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Animals and Urban Environments: Managing Domestic Animals in Nineteenth-Century Winnipeg

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On 18 April 1879, Andrew Boyd's cow died. Mr Boyd was a licensed dairyman who kept several 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 morning, one of Mr Boyd's cows wandered onto the municipal 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 fewer cow for his business. Estimating the value of his cow at about $60, 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 council, according to Boyd, had produced a hazard for which it was responsible to offer some form of protection for his urban cattle. Boyd's recommendation was to fence the garbage, not the cows.[1]

The death of Andrew Boyd's cow points to one of the primary challenges municipal governments in Canada faced in the nineteenth century – the management and regulation of domestic animals within emerging urban environments. Winnipeg and other cities were not exclusively human spaces; they were multi-species habitats, inhabited by human beings and domestic animals alike. As Andrea Gaynor has found in the case of Australian suburbs, 'it is hard to imagine that they were once home to an assortment of agricultural practices – a dairy here, a market garden there, a piggery down by the river'. Domestic livestock animals played a particularly important role in urban development as sources of food and labour. Cows, horses, pigs and other domestic animals

were once everyday sights on the streets of Canadian cities where they lived and worked alongside their human owners. As this chapter shows, Winnipeg's city council and municipal staff attempted to use by-law regulations to bring order to this ecosystem in which humans exploited domestic animals for work, food and companionship. According to William J. Novak, such by-law regulations were intended to facilitate the 'central attributes of nineteenth-century conceptions of good governance and well-ordered society', which included the ability to 'regulate trade and secure an urban food supply, to promote internal improvements and manage public properties, and to guarantee the safety and security of the populace'. As such, these regulations helped to establish Winnipeg as an environment intended to sustain both human and domestic animal populations in what can be described as an asymmetrical symbiotic relationship. That is to say, both humans and domestic animals thrived in the city, but humans derived greater benefit and advantage from this relationship. In the nineteenth century, Winnipeggers lived among many different species of animals and they were dependent upon the bodies and energy of those animals for the maintenance of a habitable urban environment.[2]

British, European, American and Canadian immigrants often envisioned the colonization and resettlement of the Canadian West as a civilizing mission. As George Colpitts illustrates in his analysis of the changing relationship between humans and wildlife in Western Canada, many immigrants arrived expecting to encounter wild animals in an untamed and uncivilized environment. For example, L. M. Fortier, Chief Clerk of the Immigration Department for the Canadian federal government, recounted a story of a government travelling agent in the early twentieth century who had to dissuade a new European immigrant 'from investing some of his small capital in firearms and knives to kill buffalo, wolves and other wild animals which his fellow passengers had persuaded him were to be encountered in the streets of Winnipeg'. Instead, the streets of Winnipeg at the turn of the century were filled with cattle, horses, pigs, sheep and chickens, animals which themselves were immigrants in the North American environment.[3]

Urban livestock animals were critical components of the expansion of the British Empire and the Dominion of Canada. 'Empire', according to James Beattie, 'gave rise to environmental change never before experienced in human history'. In the case of nineteenth-century Canadian expansion into the Northwest, the introduction of novel species of domestic animals, including cattle, horses and pigs, was one of the most ecologically transformative

moments in the region's history. Over the course of the late nineteenth and early twentieth centuries, previously unknown species of animals spread throughout the prairies, replacing the disappearing herds of North American plains bison. As Alfred Crosby reveals in his groundbreaking research on Europe's imperial demographic takeover of what he calls 'Neo-Europes', domestic livestock animals, along with novel diseases and Eurasian food plants, played a pivotal role in the biological expansion of Europe from 900 to 1900. Domestic livestock animals in North America were, as Virginia DeJohn Anderson argues, 'creatures of empire', novel species that accompanied and assisted European colonists with territorial expansion and the displacement of Aboriginal people.[4]

However important these animals were to the expansion of the agricultural frontier in North America, they also played a critical role in the development of towns and cities. In the late nineteenth and early twentieth centuries in the Canadian West, urbanization and railway construction drove colonization and massive agricultural expansion. The emergence and development of Winnipeg as a regional metropolitan centre occurred almost concurrently with the widespread introduction of domestic livestock animals to the Canadian Prairies. To fully understand the role of domestic animals as novel species and creatures of empire then, historians must also consider those that roamed the streets of emerging urban environments.[5]

Insights from urban environmental history can be usefully applied to studies of the ecological consequences of British imperialism. Urban historians, including Martin Melosi, Christine Meisner Rosen, Joel Tarr, Harold Platt and others have all attempted to examine human–nature relations within cities and the environmental consequences and effects of city building. Most recently, Melosi has called upon urban environmental historians to move away from what he calls a 'nature/built environment nexus', a conceptual framework where cities are divided into two environments, 'a natural world that tends to exclude humans, and an artificial world – a built environment – that is solely the product of human action'. Melosi contends that historians continue to treat built environments as artificial and outside of nature rather than part of a single ecosystem composed of human and non-human organisms. Urban environments, of course, are embedded within the material world, and they are subject to the same environmental influences and principles as anywhere else. To understand British imperialism as a global extension of eco-cultural networks, cities must be incorporated into this analysis. As such, the role of introduced domestic animals in the British Empire must be explored not only for its effects

on agriculture on the rural frontier, but also for its place within emerging towns and cities.[6]

The study of animals helps to move urban environmental history beyond this dichotomy of nature/built environment by treating cities as ecosystems that accommodate numerous species rather than as exclusively human habitat. Urban environmental history scholarship, however, has been slow to integrate studies of animals into the history of cities, instead focusing almost exclusively on the impact of humans on the natural environment. For instance, Bernd Herrmann contends that 'in terms of environmental history, cities are specific environments of a specific species, comparable to large-scale beaver lodges or termite mounds'. The relationships between multiple species, however, influence the formation of even beaver lodges and termite mounds, as they do cities more broadly. Peter Atkins attributes the absence of animals from urban history to an anthropocentric view of cities in the twentieth century in which 'the category "urban" acquired a transcendentally humanist quality in which animals played only bit parts, to satisfy our hunger for companionship or for meat'. To correct this view, Jennifer Wolch, Kathleen West and Thomas E. Gaines have called for a 'transspecies urban theory' that foregrounds a spectrum of human–animal relations in cities. New historical research by Jennifer Mason, Joel Tarr, Clay McShane, Catherine McNeur, Etienne Benson, Dawn Day Biehler and others has begun to breakdown this anthropocentric view, shedding new light on historical processes of urbanization that encompass human and non-human animal actors. This study of Winnipeg adds to this research, demonstrating the ways in which humans and domestic animals both shaped and constructed urban environments on the frontier of Canadian imperial expansion into the prairies.[7]

