, rural areas, natural areas, and urban areas.

4.1 Abandoned pets needing homes

The strongest-held view by study participants was that the most appropriate spaces for feral cats to occupy are human homes. This is based on a conceptualization of feral cats as domesticated pets, whose rightful place is in association with human owners within their living spaces. Therefore feral cats were understood as homeless pets, with participants making statements such as: "that's not a wild animal, that's just a homeless animal," and describing feral cats as "needing help, needing a home, homeless." Consequently, cats in free-living contexts were interpreted as lacking a home, and out of place. To illustrate, one participant stated: "if there's a feral cat I don't see any reason why it should be left to its own devices…. I view them as a domestic animal and if no one's looking after them why would they be allowed to persist?" For this reason, many participants wanted to see feral cats socialized and homed, for instance

saying: “I would rather take them out of the wild and give them a safer home,” and “the ideal situation would be to trap them, have them up for adoption and find good homes for them…integrate them into households.”

Despite this, many participants understood that feral cats are generally not socialized to humans, and therefore could not easily be integrated into households. Colony caretakers in particular emphasized “you can’t house feral cats indoors. That’s cruel, then you’re better to put them down,” “you’re torturing them when you put them in a house…They would be better if you left them outside and gave them their food bowls,” “To put them inside would be cruel. So I just want to support them in their time outside,” and

> there’s a point where they’ve been out so long that they’ve reverted back, and they just can’t be domesticated, or they can’t become part of a household anymore. And at that point, to me, there’s no choice, you either decide to euthanize it or you support them in a feral setting.

This decision about whether to allow feral cats to exist in colonies or euthanize them was extremely contentious. It was most often discussed in the context of urban areas, and will therefore be considered below when we turn our attention to these environments.

4.2 Rural working animals

Many participants also saw a role for feral cats in rural areas providing rodent control. In general barn cats were considered to be at least semi-feral, for instance one participant stated “my suspicion is that they’re filling that feral role, even if they might be associated with a barn.” Many participants took an anthropocentric, utilitarian view that if an animal was somehow serving human interests, it belonged more. Participants made statements such as: “I understand that there might be a more legitimate role for that species for example in a barn where you don’t wish to be overrun with rodents,” and

> that's, I guess, really why they're here in the first place…keeping down the rodents if you have hay or grain or whatever, is very important. So they do provide a very necessary service there…I guess that's maybe the place they should be.

Even some conservationists who felt very strongly that feral cats should not exist in the environment were willing to make exceptions for barn cats. For example, one participant explained: "If ferals are trapped, spayed, and released into a barn where they can catch mice…I can tolerate working animals." This statement of being able to "tolerate" what is categorized as a "working animal" demonstrates a utilitarian perspective where animals are accorded use value as a result of the service they provide to humans.

Many participants also felt that rural cats had an improved quality of life when compared to urban feral cats. Participants stated: "I'd be less likely to intervene and to worry about a feral cat that I saw out in a rural setting than I would one in the city," and "rural cats, I think, they're more comfortable in the barns and places like that. They have a place to go that they call home." Frequently, where urban feral cats could not be socialized and adopted into a home, many participants felt that homing them in a barn would be a good solution. For instance, one participant said: "if there were like an area…maybe like around a barn or something like that and you could spay and neuter them…and then put them back in that situation that would be really wonderful."

4.3 Contaminants of nature

Natural areas were also discussed in interviews. Prevalent sentiments included: "really they're not meant to be in the wild," "they don't really have a place in our ecosystem," and "I don't think they fit, belong, in the wild." From a conservationist perspective, concern about the impacts of feral cats on native species was greatest in natural areas, as demonstrated by statements such as: "I think I'm more concerned about feral cats out in the wild environment,"

and “I think the top priority would be in natural areas…because natural areas I think, it’s kind of clear that they pose threats to our native species.” Participants demonstrated not only concern for direct threats of predation, but also spoke more generally about natural equilibrium and ecosystem balance. For example, one participant explained:

> I have no belief that under a time frame under which we could manage them could they evolve shall we say to fit into our local environment. I don’t view that as realistic really. That’s not to say that they might not squeeze their way in, but I don’t think that there would be any sort of, I don’t imagine there being sort of natural balance.

Such discourses are closely related with ideas of purity in nature. This is illustrated well in the following statement: “I really wouldn’t want to compromise the nature reserve and its un-contamination by cats.” Another individual reflected that “there’s that visceral feeling that people have about what belongs in nature and what doesn’t. And there seems to be a visceral feeling that these cats don’t belong in nature.” This visceral feeling could also be termed abjection. Kristeva (1982), in her exploration of abjection, writes that it is rooted in purity and the maintenance of the subject. The human/animal border is required in order for us to retain our vision of the modern western subject, and thus transgressions resulting in a dissolution of the human/animal or culture/nature boundary become sites of abjection. As noted by Griffiths *et al.* (2000), there is “a fear of the merging of culture and nature” (p. 60), which results in animals in cities being encountered as impure and abject. However, the reverse also becomes true, where purity in wilderness necessitates exclusion of the human. In this way feral cats’ designation as ‘of culture’—‘of people’—results in their being seen as unnatural, and therefore as sites of abjection in nature. As expressed by one participant: “feral cats are an artificial creation of human beings…a human-created animal Frankenstein...an artificial wild animal.”

4.4 Contested urban occupations

Throughout this investigation, urban areas emerged as the most contentious. Generally, colony caretakers and animal welfare advocates were supportive of maintaining colonies in urban spaces, while conservationists were not. Feral cats were designated as out of place in urban areas because of danger to the cats and low quality of life, nuisance to humans, and potential threats to native species. Where feral cats were said to belong in urban areas, it was because of the potential for a good quality of life, the ethics of alternatives such as euthanasia, and limited concern for native species in these environments.

In terms of concerns over cats' safety and quality of life, individuals said: "The risks are higher in cities. Of poisoning, hit by cars," and "whether it's traffic, or having a nice drink of antifreeze or being caught by the neighbour's dog, it's not a particularly hospitable environment in an urban area." There was also concern for the nuisance or threat feral cats could present to humans. For instance, one participant explained, "it's not that it's sort of an inherent feature of the environment, so why should other people have to deal with cats in their backyard...even in an urban environment…maybe you don't want feral cats running around." Presumably, the fact that feral cats are not "an inherent feature of the environment" would be justification for not tolerating their presence where we might tolerate animals like squirrels, skunks, racoons, or other urbanized, native animals.

By far the most frequently-voiced argument against supporting feral colonies in cities was their potential to cause damage to populations of native species, especially songbirds. Participants made statement such as: "cats are a big problem for wild animals and wild birds in urban areas," and "there's a lot of backyard feeders, there's a lot of people attracting songbirds, particularly in the winter time. And so the impact on songbirds is huge." This ultimately led to

the belief by many conservationists that "there's just no place for them in the natural environment, or even in the urban environment." Again, this view was often associated with the designation of feral cats as a non-native, alien, or invasive species. Two participants illustrated this while making the following interesting comparisons: "if we had dogs out there that were eating little children, you would put the dogs down, and we just have to, we have to manage our ecosystems as best we can with invasive species." In this metaphor, the dogs represent the feral cats, and the little children they are eating represent our native fauna. Another participant said:

> we transport polio around the world today, and we don't let polio run rampant and kill our children, we deal with it…I think what people fail to understand is that feral cats and other invasive populations potentially have as great or greater an impact than polio might predictably have.

These examples vividly illustrate the dichotomy expressed by members of the conservationist group between the invasive "killing-machines" (as they were frequently described) that we are responsible for controlling, and our vulnerable native fauna that we are responsible for protecting. For these reasons, many conservationists felt that cats are out of place in urban environments and should be removed.

Conversely, the majority of participants in this study were either openly supportive of, willing to tolerate, or less concerned about feral cats living in urban areas. This was often based on the premise that feral cats can have a good quality of life, with colony caretakers in particular making statement such as: "there are these shelters that are these Tupperware containers where they're insulated. So those can be homes, and I think in that kind of a situation the cats can be very happy," "TNR'd cats released in an urban setting in a controlled environment can have a reasonably good life where they have their own place," "I think they do just fine. The ones that I see around here, they're quite well fed. They're really, they're doing well," and "if it's not such a bad spot for them to find that shelter and that, I think they can live out a good healthy life." Other

individuals felt that it was our moral obligation to come up with a solution other than euthanasia, and that sterilizing and maintaining colonies through TNR could provide such an answer. As explained by two participants:

> [W]e should be looking at more proactive ways of dealing with the issue, as opposed to, oh they're a nuisance, and we'll just trap and euthanize them. I think we have more and more responsibility as human beings to do something that is more pro-life.
>
> TNR is…definitely more humane than euthanizing an animal, and so if we can curb the overpopulation and if you have dedicated colony caretakers that are willing to care for these cats, why would you euthanize them? I think we need to move away from being a barbaric society.

Therefore most participants from the colony caretaker/animal welfare perspective believed that "within the city our obligation is to provide a safe way that feral cats can live." Finally, a number of individuals from the conservationist group indicated that they would be willing to tolerate feral cat colonies in urban areas because they were unlikely to present a large threat to native species within these spaces. Participants explained:

> [I]n the urban environment…maybe they're fine because most of the things they're probably eating, at least live animal wise, are probably not native species anyways…if they can make a living on their own in an urban environment it seems like more power to them, let them eat pigeons and rats.
>
> I don't really think of feral cat populations as being really great concern out in…natural settings…I think of feral cats as occurring in association with humans…I assume that threatened populations of animals don't really exist in super close association with people. And I guess that's why I think of feral cats as being less of an issue.

Generally, members of the conservationist group tended to feel that "the further it is from wild areas probably the less I care." This again supports the prominence of culture/nature dualisms in human-animal relations, with the ultimate goal of protecting pristine wilderness external to human-occupied spaces. Overall, although urban spaces were most contentious, many participants were of the opinion that "we need to somehow establish some way of accepting

them as kind of part of the urban environment", echoing Wolch's (1996) call to acknowledge that 'subaltern animal towns' already exist around us.

5.0 BEASTLY CAT PLACES

The most significant results of the exploration into the beastly places of feral cats involve the discrepancies between participants' perceptions of feral lives and the realities that emerged in observations and discussions with caretakers. A few of these discrepancies are discussed, followed by a description of two cases that illuminate these trends.

5.1 Discrepancies

Participants tended to make generalizations about the quality of life of feral cats, describing them as "pathetic," "wheezing," "rack of bones," "mangy," and "scrawny," noting anticipated health issues and poor longevity. Conversely there were very few signs of poor health in the approximately 100 cats observed. The overall body condition of cats appeared very good with no signs of thinness or emaciation. Based on visual inspections, more cats were verging on overweight than underweight (see Figure 2a). Generally, coats appeared healthy, and there were no signs of weepy eyes or sneezing typical of upper respiratory infections that can be common for cats living in close proximity to one another or who are under stress (MacDonald, Yamaguchi & Kerby, 2000). There were also no signs of present injury, for instance limping, cuts, or sores. However, one colony caretaker mentioned a cat needing to have an eye removed because of infection, and a couple of cats were missing part of their tail. In these few cases of previous injury, the cats had healed and appeared to be otherwise healthy. It must be noted that these limited observations cannot be considered representative of feral cats in general. All visited colonies were managed, with food and shelter provided, and the majority of cats had been

vaccinated and spayed or neutered. However, these data are still important as there is a marked contrast between what one would imagine of feral cats characterized as “pathetic” and “mangy”, and what was observed at the visited colonies. They provide a caution against assumptions that feral cats cannot attain what many would consider an acceptable quality of life, particularly when living in a managed colony.

Another discrepancy involved ideas about feral cats’ living situations. Participants often had very specific ideas about how feral cats live. They generally painted a picture of lone cats skulking around dumpsters in alleyways or industrial areas. Contrary to these generalizations, colonies varied greatly in size and location. The smallest comprised 2 individuals and the largest over 100. Colonies were found in residential and industrial areas, behind strip malls, in ravines, parks, and urban forests. As one caretaker noted, “there is no typical feral situation.” In one colony three cats were living under an old transport truck in a parking lot surrounded by concrete (see Figure 2b). Another large colony was located in the backyard of a mansion where residents had cut a hole in their two-car garage door and would lay down mattresses and space heaters for the cats in the winter (see Figure 2c). Despite this apparent discrepancy, the cats living under the transport truck appeared just as healthy as those living in the backyard. Most colonies contained shelters and feeding stations, often made out of wood or plastic. Many shelters were large Rubbermaid bins with small entry holes and straw and/or Styrofoam sheets for insulation (see Figure 2d). At one colony caretakers had repurposed a chicken coup as a shelter. In others there were ‘cat condos’, wooden, two-level, multi-unit dwellings that could house 4 to 10 cats. Some colonies contained covered, wooden boxes that were used as feeding stations. Overall, this diversity cautions against speaking of ‘feral cats’ as a uniform group, emphasizing the importance of considering specific contexts before making assumptions about cats’ lives and

interests. This reinforces the calls by animal geographers to attend to non-human difference and the diversity of lived experiences of animals (Bear, 2011; Lulka, 2009b; Philo, 2005).

Another noteworthy finding involves some of the common management solutions proposed in interviews, which emerged as more complex when the subjective lives of the cats were also considered. Two such cases involve the desire to integrate feral cats into homes as pets, and the desire to relocate them to rural areas to act as barn cats.

Figure 2 - Evidence of feral cat health and diversity. a. Healthy looking colony cats. b. Small colony living under a transport truck. c. Large colony in the backyard of a mansion (C. Patskou, 2010). d. Homemade Styrofoam and Rubbermaid shelters.

5.2 Case 1: From feral to house pets

As detailed in the preceding section, many participants wanted to see feral cats removed from their colonies, socialized, and adopted into homes. However, it became clear through observations and discussions with caretakers that while some cats may do well in human homes, others will not. For example, one participant said:

> I have friends who adopted a couple feral cats, but they just never saw them, hardly. They would put the food out, but they could hardly ever touch them. And in those situations I feel like they almost would have been better off back out in a colony rather than being in their house.

Another participant explained, "You can tell pretty quickly who wants to be inside and who really doesn't and there's no point in fighting it if they don't want to be inside." Caretakers emphasized that all cats are unique, and have different histories and inclinations that must be considered when making decisions about their futures and where they will be happiest. Caretakers frequently recounted stories about colony cats becoming increasingly social over time, which sometimes led to the cats being taken home as companions. For instance at one colony I was introduced to a small grey tabby named Silver (see Figure 3a). The caretaker told me that Silver was becoming friendlier over the months, increasingly choosing to engage with her. I watched him eagerly approach when we arrived, rubbing against her legs repeatedly over the several hours we were there, and stretching his head up to be petted. The caretaker said that she might bring Silver home and attempt to further socialize and find a home for him, but that she would "see how it goes." This suggested a recognition that if Silver did not do well, he would be placed back into his colony. Other caretakers took a similar approach, demonstrating an acceptance that not all cats belong in human homes.

As another example, one small colony I visited contained several cats that had come from a hoarding situation. They were not sufficiently socialized to be adoptable by shelter standards. As a result, this caretaker decided to home them in one of her small urban colonies. The caretaker said they were doing much better in their new life outdoors, as evidenced though gaining weight and forming bonds with the other colony cats. This case is an illustration of what Holmberg (2014) describes as "an interesting anomaly: the feral cat that has been born in a home" (p. 63). It also demonstrates that some cats can be seen as belonging more in a feral colony than as companion animals, despite originating in a home. Although these examples still demonstrate a human notion of belonging, they are founded on principles of attending to individual cats in terms of where they might be happiest.

5.3 Case 2: From urban feral to barn cat

Another example involves the desire voiced by many participants to see feral cats relocated from urban colonies to rural areas as barn cats. This was frequently described as a win-win situation wherein the cats would be in less danger, would not be nuisances, and could benefit farmers by providing rodent control. However, in discussion with caretakers it became clear that relocation is much more complicated than one might initially assume. Caretakers felt that "it's hard relocating them," and "relocating a colony should only be done under the rarest of circumstances," such as where the cats are in serious danger. They noted that when relocation is absolutely necessary, the whole colony should be moved together where possible because of the important social bonds between colony members. One caretaker explained:

> [Y]ou can't just take a feral cat and dump it into another colony…because not all the time when you take a feral cat to barn will they stay. As soon as the barn door's open they're gone…they need to stay and make sure that they consider that their home. So when the barn doors do open, they're not like a bat out of hell and gone

These sentiments were echoed in an interview with Karen Brownsey (personal communication, July 16, 2014), the founder of Barn Rats need Barn Cats. She explained that rehoming feral cats as mousers can be very successful if they are under one year of age, or are "truly homeless," meaning they do not belong to a particular colony. She said that colony cats older than one year will rarely consider a new area their home, and will almost always leave and try to make their way back to their colony. Her program has tried several relocation strategies, including: individual cats or several bonded colony cats together; to barns with existing cats or no cats; and with cats kept in large crates or small rooms for three to six weeks. So far nothing has proved effective for adult colony cats. She had many stories of cats going missing, or being found on the side of the road kilometres from the farm they were homed in.

Both of these cases illustrate that strategies to place animals where we feel is best for them may not always be successful, and often this is because we are neglecting both their identities as differentiated individuals, and the potential for them to have place-attachments.

6.0 FERAL CAT PLACE-MAKING AND HOMESTEADS

"They deserve to be there now that they've populated, they've homesteaded" (study participant)

The cases discussed in the preceding section illustrate the importance of attending to animal agency and connections to place. They raise the interesting question: what might it mean

to think of feral cat colonies as homesteads[2]? This section explores feral cat place-making and place-attachments using the literature concerning non-human agency and cat biology and behaviour, as well as observations from feral cat colonies and anecdotes from colony caretakers.

6.1 Place and agency

It is helpful to consider the distinction geographers often make between 'space' and 'place'. Space can be thought of as objective, physical area, and place as subjective and embedded with "history and meaning" (Tuan, 1979, p. 387). Spaces can become places through repeated experiences. Sack (1997) writes: "[P]lace differs from space in terms of familiarity and time. A place requires human agency, is something that may take time to know, and a home especially so" (p. 16). This statement illustrates that the subjective experience of meaningful place was originally considered a characteristic applicable only to humans. However, with increasing acknowledgement of the agency and subjectivity of non-human animals, limiting the possibility of meaningful engagement with the landscape to humans alone no longer seems tenable.

It is important to briefly clarify what is meant by non-human agency. Agency can be defined in numerous ways, but is often centred on the following two capacities:

- *subjectivity:* being a thinking, knowing or self-conscious subject (Mcfarland & Hediger, 2009), capable of communication (Nyyssönen & Salmi, 2013); and

[2] The term "homestead" was employed as a result of its use by a study participant. In this paper it refers to the physical home space, the process of home-/place-making, as well as the creation of ethical claims to these meaningful places. I acknowledge that this term has an inherited Lockean connotation surrounding the labour theory of property (Locke, 1690/1988), which can be problematic in numerous ways, including the presupposition of unoccupied lands, and challenges concerning alternate manners of dwelling (for instance those represented by nomadism or migratory species). I therefore use the term "homesteading" as synonymous with place-making, and not in reference to exclusive rights to property or previously unoccupied lands.

- *influence:* the ability to control the movements of one's body in fulfilling one's needs or wants (Steward, 2009), variously described as the ability to "act, operate, and exert power" (Nyyssönen & Salmi, 2013, p. 42), "produce a phenomenon or modify a state of affairs" (Jepson *et al.*, 2011, p. 230), or "influence their own lives" (Hribal, 2007, p. 102) and those of others (Rutherford, 2013).

The degree of intentionality required in order to qualify for agency is debated, but Steward (2009) contends that full propositional attitude concepts are not required, and that the possession of representational and motivational states wherein an individual controls its body in order to attain certain goals is sufficient. As well, a specific type of influence has been advanced that is particularly relevant to a geographical analysis of animal agency and place-making—that of agency in relation to environment, which can be described as:

- *spatial influence*: the ability to have a "tangible impact upon the landscape" (Lulka, 2009a, p. 80), where the "land is seen as a medium" (Nyyssönen & Salmi, 2013, p. 42) for the expression of agency (Tønnesen, 2010).

In this way agency is manifested through alterations to physical landscapes, or active place-making practices. In addition to this, one's own subjective experience of an area contributes to the development of place-attachments.

