

‘Few commodities are more hazardous’: Australian live animal export, 1788 - 1880

Nancy Eileen Cushing

The contemporary Australian trade in live sheep and cattle, primarily to Southeast Asia and the Middle East, is the largest in the world.¹ Its supporters claim that it makes an important contribution both to the Australian economy and to the food security of recipient nations. Critics argue that it is inherently cruel and must be stopped in the interests of animal welfare. These debates tend to be conducted as though live export were a new phenomenon growing out of post 1970 globalisation. Few scholars have considered the longer history of live animal export, and none have done so for Australia. A study of the direct antecedent of the Australian trade, nineteenth century live animal exports from Britain's oldest Australasian colony, New South Wales, sheds light on the role of the trade in establishing populations of exotic animals around the continent of Australia and in New Zealand which would later be drawn upon for transhemispheric mass export.² Further, it shows how live export contributed to the commodification of animals and the process of estrangement of human consumers from animals used for food which now permeates western societies. The voyages made by these animals between their places of life and the sites of their deaths allowed consumers to partake of a meat-based diet with little knowledge of the processes which made it possible.

This process of physically distancing consumers from the lives of animals used for food did not begin in Australia, or even with the carriage of animals by sea. Hoffman has shown how the long distance movement of cattle from the edges to the centre of medieval Europe allowed urban consumers to maintain their food preferences after they had exhausted the resources of their own immediate ecosystems. By drawing upon animals raised on distant peripheries in Poland, Hungary and Denmark, residents of core cities like Venice, Amsterdam and Frankfurt could, he argued, ‘externalis[e], and even forget, the social and environmental costs of satisfying’ their cultural preferences for particular foods and maintaining their social practices.³ This forgetting was amplified in the modern period as animals were moved ever longer distances, and the animal welfare costs were particularly high when the journey was by sea.

While there is a great deal of writing for and against the live export trade of recent decades, the longer history of live export from Australia is often overlooked or even denied,

¹ Clive Phillips and Eduardo Santurtun, ‘The Welfare of Livestock Transported by Ship’, *The Veterinary Journal* 196 (2013): 309. In 2013- 14, 2 020 941 sheep and 1 130 000 cattle were exported, with 97% of the sheep sent to the Middle East, mainly out of Western Australian ports and 55% of the cattle to Indonesia, predominantly from Darwin in the Northern Territory (Meat and Livestock Australia, *Australian Livestock Export Industry Statistical Review, 2013 – 14*, 1 and 6).

I gratefully acknowledge the support for this project provided by a Merewether Scholarship awarded by the State Library of NSW and my research assistant, Dr Mark Dunn.

² Matthew Tonts, Richard Yarwood and Roy Jones, ‘Global Geographies of Innovation Diffusion: The Case of the Australian cattle industry’, *The Geographical Journal* 176, 1 (2010): 91.

³ Richard Hoffmann, ‘Frontier Foods for Late Medieval Consumers: Culture, Economy, Ecology,’ *Environment and History* 7 (2001): 155.

with the origins of the trade placed in the 1970s.⁴ Popular and scholarly histories of the Australian colonial livestock industry focus on breeding and the rural lifestyle, with little attention to the origins of the animals or their ultimate destinations.⁵ Amongst academic historians, studies of livestock have long been out of fashion, with the acclimatisation movement and the impacts of invasive animals receiving attention.⁶ Parsonson's *Australian Ark* stands out by providing a careful history of the populating of Australia with domesticated species but he does not offer a critical reflection on animal import or export, treating animals as objects rather than subjects.⁷ This is echoed by Tonts, Yarwood and Jones in their work on the dissemination of cattle breeds in which they use the bland term 'migration' to describe the fraught process of animal transport by sea.⁸ While the experience of shipboard life has drawn the attention of historians, its scope has not extended to more than human 'co-colonisers'.⁹ The animal experience of movement in the service of imperialism and the effects flowing from it has rarely been considered.

Contemporary evidence related to live animal export in Australia's colonial period is scattered. No handbooks on animal transport, royal commissions or other official inquiries have been located. Therefore, the account presented here relies on a reconstruction derived from diffuse references in a variety of sources. Chief amongst them are newspaper accounts of the transport of animals by sea which regularly appeared in shipping news columns. To

⁴ Gonzalo Villaneueva, "'In the Corridors of Power": How the Animal Movement Changed Australian Politics, 1979-1991', *Australian Journal of Politics and History* 61, 4 (2015): 546-561; Alun Howkins and Linda Merricks, "'Dewy-eyed veal calves": Live animal exports and middle-class opinion, 1980 - 1995,' *Agricultural History Review*, 48, 1 (2000): 85 – 103; Bill Farmer, *Independent Review of Australia's Livestock Trade* (Canberra: Department of Agriculture, Fisheries and Forestry, 2011), http://www.daff.gov.au/Style%20Library/Images/DAFF/_data/assets/pdffile/0010/2378197/independent-review-australias-livestock-export-trade.pdf (accessed 13 December 2015); M.W. Fisher and B.S. Jones, 'Australia and New Zealand', in MC Appleby *et. al.* (eds.), *Long Distance Transport and Welfare of Farm Animals* (Wallingford, Oxon.: CABI Publishing, 2008), 328, 329.

⁵ Katherine Bell, *Cattle Australia: The story, the icons, the drives, the big runs* (Sydney: Murray David, 2009); Glen McLaren, *Big Mobs* (Fremantle: Fremantle Arts Centre Press, 2000); Charles Massy, *The Australian Merino*, revised edition (Sydney: Random House, 2007); Michael Pearson, *Pastoral Australia, Fortunes, Future and Hard Yakka, A historical overview 1788 – 1967* (Melbourne: CSIRO, 2010), 139.

⁶ Christopher Lever, *They Dined on Eland: The Story of the acclimatisation societies* (London: Quiller Press, 1992); Adrian Franklin, *Animal Nation: The True story of animals and Australia* (Sydney: UNSW Press, 2006); Eric Rolls, *They All Ran Wild: The Animals and plants that plague Australia* (Sydney: Angus and Robertson, 1984); Libby Robin, *How a Continent Created a Nation* (Sydney: University of NSW Press, 2007).

⁷ Ian Parsonson, *The Australian Ark, a history of domesticated animals in Australia* (Melbourne: CSIRO Publishing, 1998).

⁸ Tonts, Yarwood and Jones, 'Global Geographies of Innovation Diffusion,' *passim*.

⁹ Andrew Hassam, *No Privacy for Writing: Shipboard diaries 1852-1879* (Melbourne: Melbourne University Press, 1995); Robin Haines, *Doctors at Sea: Emigrant voyages to colonial Australia* (Basingstoke: Palgrave Macmillan, 2005); Rebecca J.H. Woods, 'From Colonial Animal to Imperial Edible, Building an empire of sheep in New Zealand, ca. 1880 – 1900', *Comparative Studies of South Asia, Africa and the Middle East* 35, 1 (2015): 117.

these are added letters to the editor voicing concerns about the trade. Official sources have been useful in tracing the origins and distribution of livestock within Australia and in the provision of statistics on animal exports from NSW after 1829. Critical analysis of this material reveals the extent and nature of the trade and the attitudes of participants and observers towards it.

The subject of animal agency has attracted considerable attention within the field of human-animal relations. As Nance has argued, by gathering evidence of animals' responses to the conditions of their lives, a more full understanding of the interspecific past can be developed in which non human animals feature as subjects as well as objects. In some cases, such as her circus elephants or the sled dogs studied by Onion, animals can readily be shown to have shaped their own experience and that of other animals including humans through their actions and inactions.¹⁰ This is more challenging for animals like those studied here, who were rarely individualised in the records. A parallel case is that of animals used for scientific experimentation. Like the physically restrained rats and dogs in laboratories, sheep and cattle packed into ships' holds were doubly denied the opportunity to exercise agency. Durham and Merskin show that 'individual agency is lost not only in the physical sense because of captivity, but also symbolically when animals are reduced to numbers, not names, and to protocols rather than personalities.'¹¹ The potential for agency remains, but the conditions in which these individuals were held were specifically designed to minimise their exercise of it. In the case of exported animals, those charged with their management had little incentive to create records which even inadvertently produced evidence of their experience and their reactions to it. It is hoped that the overview of live export presented here will encourage others to conduct the more fine grained research into individual voyages and species which could reveal the agency of exported animals.

