

Animals have an inherent connection to biosecurity. In 2007, an equine influenza broke out in Sydney, affecting over 8,000 properties in the course of a month.¹ In 2013, avian influenza broke out in Young, causing the deaths of over 2,000 chickens.² In March 2017, about 80 cattle died as a result of an anthrax outbreak.³ Some of these diseases cause a significant amount of pain in an animal. Governments tend to frame animal epidemics as a biosecurity concern, but there is equal scope to treat it as an animal welfare concern. Every livestock producer knows “happy and healthy livestock are productive livestock”.⁴

On 1 July 2017, the *Biosecurity Act 2015* (NSW) (“BIA”) came into effect in New South Wales, replacing 14 different pieces of legislation dealing with a broad range of biosecurity matters. Ten of these Acts have been completely repealed,⁵ whilst four partly repealed.⁶ The BIA comes as the Commonwealth Parliament introduces the *Biosecurity Act 2015* (Cth), replacing the century-old *Quarantine Act 1908* (Cth). Both new Acts promote a shared responsibility between government and industry in biosecurity and reduce burdensome red tape that has led to the outbreak of biosecurity hazards. The Commonwealth Act does not, however, intend to cover the biosecurity field in most circumstances.⁷

This paper focuses on the State BIA’s introduction of a statutory ‘biosecurity duty’. Section 22 creates the responsibility to, so far as is reasonably practicable, prevent, eliminate or minimise biosecurity risks. This applies to any person who deals with ‘biosecurity matter’⁸ or a ‘carrier’⁹ and *knows*, or

¹ Ian Callinan AC, *Equine influenza: the August 2007 outbreak in Australia* (April 2008), 10.

² Lucy Barbour, *ABC News* (16 October 2013) <<http://www.abc.net.au/news/rural/2013-10-15/bird-flu-outbreak-on-egg-farm-near-young-nsw/5024728>>.

³ ABC News (8 March, 2017) <<http://www.abc.net.au/news/2017-03-07/anthrax-outbreak-kills-80-cattle-on-queensland-grazing-property/8333256>>.

⁴ Australian Veterinary Association, ‘Better animal welfare, productivity and biosecurity’ (2016) *Australia decides 2016: The Veterinary View 2*.

⁵ *Animal Diseases and Animal Pests (Emergency Outbreaks) Act 1991* (NSW), *Apiaries Act 1985* (NSW), *Deer Act 2006* (NSW), *Fertilisers Act 1985* (NSW), *Non-Indigenous Animals Act 1987* (NSW), *Noxious Weeds Act 1993* (NSW), *Plant Diseases Act 1924* (NSW), *Stock (Chemical Residues) Act 1975* (NSW), *Stock Diseases Act 1923* (NSW), *Stock Foods Act 1940* (NSW).

⁶ *Fisheries Management Act 1994* (NSW). *Stock Medicines Act 1989* (NSW), *Wild Dog Destruction Act 1921* (NSW), *Local Land Services Act 2013* (NSW).

⁷ *Biosecurity Act 2015* (Cth) s 8.

⁸ BIA s 10 provides a broad definition, including ‘any living thing, other than a human’.

⁹ BIA s 11 includes anything that has, or is capable of having, any biosecurity matter on it.

ought reasonably to know, the biosecurity risk posed or likely to be posed by the biosecurity matter, carrier or ‘dealing’.¹⁰

Whilst this duty was not expressly intended to protect animals, I argue that having it presents indirect potential for those who work with animals to develop procedures enhancing their faunae’s welfare. First, I will discuss the new general biosecurity duty and argue it imposes a significant incentive for people to individually take more responsibility and precautions with biosecurity risks. Second, I will expand the discussion on how this duty is connected to animal welfare in two ways. I will begin emphasising that animals are actually the greatest sufferers of biosecurity risks, focusing specifically on the 2007 equine influenza outbreak. I will then suggest that the new duty may actually prevent people from mistreating animals in the first place, because their maltreatment could lead to a breach of the biosecurity duty.