Early Winnipeg's domestic animal population

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 former Red River colony and the Hudson's Bay Company property at Upper Fort Garry. Following Manitoba's troubled 1870 entry into the Canadian confederation, the village of Winnipeg grew slowly in the early years of that

decade as migrants from Central Canada, the United States, and abroad began to resettle in the southern part of the province. 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 a focus on the export of furs to the development of agriculture, and Winnipeg emerged as a regional metropolitan centre and agricultural market. It was, according to Alan Artibise, 'the first truly urban community in the British Northwest'.[8]

In the late nineteenth and early twentieth centuries, Winnipeg was an overwhelmingly multi-species environment, composed of human and domestic animal populations. Census data provide the very rough contours of the populations of certain domestic animal species in Canadian cities. Although census records are very limited, ultimately representing only a snapshot of urban animals in nineteenth-century Winnipeg, they nevertheless offer useful insights. The census, of course, is an imperfect record inevitably shaped by the processes of enumeration.[9] Because many of these animals were destined for the dinner plates of their human owners, any demographic record of urban animals can only possibly offer a static representation of what was a dynamic and fluctuating population. Furthermore, the timing of the census count could not capture the seasonal variability of the urban animal population. Despite these limitations, census records provide a picture of what was an intermixed urban environment, one in which humans and domestic animals clearly shared space. Domestic animals were an inescapable fact of urban life in the late nineteenth and early twentieth centuries.[10]

Beginning in 1861, Canadian census enumerators collected demographic data about domestic animals in cities, towns and villages. The Bureau of Agriculture and Statistics first established the practice of counting livestock along with people on both farms and individual family dwellings within major cities in Canada West (part of the Canadian colony that would later become the province of Ontario), including Hamilton, Kingston, London, Ottawa and Toronto, for the 1860–1 census.[11] After Confederation, the Dominion Bureau of Statistics continued the practice of gathering data regarding the keeping of animals in cities, tracking the populations of a variety of species of animals, including horses, oxen, dairy cows, 'other horned cattle', sheep, swine and even hives of bees. The 1891 census added fowl to the count, including turkeys, geese, ducks, chickens and 'other fowl'. In 1911, during Canada's fifth census, enumerators continued to gather data on urban animal populations as they were specifically instructed

that '[w]here grain, fruit and root crops are grown, and domestic animals are kept, and fruit trees, vines, small fruits, etc., are planted, in Cities, Towns and Villages, the statistics of them (including values) should be taken as carefully as the statistics of crops and animals on farms'.[12] Although these census records excluded animals from industrial operations and other businesses, including street railway stables, dairies and piggeries, they nonetheless offer a glimpse into the history of domestic animals in Canadian cities.

Census records between 1891 and 1911 reveal the extent to which domestic animals were ubiquitous in the urban environment of Winnipeg. Canadian census enumerators consistently recorded the populations of five species of domestic animals said to be living on individual lots in Winnipeg. These included horses, cows, sheep, pigs and chickens. The demographic histories of these species of domestic animals provide insight into the changing environment of Winnipeg in the late nineteenth and early twentieth centuries as the city experienced rapid industrialization and urban growth. In 1891, these five species of domestic animals constituted 41 per cent of all species enumerated in the census, including humans (Figure 11.1). The domestic animal population of Winnipeg changed alongside transformations of the urban environment and the human population of the city. Winnipeg experienced extraordinary human population growth during the period from 1871 to 1911 (Figure 11.2). This was especially evident in the population boom between 1901 and 1911 when the city's resident population jumped from 42,340 to 136,035. In contrast to the growth of the human population of the city, domestic animals became a smaller proportion of the species enumerated in the census relative to human population growth in the years

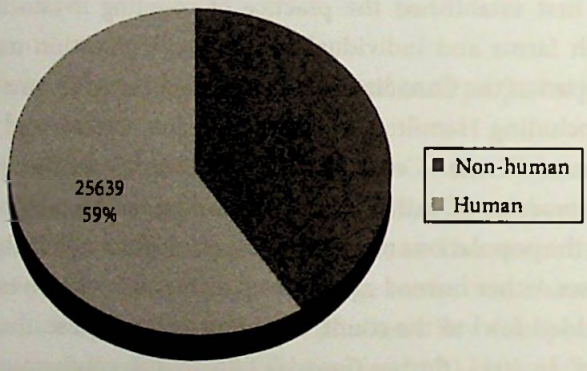

Figure 11.1 Human and non-human populations of Winnipeg, 1891.
Source: Census of Canada, 1890-91 Vol. 4 (Ottawa: 1897).

after 1901. For example, of the four predominant large domestic ungulate species documented in the census, the cow and horse populations saw growth between 1891 and 1901, but witnessed significant decline thereafter (Figure 11.3). Similarly, the chicken population – although more numerous

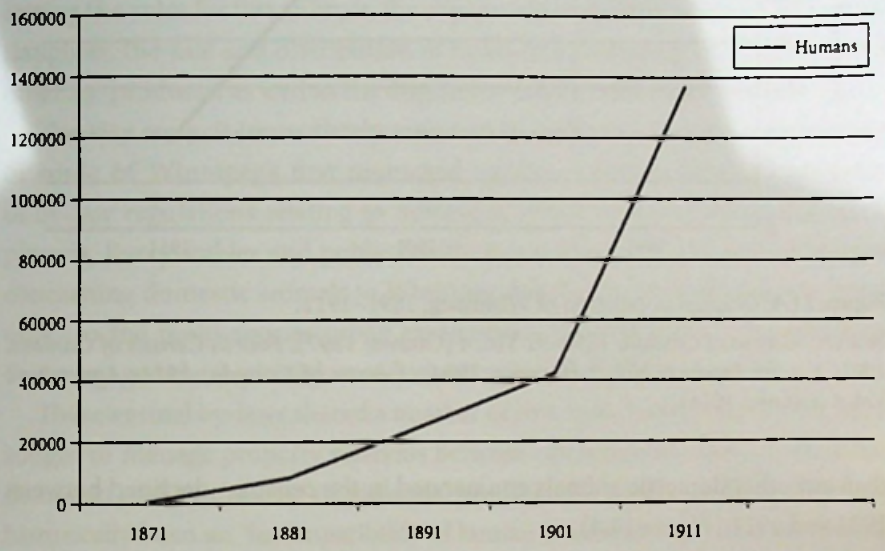

Figure 11.2 Human population of Winnipeg, 1871–1911.

