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Through the Shadows of Roadkill

The more-than-human city as a zone of entangled lives and deaths is an understanding yet to be fully realized. – Van Dooren & Rose 19.

Introduction. Spotting the bodily remains of lost lives smeared into the pavement is a common occurrence I experience when driving through urban and rural landscapes. In North America, the name we give to these urbanized dead bodies is "roadkill." This article problematizes how we often ignore and turn our gaze away from roadkill. Speaking to this problem, I argue that turning towards rather than away from roadkill allows us to bear witness to the death of an animal, and this bearing witness to roadkill enables the unfolding of an intimate engagement with animal death. Our acknowledgment of roadkill is crucial because bearing witness to these bodies opens the possibility for reflecting on how these bodies once possessed lives and identities of their own. In this article, I bear witness to roadkill by acknowledging and exploring the lives of these beings through their rendered roadkill identities.

This article aims to contribute to the literature on human-animal relations and animal death through an analysis and critique of the banality of animal death, as exemplified with the case of roadkill. Much of the literature on human-animal relations and animal death problematizes the violent, yet normalized, ways in which animals are made killable within industrial capitalism (Noske; Torres; Shukin). These discussions of animal life and death are often shaped by analyses of the animal industrial complex, within which the intensive production and killing of animals for meat and other animal products unfold (Arcari 69). Rosenberg defines animal agriculture as "the managed reproduction and destruction of nonhuman life for the expansion of (qualified) human life" (70), providing an analysis of how systematized and sexual violence of Berkshire swine bodies was a core strategy in their reproduction and killing as livestock capital. Taking a different approach, Arcari engages in a critique of meat production and consumption by problematizing how we normalize the killing of animals for meat through language, rendering animals invisible through their commodified identities as "livestock" and "units of production" (69; 81). Cudworth focuses on the ways in which domesticated animals are subjected to normalized violence and killing. For example, she examines how (sick and rescued) companion animals and research animals are "euthanized," while livestock animals are "slaughtered" where, despite these different classifications (or euphemisms) for killing, the logic of a "non-criminal putting to

death" of animals is at work (7). Discussing violence and animal death differently, Morin argues that the exploitation and incarceration of animals within industrial spaces such as the slaughterhouse and animal laboratory parallels the exploitation of human prisoners held within the confines of the prisoner execution chamber (1317). She draws our attention to how institutional and normalized forms of killing successfully function according to the extent to which bodies are "animalized," where this animalization of incarcerated bodies provides the foundation for their violent yet normalized "killability" (1317; 1319).

It is not my intention to suggest that these discussions of human-animal relations and animal death are problematic. These scholarly contributions are essential, given the variety of conceptual tools they provide us with for exercising ethical relations with animals. However, shedding light on an area that has received less scholarly attention, an analysis of the banality of animal death such as roadkill, can deepen how we understand animal death by opening space for discussing and reflecting on animals killed outside the confines of industrialized killing. This conversation encourages us to critique how we problematically normalize roadkill by shedding light on our (often neglected) role in their production.

Several scholars have examined roadkill in critical ways and offer important insights for this article. Dennis Soron engages in an analysis of roadkill by discussing the problematic ways in which Western culture commodifies roadkill. Drawing attention to this commodification enables us to consider the problems that shape our encounters with roadkill and the kinds of practices that prevent us from having ethical relations with them. I argue that roadkill commodification spectacularizes and humorizes animal death, shaping human-roadkill relations in unintimate and unethical ways. Alexandra Koelle discusses roadkill through her analysis of intimate bureaucracies, which she defines as an extensive study of animal movements and habitat types made up of assemblages of paper, policies, and people (655). These practices, Koelle argues, form an agential world of accountability and counting. As I will explore, Koelle's notion of intimate bureaucracies assists with carrying out an analysis of intimate human-roadkill encounters. I discuss Soron and Koelle's analyses in more detail throughout this article to better articulate my discussion of roadkill and human-animal relations.

