On 18 April 1879, Andrew Boyd’s cow died. Mr. Boyd was a licensed dairyman who kept several milch cows in Winnipeg, supplying the young city with fresh milk for many of its more than 4,000 residents. While grazing in the city, one of Mr. Boyd’s cows wandered onto the city nuisance grounds to take a meal. Feasting on garbage, as it turned out, proved to be fatal. The unfortunate beast died, leaving the dairyman with one less cow for his business. Estimating the value of his cow at about sixty-dollars, Andrew Boyd petitioned Winnipeg’s city council for compensation. He argued that he was entitled to some form of reimbursement for his loss because the city dump, was “not fenced, and there [was] no protection against cows eating garbage deposited in the said nuisance ground.” The city, according to Boyd, had produced a hazard for which it was responsible to offer some form of protection for his urban cattle. Boyd’s solution was to fence the garbage, not the cows.¹

The death of Andrew Boyd’s cow points to what was the central concern of the management of domestic animals in the city of Winnipeg in the nineteenth century: the interaction of non-human animals with the urban environment and its effects on both human and non-human health. Because domestic animals were so indispensable to the

city-building process, Winnipeg’s earliest city authorities sought to create a system of regulation and management that would secure the rational exploitation of animals for food and labour. While the city council, according to Alan Artibise, generally neglected public health matters until the passage of its first comprehensive public health by-law in 1899, it did not ignore matters relating to the management and regulation of urban animals. Artibise’s study of nineteenth-century Winnipeg claims that “City Council approached any and all public health matters in a piecemeal and often callous fashion.” Yet the earliest municipal regulations of urban animals reveal that, in fact, public health regulation in the city of Winnipeg in the nineteenth-century began with a focus on the interaction between humans and non-human animals in the urban environment. The emergence of more comprehensive public health reform was born out of significant regulations trained on the management of non-human animals. Furthermore, these regulations were both guided and limited by the autonomy of domestic urban animals.  

This research builds on recent work in urban environmental history and challenges earlier studies of the history of urbanization in Canada by looking at the role of non-human animals in city-building. Canadian urban history research reached an apex toward the end of the 1980s, following a period of intense concentration on urban studies with important work by social historians, including John Weaver, Alan Artibise, Gilbert Stelter, and Norbert MacDonald. Landmark collections of essays in urban history, as well as a handful of monograph-length studies, provided a critical base of research that drew

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the attention of Canadian historians to matters of the city and local history, something which had been largely overlooked.

Recent work in urban environmental history has attempted to apply a different approach to understanding Canada’s urban past. While earlier social histories of cities offer excellent studies of topics relating to urban environments, including public health administration, waterworks and wastewater systems, and solid waste disposal, they tend to focus primarily on social and political factors that shaped urban planning and municipal politics. This kind of approach to the study of cities embodies the common perception of the urban environment as an exclusively human-constructed space. Instead, environmental historians have attempted to study cities as biological spaces influenced by both human and non-human actors. For instance, US urban environmental historian Martin Melosi seeks “a slightly broader definition” in his approach to studying the history of cities, “in which the physical features and resources of urban sites (and regions) influence and are shaped by natural forces, growth, spatial change and development, and human action.” This kind of approach has also influenced research in the Canadian context, most evident in the 2005 publication of a special issue of Urban History Review/Revue d’histoire urbaine on urban environmental history.

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Largely missing from this Canadian literature, however, is an analysis of the non-human animals that shaped the city-building process. Humanities research in the emerging field of animal studies has brought this to light in the context of the US, the most prominent recent work being Clay McShane and Joel Tarr’s history of horses in nineteenth-century US cities. The obvious exception to this would be Bettina Bradbury’s pioneering research on urban animals in Montreal from 1861 to 1891. Based on an analysis of nineteenth-century census data, Bradbury offers valuable insights into the often hidden history of animals in the urban environment. She very persuasively demonstrates the centrality of small-scale animal-raising to the economy of families in Montreal during this period. Furthermore, she shows that animal husbandry in nineteenth-century Montreal was uniquely urban in nature rather than derivative of rural agricultural economies. Her analysis, however, does not consider the relationship between these domestic animals and their urban surroundings. Focusing on the municipal government’s campaign to prohibit the keeping of pigs in the city by the 1870s, Bradbury does not closely examine the environmental and biological factors that contributed to this effort. While there is certainly ample evidence of class prejudice and bias behind the pig prohibition, the nature of this species of animal and its often violent and destructive behaviour within an urban environment played a significant role in its subsequent banishment from the wards of cities like Montreal and New York City.5