Source: Alan Artibise, *Winnipeg: A Social History of Urban Growth, 1874-1914* (Montreal: McGill-Queen's University Press, 1975), 130–31.

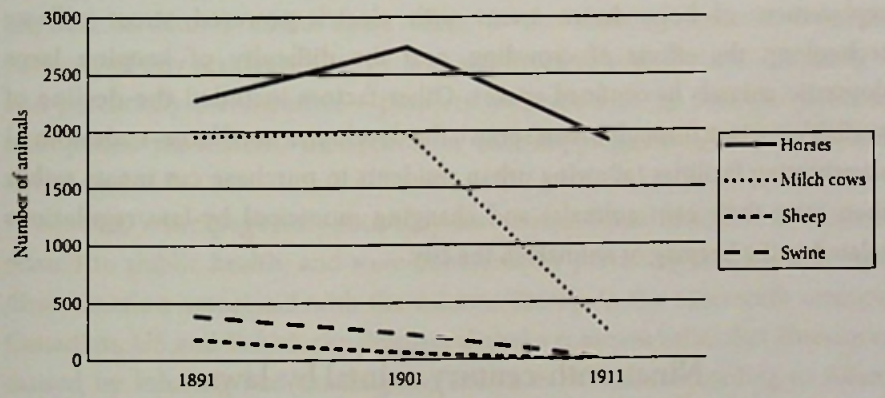

Figure 11.3 Large domestic ungulate population of Winnipeg, 1891–1911.

Sources: Census of Canada, 1890-91 Vol. 4 (Ottawa: 1897); *Fourth Census of Canada, 1901: Natural Products* Vol. 2 (Ottawa: 1904); *Census of Canada, 1911: Agriculture* Vol. 4 (Ottawa: 1914).

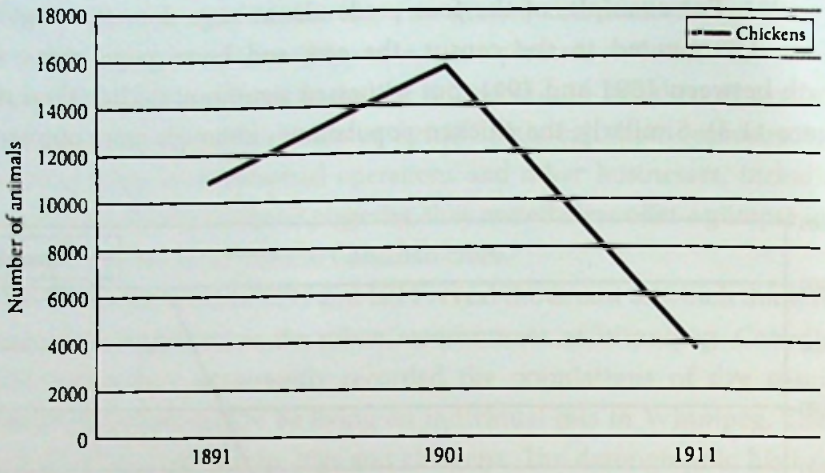

Figure 11.4 Chicken population of Winnipeg, 1891–1911.

Sources: Census of Canada, 1890–91 Vol. 4 (Ottawa: 1897); *Fourth Census of Canada, 1901: Natural Products* Vol. 2 (Ottawa: 1904); *Census of Canada, 1911: Agriculture* Vol. 4 (Ottawa: 1914).

than any other domestic animals enumerated in the census – declined between 1901 and 1911 (Figure 11.4).

Prior to 1901, the census data for the City of Winnipeg shows an increase in the urban domestic animal population followed by a sharp decline. The transformation of the city from a habitat with a mix of humans and domestic animals to one in which domestic animal populations were proportionally smaller can be explained by a number of different factors, including the replacement of horse-drawn trams with electric-powered street railway technology, the effects of crowding, and the difficulty of keeping large domestic animals in confined spaces. Other factors included the decline of available pasture through urban sprawl, the development of large-scale animal slaughtering facilities (allowing urban residents to purchase cut meats rather than raise their own animals) and changing municipal by-law regulations related to the keeping of animals in the city.

Nineteenth-century animal by-laws

Domestic animals were so ubiquitous within the emerging urban environment of Winnipeg that they immediately fell under the authority of the municipal government, following the incorporation of the city in 1873. The Manitoba

legislature granted the city a wide range of powers within the city charter to regulate the domestic urban animal population. The charter included powers to protect the interests of both animals and humans. For example, the city council had the authority to pass by-laws 'for preventing cruelty to animals', and 'for restraining or regulating the running at large of any animals'. In addition to setting the rules for live animals, the city was also responsible for managing their slaughter, the sale and distribution of meats, the processing of animal fats and other by-products, as well as the disposal of animal bodies and waste.[13]

The city council immediately exercised its authority over domestic animals in some of Winnipeg's first municipal by-laws. These included a wide array of by-law regulations relating to nuisances, streets, public markets, dog taxes, pounds, livery stables and public health. It is evident from the earliest by-laws concerning domestic animals in Winnipeg that the city council sought to bring order to the multi-species urban environment through a series of regulations that managed the exploitation of domestic animals for human benefit.

These animal by-laws shared a number of common characteristics. First, they sought to manage property relations between city residents. As Mark Fiege has demonstrated in the case of airborne weeds in the American West, there has historically been an 'incompatibility of human boundaries and forms of mobile nature – water, soil and organisms – that those boundaries could not contain'. Because they are living, moving organisms *and* property, domestic animals complicated property relations even further. As a form of mobile property, domestic animals transgressed static property boundaries and threatened to damage buildings, fencing and other forms of stationary property. Similarly, physical structures could cause harm to the roaming domestic livestock property of city residents. City by-laws attempted to balance these competing – and potentially incompatible – property interests, with the desire to facilitate unimpeded movement, transportation and shipping throughout the urban environment.[14]