In this article, I problematize how we often fail to acknowledge roadkill animals and argue that our relations with roadkill warrant ethical kinds of engagement, which I explore through an analysis of death and intimacy. Intimate engagement with animal death strengthens how we understand the complexity of human-roadkill relations,

while simultaneously providing us with tools for addressing how to engage in these relations in ethical ways. As I make clear, death does not inhibit our relations with roadkill animals but instead acts as a catalyst for them. I address how we can intimately acknowledge the death of those rendered as roadkill and discuss how this acknowledgement creates opportunities for locating ourselves in their shadows. Lastly, I advocate for an acknowledgement of roads as relational spaces upon which humans and roadkill are brought together in entangled encounters.

To carry this discussion forward, I begin by describing what I refer to as unintimate bureaucracies to address the common ways in which human practices deny roadkill care and attention. I discuss several examples of unintimate bureaucracies that impact roadkill in different places across North America. Some of the examples that I look at include the Toronto Animal Services' roadkill disposal practices and the Ontario Ministry of Natural Resources and Forestry's rules regarding the consumption of roadkill meat. A discussion of unintimate bureaucracies provides a foundation for understanding and exemplifying the kinds of practices that Koelle's analysis of intimate bureaucracies seeks to move away from. I then turn to a discussion of Koelle's analysis of intimate bureaucracies and road ecology in more detail. To develop my analysis of an ethical and intimate engagement with roadkill and animal death, I examine intimate bureaucracies and road ecology in relation to Deborah Bird Rose's notion of "shadows," which illuminate roads as spaces where the living encounters the dead. By extending Rose's analysis to roadkill, I demonstrate the critical ways in which humans and roadkill are entangled. As I hope to make clear, through the shadows of roadkill our relationality with roadkill beings continues to flourish.

Unintimate bureaucracies. I define unintimate bureaucracies as statistical practices of organizing information about roadkill that narrowly define them through quantifiable measures. Unintimate bureaucracies aim to count and dispose of roadkill bodies; however, they do not, for example, account for roadkill species diversity or aim to mitigate animal death. Exemplifying unintimate bureaucracies, the Toronto Animal Services states that it receives approximately 10,000 calls regarding roadkill annually (Winsa). In 2011, the response team collected and disposed of approximately 7,500 bodies, stating that the most common animal carcasses found within the city of Toronto were: 1) raccoons (3,258), 2) squirrels (1,533), 3) cats (1,336), 4) birds (354), 5) dogs (229), 6) skunks (191), 7) opossums (155), 8) rabbits (142), 9) rodents (86), and 10) groundhogs (69). Although this list may not initially read as problematic, upon closer inspection it exemplifies unintimate bureaucracies. By cataloging several beings into the problematic category "rodents," this list of data collection makes individual species such as rats, for

example, hard to locate and ethically acknowledge as a distinct species with different kinds of characteristics and navigational needs. Failing to acknowledge the diversity of roadkill prevents us from mitigating the extent to which our technologized actions impact animals. As a result, this kind of data collection restricts our ability to engage with roadkill intimately. Helping to complicate these numbers and address the lack of attention that is missing from them, Soron argues that "flattened fauna" statistics are often always incomplete because they fail to account for the many wounded animals who stumble off the road to die out of sight (112). Soron's critique of "flattened fauna" statistics draws attention to the unaccounted for, and critically sheds light on how, when hit by a vehicle, some animals refuse to remain in their struck locations, perhaps demonstrating a will to die in a more remote space of their choosing. Considering how animals might slip through the cracks of their statistical control can allow us to critically acknowledge them as beings who possess wants, needs, demands, and identities. However, unintimate bureaucracies depict (accounted for) roadkill animals as one-dimensional objects in need of collection and disposal, and this has problematic implications for how we think about animals— both living and dying— as bodies whose identities and lives lack meaning.