5 Clay McShane and Joel Tarr, The Horse in the City: Living Machines in the Nineteenth Century (Baltimore: Johns Hopkins University Press, 2007); For addition US studies of the history of urban animals see also Susan D. Jones, Valuing Animals: Veterinarians and Their Patients in Modern America (Baltimore: Johns Hopkins University Press, 2003); Jennifer Mason, Civilized Creatures: Urban Animals, Sentimental Culture, and American Literature, 1850-1900 (Baltimore: Johns Hopkins University Press, 2005); Bettina Bradbury, “Pigs, Cows, and Boarders: Non-Wage Forms of Survival Among Montreal Families, 1861-91”.
Environmental historians have offered two dominant conceptual frameworks for understanding the place of domestic labour and food animals in the nineteenth-century urban environment. The first comes from the research of McShane and Tarr who describe the urban horse as a “living machine.” This metaphor (derived, in part, from Richard White’s concept of the Columbia River as an organic machine) aptly encompasses both the biological nature of domestic animals and their exploitation as property and sources of mechanical and chemical energy. They contend that horses survived into the twentieth century by occupying an ecological niche in cities through partnership with humans as form of “co-evolution, not domination.” The concept of the living machine can be usefully applied to a broader range of urban animals, including cattle, swine, and poultry. If, as McShane and Tarr argue, “[h]umans could not have built nor lived in the giant, wealth-generating metropoles that emerged in that century without horses,” I contend that the same argument can be applied more generally to a wider range of domestic urban food and labour animals.6

The second dominant conceptual framework for understanding the place of domestic animals in nineteenth-century cities comes from Ted Steinberg who describes these cities generally as “the organic city.” “Crammed with people and factories, in addition to the pigs, horses, mules, cattle, and goats used for food and transport,” Steinberg characterizes the nineteenth-century US city as “a dark and filthy place.” Yet this mixture of human and non-human city-dwellers provided valuable ecological services and interconnections of food production and waste disposal, especially the collection and redistribution of manure for agricultural production in the immediate rural hinterland. Steinberg finds that by the end of the nineteenth-century, humans extirpated

6 McShane and Tarr, *The Horse in the City*, 1-2.
animals from the urban environment “reinforcing the division between urban and rural life and contributing to the illusion of the city as somehow existing outside of nature.” We see this concept incorporated into Canadian research, like that of Michèle Dagenais’ work on Montreal, in which she finds by the end of the century, “a generalized separation between people, their activities (especially those connected with the production of food and waste), and their repercussions on the environment.” In the case of Winnipeg in the nineteenth-century, early by-law regulations reveal evidence of this “organic city” in which humans and non-human domestic animals established a form of co-existence or symbiosis in the formation of a multi-species habitat.7

The city of Winnipeg, situated at the confluence of the Red and Assiniboine Rivers in southern Manitoba, was incorporated in November 1873. The city itself was centred on a small cluster of businesses and homes at the intersection of two former wagon trails, Main and Portage roads, and encompassed parts of the old Red River colony and the Hudson’s Bay Company property at Upper Fort Garry (Map 1). Following Manitoba’s troubled entry into Confederation and the first Riel resistance, the village of Winnipeg grew slowly in the early years of the 1870s as migrants from Ontario began to resettle near the old Red River colony. By 1874, the population of Winnipeg had swelled to roughly 3,700 people in a relatively concentrated central core of settlement. The economy of Manitoba during this period transitioned from the fur trade to agriculture and

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Winnipeg emerged as a regional metropole and agricultural market. It was, according to Artibise, “the first truly urban community in the British Northwest.”