ANIMALS AND THE DUTY

The BIA was passed significantly as a response to biosecurity exposures and outbreaks stemming from animals. In his second reading speech, the Minister for Primary Industries cited specifically the 2007 equine influenza outbreak and the 2013-4 aviation influenza outbreak as a motivating factor.¹¹ He emphasised the importance of the effect it had on industry. New South Wales alone has about 42,000 agricultural businesses and approximately 150,000 people directly employed in the agriculture and food sectors.¹² However, the complex connections between animal welfare and bioindustry result in a compelling case to pay close attention to the treatment and protection of animals who are susceptible to gruellingly painful diseases. This is often due to the negligence of those dealing with biosecurity matter, or systemic flaws in quarantine.

¹⁰ BIA s 12.

¹¹ New South Wales, *Parliamentary Debates*, Legislative Council, 12 August 2015, 2380 (Niall Mark Blair, Minister for Primary Industries).

¹² NSW Food Authority, *NSW Government Food Safety Strategy 2015-2021: Safe Food From Paddock to Plate* (2015)

The new duty includes both subjective *and* objective elements. Not only will a person be responsible if they know about a biosecurity duty, but if they *ought reasonably to know*.¹³ This indicates a significant shift from the repealed laws. The former ‘duty to notify’ under the *Animal Diseases and Animal Pests (Emergency Outbreaks) Act 1991* (NSW) (“ADAPA”), for instance, had no objective elements, imposing duties on people “in charge of”, or had “in possession or control” an animal or animal product which they *suspected* (not *ought to suspect*) was infected with an “emergency animal disease” to notify an inspector.¹⁴ Emergency animal disease had a narrower definition than the BIA’s ‘biosecurity impact’, including bovine spongiform encephalopathy (also known as ‘mad cow disease’), foot and mouth disease, rabies, and “any other animal disease declared by the Minister”.¹⁵ ‘Biosecurity impact’ does not limit the diseases and does not require a declaration. It is broadly defined to include impacts on the economy, the community and the environment.¹⁶

The other repealed laws took comparable approaches. Subjective duties were also imposed on beekeepers,¹⁷ owners and occupiers of land which livestock were depasturing and those who were in charge of travelling stock.¹⁸ An ‘ought reasonably to have known’ test was contained in the *Stock Diseases Act 1923* (NSW) but only applied when people engaged in particular offences.¹⁹ Under the *Fisheries Management Act 1994* (NSW) (“FMA”), persons were only imposed with duties to comply with the Minister’s directions when the Minister declared a quarantine area.²⁰ There were provisions criminalising *depositing* diseased fish in NSW waters if a person knew or “had reason to suspect” that it was infected with a declared disease,²¹ but fines for ‘communicating’ a declared disease to live fish were only imposed if it was intentional or reckless, not negligent.²²

¹³ BIA s 22.

¹⁴ *Animal Diseases and Animal Pests (Emergency Outbreaks) Act 1991* (NSW) s 7(1).

¹⁵ *Animal Diseases and Animal Pests (Emergency Outbreaks) Act 1991* (NSW) s 6A(1).

¹⁶ BIA s 13.

¹⁷ *Apiaries Act 1985* (NSW) s 22(1).

¹⁸ *Stock Diseases Act 1983* (NSW) s 9(1).

¹⁹ *Stock Diseases Act 1923* (NSW) ss 20(1)–(2), 20B(1).

²⁰ *Fisheries Management Act 1994* (NSW) s 183.

²¹ *Fisheries Management Act 1994* (NSW) s 186.

²² *Fisheries Management Act 1994* (NSW) s 183.