Many policies that govern the systematic collection and disposal of roadkill exemplify unintimate bureaucracies. For example, the Toronto Animal Services Emergency and Mobile Response Unit stresses that specific guidelines must be followed when individuals attempt to move dead animals lying near their property. Listed on the *Toronto 311* website is the following set of guidelines: "Do not touch the dead animal with bare hands. Wear gloves or use a double plastic bag to pick it up and place it in another plastic bag. Wash your hands … bag the animal and place it on the curb for pick up (this does not apply to owned/pet animals)" ("Dead animal removal — on city or private property"). The animals that are collected by the response team are then disposed of through cremation. Akin to practices of garbage disposal, these acts fail to enable a deeper acknowledgment of the lost lives and bodies located in the bags.

Exemplifying unintimate bureaucracies are statistics on roadkill that quantify and calculate death based on economic loss associated with property damage. For example, in the United States in 2009, cost comparisons associated with vehicle damage had shown that collisions with moose resulted in $30,760 worth of damage, collisions with elk resulted in $17, 483, and deer-vehicle collisions, perhaps due to the smaller size of deer, produced damage costs of $6,617 ("Wildlife-Vehicle Collisions in Canada: A Review of the Literature and a Compendium of Existing Data Sources"). Different methods for data collection that produce these analyses include police reports,

insurance claims, and maintenance contractor records. Reducing animal lives to economic loss represents roadkill as aggregated bodies whose deaths negatively impact human capital. Absent from these methods for understanding and knowing roadkill are critical acknowledgements of the individual bodies whose lives and identities are lost to vehicle collisions. A systematic analysis of roadkill, which the work of unintimate bureaucracies **is** built upon, fails to account for more complex and intimate ways of engaging with and understanding these animals.

Unlike roadkill beings who are collected and disposed of via cremation, or those equated with costly vehicle damage, other roadkill bodies are collected and consumed as food. On the one hand, roadkill consumption demonstrates the bureaucratically, unintimate ways in which we collect and dispose of roadkill animals, providing little (or no) attention to the animal lives that once embodied roadkill vessels. Find Law Canada, an organization providing legal information on a wide range of topics, states that laws regarding roadkill vary by province, where in Ontario, for example, individuals can eat roadkill after registering the animal with the Ontario Ministry of Natural Resources and Forestry ("Can you keep roadkill?"). Some roadkill animals targeted for such consumption include black bears, deer, beavers, rabbits, and moose. Find Law Canada explains that roadkill is the safest when it is fresh, where indicators of this include bodies with clear eyes while bearing no maggots, fleas, or flies. Outlining how to legally register an animal, Find Law Canada states that "roadkill enthusiasts have to either mail in a form — called a Notice of Possession — to the MNRF or, for the more tech-savvy, create an online profile on the ministry's website. If everything is okay, the MNRF will issue a Confirmation of Registration that allows the holder of the roadkill to legally consume the meat." Supporting this protocol, the Dead Animal Disposal Act specifies that "no person shall collect a dead animal unless the person is the holder of a license as a collector" ("Dead Animal Disposal Act, R.S.O., 1990, c. D. 3"). These practices administratively limit the avenues through which we can engage with roadkill as bodies accompanied by a history, context, and an identity beyond that of fresh meat. Find Law Canada specifies an exception to the rules of registration by stating that humans cannot consume roadkill on the endangered species list. Perhaps it is because of their scarce existence that governing agencies deem endangered roadkill as non-consumable. However, despite the logic that supports this exception, it exemplifies how the lives and deaths of animals are hierarchically arranged, denoting some animals — and their deaths — with more ethical acknowledgement than others.

