

Animal Welfare in Australia 2025

Environmental Scan



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Acknowledgement of Country

We acknowledge the continuous connection of First Nations Traditional Owners and Custodians to the lands, seas and waters of Australia. We recognise their care for and cultivation of Country. We pay respect to Elders past and present, and recognise their knowledge and contribution to the productivity, innovation and sustainability of Australia's agriculture, fisheries and forestry industries.

Purpose

The renewal of the AAWS establishes Australia's commitment to modern, sustainable, evidence and science-based welfare practice. The department has prepared a cross-sectoral animal welfare environmental scan to outline the context in which animal welfare practices and systems operate in Australia, and within which the renewed AAWS is being developed. The environmental scan is a desk-top exercise with references included.

Contents

Policy	4
Regulatory and legal	6
Sociological	8
Economic	10
Environmental	12
Technology and data	15
Future trends	17
References	19



Policy

Commonwealth initiatives

Renewal of the Australian Animal Welfare Strategy (AAWS)

The Australian Government has committed \$5 million over 4 years (2023-2027) to renew the AAWS (DAFF 2024c), with the objective of providing a framework for a national approach to animal welfare in Australia. The previous AAWS lapsed in 2014. The renewal of the strategy establishes Australia's commitment to modern, sustainable, evidence and science-based welfare practices. It is being developed under a joint leadership model with Commonwealth, state and territory governments, and will be complemented by the National Statement on Animal Welfare (DAFF 2024c).

National Statement

There are several National Statements that have been developed or are under development that may intersect with the current National Statement on Animal Welfare. These include First Nations in Agriculture (DAFF 2024b), Aquaculture (DAFF 2024a), Biosecurity (DAFF 2020) and Climate Change and Agriculture (DAFF 2023a).

Inspector-General for Animal Welfare and Live Animal Exports

In November 2023, the role of the Inspector-General of Live Animal Exports was amended to the Inspector-General of Animal Welfare and Live Animal Exports (IGAWLAE 2025). This new role broadens the Inspector-General's scope, increasing the focus on animal welfare when reviewing the Commonwealth Government's effectiveness in monitoring, investigating and reporting on the implementation of animal welfare and live animal export legislation and standards relating to the export of livestock (IGAWLAE 2025).

Live Sheep Phase Out

The Australian Government has announced the export of live sheep by sea will end on 1 May 2028. The Government has committed \$139.7 million over 5 years to support the transition (DAFF 2025c). The transition plan includes funding for science- and evidence-based activities that will support good animal welfare outcomes during sheep land transport, and to support continued engagement with WOAH, including for the development of global animal welfare standards (DAFF 2025c).

Future Drought Fund

The Future Drought Fund provides secure and continuous funding for drought resilience initiatives and was established in 2019 (DAFF 2025b). The aim is to assist Australian farmers and communities to prepare for the impacts of drought (DAFF 2025a).

Environment Protection and Biodiversity Conservation Act 1999

The Environment Protection and Biodiversity Conservation Act 1999 (EPBC) facilitates the protection and management of nationally and internationally important plants, animals, habitats and places. The EPBC Act is there to assist in protection and conservation of the environment and biodiversity as well as promote sustainable development and assess our environmental impact. It also promotes First Nations people's knowledge and highlights their protection and sustainable use of the environment.

State initiatives

Animal welfare in emergencies

State and territory governments support animal welfare in emergencies. For example, Western Australia (WA DPIRD 2025), Victoria (Agriculture Victoria 2025) and South Australia (SA DPIR 2025) have developed support plans to assist with managing animal welfare during emergencies. Some state and territory government agencies are also involved in the development of the 'Planning for Animals in Disaster' handbook (AIDR 2024), which is a joint initiative through the National Emergency Management Agency and the Australian Institute for Disaster Resilience.

State Governments increase animal welfare funding

Several state governments have committed additional funding to their respective RSPCA branches, who have responsibilities for the enforcement of animal welfare legislation, as well as to animal welfare and volunteer organisations that provide care and rehabilitation for companion animals and wildlife (Government of SA 2025; Government of WA 2025; NSW Government 2024; 2025; Queensland Government 2024; 2025; Victorian State Government 2025). The New South Wales government has also committed to establish an Independent Office of Animal Welfare (NSW Government 2025).