6.2 Place-making

In what manner might feral cats exert their spatial influence and homestead? To answer this question we can begin with insights from the biological sciences on free-living domestic cat biology and behaviour. Feral cat colonies are structured by philopatry—literally "home-loving"—meaning they exhibit site-fidelity (Liberg, Sandell, Pontier & Natoli, 2000). Home ranges are the areas in which individuals search for food, whereas territories are those that are

defended by an individual from encroachment (Spotte, 2014). Although there is contention regarding the degree to which feral cats exhibit territoriality (Spotte, 2014), there is evidence that supports the establishment and enforcement of core areas, such as observations that there is very limited migration between colonies (Liberg *et al.*, 2000). This trend was observed in this study in a residential area, where a caretaker had a small colony in her front yard and another in her backyard (see Figure 3b). She lived in a semi-detached home in a condominium complex, and explained that the cats from the front yard never went around back, and vice versa. Individuals from the two colonies never mingled, and had been living in these two proximate but separate locations for years. It is also a commonly-held belief among caretakers that cats will generally not accept newcomers into their colonies. For instance, one caretaker said she had witnessed colony cats denying food access to new cats by preventing them from approaching feeding stations.

We can also think about place-making in terms of the material processes of embodied interactions with landscape (van Dooren & Rose, 2012). Interactions observed in colony cats include tree scratching, and scent marking by rubbing the sides of their bodies, or especially facial glands against "scent sticks" (Tabor, 1983, p. 138) such as trees, shelters, and feeding stations (see Figure 3c). During one colony visit, caretakers were constructing new shelters. They explained that cats were always extremely curious of any new features that appeared in the colony space, and were quick to explore and mark new items. They pointed out signs detailing TNR which had been affixed to trees in case someone happened to stumble on the colony. The signs bore many scratches, despite being more than a metre off the ground. The caretakers said within a couple of days of attaching the signs, the cats had added many scratches to this new

feature. These actions taken together construct a narrative of getting to know a space, marking one's territory, and making a place one's home.

6.3 Place-attachments

Although it is more challenging to present evidence of non-human place-attachments, there are several means through which such possibilities can be explored. Many colony caretakers discussed colonies as homes, for instance saying: "this is their community," "their sense of security," and, "They have a place to go that they call home." In terms of cat behaviour, biologists write that "within the communal home range, the individual might have different favorite areas" (Liberg, 1980, p. 341), and "certain spots were consistently identified as greater use areas, such as sunbathing nests" (Tabor, 1983, p. 65). Adding firsthand observations to this, it was noted that some cats would go to certain dishes, feeding stations, or shelters repeatedly, and not others. For instance, there were two different locations with feeding stations at one very large colony. The caretakers said that some cats would occupy one area and frequent one station, while others would frequent the second. These stations were only about ten metres apart, but cats seemed to demonstrate a preference for one or the other. From informal, or intuitive knowledge, many individuals with companion cats can likely think of favourite chairs or windowsills which seem important to our feline friends; why should we assume feral cats would be any different?

Anecdotes recounted in the preceding section concerning feral cat relocation and homing instincts also provide evidence of place-attachments. Surely the greatest demonstration of meaningful engagement with place is the desire to return to one's home, to seek it out when we find ourselves taken from it. In support of this, van Dooren and Rose (2012) discuss the 'storied places' of urban penguins and flying foxes in Sydney Australia, writing that they are "known and experienced through memory and expectation, through embodied knowledge of distance and

proximity, through past stories and shared stories, and through individual determination both to travel and to return" (p. 13).

Figure 3 - More scenes of colony life. a. Silver eating out of the food bucket. b. The 'backyard' colony. c. Colony cat scratching a tree to which a scratch pad has been affixed by caretakers. d. Demolished warehouse that previously housed a colony.

6.4 Implications

This discussion of feral cat homesteading raises important ethical questions with respect to their vulnerability and ethical claims. Since they are rarely considered to be legitimate community-members, feral cats are frequently at risk from both intentional persecution such as poisoning or removal, and unintentional displacement by activities such as construction or demolition. Seven of the 20 colonies visited in this study had been relocated, or were going to be

in the near future due to some threat or disturbance. One colony had inhabited an abandoned warehouse until its demolition, which left approximately 100 cats without a home in the middle of winter (see Figure 3d). Colony caretakers had been forewarned, and were able to relocate the cats to an adjacent wooded area, constructing sufficient shelters so that, to their knowledge, none perished. The move did cause sufficient stress that upper respiratory infections circulated within the colony, but these dissipated following treatment with antibiotics. Though their old home is presently no more than an open, concrete-floored area with piles of rubble, cats still occupied this space. They wandered the area, bounding through the rubble and perching on concrete blocks. Although they appear healthy in their new home, and larger shelters are currently being constructed by caretakers, it is impossible to say how they were affected by this transition and the loss of what was, to many members of the colony, the only home they had ever known.

Although there are no easy solutions to these dilemmas, one practical finding of this study was the success in formalizing TNR as the appropriate response to feral cats in Toronto's Animal Control Bylaw. The bylaw states that "Any feral cat may be spayed or neutered by the Executive Director *and subsequently released*" (City of Toronto, 2013, p. 4, emphasis added). The outcome of such legislation is that when community members complain about the presence of feral cats in an area, if the cats are part of a colony in which TNR has taken place, they can be told that these cats are being managed as per the Animal Control Bylaw (E. Attard, personal communication, September 17, 2014). For this reason caretakers and key informants emphasized that bylaws can legitimize feral colonies' occupations of public spaces at least, and support the work of colony caretakers within the community.

At a deeper level, what is required is a recognition of the ethical claims to space presented by non-humans who engage in place-making practices and develop place-attachments.

Ingold (2011) and Barua (2014) discuss the 'inversion' that takes place when inhabitation becomes conceptualized as merely occupation. Conceiving of beings as occupants rather than inhabitants advances an understanding of "a world already built" (Ingold, 2011, p. 147), rather than acknowledging the processes of 'place-binding' through which we actively dwell. The politics of inversion in this case are based on an objectification of non-humans that renders them passive occupants of habitats, rather than minded subjects and inhabitants of homes. This objectification of animals is maintained most obviously in the interests of commercial animal exploitation industries, where any questioning of the ethical claims of animals presents a threat. More subtly, and exemplified most clearly in the cases of animals labelled as alien, invasive, or feral, such understandings are reproduced by dominant holistic knowledge systems that focus on animals as merely parts of a large whole, cogs in a machine discussed only in terms of their functional roles within ecosystems. These systems of thought direct our attention to such features as the 'greater good' of ecosystem health and biodiversity preservation, and away from encountering animals as unique beings who matter in their own right. These biopolitical operations have been described in the literature (e.g., Darier, 1996, 1999; Luke, 1995, 1999; Rinfret, 2009; P. Rutherford, 1999; S. Rutherford, 2007), and can be seen operating in the discourses which invert feral animals' inhabitation into occupation, and ultimately serve to make them "killable" (Haraway, 2008).

Finally, it is important to note that human societies do not produce feral cat spaces by such activities as abandoning buildings and permitting the deterioration of spaces into abject, subaltern feral dwellings. Neither do colony caretakers alone produce cat spaces by constructing and arranging shelters and feeding stations. But neither do cats produce their beastly places, through the processes of homesteading, for themselves alone. Rather these cat-human landscapes

are co-produced through many simultaneous, overlapping agencies and modes of inhabitation. As animals shape places, they change the tenor of shared landscapes, and this can have profound influences on humans as well. To use an illustration from this study, participants often noted their own enjoyment of sharing spaces with free-living cats, for instance saying: "I actually think it's kind of neat to see some sort of feline in this landscape," "when I went to Italy when I was fourteen, there were cats everywhere, and they were sort of between respected and tolerated. They just were part of the landscape. I thought it was marvelous," and "I find something comforting about having cats around, even feral cats, in small quantities. I find it sort of welcoming…I think cats are a lovely, lovely to have around even if they're not super human friendly." But even where cats are not visible or interacting with humans, they still have an interest in dwelling, homesteading, inhabiting. They make their homes, which become meaningful to them, and in acknowledging this it becomes our responsibility to find new ways of "sharing and co-producing meaningful and enduring multispecies cities" (van Dooren & Rose, 2012, p. 19).

7.0 CONCLUSION

Overall, the results of interviews demonstrate that the discursive constructions of feral cats and the nature of belonging are based strongly on domestic/wild and culture/nature dualisms. Feral cats are still thought of as animals 'of people', and are therefore seen to belong as our companion or working animals, and not as living independent existences or polluting pristine nature. Notions of belonging are also influenced by assumptions about feral cats' quality of life. However, observations of their beastly places provided evidence of health and connection to colony spaces. The observations also demonstrated a large diversity in possible living

situations, cautioning against treating feral cats as a uniform group and homogenizing their life experiences. The results of this study further illustrate that our strategies to place animals may not always succeed, often as a result of our failure to acknowledge their identities as differentiated individuals and the potential for them to have place-attachments. In terms of the practical dimensions of human socio-spatial practices, Toronto's formalization of TNR and registered colonies as the appropriate response to feral cats in its Animal Control Bylaw represents a step towards legitimizing cats' claims to space. On a deeper level, in order to challenge the inversion of inhabitation into occupation (Barua, 2014; Ingold, 2011), we must encounter non-humans as minded subjects capable of place-making practices, and meaningful attachments to homes.

This paper represents a small study of a very complex human-animal entanglement. It necessarily omits consideration of much of the messiness of these interactions. It attempts to continue bridging the divide between the natural sciences' exclusive focus on animals as research objects, and the focus within social sciences and humanities disciplines on discursive, human representational accounts of animals. It also attempts to carefully attend to non-human difference and recognize the individuality, unique histories, and preferences of feral cats. Hopefully, it will contribute to future work in animal geography and related disciplines that attempt to engage empirically with animals through observational studies and secondary anecdotal data to critically explore their beastly places. If we reject nature/culture and domestic/wild dualism, take non-human agency seriously, and encounter animals as subjects of their own lifeworlds, it becomes our responsibility to acknowledge, as stated by one study participant, that feral cats "do have a right to space, and it's up to us to get a little more creative and sort that out."

BIBLIOGRAPHY

Barua, M. (2014). Bio-geo-graphy: landscape, dwelling, and the political ecology of human-elephant relations. *Environment and Planning D: Society and Space, 32*, 915-934.

Bear, C. (2001). Being Angelica? Exploring Individual Animal Geographies. *Area 43*(3), 297-304.

Birke, L. (2014). Escaping the maze: Wildness and tameness in studying animal behaviour. In G. Marvin & S. McHugh (Eds.), *Routledge Handbook of Human-Animal Studies* (pp. 39-53). New York, NY: Routledge.

Blancher, P. (2013). Estimated Number of Birds Killed by House Cats (*Felis catus*) in Canada. *Avian Conservation and Ecology, 8*(2), 3.

Buller, H. (2014). Animal geographies II Methods. *Progress in Human Geography*, 0309132514527401.

City of Toronto, Municipal Code Chapter 349, Animals. June 13, 2013.

Darier, E. (1996). Environmental governmentality: the case of Canada's green plan. *Environmental Politics, 5*, 585–606.

Darier, E. (1999). Foucault and the environment. In Darier, E. (Ed.), *Discourses of the Environment* (pp. 1-33). Malden, PA: Blackwell.

Griffiths, H., Poulter, I., & Sibley, D. (2000). Feral cats in the city. In C. Philo & C. Wilbert (Eds.), *Animal Spaces, Beastly Places: New Geographies of Human-Animal Relations* (pp. 56-70). London, UK: Routledge.

Haraway, D. (2008). *When Species Meet.* Minneapolis, MN: University of Minnesota Press.

Holmberg, T. (2014). Wherever I lay my cat? Post-human crowding and the meaning of home. In Marvin, G., & McHugh, S. (Eds.). *Routledge Handbook of Human-Animal Studies* (pp. 54-67). New York, NY: Routledge.

Hodgetts, T., & Lorimer, J. (2014). Methodologies for animals' geographies: cultures, communication and genomics. *Cultural Geographies*, 1474474014525114.

Hribal, J. (2007). Animals, agency, and class: Writing the history of animals from below. *Human Ecology Review, 14*(1), 101.

Ingold, T. (2011). *Being alive: Essays on movement, knowledge and description*. New York, NY: Taylor & Francis.

Jepson, P., Barua, M., & Buckingham, K. (2011). What is a conservation actor? *Conservation and Society, 9*(3), 229.

Jickling, B., & Paquet, P. C. (2005). Wolf Stories. *Environmental Ethics, 27*(2), 115-134.

Johnston, C. (2008). Beyond the clearing: towards a dwelt animal geography. *Progress in Human Geography, 32*(5), 633-649.

Kristeva, J. (1982). *Powers of horror: An Essay on Abjection*. (L. S. Roudiez, Trans.). New York, NY: Columbia University Press.

Lavau, S. (2011). The nature/s of belonging: performing an authentic Australian river. *Ethnos, 76*(1), 41-64.

Lestel, D., Brunois, F., & Gaunet, F. (2006). Etho-ethnology and ethno-ethology. *Social Science Information, 45*(2), 155-177.

Liberg, O. (1980). Spacing patterns in a population of rural free roaming domestic cats. *Oikos, 35*, 336-349.

Liberg, O., Sandell, M., Pontier, D., & Natoli, E. (2000). Density, spatial organization and reproductive tactocs in the domestic cat and other felids. In D. C. Turner & P. P. Bateson (Eds.). *The domestic cat: The biology of its behaviour* (2nd ed.) (pp. 119-147). Cambridge, UK: Cambridge University Press.

Luke, T. W. (1995). On environmentality: Geo-power and eco-knowledge in the discourses of contemporary environmentalism. *Cultural Critique, 31*, 57-81.

Luke, T. W. (1999). Environmentality as green governmentality. In E. Darier (Ed.), *Discourses of the Environment* (pp. 121-151). Malden, PA: Blackwell.

Lulka, D. (2009a). Consuming Timothy Treadwell: redefining nonhuman agency in light of Herzog's Grizzly man. In McFarland, S. E., & Hediger, R. (Eds.), *Animals and agency: an interdisciplinary exploration* (Vol. 8) (pp. 67-87). Boston: Brill.

Lulka, D. (2009b). The residual humanism of hybridity: retaining a sense of the earth. *Transactions of the Institute of British Geographers, 34*(3), 378-393.

MacDonald, D. W., Yamaguchi, N., & Kerby, G. (2000). Group-living in the domestic cat: its sociobiology and epidemiology. In D. C. Turner & P. P. Bateson (Eds.). *The domestic cat: The biology of its behaviour* (2nd ed.) (pp. 95-118). Cambridge, UK: Cambridge University Press.

McFarland, S. E., & Hediger, R. (2009). Approaching the agency of other animals: an introduction. In McFarland, S. E., & Hediger, R. (Eds.), *Animals and agency: an interdisciplinary exploration* (pp. 1-22). Brill.

Notzke, C. (2013). An exploration into political ecology and nonhuman agency: The case of the wild horse in western Canada. *The Canadian Geographer/ Le Géographe canadien, 57*(4): 389-412.

Nyyssönen, J., & Salmi, A. K. (2013). Towards a Multiangled Study of Reindeer Agency, Overlapping Environments, and Human-Animal Relationships. *Arctic Anthropology, 50*(2), 40-51.

Philo, C. (1998). Animals, Geography, and the City: Notes on Inclusion and Exclusion. In: J. Wolch & J. Emel (Eds.), *Animal Geographies: Place, Politics and Identity in the Nature-Culture Borderlands* (pp. 51-71). London: Verso.

Philo, C. (2005). Spacing lives and lively spaces: partial remarks on Sarah Whatmore's Hybrid Geographies. *Antipode, 37*(4), 824-833.

Philo, C., & Wilbert, C. (2000). Animal Spaces, Beastly Places. In C. Philo & C. Wilbert (Eds.), *Animal Spaces, Beastly Places: New Geographies of Human-Animal Relations* (pp. 1-34). London: Routledge.

Rinfret, S. (2009). Controlling animals: power, Foucault, and species management. *Society and Natural Resources, 22*(6), 571-578.

Rutherford, P. (1999). The entry of life into history. In E. Darier (Ed.), *Discourses of the Environment* (pp. 37-62). Malden, PA: Blackwell.

Rutherford, S. (2007). Green governmentality: insights and opportunities in the study of nature's rule. *Progress in Human Geography, 31*(3), 291-307.

Rutherford, S. (2013). The Biopolitical Animal in Canadian and Environmental Studies. *Journal of Canadian Studies/Revue d'études canadiennes, 47*(3), 123-144.

Sack, R. D. (1997). *Homo Geographicus*. Baltimore, MD: Johns Hopkins University Press.
Spotte, S. (2014). *Free-ranging Cats: Behavior, Ecology, Management*. Chichester, UK: John Wiley & Sons.
Steward, H. (2009). Animal agency. *Inquiry, 52*(3), 217-231.
Tabor, R. K. (1983). *The Wild Life of the Domestic Cat.* London, UK: Arrow Books Limited.
Tønnessen, M. (2010). Wolf land. *Biosemiotics, 3*(3), 289-297
Tuan, Y. F. (1979). Space and place: humanistic perspective. In: S. Gale & G. Olsson (Eds.), *Philosophy in Geography* (pp. 387-427). Netherlands: Springer Netherlands.
van Dooren, T., & Rose, D. B. (2012). Storied-places in a multispecies city. *Humanimalia, 3*(2), 1-27.
Wolch, J. (1996). Zoöpolis. *Capitalism, Nature, Socialism, 7*(2), 21-47.
Wolch, J. (2002). Anima urbis. *Progress in Human Geography, 26*, 721-742.

4.0 MANUSCRIPT B

Becoming cat: Posthumanist performativity and feline ferality

Abstract

Recent scholarship in animal studies has emphasized the need to attend to the subjectivities and agency of non-human animals. This has largely been based on the premise that third party representational accounts of animals' lives are insufficient, and that we must move beyond exploration of discursive constructions of non-humans alone. Performative approaches, which examine the ways in which identities are produced through repeated bodily actions, have been suggested as one lens through which non-humans can be accorded agency in interactions and outcomes. Building off of the work of Barad (2003) and Birke *et al.* (2004), this article seeks to contribute to relational accounts of human-animal interactions by advancing a model of posthumanist performativity and applying it to an empirical case study of human-feral cat relations from Ontario, Canada that took place in 2014. Interview results are used to consider the ways in which both human and feral cat agencies participate in the co-creation of subjectivities in these more-than-human intra-actions. The utility of such an approach in contesting totalizing logics which operate to make feral cats 'killable' is also explored. Overall, performative approaches are advanced as a fruitful means of subverting such processes, and challenging nature/culture, human/animal and domestic/wild dualisms.

1. INTRODUCTION

This paper emerged out of research that aimed to investigate the conceptual, spatial, and ethical dimensions of human-feral cat relations in southern Ontario, Canada. Semi-structured interviews were used to investigate the ways in which feral cats are categorized and 'placed' spatially by humans. Additionally, direct observations of feral colonies and secondary anecdotal evidence of colony caretakers contributed to an exploration of the lifeworlds of feral cats. Though my primary objective was to contrast human accounts of animal lives with the actual experiences of animals meaningfully inhabiting a shared landscape, I also became interested in critically interrogating the processes through which animals emerge as certain types of beings, and the significance of these operations in terms of the policing of human-animal relationships. Feral cats represent an interesting case of human-animal relations because they transgress domestic/wild, and therefore culture/nature binaries, and their divergent definitions generate conflicts surrounding where they do and do not belong. Those who believe they can 're-wild' see them as belonging in free-living contexts, while those who believe they are escaped pets see them as out of place and requiring re-integration into the human sphere. In this way, their categorization determines spatial dimensions of belonging, which also feeds into ideas about how humans ought to interact with them: by leaving them alone, eradicating them, or attempting to socialize and adopt them into homes.

Throughout interviews, I became increasingly aware of the role of cat behaviour in determining participants' classification of feral cats along the domesticated-wild spectrum. In particular, participants often noted specific interactions with individual cats as determinants of these understandings. Thus I began to question the ways in which human-feral cat relations might be thought of as performative, in the sense developed by Judith Butler, as in produced

through bodily actions which create an illusion of fixed, inherent features in a subject. As an example of a statement that evoked a performative interpretation, one participant explained: "cats do a lot of manipulation, like the hissing, and the carrying on, but once you touch them, they don't bite…. But they do that intimidation, that's it, a lot of intimidation. And they're just scared". This account suggests that rather than possessing some sort of core internal feature of wildness, or viciousness, feral cats are performing wild/vicious.

Butler developed the concept of performativity to posit that gender is not a fixed, inherent feature of identity, but rather is produced through repeated acts that create an illusion of permanence (Butler, 1990). In this way, gender is a dynamic process, a corporeal becoming enacted through embodied agency (Butler, 1990; Lloyd, 2007). Performativity has subsequently been applied to many other identities and components beyond gender, such as sexuality, markets, and nation states. Posthumanist performativities have been developed by Barad (2003) and Birke *et al.* (2004); these are described in greater detail in the following section, and serve as the basis for analysis.