As a comparatively young western city, Winnipeg in the nineteenth-century was an overwhelmingly multi-species environment. Census records from 1891 and 1901 reveal the extent to which non-human animals were ubiquitous in the urban environment (Figures 1). In 1891, enumerated domestic animals accounted for about forty-one percent of the population of Winnipeg. By 1901, this number had dropped to thirty-four percent. When compared to a more urbanized, larger city like Montreal (Figure 2), it is clear that Winnipeg was at an earlier stage of urban development, a period during which, as Dagenais suggests “city and countryside were more intimately connected.” Of this proportionately large urban animal population in Winnipeg, “Hens and Chickens” constituted the most common type of livestock animal people kept in the nineteenth century (Figure 3). By 1901, census enumerators recorded 15,673 hens and chickens within the city, about seventy-two percent of all enumerated animals. In terms of biomass, however, horses and cattle probably constituted a much larger proportion of urban animal populace.

The census, of course, is an imperfect record inevitably shaped by the processes of enumeration. Because many of these animals were destined for the dinner plates of their human owners, any record of the urban animal population can only possibly represent a snapshot. Furthermore, the timing of the census count cannot capture the great fluctuation of the urban animal population, which dropped by a steep margin during the winter. Despite these limitations, census records to provide a picture of what was an

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8 Artibise, Winnipeg, 7-10.
intermixed urban environment, one in which humans and animals clearly shared space.

Domestic food and labour animals were an inescapable fact of urban life in the nineteenth-century (Figure 4).¹⁰

Because of the ubiquitous nature of non-human animals in Winnipeg, they inevitably played a central role in the city-building process, one which historians have, in part, overlooked. Artibise’s analysis of the early history of public health regulation in Winnipeg offers a thorough and astute reading of the failure of the city council to provide adequate public health measures. In terms of spending and resources, he is probably correct in his assessment that “[o]f all the city’s various departments that of health suffered most from neglect in the years preceding 1900.” Yet, his analysis does not acknowledge the earliest efforts to construct a regulatory framework for public health and the central role of the management of urban animals in the development of Winnipeg’s public health system. While a major typhoid outbreak in 1903-04 led to the establishment of a more elaborate and formal public health system with greater powers and resources, this was built upon a regulatory framework designed to manage animals and their relationship with the urban environment. Urban animal management in Winnipeg in the nineteenth-century focused on the interactions with the built environment in order to mitigate and abate adverse health effects on both humans and non-human animals. These by-law regulations were intended to facilitate the “central attributes of nineteenth-century conceptions of good governance and well-ordered society,” according to William J. Novak, which included the ability to “regulate trade and secure an urban food supply, to

¹⁰ For more on the variability of census records of urban animals see Bradbury, “Pigs, Cows, and Boarders.”
promote internal improvements and manage public properties, and to guarantee the safety
and security of the populace.”

The prominence of early Winnipeg municipal regulation of urban animals is
evident in the city’s first scavenging by-law, passed in March 1874. This regulation was
the city’s eighth by-law and was passed even before the by-law which determined the
guidelines for the proceedings of council. The scavenging by-law offered a simple
licensing system for the removal of solid waste, night soil, manure, and the disposal and
burial of animal bodies. The city contracted this work to individuals who purchased
annual scavenging licenses, which set guidelines for hauling fees and rates. It also
established a municipal nuisance ground for the disposal of a vast array of urban waste
products, including the large quantities of animal waste and bodies accumulated in the
city. While the council may not have immediately hired a medical health officer in 1874,
they did hire James Collins and Charles Granger as the first licensed scavengers for the
removal and disposal of animal and human waste products in order to better manage the
health of the urban environment. A year later, the city council passed a more detailed
scavenging by-law, which set out specific duties and obligations for licensees. Under the
1875 by-law, the city required scavengers to retrieve and remove at the request of the
Chief of Police any “nuisance, offal, garbage, night soil, manure, or other offensive
matter on City or in or upon any premises, house, lot, or enclosure within the City of
Winnipeg.” Because much of this waste came from urban animals, scavengers were
permitted to charge specific rates for the removal of manure and bodies. For instance,

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dead horses and cattle were collected at two dollars apiece while smaller animals, such as sheep and pigs went for half the coast at one dollar.\textsuperscript{12}