Advocating for what I argue are unintimate practices of roadkill consumption, PETA (People for the Ethical Treatment of Animals) defines roadkill as "meat without

murder" ("Meat Without murder"). The organization frames the consumption of roadkill meat as a more compassionate way for humans to consume animals by eating animals who were once "free" rather than confined within violent systems of livestock production (Soron 112). PETA's stance on roadkill consumption alludes to unintimate practices of consumption because it problematically and ironically hyper-commodifies roadkill bodies as "ethical" meat. The automobile industry plays a crucial role in the industrial production and consumption of agricultural animals, given how animal agriculture could not function without the support of industrial transport trucks that haul thousands of animals every day from farms and feedlots to slaughterhouses. PETA's position on roadkill consumption therefore fails to account for the problematic link between the production of roadkill bodies and agricultural animals that petro-capitalism makes possible. PETA's logic also supports a way of thinking that absolves humans from their role in hitting and killing animals with their automobiles, ignoring the violence of roadkill death. Alongside this, in its negation of the violence these animals experience, PETA's description of meat without murder valorizes the "freedom" of roadkill animals as a means for moralizing their consumption. However, when we conceptualize animals who live outside of the industrial animal complex as inherently "free," we fail to account for how human activity limits the lives of most animals. Roadkill deaths exemplify the daily limitations animals endure as a result of this activity. Brashares et al. address this lack of freedom in their analysis of "nocturnal refuge," where they discuss how wildlife animals are becoming more nocturnal as a response to human activity (1232). Seeking "nocturnal refuge" as a means of avoiding human contact exemplifies one of the ways in which the day-to-day lives of animals are subjected to human disturbance.

Although the consumption of roadkill exemplifies practices of unintimate bureaucracies, conceptualized differently, it also animates a possibility for intimately engaging with animal death. Offering insight here, Evans and Miele discuss the intimate relationships that emerge from eating; they describe eating as a deeply visceral experience that brings together the intermixing and fusion of bodies (3). Evans and Miele explain how practices of eating allow for the emergence of something new between the consumer and consumed that was not there before (4). Extending this kind of thinking to roadkill consumption opens possibilities for exploring how roadkill consumption can enable intimate practices. For example, through our absorption of roadkill, animal bodies become intimately dispersed within ours, resulting in the establishment of fleshy connections that fuse animal bodies with human bodies. When we consume the bodies of roadkill through this physical and symbolic fusion, we become entangled with their deaths. Consuming the death of roadkill entails our

acknowledgement of them as beings who once possessed lives. We locate ourselves in roadkill identities by reflecting on our roles in inflicting the kind of death from which these identities emerge. However, for this kind of intimacy to unfold, critical attention to and respect for the roadkill bodies one chooses to consume is vital. *If* it is possible to consume roadkill intimately, it is necessary that we acknowledge the lives that once possessed their bodies rather than merely treating their bodies as flesh for consumption.

Roadkill Commodities. The numerous ways in which we commodify roadkill signals our lack of political, intimate, ethical, and compassionate attention to them. Soron's analysis of roadkill commodification draws attention to some of the problems that prevent possibilities for our encountering of death in intimate ways. We can create alternative avenues for engaging with roadkill by understanding and shedding light on these problems. Roadkill commodities such as cookbooks, cotton-stuffed toys, crude comical prank toys, glass wear, and candy exemplify the many ways in which the desecrated bodies of animals are consumed and rendered into comic spectacles of domination (Soron 109). Roadkill commodities absolve human responsibility and fetishize this violence by rendering these animals as figures who seem to invite and enjoy their own victimization (117). This enjoyment is animated in the silly faces of cotton-stuffed plush toys that look like roadkill, the sweet tastes afforded by sugar candies made with gelatin that look like dead animals, and cook-books labeled, "Bambi Helper," suggesting that deer willingly offer themselves up as dinner.

Roadkill commodities such as plush toys and gummy candies use the reality of roadkill as an avenue for mocking animal death by attempting to make it funny. These commodities manufacture an imitation of animal death, creating a niche market that makes roadkill fun to consume. Alongside this, roadkill commodities encourage and impede our ability to take roadkill subjects seriously; in other words, they allow us, as consumers, to consume animal death without taking it seriously. An interesting and problematic characteristic of these commodities is the way in which they are spectacularized and tailored to young consumers, impacting how children develop ideas about roadkill and animal death. Roadkill plush toys and candies, for example, invite children to consume and engage with ideas of roadkill that shape how they understand roadkill as "cute," "funny," and "tasty." This commodification promotes an unethical and unintimate human acknowledgement of roadkill because it represents the real and fallen lives of animals as mere objects of human consumption (for human profit). Problematically shaping how we understand roadkill, these commodities negatively impact how we might carry out human-roadkill encounters, constraining our ability to exercise intimate human-roadkill relations.