For the purpose of this study, the term 'export' has been defined as the transport of animals by sea from one polity to another. This narrow definition of export serves as a reminder of the impact on animals of arbitrary categories created by humans, with livestock travelling long distances without crossing political boundaries receiving less attention and concern than those who are moved into different states.¹² When it was established in 1788,

¹⁰ Susan Nance, *Entertaining Elephants, Animal Agency and the Business of the American Circus* (Baltimore: Johns Hopkins University Press, 2013); Rebecca Onion, 'Sled Dogs of the American North: On Masculinity, whiteness and human freedom', in Sarah E. McFarland and Ryan Hediger (eds) *Animals and Agency: An Interdisciplinary Exploration* (Leiden: Brill, 2008), 129 – 56)

¹¹ Debra Durham and Debra Merskin, 'Animals, Agency, and Absence: A discourse analysis of institutional Animal Care and Use Committee meetings', in Sarah E. McFarland and Ryan Hediger (eds) *Animals and Agency: An Interdisciplinary Exploration* (Leiden: Brill, 2008), 229.

¹² This lesser attention to domestic sea transport has been noted in studies of the Irish cattle trade to Britain. See Richard Perren, 'The North American Beef and Cattle Trade with Great Britain, 1870 – 1914', *Economic History Review* 24, 3, New Series (1971), 430 – 44; Richard Perren, *The Meat Trade in Britain, 1840 – 1914* (London: Routledge and Kegan Paul, 1978);

the colony of New South Wales consisted of roughly half of the Australian continent, including all territory to the east of the 135th meridian, and the adjoining islands, leaving little scope for export even if animals had been available. The trade developed as other colonies were separated from NSW – New Zealand (1817), Van Diemen’s Land (1825), South Australia (1836), Victoria (1851), Queensland (1859) – making movements of animals across the new borders officially exports. Consideration has also been limited to animals carried by ship. The lives of the larger number of livestock crossing the land borders between NSW and the adjoining colonies retained some normalcy in transit, with free movement, social interaction, opportunities for grazing and nightly rests. Those carried on ships had very different experiences.¹³ The intention of these restrictions is to establish a genealogy of the current international live export trade from its small scale beginnings. The commercial transport of livestock within polities is also significant and warrants separate study.

In contrast with the vocal opposition to live export since 1970, trade in live animals was seen in the nineteenth century as a necessary and unremarkable aspect of colonisation. In part, this is because the experience of the animals was left unconsidered. Through a reconstruction of the experience of live export, this article will offer an exploration of how practices in the trade reflected and informed more general attitudes to animals used for food, arguing that the conditions of live export and its capacity to deliver animals to increasingly distant destinations both contributed to extending the conceptualisation of animals as commodities. It is presented in three parts: an account of the animal imports which established populations of livestock in NSW; an overview of live animal export from NSW up to 1880; and a more detailed account of conditions in the mature trade in the 1860s and 1870s. Far from being an incidental aspect of the history of Australia, live animal export was a core element of the colonial project which helped to develop the new patterns of human-animal relations which came to dominate in the twentieth century.

Importing Animals

Live export of animals as breeding stock, beasts of burden or for food was just one aspect of a complex web of human-induced animal movements in the Australian colonial period. Initially, inward movements were the priority. Domesticated animals were an essential component of the equipment of the colonisers. Indeed, Crosby in *Ecological Imperialism* credits introduced livestock with being the main reason the former colonies he called ‘Neo Europes’ were so successful.¹⁴ These adaptable animals were effective at initiating ecological change and their reproduction allowed rapid expansion across space, especially when settlers assisted their dispersal. Cattle prepared the way for sheep, trimming native grasses to a manageable height, as well as providing food, transport, tallow for grease

Carolyn A. Edie, ‘The Irish Cattle Bills: A Study in Restoration Politics’, *Transactions of the American Philosophical Society* 60, 2 (1970), 1-66.

¹³ This limitation also aligns with contemporary live export. Only one to two percent of sheep and cattle are currently exported by air. For goats, the percentages are reversed with almost all goat exports occurring by air, with most being exported to Malaysia (Meat and Livestock Australia, *Australian Livestock Export Industry Statistical Review*, 2013 – 14, pp. 5, 8 and 11).

¹⁴ Alfred Crosby, *Ecological Imperialism: The biological expansion of Europe, 900 – 1900* (Melbourne: Cambridge University Press, 1986), 3, 6, 73, 172 -75.

and candles, manure, hides and horns (used as containers and boiled down for glue).¹⁵ Livestock became central to the dispossession of Indigenous Australians with competition for water often becoming a trigger for violent conflict, and the environmental impact of these heavy grazing animals disrupting the Aboriginal economy.¹⁶ The dependence of settlers on introduced animals was not reciprocated as cattle, horses, pigs and goats demonstrated by rapidly establishing free living populations. Domesticated animals could thrive on their own, but the colonies would not have survived without them.

While the British long attempted to keep entry to the continent strictly for their own ‘race,’ animals were imported from a variety of other places of origin. This was an exception to the common practice in which colonial agricultures were founded on breeds from colonising nations.¹⁷ Most of the 500 cattle, goats, horses, pigs, birds, rabbits and sheep accompanying the First Fleet in 1788 were purchased at the Cape of Good Hope from a mixture of native breeds and those developed there by the Dutch colonists, including the fat tailed Namaqua and Ronderib sheep, bred to produce mutton.¹⁸ The cattle were Afrikanders, hump backed, black or red with white spots and with their long horns cut short for the voyage.¹⁹ In the 1790s, purchases of Cape cattle continued and Bengal sheep, with thin tails and hair mixed with fine wool, were imported from Calcutta, both by the government and by military officers as a speculation.²⁰ Ships’ masters brought small groups of horses, sheep and cattle on the three month voyage from India to Sydney prior to 1801 and traders like Robert Campbell imported larger numbers under government contract.²¹ In perhaps the largest of these shipments, over 900 cattle were carried on the general trading ship *Sydney* from Calcutta to Port Dalrymple in northern Van Diemen’s Land (now the Tamar River in Tasmania) in 1805. Tightly packed on the ship as it traversed waters notorious for headwinds, becalmings and cyclones, almost one third died en route.²² Even longer voyages for animals were

¹⁵ John Perkins and Jack Thompson, ‘Cattle Theft, Primitive Capital Accumulation and Pastoral Expansion in Early NSW, 1800 – 1850’, *Australian Historical Studies* 111 (1998): 302.

¹⁶ A recent account of this conflict in the NSW interior is found in Cameron Muir, *The Broken Promise of Agricultural Progress, An Environmental history* (London: Routledge, 2014), Ch.1.

¹⁷ Tonts, Yarwood and Jones, ‘Global Geographies of Diffusion’: 93. The authors claim that the first cattle to arrive in Australia in 1788 were Dairy Shorthorn, Devon and Dexter cattle from England and Ireland, ignoring the original Afrikanders and Indian animals.

¹⁸ Mark McGranaghan, ‘Hunters with Sheep: The |Xam Bushmen of South Africa, Between Pastoralism and Foraging’, *Africa: The Journal of the International African Institute* 85, 3 (2015): 531.

¹⁹ Grace Karskens, *The Colony, A History of early Sydney* (Sydney: Allen and Unwin, 2009), 285 - 87).

²⁰ DR Hainesworth, *The Sydney Traders, Simeon Lord and his contemporaries, 1788 – 1821* (Melbourne: Cassell Australia, 1972), 24 n; Parsonson, *The Australian Ark*, 2, 4, 8.