Second, Winnipeg's early animal by-laws demonstrated concern over matters related to public health, and were influenced by prevailing notions of disease dissemination associated with the miasma theory. In the nineteenth century, Canadian, US and British city dwellers shared a common belief that illness was caused by inhaling bad-smelling air, known as miasma. According to Adam Rome, nineteenth-century US public health officials and urban reformers believed that 'the decay of organic matter caused air-borne sickness'. Peter Thorsheim has shown, through his analysis of the changing definitions of air pollution, that public health regulations in nineteenth-century Britain first

focused on 'an invisible gas thought to be given off by decaying plant and animal matter'. Because of this prevailing thinking about disease, city regulations in Winnipeg targeted decaying organic matter and even living organisms as sources of pollution. This had direct implications for the regulation of domestic urban animals. In his history of public health regulation in early Winnipeg, Artibise argues that 'of 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 during a period Martin Melosi characterizes as the 'age of miasmas', which focused in large part on the management of urban livestock animals. While a major typhoid outbreak in 1903 and 1904 led to the establishment of a more elaborate and formal public health system with greater powers and resources, this was built atop a regulatory structure designed, in part, to manage domestic animals and their relationship with the urban environment as potential sources of miasma. Urban animal management in nineteenth-century Winnipeg focused on the interactions among humans, animals and the built environment in order to mitigate and abate perceived adverse health effects.[15]

The third characteristic of Winnipeg's by-laws governing the keeping of animals in the city was that, in addition to seeking to protect human health, they also sought to protect animal health. Such modest animal protection provisions in these by-laws had multiple influences, including new thinking about human–animal relations encompassing anti-cruelty arguments in the late nineteenth century in Britain, the United States and Canada (see also Chapter 8). In 1894, social welfare reformers in Winnipeg followed trends in other parts of Canada and the rest of the British Empire by forming the Society for the Prevention of Cruelty to Women, Children and Animals. These organizations, according to Georgia Sitara, shared two interconnected goals, 'kindness to animals and civilizing human behaviour'. By the end of the nineteenth century, Winnipeg's animal by-laws began to reflect some of these anti-cruelty interests, but they always embodied some protections for animals as forms of property. Because horses, cattle, pigs, chickens and other domestic animals were valuable sources of capital as food and labour, the city council's by-laws demonstrated concern for the well-being of animals even prior to the formal organization of anti-cruelty societies in the city.[16]

Finally, these early by-laws were, for the most part, non-exclusionary. That is to say, prior to 1900, Winnipeg's city council set restrictions on animal husbandry within the urban environment, but the city's by-law regulations did not entirely exclude domestic animals. Bettina Bradbury's pioneering research

on urban animals in Montreal from 1861 to 1891 reveals the centrality of small-scale livestock husbandry to the economy of families in the city during this period. In spite of municipal efforts to control and constrain the keeping of pigs in Montreal, city authorities did not entirely exclude livestock husbandry in the nineteenth century. The same was true in the case of Winnipeg. In fact, nineteenth-century urban animal regulations created legitimate space within the law for animals to live and work in the city.[17]

Scavenging and public health

Urban domestic animal management in nineteenth-century Winnipeg sought to mitigate adverse health effects on both humans and animals resulting from interactions among animals, humans and the built environment. This approach to 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, passed even before the by-law that 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 urban waste products, including the large quantities of manure and numbers of animal bodies found in city streets. The council hired James Collins and Charles Granger as the first licensed scavengers for the removal and disposal of animal and other waste products in order to better manage the health of the urban environment, fearing that decaying animal bodies and waste would emit harmful miasmas. A year later, the city council passed a more detailed scavenging by-law, which set out specific duties and obligations for scavengers. 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 animal bodies. For instance, dead horses and cattle were collected at $2 apiece, while smaller animals, such as sheep and pigs, went for half the cost at $1. The work of city scavengers addressed some of the earliest public-health concerns associated with domestic animals as environmental hazards in Winnipeg. Eventually, by

1899, the regulation of scavengers fell under the auspices of the city health officer.[18]

The earliest scavenging by-laws were just one component of the city's approach to regulating the potential public health and environmental hazards associated with domestic animals. The first public health by-law for the city of Winnipeg was overwhelmingly focused on the management of domestic animals. Passed by the council in May 1874, this by-law included thirty separate clauses, fifteen of which pertained specifically to the control of livestock 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'. Most of the regulations in the public health by-law were intended to supervise the relationship between animals and the 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 any offensive matter or substance whatever' on any city lot within the municipal boundaries of Winnipeg. Should an animal die within the city, its owner 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 contamination and to control animal bodies as a source 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 or standing 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 ordering the disposal of all unclaimed animal carcasses and therefore had the power to direct licensed scavengers to carry out this duty.[19]

Guided by the prevailing 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 on private property. Animals were not outlawed by such regulations. 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 allowed 'such establishments or premises to become nauseous, foul, or offensive, [were] liable to the penalties provided'. This was especially true of slaughterhouses, 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 slaughterhouses for cleanliness and to ensure that operators properly disposed of all blood and offal.[20]

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 George 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 that 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 the city council generally ignored Mulvey's recommendations, his report does show that the first public health by-law was not simply a dead letter.[21]

The city's second health officer, George Kerr, similarly struggled to convince the 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 city limits and 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'. By 1883, the pile had accumulated roughly 189 dead animals that Kerr eventually had burned. Kerr found that city residents who did use the municipal nuisance ground for the disposal of animal carcasses rarely buried the animals. He recommended that the licensed scavengers be paid additional fees to bury these animals, or the city should hire a specific employee to perform this labour.[22]

In 1882, the city continued to face challenges associated with the disposal of dead animal carcasses, urban livestock husbandry and fears regarding fouled, bad smelling air. Dr Kerr reported that 'the nuisance grounds is altogether to[o] small for the amount of dead animals, night soil, manure, and other filth which is carted from the city'. Additionally, he was concerned about 'the filthy condition of the several cattle yards throughout the city' that alarmed nearby city residents, who complained that 'the stench arising from the yards is not very pleasant'. In 1882, the city added some additional provisions to its public health regulations to address some of Kerr's concerns. By-law amendments added regulations for cattle yards or any fenced area where 'three or more cattle, hogs, sheep or calves, are kept for sale or slaughter', to ensure that they 'be kept and maintained in as clean and orderly a manner as is possible, and shall be provided with proper sheds for sheltering and wells for watering stock'. The council also required all cattle yards to be located no closer than twelve blocks away from Main Street.[23]