The topic of this paper is not necessarily the subject formation of felines themselves, as there are ways in which feline subjectivity and identity positions would differ from those of humans. Namely, in the case of felines it is hard to imagine the type of internalization of broad social norms that Foucault would describe as subjectification. Rather, the topic of this inquiry is the mutual co-constitution of subjectivities in human-animal encounters, that is, the space of this specific intra-action itself. The aim of this paper is to investigate the ways in which human-animal relations might be conceived of as performative, not the extent to which animals can be said to perform 'wild' or 'domestic' in terms of internalized identities. Specifically, this paper seeks to:

- develop a model of posthumanist performativity which can be applied to empirical studies of more-than-human intra-actions;
- apply this model to the results of the case of human-feral cat relations from southern Ontario, Canada; and
- assess the limitations and utility of such an approach in terms of Butler's original emancipatory political agenda, but using categories of animality as those to be 'troubled'.

2. POSTHUMANIST PERFORMATIVITIES

Posthumanist performativities contribute to broader efforts in animal studies and related disciplines, such as animal geography, to investigate non-human subjectivities and agency. The goals of such approaches are to challenge positivist ontologies of natural sciences that maintain non-human animals wholly within the realm of nature as passive objects, and to challenge social constructivist ontologies that focus exclusively on the human-discursive realm, both of which rob animals of agency (Barad, 2003; Buller, 2014; Hodgetts & Lorimer, 2014; Johnston, 2008). As a result there have been a growing number of studies focussed on material, relational approaches to studying the more-than-human world (Whatmore, 2006). Posthumanist performativity, originally developed by Karen Barad (2003), is one such approach. Barad defines 'agential realism' as an ontology that rejects the representationalist understanding of the fundamental units of reality as objects and their representations, or words and things. Rather, she posits a causal relationship between "discursive practices" and "material phenomena" (p. 814). In this account, the basic units of reality are phenomena, or agential intra-actions; the relationships, not the relata. Barad (2003) challenges the dominant understanding of continuous,

discrete entities, positing that components become differentiated agencies through the process of intra-acting. She emphasizes that these agencies can be non-human, opening up the possibility for considering the performative nature of animal subjectivities, and human-animal relations.

Building on this foundation, Birke *et al.* (2004) advance the concept 'animaling' as a discursive process through which *animality* is constructed as that which is radically different from *humanity*. The authors write that the utility of conceiving of animality and human-animal relations as performative lies in the acknowledgement of animal agency[3], and in moving beyond essentializing discourses which focus on inherent characteristics of animals and thereby perpetuate culture/nature and human/animal dualisms. These authors apply this framework to laboratory rats, suggesting that 'lab rat' is a becoming in which rat agency participates in the congealing of this specific scientific apparatus. The authors conclude that a performative account emphasizes the co-creation of human-animal relationships, the participation of animals in discursive practices, and the significance of material, corporeal relatings.

In order to facilitate the application of posthumanist performativity to an empirical case, a model of intra-action needed to be advanced which broke the process down into its component parts. Barad's (2003) agential realism purports a causal relationship between discursive practices and material phenomena, or agency. I have broken down specific human-cat intra-actions into the following iterative process, which is illustrated in Figure 4:

a. material agency of human influences discursive practices of cat;

b. discursive practices of cat influences material agency of cat;

c. material agency of cat influences discursive practices of human; and

[3] By animal agency, I mean the possession of subjectivity and the ability to act in the world in a way that influences oneself and others (Hribal, 2007; Nyyssönen & Salmi, 2013; Rutherford, 2013; Steward, 2009).

d. discursive practices of human influences material agency of human

I acknowledge the somewhat artificial nature of these divisions, especially temporally, but contend that some simplification to a process of intra-action is necessary for such a theory to be applied to a concrete case. In reality, there is likely a more fluid and iterative enactment of multiple, simultaneous material-discursive practices. However, I advance this model as a useful proxy to initiate thinking about posthumanist performativity in real-world, observable relationships.

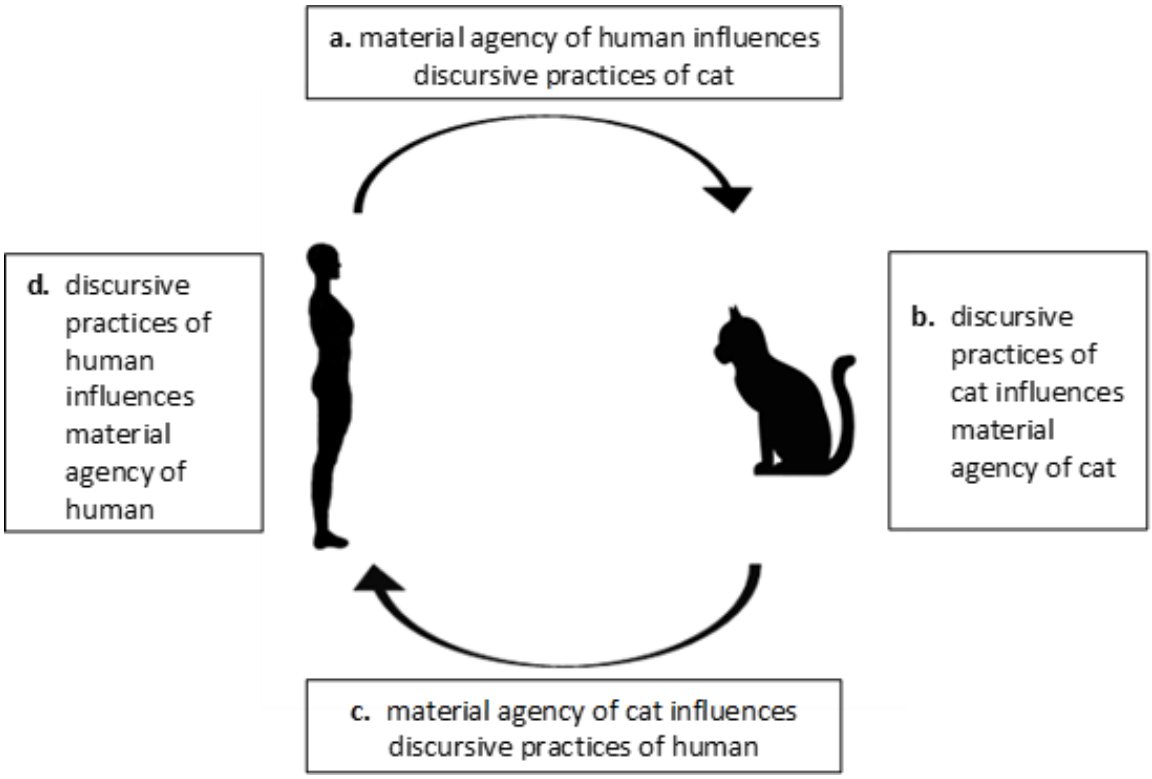

Figure 4 - Model for the process of human-cat intra-action

One question that may emerge from this model is the extent to which animals can be said to participate in discursive practices and hold constructed understandings of humans. I contend that animals do participate in discursive practices based on an understanding of discourse as

more than merely speech acts. In support of this, Butler (2010) explains that there does not have to be "discrete verbal enunciation" in order for there to be performative discourses (p. 150). Similarly, Birke *et al.* (2004) write that lab rats are agents in the material-semiotic production of meaning. Lulka (2009b) further supports this, stating that animal performances "express an uncertain and changing form of knowledge" (p. 390). This knowledge includes understandings of other beings with whom individuals interact, which then shape encounters (Sanders, 2007). For instance, Smuts (1999, 2001, 2006) discusses baboons' perception of humans as social subjects, and the levels of intersubjectivity that can be attained in human-animal encounters. In particular, she writes, "subjective experience of us plays the same role in their relations with us that our subjective experience of them plays in our relations with them" (1999, p. 118). Kohn (2007) also emphasizes the importance of acknowledging animal material-discursive practices, writing that "[h]umans are not the only knowers, and knowing…exists in the world as an other than human, embodied phenomenon that has tangible effects" (p. 17).

Additionally, it should be mentioned that one aim of this paper is ground posthumanist performativity more strongly in Butler's original emancipatory agenda so as to 'trouble' animality. Barad's (2003) formulation of a posthumanist performativity had as its aim the 'sharpening' of performativity as a theoretical tool, with an emphasis the significance of materiality. It did not deal explicitly with animals as non-human agents, but rather focused on the practice of science, and the agency of inanimate components such as apparatuses involved in knowledge production. Birke *et al.* (2004) do explicitly promote performativity as a means to challenge human-animal dualisms and recognize the agency of non-human animals. However, though the authors emphasize the new understanding of human-animal hybridity made possible through such an approach, the emphasis remains on the theoretical utility, not in a political or

ethical agenda centred on animal exploitation or human-animal relations of power. I therefore wish to advance that performativity is not only a valuable theoretical tool for according greater agency to non-human animals and emphasizing the importance of materiality, but that it also has practical utility in challenging many of the mechanisms that operate to make animals such as feral cats 'killable' (Haraway, 2008) through totalizing, 'animaling', logics that maintain them as a certain category of being. One of the greatest strengths of Butler's original formulation of performativity was its prescription for challenging boundary-policing through subversive acts made possible through the recognition of the performative nature of subject attributes. In the fourth section of this paper, I seek to demonstrate the potential for similar subversive reconstitutions of animality and human-animal relationships.

3. APPLICATION TO HUMAN-FERAL CAT CASE STUDY

This application employs the results of an empirical case study of human-feral cat relations that took place in southern Ontario, Canada in 2014. Semi-structured interviews were employed to investigate the social construction of feral cats. Forty participants were interviewed, including 21 holding animal welfare/colony caretaker perspectives, and 15 classified as conservationists. Four fell into an intermediate group, holding strong opinions aligning with both positions. Participants with these polarized perspectives were selected on the basis that they would represent well-developed or extreme standpoints on the subject and were likely to demonstrate clear conceptualizations and spatial preferences, providing the greatest opportunity for understanding the underlying assumptions and deeper dimensions of conflicting opinions. Participant recruitment took place through purposive, opportunistic, and snowball sampling. Interviews were audio-recoded, transcribed, and coded for themes.

3.1 Cat material agency influences human discursive practices

The conflicts that surround feral cats, and feral animals more generally, stem partially from challenges in categorizing them. This was clearly demonstrated in interviews as participants disagreed on whether feral cats should be thought of as domesticated or wild animals. As I elaborate below, individuals frequently classified feral cats into one of these categories as a result of their behaviour, often based on previous personal interactions with specific feral cats. This is important, as it redirects human understandings of feral cats away from human representations of animals alone and towards material-discursive practices in which individual animals are participants.

Some participants' understanding of feral cats as domesticated animals stemmed from their experiences with individual feral cats who acted in manner that was interpreted as domestic, namely tame or socialized to humans. To illustrate, one colony caretaker who fed a feral cat described her as, "almost like a domestic cat. She is that wanting to be with people". This desire to interact with humans is a behaviour that aligns with a domesticated animal, and therefore that is how the cat was interpreted. Other participants also mentioned the behaviour of feral cats in terms of their tameness and reliance on humans, making statements such as:

> These are street animals, they don't belong to anybody, so, I'm assuming that means they couldn't be too wild if they're willing to hang around humans…. There's a difference to me between a bunch of animals running around the street and being fed. To me that's not a wild animal, that's just a homeless animal.

> Are they truly feral? Like cats in winter, do they move into barns, urban areas? I know that the ones in our neighbourhood feed out of the dishes of other cats that are put out, and people feeling sorry for them. So I don't necessarily think that the feral cat is truly a wild cat.

These statements suggest that the behaviour of feral cats in terms of where they find their food, and whether or not they make use of human-establishments, are important considerations in their categorization as either domesticated or wild animals.

Other participants understood feral cats to be wild animals, also based on their observed behaviour. For instance, two participants described how they identify or classify feral cats in the following way:

> This cat is pretty wild because it's very wary. And you may only see it for a few seconds…and it's very wary of people because it has become wild, it's like a wild animal just like a cougar or a bobcat.
>
> Truly feral cats … don't want anything to do with people, I almost put them more with a wild population, or like a racoon population, because they want nothing to do with people. And they're not going to become friendly house pets again. They aren't missing people.

In this way feral cats become marked as 'wild' through their evasive behaviours. Similarly, behaviours of viciousness or aggression also resulted in categorization as wild. For instance, one participant reflected on their experience seeing a colony at a landfill, stating, "They had returned to the wild, they were fierce…we used to tell the kids don't run near those cats, they're not little pets at home". This differentiation between "little pets at home" and "fierce" animals that had "returned to the wild" was based on personal, situated experiences with cats behaving in a certain manner: friendly and docile in the home, fierce and dangerous at the landfill.

These examples illustrate the influence of context-specific animal agency on human conceptions of animals. When feral cats behave as if domesticated by relying on humans or seeking interaction, they become categorized as domestic pets. When they behave as if wild by being elusive or aggressive, they become categorized as wild animals. In this way discursive constructions of feral cats are based on human exposure to the material agency of individual cats.

3.2 Human discursive practices influence human material agency

Interview results indicated that participants' responses to encountering a feral cat would depend on how they had already categorized these animals. Participants who viewed feral cats as abandoned domesticated pets would respond in such ways as: contact local animal services or animal welfare organization; attempt to approach the cat; or leave out food. If they found a litter of feral kittens, they might try to bring them into their homes and attempt to raise and socialize them. To illustrate, participants who viewed feral cats primarily as homeless domesticated pets described the following actions they had taken or would take upon encountering feral cats: "Say kind of like here puss and try to offer something to eat"; "I've tried to befriend them, and actually built a shelter for one to sleep in"; "I would probably do what I could to get it out of there. Take it home or whatever"; and "I certainly fostered feral kittens as well. And, you know, tried to socialize them".

Conversely, if individuals viewed feral cats as wild animals, they might be likely to do such things as: warily maintain their distance; attempt to trap and relocate them; or behave aggressively, such as chase them away. For instance, one participant explained their neighbour's view on a feral cat in their area as follows: "He said if he saw that cat he would, the wild one, he would trap her and…take her to animal control to be destroyed". Another participant who described feral cats as "truly wild" stated that they had in the past trapped feral cats around their home in order to "take them somewhere else…near a barn, or near a place it might set up". Similarly, another participant who described feral cats as "like a wild animal" said that his views on how to respond to feral cats were to "leave them until they become a big problem".

These divergent actions that would be taken based on the discursive construction of feral cats are demonstrated in the following statement by a participant:

> I've got friends who've got cats that were found as kittens, in a wild setting, and the mother was caught, and the kitten was socialized and is now tame...I've had friends who've rescued baby squirrels, and released them back, which is what you tend to think of doing with a wild animal, release it back. Now if I found an injured adult feral cat and could bring it back to health and release it I would. But kittens I might remove them from the environment and bring them into human care.

This statement demonstrates the divergent actions one would take when encountering an animal that one classifies as wild versus domesticated. The appropriate response for a wild animal would be to "release it back". Adult feral cats are interpreted by this participant as being more like wild animals, and this therefore becomes the appropriate action to take. However, feral kittens are seen as having the potential to become domesticated animals, and therefore this participant views the appropriate action as "remove them from the environment and bring them into…human care". In this way the material agencies enacted by humans in relation to feral cats are dependent upon their discursive constructions of these animals.

3.3 Human material agency influences cat discursive practices

Next, we must consider the material-discursive practices of cats themselves. These are more challenging to speculate upon than those of humans. Although there is no way to converse with animals that would allow for direct knowledge of their thoughts, critical scholarship is increasingly acknowledging animals as minded subjects. There is growing recognition that despite the absence of a shared language, humans can still develop understandings of non-human animals based on affective encounters (Bear, 2011; Smuts, 2001), aesthetic understandings, critical anthropomorphism (Burghardt, 1991; Irvine, 2004) or responsible anthropomorphism (Johnston, 2008), and long shared histories of non-verbal communication (Alger & Alger, 1999; Buller, 2014; Hodgetts & Lorimer, 2014; Ingold, 1988; Jickling & Paquet, 2005). It is my contention that just as the influence of cat behaviour on human actions is mediated by our

discursive practices, or constructions of cats, so too are cat behaviours that result from human actions shaped by some sort of understanding of humans held by cats.

If a human responds to a feral cat by putting out food, providing shelter, speaking gently, cautiously and carefully approaching over time, etcetera, this cat may develop an understanding of humans as sources of food, shelter, and possibly companionship. This is the basis of the process of socialization in domestication: that some animals will, over time, learn that humans are not threats, and will choose to become companions to us. This process of becoming companion animal is achieved through human actions influencing cat discursive practices. Similarly, if a human responds to a feral cat by chasing them away, yelling, or throwing something, this cat will develop an understanding of humans as dangerous threats. This is demonstrated by the following explanation by a study participant:

> A lot of the feral cats are very fearful of people, because people kick them, scare them off their property, hose them off their property, all kinds of things. So there's a real reason why cats are, or feral cats, are afraid of many people, because we're pretty nasty to them.

This participant's statement supports the idea that cats' discursive practices with respect to humans are influenced by previous and on-going human actions towards them.

3.4 Cat discursive practices influence cat material agency

Finally, cat discursive practices influence cat material agency, or actions with respect to humans. Where cat discursive practices demonstrate an understanding of humans as dangerous threats, they will behave in an elusive manner and attempt to avoid interactions with humans. Where cats perceive humans to be benign, or benevolent sources of food, they will be visible in the landscape and have some interaction with humans. As one potential example of cat discursive practices, a participant explained that mother cats teach their kittens that humans are beings to be feared, and this influences the young cats' behaviours toward us:

> They only know to be scared of humans. The mother teaches the babies that. Don't go near the humans. You know how I know that, because when we first moved in we came across a couple litters. Once mum knew we found them, she moved them. Instantly. And then as soon as they see us they dart.

This quotation is indicative of two separate discursive practice-material agency causal pathways. First, the discursive construction of humans as a threat held by the mother cat causes her to move her kittens to a new location once she discovers that humans know where they are. If she understands humans to be dangerous threats, then she will relocate her kittens in order to protect them. Second, the mother's discursive practices relating to the designation of humans as threats is imparted to the kittens, who subsequently choose to hide from humans when they are encountered. It is a learned response based on a shared understanding. Further examples are provided in the summary that follows, where these four components are integrated.

3.5 Summary

Two quotes from participants demonstrate multiple components of the developed model of human-cat intra-action. While discussing a cat from a colony that had undergone trap-neuter-return, one participant stated:

> One of the cats was so tame…she was a great cat, I could pick her up and she would purr, and just not a mean bone in her body. And there was, when I trapped her, there was no way I'm going to release her, right. Because, was she a domestic cat? You never know. She could have been a domestic cat, she could have just been a really nice sweet cat, you know, like there's nasty people and there's just some really nice people. So she might have just been a really nice cat that was not fearful of people.

This quote can be deconstructed into the model advanced for more-than-human intra-actions, as is demonstrated in Figure 5.