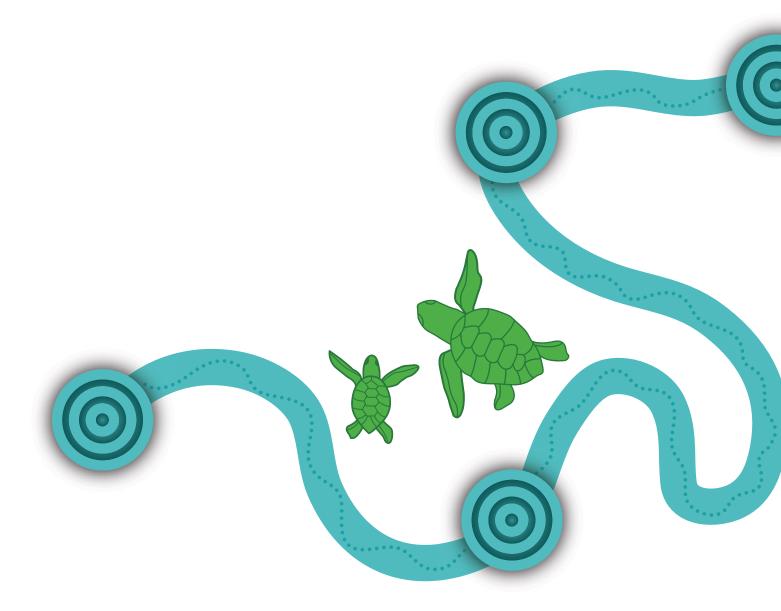
Tasmanian Livestock Processing Taskforce

The Tasmanian Livestock Processing Taskforce was established in late 2023 in response to identified animal welfare concerns in several of the state's commercial processing facilities (Tas. DNRE 2025). The taskforce has developed new Animal Welfare Guidelines and a Strategic Implementation Plan for livestock processing in Tasmania to ensure an enduring animal welfare culture at Tasmanian abattoirs and knackeries.

Emergency and disaster response

The Australian Government has emergency and disaster response plans as well as biosecurity initiatives that influence animal welfare during emergencies. The *Biosecurity Act 2015* contains preventative biosecurity measures and the National Biosecurity Strategy provides strategic direction to prevent disease or pest spread within Australia which may then cause harm to our

animals (Australian Government 2025). Biosecurity measures implemented can also have animal welfare implications themselves, such as destroying infected and in-contact animals on farm during emergency animal disease outbreaks if deemed necessary (AHA 2025). Animalplan (DAFF 2022) is Australia's first national action plan to strengthen the production animal health system. Objective 5 of the action plan will focus on improving animal welfare outcomes relevant to emergency situations. This involves addressing animal welfare risks in emergencies and improving relevant policy and crisis response documents. The Australian Veterinary Emergency Plan, or AUSVETPLAN, is a series of resources that contain nationally agreed approaches for responding to emergency animal disease incidents in Australia (AHA 2025). The Office of the Australian Chief Veterinary Officer also has a focus on emergency animal disease threats in terms of prevention, preparedness, detection and response (DAFF 2023b).



Regulatory and legal

Roles and responsibilities

State and territory governments have the primary responsibility for animal welfare regulation in Australia and administer legislation for animal welfare or the prevention of cruelty. The Australian Government is responsible for the welfare of animals involved in trade and animals processed at export-registered establishments (DAFF 2021).

The export of meat products and live animals is regulated by the Commonwealth via the Export Control Act 2020 and associated rules (DAFF 2022a; 2023b). Minimum animal health and welfare conditions to export livestock are outlined in the *Australian Standards for the Export of Livestock* (ASEL), the current version of ASEL came into effect in November 2023 (DAFF 2022a). The Exporter Supply Chain Assurance Scheme is a regulatory requirement for the export of feeder or slaughter livestock (DAFF 2023c).

All people who have animals in their care have a responsibility to ensure that they have adequate knowledge, training and skills to apply in the protection of the welfare of animals. Australia's animal welfare framework is supported by enforceable standards, voluntary codes of practice and industry certification and assurance schemes (DAFF 2021).