The purpose of this broad change was to demonstrate to the community that biosecurity is a shared responsibility between government, industry and communities,²³ and that everybody should play a role in mitigating and preventing biosecurity threats. It significantly broadens the responsibility and harmonises what were outdated and inconsistent provisions. The way the old subjective duties were framed clearly limited those people responsible. Employees on cattle farms may have overlooked what they thought may have been signs of foot and mouth disease because the responsibility they believed lay elsewhere, and they may not have been wrong. Those “in charge of” cattle may have been their direct supervisor or employer, and those “in possession of” cattle would constructively be their employer. Those employees may have breached their duties as an employee, but probably not as duty-holders under ADAPA.

BIA, by contrast, prescribes that more than one person can concurrently have the same biosecurity duty.²⁴ It is not limited to just an employer or a supervisor - employees, independent contractors, volunteers, and others also ought reasonably know the biosecurity risks presented to the animals with which they work. Furthermore, the duties cannot be ‘transferred’ to another person,²⁵ meaning one cannot shift the duty to another by way of contract, delegation or reliance.

Breaching the duty is a criminal offence, divided into ‘Category 1’ and ‘Category 2’ offences. The former requires intention or recklessness, but the latter has no subjective *mens rea* requirement. Category 2 offences attract fines of up to \$220,000 for an individual and \$440,000 for a corporation, as well as extra per each the day the offence continues.²⁶ However, the penalties escalate substantially if the offence was “committed negligently”,²⁷ rising to \$1,100,000 for an individual and \$2,200,000 for a corporation.²⁸ The duty is thus a very serious one and is subject to an expansive enforcement regime for authorised officers under Part 8 of the Act. The Act does not confer a right of action in

²³ BIA s 3(2)(a).

²⁴ BIA s 20.

²⁵ BIA s 19.

²⁶ BIA s 280(1).

²⁷ BIA s 281.

²⁸ BIA s 280(2).

civil proceedings based on a contravention²⁹ but it also does not affect or limit a civil action under the general law such as a claim in negligence.³⁰

ANIMAL WELFARE IMPLICATIONS

As previously mentioned, the BIA itself was passed largely as a result of risks contained in animals. The Minister spoke little about animal welfare, only alluding to it briefly when mentioning the use of emergency powers to destroy animals “for welfare reasons” (i.e. when they become diseased).³¹

Despite this, the new duty has much potential to not only prevent biosecurity risks, but actually protect animals and ensure their health and wellbeing is maintained. The duty will apply to those who “deal” with biosecurity matter, which has an extremely broad definition to include keeping, having possession, care, custody or control of, produce, manufacture, supply, import, acquire, buy, sell or dispose, move, release, use or treat, breed, experiment and much more.³² With the duty imposed on *everybody* who knows or ought reasonably to know biosecurity risks - which will include, *inter alia*, poultry workers, cattle grazers, sheep shearers, land managers, recreational and commercial fishermen and women - basic protection afforded to animals could be fundamentally necessary. This is because complying with the duty can, first, prevent animal suffering in the form of disease outbreaks and second, deter animal maltreatment which has a close connection to biosecurity risks.

TOUGH RESPONSIBILITIES: THE EQUINE INFLUENZA OUTBREAK

Animals suffer egregiously from biosecurity diseases. Equine influenza (EI) is highly infectious, symptoms of which include a high fever, dry cough, swollen lymph nodes arising under the jaw, depression, a loss of appetite, and stiffness in the limbs causing the reluctance to move.³³ In 2007, EI broke out in NSW.³⁴ It was followed by a Commission of Inquiry before the Hon. Ian Callinan AC, who released his final report (‘The Callinan Report’) in 2013. His Honour found many inadequacies

²⁹ BIA s 6(1).

³⁰ BIA s 6(2).

³¹ New South Wales Legislative Council, above n 12, 2382.

³² BIA s 12.

³³ Horsetalk <<https://www.horsetalk.co.nz/2013/10/07/equine-influenza-treatment-care/>>.