In 1899, the city council made a substantial alteration to the public health by-law, limiting the number of domestic livestock animals that could be legally kept in the city. As the city's human population grew to nearly 40,000, the city council began to set limits on the number of livestock animals able to be kept on a private lot in Winnipeg. Amendments to the public health by-law in 1899 restricted to just five animals the number of cattle able to be kept in a stable or other building that was within fewer than 200 feet of a residence occupied by someone other than the owner of the cattle. As with other public health by-laws, the purpose of this amendment was to prevent inconvenience and nuisances to neighbours. As such, if one wanted to keep more than five cows, the owner was required to supply the Market, License and Health Committee with 'the consent in writing of all persons so resident within two hundred feet of such stable or other building'. Although this new provision to the public health by-law excluded cattle brought into the city for sale and it still permitted residents to keep other animals on private lots, it very likely circumscribed the ability of urban dwellers to keep cattle in Winnipeg.[24]

Public markets

To complement its broader nineteenth-century public health initiatives, the Winnipeg city council attempted to control the sale and distribution of animals as part of the urban food supply through a public market system. This was an

effort to further protect human and, to a lesser extent, domestic animal health. According to Helen Tangires, 'in addition to building wharves, docks, bridges, and roads, local government was expected to provide facilities for buying and selling food'. In nineteenth-century North America, this was such a common practice that most cities established public markets within the first weeks of incorporation. For example, W. Thomas Matthews's research on Upper Canadian towns found that 'practical matters to law enforcement, internal improvements, public health and sanitation, revenue raising, and the regulation of the public market were uppermost in the minds of Upper Canadians when they advocated the reorganization of municipal institutions'. Public markets were a major component of nineteenth-century urban infrastructure and the primary site for the sale and distribution of live and dead animals in the city.[25]

As a relatively young western city, Winnipeg followed the practices of older Canadian and US municipalities by establishing a public market in 1874, shortly after incorporation. The first market committee selected a site for the market on 25 February 1874 and drafted a public market by-law that the city council passed in April the following year. After numerous construction delays and some political controversy, the first public market in Winnipeg opened in May 1877. 'In earnest, and at an early hour there was quite a rush of customers', according to one newspaper report about the opening of Winnipeg's Central Public Market. The city council later replaced this original building due to construction flaws and inadequate space in 1890 (Figure 11.5).[26]

Figure 11.5 The Central Public Market building in the early 1900s.
Source: City of Winnipeg Archives. Photograph Collection. Box P7 file 78.

The public market by-law regulations established significant municipal control over the slaughter, sale and distribution of live and dead animal bodies in the city. It restricted the sale of all 'fresh, salt, and dried provisions, and fish, including Butchers Meat, Pork, salt and dried meat, Turkeys, Geese, Ducks, poultry, Game, Butter, eggs, Fruit, vegetables, and all Kinds of livestock' to licensed public market sellers. This ostensibly allowed the city to regulate not just the prices of food in Winnipeg, but also the quality. The by-law required the market superintendent 'to cause all dirt and filth in or about the said Markets to be removed with all possible celerity, [and] to inspect all articles brought to the Markets'. All butchers in the city had to be licensed and operate only within the Central Public Market where they were to keep their stalls 'in a clean and proper state'. Lastly, the city council exercised complete control over the sale of live animals, stipulating that 'no horned cattle, calves, swine, sheep, horses, mares, gelding, or mules or anyone of them, brought into the City for sale, shall be sold in any of the Public streets or other places in the said City, before they have been to the Cattle Market and the Market fees have been paid thereon'. Obviously the public market regulations allowed the city to generate revenue through fees and licenses, but it also served some nominal public-health purposes.[27]

In 1885, Winnipeg changed its regulations for the slaughter and sale of animals in the public market, shifting towards the use of slaughterhouses. Amendments to the public market by-law in February 1885 prohibited the slaughtering of live animals 'within the limits of any public markets', and restricted this to licensed slaughterhouses monitored by the city health inspector.[28] These amendments also liberalized previous public market regulations by permitting butchers to open shops outside of the Central Public Market building. The city added provisions for the prevention of cruelty to live animals sold at the public market:

> No person shall slaughter, sell, offer, or expose for sale or barter or trade, the meat of any calf less than four weeks old. Nor shall any person burn, sear, or cut the inner parts of or confine the mouth of any calf by rope, twine or any kind of muzzle; and no person shall in any manner tie or confine by rope, twine or otherwise the feet of any calf, sheep, lamb, swine or poultry, which may be brought to or exposed in the city for sale.[29]

In 1899, the city took further measures to ensure that licensed butchers kept their stalls and shops in a clean and healthy condition, and required them not to 'slaughter, bleed or gut any animal or fish or pluck or remove the feathers from any fowl, poultry or wild game of any description'. Furthermore, the new amendments called upon the sellers to ensure that live animals were 'fastened in

the stalls or to the place or places assigned for such purposes as to secure them from doing injury to any person or being injured by each other', and that no one 'shall in any way ill-treat or be guilty of cruelty towards the same, either by beating them unmercifully or keeping them lying on the ground with their feet tied or otherwise'.[30]

In the late nineteenth century, changes to the public market by-laws in the city of Winnipeg balanced numerous interests, including municipal fiscal matters, the business interests of food retailers, public health, and animal health concerns. As the population of the city grew, those interests became more difficult to balance. Butchers sought reform of the restrictive licensing regulations that prohibited the sale of meats outside of the public market, while the municipal government attempted to retain both its public health oversight and the revenue license fees supplied. Provisions for the prevention of cruelty to animals in the public market by-laws demonstrated shifting attitudes towards the treatment of domestic animals in the urban environment, while the maintenance of public health provisions showed the continued concerns about animals as a source of organic waste and environmental pollution.

Pounds and trespass

In addition to regulating domestic animals for the purposes of safeguarding human and animal health, the city council also monitored and controlled practices of animal husbandry in Winnipeg in the nineteenth century in order to regulate property relations and to bring order to city streets and sidewalks. As they autonomously roamed throughout the urban environment, domestic livestock animals compelled the city council to implement regulations to control livestock husbandry practices through the establishment of a city pound system. As with its public health regulations, Winnipeg's nineteenth-century pound by-laws did not seek to entirely exclude domestic animals from the city. Instead, they created legitimate space within the city's regulatory framework to accommodate the occasionally troublesome presence of horses, cattle, pigs, chickens and other animals that lived and worked in Winnipeg.

Of course, non-human animals have the capacity to exercise their own degree of autonomy, something that Winnipeg's city councillors sought to constrain through municipal pound regulations. The council passed the first pound by-law and hired a city pound keeper in June 1874, complementing the early scavenging and public health by-laws that also regulated domestic animals in the city.