International engagement

Australia, as a member of the World Organisation for Animal Health (WOAH), contributes to the development of international standards for animal welfare in the Terrestrial Animal Health Code. These standards aim to improve terrestrial and aquatic animal health and welfare and veterinary public health worldwide. Australia also uses the WOAH standards to aid in development of their own standards (WOAH 2025c). Australia and New Zealand jointly manage the WOAH Collaborating Centre for Animal Welfare Science and Bioethical Analysis: the David Bayvel Consortium. This venture provides scientific expertise and support to the WOAH and its members as well as providing their expertise internationally (WOAH 2025b). Australia is also a member of the Advisory Group for the Regional Animal Welfare Strategy for Asia and the Pacific (WOAH 2025a).

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) is an agreement between international governments, including Australia,

to ensure that international trade of wild animals and plants does not threaten the survival of those species (CITES n.d.).

International agreements are increasingly considering animal welfare. Australia and the United Kingdom are parties to a Free Trade Agreement which includes a chapter on animal welfare (DFAT 2024b). The Comprehensive Economic Partnership Agreement with The United Arab Emirates also includes a commitment to improving animal welfare (DFAT 2024a).

Legislative reform

Multiple states and territories are undergoing a review of their animal welfare laws to provide a modern legislative framework to address growing public interest surrounding animal welfare and to consider contemporary animal welfare science. National harmonisation and industry arrangements are being considered as part of reform measures to decrease regulatory burdens (NSW DPIRD 2025). The measurement of animal welfare outcomes and indicators are being considered in policy development by states, territories and the Commonwealth. The Commonwealth's regulatory framework for livestock exports utilises animal welfare indicators, through ASEL, for managing welfare outcomes. New South Wales and Victoria are in the process of updating their animal care and protection laws and the South Australian parliament recently passed a new Animal Welfare Act (Engage Victoria 2024; NSW DPIRD 2025; SA DEW 2025). Some state and territory jurisdictions are considering or are in the process of expanding the definition of 'animal' in legislation to include vertebrate fish, cephalopods and decapod crustaceans to reflect scientific evidence that they are sentient (ACT Government 2019; Engage Victoria 2024; SA DEW 2025; WA DPIRD 2021). The Australian Capital Territory was the first jurisdiction to recognise animal sentience in legislation in 2019 (ACT Government 2019). Victoria and South Australia are also proposing to recognise animal sentience in their laws (Engage Victoria n.d.; Kotzmann 2023; YourSAy 2024). The Western Australian Government has supported recommendations to 'recognise that animals are living beings, able to perceive, feel, and have positive and negative experiences' in response to an independent review of the Animal Welfare Act 2002 (WA DPIRD 2021).

Enforcement and reporting

Inspectorate arrangements vary between jurisdictions and are often shared with government agencies, charitable organisations, such as the RSPCA, and the police (NSW DPIRD 2019a; RSPCA 2025; WA DPIRD 2025). Local governments have responsibility over some companion animal management such as control and public health, leading to differing policy and decision making not only between states and territories but internally as well (DAFF 2021). The Queensland Department of Primary Industries publish animal welfare complaints data on their website (QLD DPI 2023). A voluntary survey of the Australian public in 2021 suggests support for greater investigation and prosecution rates (Morton et al. 2022). There are additional challenges to practically enforce animal welfare legislation in rural and regional communities, recognising that regional officers are required to cover large geographical areas (ABC 2024).

Agriculture Ministers' Meeting (AMM)

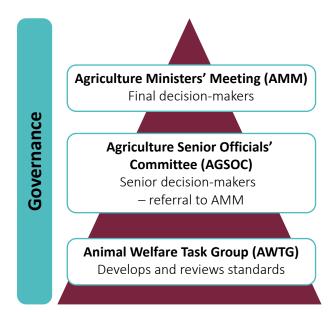
The Agriculture Ministers' Meeting (AMM) consists of Commonwealth, state and territory agriculture ministers. Through this forum ministers work collaboratively on national issues relating to the agriculture and fisheries sectors. In May 2023, all ministers agreed that both the agriculture sector and the general community have a strong interest in the humane treatment of animals (DAFF 2023a) and animal welfare priorities are addressed through the forum. For example, Ministers committed to jointly renewing the Australian Animal Welfare Strategy, to developing a National Statement on Animal Welfare (national statement) during 2024 and are overseeing work to improve the process for developing nationally consistent animal welfare arrangements with an emphasis on clarity, harmonisation and timeliness (DAFF 2024a). At their meeting of 1 November 2024, Ministers agreed to finalise the national statement, and agreed it will cement a commitment to joint leadership between Commonwealth, state and territory governments.