Intimate Bureaucracies. Absent from unintimate bureaucracies and roadkill commodification are the kinds of political and ethical attention that characterize what Koelle refers to as "intimate bureaucracies." She defines intimate bureaucracies as an extensive study of the diverse and far-ranging array of animal movements and habitat types made up of assemblages of paper, policies, and people that form an agential world of accountability and counting (655). Koelle explains that road ecologists engage in intimate bureaucracies by examining roads as networks in the living landscape that can be altered to be more responsive to the multispecies that use them (657). Road ecologists seek to mitigate the often-fatal infrastructure through which humans and animals are brought together. One of the goals of road ecology is to increase highway opportunities for animals, as the highway names a dangerous zone that intersects with the biological corridors of many animals (652). Biological corridors refer to animal routes that fail to align with asphalt markings, which are often only recognizable to species who use them (651). Via her analysis of intimate bureaucracies and its relation to road ecology, Koelle examines the connections among science, policy, and human-animal corridors, arguing that "a pressing and lively world emerges when one takes seriously the scientific and regulatory worlds that deal with roadkill" (657). Intimate bureaucracies bring attention to the entanglement of humans, animals, habitats, and automobiles, complicating the simplicity of understanding roadkill as bodies in mere need of collection and disposal.

Intimate bureaucracies provide ethical and intimate attention to roadkill, given the way they attempt to evaluate, know, and understand the biological corridors of animals who become victim to automobile collisions. By taking roadkill seriously through ethical and intimate acts of paying attention, counting, and mitigating animal deaths, intimate bureaucracies challenge our turning away from roadkill. This act of turning away signals the ways in which we fail to acknowledge the lives that roadkill possessed. In these moments, we also fail to consider the children, parents, friends, and other subjects who roadkill animals leave behind. Thinking about these relationships allows us to acknowledge the multiplicity of animal identities that shaped these familial and social connections.

Providing further insight on roadkill and relationality, Koelle emphasizes how humans, animals, habitats, and automobiles shape the ecology of roads, illustrating the road as a space upon which nonhuman nature and human culture fuse (652). The following passage exemplifies the intricate and complex ecology of roads:

> Out on the highways and single lane roads of North America, the categories of "nature" and "culture" are hard to separate. Snakes bask on paved roads. Some get run over, and their bodies attract scavengers who find a steady food source along the asphalt. Eagles gorge themselves on carrion, becoming so heavy that they need a running start before they can fly. Cars often hit them before they are airborn. Bighorn sheep glean salt from de-icing agents stuck in the cracks of the pavement. Bats roost under highway bridges, and the moving that keeps grasses short along medians can increase forage for small mammals. (652)

This passage addresses the entanglements of roadkill by highlighting how roads provide space for the living and the dead, where through relational acts, the death of some animals becomes a means for the livelihood of others. In these moments, living animals are brought into relation with non-living animals, re-using and recycling these bodies within their own. The road is a space where the dead and living encounter one another. The road, in other words, is a relational space within which animals — dying and living — and humans are brought together in entangled relations.

I bring Rose's analysis of shadows into conversation with Koelle's analysis of intimate bureaucracies to provide a rich lens for understanding intimate bureaucracies, and more specifically, encounters between the living and the dead. Bringing these concepts into conversation with one another helps to reveal how the lives of snakes, big horn sheep, eagles, and bats, for example, are rooted in the deaths and bodies of those from whom they forage. An analysis of shadows adds depth to Koelle's intimate bureaucracies by strengthening how we understand the entanglement between the living and the dead that the work of road ecology and intimate bureaucracies center on. Rose describes how living beings — both human and nonhuman — live within shadows cast by the deaths of those who came before them. She explains that human and nonhuman animals precede one another, where the birth and life of one being exists within relation to the death of another. Life, according to Rose, always exists in the shadows of death.