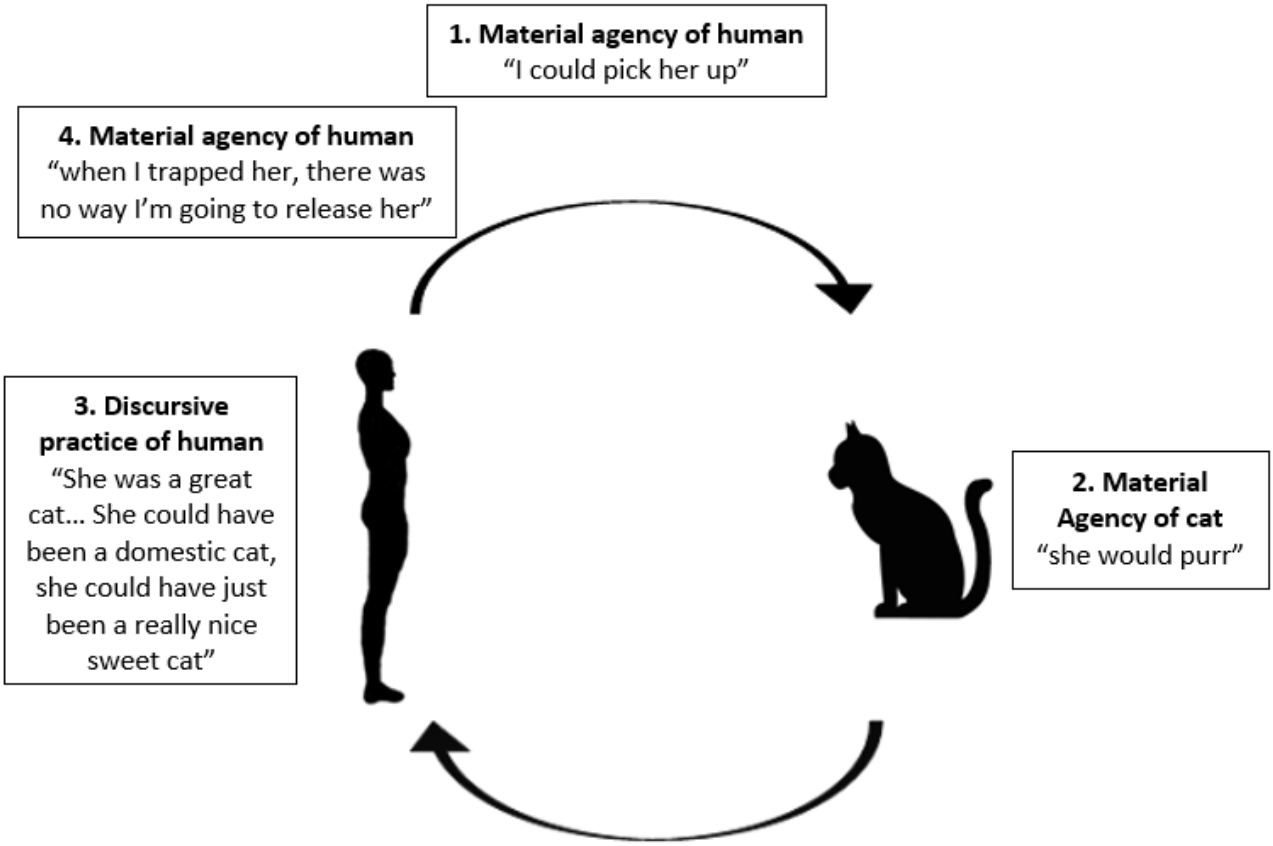

Figure 5 - Example One of human-feral cat intra-action deconstructed into four component parts

In Figure 5 we can see that this break-down of intra-actions does not include all four components: the discursive practices of cats are missing. This is because Figure 5 employs only the quote from the participant, who does not discuss the discursive practice of the cat. We could guess that it would be something like "the cat trusts the participant, not interpreting her as a threat", based on her actions of allowing herself to be picked up and purring. However, since the participant did not state this, it has been omitted from the figure. In terms of the three components of intra-actions that are represented, we can see that the participant is describing the cat's performance of domesticated animal, without necessarily inscribing this identity as an innate characteristic of this individual. When the participant says "She could have been a domestic cat, she could have just been a really nice sweet cat", She is acknowledging that

individuals could perform domestic traits of "nice", "sweet" and "not fearful" whether their background was as a stray domestic, or feral/wild cat. We also do not know how this cat would have acted towards another individual human, or the circumstances that led to the relationship with this human, wherein the participant "could pick her up and she would purr". Perhaps to another human who behaved in a manner this cat perceived as threatening, she would have performed feral/wild very well. In this situation, we see the specific human-cat relationship that emerges is one of friendly, human-social, domestic cat and friendly, caretaking, rescuing human. These can both be conceptualized as performances emerging from a specific, embodied encounter between two unique individuals at a specific time in a specific place.

A second example in which a more integrated intra-action can be seen playing out is the following explanation from a participant about rural cats:

> You don't know when you just encounter a cat whether it's one that's been dropped off and is trying to find its way home or make its way somewhere, or whether it's one that's truly wild. And I suspect when I see cats in that situation it tends to be the former. They're cats that were released because truly wild cats would be as elusive as a bobcat or another predator. I mean if they're really in tune with danger that people might present to them, and there are a lot of people in rural areas that would, and do take care of wild cats, whether by shooting or whatever…You wouldn't encounter them too much.

This quote can be deconstructed as depicted in Figure 6:

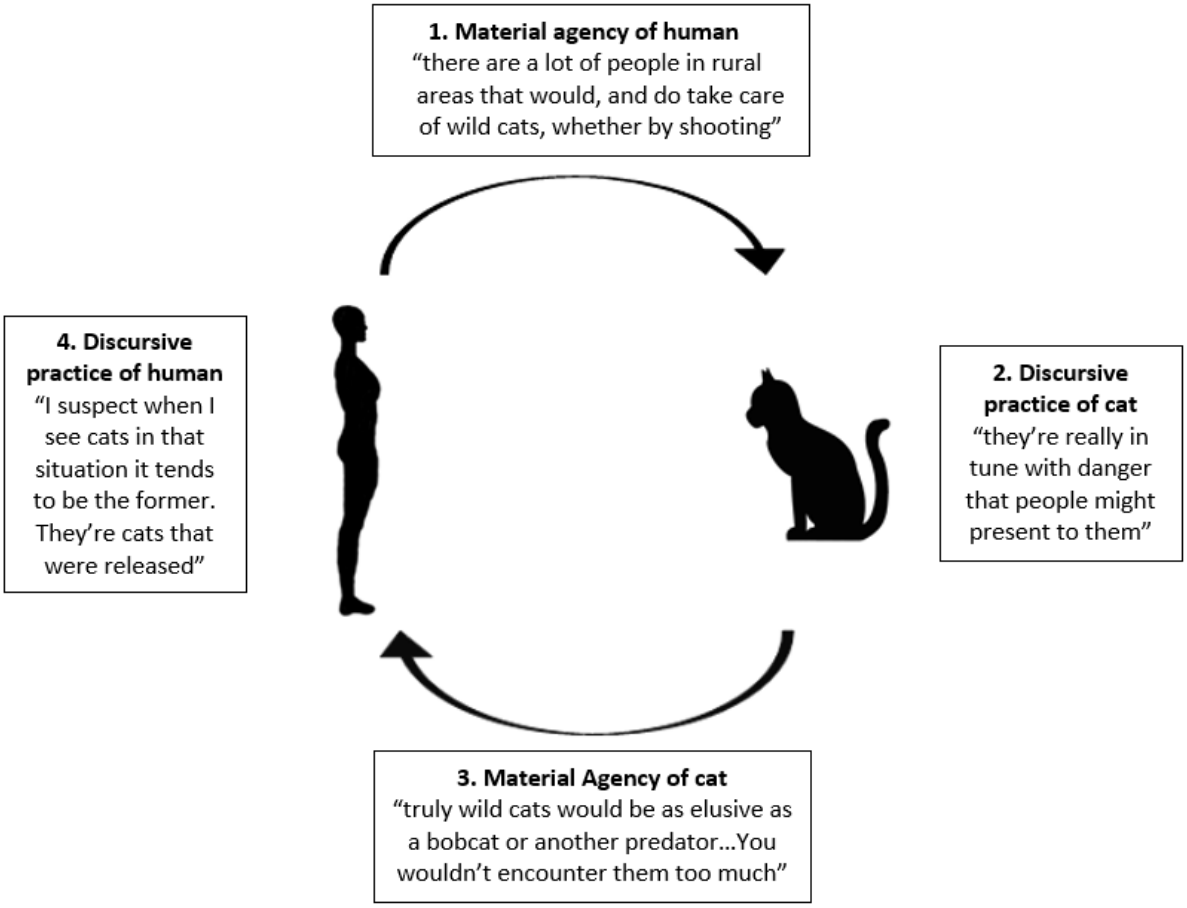

Figure 6 - Example Two of human-feral cat intra-action deconstructed into four component parts

In this statement, we can see that the specific human-cat relationship that emerges is elusive, wild cat and aggressive, deadly human. This illustrates that in a context where cats are seen as wild pests, they become elusive and wary, modifying their behaviour as a result of the knowledge of the threat posed to them by humans; they perform wild. These behaviours then reinforce their classification as wild animals by humans, who then are more likely to see it as appropriate to "take care of" them by killing, as opposed to actions one might take upon encountering an animal that is perceived as domestic, such as trying to socialize, rescue, or have them adopted.

4. DISCUSSION

4.1 Broader-scale intra-actions

The account of human-animal performative intra-actions presented above focuses on the scale of individual, one-on-one interactions.[4] However, how does this analysis operate when scaled-up to societal- or cultural-level discursive practices? How can we factor in considerations external to the space of individual intra-actions? A limitation of this analysis is that there is likely to be a spectrum in the degrees to which one being's discursive practices would be influenced by the actions of others. For some humans, maybe the way they think about and act towards a cat they encounter will be exactly the same regardless of what the cat does. Likewise, some cats may think about and act towards a human they encounter in a certain way regardless of how that particular human behaves. However, the premise of performativity is that it is important to consider the emergence of subjectivities, the becomings that ensue in the space of embodied interactions, acknowledging the agencies that are enacted through such repeated or iterative processes. It is not a complete picture, but an important part of what Lulka (2009b) terms a 'thicker' understanding of human-animal relations that is frequently ignored.

In the case of humans, broader discourses on animals are important factors to consider. Verbal discourses also reproduce these relationships through the ways in which animals are spoken about, represented in our writings and media, and in our laws. Even uttering the word 'feral' in association with an animal can be interpreted as performative, in its power to produce a subject that is killable. This is especially so in areas that have policies surrounding the

[4] I acknowledge that it may be a human bias to conceive of performativity as operating solely at the scale of the individual. For instance, drawing on Smuts's (2001, p.300) discussion of baboons as existing as "selves-in-community", and of a merging of consciousness with the "group-mind" of the troop, it seems prudent to acknowledge the possible existence of group-level performativities that would be unfamiliar from a human standpoint.

eradication of feral animals. However, the exclusively human discursive realm has been much studied, and the aims of this paper are to investigate the ways in which animals are also agents in the production of human-animal relations, and to focus on the scale of individual, embodied human-animal interactions as material-discursive practices.

In the case of cats, there may also be shared cultural understandings of humans. Although animal culture is a fairly recent avenue of scholarship and remains contentious within the natural sciences (Laland & Janik, 2006), social scientists are increasingly interested in exploring human-animal relations as well as animal societies from a cultural perspective, for instance by using ethno-methodologies (e.g. Alger & Alger, 1999; Barua, 2013; Bear, 2011; Fuentes, 2010; Kirksey & Helmreich, 2010). A comparison of polarized human-feral cat relationships in different parts of the world could illustrate culturally-divergent understanding of humans held by cats. For instance, an example advanced frequently in interviews was the response to feral cats in Italy versus Australia. In Italy, feral cats are protected by Law No. 281 and accorded the "right to live free" (Natoli *et al.*, 2006). One participant recollected their experience in Italy, stating:

> [T]here were cats everywhere, and they were sort of between respected and tolerated. They just were part of the landscape. I thought it was marvelous…. They were all kind of like living sculptures in the sun, draped here and there. And you see an old woman in black giving them some leftover fish.

Conversely, in Australia feral cats are understood as invasive predators and are actively exterminated. This context was explained by another study participant, who stated, "in the outback there are cat populations…and you'd see these wild cats, and they've adapted to that situation and they've been living there for generations, and you'd rarely ever get a good glimpse at one of them". In a context where feral cats are "between respected and tolerated", fed, and protected by law, they were "everywhere" and "part of the landscape". In contexts where they are actively exterminated by humans, you would "rarely ever get a good glimpse at one". In this

way, the tendency of free-living cats in Italy to perform tame/social/domestic, and the tendency of free-living cats in Australia to perform elusive/wild could be attributed in part to the specific human-cat relationships that have developed through broader-scale interactions and cultural understandings held not only by humans, but also by cats.[5]

4.2 Subversion

This paper attempts to contribute to the animal studies scholarship by providing a means through which animal agency can be integrated into explorations of human-animal relations. The discussion of both human and animal material-discursive practices challenges human/animal, domestic/wild, and culture/nature dualisms, as well as the assumed interiority of many characteristics associated with animality. Though others have problematized domestic-wild dichotomies and theorized a continuum of possible human-animal interactions (e.g., Anderson, 1997; Wolch, 1996), to date no framework has been advanced to explain the mechanisms through which these categories or ways of relating are established and reproduced, in a "mundane manner…within the field of bodies" (Butler, 1988, p. 525). This paper also provides an example of how performative theories can be applied to an empirical case study, which to date has been absent in the scholarly literature.

In addition to these theoretical contributions, I contend that a performative approach has practical utility in advancing a political and ethical agenda of a more equitable relationship to non-human animals. When Judith Butler first advanced a theory of gender performativity, she

[5] As another illustration of the ways in which performative human-animal relationships are situated historically and spatially, Smuts (2001) discusses Thomas's (1994) accounts of human-lion relations in the Kalahari. The Ju/wa had maintained a "truce" with local lions until they were forced to settle elsewhere, and a new, and less tolerant, relationship emerged between the lions and the different humans who were now sharing space with them. Smuts (2001) refers to this relationship as an "ancient interspecies tradition" that was ruptured and reformed in a much different way (p. 302).

emphasised its value in challenging social norms based upon essentializing categorizations. In conceiving of certain subject attributes as performative, opportunity was created for new, subversive, transformative performances (Butler, 1988). If categories of animality are viewed as performative rather than inherent, there is similarly potential for challenging these delineations. Just as Butler employed the transgression of the male/female gender binary represented by drag to challenge normative and deviant categories, the case study described here uses the transgression of domestic/wild animal categories represented by ferality. Such contestations become important when considered alongside the ways in which totalizing, essentializing logics operate to make animals killable, and in this case also stigmatize human caretakers. Animals are made killable by being categorized as a certain type of being, assigned appropriate behaviours and preferences based on this classification, and deemed out of place when they transgress these boundaries of acceptable behaviours or life-ways. This has led to violent eradications of many animals, including feral cats, globally.

Examples from this study illustrate the ways in which assuming essential characteristics of animals can operate to make them killable. For instance, a number of participants who aligned with a conservationist position often made assumptions about the behaviours of feral cats based on inherent characteristics such as their genetics. This is demonstrated in the following quotations:

> They don't have the same genetic memory I think of what it means to be a wild animal.
>
> They are so far removed from their wild cousins, they're a domesticated breed of animal now. You just can't release them into the wild and say it's a wild animal. They're not. They don't have the genetics of their wild cousins anymore. They've been changed through breeding and captivity. They're not equipped for it.
>
> Wild animals, they do the minimum they have to to survive. They're not going to go out and kill tons of birds just because they can, and have the energy. They're going to just kill to eat and that's it. But I don't think feral cats really do that, I don't think they behave

> like a wild animal does, so they have more of an impact on the environment. And I don't think they probably know how to survive in it as well.… They're not adapted to survive in any ecosystem, not even where their ancestors came from, I don't think, so that's not good for them.

These statements not only essentialize feral cat behaviours by attributing them to genetics, but also prescribe where these animals do and do not belong as a result. As hinted at by the latter two quotations, calls for eradication are sometimes even based on the premise that it is for the cats' own good. This is clearly demonstrated by the following statement by one participant: "It's not a fair thing to do to something that is here as a pet…We need to take responsibility for this stuff. Even if it means that we need to put these things down." This statement is not in regard to a specific cat. It is not about saying: *There is a particular feral cat who does not have a good quality of life, let's take responsibility and 'put it out of its misery' by euthanizing it.* It is about totalizing the experience of all individuals of a certain class of non-humans, and prescribing the appropriate response to them based on assumed inherent abilities and preferences. They are not only made killable through their transgression of living independently from human owners, but the prescribed response, euthanasia, is presented as the best alternative for the cat. In light of this, a performative approach can a useful tool for subverting the processes of 'animaling' through which non-humans are made killable. It challenges the notion that there are right or wrong, or natural and unnatural, ways for certain animals to live based on assumed inherent characteristics.

4.3 Extension

The same approach can easily be extended beyond the case of feral cats to many different forms of human-animal interactions, such as the boundaries that are policed between humans and 'wildlife'. For instance participants in this study also made claims about appropriate behaviour of

wild animals that can be analyzed through a performative lens. One participant contended: "Is racoon behaviour the same in a city as racoon behaviour outside of the city? Arguably no, they're not the same". Another participant similarly stated that "a racoon climbing on a balcony is one thing. A racoon sort of entering out of the woods and venturing near your backyard is something very different". The same participant later clarified:

> If you've ever seen…very urbanized racoons sometimes which look sort of unhealthy and they're feeding off garbage behind buildings and things like that, that doesn't exactly inspire wonder in the environment or nature. I think there's very realistic concern for them becoming pests.

These statements illustrate discursive constructions of racoons based on racoon behaviour. Racoons outside of the city fending for themselves are appropriately performing wild. But racoons in the city feeding off of human garbage are not exhibiting behaviours that are appropriate for this class of being.

The ways in which we conceive of animals often has consequences in terms of how appropriate relationships are construed. With respect to wild animals, the appropriate behaviour of humans would be to leave them alone, or sometimes to 'manage' them. For example, one study participant said: "I think that we need to be much more careful that we don't feed them.... [A]s long as we're very careful and we don't tame them…we let them be wild". In this way the appropriate human-wild animal relationship is conceptualized as one of maintaining an appropriate degree of distance or separation. Taming animals, through feeding or seeking interaction, is seen as inappropriate for humans. Likewise becoming tame, or seeking interaction with humans is seen as inappropriate for wild animals; an improper performance of wild. Despite this, it is likely that we can all think of examples where wild animals have sought out human company of their own accord. Such animals frequently become labeled as 'problem animals' or 'nuisance wildlife', and are often disciplined for their transgression through such means as

hazing or relocation. Similarly, humans who engage in improper relationships with wild animals, through feeding or caring for abandoned young for example, are often disciplined through fines.

Many times the boundaries we draw around interactions are erected for the supposed good of all. Human interactions with wild animals may not only be dangerous to us, but also to the animals. While I do not assert that habituation cannot lead to harms, and that this potential should not be carefully evaluated,[6] often the motives that underlie such policing are more complex. Many times there is a fear of making animals somehow less by taking away their wildness thorough interactions with humans; that their dignity is removed by becoming 'tame'. This is based on a socially constructed understanding and valuation of wildness in wildlife, similar to Cronon's (1995) social construction of wilderness. Other times the boundary is maintained through culture/nature dualisms that result in the belief that humans ought not to interfere in nature at all, like the photographer or scientist who does not intervene in the 'natural' processes of starvation, or death by exposure, in the animals being filmed or studied (Candea, 2010).

Overall, such boundaries seek to reinforce the neat categorization of our world into nature and culture, and create a separation between humanity and animality. Milton (2005) describes one reason for this separation:

> [A] distancing of nonhuman from human animals…serves powerful interests, at least in western cultures. It helps to sustain the myth that nonhuman animals are not 'real' persons but only metaphoric ones. As a consequence, we can use them in many ways without being impeded by moral sensibilities; we can experiment on them, eat them and use them for our entertainment, and exploit them in countless other ways that industrial economies, sanctioned by Cartesian science, have devised. (p.266)

[6] For instance, Collard (2014) raises important challenges to the dissolution of the category 'wild', highlighting "the need to retain wild lives—that is, retain a sense of autonomy and alterity in and for nonhuman animals" (p 162). However, I would advance that autonomy and alterity are an integral part of ethical relations with all non-human animals, not only those that are 'wild', and in fact can be recognized in a performative approach that challenges essentializing or 'animaling' discourses.

But apart from the economic and political investment in animal exploitation, there are also deeper motivations for upholding human-animal dualisms, namely in support of the humanist project that maintains our species as unique and superior, the climax of creation (Badmington, 2004). Understandably challenging this belief is uncomfortable and unsettling, but it also gives us opportunities to be a little bit less lonely (Smuts, 2006) by recognizing kinship beyond the species boundary. Herein also lies the possibilities of more ethical relationships with the other beings who share this planet with us.

4.4 Cautions and considerations

In this paper I am not attempting to claim that animals who have a long shared history with humans and who have been subject to such processes as selective breeding, or more recent forms of technological genetic modification, have not been changed as a result of this relationship, though—as advanced by Haraway (2003, 2008)—I would contend that we should similarly investigate the ways in which humans have been shaped by such relationships. I am not saying that there may not be 'real' (genetic, behavioural) differences between animals who have been domesticated for many thousands of years and those who have not. What I contend is that the hard lines we draw around such categories and their consequences—such as how individual animals are treated, groups of animals are made killable, and human-animal relationship are policed—are deserving of critical examination.