The Animal Welfare Task Group (AWTG), a subgroup of the Agriculture Senior Officials' Committee (AGSOC), continues to work towards a national approach for greater transparency on animal welfare incidents. Ministers also agreed that the AWTG will report on implementation of the Australian Animal Welfare Standards and Guidelines for Poultry. The AWTG has a workplan and reports annually to AGSOC (DAFF 2024b).

National harmonisation

All state and territory jurisdictions work together via the AWTG to develop and review Australian Animal Welfare Standards and Guidelines (DAFF 2024b) (see the governance structure at Figure 1). The group delivers on animal welfare priorities of national interest referred to it by AGSOC. Endorsed national standards are intended to be adopted as minimum legal standards into state and territory legislation (DAFF 2025a). Australian Animal Welfare Standards and Guidelines (standards) have been developed for cattle (AHA 2016a), sheep (AHA 2016b), exhibited animals (NSW DPIRD 2019b) and poultry (DAFF 2022b). Standards for livestock during land transport (AHA 2012) and while at saleyards and depots (Vic. DEDJTR 2018) apply to a range of production animal species. Standards and guidelines for livestock at processing establishments are currently under development, along with amendments to the land transport standards specific to horses (DAFF 2024b). The standards are variably implemented throughout state and territory jurisdictions, with some regulated as mandatory requirements or adopted as recommended codes of practice.

Figure 1 The governance structure that supports national animal welfare standards setting.



Sociological

Community views and attitudes

Social License to Operate or 'social license' refers to the "ongoing acceptance and approval of an industry's operations by the community, and other stakeholders that can affect its profitability" (Breakey 2021). Over the past decade animal welfare has become an important consideration for the social license of Australian animal industries (Hampton, Jones & McGreevy 2020). For example, there has been increased scrutiny of commercial kangaroo harvesting and of the greyhound racing industry following heightened public awareness of adverse welfare outcomes. Cultural and spiritual beliefs can also influence perceptions of animal welfare, including slaughter practices (Hampton, Jones & McGreevy 2020). Some research suggests that in Australia's animal welfare system, there is a changing social license that reflects the intrinsic value of animals (DAFF 2024).

Livestock industries are increasingly embedding animal welfare commitments into their sustainability frameworks, including increased transparency and reporting on animal welfare objectives to address community expectations (ADF 2025; AgriFutures 2024; APL 2021; AWI & MLA 2025; MLA 2025; NFF 2024a).

Urbanisation is continuing to increase with more people concentrated in cities now than at any other time in Australian history (Australian Government n.d.). The move towards larger cities limits the opportunities for physical exposure to production animals and farming, resulting in highly stylised farming practices displayed in places like supermarkets and the local show being the only reference for many. The shift has also resulted in many people now viewing animals primarily as family and members of society, and has reduced understanding of animals in food and fibre production (Buddle, Bray & Ankeny 2018a; Chen 2016). In turn, this has resulted in some consumers in urban regions becoming critical of modern agriculture (Latacz-Lohmann & Schreiner 2018; Taylor & Signal 2009).

Animals are culturally significant to many Australians. Personal and cultural values can influence how individuals and communities interact and care for animals.

Sentience

Sentience is the ability to experience positive and negative feelings such as pain, fear, pleasure and joy (Browning & Birch 2022). Modern views in animal welfare science recognise animal sentience and the need to promote a positive mental state in animals (Birch, Schnell & Clayton 2020; Browning & Veit 2022; Webb et al. 2018). Although scientific views have settled, the legal recognition of sentience is more contentious.