²¹ Philip Gidley King, ‘State of his Majesty’s Settlements in New South Wales, 31st December 1801’, *Historical Records of New South Wales* (hereafter *HRNSW*) IV (Sydney: Government Printer, 1896), 662; King to Lord Hobart, 9 May 1803, *HRNSW*, vol. V, 113 and 40 n.

²² King to Earl Camden, 30 April 1805, *HRNSW*, V, 607 – 08.

undertaken, as in the case of four Spanish sheep and almost 20 cattle purchased in California and taken to Sydney on the *Daedalus* in 1793.²³

Imports with in the region was preferred not only because of the difficulties of keeping animals alive through the long voyage between Britain and Australia, but also in the case of sheep because their export from England was banned.²⁴ Put in place to protect the wool industry during the Elizabethan period, the long standing ban had the unintended humane consequence of keeping British sheep off ships, unless an exemption in the form of a Treasury Warrant was obtained.²⁵ Although there were complaints about unfamiliar hairy sheep, and small cattle and horses unfit for heavy labour, with the exception of a few animals sent as gifts or accompanying free emigrants, Australia's first livestock originated outside of the mother country.²⁶ Exporting animals from older to newer colonies extended the reach of British imperialism.

These precious domestic animals were fiercely protected and their re-export not considered for several decades. Colonists dined on native animals when they could and imported salted meat the rest of the time. Pigs did well, but in 1801 Governor King was still concerned enough about their numbers that he banned their sale to those outfitting ships for departure from the colony.²⁷ Flocks and herds grew slowly. By 1810, there were at last enough privately owned cattle to enable the Commissariat to purchase fresh beef for distribution in military and convict rations.²⁸ With basic needs met, attention began to turn to the importation of small numbers of breeding stock from the UK such as the Angus (1820) and Hereford (1825), often accompanying new immigrants or sent to those already in the

²³ Massy, *The Australian Merino*, 121; Philip Morton, *The Cattle of New South Wales from 1788* (Sydney: Waite and Bull, 1930), 7.

²⁴ A Bill For Explaining, amending, and reducing into One Act of Parliament, the several Laws now in being for preventing the Exportation of Live Sheep, Rams, and Lambs, Sixteenth Parliament of Great Britain: third session (24 January 1786 - 11 July 1786), 30 June 1786; 'An Epitome of the bill ... the better to prevent the exportation of live sheep, wool, &c. and a comparative view of that bill, with the laws now in being for the like purposes. To which are prefixed, some observations upon the importance of the woollen manufactures, and the reasons for the present application,' (pamphlet) London: Stafford and Davenport, 1788. In 1788, the Act still had as a penalty for the export of sheep, the cutting off of the offender's left hand and its display in a marketplace. Repeat offenders were to be executed. The alternative punishment proposed in 1788 was imprisonment of three months and a levy per animal exported (6).

²⁵ Massy, *The Australian Merino*, 122.

²⁶ Parsonson, *Australian Ark*, 7, 13; Philip Gidley King, 'State of his Majesty's Settlements in New South Wales, 31st December 1801', *HRNSW IV* (Sydney: Government Printer, 1896), 662.

²⁷ Government and General Order, 16 December 1800 and 14 April 1801, *HRNSW IV*, 270 and 343.

²⁸ King to Hobart, 9 May 1803, *HRNSW*, V, 113 – 14. Samuel Marsden wrote in a letter on 4 May 1810 that horned cattle had increased in the colony so much that many were slaughtered and fine beef was sold to the government for army rations at 9 pence a pound (James S. Hassall, *In Old Australia, Records and Reminiscences from 1794* [1902] facsimile edition. (Sydney: Library of Australian History, 1977), 150).

colony by friends and relatives.²⁹ The ban on exporting sheep was lifted by the British Wool Act of 1824, allowing the direct importation of Merinos, Teeswaters and Leicesters.³⁰ Death tolls on these long voyages could be very high, as when more than half of a shipment of 92 Merino and Leicester sheep died on the voyage of the *Hashemy* in 1839.³¹ Those carried in small numbers, as on the *Posthumous* in 1841, with just 20 sheep and horses and one cow, had better outcomes. The excellent condition of these animals on arrival was so unusual that it was acclaimed as a credit to those who had cared for them.³²

Live animal imports were a necessary stage in the setting up of a new colony. In the case of NSW, the long distance from Britain and the ban on the export of sheep meant that most of the original livestock came from colonies in the region, led by South Africa and India. Over time, breeding animals were strategically imported from Britain and Europe to develop stocks of animals with characteristics which suited local conditions and met market expectations for the production of wool and meat. While there were severe losses on many voyages, stocking densities tended to be lower than when animals for food were being transported. As Dunlap noted, these animals were ‘most potent tools’ in the remaking of invaded lands and they were highly valued for that role.³³

Live Animal Export

Turning to the export of live animals, although livestock were too few in number and too highly prized to be sent out of NSW in the early years of colonisation, animals did leave the colony. Indeed, preserved and live native animals were amongst the first exports. The most lucrative and organised element of this animal trade was the whaling and sealing industry known generically as the fisheries, but a wide range of animal products was exported including kangaroo hides, possum furs and black swan skins.³⁴ Also important was the live trade in native specimens. In contrast with later mass export, this began as a premium trade in which small numbers of native birds and animals were carefully cosseted through the voyage to Britain to be sold to collectors or museums; or kept as mementos of colonial adventures.³⁵ Live export of native animals should not be omitted from larger considerations of the logistics and ethics of live animal export from Australia.

²⁹ Tonts, Yarwood and Jones, ‘Global Geographies of Innovation Diffusion’, 95. See for example, ‘Merino Sheep’, *Hobart Town Gazette and Van Diemen’s Land Advertiser*, 6 February 1824, 2.

³⁰ Parsonson, *Australian Ark*, 18 - 19.

³¹ ‘Hashemy’, *Australian*, 26 January 1839, 2.

³² ‘Ship News’, *Sydney Gazette*, 2 February 1841, 2.

³³ Thomas R. Dunlap, ‘Remaking the Land: The Acclimatization Movement and Anglo Ideas of Nature’, *Journal of World History* 8, 2 (1997): 303.

³⁴ Karskens, *The Colony*, 175; ‘Ship News’, *Hobart Town Gazette and Van Diemen’s Land Advertiser*, 11 October 1823, 2.

³⁵ Over time, this export trade grew in scale and scope until hundreds of thousands of budgerigars and smaller numbers of cockatoos and other birds were being exported from South Australia in the 1860s. John Simons, ‘The Scramble for Elephants: Exotic Animals and the Imperial Economy’, in Melissa Boyde (ed.), *Captured: The Animal within Culture* (Basingstoke: Palgrave MacMillan, 2014), 34; Author, forthcoming; Anne Coote, ‘Science,

The live export of introduced species repeated the pattern through which they were initially established in NSW. Animals accompanied settlers as they ventured into each new part of Australasia and became a resource upon which the next advance could be founded. Livestock from mainland NSW were carried to Norfolk Island just weeks after the establishment of Sydney in 1788 and evacuated with the human population from Norfolk Island to Van Diemen's Land (then part of NSW, later Tasmania) in the first decade of the nineteenth century. The *Sydney* was again used to carry some of these livestock and lost one third of its 390 sheep before landing at Hobart in 1805.³⁶ Sheep thrived in Van Diemen's Land on the open grasslands created by Indigenous burning and in the absence of the dingo as a predator.³⁷ By 1819, Van Diemen's Land's livestock far outnumbered those of NSW, with some 172 000 sheep and Bengal-cross cattle ranging its grassy woodlands compared with 80 000 sheep and cattle on the NSW mainland.³⁸