It is also important to note one of the main challenges Butler (1993) identifies in her performative theory of gender: the challenge of determining 'good' subversive parodies of societal norms, and 'bad' appropriations that operate to reinforce these norms. Similar concerns are relevant in this discussion of posthumanist performativity. For instance, it is easy to see the

potential challenges associated with someone claiming that the keeping of a 'wild', exotic 'pet' is a positive subversion of what is deemed an appropriate form of human-animal relations. There are frequently examples of people keeping exotic 'pets' and arguing that they are happy, well-adjusted family members, such as the case of Darwin the "Ikea monkey" from Toronto, Ontario several years ago.[7] However, there is something highly problematic in the keeping of exotic 'pets', especially non-human primates such as Darwin. Whether it be challenges to the commodification of non-human life represented in the exotic pet trade (Collard, 2013, 2014), the ethics of keeping 'wild' animals indoors, or the assumed right of humans to own non-humans, I believe that this sort of transgression does not represent a positive subversion of the policing of appropriate human-animal relations. In agreement with this, Collard (2014) notes that "fascination, love, and curiosity" can still be drivers of "violence, suffering, and exploitation", and calls for "a commitment to less violent, invasive, and exploitative forms of human-animal entanglements" (p. 162). I think part of what is required is permitting some expression of agency on behalf of the animals involved. There are important differences in human-animal friendships developed through purchasing an animal as a commodity through the exotic pet trade, and through a 'wild' animal choosing to inhabit your property and engage with you. Some notion of voluntary participation in the relationship is required, which necessitates a critical investigation into the idea of non-human participation. For instance, Sanders (2007) discusses non-human animals as participants in joint-action with humans, wherein "both the animal and human attempt to assume the perspective of the other, devise related plans of action and definitions of object, and fit together their particular (ideally, shared) goals and collective action" (p. 320). Further elaborating this model in contexts other than human-companion animal interactions could be an

[7] See, for instance, http://www.cbc.ca/news/canada/toronto/ikea-monkey-a-little-person-owner-insists-1.1264816

important avenue for future study. It also has ramifications for discussions surrounding whether or not animals can participate in ethical relationships based on a social contract approach.

5. CONCLUSION

This paper has sought to investigate the utility of a performative theory in understanding the enactment of human-animal relations through its application to a case study of feral cats from Ontario, Canada from 2014. I contend that such an approach can successfully 'trouble' binaries associated with animality, and shift the focus of human-animal relations to a more equal consideration of the subjectivities and agency of both humans and animals. Through the development of a model of posthumanist performativity, this paper seeks to facilitate future investigations into other modes of human-animal interactions.

Overall, a performative approach challenges dominant constructions of inherent identity features of wild and domesticated animals, and therefore beliefs surrounding 'right' or 'natural' types of relationships between humans and animals that emerge from such identities. By conceptualizing both animal subjectivities and human-animal relationships as performative, one can begin to acknowledge a spectrum of possible types of behaviours and relationships that can emerge through interactions. In this regard, a performative approach has theoretical significance to the field of animal studies in terms of challenging culture/nature, human/animal and domestic/wild dualisms, as well as providing a means through which non-human agency can be integrated into empirical investigations of human-animal relations. It also has political and ethical significance in its ability to challenge totalizing conceptions of animal capacities and natural behaviours that so often are used as justification for exploitative interactions. Instead, it encourages a recognition of non-human difference (Bear, 2011; Lulka, 2009b; Philo, 2005),

including unique personality traits, histories, interactions, inclinations, and preferences that all come together to form a certain subjectivity in a moment, and in particular, in a moment of interaction with an other.

By using a performative approach and focusing on embodied human-animal interactions, we remove the assumption that there is some sort of internal core feature of animals that is driving them to behave in certain ways. We can cautiously interpret their actions, alerted to the possibility of their diverse and unique agencies based on a range of situational factors. This opens up space for respectful and careful (caring) attempts to 'speak alongside' (Jarratt, 2004) animals rather than speaking for them. It has potential to be extended in future to challenge the ways in which various animals are defined, spoken for, and made killable.

BIBLIOGRAPHY

Alger, J. M., & Alger, S. F. (1999). Cat culture, human culture: An ethnographic study of a cat shelter. *Society and Animals, 7*, 199-218.

Anderson, K., (1997). A walk on the wild side: a critical geography of domestication. *Progress in Human Geography, 21*, 463-485.

Badmington, N. (2004). Mapping posthumanism. *Environment and Planning A, 36*(8), 1344-1351.

Barad, K. (2003). Posthumanist performativity: Toward an understanding of how matter comes to matter. *Signs, 28*(3), 801-831.

Barua M (2013) Circulating elephants: Unpacking the geographies of a cosmopolitan animal. *Transactions of the Institute of British Geographers*. 10.1111/tran.12047

Bear, C. (2011). Being Angelica? Exploring individual animal geographies. *Area, 43*(3), 297-304.

Birke, L., Bryld, M., & Lykke, N. (2004). Animal Performances An Exploration of Intersections between Feminist Science Studies and Studies of Human/Animal Relationships. *Feminist Theory, 5*(2), 167-183.

Buller, H. (2014). Animal geographies II Methods. *Progress in Human Geography*, 0309132514527401.

Burghardt, G. (1991). Cognitive Ethology and Critical Anthropomorphism: A Snake with Two Heads and Hog-Nosed Snakes that Play Dead. In C. Ristau (Ed.), *Cognitive Ethology* (pp. 53-90). Hillsdale, NJ: Lawrence Erlbaum.

Butler, J. (1988). Performative acts and gender constitution: An essay in phenomenology and feminist theory. *Theatre journal*, 40(4), 519-531.
Butler, J. (1990). *Gender Trouble: Feminism and the Subversion of Identity*. New York, NY: Routledge.
Butler, J. (2010). Performative agency. *Journal of Cultural Economy, 3*(2), 147-161.
Candea, M. (2010). "I fell in love with Carlos the meerkat": Engagement and detachment in human–animal relations. *American Ethnologist, 37*(2), 241-258.
Collard, R. C. (2014). Putting animals back together, taking commodities apart. *Annals of the Association of American Geographers, 104*(1), 151-165.
Collard, R. C., & Dempsey, J. (2013). Life for sale? The politics of lively commodities. *Environment and Planning A, 45*(11), 2682-2699.
Cronon, W. (1995). The trouble with wilderness; or, getting back to the wrong nature. In W. Cronon (Ed.), *Uncommon ground: Rethinking the human place in nature* (pp. 69-90). New York, NY: Norton.
Fuentes, A. (2010). Naturalcultural encounters in Bali: Monkeys, temples, tourists, and ethnoprimatology. *Cultural Anthropology, 25*(4), 600-624.
Haraway, D. (2003). *The companion species manifesto: Dogs, people, and significant otherness*. Chicago, IL: Prickly Paradigm Press.
Haraway, D. (2008). *When Species Meet*. Minneapolis, MN: University of Minnesota Press.
Hodgetts, T., & Lorimer, J. (2014). Methodologies for animals' geographies: cultures, communication and genomics. *Cultural Geographies*, 1474474014525114
Hribal, J. (2007). Animals, agency, and class: Writing the history of animals from below. *Human Ecology Review, 14*(1), 101.
Ingold, T. (1988). The animal in the study of humanity. In T. Ingold (Ed.), *What is an animal* (pp. 84-99). London, UK: Unwin.
Irvine, L. (2008). *If you tame me: Understanding our connection with animals*. Philadelphia, PA: Temple University Press.
Jarratt, S. C. (2004). Beside Ourselves: Rhetoric and Representation in Postcolonial Feminist Writing. In A. A. Lunsford & L. Ouzgane (Eds.), *Crossing Borderlands: Composition and Postcolonial Studies* (pp. 110-128). Pittsburgh, PA: The University of Pittsburgh Press.
Jickling, B., & Paquet, P. C. (2005). Wolf Stories. *Environmental Ethics, 27*(2), 115-134.
Johnston, C. (2008). Beyond the clearing: towards a dwelt animal geography. *Progress in Human Geography, 32*(5), 633-649.
Kirksey, S., & Helmreich, S. (2010). The emergence of multispecies ethnography. *Cultural Anthropology, 25*(4), 545-576.
Kohn, E. (2007). How dogs dream: Amazonian natures and the politics of transspecies engagement. *American Ethnologist, 34*(1), 3-24.
Laland, K. N., & Janik, V. M. (2006). The animal cultures debate. *Trends in Ecology & Evolution, 21*(10), 542-547.
Lloyd, M. (2007). *Judith Butler: From norms to politics* (Vol. 20). Malden, MA: Polity.
Lulka, D. (2009b). The residual humanism of hybridity: retaining a sense of the earth. *Transactions of the Institute of British Geographers, 34*(3), 378-393.
Milton, K. (2005). Anthropomorphism or Egomorphism? The Perception of Non-Human Persons by Human Ones. In J. Knight (Ed.) *Animals in Person: Cultural Perspectives on Human-Animal Intimacy* (pp. 255-271). Oxford, UK: Berg

Natoli, E. Maragliano, L., Cariola, G., Faini, A., Bonanni, R., Cafazzo, S., & Fantini, C. (2006). Management of feral domestic cats in the urban environment of Rome (Italy), *Preventative Veterinary Medicine, 77*(3-4), 180-185.

Nyyssönen, J., & Salmi, A. K. (2013). Towards a Multiangled Study of Reindeer Agency, Overlapping Environments, and Human-Animal Relationships. *Arctic Anthropology, 50*(2), 40-51.

Philo, C. (2005). Spacing lives and lively spaces: partial remarks on Sarah Whatmore's Hybrid Geographies. *Antipode, 37*(4), 824-833.

Rutherford, S. (2013). The Biopolitical Animal in Canadian and Environmental Studies. *Journal of Canadian Studies/Revue d'études canadiennes, 47*(3), 123-144.

Sanders, C. R. (2007). Mind, self, and human-animal joint action. *Sociological Focus, 40*(3), 320-336.

Smuts, B. (1999). "Living with Animals". In J. M. Coetzee (Ed.), *The Lives of Animals* (pp. 107-120). Princeton, NJ: Princeton University Press.

Smuts, B. (2001). Encounters with animal minds. *Journal of Consciousness Studies, 8*(5-7), 293-309.

Smuts, B. (2006). Between species: Science and subjectivity. *Configurations, 14*(1), 115-126.

Steward, H. (2009). Animal agency. *Inquiry, 52*(3), 217-231.

Thomas, E. M. (1994). *The Tribe of the Tiger*. New York, NY: Simon and Schuster.

Whatmore, S. (2006). Materialist returns: practising cultural geography in and for a more-than-human world. *Cultural geographies, 13*(4), 600-609.

Wolch, J. (1996). Zoöpolis. *Capitalism, Nature, Socialism, 7*(2), 21-47.

5.0 CONCLUSION

5.1 Thesis Summary

The research described in this thesis contributes to the animal studies and animal geography scholarship by presenting an empirical case study of human-feral cat relations from southern Ontario, Canada. The broad aim of this research was to critically explore human-feral cat relations in southern Ontario. To do so, the research project: investigated empirically the conceptual, spatial and ethical dimensions of feral cats from the human perspective using semi-structured interviews; investigated empirically the conceptual, spatial and ethical dimensions of ferality from the feline perspective using observational methods and anecdotal evidence from colony caretakers; explored the agency and place-relations of feral cats; and, explored human-feral cat material-discursive practices through the lens of posthumanist performativity.

Manuscript A, *'Of place' or 'of people': Exploring the spatial dimensions of human-feral cat relations in southern Ontario*, discusses the spatial implications of this research. It presents the results of the semi-structured interviews in a discussion of cat spaces, as well as the most important findings of the field observations of feral cat colonies in a discussion of their beastly places. It highlights the discrepancies between human accounts of feral cat lives and what was learned about their lifeworlds from direct observations and caretakers. Focusing on these discrepancies illustrates what is missed when the subjectivities, agency, and place-attachments of animals are neglected in human attempts to place them where we believe they belong. This is exemplified through cases of attempting to socialize and home feral cats, and relocating them to rural areas to act as barn cats. This manuscript concludes with a discussion of how feral cats'

agency is manifested through the process of place-making, along with the ethical implications of acknowledging their meaningful inhabitation of the world.

Manuscript B, *Becoming cat: Posthumanist performativity and feline ferality*, employs a theory of performativity to engage with the embodied agencies of feral cats as they interact with humans. This approach combines feminist calls for attention to materiality with the recent focus in animal geography on animal agency. The discussion of both human and animal material-discursive practices challenges human/animal, domestic/wild, and culture/nature dualisms, as well as the assumed interiority of characteristics associated with animality. It presents a model for more-than-human material-discursive intra-actions as conceptualized in Barad (2003), and applies this model to empirical results of the case study. The political and ethical utility of performativity in subverting totalizing discourses which operate to make certain classes of animals killable is also discussed.

Overall, by exploring both the animal spaces and the beastly places of feral cats, this thesis advances our knowledge of non-human difference, subjectivities, agency, place-making, and material-discursive practices through a critical exploration of human-feral cat relations. In the following sections the practical and scholarly contributions are detailed, along with the study's limitations and potential avenues for future research.

5.2 Practical Contributions

A first area of practical value relates to the experience of colony caretakers, and especially their challenges. It is important to be aware of these issues in order to design programs that can best support their efforts. During interviews, caretakers and key informants noted the

following challenges: legal barriers; conflicts with neighbours or other community members; financial difficulties; and isolation/lack of social and emotional support.

In terms of legal barriers, some communities have laws against feeding feral cats, that prohibit cats at large, or that have nuisance clauses that may impact colony caretakers as well as feral cats. In some communities where feeding constitutes 'harbouring', caretakers could be culpable should cats be impounded due to nuisance clauses or prohibitions against cats roaming at large. In addition to legal ramifications, caretakers live in fear of direct conflict with others:

> It's very very hard for them, because here they are, they're already worried about these animals, they're worried about them in the cold, they're worried about them when they see them sneezing or coughing or hurt or limping. And then they're worried because their neighbours are giving them a hard time, or their landlord is saying stop feeding them and they'll go away, if you don't stop feeding them I'm going to evict you. So there they are, what do they do? And the reality is that you, once you've started caring for these animals, like giving them food or shelter, you can't stop. There's no way that you would be able to emotionally distance yourself from them, because you see them every day, and they're looking at you and you're not feeding them? No. So they go ahead and they take those risks, and at great personal cost as well.

There are also associated financial burdens. In some locations such as the GTA, caretakers have opportunities to access free or low-cost spay neuter programs for feral cats, and may receive food donations from local animal welfare or rescue organizations. In smaller communities, and especially rural areas, resources are much more limited. Some caretakers are able to find veterinarians that will provide spay/neuter services for ferals at a reduced cost, but even at 50 dollars per cat, costs can still add up for individuals.

Additionally, one key informant described colony caretakers as "isolated, frustrated, exhausted, threatened and challenged". Often they do not have a good network of support, and feel that there is no one they can turn to for assistance. Another informant notified me that for this reason, many caretakers feel they can never go on vacation or leave the city for any reason,

as there is no one they would trust or impose upon to take care of their colony. A number of caretakers expressed the desire to connect with others in the community doing such work, but did not know how.

Colony caretakers have a key role to play in cat management and expend tremendous amounts of time and resources in caring for their colonies. They have intimate and extensive knowledge of feral cats, and access to colonies. Management initiatives need to proceed with their cooperation, and some of the best ways to channel resources into feral cat management is by assisting caretakers with their work. Initiatives aiming at supporting colony caretakers should focus not only on direct support through veterinary clinics and the provision of resources such as cat food, but should also focus on social support and building caretaking networks.

A second practical contribution of this research is in providing a better understanding of public perceptions on feral cats, and potential areas of common ground in the heated conflict that surrounds them. Valuable nuanced perspectives emerged throughout the study. Often participants' views were complex, with overlapping, and at times conflicting, values and preferences. To illustrate, four study participants were difficult to classify into one group or the other. These participants were not between groups in the sense that they tended towards neutrality on the subject, but rather that they held strong views generally shared in one group and other strong views generally shared in the other. For example, one individual described how they had previously cared for a feral cat, providing both food and shelter in the hopes that the cat would survive the winter. Later in the interview, upon being asked how feral cats should be managed, the participant stated "I think probably the right thing to do is round them up and euthanize them, simply because they're so out of place". This individual both technically falls into the colony caretaker category, but also contended that feral cats should be killed because of

their impact on native ecosystems. In addition to this, many caretakers or welfarists expressed concern over the impact of cats on birds. One participant stated "it's horrible. I find it really horrible". Similarly, many conservationists also indicated that cat welfare was an important consideration for them. For instance, one participant explained that "also a pretty big concern is whether or not the cats are actually having a life worth living."

Although it might be suggested that the polarized perspectives investigated are based on conflicting systems of belief, and are therefore fundamentally incompatible, common values and preferences emerged while analyzing the research. These can be focused on in order to mitigate further conflicts and promote cooperation. One such area is targeting the prevention of future feralization through the management of owned cats. Most participants emphasized that the feral cat 'problem' was, at its root, an owned cat problem (and therefore a human owner problem). The underlying cause of the issue was identified as cat abandonment and failure to spay or neuter cats, be they barn or companion animals. Nearly all participants were supportive of initiatives to promote spaying and neutering of owned cats, and preventing abandonment. In this regard, a focus on prevention would satisfy those concerned with feral cats from both an animal welfare and a native species conservation perspective. In areas where there might be strong resistance to TNR programs by individuals concerned with wildlife loss, these individuals would likely still be supportive of such preventative measures as low cost/accessible spay/neuter clinics for owned cats, and preventative measures against cat abandonment.

It became clear throughout the research that public preferences for feral cat management varied spatially, which provides further potential for finding common-ground. Participants often did not think a blanket solution for all feral cats everywhere would be appropriate. The most common view that was demonstrated was that feral cats belong most as rodent control in

agricultural areas or in managed urban colonies, though the latter proved somewhat contentious, and least in natural areas. In rural areas, even some conservationists who felt very strongly that feral cats should not exist in the environment were willing to make exceptions for barn cats, but usually only if their populations were controlled through spay/neuter. In natural areas colony caretakers/welfarists were concerned with cats' quality of life, ability to survive without human assistance, and predation by wild animals. Conservationists tended to believe that in natural areas cats were more likely to cause damage to wildlife. However, many participants also noted that the situation in Canada was likely to be different from the southern United States, or other locales with a more moderate climate. Many felt that independent feral cats in natural areas in southern Ontario would likely not present a risk of rapid population growth because of predatory animals such as birds of prey, foxes, and coyotes, and the harsh climate.

Trap-neuter-return was the most contentious management strategy discussed. Although I had anticipated a lack of support for such strategies when compared with removal and euthanasia from participants who were classified as conservationists, I was surprised to find that there was often support. For instance, one conservationists affirmed, "[N]euter, or spay and return. I totally agree with that…. [T]hat would definitely help," while another said, "I've heard about different solutions like sterilizing the feral cats and then releasing them so they can't reproduce. And that seems like a humane way to do it". Although there certainly were conservationists who were largely opposed to maintaining colonies and TNR, most were more likely to be supportive of such strategies in urban areas, especially where there were few native species of concern. For instance, participants said: "[In urban areas] if they're not doing any damage to wildlife then I would say that that's probably a good way to go about it," and, "[T]he further it is from wild areas probably the less I care."

Both conservationists and animal welfarists emphasized that TNR programs must be initiated in tandem with owned cat management. Therefore TNR programs are likely to be given more support if they are presented as a partial management strategy, used in tandem with prevention and owned cat management, such as through licensing and low cost/accessible spay-neuter programs. Overall, this spatial preference provides the opportunity for compromise: in high-priority wildlife areas, removal (and relocation, not euthanasia) can be the best practice, and in areas of low wildlife priority TNR and managed colonies can be the best practice. This will likely satisfy the majority of conservationists. This will also likely be accepted by the majority of colony caretakers/animal welfarists, who were generally willing to relocate feral cats from areas where risks to wildlife were high. For instance, colony caretakers said, "[I]f there are endangered species nearby, in that case, relocating the colony can be an option," and, "[W]here there are these marshlands and there's nesting and whatnot and birds come up from the US you know to reproduce, in that case with feral cat population there, I'd be an advocate of relocation of the colony." Emphasis on prioritizing management areas highlights the possible value of such strategies as collaborative mapping, where high priority bird habitat areas could be selected for intensive removal and relocation of feral cats, and low priority areas could be designated as appropriate for TNR. By involving individuals on both sides of the debate in such collaborate planning, and focusing on helping both cats and wildlife though the long-term reduction in feral cat populations, conflicts could be greatly reduced, increasing the overall effectiveness of feral cat management.

5.3 Scholarly Contributions

This thesis contributes to both to the scholarly context surrounding feral cats, especially in Canada, and to animal studies and animal geography scholarship. By providing an empirical

case study from Canada, this research fills a void in the interdisciplinary literature on feral cats and their management. This is the first study from Canada to investigate public perceptions of feral cats and preferences for their management, which is important considering that public perceptions can vary regionally (Loyd & Miller, 2010; Wilken, 2012). Additionally, voices of colony caretakers are largely absent from the literature. Although previous studies present quantitative data on colony caretakers (e.g., Centonze & Levy, 2002; Levy *et al.*, 2003b), or investigate their stigmatization (e.g., Thompson, 2012), a more thorough discussion of caretaking culture, challenges, and caretakers' relationships to cats is an important missing piece in understanding the complexity of human-feral cat relations. These individuals who transgress social norms and care so deeply about highly marginalized non-humans, many of whom they never interact with directly, represent an interesting liminal case somewhere between human-companion animal and human-wildlife relationships.