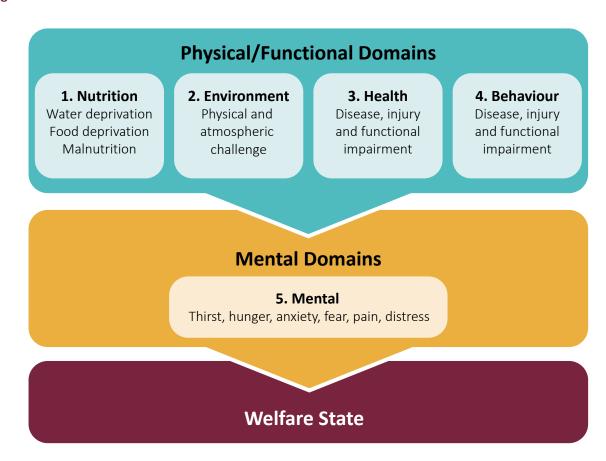
Animal welfare vs ethics

Animal welfare is 'the physical and mental state of an animal in relation to the conditions in which it lives and dies and can be referred to on a spectrum from positive to negative' (WOAH 2025). Ethics is defined as the study of what is considered morally right or wrong, and ethical is morally right (Cambridge Dictionary 2025). Animal welfare science includes empirical and behavioural assessments. It is also widely accepted that assessments of animal welfare involve several considerations that are ethical in nature (AVA 2017).

The Five Freedoms/Domains

The Five Freedoms model has been used when considering animal welfare for over 30 years. Although it was highly influential in the animal welfare sector initially, the model does not fully capture current research in animal welfare and the management of it. Providing complete freedom from negative experiences such as discomfort, injury or disease may not be possible. Therefore, animal welfare is increasingly being considered under the Five Domains Model (Figure 2). The model recognises that animals are sentient and can feel positive and negative emotions and has been used to provide a best-practice framework in some animal industries (RSPCA 2021). Adoption of the model could improve communication about animal welfare in the food chain (Beausoleil et al. 2023).

Figure 2 The Five Domains model



Emerging issues for farmers

Evidence has shown that there is correlation between lower levels of stress in farmers and higher levels of animal welfare. Stressors in farming include things such as poor weather conditions, financial difficulties, adjusting to government regulations, geographical isolation and media criticism (Hansen & Osteras 2019). Despite a genuine passion for farming, farmers are concerned about the future of farming (NFF 2024b).

Information sources and education

Animal welfare topics are becoming increasingly present in the media. Animal welfare stories and posts are being shared through traditional and social media channels. Social media has become an advocacy tool for the younger generations over the last few years. Although this channel gives them an opportunity to engage, support and speak out on areas of concern, there are concerns about the spread of misinformation (Arnot et al. 2024).

Animal activism

A rise in social media usage arguably plays a role in driving animal activism, with hashtag movements such as #Nuptothecup gaining momentum through 'clicktivism' (Arnot et al. 2024; Mkono et al. 2023). Although this is increasing, many Australians feel those involved in this practice are 'ignorant', the content is extreme and unreliable, and that simply sharing something online does not result in meaningful change (Buddle, Bray & Ankeny 2018b). Even though animal activism is becoming more apparent, it is not a new concept and has been around for more than 50 years (Villanueva 2012). In-person activist activity is also happening on city streets, at public events, on farms and at abattoirs and can be a confronting affair for the public (ABC 2019). While activists argue that this activity exposes breaches in animal welfare laws, it also poses risks to biosecurity, safety and welfare to both humans and animals involved (AFI 2013; AVA 2020). Despite this, it has been found that increasing correct awareness around animal welfare issues can lead to improved welfare outcomes (Magnusson et al. 2022).

Economic

Trade and welfare

Livestock and livestock products are forecast to increase in gross value in 2025-2026 to \$40 billion (DAFF 2025b). Animal welfare has become a greater consideration for the trade of animals and animal products. Through the AAWS, Australia has an opportunity to demonstrate its trade credentials in order to maintain and secure future market access. Overseas trading partners are calling for stronger standards on a range of issues. The Italian wool trade is shifting towards non-mulesed wool due to an increasing number of brands and their customers changing their requirements (Sheep Central 2023). In December 2021, the United Kingdom and Australia signed a Free Trade Agreement including the first of its kind chapter on animal welfare (DFAT 2021).