Shadows of death provide a strong foundation for conceptualizing the intimate ways in which we encounter roadkill. An intimate engagement with roadkill can emerge from the practicing of intimate bureaucracies, whereby critical attention is given to understanding roadkill subjects and mitigating their death, all the while acknowledging the entanglement we share with roadkill bodies. Or, in an alternative way, this intimacy can emerge via the fleshy entanglement of roadkill and those humans who — practicing

reflexivity and respect towards roadkill — consume their bodies as food. Rose's analysis of shadows allows us to think about relationships among humans, animals, and roadkill, offering a lens for intimately understanding roadkill as bodies that become recycled and carried within the lives of others. She explains that when we see ourselves in the shadows of others, we understand how our existence is made possible through the co-constitution of others (2). The shadows of death that precede us, Rose expresses, must be understood as a multispecies shadow, "immensely great and never [fully] knowable." Shadows provide us with tools for examining our implication in the deaths of animals, thus enabling us to understand how roadkill (and, more broadly, animal death) is inherently relational. Exemplifying human-animal relationality, shadows connect us to animals by disclosing our shared vulnerability to death. Death provides an avenue for taking our shared vulnerability and relationality as human animals with nonhuman animals seriously. Attempting to locate ourselves within the shadows of roadkill can allow us to "see the fate of animals as a reflection of our own enduring vulnerability and mortality, reminding us how the social world we have collectively constructed also violates, objectifies, constrains, and oppresses members of our own species" (Soron 123). Reflecting on our relationality with roadkill through the shadows of death can thus teach us about our shared (human-animal) mortality.

Mitigating roadkill is not always possible. Collisions exemplify one of the negative consequences of driving that impact both human and animal lives, and an understanding of the relationality of roadkill needs to be grounded in an acknowledgment of this. However, drivers too often identify roadkill collisions as inevitable and normalize the killing of animals on the road as meaningless. Accepting that collisions occur and, at times, cannot be prevented does not justify our turning away from roadkill. Our reliance on driving shapes our normalization of animal death, which roadkill are a by-product of. Driving, although normalized and often treated as a mundane daily practice by many, is not a morally or ethically emptied practice because it ties us to others with whom we share the roads (and are responsible to and for when sharing roads). Morally and politically responding to roadkill requires that we acknowledge our responsibility to these animals by problematizing the normalization of their deaths. When we understand our relationality with roadkill, we recognize our entangled role in animal death and, in the process, create space for considering how roadkill bodies once possessed lives and relationships that matter(ed). Roadkill relationality demonstrates how driving is an act that morally and ethically binds us to human and animal others.

Conclusion. To understand the overlooked lives of roadkill, we must critically examine our entanglement with them and reflexively locate ourselves in the production of their death. A thorough discussion of unintimate bureaucracies helps to shed light on practices that limit our abilities for intimately engaging with roadkill. A strong understanding of unintimate bureaucracies also helps to weaken the grounds upon which these practices unfold, thus opening different avenues for encountering roadkill in ethical ways. Rose's analysis of shadows strengthens Koelle's notion of intimate bureaucracies because it illuminates the human-animal relationality that is always present within practices of intimate bureaucracies and road ecology. More specifically, shadows provide a framework for conceptualizing the entanglement of life and death, revealing how this entanglement is vital to the identities of animals and humans. It is easier to consider how humans shape animal identities and animal deaths, given the asymmetry that too often characterizes human-animal relations. However, a consideration of how animals, and more critically, animal deaths, shape human identities is less discussed and therefore warrants further investigation. More must be done to prevent the death of animals summoned as roadkill. Helping with this, Koelle's work details how processes of roadkill data collection must foreground details about the diversity and behaviors of animals, where this data can then be used, for example, in projects of road restructuration. Exemplifying what these roadkill measures might look like, the Washington State Department of Transportation has revealed its construction of a wildlife overpass that will allow animals to cross the Interstate 90 expressway by providing an alternative pathway for those who roam the highway's cascades (Regimbal). The 66-foot-long archway will span the Interstate 90, mitigating the risks of human-animal automobile collisions. The construction of this passageway represents the goal of mitigating roadkill death and signals our attention to the presence, agency, and lives of animals as mobile subjects who require us to share the roads.