Manuscript A contributes to new directions in animals' geographies that seek to explore the lifeworlds of animals firsthand in order to better understand their lives-in-place. It advances recent efforts to bridge the divide between the natural sciences' exclusive focus on animals as research objects, and the historical privileging of discursive, human representational accounts of animals within social sciences and humanities disciplines. This is the first attempt, of which I am aware, from within animal geography or animal studies to employ field observations to investigate the lives of feral cats directly. The results provide a caution against making assumptions about feral cats' quality of life and living situations. The observed diversity contributing towards efforts to "tease apart nonhuman difference and more closely interrogate the diversity of animal life" (Bear, 2011, p. 297). Furthermore, the discussion of feral cat homesteading, informed by triangulating direct observations, anecdotes from caretakers, and

primary literature on free-living cat biology and behaviour, contributes to the sparse literature on non-human place-making and place-attachments. Its processual approach to animal inhabitation through spatial influence develops a framework which can be profitably applied to other cases of non-human place-making in the future. In summary, Manuscript A contributes to efforts aimed at engaging empirically with animals in order to explore "their agencies, their behaviours, and in particular their place-making" (Hodgetts & Lorimer, 2014, p. 4).

Manuscript B contributes to non-representational efforts in animal studies to explore the material dimensions of human-animal relations. One of its primary contributions is the advancement of a model of more-than-human intra-actions which could easily be applied to other cases of human-animal encounters in the future. This paper further provides a novel application of posthumanist performativity to an empirical case study. Though Maurstad, Davis and Cowles (2013) discuss horse-human intra-actions using the results of interviews, they do not consider the horses' embodied actions as performative, or use this framework to challenge essentialist 'animaling', or binaries beyond the nature/culture divide. Beyond theoretical contributions, this application has ethical and political significance in terms of 'troubling' widely essentialized attributes of animality by conceiving of them as performative. It encourages a recognition of unique personality traits, histories, interactions, inclinations, and preferences which all come together to form a subjectivity, whether human or animal, in a moment of interaction with an other.

Based most broadly on a feminist-posthumanist conceptual framework, this research rejects nature/culture, human/animal and domestic/wild dualisms, challenges traditional scientific conceptions of animals, and instead encounters them as differentiated individuals, agents, and subjects. It contributes feminist emphases on embodiment, materiality,

performativity, and the recognition of diversity and difference to the animal studies scholarship. Overall, it engages with one of the most complex and ethically-challenging cases of human-animal relations, while attempting to 'turn toward' (Bird Rose, 2011) and 'stay with the trouble' (Haraway, 2010).

5.4 Limitations and Future Research

5.4.1 Limitations

There are several important limitations to this research that should be noted. First, there is a limitation of partial perspectives in the results of semi-structured interviews on human placement of feral cats. Because of limited time and resources, participants who would be able to provide the most valuable and in-depth data needed to be targeted. This meant the research focused on recruiting individuals with the strongest opinions on the subject, namely those very concerned about cat welfare, and those very concerned about the impacts of cats on native fauna. This has necessarily led to an arguably biased selection of study participants, and has risked omitting other views that may be more balanced, integrative, or nuanced. Despite this, the strong perspectives presented by the 40 participants permitted an in-depth investigation into the underlying environmental and animal attitudes and values that had led to the development of such perspectives. However, future studies interested in building on this work may be interested in recruiting participants with a larger diversity of views and values on the topic, beyond the two polar perspectives presented herein.

Second, because of the limitation of time and challenges with recruitment, this research could have benefited from more field observations. Observations occurred in 20 colonies within three communities in southwestern Ontario. Between these colonies, a total of 100 cats was

observed. Although these observations did generate many points of discussion, a larger amount of time observing cats in a greater diversity of areas could have benefitted this study. Furthermore, because of the reclusive nature of 'true feral' cats, only cats who would be classified as 'semi-feral' were observed during field work. This certainly limits my ability to draw conclusions about the lives of feral cats in general, as 'true ferals', even living within the visited colonies, may have differed from observed cats in terms of health and behaviour. However, cats who are unwilling to show themselves to humans could not be studied through observational means by any researchers, short of tools such as critter cams or camera traps.

Third, again because of limited time and resources, it was not feasible to incorporate formal ethological training as part of this project. However, as discussed in my Methodology, I contend that the careful use of more-than-human social science methods such as responsible anthropomorphism (Jickling & Paquet, 2005; Johnston, 2008) and affective encounters (Bear, 2011; Smuts, 2001) can also be foundations upon which to base primary observations of non-human animals. Furthermore, I count the many years of living with companion cats as valuable, if informal, training on cat behaviour and human-cat communication. In addition, triangulating my direct observations with secondary anecdotal evidence from caretakers and the primary literature on free-living cat biology and behaviour contributed to a more robust methodology.

Related to this, and as in all studies where the perspectives of animals are investigated, there are always challenges associated with 'speaking for' animals. In this study, I interpreted certain subjective facets of the lives of feral cats, which may have been interpreted differently by others. In Manuscript A, I challenge the view that feral cats tend to have a poor quality of life based on observations of perceived good health, play, and positive interactions amongst colony-mates, with caretakers, and with the landscape. However, this inference that cats can be 'happy'

in such situations based on these observations is certainly subject to contestation, as I could never truly know how they perceive their own quality of life. However, I would again justify my interpretations based on extensive experience with 'happy' companion cat behaviour, and my recognition that I am not attempting to extrapolate my observations beyond my interactions with these specific cats, at the time of observation. (For instance, a very different narrative may have emerged if observations had occurred in a -20 degree Celsius blizzard.) However, especially where poor quality of life is frequently used as justification for euthanasia, and where my intuition was corroborated by caretakers who have extensive personal experience with these particular cats, I would maintain that my impressions of the lives of these cats' present a valuable challenge to totalizing assumptions and failures in attending to non-human difference.

Furthermore, this application is open to the critiques, presented by Lulka (2009b) and Buller (2014), of still being focused on the human side of human-animal relations. The emphasis was indeed on human spatial placement of cats, and in investigating cat lifeworlds only in relations to humans: largely in urban managed colonies, and in association with human caretakers. Manuscript B analyzed the potential of cat performativity in their interactions with humans, not with one another or other non-human animals. However, these directions could be areas of future investigation, where greater time, resources, and training could permit a deeper exploration of the lifeworlds of animals with less of a focus on directly human-influenced dimensions of their lives.

5.4.2 Future Research

Building upon the growing body of literature on more-than-human geographies, this study has contributed to the opening up of many avenues of future research. First, there is still

much that is not known about the conflicting views and management preferences surrounding feral cats in a Canadian context. As a regional case study, there is room for further research in other parts of the country, as well as studies that explore other dimensions of the issue, such as quantitative analyses. In particular, it would be useful to conduct studies on perceptions of feral cats before and after community outreach and education initiatives concerning cats, or before and after the implementation of feral cat management programs such as TNR. Furthermore, this study has only provided a superficial treatment of how perceptions of feral cats differ in rural and urban communities, which may be an important and interesting topic of inquiry. Studies on the lives of feral cats in natural areas such as conservation areas and parks would also be very interesting.

Second, the Manuscript A case study attempted to bring the human placement of animals into conversation with the experiences and lifeworlds of the animals themselves. The interesting findings on discrepancies and their significance for human-animal socio-spatial practices and non-human place-making could be extended to many other cases of human-animal relations. Feral cats present a particularly interesting case, but similar research could be conducted on other feralized species, wild animals, or especially urban wildlife. Future research could more thoroughly examine the ethical implications of non-human place-attachments and spatial claims, for instance in experimental forms of interspecies communities represented in various cases, such as positive instances of fostering urban wildlife, or farm sanctuaries (Kymlicka, 2015). There is great opportunity for deeper investigations into non-human place-making practices, which could benefit from more extensive direct field observations, and combined ethological and ethnographic methodologies (such as those described in Lestel *et al.*, 2006). Non-human place-making as individual practices could be considered in conjunction with relationships to humans,

other animals, and historical and cultural factors in order to contribute to a 'thicker' understanding of the more-than-human social world.

Third, Manuscript B represents an experimental application of a theory with much space for future development. Future work could improve upon the model advanced for more-then-human material-discursive intra-actions. It could apply such a model to many other cases of human-animal encounters and relationships, especially with wild animals. It could even be extended to investigations of non-human interactions such as the co-shaping of relationships between interacting domesticated and wild animals, and the ways in which these encounters destabilize nature/culture boundaries. The primary utility of a performative approach is its ability to challenge the assumed inherent capabilities and preferences of non-human animals, and the policing of human-animal relations. Consequently, examining other ways in which the human-animal divide is policed could be very interesting and important. Many of the same principles could also be applied to investigate the operations of power that drive such policing, such as from a Foucauldian biopolitical framework.

Finally, methodologically there is much room for future development of experimental tools and approaches for exploring the lives of animals. This case study presents but one example of the possible utility of integrating primary research on animals with evidence from the human discursive realm. In future, as called for by Bear (2011), Barua (2014), Buller (2014), and Hodgetts and Lorimer (2014), these methods could be further extended to delve more deeply into the lifeworlds of animals firsthand. Some methods that have been posited include various communications, tracking, and video technologies. For instance, for feral cats, radiotelemetry, camera traps, or critter cams could all provide valuable information on the daily lives and habits of cats that are too wild to be observed directly, or who are living independently rather than in

managed colonies. This of course also applies to other animals. In employing such methods social scientists will likely need to forge partnerships with biologists conducting research on animals who have access to these tools. The application of tools traditionally employed exclusively by natural scientists could be valuable to researchers concerned with studying the social lives, spatial practices, unique cultures, and interspecies relationships of non-humans. I believe these new theories and methodologies for engaging with animals are poised to become fast-growing and fruitful facets of animal geography and animal studies.

6.0 BIBLIOGRAPHY

10 Carden. (2014). About 10 Carden. Retrieved from http://www.10carden.ca/about-10-carden/

Alger, J. M., & Alger, S. F. (1999). Cat culture, human culture: An ethnographic study of a cat shelter. *Society and Animals, 7*, 199-218.

Anderson, K., (1997). A walk on the wild side: a critical geography of domestication. *Progress in Human Geography, 21*, 463-485.

Angier, N. (2013). That Cuddly Kitty Is Deadlier Than You Think. The New York Times. Retrieved from http://www.nytimes.com/2013/01/30/science/that-cuddly-kitty-of-yours-is-a-killer.html?_r=0

Ash, S. J., & Adams, C. E. (2003). Public Preferences for Free-Ranging Domestic Cat (*Felis catus*) Management Options. *Wildlife Society Bulletin, 31*(2), 334-339.

Badmington, N. (2004). Mapping posthumanism. *Environment and Planning A*, 36(8), 1344-1351.

Baker, S. (1993). *Picturing the beast: Animals, identity, and representation*. Champaign, IL: University of Illinois Press.

Barad, K. (2003). Posthumanist performativity: Toward an understanding of how matter comes to matter. *Signs, 28*(3), 801-831.

Barua, M. (2013). Circulating elephants: Unpacking the geographies of a cosmopolitan animal. *Transactions of the Institute of British Geographers*. 10.1111/tran.12047

Barua, M. (2014). Bio-geo-graphy: landscape, dwelling, and the political ecology of human-elephant relations. *Environment and Planning D: Society and Space, 32*, 915-934.

Baynes-Rock, M. (2013). Life and death in the multispecies commons. *Social Science Information, 52*(2), 210-227.

Bear, C. (2001). Being Angelica? Exploring Individual Animal Geographies. *Area 43*(3), 297-304.

Bird Rose, D. (2011). *Wild dog dreaming: Love and extinction*. Charlottesville, VA: University of Virginia Press.

Birke, L. (2014). Escaping the maze: Wildness and tameness in studying animal behaviour. In G. Marvin & S. McHugh (Eds.), *Routledge Handbook of Human-Animal Studies* (pp. 39-53). New York, NY: Routledge.

Birke, L., Bryld, M., & Lykke, N. (2004). Animal Performances: An exploration of intersections between feminist science studies and studies of human/animal relationships. *Feminist Theory, 5*(2), 167-183.

Blancher, P. (2013). Estimated Number of Birds Killed by House Cats (*Felis catus*) in Canada. *Avian Conservation and Ecology, 8*(2), 3.

Bordo, S. (1986). The Cartesian masculinization of thought. *Signs, 11*(3), 439-456.

Braun, B. (2004). Modalities of posthumanism. *Environment and Planning A, 36*(8), 1352-1355.

Buller, H. (2014). Animal geographies II Methods. *Progress in Human Geography*, 0309132514527401.

Burghardt, G. (1991). Cognitive Ethology and Critical Anthropomorphism: A Snake with Two Heads and Hog-Nosed Snakes that Play Dead. In C. Ristau (Ed.), *Cognitive Ethology* (pp. 53-90). Hillsdale, NJ: Lawrence Erlbaum.

Butler, J. (1988). Performative acts and gender constitution: An essay in phenomenology and feminist theory. *Theatre journal, 40*(4), 519-531.

Butler, J. (1990). *Gender Trouble: Feminism and the Subversion of Identity*. New York, NY: Routledge.

Butler, J. (2010). Performative agency. *Journal of Cultural Economy, 3*(2), 147-161.

Canadian Federation of Humane Societies. 2012. Cats in Canada: A Comprehensive Report on the Cat Overpopulation Crisis. Retrieved from http://cfhs.ca/athome/cat_overpopulation_crisis/

Canadian Veterinary Medical Association. (2014). Free-Roaming, Abandoned, and Feral Cats - Position Statement. Retrieved from https://www.canadianveterinarians.net/documents/free-roaming-abandoned-feral-cats-position-statement

Candea, M. (2010). "I fell in love with Carlos the meerkat": Engagement and detachment in human–animal relations. *American Ethnologist, 37*(2), 241-258.

Centonze, L. A., & Levy, J. K. (2002). Characteristics of free-roaming cats and their caretakers. *Journal of the American Veterinary Medical Association, 220*(11), 1627-1633.

Chambers, C. N., & Main, M. E. (2014). Between "Wild" and "Tame": Placing Encounters with Sirocco the Kakapo Parrot in Aotearoa/New Zealand. *Society & Animals, 22*(1), 57-79.

City of Kitchener, Chapter 408 Animals – Regulation, 2008.

City of Toronto, Municipal Code Chapter 349, Animals. June 13, 2013.

City of Vaughn, By-Law Number 53-2002, 2002.

City of Waterloo, By-Law NO. 09 –047, 2009.

Collard, R. C. (2014). Putting animals back together, taking commodities apart. *Annals of the Association of American Geographers, 104*(1), 151-165.

Collard, R. C., & Dempsey, J. (2013). Life for sale? The politics of lively commodities. *Environment and Planning A, 45*(11), 2682-2699.

Costall, A. (1998). Lloyd Morgan and the Rise and Fall of Animal Psychology. *Society and Animals, 6,* 13-29.

Cox, G. & Ashford, T. (1998). Riddle Me This: The Craft and Concept of Animal Mind. *Science, Technology, and Human Values, 23,* 425-438.

Cronon, W. (1995). The trouble with wilderness; or, getting back to the wrong nature. In W. Cronon (Ed.), *Uncommon ground: Rethinking the human place in nature* (pp. 69-90). New York, NY: Norton.

Dabritz, H. A., Atwill, E. R., Gardner, I. A., Miller, M. A., & Conrad, P. A. (2006). Outdoor fecal deposition by free-roaming cats and attitudes of cat owners and nonowners toward

stray pets, wildlife, and water pollution. *Journal of the American Veterinary Medical Association, 229*(1), 74-81.

Darier, E. (1996). Environmental governmentality: the case of Canada's green plan. *Environmental Politics, 5*, 585–606.

Darier, E. (1999). Foucault and the environment. In Darier, E. (Ed.), *Discourses of the Environment* (pp. 1-33). Malden, PA: Blackwell.

Dauphiné, N. I., & Cooper, R. J. (2009). Impacts of free-ranging domestic cats (Felis catus) on birds in the United States: a review of recent research with conservation and management recommendations. *Proceedings of the fourth international partners in flight conference: tundra to tropics*, 205-219.

Davis, K. (1995). Thinking Like a Chicken: Farm Animals and the Feminine Connection. In C. J. Adams & J. Donovan (Eds.), *Animals and women: Feminist theoretical explorations* (pp. 192-212). Durham & London: Duke University Press.

Donovan, J. (2007). Animal Rights and Feminist Theory. In J. Donovan & C. J. Adams (Eds.), *The feminist care tradition in animal ethics: A reader* (pp. 58-86). New York, NY: Columbia University Press.

Donovan, J., & Adams, C. J. (Eds.). (2007). *The feminist care tradition in animal ethics: A reader.* New York, NY: Columbia University Press.

Economic Development, Finance & Enterprise Services. (n.d.). City of Guelph 2012 Community Profile. Retrieved from http://guelph.ca/wp-content/uploads/2012CommunityProfile.pdf

Foley, P., Foley, J. E., Levy, J. K., & Paik, T. (2005). Analysis of the impact of trap-neuter-return programs on populations of feral cats. *Journal of the American Veterinary Medical Association, 227*(11), 1775-1781.

Fuentes, A. (2010). Naturalcultural encounters in Bali: Monkeys, temples, tourists, and ethnoprimatology. *Cultural Anthropology, 25*(4), 600-624.

Gaard, G. C. (2003). Vegetarian ecofeminism: A review essay. *Frontiers: A Journal of Women Studies, 23*(3), 117-146.

Griffiths, H., Poulter, I., & Sibley, D. (2000). Feral cats in the city. In C. Philo & C. Wilbert (Eds.), *Animal Spaces, Beastly Places: New Geographies of Human-Animal Relations* (pp. 56-70). London, UK: Routledge.

Guelph Animal Nuisance Bylaw Petition. (n.d.). Retrieved from http://www.ipetitions.com/petition/guelph-animal-nuisance-by-law

Guelph Cat Population Taskforce. (2015). "Guelph Cat Population Taskforce". Retrieved from www.guelphcats.org

The Guelph Humane Society Incorporated. (n.d.). "About us". Retrieved from http://www.guelph-humane.on.ca/about_us.htm

Hardy, C., Harley, B., & Phillips, N. (2004). Discourse Analysis and Content Analysis: Two Solitudes? *Qualitative Methods, 2(2), 19-21.*

Haraway, D. (1988). Situated knowledges: The science question in feminism and the privilege of partial perspective. *Feminist studies, 14*(3), 575-599.

Haraway, D. (2003). *The companion species manifesto: Dogs, people, and significant otherness*. Chicago, IL: Prickly Paradigm Press.

Haraway, D. (2008). *When Species Meet.* Minneapolis, MN: University of Minnesota Press.

Haraway, D. (2010). "Staying with the Trouble: Xenoecologies of Home for Companions in the Contested Zones". *Cultural Anthropology*. Retrieved from http://www.culanth.org/fieldsights/289-staying-with-the-troublexenoecologies-of-home-for-companions-in-the-contested-zones.

Herzog, H. A. (2007). Gender differences in human–animal interactions: A review. *Anthrozoos, 20*(1), 7-21.

Hodgetts, T., & Lorimer, J. (2014). Methodologies for animals' geographies: cultures, communication and genomics. *Cultural Geographies*, 1474474014525114.

Holmberg, T. (2014). Wherever I lay my cat? Post-human crowding and the meaning of home. In Marvin, G., & McHugh, S. (Eds.). *Routledge Handbook of Human-Animal Studies* (pp. 54-67). New York, NY: Routledge.

Houle, K. L. (2013). *Responsibility, Complexity, and Abortion: Toward a New Image of Ethical Thought.* New York, NY: Lexington Books.

Hovorka, A. J. (2008). Transspecies urban theory: chickens in an African city. *Cultural Geographies, 15*(1), 95-117.

Hovorka, A. J. (2012). Women/chickens vs. men/cattle: Insights on gender–species intersectionality. *Geoforum, 43*(4), 875-884.

Hribal, J. (2007). Animals, agency, and class: Writing the history of animals from below. *Human Ecology Review, 14*(1), 101.

Hutson, K. D. (2011). Ordering the Feral Cat: Stakeholder Perspectives on Cat Overpopulation (Unpublished senior honors thesis). The Ohio State University, Columbus, OH.

Ingold, T. (1988). The animal in the study of humanity. In T. Ingold (Ed.), *What is an Animal* (pp. 84-99). London, UK: Unwin.

Ingold, T. (2000). *The perception of the environment*. London, UK: Routledge.

Ingold, T. (2011). *Being alive: Essays on movement, knowledge and description*. New York, NY: Taylor & Francis.