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Socioeconomic drivers of animal welfare

Australia has very high rates of pet ownership. In a 2023 pet census of Victoria, \$449 million was spent on pet insurance alone (Agriculture Victoria 2023). The rising cost of living and tough rental market contributes to the surrender of pets as pet owners struggle financially.

Provision of veterinary care is a key determinant of the health of all animals, one of the Five Domains of animal welfare. The cost of veterinary care is a significant barrier to pet owners from lower social-economic communities (McDowall et al. 2023).

The COVID-19 pandemic contributed to animal welfare issues globally. A recent study demonstrated the need to prepare national, multisectoral response groups to protect animal welfare in such events (Baptista et al. 2021). The purchase of 'designer dogs' during the pandemic is likely contributing to the growing number of pet abandonments (ABC 2024).

The rise in seizures and surrenders relating to economic pressures and rise in cost of living also have an impact on animal welfare groups such as the RSPCA (RSPCA Victoria 2023). Extra pressure is placed on their resources due

to increased demand for their services which in turn increases their need for funding and donations to support their business model (Vet practice Magazine 2023).

Public interest in welfare-conscious food production continues to drive sales of these products. Third party assurance schemes for animal welfare are becoming more common and have been adopted by retailers and food companies. The major supermarkets in Australia have committed to various policy positions related to animal welfare and often source products from 'RSPCA approved' farming schemes. Woolworths and Aldi have pledged to source only cage-free eggs in their supply chains by the end of 2025 (ALDI 2025; Woolworths Group 2025).

The increased cost of a higher welfare product is a significant barrier for Australians to purchase higher welfare weighted products. This indicates that economic trends affect the weight people place on animal welfare (RSPCA 2023). Animal welfare as a priority mirroring current economic circumstances can also be seen in the companion animal area, with pet owners adjusting their priorities surrounding their pet's welfare due to economic constraints. In times of financial hardship, when individuals focus on meeting their basic needs, animal welfare may be deprioritised due to limited resources (Pet Insurance Australia 2024; Vet practice Magazine 2023).

In Australia, animals are involved in various recreational and sporting events, many of which bring people and regional communities together. Greyhound racing in New South Wales contributed \$809million to the economy in the 2022-2023 financial year (Greyhound Racing NSW 2024). The Australian thoroughbred racing industry also contributed around \$9.5 billion to the economy in 2024 (Racing Australia 2024). There is growing community interest in these activities and the use of animals in these sectors. This has driven various standards, guides and initiatives relating to the welfare of animals (AHIC 2023; Equestrian Australia 2017; 2023; Greyhound Racing NSW 2024).

Labour shortages

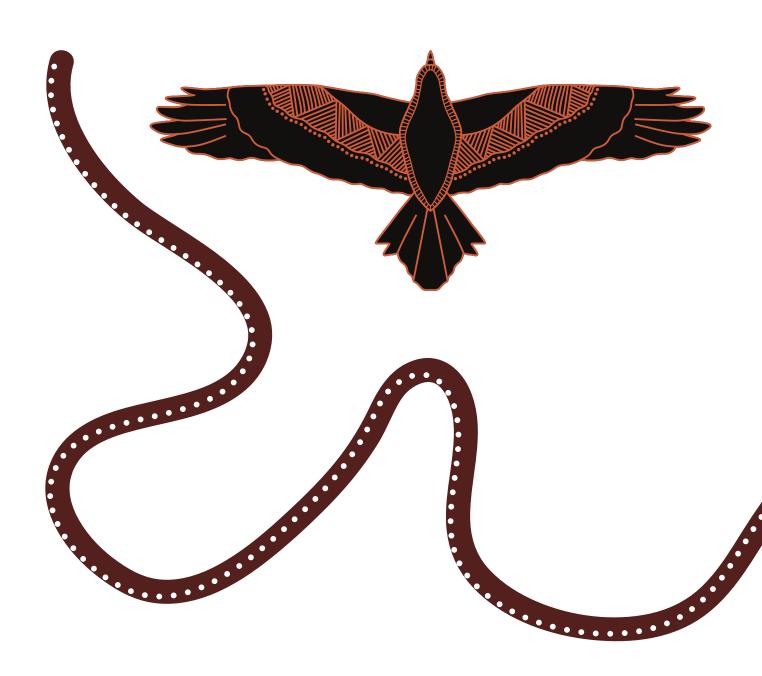
The New South Wales parliamentary inquiry into the veterinary workforce revealed that the veterinarian shortage as well as challenging work conditions for veterinary nurses and technicians was not only a national, but a global problem with a range of contributing factors and broad impacts (Parliament of NSW 2024). Limited veterinary services and difficult working environments impact animal welfare as well as individual animals, and large groups in Emergency Animal Disease events.