The *Daily Free Press* celebrated the passage of the new by-law, noting that 'we now have a poundkeeper [sic], let some of the unemployed employ themselves in impounding the myriads of pigs and things which infest the streets'. Horses, cows, pigs and dogs regularly transgressed the increasingly ordered boundaries of the urban environment, damaging physical property, impeding transportation and occasionally threatening the human residents of the city. As such, the city council placed new restrictions on the practice of free-range animal husbandry in Winnipeg. The pound by-law forbade city residents to allow any 'horse or bull, or swine of any sex or kind to run at large at any time within the limits of this city'. Significantly, cows and chickens were excluded from this first by-law regulation.[31]

While the original 1874 pound by-law forbade many domestic animals from running at large within the city, it also recognized that these animals would invariably break the rules and that the city would need to mediate such complicated property conflicts as those between animal owners and stationary property owners. The city pound keeper was required to follow a relatively strict set of guidelines for how to properly capture and care for animals within the pound. The by-law required him 'to furnish the animal with good and sufficient food, water, and shelter'. Later by-law amendments even required the pound keeper to milk all dairy cows that he held. While such requirements met the needs of the animals, they were ultimately intended to protect the property interests of the human owners. The pound keeper posted regular notices of all of the captured animals on the gates of the city pound, the police station, local post offices and eventually in the pages of the *Manitoba Gazette*. 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. Furthermore, the regulation allowed residents to capture stray animals and deposit them in the city pound.[32]

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 Winnipeg in such large numbers. Stewart Mulvey, the first city health inspector, considered free roaming animals a public health concern, particularly the pigs that regularly scavenged for food in the streets. He urged the council 'to restrain pigs from running at large', because he found that 'when water is pumped out of cellars or after a shower of rain these troublesome animals

root, roll, and bury themselves in the drains, thus producing the worst kind of stagnant waters to the danger of the health of the citizens'. Just a few months after the appointment of the pound keeper, the problem of free roaming animals persisted. According to an October 1874 *Free Press* report, 'pigs continue to roam the streets and explore gutters, utterly regardless of the poundkeeper [sic]'. Even in the winter of the following year, newspapers reported that 'some pigs continue to trot about the city with frozen feet and bristles, *a la* porcupine, from the coolness of the weather'. In 1877, city resident 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'. 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 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 such occasion, delivered them to the city pound and forwarded a petition to the council for reimbursement for his losses.[33]

To address some of these complaints, the city council amended the pound by-law in October 1880 to include cattle. The city no longer permitted owners of any 'ox, cow or other cattle' to allow their livestock to 'run at large between the hours of nine o'clock at night and five o'clock in the morning'. The city pound keeper's monthly reports provide some insight into the extent to which these amendments were enforced (Figure 11.6). Between May and December 1881, the city pound typically held cattle, horses and pigs, but never more than twenty-four animals in a given month. Cattle seemed to be most commonly held in the summer when owners were most likely to herd their animals on unoccupied lots in the city. However, the pound keeper typically captured pigs throughout the year, and in December 1881 these were the only type of animal held in the city pound.[34]

In 1881, the city added new provisions to its pound regulations, including the integration of previously separate dog licensing and tagging regulations that required all dog owners to purchase tags each year and register their animals with the city police. Because owners could disavow themselves of responsibility for the actions of stray dogs, anyone who allowed 'any dog or bitch to remain about his house or premises shall be deemed the owner thereof for all the purposes of this by-law'. Stray dogs were a persistent problem on the streets of Winnipeg

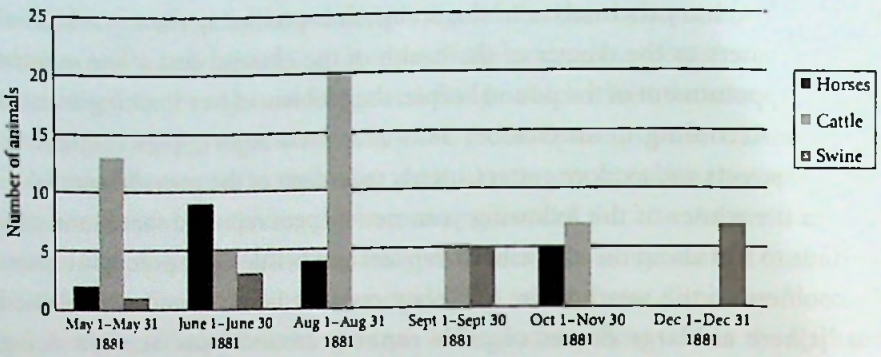

Figure 11.6 Winnipeg city pound records, May to December 1881.
Source: City of Winnipeg Archives, City Council Correspondence, City Pound Keeper Reports, 31 May 1881 to 9 January 1882.

in the 1870s and 1880s. For example, a storeowner named A. J. Symonds wrote to the city council in February 1877 to raise awareness of 'the danger of being beset by savage dogs infesting the public streets of the city'. He was especially disturbed by the number of times he was 'attacked by dogs on Main Street', where on one such occasion he was chased down the street to his store by two particularly vicious dogs that he kept at bay by beating them with a walking stick. In 1885, the city expanded its pound infrastructure to include three different city pounds to address increasing concerns regarding such stray animals. Alderman Henry S. Crotty complained to the city council earlier that year that up to 150 dogs were known to be roaming the streets and that 'it was really getting to be dangerous for women and children to go out, and horses were frequently running away'. Mayor Charles Edward Hamilton even echoed the same concerns and 'mentioned having had to do battle with dogs himself'.[35]

The first new pound, located on a large tract of land on the west side of the city, could accommodate a diverse range of animals, including 'dogs, horses, mules, cattle, swine, bulls, oxen, rams, goats, or other animals together with geese and poultry'. The second pound, located on the south end of the city, included accommodations for all the same animals, except dogs. And the third pound, located on the east side, similarly held all such animals, excluding dogs. In addition to adding new pounds, the council also prohibited the free running of all animals, including cattle and poultry, within a defined boundary in the centre of the city, known as the pound limits. Residents, however, could continue to allow their animals to graze outside of those limits on unoccupied lots. To prevent the problem of runaway horses and other draught animals, the 1885 pound by-law required all such animals to be 'thoroughly secured from getting

loose by strong bridles, halters, reins, ropes or other sufficient means held by the driver or person in charge'. Finally, the new amendments banned all dogs from running at large in the city, especially those deemed to be 'of a vicious or ferocious disposition or accustomed to snap at or bite mankind or if such dog has previously attacked or bitten any person travelling in or along the public street'. The city also specifically prohibited dogs from threatening horses because they could trigger a runaway or possibly a stampede.[36]