The city’s scavenging by-law was one component of a complex of by-law regulations designed to control and manage urban animals. The centrepiece of this regulatory framework was the public health by-law, first passed in May 1874, which was overwhelmingly focused on urban animals. Of the thirty clauses in this first public health regulation, fifteen pertained specifically to the control of animals and animal by-products. The first section of the by-law offered a simple and limited set of rules to guard the urban food supply by prohibiting the sale or import of any “tainted, damaged or unwholesome fish, meat, fruit, vegetables, or article of food of any kind whatsoever.” In a general sense, these clauses aimed to protect humans from the potentially adverse health effects of contact with animal bodies, in this case as food.\textsuperscript{13}

Most of the regulations in the public health by-law were intended to supervise the relationship between animals and their surrounding urban environment to mitigate the impact of animals as a pollutant. For instance, water carters were forbidden from drawing water from “any water hole, or opening in the ice, used as a watering place by cattle, horses, or other animals, and which by reason of such use, or from any other cause, has become foul or impure.” All city residents were prohibited from depositing “any dead carcass, manure, filth, dust, or nay offensive matter or substance whatever” on any city lot within the municipal boundaries of Winnipeg. Should an animal die within the city, the owner of that animal was required to have it “buried at least four feet below the surface or drawn or removed beyond the limits of the City.” Again, to prevent

\textsuperscript{12} CWA. By-Law 8, 23 March 1874; By-Law 13, 2 March 1875.
\textsuperscript{13} CWA. By-Law 12, 4 May 1874.
contamination and to control animal bodies as a form of urban pollution, the public health
by-law specifically banned the disposal of animal carcasses in any place it may come into
contact with flowing water, including any “ditch, coolie, sewer, or drain, in the City or in
the River opposite the City.” The Chief of Police was ultimately responsible for the
disposal of all unclaimed animal carcasses and therefore had the power to direct licensed
scavengers to carry out this duty.\textsuperscript{14}

Guided by the prevailing nineteenth-century miasmic theory of disease
dissemination, the city council sought to limit the contamination of Winnipeg’s air by
foul smells through the regulation of the conditions of animal-keeping in private residents
and businesses. Animals were not outlawed. In fact, the early public health regulations in
Winnipeg merely established rudimentary controls over what was considered a very
necessary urban animal populace. The public health by-law stipulated that “any person
who shall keep swine, dogs, foxes, or such other Animals on their premises, shall
maintain the houses, buildings or pens in which the same shall be kept in such a clean
state that the neighbors or passengers may not be incommoded by the smell therefrom.”
Similarly, any businesses that kept animals or handled animal by-products and allow
“such establishments or premises to become nauseous, foul, or offensive, [were] liable to
the penalties provided.” This was especially true of slaughter houses, which while not
initially excluded from the city boundaries, were in fact crucial municipal facilities for
the supply of meats. City council established powers for the Chief of Police to inspect all
slaughter houses for cleanliness and to ensure that blood and offal were properly
disposed.\textsuperscript{15}

\textsuperscript{14} Ibid.
\textsuperscript{15} Ibid.
The by-law also granted the city the power to appoint a medical health officer to inspect and enforce these early public health regulations. While the enforcement of this first public health by-law may not have been entirely comprehensive, it was not as slipshod as Artibise suggests. Contrary to Artibise’s claim that Dr. G.H. Kerr was appointed as the first municipal health officer for Winnipeg in 1881, a report by Stewart Mulvey from 1 February 1875 indicates that he was appointed as the first health officer in 1874. Mulvey claimed to have conducted “upwards of one hundred and fifty official inspections on premises throughout the city” and that he issued “one hundred and eighty official notifications in writing.” Mulvey’s extensive inspections occurred within the context of a summer outbreak of an epidemic he only described as a “malignant fever.” His report pointed to several deficiencies in the city’s public health by-law, including the provision which permitted residents to dump manure, animal carcasses, and other offensive matter just outside the municipal boundaries. This, he claimed “will prove offensive to the persons in the vicinity as well as dangerous to the public health.” While city council generally ignored Mulvey’s recommendations, his report does show that the first public health by-law was not simply dead letter.16

Of course, non-human animals have the capacity to exercise their own degree of autonomy, something which Winnipeg’s city council sought to constrain through its municipal pound regulations. The city’s pound by-law was passed very shortly after the public health by-law in 1874, comprising the third component of this regulatory framework over urban animals in Winnipeg’s early history. Domestic livestock animals, such as horses, cows, and pigs, regularly transgressed the increasingly ordered boundaries of the urban environment, causing problems for property owners and impeding