³⁴ Callinan, above n 1, 11.

in importation procedure largely targeting the Australian Quarantine and Inspection Service (AQIS). This included, *inter alia*, important vaccinations being unavailable,³⁵ procedures for pre-export quarantine not subject to inspections from Biosecurity Australia,³⁶ and also no testing of each horse for EI at the last practicable opportunity before release from post-arrival quarantine.³⁷

The new duty is likely to lead to the development of stricter and more careful procedures, and induce individuals, to ensure that biohazards such as EI never recur. Mr Scott Barlow, a farrier,³⁸ attended Eastern Creek Quarantine Station just before the outbreak. He removed the shoes of five horses and trimmed their hoofs, but failed to clean or disinfect his tools when moving amongst them. He furthermore placed his tools in his vehicle without cleaning or disinfecting them, and left his dirty gumboots and overalls in the change room.³⁹ Barlow ought to have known the risks posed by horses, so may have breached the duty today and would have been liable under a BIA offence.

AQIS (now the Department of Agriculture and Water Resources), and their individual agents, through their significant failings in procedure, may have also been subject to significant criminal penalties as well for the shortcomings causing the outbreak. The Report found that AQIS tried to shift obligations to agents such as International Racehorse Transport,⁴⁰ now prohibited under BIA.⁴¹ I note that AQIS - as an agent of the Crown - may have been “protected” from liability if their acts or omissions were found to be “done or omitted to be done in good faith for the purpose of executing any provision of this Act”.⁴² If, however, the duty makes these changes, significant animal suffering can be prevented from the spread of disease.

³⁵ Ibid, 97.

³⁶ Ibid, 98.

³⁷ Ibid, 100.

³⁸ Specialists in equine hoof care.

³⁹ Callinan, above n 1, 220.

⁴⁰ Callinan above n 1, 262.

⁴¹ BIA s 18.

⁴² BIA s 383(1).

There is a well-studied connection between the maltreatment of animals and biosecurity risks.⁴³ Contagious diseases can be spread by physical contact with other animals, but also be transmitted via air, water and food. Diseases suffered by animals have arisen from inhumane circumstances which, should they be found to present a 'biosecurity risk', could attract penalties the BIA.

Salmonella, an intestinal bacteria prevalent amongst reptiles, livestock and poultry, provides a useful example. It is a contagious disease, and 2016 was reportedly the worst year for salmonellosis in NSW.⁴⁴ Cattle kept in poor or stressful conditions are more susceptible to disease,⁴⁵ including salmonella.⁴⁶ Poor treatment by a factory worker or aggressive interactions with other animals result in physiological changes in the animal allowing it to cope with stress. But if the stressor is persistent and then chronic, these responses can impact upon the cow's immunity. It thus becomes more susceptible to disease.⁴⁷ One Swedish study found that hens suffered higher rates of mortality from bacterial diseases and parasites in litter-based than free-range systems.⁴⁸

Long-distance transport has additionally been found to increase the spread of disease agents. In the United States, a study found the average prevalence of Salmonella within cattle faeces was 18 per cent before transport. This rose to 46 per cent after 30-40 minutes truck drive to the slaughter plant. The amount of animals with contaminated hides also rose dramatically from 6 to 89 per cent.⁴⁹ UNFAO blamed "transport of animals over long distances as one cause of the growing threat of

⁴³ Peter John Chen, *Animal Welfare in Australia: Politics and Policy* (Sydney University Press, 2016); Ian Robertson, *Animals, Welfare and the Law: Fundamental Principles for Critical Assessment* (Routledge, 2015); Peter Bollen and Merel Riskes-Hotinga, 'The welfare of pigs and minipigs' in Eila Kaliste (ed), *The Welfare of Laboratory Animals* (Springer, 2007) 245-274.

⁴⁴ Harriet Alexander, *The Sydney Morning Herald* (8 January 2017) <<http://www.smh.com.au/national/health/worst-year-in-nsw-for-salmonella-e-coli-as-global-temperatures-increase-20170106-gtnfve.html>>.

⁴⁵ John Moran, 'Improving livestock welfare in developing countries: Bringing Australian export dairy heifers into the 'welfare tent'' (2015) 27 *Agricultural Science* 1, 56.