The direction of flows of animals varied over time according to changes in supply and demand. Sheep were sent to the rest of NSW from Van Diemen's Land in the early 1820s. In the 1830s, after Van Diemen's Land had been made a separate colony, sheep were carried in large numbers to the Port Phillip District of NSW (now Victoria) and to the new colonies of Western Australia and South Australia. In a single year, 1837, over 55 000 Van Diemen's Land sheep were ferried in a fleet of small ships from the north of the colony across Bass Strait to help to build up flocks in the Port Phillip District, with average losses of fifteen percent.³⁹ After South Australia was established in 1836, 100 shiploads of sheep were sent there from Van Diemen's Land, many of them descendants of Norfolk Island Bengals, Merinos and British long wool varieties.⁴⁰ Animals from NSW also contributed to the stocking of South Australia. A Dr Sherwin of the NSW Southern Tablelands in 1838 sent two ships to South Australia with 2500 sheep and cattle on board. The losses on both voyages were severe: 2200 sheep and 66 cattle.⁴¹

The shipping of animals from NSW to Van Diemen's Land was reinstated in the 1840s when sheep and cattle from Gippsland region of the Port Phillip District began to be exported to Hobart. Island pastoralists had focused on wool production, creating a shortage of meat when the convict population rapidly rose after the cessation of transportation to NSW in 1840.⁴² Forty bullocks or up to 200 sheep were carried per trip on a fleet of small vessels. Although there were protests about the importation of 'foreign' animals, in 1856, 82 000 sheep and 8000 cattle were shipped to the newly renamed Tasmania from the other colonies

Fashion, Knowledge and Imagination: Shopfront natural history in 19th-century Sydney', *The Sydney Journal* 4, 1 (2013): 1–18.

³⁶ Parsonson, *Australian Ark*, 14.

³⁷ Bill Gammage, *Biggest Estate on Earth: How Aborigines made Australia* (Sydney: Allen and Unwin, 2012).

³⁸ James Boyce, 'Return to Eden: Van Diemen's Land and the early British settlement of Australia', *Environment and History* 14 (2008): 295.

³⁹ NSW Import of Live Stock, NSW Colonial Secretary, Returns of the Colony, 1842, p. 590, Archives Office of NSW 4/274; Parsonson, *Australian Ark*, 70.

⁴⁰ Parsonson, *Australian Ark*, 86.

⁴¹ 'Ship News', *Sydney Gazette and NSW Advertiser*, 29 May 1838, 2.

⁴² Wayne Caldwell, 'Gippsland and the Van Diemen's Land Livestock Trade: Log of the *Dew Drop*, 1847 – 49', *The Great Circle* 34, 2 (2012): 20.

and the inflow of sheep from NSW continued beyond 1880.⁴³ Live animals were exported from NSW into Victoria after its separation in 1851, principally overland but also by coasting vessels. Despite the spike in demand triggered by the gold rushes of the 1850s, the trade was curtailed after just a few years by concerns over diseases such as scab (*psoroptes communis ovis*), contagious bovine pleuro pneumonia, and foot and mouth disease, leading to the invoking of laws against the importation of diseased stock first enacted in the mid 1840s.⁴⁴

The first live animal exports from the NSW mainland to New Zealand were conducted by the man credited by its supporters with being the father of Australian live animal export, Sydney-based Anglican chaplain Samuel Marsden. When setting up a Church Missionary Society station at the Bay of Islands in New Zealand late in 1814, Marsden despatched a dozen sheep, cattle, cows, poultry and a horse there on the brig *Active*.⁴⁵ Animal exports continued, with sheep and cattle from NSW being shipped to two dozen missionary settlements established over the next 15 years, and to settlers as they arrived.⁴⁶ The trade picked up pace after the 1840 Treaty of Waitangi was followed by increased British immigration. Charles Bidwell's shipment of 1600 sheep to the Nelson district in 1843 is said to have initiated the pastoral era in New Zealand but it was one of several, with 700 sheep having been sent on two ships to the Port Nicholson (later Wellington) region on the North Island in January of that year.⁴⁷ Another 3000 sheep were sent from Sydney to Port Underwood on the South Island in the late 1840s, and shipments of sheep and cattle were also made out of Twofold Bay on the NSW south coast.⁴⁸ As was the case in Van Diemen's Land, flocks quickly built up and had reached 1.5 million in the late 1850s.⁴⁹ Based almost entirely on these Australian-bred animals, New Zealand became a major exporter of wool; from 1882, frozen mutton and premium lamb to Britain; and in the twentieth century, live animals as far as the Middle East.⁵⁰

Live animal exports to New Caledonia started as in New Zealand as missionaries arrived with the animals they deemed necessary to set up self sustaining establishments in the 1840s. Trade between Australia and New Caledonia, originally based around sandalwood

⁴³ 'Sheep Breeding', *Launceston Examiner*, 23 October 1858, 4; Leader, *Sydney Morning Herald (SMH)*, 24 August 1868, 4; Caldwell, 'Gippsland and the Van Diemen's Land Livestock Trade', 22.

⁴⁴ J.R. Fisher, 'Origins of Animal Quarantine in Australia', *Australian Veterinary Journal* 78, 7 (2000): 479.

⁴⁵ Hassall, *Reminiscences*, 165.

⁴⁶ For example, sheep and cattle were carried to New Zealand missionary settlements on the *Vanguard* in 1837 ('Ship News', *Sydney Gazette and NSW Advertiser*, 2 December 1837, 2).

⁴⁷ Richard Wolfe, *A Short History of Sheep in NZ* (Auckland: Random House NZ, 2006), 47; 'Export', *SMH*, 16 January 1843, 2.

⁴⁸ Wolfe, *A Short History of Sheep in NZ*, 50; 'Ship News', *Cornwall Chronicle*, 23 December 1840, 2.

⁴⁹ Wolfe, *A Short History of Sheep in NZ*, 46. In the four months from October 1863 to January 1864, 4400 sheep and cattle were exported from NSW to New Zealand, with just 3300 arriving alive ('Auckland', *SMH*, 23 January 1864, 4).

⁵⁰ BM Binney, PJ Biggs, PE Carter, BM Holland and NP French (2014) 'Quantification of Historical Livestock Importation into New Zealand, 1860–1979', *New Zealand Veterinary Journal*, 62, 6 (2014): 311.

and beche-de-mer for China, continued after French annexation in 1853.⁵¹ One thousand head of cattle were imported from NSW in 1859 and allowed to graze 'Australian style' in unfenced pastures on the west coast to the north of Noumea.⁵² Lyons argues that the damage they did to native plantations and their contribution to establishing an alternative economy helped to expropriate the Indigenous Kanaks. Newcastle, the outlet of the Hunter Valley to the north of Sydney, became a major port of supply in the 1870s, with ships which carried copper ore mined in New Caledonia to Newcastle for refining returning with cargoes of sheep, cattle, horses, pigs and poultry.⁵³ Cattle herds grew to over 100 000 in 1890, when there were 11 000 sheep and 3000 horses in New Caledonia.⁵⁴

Exports to more distant colonies were largely limited to horses. They were sold principally in India, but also in Mauritius, Singapore and South Africa. Marsden with his mixed export to New Zealand in 1814 was the pioneer and he was followed by Alexander Riley who shipped 25 horses to Batavia three years later.⁵⁵ From the 1830s, horses from NSW, which became known as *Walers*, were purchased in India as army remounts, riding and driving horses or for racing. While various claims were made that *Walers* were esteemed as sure footed, resilient and accustomed to hot, dry conditions, one of their main points of attractiveness was their low cost. Some regarded them as 'misshapen mongrel brutes' which compared poorly with well bred horses imported from the Cape of Good Hope.⁵⁶ Horse exports continued without pause into the twentieth century with horses sent to support Australia's troops in South Africa during the Boer War and the Middle East during World War I.

⁵¹ Elizabeth Rechniewski, 'The Perils of Proximity: The Geopolitical underpinnings of Australian views of New Caledonia in the nineteenth century', *Portal, Journal of Multidisciplinary International Studies* 12, 1 (2015): 2 – 3.

⁵² Martyn Lyons, *The Totem and the Tricolour, A Short History of New Caledonia since 1774* (Sydney: UNSW Press, 1986), 49.

⁵³ 'Newcastle, From our Correspondent', *Singleton Argus and Upper Hunter General Advocate*, 28 October 1874, 2; 'The Trade of the Port for 1876', *Newcastle Morning Herald and Miner's Advocate* (hereafter *NMH*) 24 February 1877, 4; 'Shipment of Cattle to New Caledonia,' *NMH*, 21 November 1878, 2.