However, going beyond a conversation of roadkill prevention, it has been my goal to bring attention to the already fallen, describing different practices and ways of thinking that can initiate gestures of justice toward these beings. Exercising gestures of justice towards roadkill requires that we un-normalize roadkill by weakening the kinds of perceptions that see roadkill death as banal — or do not see it at all. Seeing and understanding roadkill bodies as animals with lives that matter(ed) and whose deaths we are always a part of provides the foundation upon which we can build intimate human-roadkill encounters.

Works Cited

Arcari, Paula. "Normalised, human-centric discourses of meat and animals in climate change, sustainability and food security literature." *Agriculture and Human Values* 34.1 (2017): 69-86.

Brashares, Justin S., Carter, Neil H., Gaynor, Kaitlyn, & Hojnowski, Cheryl E. "The influence of human disturbance on wildlife nocturnality." *Science* 360.6394 (June 2018): 1232-1235.

"Can you keep roadkill?" *Find Law Canada – Thompson Reuters Canada Limited*. Accessed 1 December 2017. Online.

Cudworth, Erica. "Killing animals: sociology, species relations and institutionalized Violence." *Sociological Review* 63.1 (2015): 1-18.

"Dead Animal Disposal Act, R.S.O., 1990, c. D. 3." - repealed on March 27, 2009. *Queen's Printer for Ontario*. Accessed 1 December 2017. Online.

"Dead animal removal — on city or private property." *Toronto 311*. Accessed 1 December 2017.

Evans, Adrian B. & Miele, Mara. "Between food and flesh: how animals are made to matter (and not matter) within food consumption practices." *Environment and Planning D: Society and Space* 30.2 (Jan 2012): 1-17.

Koelle, Alexandra. "Intimate Bureaucracies: Roadkill, Policy, and Fieldwork on the Shoulder." *Hypatia* 27.3 (2012): 652-665.

Morin, Karen. "Carceral Space: Prisoners and Animals." *Antipode* 48.5 (2016): 1317-1336.

Noske, Barbara. *Beyond Boundaries: Humans and Animals*. Black Rose Books, 1997.

Regimbal, Alec. "I-90 archway is half of planned wildlife overpass." *Yakima Herald.com* 17 July, 2017. Accessed 23 November 2017. Online.

Rose, Deborah Bird. "In the shadow of all this death." *Animal Death*. Jay Johnston & Fionna Probyn-Raspey, eds. Sydney UP, 2012. 1-20.

Rosenberg, Gabriel. "A Race Suicide among the Hogs: The Biopolitics of Pork in the United States, 1865–1930." *American Quarterly* 68.1 (2016): 49-73.

Shukin, Nicole. *Animal Capital: Rendering Life in Biopolitical Times*. U of Minnesota P, 2009.

Soron, Dennis. "Roadkill: Commodity Fetishism and Structural Violence." *Topia* 18 (2007): 108-123.

Torres, Bob. *Making a Killing: The Political Economy of Animal Rights*. AK Press, 2007.

Van Dooren, Thom & Deborah Bird Rose. "Storied-places in a multispecies city." *Humanimalia* 3.3 (2012): 1-27. Accessed Dec. 2, 2017. Online.

"Wildlife-Vehicle Collisions in Canada: A Review of the Literature and a Compendium of Existing Data Sources." *Traffic Industry Research Foundation*. Accessed 23 December 2017. Online.

Winsa, Patty. "Roadkill: 3,000 raccoons, 1,300 cats and more are casualties of city streets annually." *The Star* 25 Aug. 2012. Accessed 13 December 2017. Online.