⁴⁶ *Agriculture Victoria*, <<http://agriculture.vic.gov.au/agriculture/pests-diseases-and-weeds/animal-diseases/zoonoses/zoonoses-animal-diseases-that-may-also-affect-humans>>.

⁴⁷ Moran, above n 45, 57.

⁴⁸ Michael Appleby et al, *Animal Welfare* (CAB International 2nd Ed, 2011) 25.

⁴⁹ A.R. Barham et al, 'Effects of the transportation of beef cattle from the feedyard to the packing plant on prevalence levels of *Escherichia coli* O157 and *Salmonella*' (2002) 65 *Journal of Food Protection* 2, 281.

livestock epidemics”.⁵⁰ Humane Society International argued pessimistically that there is probably no real humane way to transport animals over long distances by sea or land,⁵¹ as they suffer from the stress of being confined in tight spaces surrounded by other stressed critter. These observances reveal a linkage between biosecurity hazards and animal welfare that should not be ignored.

It is unclear, however, who ought to reasonably know about such risks. Could the Act’s broad language mean those who do not ‘call the shots’ suddenly be imposed with penalties? If a truck driver transports cattle in cramped vehicles, is aware that they are suffering but has no control on how these animals are to be transported, would he breach the duty if he does not object?

The words ‘reasonably practicable’ in s 22 should, as the phrase obviously implies, be interpreted practically and consider the costs associated with available ways of preventing risks. If the cost for an employee to object the way an employer treats animals - which could cause a biosecurity risk - is the risk of discipline, discrimination or dismissal, would that excuse them from not discharging their duty? Whilst the Act should be interpreted broadly, ‘reasonably practicable’ will no doubt be the benchmark of flexibility that both authorised officers and courts will need to carefully take into account.

CONCLUSION

My paper has analysed the new statutory duty under the BIA, legislation which has rapidly transformed the biosecurity framework in NSW. It is not merely a human issue but an important animal welfare one. Animals are the greatest sufferers of disease outbreaks, many of which can be prevented by proper procedure, competence and policy.

The general biosecurity duty is a welcome and necessary addition. Whilst its goal was not the promotion of animal welfare, I have argued that, indirectly, it could provide significant protection of

⁵⁰ Michael Greger, ‘The Long Haul: Risks Associated with Livestock Transport’ (2007) 5 *Biosecurity and Bioterrorism: Biodefense Strategy, Practice, and Science* 4, 301-302.

⁵¹ Humane Society International, Submission by Humane Society International Australia on the Regulation of Agriculture, *Draft Report by the Productivity Commission*, 24 August 2016, 4.

animals from unnecessary suffering as it now features both subjective and objective elements. By ensuring procedures are more thoroughly developed, BIA can prevent the spread of outbreaks like EI. It can also encourage those who work with animals to treat them with compassion, given stressed animals can become more susceptible to diseases. At the time of writing, the Act has only been in operation for five months so it is too early to assess its effects. Future inquiries will be vital to analyse its success.

LEGISLATION CITED

COMMONWEALTH

Biosecurity Act 2015 (Cth)

Quarantine Act 1908 (Cth)

NEW SOUTH WALES

Animal Diseases and Animal Pests (Emergency Outbreaks) Act 1991 (NSW)

Apiaries Act 1985 (NSW)

Biosecurity Act 2015 (NSW)

Deer Act 2006 (NSW)

Fertilisers Act 1985 (NSW)

Fisheries Management Act 1994 (NSW)

Local Land Services Act 2013 (NSW)

Non-Indigenous Animals Act 1987 (NSW)

Noxious Weeds Act 1993 (NSW)

Plant Diseases Act 1924 (NSW)

Stock (Chemical Residues) Act 1975 (NSW)

Stock Diseases Act 1923 (NSW)

Stock Foods Act 1940 (NSW)

Stock Medicines Act 1989 (NSW)

Wild Dog Destruction Act 1921 (NSW)

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