⁵⁴ Lyons, *The Totem and the Tricolour*, 50.

⁵⁵ AT Yarwood, *Walers, Australian horses abroad* (Melbourne: Melbourne University Press, 1989), 33.

⁵⁶ Yarwood, *Walers*, 17, 21, 29; 'Export of Horses to India', *Goulburn Herald and Chronicle*, 22 August 1868, 3.



Image 1: Like other animals exported from Australia during the nineteenth century, the horses known as ‘Walers’ in India experienced difficult conditions on the voyage and as they were unloaded, leading to high casualty rates.

Source: Landing [Waler] horses from Australia, c1843, watercolour, State Library of NSW, DG SV*/Hors/1(a)

Live animals were a constant element of the NSW export trade in the period under consideration. The Returns of the Colony of NSW record live animal export from 1829 showing that it was led in quantity by sheep, then cattle and horses with small numbers of pigs, dogs, goats and birds and occasional oddities like deer, llamas, lions and tigers.⁵⁷ For the first half of the period, destinations were given only as Other British Colonies, New Zealand and the Fisheries, and Foreign States. From the 1850s, specific destinations were provided showing that other Australian colonies, New Zealand and New Caledonia were the principal destinations for animals, with additional recipients including India, China, Mauritius, unspecified Pacific islands, the United States and Russia (Petropavlovsk). After starting at just a few hundred sheep exported in 1830, numbers rose to 12 000 in 1838 and peaked at 77 000 in 1843. Live exports fell when the new colony of Victoria was created and its sheep were no longer included in export figures, reducing the NSW totals to between 18 000 and 40 000 per annum in the 1850s. Cattle, whose numbers fluctuated between 1000 and 16 000 a year, became the most lucrative live export from the 1850s until 1876 when all exports (not just those by sea) were recorded, obscuring the exports by ship amongst over 1 000 000 animals crossing land borders by 1880. The direct contribution of live animal export

⁵⁷ *Statistical Register of New South Wales* for 1829 to 1880 (Sydney: Government Printer, 1830 – 81). Prior to the creation of the colony of Victoria in 1851, exports from the Port Phillip District were listed separately in the same volume.

to the NSW economy was modest, ranging from two to five percent of the value of wool exports, but it had high strategic value in its support of new colonies.⁵⁸

As the oldest colony in the Australasian region, NSW became the source of livestock which launched new European outposts, principally of Britain but also of France, and supported the British order in longer established ones in South Africa and India. Just as NSW had first relied on imported animals, the new colonies in their turn needed years of imports of animals to establish and enrich their herds and flocks and to feed their own populations as they did so. This process of transferring animals between colonies enabled species which could not have survived direct voyages from Britain in large numbers to advance around the world. They became not only the mainstay of the settlers, but the forebears of huge populations of animals which by the end of the twentieth century were being used to feed consumers in Europe, Asia and the Middle East. Live export within Australasia was a key component in enabling this global trade in animals.

Hazardous Commodities

Given this essential role, live animal export was accepted in the nineteenth century as part of the natural order of an expanding empire. Its conduct received little public attention, and yet its impact on human animal relations was considerable. Live export extended the boundaries of what was considered acceptable in the treatment of animals. It reduced sheep and cattle to the status of commodities which only differed from other goods such as lumber, dry provisions or whale oil to the extent that their sentience made them a more risky investment. This attitude was put succinctly by a writer reporting on a voyage on which many animals had died in 1864. He noted that ‘few commodities are more hazardous than domestic livestock when carried by ship at sea.’⁵⁹ The hazard of concern was to the profits of human investors rather than to the animals who lost their lives. The few dissident voices, some which are quoted below, critiquing live export in this period serve as a reminder that not all were willing to accept this stance of, in Hoffman’s terms, externalizing the costs of meat consumption and forgetting the animals who made it possible. Willfully viewing sheep and cattle as commodities had profound implications for the individuals being exported and for other animals used for meat.

As Phillips points out in his study of the contemporary export trade, when considering its overall character, each element of the process of animal procurement and transport must be taken into account for its particular and cumulative impact. These elements consist of mustering, movement to a transport hub, a period of time in a holding depot at the port, loading onto a ship, the voyage and disembarkation.⁶⁰

⁵⁸ The *Statistical Registers of New South Wales*, 1829 – 80. For 1880, when livestock exports by land were included, the proportion rose to 12% of the value of wool exports.

⁵⁹ ‘Cattle Trade by Sea’, from *Southern Cross*, 29 December 1863 in *Newcastle Chronicle and Hunter District News*, 13 January 1864, 4. When considering which commodities might have been more hazardous, human beings, whether as convicts, slaves or forced labourers, are a natural point of comparison. See Clive Phillips, *The Animal Trade* (Wallingford, Oxon.: CABI, 2015) for a comparison with slavery.

⁶⁰ C.J.C. Phillips, ‘The Welfare of Livestock During Sea Transport,’ *Long Distance Transport and Welfare of Farm Animals*, eds M.C. Appleby *et al.* (Wallingford, Oxon.: CABI Publishing, 2008), 140 – 41.

Sheep and cattle on Australian properties in the colonial period existed well away from centres of population, and lived relatively independently on open grasslands, with minimal supervision by shepherds and stockmen. Once selected for market, flocks or herds were walked on public roads or carried by rail to ports. Railcars full of often terrified stock drew the eye, leading to complaints from observers about overcrowding, crushing and lack of access to drinking water for days at a time: ‘as gross a case of cruelty as it is possible to conceive.’⁶¹ The NSW railway system had two terminal points until 1889, Sydney and Newcastle. ‘Humanity’ writing in 1864, was appalled by the treatment the ‘poor beasts’ received from shippers in Newcastle, saying it would ‘shock the ears of civilised society.’⁶² At the Homebush stockyards in Sydney, animals bruised and dehydrated after their long journeys, sheep smothered in the crush, and survivors driven with whips and dogs into a yard to be auctioned and taken away for export or slaughter were described as presenting a ‘demoralizing’ and ‘melancholy’ spectacle.⁶³

It was during this phase of the export process that animals had the greatest opportunities to exercise agency in ways sufficiently striking to be entered into the written record. On several occasions in the 1840s and 50s in Hobart, wild Gippsland horned cattle broke away as they were driven to the Government Slaughteryards through the Domain, running into traffic and goring bystanders.⁶⁴ More usually, it was the animals themselves who were harmed as when 24 sheep being driven to the wharves in central Newcastle were killed by a coal train in 1878.⁶⁵ The response was to further separate people and animals, restricting the transit of stock animals in cities and towns to the hours of darkness.⁶⁶ Measures like these avoided disruption to traffic in urban areas but also minimised the general level of awareness of the export process.

For those animals who continued their journeys by water, the loading process was another trial, whether animals were driven from jetties onto ships through stock races, lifted using hoists or taken to ships in boats and winched on board using tackles.⁶⁷ In Newcastle in 1879, concern was expressed over the loading of as many as 70 cattle an hour using common slings rather than proper belly bands. This was described as barbarous, painful and an abominable custom which was both cruel to the animals and damaging to the reputation of

⁶¹ ‘Prevention of Cruelty to Animals’, *Brisbane Courier*, 28 September 1880, 3; ‘Cruelty to Animals’, *Evening News* (Sydney), 15 August 1876, 2; ‘Cruelty’, *Brisbane Courier*, 10 October 1877, 5.

⁶² Humanity, ‘Shipment of Cattle’, *Newcastle Chronicle and Hunter River District News*, 29 February 1864, 2.

⁶³ ‘Southern Railway Extension III, Trucking of Stock’, *SMH*, 24 May 1878, 6.

⁶⁴ ‘Driving Bullocks in the Domain’, *Colonial Times* (Hobart), 18 June 1850, 3.