Irvine, L. (2008). *If you tame me: Understanding our connection with animals.* Philadelphia, PA: Temple University Press.

Jarratt, S. C. (2004). Beside Ourselves: Rhetoric and Representation in Postcolonial Feminist Writing. In A. A. Lunsford & L. Ouzgane (Eds.), *Crossing Borderlands: Composition and Postcolonial Studies* (pp. 110-128). Pittsburgh, PA: The University of Pittsburgh Press.

Jepson, P., Barua, M., & Buckingham, K. (2011). What is a conservation actor? *Conservation and Society, 9*(3), 229.

Jessup, D. A. (2004). The welfare of feral cats and wildlife. *Journal of the American Veterinary Medical Association, 225*(9), 1377-1383.

Jickling, B., & Paquet, P. C. (2005). Wolf Stories. *Environmental Ethics, 27*(2), 115-134.

Johnston, C. (2008). Beyond the clearing: towards a dwelt animal geography. *Progress in human geography, 32*(5), 633-649.

Kellert, S. R., Berry, J. K., & US Fish and Wildlife Service. (1980). Knowledge, affection and basic attitudes toward animals in American society. US Department of the Interior, Fish and Wildlife Service.

Kincheloe, J. L., & McLaren, P. L. (1994). Rethinking critical theory and qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of Qualitative Research* (pp. 138-157). Thousand Oaks, CA: Sage

Kirksey, S., & Helmreich, S. (2010). The emergence of multispecies ethnography. *Cultural Anthropology, 25*(4), 545-576.

Kohn, E. (2007). How dogs dream: Amazonian natures and the politics of transspecies engagement. *American Ethnologist, 34*(1), 3-24.

Kristeva, J. (1982). *Powers of horror: An Essay on Abjection*. (L. S. Roudiez, Trans.). New York, NY: Columbia University Press.

Kymlicka, W. (2015, Jan). Farm Sanctuaries: From Refuge to Intentional Community? Paper presented at the Minding Animals Conference 3, New Delhi, India.

Laland, K. N., & Janik, V. M. (2006). The animal cultures debate. *Trends in Ecology & Evolution, 21*(10), 542-547.

Latour, B. (1993). *We Have Never Been Modern.* Harlow, UK: Pearson.

Lavau, S. (2011). The nature/s of belonging: performing an authentic Australian river. *Ethnos, 76*(1), 41-64.

Lestel, D., Brunois, F., & Gaunet, F. (2006). Etho-ethnology and ethno-ethology. *Social science information, 45*(2), 155-177.

Levy, J. K., & Crawford, P. C. (2004). Humane strategies for controlling feral cat populations. *Journal of the American Veterinary Medical Association, 225*(9), 1354-1360.

Levy, J. K., Gale, D. W., & Gale, L. A. (2003a). Evaluation of the effect of a long-term trap-neuter-return and adoption program on a free-roaming cat population. *Journal of the American Veterinary Medical Association, 222*(1), 42-46.

Levy, J. K., Woods, J. E., Turick, S. L., & Etheridge, D. L. (2003b). Number of unowned free-roaming cats in a college community in the southern United States and characteristics of community residents who feed them. *Journal of the American Veterinary Medical Association, 223*(2), 202-205.

Liberg, O. (1980). Spacing patterns in a population of rural free roaming domestic cats. *Oikos, 35*, 336-349.

Liberg, O., Sandell, M., Pontier, D., & Natoli, E. (2000). Density, spatial organization and reproductive tactocs in the domestic cat and other felids. In D. C. Turner & P. P. Bateson (Eds.). *The domestic cat: The biology of its behaviour* (2nd ed.) (pp. 119-147). Cambridge, UK: Cambridge University Press.

Lloyd, M. (2007). *Judith Butler: From norms to politics* (Vol. 20). Malden, MA: Polity.

Longhurst, R. (2010). Semi-structured interviews and focus groups. In N. Clifford, S. French & G. Valentine (Eds.), *Key Methods in Geography* (pp. 117-132). Thousand Oaks, CA: Sage.

Longcore, T., Rich, C., & Sullivan, L. M. (2009). Critical assessment of claims regarding management of feral cats by trap-neuter-return. *Conservation Biology, 23*(4), 887-894.

Lord, L. K. (2008). Attitudes toward and perceptions of free-roaming cats among individuals living in Ohio. *Journal of the American Veterinary Medical Association, 232*(8), 1159-1167.

Lorimer, H. (2006). Herding memories of humans and animals. *Environment and Planning D: Society and Space, 24*(4), 497.

Lorimer, J. (2010). Elephants as companion species: the lively biogeographies of Asian elephant conservation in Sri Lanka. *Transactions of the Institute of British Geographers, 35*(4), 491-506.

Loyd, K. A. T., & DeVore, J. L. (2010). An evaluation of feral cat management options using a decision analysis network. *Ecology and Society, 15*(4), 10.

Loyd, K. A. T., & Miller, C. A. (2010). Influence of demographics, experience and value orientations on preferences for lethal management of feral cats. *Human Dimensions of Wildlife, 15*(4), 262-273.

Luke, T. W. (1995). On environmentality: Geo-power and eco-knowledge in the discourses of contemporary environmentalism. *Cultural Critique, 31*, 57-81.

Luke, T. W. (1999). Environmentality as green governmentality. In E. Darier (Ed.), *Discourses of the Environment* (pp. 121-151). Malden, PA: Blackwell.

Lulka, D. (2009a). Consuming Timothy Treadwell: redefining nonhuman agency in light of Herzog's Grizzly man. In McFarland, S. E., & Hediger, R. (Eds.), *Animals and agency: An interdisciplinary exploration* (Vol. 8) (pp. 67-87). Boston: Brill.

Lulka, D. (2009b). The residual humanism of hybridity: retaining a sense of the earth. *Transactions of the Institute of British Geographers, 34*(3), 378-393.

MacDonald, D. W., Yamaguchi, N., & Kerby, G. (2000). Group-living in the domestic cat: its sociobiology and epidemiology. In D. C. Turner & P. P. Bateson (Eds.). *The domestic cat: The biology of its behaviour* (2nd ed.) (pp. 95-118). Cambridge, UK: Cambridge University Press.

Maurstad, A., Davis, D., & Cowles, S. (2013). Co-being and intra-action in horse–human relationships: a multi-species ethnography of be(com)ing human and be(com)ing horse. *Social Anthropology, 21*(3), 322-335.

McFarland, S. E., & Hediger, R. (2009). Approaching the agency of other animals: an introduction. In McFarland, S. E., & Hediger, R. (Eds.), *Animals and agency: An interdisciplinary exploration* (pp. 1-22). Brill.

Michel, S. M. (1998). Golden Eagles and the Environmental Politics of Care. In: Wolch, J., Emel, J. (Eds.), *Animal Geographies: Place, Politics and Identity in the Nature-Culture Borderlands* (pp. 162-187). London & New York: Verso.

Milton, K. (2005). Anthropomorphism or Egomorphism? The Perception of Non-Human Persons by Human Ones. In J. Knight (Ed.), *Animals in Person: Cultural Perspectives on Human-Animal Intimacy* (pp. 255-271). Oxford, UK: Berg

Munro, L. (2001). Caring about blood, flesh, and pain: Women's standing in the animal protection movement. *Society and Animals, 9*(1), 43-62.

Natoli, E. Maragliano, L., Cariola, G., Faini, A., Bonanni, R., Cafazzo, S., & Fantini, C. (2006). Management of feral domestic cats in the urban environment of Rome (Italy), *Preventative Veterinary Medicine, 77*(3-4), 180-185.

Neuman, W. L. (2003). *Social research methods: Quantitative and qualitative approaches*. Boston, MA: Allyn and Bacon.

Nimmo, R. (2011). Actor-network theory and methodology: Social research in a more-than-human world. *Methodological Innovations Online, 6*(3), 108-119.

Notzke, C. (2013). An exploration into political ecology and nonhuman agency: The case of the wild horse in western Canada. *The Canadian Geographer/ Le Géographe canadien, 57*(4): 389-412.

Nutter, F. B., Stoskopf, M. K., & Levine, J. F. (2004). Time and financial costs of programs for live trapping feral cats. *Journal of the American Veterinary Medical Association, 225*(9), 1403-1405.

Nyyssönen, J., & Salmi, A. K. (2013). Towards a Multiangled Study of Reindeer Agency, Overlapping Environments, and Human-Animal Relationships. *Arctic Anthropology, 50*(2), 40-51.

Paramaguru, K. (2013). The Biggest Threat to U.S. Wildlife? Cats. Time. Retrieved from http://newsfeed.time.com/2013/01/31/the-biggest-threat-to-u-s-wildlife-cats/

Philo, C. (1998). Animals, Geography, and the City: Notes on Inclusion and Exclusion. In: J. Wolch & J. Emel (Eds.), *Animal Geographies: Place, Politics and Identity in the Nature-Culture Borderlands* (pp. 51-71). London: Verso.

Philo, C. (2005). Spacing lives and lively spaces: partial remarks on Sarah Whatmore's Hybrid Geographies. *Antipode, 37*(4), 824-833.

Philo, C., & Wilbert, C. (2000). Animal Spaces, Beastly Places. In C. Philo & C. Wilbert (Eds.), *Animal Spaces, Beastly Places: New Geographies of Human-Animal Relations* (pp. 1-34). London: Routledge.

Plumwood, V. (1993). The politics of reason: Towards a feminist logic. *Australasian Journal of Philosophy, 71*(4), 436-462.

Power, E. R. (2009). Border-processes and homemaking: encounters with possums in suburban Australian homes. *Cultural Geographies, 16*(1), 29-54.

Regan, T. (1983). *The Case for Animal Rights.* Berkeley, CA: University of California Press.

Rinfret, S. (2009). Controlling animals: power, Foucault, and species management. *Society and Natural Resources, 22*(6), 571-578.

Risan, L. C. (2005). The boundary of animality. *Environment and Planning D: Society and Space, 23*(5), 787.

Robertson, S. A. (2008). A review of feral cat control. *Journal of Feline Medicine and Surgery, 10*(4), 366-375.

Rutherford, P. (1999). The entry of life into history. In E. Darier (Ed.), *Discourses of the Environment* (pp. 37-62). Malden, PA: Blackwell.

Rutherford, S. (2007). Green governmentality: insights and opportunities in the study of nature's rule. *Progress in Human Geography, 31*(3), 291-307.

Rutherford, S. (2013). The Biopolitical Animal in Canadian and Environmental Studies. *Journal of Canadian Studies/Revue d'études canadiennes, 47*(3), 123-144.

Sack, R. D. (1997). *Homo Geographicus*. Baltimore, MD: Johns Hopkins University Press.

Sanders, C. R. (2007). Mind, self, and human-animal joint action. *Sociological Focus, 40*(3), 320-336.

Scott, K. C., Levy, J. K., & Crawford, P. C. (2002). Characteristics of free-roaming cats evaluated in a trap-neuter-return program. *Journal of the American Veterinary Medical Association, 221*(8), 1136-1138.

Seto, M. (2013). Ontario SPCA Animals' Voice Pawdcast – Free Feral Food Program & Feral Cat Trap Depot Program – Season 2, Episode 7 [Audio podcast]. Retrieved from http://ontariospca.ca/blog/ontario-spca-animals-voice-pawdcast-free-feral-food-program-feral-cat-trap-depot-program-season-2-episode-7/

Seymour, M., & Wolch, J. (2010). "A Little Bird Told Me...": Approaching Animals Through Qualitative Methods. In D. DeLyser, S. Herbert, S. Aitken, M. Crang & L. McDowell (Eds.), *The SAGE handbook of qualitative geography* (pp. 305-320). Thousand Oaks, CA: Sage.

Singer, P. (1975). *Animal Liberation*. New York, NY: New York Review.

Smuts, B. (1999). "Living with Animals". In J. M. Coetzee (Ed.), *The Lives of Animals* (pp. 107-120). Princeton, NJ: Princeton University Press.

Smuts, B. (2001). Encounters with animal minds. *Journal of Consciousness Studies, 8*(5-7), 293-309.

Smuts, B. (2006). Between species: Science and subjectivity. *Configurations, 14*(1), 115-126.

Spotte, S. (2014). *Free-ranging Cats: Behavior, Ecology, Management*. Chichester, UK: John Wiley & Sons.

Steward, H. (2009). Animal agency. *Inquiry, 52*(3), 217-231.

Tabor, R. K. (1983). *The Wild Life of the Domestic Cat.* London, UK: Arrow Books Limited.

Thomas, E. M. (1994). *The Tribe of the Tiger.* New York, NY: Simon and Schuster.

Thompson, C. (2012). The Contested Meaning and Place of Feral Cats in the Workplace. *Journal for Critical Animal Studies, 10*(4), 78-108.

Tønnessen, M. (2010). Wolf land. *Biosemiotics, 3*(3), 289-297

Toronto Feral Cat TNR Coalition. (2014). About Us. Retrieved from http://torontoferalcatcoalition.ca/about-us/

Tuan, Y. F. (1979). Space and place: humanistic perspective. In: S. Gale & G. Olsson (Eds.), *Philosophy in Geography* (pp. 387-427). Netherlands: Springer Netherlands.

Urbanik, J., & Morgan, M. (2013). A tale of tails: The place of dog parks in the urban imaginary. *Geoforum, 44*, 292-302.

van Dooren, T., & Rose, D. B. (2012). Storied-places in a multispecies city. *Humanimalia, 3*(2), 1-27.

Walker, T. (2013). 'Stone-cold serial killers': Domestic cats slaughter billions upon billions of animals in US every year. The Independent. Retrieved from http://www.independent.co.uk/news/world/americas/stonecold-serial-killers-domestic-cats-slaughter-billions-upon-billions-of-animals-in-us-every-year-8473643.html

Whatmore, S. (2006). Materialist returns: practising cultural geography in and for a more-than-human world. *Cultural Geographies, 13*(4), 600-609.

Whatmore, S., & Thorne, L., (1998). Wild(er)ness: Reconfiguring the Geographies of Wildlife. *Transactions of the Institute of British Geographers, 23*, 435-454.

Whatmore, S., & Thorne, L. (2000). Elephants on the move: spatial formations of wildlife exchange. *Environment and Planning D: Society and Space, 18*(2), 185-204.

Wilken, R. L. (2012). Feral Cat Management: Perceptions and Preferences (A Case Study). (Master's thesis). San José State University, San Jose, CA. (Paper 4181)

Winter, L. (2004). Trap-neuter-release programs: the reality and the impacts. *Journal of the American Veterinary Medical Association, 225*(9), 1369-1376.

Wylie, A. (2003). Why Standpoint Matters. R. Figueroa & S. Harding, (Eds.), *Science and Other Cultures* (pp. 26-48). New York, NY: Routledge.

Wolch, J. (1996). Zoöpolis. *Capitalism, Nature, Socialism, 7*(2), 21-47.

Wolch, J. (2002). Anima urbis. *Progress in Human Geography, 26*, 721-742.

Wolch, J., & Emel, J. (1995). Bringing the animals back in. *Environment and Planning D: Society and Space, 13*, 632-636.

Wolch, J., West, K., & Gaines T., (1995). Transspecies Urban Theory. *Environment and Planning D: Society and Space, 13*(5), 735-760.

Wolfe, C. (2003). *Animal Rites: American Culture, the Discourse of Species, and Posthumanist Theory.* Chicago, IL: The University of Chicago Press.

APPENDIX A: ETHICAL CONSIDERATIONS

A.2 HUMAN PARTICIPANTS

This research presented a small risk of social harm to feral cat colony caretakers. There is evidence to suggest that caretakers may experience social stigmatization where their actions are seen as transgressive (Thompson, 2012). Additional stereotypes of 'crazy cat ladies' and cat hoarders exacerbate the stigma around individuals who chose to care for community cats. To protect this group of human participants from this risk, diligent care was taken to ensure participant confidentiality. The only directly identifying information collected was the names and contact information of participants, which were required for coordinating participation and disseminating study results. Consent forms also contained participant names and signatures. However, interview data was not directly identifying, and rather employed unique study codes to identify participants. Further protection was ensured by use of separate storage locations for identifying and coded data, locked filing cabinets and offices, and password protection of computers, hard drives, and identifying computer documents. These measures were approved by the University of Guelph Research Ethics Board.

A.2 FELINE PARTICIPANTS/COMMUNITY MEMBERS

The vulnerability of the cats themselves became a very important consideration throughout this study. When beginning my field work I had understood that many individuals think that feral cats do not belong in urban environments, and they are often reacted to with threats of relocation, or forcible removal. I had therefore prioritized the confidentiality of the locations of any feral colonies I discovered. However, there was still mistrust from the caretaking community in Guelph concerning research on feral cats, and recruitment for colony caretakers to

accompany to colonies proved challenging. In one interview a participant shared with me that colonies may be located on private property, and caretakers therefore wish to avoid attention being drawn to these locations. They therefore requested that I not seek out colonies in Guelph, stating that "this is life and death we're talking about, not getting a PhD". Based on this request and a desire to protect feral cats, I decided to not pursue any field observations of colonies in Guelph. I ensured that I only went to colonies where caretakers were eager to have me accompany them, and made sure to follow their lead entirely. I also did not record to locations of any colonies, or take any photographs or videos that would clearly indicate colony locations (such as of street or store signs, unique landscape features, etc.). I also completed an Animal Utilization Protocol and the Animal User Training Program Core Modules through the University of Guelph Animal Care Services.

APPENDIX B: INTERVIEW GUIDE

INTRODUCTION

For my study, I'm interested in domestic house cats. In particular, I would like to talk about feral cats, which are free-roaming cats that do not have an owner. To get started, I'm going to ask you a few general questions about what you think about feral cats and your experience with them, then I will be moving on to some more specific questions

1. CORE QUESTIONS:

- What are some of the first words or phrases you think of when you hear the word 'cat'? What about when you hear the word 'feral'?
- When you see feral cats in a city, what do you think, or how do you feel about them?
  [if necessary: feral= skittish cat without a collar; PROMPT: what are some of your thoughts about the cat? Why is it there? Is this bad? What should be done about it? How would you respond to the encounter?]
- What about when you see feral cats in the countryside, like in a farm field?
- What about when you see feral cats in a natural or wilderness area, like a provincial park or other protected area?
- What do you think or how do you feel when you encounter wild animals in cities?
  [PROMPT: Songbirds? Other wildlife: racoons, foxes? Do they belong in urban areas? Should we help wildlife live in urban areas? Make it more hospitable to them?]
- In your opinion, in what ways are feral cats different from or similar to wild animals, like racoons or foxes?
  [PROMPT: does their domestication matter? Their origin outside of Canada? Ability to survive on their own? Balance with the ecosystem?]
- Do you think that cats could ever belong in nature in Canada, or become wild animals again?
  [PROMPT: What factors would make this possible? How much time would it take? 100s or 1000s of years? More to do with timescale, or how they fit into ecosystems (balance)?]
- In your opinion, how should feral cats be managed?
  [Have you heard of TNR programs? What do you think about them? Would you ever support euthanasia as a management tool? Does management depend on where they are? Different or same in urban/rural/natural areas? Why or why not?]

For animal welfare/colony caretakers:

- There has been a lot of concern expressed recently surrounding cat predation on native species like songbirds. What do you think about these claims?
  [PROMPT: Are you concerned about this? Do you find the arguments convincing? Why/not? Are cats being used as a scapegoat? What if a bird species were at risk of extinction?]

For colony caretakers only:

- How long have you been caring for feral cats? In Guelph?
  [PROMPT: In what exact locations do you care for cats (address, intersection; reassure about confidentiality of this information)]
- How did you first start caring for cats?
- What is your routine with the cats normally like? How often do you visit them, and what do you do?

For non-caretakers:

- Do you have any experience with feral cats? Have you encountered any? Around Guelph?
  [PROMPT: Where, when, what happened, what did you do, how did you feel?]

2. ADDITIONAL QUESTIONS

For Animal welfare/colony caretakers

- Overall, do you think feral cats can live a good life?
  [PROMPT: Do you think cats live better lives as pets than as wild, feral animals? Should kittens be removed from colonies and socialized and adopted where possible?]
- What do you think about people who want to eradicate feral cats because of the threat they pose to native species? If you could help them to understand one point or idea from your position, what would it be?

For conservationists

- In terms of the bird debate, some people have argued that recent studies don't take into account habitat loss, and other human threats to birds, and therefore feel that cats are being made into a scapegoat for declining bird populations. What do you think about these claims?
  [PROMPT: Do you find them convincing? Would they influence your opinion? Why/not?]
- What if someone tried to argue that feral cats prey largely on common, even non-native species in urban areas, like house sparrow and European starling? What would you think about these claims?
  [PROMPT: Would you find them convincing? Would they influence your opinion? Why/not?]
- How did you come to form your opinion on feral cats?
  [PROMPT: From personal experiences? Talks/communication with others? Scientific paper? Popular media?]
- What do you think about people who actively care for feral cats? If you could help them to understand one point or idea from your position, what would it be?
- If we realized that it would be impossible to eradicate all feral cats in Canada, so there would always be populations of feral cats, what would be the worst case scenario for you? The best case scenario?