Winnipeg's nineteenth-century pound by-laws placed increasingly strict limits on where domestic animals could freely move as both human and non-human population growth caused crowding and greater potential for conflict. Nevertheless, those limits still permitted Winnipeg residents to keep such animals and to herd them within the city. By 1893, the city council had established five separate pounds to accommodate the growth of the urban environment. All domestic animals, except for bulls, goats and swine, were permitted to graze freely outside of the pound limits. Even in subsequent amendments in 1899, the City of Winnipeg continued to permit residents to herd some domestic livestock animals within the municipal boundaries, recognizing still that such animals were crucial to the economy of the city, as important sources of labour and food.[37]

Conclusion

When Andrew Boyd petitioned the Winnipeg city council for compensation for the death of his cow, he knew that he was within his rights to do so. His cow was not out of place in the city. Even by 1900, one could find cattle grazing on unoccupied lots outside of the pound limits. William H. Carre, a local historian and photographer, captured one such creature on the margin of the frame of a photograph of Carlton Street that he included in his souvenir history of Winnipeg (Figure 11.7). Domestic animals were part of the everyday streetscapes of Winnipeg.[38]

In nineteenth-century Winnipeg, humans and domestic animals lived in an asymmetrical symbiotic relationship in which humans derived greater benefit and advantage from the exploitation of cattle, horses, pigs, chickens and other livestock. One of the principal tasks of the municipal government of Winnipeg was to attempt to manage and control this complicated, multi-species environment in which humans and domestic animals lived and worked alongside one another. To do so, the city council created a regulatory infrastructure through by-laws

Figure 11.7 Carlton Street, 1900.
Source: William H. Carre, *Art Work on Winnipeg*, Part 4 (Winnipeg: Wm. H. Carre Company, 1900), n.p.

that would facilitate the exploitation of domestic animals for human needs while safeguarding human health. At the same time, city regulators recognized that these animals performed vital services necessary for the growth and development of Winnipeg. As such, their regulations sought to create legal space within the urban environment for animals to live with some protections against ill-health and inhumane treatment.

The role of domestic animals in the growth and development of Western Canadian cities is an important component of the broader history of Canadian colonization of the Northwest and the biological expansion of the British Empire more generally. Domestic animals were novel species that eventually came to displace indigenous species of North American animals and facilitate Canadian colonial control and authority over land and resources. The pattern of colonization across the prairies was led and shaped by the emergence of new towns and cities. Thus, the case of nineteenth-century Winnipeg reveals that introduced domestic animals were 'creatures of empire' on both the agricultural frontier and within the urban environment.

Notes

1 City of Winnipeg Archives (hereafter CWA). City Council Correspondence. Andrew Boyd to City Council, 21 April 1879; population figures drawn from City Assessment Office figures cited in Alan F. J. Artibise, *Winnipeg: A Social History of Urban Growth, 1874–1914* (Montreal: McGill-Queen's University Press, 1975), 130–1.

2 Andrea Gaynor, *Harvest of the Suburbs: An Environmental History of Growing Food in Australian Cities* (Crawley: University of Western Australia Press, 2006), 1; William J. Novak, *The People's Welfare: Law and Regulation in Nineteenth-Century America* (Chapel Hill: University of North Carolina Press, 1996), 191.

3 George Colpitts, *Game in the Garden: A Human History of Wildlife in Western Canada to 1940* (Vancouver: UBC Press, 2002), 9. This anecdote was documented in James S. Woodsworth, *Strangers Within Our Gates: Or, Coming Canadians* (Toronto: Missionary Society of the Methodist Church, 1909), 37–8.

4 James Beattie, 'Recent Themes in the Environmental History of the British Empire', *History Compass* 10, 2 (2012): 130; Alfred Crosby, *Ecological Imperialism: The Biological Expansion of Europe, 900–1900* (New York: Cambridge University Press, 1986); Virginia DeJohn Anderson, *Creatures of Empire: How Domestic Animals Transformed Early America* (Oxford: Oxford University Press, 2004), 3–4.

5 For more on the role of cities and railways in Canadian colonial expansion on the prairies, see Artibise, 'The Urban West: The Evolution of Prairie Towns and Cities to 1930'. *Prairie Forum* 4, 2 (1979): 237–62.

6 Martin V. Melosi, 'The Place of the City in Environmental History'. *Environmental History Review* 17, 1 (1993): 1–23; Christine Meisn Rosen and Joel A. Tarr, 'The Importance of an Urban Perspective in Environmental History'. *Journal of Urban History* 20, 3 (1994): 299–310; Harold L. Platt, 'The Emergence of Urban Environmental History'. *Urban History* 26, 1 (1999): 89–95; Melosi, 'Humans, Cities, and Nature: How Do Cities Fit in the Material World?'. *Journal of Urban History* 36, 1 (2010): 4.

7 Bernd Herrmann, 'City and Nature and Nature in the City', in *Historians and Nature: Comparative Approaches to Environmental History*, eds. Ursula Lehmkuhl and Herrmann Wellenreuther (New York: Berg, 2007), 226; Peter Aitkins, 'Introduction', in *Animal Cities: Beastly Urban Histories*, ed. Atkins (Surrey: Ashgate, 2012), 2–3; Jennifer Wolch, Kathleen West, and Thomas E. Gaines, 'Transspecies Urban Theory'. *Environment and Planning D: Society and Space* 13 (1995): 736; For more research on the history of urban animals, see Jennifer Mason, *Civilized Creatures: Urban Animals, Sentimental Culture, and American Literature, 1850–1900* (Baltimore: Johns Hopkins University Press, 2005); Gaynor, *Harvest of the Suburbs*; Clay McShane and Joel Tarr, *The Horse in the City: Living Machines in the Nineteenth Century* (Baltimore: Johns Hopkins University Press, 2007); Ann Norton Greene, *Horses at Work: Harnessing Power in Industrial America* (Cambridge: Harvard University Press, 2008); Catherine McNeur, 'The "Swinish Multitude": Controversies Over Hogs in Antebellum New York City'. *Journal of Urban History* 37, 5 (2011): 639–60; Jessica Wang, 'Dogs and the Making of the American State: Voluntary Association, State Power, and the Politics of Animals Control in New York City, 1850-1920'. *Journal of American History* 98, 4 (2012): 998–1024; Etienne Benson, 'The Urbanization of the Eastern

Gray Squirrel in the United States'. *Journal of American History* 100, 3 (2013): 691–710; Dawn Day Biehler, *Pests in the City: Flies, Bedbugs, Cockroaches, and Rats* (Seattle: University of Washington Press, 2013).