⁶⁵ Caldwell, ‘Gippsland and the Van Diemen’s Land Livestock Trade’, 24; ‘Twenty-four sheep killed by a coal train’, *NMH*, 29 August 1878, 2.

⁶⁶ ‘Newcastle Borough Council’, *NMH*, 25 September 1877, 1; Andrew Brown May, *Melbourne Street Life: the Itinerary of our days* (Melbourne: Australian Scholarly Publishing, 1998), 66.

⁶⁷ Pearson, *Pastoral Australia*, 38. Slings hoisted by horses were used to load cattle and sheep in Gladstone in Queensland in 1877 (‘The Gladstone Cattle Trade’, *Daily Northern Argus* (Rockhampton), 10 January 1877, 2).

the port.⁶⁸ Alternatives to slings, such as inclined plane shoots to allow animals to walk between decks and gangways for loading and unloading had been in use in purpose-designed ships carrying stock to Britain from Europe since the 1860s but remained rare in Australia.⁶⁹

Once on board the ship, conditions for animals rapidly deteriorated. In the absence of official or industry guidelines for fitting out ships for the carriage of animals, temporary stalls or pens were often installed on general purpose vessels. These partitions were of great interest to animal welfare authorities in Britain, who found that many deaths of animals in transit could be attributed to faulty structures which did not provide adequate protection for animals.⁷⁰ Even well designed partitions which allowed for neat rows of stalls with a passage for accessing the animals in between could become hazardous when heavy seas made large animals press heavily upon them, bringing them down on the animals. When a ship carrying horses from Melbourne to Dunedin in New Zealand was struck by a gale in the 1860s, 60 terrified horses kicked and bit one another as they tried to escape the wreckage of their stalls. Thirteen died. In another case, cattle were tied to both side of spars fastened across a ship. When a squall hit, the weight of the cattle broke the spars and they all ended up on one side of the hold, with those on the bottom being smothered.⁷¹ The few ships and masters who specialised in carrying animals tended to have better survival rates but all voyages in this period carried a significant degree of risk. If ships in distress had to be lightened, animals were pitched overboard as readily as was other cargo and if vessels took on water, it was the animals on the lower decks who were the first to drown.⁷²

On board ship, animals were carried on open decks or in the hold. Those on open decks had to contend with weather conditions and the impact of high seas. Below decks, many believed the best way to keep animals upright was to pack them close together, 'like wool bales,' for mutual support.⁷³ High stocking rates also helped to boost profits, as long as animals survived the voyage. In such conditions, there was little capacity for the animals to move about, or lie down. Measures such as open hatches and wind sails were put in place to draw in fresh air but were rarely sufficient to avoid a heavy stench which grew as the voyage progressed, leaving animals 'foaming and gasping for a breath of air'.⁷⁴ Contemporaries described the air below decks as being 'vitiated by the exhalations of carbonic gases' from the animals and noted that sheep with their smaller lung capacity were affected by bad air before cattle. It was reported that humans could not go down amongst the sheep and remain there for more than two minutes, giving an indication of both how poor the air quality was and the limited attention animals received on their journeys.⁷⁵ It is now understood that distress from high temperatures and humidity generated by the closely packed bodies and the build up of ammonia from their urine in the air they breathe, contribute to stress, illness and

⁶⁸ 'Cruelty to Animals', *NMH*, 19 December 1879, 2; 'Cruelty to Animals', *NMH*, 20 December 1879, 5.

⁶⁹ 'A Cargo of Cattle', *Brisbane Courier*, 6 October 1865, 4.

⁷⁰ Great Britain. Parliament. House of Commons. *Merchant ships (conveyance of animals). Return to an order of the Honourable the House of Commons, dated 23 June 1881* (London: House of Commons, 1881), 91 – 92.

⁷¹ 'The Cattle Trade by Sea', *Newcastle Chronicle*, 13 January 1864, 4.

⁷² Caldow, 'Gippsland and the Van Diemen's Land Livestock Trade', 24, 39.

⁷³ 'The Cattle Trade by Sea', *Newcastle Chronicle*, 13 January 1864, 4.

⁷⁴ Humanity, 'Shipment of Cattle', *Newcastle Chronicle*, 29 February 1864, 2.

⁷⁵ 'The Cattle Trade by Sea', *Newcastle Chronicle*, 13 January 1864, 4.

morality rates especially amongst sheep.⁷⁶ Not only was air quality poor, but animals were kept in darkness and subjected to distressing noise levels and unpredictable movement.⁷⁷ Zimmerman describes same issues in the North American trade of the period: improper care, poor weather, overcrowding, flimsy stalls and insufficient ventilation.⁷⁸ With no inspectors or passengers on these freighters, the only accounts originate with those who worked in the industry. Their concern for animal welfare was consistently tied with providing minimum standards to maximise profits.

The time spent in transit by animals in the colonial period varied considerably. Animals transported to New Zealand or New Caledonia spent a week or more at sea, similar to the five to ten days now taken to ship cattle to Java and Sumatra from Australia's northern ports. In 1855, when the *Gazelle* made the trip from Sydney to Otago in New Zealand with 800 sheep and 92 cattle, the passage was made in 10 days with few losses.⁷⁹ The longest voyages for sheep were those sent to Kobe and Yokohama in Japan in the 1870s, although horses shipped to India travelled even further.⁸⁰ Horses had a relatively higher value per head than did sheep or cattle and therefore might have been expected to receive more care and attention but Yarwood shows that many made very difficult voyages. Those who survived the uncomfortable three or four week journey to Madras were landed in small open boats which were capsized near shore forcing the horses to swim and walk their way to dry land.⁸¹ (See image 1) Other animals were unloaded as they had been loaded, along ramps or using slings.

Very high rates of animal death occurred. Perhaps not surprisingly, it was people at the destination rather than the port of departure who were most conscious of the losses. In 1864, a Newcastle newspaper reprinted an article from a New Zealand paper commenting on recent deaths at sea, such as the *Adelaide Bell* from Newcastle to Auckland on which 120 of 180 cattle had died, and the barque *HL Rutgers* which landed only 31 of 140 cattle.⁸² The bodies of animals who died on the voyage were hoisted on deck and thrown overboard, leaving traces only on balance sheets. In the colonial period, when any explanation at all was given, the main factors cited were delays mainly due to bad weather which led to shortages of food and water; direct damage from storms such as being swept overboard or knocked into

⁷⁶ C.J.C. Phillips, 'The Welfare of Livestock During Sea Transport,' *Long Distance Transport and Welfare of Farm Animals*, eds M.C. Appleby *et al.* (Wallingford, Oxon.: CABI Publishing, 2008), 140 – 41. Phillips and Santurtun raise additional stressors including high levels of noise, changes in photoperiod and light intensity and forced movement along ramps which impact animal welfare during sea transport ('The Welfare of Livestock Transported by Ship,' 309).

⁷⁷ The role of these factors is raised by Phillips and Santurtun, 'The Welfare of Livestock Transported by Ship,' 309.

⁷⁸ W. David Zimmerman, 'Live Cattle Export Trade Between United States and Great Britain, 1868 – 1885', *Agricultural History* 36, 1 (1962): 49.

⁷⁹ 'Ship's Mails', *SMH*, 16 February 1855, 4.

⁸⁰ 'Imperial Eastern Telegrams', *NMH*, 22 April 1878, 2; 'Shipping in Port', *NMH*, 25 July 1878, 2. The return cargo from Japan was rice.

⁸¹ Yarwood, *Walers*, 30.