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16 Artibise, *Winnipeg*, 225; CWA. City Council correspondence, Stewart Mulvey, 1 February 1875.
transportation. For example, Richard Code, a Point Douglas property owner faced the ever-present reality of free-roaming urban animals on a regular basis as horses and cattle fed on his modest market garden in 1879. He used the provisions of the city’s pound by-law to seek retribution and compensation from the owners of “certain horses and cattle which had done damage” to his property. Mr. Code captured eight delinquent cows on one occasion, delivered them to the city pound, and forwarded a petition to the council for reimbursement for his losses.17

While the original 1874 pound by-law forbade all horses, pigs, cows, mules, oxen, and goats from running at large within the city, it also recognized that, at this early stage in the city’s urban development, these kinds of animals would invariably break the rules. The city hired a pound keeper who was required to follow a relatively strict set of guidelines for how to properly capture and care for animals within the pound. He was required “to furnish the animal with good and sufficient food, water, and shelter during the whole time such animals continues impounded” The by-law also established the earliest rules for negotiating property damage and trespass disputes over the actions of offending animals. These disputes hinged on whether or not the property owner could prove that he had erected properly constructed fencing to guard his land against roaming animals. The regulation also allowed residents, such as Richard Code, to capture stray animals and deposit them in the city pound.18

Despite the modest efforts to establish a modicum of control over Winnipeg’s urban animals in the city’s early years, the pound keeper was ultimately limited in his ability to exercise an omnipresent authority over a population of animals which inhabited

17 CWA. By-Law 13, 1 June 1874; City Council correspondence, Richard Code, 22 September 1879; Frank Land, City Pound Keeper, 1 December 1879.
18 CWA. By-law 13, 1 June 1874.
Winnipeg on a nearly one to one ratio with its human inhabitants. Even by 1877, residents such as James Spence complained that “[t]here are large droves of cattle running around loose at night doing considerable damage to my property and fence.” Similarly, Richard Foseley reported that his brick yard on Portage Road was “nightly annoyed by cattle running over my Bricks and yard making the yard unfit to work on the next morning.” The city’s health officer Dr. G.H. Kerr struggled to convince council to grant him wider powers to control human behaviour over the disposal of animal bodies. He regularly drew attention to the fact that residents were simply hauling dead horses and cattle to the prairie just outside the municipal boundaries a depositing them on a growing open pile. In December 1881, he claimed to have counted “some thirty or forty carcasses] in number strewed over the prairie close to the hospital.,”

The earliest by-law regulations in the city of Winnipeg in the nineteenth-century reveal the centrality of non-human animals in the city-building process. While these regulations sought to manage and control cows, horses, and pigs, they did not exclude these animals from the urban environment. Instead, early municipal regulations were directed at managing the interactions between non-human animals and the urban environment in order to mitigate the impact of animals and animal by-products on human and non-human health. Animals were vital components for the establishment of cities, playing crucial roles in maintaining the urban food supply and providing much needed energy for transportation and construction through their labour. By-law regulations sought to manage these animals to provide more rational exploitation.

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19 CWA. City Council correspondence, James Spence, 9 July 1877; Richard Foseley, 9 July 1877.
Human and Non-Human Populations of Winnipeg, 1891

Figure 1.) Enumerated human and non-human populations of Winnipeg in the nineteenth-century. Sources: Census of Canada, 1891 and 1901.
Figure 2.) Enumerated human and non-human populations of Montreal in the nineteenth-century. Sources: *Census of Canada*, 1891 and 1901.
Non-Human Animal Population of Winnipeg, 1891

![Pie chart showing percentages of different non-human animal species in 1891.]

Non-Human Animal Population of Winnipeg, 1901

![Pie chart showing percentages of different non-human animal species in 1901.]

Figure 3.) Enumerated non-human population of Winnipeg in 1891 and 1901 by species. Sources: *Census of Canada*, 1891 and 1901.
Figure 4.) Draught and transportation animals, like these oxen in 1899, were the most visible urban animals in nineteenth-century cities like Winnipeg. Source: Alan Artibise, *Winnipeg: An Illustrated History* (Ottawa: National Museums of Canada, 1977).