8 Artibise, *Winnipeg*, 7–10.

9 For more on processes of census enumeration in nineteenth-century Canada, see David A. Worton, *The Dominion Bureau of Statistics: A History of Canada's Central Statistical Office and its Antecedents, 1841–1972* (Montreal: McGill-Queen's University Press, 1998); Bruce Curtis, *The Politics of Population: State Formation, Statistics, and the Census of Canada, 1840–1875* (Toronto: University of Toronto Press, 2001).

10 For more on the variability of census records of urban animals, see Bettina Bradbury, 'Pigs, Cows, and Boarders: Non-Wage Forms of Survival among Montreal Families, 1861-91'. *Labour/Le Travail* 14 (1984): 9–46.

11 Bureau of Agriculture and Statistics, *Census of the Canadas, 1860–61: Agricultural Produce, Mills, Manufactories, Houses, Schools, Public Buildings, Places of Worship, &c* (Mountain Hill, Quebec: Steam Press Printing Est., 1864), 90–5.

12 Dominion Bureau of Statistics, *Census of Canada, 1911: Agriculture*, Vol. 4 (Ottawa: Government Printer, 1914), 419.

13 *An Act to Incorporate the City of Winnipeg*, 8 November 1873, 25–32.

14 Mark Fiege, 'The Weedy West: Mobile Nature, Boundaries, and Common Space in the Montana Landscape'. *Western Historical Quarterly* 36 (2005): 24.

15 Adam Rome, 'Coming to Terms with Pollution: The Language of Environmental Reform, 1865-1915'. *Environmental History* 1, 3 (1996): 8; Peter Thorsheim, *Inventing Pollution: Coal, Smoke, and Culture in Britain since 1800* (Athens: Ohio University Press, 2006), 2; Artibise, *Winnipeg*, 225; Melosi, *The Sanitary City: Environmental Services in Urban America from Colonial Times to the Present* (Pittsburgh: University of Pittsburgh Press, 2008), 12.

16 Georgia Sitara, 'Humanitarianism in the Age of Capital and Empire: Canada, 1870-1890' (PhD diss., University of Victoria, 2010), 22.

17 Bradbury, 'Pigs, Cows, and Boarders', 9–46.

18 CWA. By-Law 8, 'A by-law appointing two City Scavengers', 23 March 1874; By-Law 33, 'A by-law respecting scavengers', 2 March 1875; By-law 1601, 'A by-law respecting the Appointment of an Inspector of Licenses, and the Issue of Licenses in certain cases', 8 May 1899.

19 CWA. By-Law 12, 'A by-law relating to the Public Health', 4 May 1874.

20 CWA. By-Law 12, 'A by-law relating to the Public Health', 4 May 1874.

21 Artibise, *Winnipeg*, 225; CWA. City Council correspondence, Stewart Mulvey, 1 February 1875.

22 CWA. City Council correspondence, G. H. Kerr to Mayor and Council of the City of Winnipeg, 1 December 1881.

23 CWA. City Council correspondence, G. H. Kerr to Mayor and Council of the City of Winnipeg, 1 December 1881; G. H. Kerr to Mayor and Council of the City of Winnipeg, 30 June 1882; G. H. Kerr to Mayor and Council of the City of Winnipeg, 1 February 1882; G. H. Kerr to Mayor and Council of the City of Winnipeg, 29 April 1882; G. H. Kerr to Mayor and Council of the City of Winnipeg, 2 June 1882; By-Law 179, 'A by-law respecting Public Health', 3 July 1882.

24 CWA. By-law 1620, 'A by-law relating to the Public Health', 8 May 1899.

25 Helen Tangires, *Public Markets and Civic Culture in Nineteenth Century America* (Baltimore: Johns Hopkins University Press, 2003), 3; W. Thomas Matthews, 'Local Governments and the Regulation of the Public Market in Upper Canada, 1800–1860: The Moral Economy of the Poor'. *Ontario History* 79, 4 (1987): 300.

26 CWA. Market Committee Reports, 25 February 1874; By-law 48, 'A by-law establishing public markets', 9 April 1875; *Daily Free Press*, 4 August 1877, 3.

27 CWA. By-law 48, 'A by-law establishing public markets', 9 April 1875.

28 CWA. By-law 321, 'A by-law to establish Public Markets', 23 February 1885.

29 CWA. By-law 321, 'A by-law to establish Public Markets', 23 February 1885.

30 CWA. By-law 1616, 'A by-law respecting Public Markets and Weigh Houses', 8 May 1899.

31 CWA. By-Law 13, 'A by-law respecting Pounds and appointing Poundkeepers', 1 June 1874; *Daily Free Press*, 7 July 1874, 3.

32 CWA. By-law 13, 1 June 1874.

33 CWA. City Council correspondence, Stewart Mulvey to City Council, 10 August 1874; *Daily Free Press*, 21 October 1874, 3; 8 February 1875, 8; CWA. City Council correspondence, James Spence, 9 July 1877; Richard Foseley, 9 July 1877; Richard Code, 22 September 1879; Frank Land, City Pound Keeper, 1 December 1879.

34 CWA. By-law 79, 'A by-law to amend by-law 13 respecting pounds', 11 October 1880; City Council Correspondence, City Pound Keeper to Council, 31 May 1881; 4 July 1881; 5 September 1881; 17 October 1881; 5 December 1881; 9 January 1882.

35 CWA. By-law 139, 'A by-law to establish pounds', 14 March 1881; City Council Correspondence, A. J. Symonds to City Council, 26 February 1877; *Winnipeg Free Press*, 24 February 1885, 4.

36 By-law 356, 'A by-law to establish Public Pounds', 14 September 1885.

37 CWA. By-law 630, 'A by-law to provide for Pounds and Poundkeepers', 17 April 1893; By-law 1603, 'A by-law for the Appointment of Poundkeepers and to regulate Pounds', 8 May 1899.

38 William H. Carre, *Art Work on Winnipeg*, Part 4 (Winnipeg: Wm. H. Carre Company, 1900), n.p.

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