⁸² 'Cattle Trade by Sea' from *Southern Cross*, 29 December 1863 in *Newcastle Chronicle and Hunter District News*, 13 January 1864, 4.

one another or into parts of the ship's structure; and overcrowding.⁸³ There was a high level of tolerance for such losses, with death rates on voyages which have become touchstones in the anti live export movement, such as the *Cormo Express* from NZ in 1990 with a 12% mortality rate and the MV *Becrux* from Portland and Fremantle in 2002, with a death rate of 31% amongst a load of 2000 cattle, being regularly exceeded in the colonial period.⁸⁴ Further, as Fisher and Jones note, while mortality is often taken as a key indicator of good practice, the animals who die represent only the worst cases of suffering and cannot be taken as a measure of animal welfare.⁸⁵

These death rates were not accepted by all in industry as inevitable. Notice was taken of measures which could reduce mortality, such as spraying water on cattle or sheep in hot conditions to cool the animals and the space around them, as well as absorbing some of the unhealthy gases in the atmosphere.⁸⁶ Some animal deaths were attributed to their being too fat prior to loading, a factor still considered to be significant.⁸⁷ Certain shipowners and masters acted on accumulating knowledge and improved the experience of animals. The *Mary Mildred*, operating out of Newcastle and Gladstone in Queensland to New Zealand and New Caledonia in the 1870s, was permanently fitted out for the trade with cattle held by strong hemp rope in two rows on each 'splendidly ventilated' deck. Two stockmen were retained for each voyage to ensure that each animal receive its share of hay and water, which was provided in movable troughs. Offering the stockmen bonuses per head landed, the *Mary Mildred* successfully carried up to 200 head of cattle on voyages of between a week and a month.⁸⁸

One shipper went further, becoming a vocal, if anonymous, critic of the trade. He drew attention to the suffering of cattle, painting a vivid word picture of their experience penned below decks and demanding, in the cause of humanity, that shipping should conform to Martin's Act, the British legislation passed in 1822 to prevent the cruel and improper treatment of cattle and sheep.⁸⁹ In another piece, likely the same experienced carrier compared conditions on most ships to those in the semi-apocryphal Black Hole of Calcutta, where more than 100 British prisoners were said to have died after being held in an overcrowded dungeon overnight. Referring again to Martin's Act, he argued that those who

⁸³ In the twenty-first century, leading causes of death during live export from Australia are, for sheep, failure to eat (inanition) leading to exhaustion and starvation and salmonellosis and for cattle, heat stroke, trauma and respiratory diseases (Fisher and Jones, 'Australia and New Zealand', 345).

⁸⁴ Phillips, 'The Welfare of Livestock During Sea Transport', 138 and 146.

⁸⁵ Fisher and Jones, 'Australia and New Zealand', 346.

⁸⁶ 'Cattle Trade by Sea' from *Southern Cross*, 29 December 1863 in *Newcastle Chronicle*, 13 January 1864, 4. Phillips suggests that the wetting of cattle to help them reduce their body temperatures in hot conditions was a method only recently devised and one not suitable for sheep because of their wool (Phillips, 'The Welfare of Livestock During Sea Transport,' 147).

⁸⁷ 'Ship News', *Sydney Herald*, 28 January 1839, 2; Clive Phillips, *The Animal Trade* (Wallingford, Oxon.: CABI, 95).

⁸⁸ 'Cattle Shipment,' *NMH*, 18 February 1878, 2; 'A Cattle Shipment', *Telegraph* (Brisbane), 31 October 1877, 2; 'Shipment of Cattle', *NMH*, 12 November 1879, 2; 'The Gladstone Cattle Trade', *Capricornian* (Rockhampton), 13 January 1877, 2.

⁸⁹ Humanity, 'Shipment of Cattle', *Newcastle Chronicle*, 29 February 1864, 2.

believed it protected animals had no awareness of their experiences during sea transport.⁹⁰ He advised that ships had to be chosen for suitability to the purpose, that fittings be substantial and secure, food, water and ventilation adequate and animals given sufficient space. Most importantly, the ship's master had to take a personal interest in ensuring the animals' welfare night and day. Although invoking the emotional image of the Black Hole of Calcutta and citing Martin's Act, the profit motive still infiltrated this account, as it was noted that a further incentive to look after the animals was the policy that insurers would only pay out if an entire cargo were lost.

These scattered descriptions of the experience of live export for animals demonstrate that they were treated as commodities. They differed from other goods mainly in their capacity to die, and therefore become worthless but, except in a few cases like that of the *Mary Mildred*, the response was not to take measures to minimise harm. Instead, the prevailing approach was to keep the cost per animal as low as possible by using general cargo vessels instead of fitting out ships for live export, employing high stocking levels and providing little care en route. With livestock hidden below decks in port and on the voyage and thrown overboard if they died, few people either within NSW or in the receiving colonies had any direct knowledge of the conditions experienced by the animals. Most newspaper reports focused instead on the risks faced by investors in these hazardous commodities.

Alternatives to Live Export

A potential disruption to the component of the live export trade delivering animals for slaughter was the introduction of new technologies which would allow animal products rather than live animals to be shipped to distant destinations. This began on a large scale in Australia in the 1840s depression when animals were boiled down and their tallow extracted for the soap and candle industries. Between 1843 when boiling down began and 1851, 30 000 tons of tallow with a value of £1 million was exported to Britain from some 110 boiling down works in south eastern Australia.⁹¹ In the same period, the technology of tinning meat was imported from Britain, allowing preserved mutton, beef and later kangaroo and rabbit to be returned to the mother country. The next technological innovation was holding meat at low temperatures. Chilled beef began to arrive in Britain from the US in 1875 but for longer distances, only freezing could keep meat edible.⁹² This was achieved in 1877 in a shipment of Argentinian beef to France. Australians were also experimenting with long distance meat transport and the first successful shipment of frozen Australian meat to the UK arrived on the *Strathleven* in 1880.⁹³

It might be expected that this innovation would have led to the end of thoughts of long distance live export, but frozen meat was initially received with caution in Britain. The rationale given for the continuance of the live export trade in the twenty first century that consumers in the recipient nations prefer fresh meat, killed and butchered according to local traditions was certainly the case amongst British consumers in the late nineteenth century. Even as the modern retreat from meat making was underway, as explored by Noélie Vialles in her study of the French abattoir and seen in the centralisation of the British meat markets at

⁹⁰ 'The Cattle Trade by Sea', *Newcastle Chronicle*, 13 Jan 1864, 4.

⁹¹ Pearson, *Pastoral Australia*, 38.

⁹² Perren, 'The North American Beef and Cattle Trade with Great Britain': 433.

⁹³ James T. Critchell and Joseph Raymond, *A History of the Frozen Meat Trade* (London: Constable and Co., 1912), 31.

that time, a hierarchy of preferences for meat developed, which ranked fresh locally raised animals most highly, followed by European or American chilled or locally slaughtered imports, through to suspect meats such as frozen Australian mutton and tinned corned beef.⁹⁴

As Woods argued, the mass importation of chilled and frozen meat to Britain in the late nineteenth century created an ellipsis between animal and meat. This hiatus was not welcomed by all and their reservations were one of the reasons that carcasses being exported from Australasia were only skinned, bled and beheaded prior to transport, with final ‘dressing’ undertaken on arrival to ensure that the meat took the locally preferred form.⁹⁵ To overcome this prejudice, described by a frozen meat promoter at the time as ‘suburban snobbishness’, education campaigns had to be run about how to thaw meat prior to cooking and reassurance offered to allay concerns about a loss of flavour and nutrition, and brush aside objections to the ‘unsightly’ appearance of thawed meat.⁹⁶ Several decades were required before diners reconciled themselves to the oddity of knowing that the animal they were eating had been killed on the other side of the world and to the now familiar ‘separation in space and time between an animal’s life, its death, and its consumption by humans.’⁹⁷

This preference for fresh meat, accompanied by the higher prices it could bring, inspired some Australian entrepreneurs to dream of extending live exports to Britain after the advent of American cattle exports there in 1868.⁹⁸ Trial shipments were sent from 1880 including the voyage of the *Maori King* with 20 bullocks out of Sydney in 1894 and the *Buteshire* in 1895 which carried sheep and twenty-six bullocks from Rockhampton in Queensland to the UK.⁹⁹ Loss of condition and deaths on the voyage, uncertain prices on arrival and compulsory slaughter at the docks to prevent the introduction of disease meant that no successful commercial trade was established.¹⁰⁰ With beef and sheep meat being sent frozen to Britain from Queensland and New Zealand, the focus of live export shifted away from NSW to western and northern Australia, where vast cattle properties established from the 1880s supplied animals to regional markets including Hong Kong, Manila, Singapore and

⁹⁴ Noélie Vialles, *Animal to Edible*, translated from the French by J.A. Underwood (Cambridge: Cambridge University Press, 1994).