For either:

- I've heard of some initiatives where feral colonies are trapped and neutered, then placed in a large enclosure where they are cared for, but cannot interact with the environment. What would you think about such initiatives?
  [PROMPT: who should pay for them? Are they worth the cost? Would the cats be happy?]
- I have also heard of initiatives where cats are trapped and neutered, then placed in a barn as a mouser in a farming area. What would you think about such initiatives?
  [PROMPT: is this a good solution? Do you approve of this role for them? Would you still be concerned about their welfare? Or their impacts on birds?]
- What do you think about the idea of animals having claims to spaces, or the right to live somewhere? How would you see such claims fitting into the feral cat issue?
  [PROMPT: do you think feral cat colonies have claims to the spaces they occupy? What if someone argued that songbirds have claims to space, and we should remove cats because they are a threat? Would one claim/right overrule the other? Why?]
- In some countries, like Italy, there are laws that protect feral animals as free-living populations. What do you think about such laws?
  [PROMPT: What about if someone proposed that such a law be introduced in Canada? How is (the situation in) Canada different from Italy?]

3. DEMOGRAPHIC INFORMATION: If you wouldn't mind, I also have a few questions about yourself. This will only be presented as anonymous, aggregate data

- Do you own any pets? What kind and how many?
- Do you feed birds? [PROMPT: Can you tell me a bit about why/why not?]
- What year were you born?
- What is your occupation?
- What is the highest level of education you have completed?
- Do you know of anyone else in Guelph who might be interested in participating in this study? If I give you a copy of my recruitment poster could you pass it along to them?

APPENDIX C: STUDY PARTICIPANTS

Forty participants were recruited and interviews took place between May 21 and September 19, 2014. Fifteen participants were classified as conservationists, 21 as animal welfare/colony caretakers, and four were left unclassified, belonging to a middle group (see Figure 7). The average age of participants was 51, with 72 percent of participants falling between the ages of 40 and 70. For an age distribution, see Figure 8. There was no significant difference in age between the two groups. In terms of location, 57 percent of participants were from the City of Guelph, while the other 43 percent were from other communities in southern Ontario (see Figure 9). Eighty-three percent of participants were located within 100 kilometres of Guelph. As illustrated in Figure 10 there were nearly twice as many female participants (26) as male (14). Within the conservationist group, 67 percent of participants were male and 33 percent female (see Figure 11). Within the animal welfare/colony caretaker group, 10 percent of participants were male and 90 percent female (see Figure 12). This is consistent with the literature, as many researchers have found that there is a much greater proportion of women than men involved in animal rescue (Herzog, 2007; Munro, 2001). Overall, participants were highly educated, with 30 percent of participants holding a bachelor's degree, and 30 percent a master's. Only 12.5 percent of participants had not completed any postsecondary education. A more detailed breakdown of participants' education levels can be seen in Figure 13.

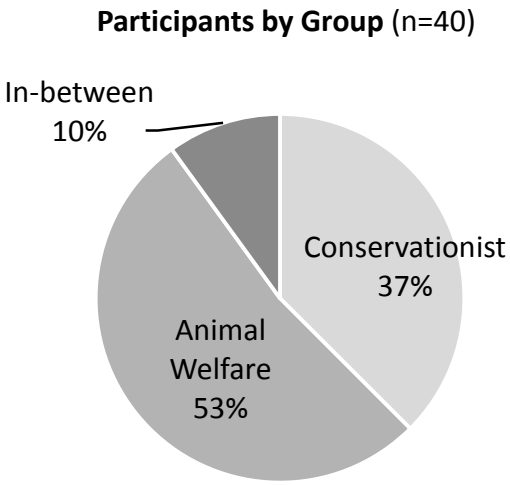

Figure 7 - Participants by group

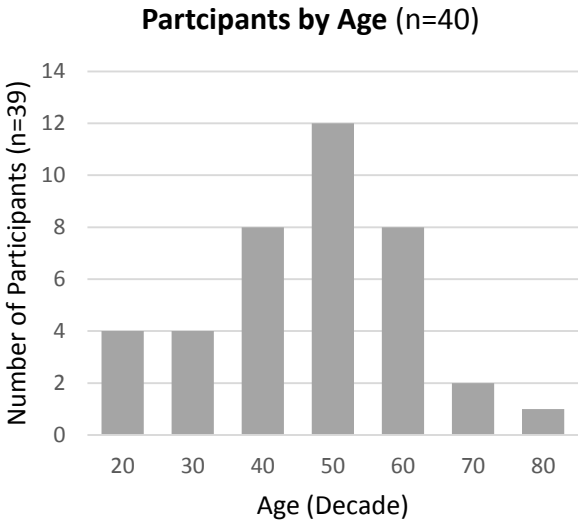

Figure 8 - Participants by age

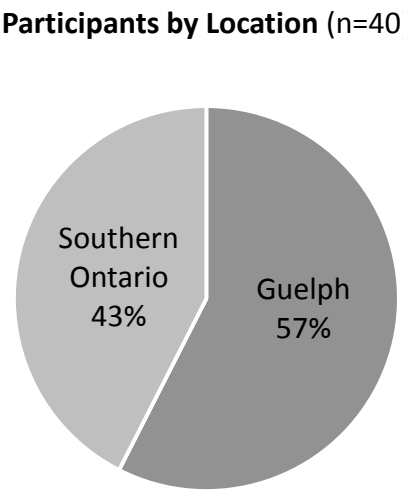

Figure 9 - Participants by location

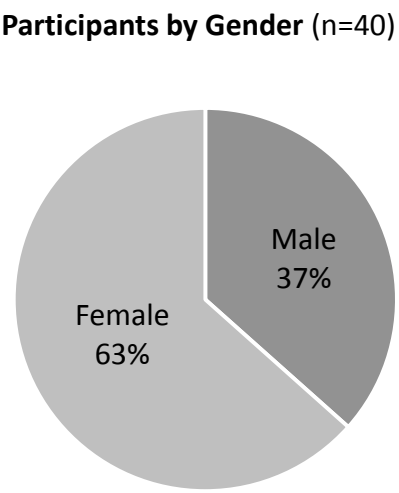

Figure 10 - Participants by gender

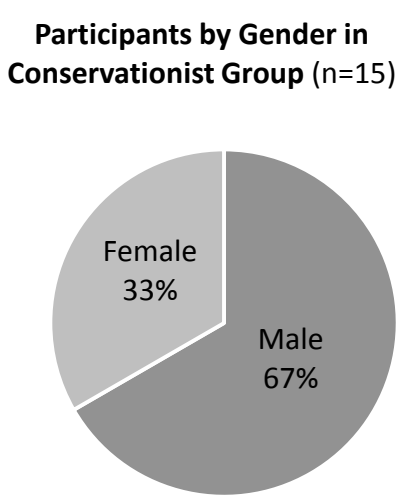

Figure 11 - Participants by gender in conservationist group

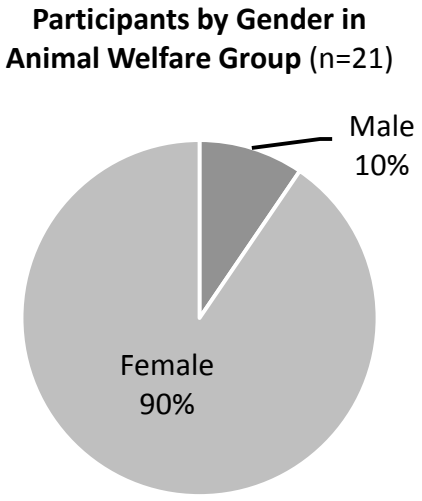

Figure 12 - Participants by gender in animal welfare group

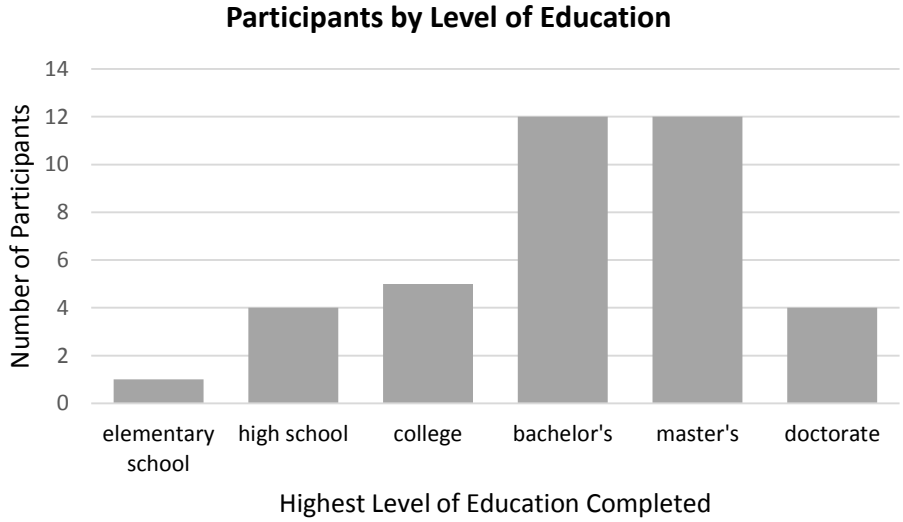

Figure 13 - Participants by level of education

APPENDIX D: LEGAL CONTEXT

In order to gain an understanding of the legal structures influencing feral cats in southwestern Ontario, content analyses of selected Animal Control Bylaws were performed. The selected locations were: Guelph; Waterloo; Kitchener; Brantford; Vaughn; London; and Toronto. In reviewing these bylaws, several notable common threads emerged.

In four of the seven bylaws reviewed (Guelph, Brantford, London, Vaughn), there was no mention of the word "feral", or any acknowledgement that feral cats even existed. In two of the bylaws where feral cats were mentioned (Kitchener and Waterloo), it was exclusively in the definition of cats and kittens, and no other discussion of feral cats or their management was presented. The only bylaw that specifically discussed feral cats was that of Toronto. In this document, feral cats, feral cat colonies, and trap neuter return programs are all defined. It further contains the following Article:

> ARTICLE VI Feral Cats, Trap Neuter Return Program
> § 349-22. Feral Cats. A. The Executive Director may operate a trap, neuter, return program in respect of any feral cat or feral cat colony and maintain a record of the feral cat's sterilization. B. Any feral cat may be spayed or neutered by the Executive Director and subsequently released. C. Where, in the opinion of the Executive Director, a feral cat is injured or ill and should be euthanized without delay for humane reasons, the feral cat may be so euthanized." (City of Toronto, 2013, p. 349-14)

This incorporation of feral cats into Toronto's Animal Control Bylaw gives them legal protection that is not afforded in any of the other communities investigated. The statement that "Any feral cat may be spayed or neutered by the Executive Director *and subsequently released*" (emphasis added) legitimizes feral cats' occupation of certain areas. Therefore when human community members complain about the presence of feral cats in an area, if they are part of a colony in

which TNR has taken place, they can be told that these cats are being managed as per the Animal Control Bylaw (E. Attard, personal communication, September 17, 2014).

Although the other six cities do not directly discuss the management of feral cats, there are other bylaws which would have an influence upon them. One such bylaw is the prohibition of animals running at large. Vaughn, Kitchener and Waterloo all have specifications against animals running at large, including cats. The Brantford bylaw contains a clause that prohibits animals running at large or trespassing, but exempts cats, as well as dogs and banded pigeons. The Vaughn bylaw specifies that:

> An animal shall be deemed to be running at large when found in any place other than the premises of the owner of the animal, or on private land other than that of the owner of the animal, where consent by the owner of the land has been given, and the animal is not under the control of any adult person." (City of Vaughn, 2002, n.p.)

This is significant not only because any cat found running at large within these communities can be impounded, and disposed of if unclaimed, but it can also impact colony caretakers. In both Kitchener and Waterloo the bylaws specify that "harbouring" cats includes "feeding, leaving food in a manner that is likely to attract a cat or kitten to a property" (City of Kitchener, 2008, p. 408-4). In this way, by feeding feral cats colony caretakers are technically harbouring them, and can therefore be considered as responsible for them should they be impounded by animal services.

One way in which feral cats may be impacted by stipulations in the reviewed animal control bylaws is through nuisance clauses. The Vaughn, Waterloo and Kitchener bylaws all prohibit cats from being a nuisance to any citizen. As stated in the City of Waterloo (2009) bylaw: "No person shall keep or harbour any cat or kitten in a manner that adversely impacts

neighbouring properties or residents whether through…straying or roaming of cat(s) or kitten(s)" (p. 20). The Vaughn bylaw expands that:

> Where a property owner or tenant makes a complaint to the Animal Control Officer that a cat is causing damage to the said owner's or tenant's property or is otherwise creating a disturbance on that property, the said Animal Control Officer may, with the consent of the said property owner or tenant, enter onto the private property and into the structure thereon, and capture the cat and impound same. (City of Vaughn, 2002)

Therefore feral cats that are perceives as a nuisance to any resident may be captured by Animal Control Officers, and colony caretakers responsible for "harbouring" such cats would be considered culpable.

To summarize, three of the seven communities (Guelph, Brantford, London) do not have any stipulations in their Animal Control Bylaws that would affect feral cats. Three others (Kitchener, Waterloo, Vaughn) have clauses that could impact feral cats, either through prohibitions against running at large, or causing nuisance. In the majority of these bylaws, animals impounded by Animal Control Officers are required to be held for three days, after which point they can be sold, or destroyed. Feral cats are only afforded any legal protection in Toronto's Animal Control Bylaw, which legitimizes their occupation of spaces within colonies by formalizing trap neuter return as the appropriate management response.

APPENDIX E: THE POLITICS OF CARETAKING

Beyond simply representing a difference in opinion, the conflicts between colony caretakers and conservationists involve broader political issues that are important to note. The social stigmatization of colony caretakers has previously been documented in the literature (e.g., Griffiths *et al*., 2000; Thompson, 2012), and is often portrayed as resulting from the marginalized position of feral cats, whose liminality evokes abjection. However, links can also be made to dualisms beyond nature/culture, namely feminine/masculine and reason/emotion. These intersecting dualisms have been the subject of feminist scholarship for decades, and are attributed to the scientific revolution and especially the work of Descartes (for instance, see Bordo, 1986). Briefly, in these systems of thought logic is associated with the masculine, and privileged over such feminized attributes as emotion. Through similar operations, wilderness, wildlife, and holistic scales of species and ecosystems have become associated with the masculine realm and privileged, whereas domesticated animals, and the scale of individuals are marginalized, and associated with the feminine. In terms of the valuing of wild animals over those that have been domesticated, feminist scholars have reflected that our society exhibits a "culturally conditioned indifference toward, and prejudice against, creatures whose lives appear too slavishly, too boringly, too stupidly female, too 'cowlike'" (Davis, 1995, p. 196), and that "to be concerned about the welfare of chickens or lambs is to be concerned about the most trivial of domesticated (feminized) nature" (Anderson, 1997, p. 480).

There is considerable evidence of these dynamics in this study's interviews. For instance, many conservationists emphasized that the appropriate scale at which to approach the feral cat issue was the ecosystem scale, where the concern was with native species protection and not

animal welfare. As stated by participants: “It’s an ecosystem problem, and people I think need to start looking at it from an ecological standpoint as opposed to an animal welfare standpoint,” and “we can’t just look at it from an animal welfare standpoint because it’s, that’s not the issue that’s happening now. We’re getting too many cats outside and that’s an ecological issue.” Another participant said: “I do have a fundamental issue with the cat colony idea, I really do…you’re taking energy away from things that matter.” In this case the “things that matter” would be native wildlife, which this participant contends should be the focus of animal related concern, rather than feral cats. Similarly, another participant explained: “it’s difficult because I know that their heart is in the right place, because they care for these animals and that’s never a bad thing. But…I see that caring as being placed in the wrong sort of arena.” Another participant took a more anthropocentric view which similarly attributed the actions of colony caretakers as misdirected:

> If you have that kind of time to spend, why don’t you help the poor and the needy. Help people. You know, really, why do you need to feed cats with your time? I mean I understand the passion they have, and I’m not diminishing the passion in any sense, I just think there’s better ways that they could exercise the passion.

Discussions of the “care” and “passion” of caretakers also emphasizes the dualism between logic versus emotion. Conservationists often attributed caretakers with characteristics suggesting that they are overemotional. This is illustrated well in the following statements: “I call it the Disney syndrome,” “I think that’s just a bleeding heart solution,” “I think it’s a misguided thing…and ethically, you know, it’s sort of the weak way out,” and “in cities, people seem to get daffy over these things.” As suggested by the last example, caretakers often get labelled not only as overemotional, but also as illogical. While discussing the lack of scientific consensus on the impact of feral cats, and the challenges with data extrapolation, one conservationist explained:

> These scientists aren't, they're not trying to make this stuff up. So people saying that type of thing either don't have any type of ecological background, or they do but they're letting their animal welfare catness take over…They're not looking at it objectively.

This argument suggests that rather than approaching the situation from an objective, logical stance, caretakers allow their emotions to take over and therefore are not interpreting the issues and solutions correctly.

These statements point towards a final, common facet of caretaker marginalization, the 'crazy cat lady' stereotype. This emerged in a number of contexts during the course of this study. One key informant who had founded a small organization explained that cat rescues need to be especially professional and treat their work like a business in order to be taken seriously rather than considered 'crazy cat ladies'. During the time I spent with one caretaker, we visited a friend's farm where a number of feral cats had been relocated. Although this friend was glad to accept the cats, while my guide was occupied elsewhere he told me that she was a "crazy cat lady" because this was her "whole life". He further stated that "you can care too much", and cautioned me not to turn out the same way. Furthermore, one caretaker informed me that she had not told her family that she devotes part of her life to caring for a number of colonies, for fear of what they will think. She further stated that her boss and coworkers thinks she's crazy because she cares for a colony around her workplace. Similarly, one study participant informed me that:

> The tricky part with that is that you have to get past the "you are just a crazy cat lady" kind of mentality amongst the general population. Even my friends and my coworkers laugh at me for what I do. I don't really get the humour in it, but they do kind of poke fun because they just look at the stereotypical, the vision of what a person who has cats is, kind of slightly crazy. So that's the biggest obstacles I think.

Another participant described the difference between cat rescue and dog rescue, noting the stigmatization in the latter:

> It's unfortunate that you can rescue dogs and be a saint, rescue cats and you're nutty. Because I know many good people in the group, and we aren't crazy cat ladies, we're just concerned about how people perceive cats.

These views can also be found in the scientific literature. For example, Dauphiné and Cooper (2009) write: "In many cases, the characteristics and behaviour of people involved in TNR are suggestive of the psychiatric disorders described in problematic animal hoarding" (213). This statement is made without any supporting evidence, and serves to perpetuate a harmful stereotype.

These examples can be thought of in terms of intersectionality. Intersectionality describes the process by which multiple categories or identities function or come into being simultaneously to reproduce interdependent operations of power (Hovorka, 2012). In this case, the categories of gender and species function to create a subject that is marginalized by dominant discourses. The stereotype is not 'crazy cat person', but 'crazy cat lady'. Assumptions are made about the gender of the caretakers, which were largely supported by this study's breakdown of 90% females in the colony caretaker/animal welfare group. It also isn't 'crazy animal lady', as wildlife rehabilitators, and as mentioned above, even dog rescuers, do not face the same sort of stereotyping and denigration. Something in the identities of being a woman, and associating with the particular species cat, functions to label one as overemotional, irrational, and mentally questionable. It takes away any credibility, or the possibility that the choice to engage in caretaking could be motivated by an informed consideration of evidence and ethical reasoning.

Recently, feminist scholars have highlighted the importance of a politics or ethics of care in informing our relations to the non-human world. For instance, Donovan and Adams (2007) write that an ethical relationship with animals based on feminine principles of care involve: emphasis on context, situations, and particularity over abstract, universal rules; rejection of

hierarchical dualisms; and, a focus on attending to individuals, rather than animals as aggregates. Another important dimension of the care tradition is its political nature. Adherents to care theory argue that along with attending to the needs and suffering of individual animals, we also need to focus on the political and economic factors which have resulted in their situations (Donovan, 2007). Similarly, Michel (1998) discusses the politics of care in wildlife rehabilitation, and writes: "Recently, social theorists, especially feminists, have embraced the practice of care as a political action of resistance to the inequities associated with the nature-culture dualism" (p. 170). Overall, future work could investigate the ways in which the privileging of holistic outlooks and scientific principles operate to marginalize those who care for animals on an individual basis.