⁹⁵ Woods, ‘From Colonial Animal to Imperial Edible’: 119, 121, 122.

⁹⁶ Critchell and Raymond, *A History of the Frozen Meat Trade*, 207. These issues were frequently addressed in newspaper articles about the importation of frozen meat. See for example, ‘Agriculture’, *Leicester Chronicle and the Leicester Mercury*, 22 October 1881; ‘Markets of Frozen Food’, *Birmingham Daily Post*, 8 August 1882, 3; ‘The Iced Vaults of Victoria Dock’, *Pall Mall Gazette*, 12 July 1884, 6. In some cases, frozen meat was thawed prior to its release onto the market. For that sold frozen, cooks were advised to place it in water or hang it in the larder for several days to thaw.

⁹⁷ Hoffmann, ‘Frontier Foods for Late Medieval Consumers’: 132.

⁹⁸ Zimmerman, ‘Live Cattle Export Trade Between United States and Great Britain, 1868 – 1885’: 46.

⁹⁹ ‘Live Cattle from Australia’, *Gippsland Times*, 5 January 1880, 4; ‘Livestock Exportation’, *Queenslander*, 3 January 1880, 27.

¹⁰⁰ On this, the *Maori King*’s second trip with live cattle, the bullocks delivered to England were wasted and unsaleable (‘Cablegrams’, *SMH*, 14 November 1895, 2). On the *Buteshire*, five of the bullocks died en route and one had to be put down on arrival. Eighteen were said to be in excellent condition, as were the sheep (‘The *Buteshire*’s Cattle’, *Morning Bulletin* (Rockhampton), 8 April 1895, 6).

Java.¹⁰¹ While low levels of live export from NSW continued, the success of the industry in establishing livestock populations elsewhere in the region meant that it never resumed its central role in the industry.

Conclusion

Arriving in a continent without domesticated animals in 1788, Australian colonists set about populating what they imagined as empty spaces with co-colonists in the form of sheep, cattle, horses and other barnyard animals. Unable to reliably carry livestock from Britain, they drew upon surplus animals in older colonies for their foundational stock. NSW, as the first Australasian colony, then took on the role of providing animals to support the further expansion of empire, to Norfolk Island, Van Diemen's Land, other Australian mainland colonies, New Zealand and the French colony of New Caledonia.

In stark contrast to the extensive model of pastoralism employed in Australia, the colonial live export trade channeled animals from rural property to droving mob or railway wagon to ship's hold in increasingly intensive conditions. Once on board ship, they spent weeks or months in close confinement. Death rates were high in this regional trade but enough animals survived these voyages to keep the industry in existence and even to encourage entrepreneurs to dream of selling Australian livestock in the British market. This ambition was largely set aside after the development of the capacity to export frozen meat and live animal export shifted away from NSW to more northerly parts of Australia which were serving the south-east Asian market by the early twentieth century.

The live animal trade was less profitable than other exports including wool. Its value lay in providing the foundation for the new colonies and for meat and live animal export industries which have been central to the economic fortunes of Australia and New Zealand, as well as enabling recipients greatly to increase their consumption of animal products. As in medieval Europe, the flocks and herds built up in Australasia were on the frontiers of their own societies and like the cattle of contemporary Western US and Argentina, they were also on the frontiers of transoceanic economies. Mass live animal export over very long distances emerged from these new world grazing economies where the vast scale of landholdings and huge livestock numbers encouraged the early development of 'modern' attitudes to animals as commodities. The free ranging sheep and cattle were not known individuals with whom stockmen worked on a daily basis. As in later forms of intensive agriculture, they were units of production engaged with as little as possible to minimise costs.¹⁰² For local consumers, the animals who provided their meat were concealed by distance on the vast paddocks of their home stations and for those in importing countries, by the hulls of wooden ships.

Live animal movements by sea, whether for import, export or transport within political entities, was a site of experimentation with what animals can be deprived of and survive. On board ship in the nineteenth century, animals were closely packed, fed dry foods from troughs and prevented from engaging in social activities, breathing fresh air or feeling

¹⁰¹ Pearson, *Pastoral Australia*, 134; Austin, *The Australian Livestock Export Trade*, 18 – 19.

¹⁰² Rhoda Wilkie, 'Sentient Commodities and Productive Paradoxes: The Ambiguous nature of human-livestock relations in Northeast Scotland', *Journal of Rural Studies* 21 (2005): 216.

sunshine, rain or soil under their feet. They were anonymous and received minimal attention. This was well outside of the norms for animal husbandry in Australia at the time. The lower standard of animal welfare during transport stood out to the few who were aware of it, being described in the 1860s as involving cruelties never contemplated by the ‘authors of Mr Martin’s act’. The acceptance of this disparity became entrenched, with higher stocking densities still permitted on Australian ships than in feedlots, sale yards and intensive feeding operations.¹⁰³ In live export, animals are treated like other commodities, being relocated from a place where they have a lesser value to one where they are worth more, with minimal concerns for their animal nature.

It is tempting to go further and to suggest that shipboard conditions were a precursor to the industrialised agriculture practices developed the twentieth century. While more research is needed to sustain such a claim, there are clear parallels. The form of and conditions on early factory style farms, such as the Danish-style ‘fattening houses’ for pigs set up in Britain during the 1920s, resembled live export, with the animals fed on processed foods, restricted in their movement and held in enclosed barns set up with double rows of pens separated by feeding and dunging passages, which could be mistaken for ships’ holds.¹⁰⁴ In the *Animal that therefore I am*, Derrida described industrial agriculture as subjecting livestock to ‘conditions that previous generations would have judged monstrous, outside of every supposed norm of a life proper to an animal’.¹⁰⁵ That may have been the case on land, but at sea, previous generations had placed animals in very similar conditions. As on board ship, intensive farming relies on strict control of animals, including isolating them from natural light, the climate and potential microbes. Barn walls and barbed wire fences with biohazard warnings prevent the scrutiny or even the informed awareness of such operations as effectively as did (and do) ship’s hulls.

Live animal export from NSW has a long history which should be considered in discussions of the contemporary Australian trade. It was during the first century of the trade that many of its continuing assumptions were established, including the acceptance of lower standards of animal welfare than were the norm on land as they were reimagined as no longer fellow creatures but mere sentient commodities. For contemporaries, poor conditions and high death rates could be justified by the important role the industry played in distributing livestock to new regions of European colonisation and in generating profit for pastoralists, investors, ship owners and masters. Consuming animals who had travelled from centres to frontiers, and later from frontiers to centres, meant that meat eaters had little direct knowledge of the lives of animals who provided their roasts and chops. In the longer term, live export from NSW made a contribution to the externalizing and forgetting of the costs to animals of a cultural preference for meat.

¹⁰³ ‘The Cattle Trade by Sea’, 4. The Australian Standards for the Export of Livestock adopted in 2011 permit more animals per square metre during export than those for allowed for by Australian animal welfare codes of practice in feedlots, sale yards and intensive indoor systems (Susan F. Foster and Karen L. Overall, ‘The Welfare of Australian Livestock Transported by Sea’, *The Veterinary Journal* 200 (2014): 207.

¹⁰⁴ Abigail Woods, ‘Rethinking the History of Modern Agriculture: British pig production, 1910 – 65’, *Twentieth Century British History* 23, 2 (2012): 175; Brian G. Henning, ‘Standing in Livestock’s “Long Shadow”’, *Ethics and the Environment* 16, 2 (2011): 65 - 66.

¹⁰⁵ Quoted by Fiona Probyn-Rapsey, ‘Nothing to See – something to see: White animals and exceptional life/death,’ Jay Johnston and Fiona Probyn-Rapsey, eds, *Animal Death* (Sydney: Sydney University Press, 2013), 242.