The Australian agricultural sector has in recent years struggled with a shortage of farm and abattoir labour, which has down-stream impacts on the supply chain including animal welfare. The Australian Government has committed to supporting the agricultural industry through foundational workforce measures (DAFF 2025a).

Animal welfare and societal wellbeing

Companion animals contribute to Australian society by enhancing mental health, reducing social isolation and fostering community connections. Australians spend over \$33 billion annually on their pets and this economic influx supports industries such as pet care, veterinary services and animal training (AMA 2022). Promoting strong animal welfare standards for companion animals not only improves their quality of life but also amplifies these social and economic benefits.

The rising cost of living and tough rental market contributes to the surrender of pets as pet owners struggle financially (Agriculture Victoria 2023).



Environmental

Climate change

The World Health Organisation has declared that climate change poses the biggest threat to global health in the 21st century. This threat also has negative effects on animal welfare (Vets for Climate Action 2023). The effects of climate change have resulted in increased occurrences of natural disasters such as bushfires, floods, temperature extremes, storms and droughts (WHA 2023b). These extreme weather events can directly cause death due to destruction of habitats resulting in a lack of food, water and shelter as well as being at risk of heat stress and heat stroke (RSPCA 2020). For example, the Black Summer bushfires in 2019-20 greatly impacted Australia's biodiversity, killing or displacing approximately 3 billion native animals (CSIRO 2022; Parrot et al. 2021). This includes up to 10,000 koalas in New South Wales which is a third of the population. Evidence shows that wildlife located over 50km away from bushfires can die due to smoke inhalation (RSPCA 2020). Flooding and droughts can also have a negative effect on fish populations. During these events, the levels of dissolved oxygen in rivers can reduce significantly, leading to stress and potential suffocation (MDBA 2025). The 2022 Lismore floods saw at least 1300 animals killed including cows, horses, pigs and sheep, with cattle and other livestock being a large proportion, both directly in the floods and indirectly from pasture contamination (ABC 2022a; 2022b; Nilsson 2022). Algal blooms are also linked to periods of exceptionally warm ocean temperatures, made more likely as a result of climate change. They may last between a week to several months and cause marine species mortalities. For example, a marine heatwave affecting southern Australia since September 2024 has resulted in algal blooms and marine mortalities in South Australia (SA DPIR 2025). These disaster events impact a wide range of Australian animals.

Climate change is impacting rain events, sea temperatures and levels, and ambient temperatures, which can impact vector reproduction. This can cause a rise in disease incidents and affects the geographical distribution of the vectors and, therefore, diseases (AVA 2022). Akabane and Bovine Ephemeral Fever are both examples of vector-transmitted diseases in cattle that are affected by rain and have seen a shift in case numbers and geographical distribution (AHA 2025; Queensland Government 2015; 2025a).

Pest management

The estimated annual cost to Australian agriculture from introduced species like foxes and feral pigs is around \$720 million-\$1 billion (DCCEEW 2017). Pest animals can cause damage to ecosystems and agricultural land, as well as spread diseases to native wildlife, domestic animals, and humans. Feral animals such as deer, buffalo, feral cats and wild dogs can spread disease, act as predators, and disturb critical wildlife habitat reducing biodiversity and increasing competition (NSW DPI 2023; WHA 2023c). Other invasive species include insects such as the Red Imported Fire Ant, which can cause extensive damage to ecological and agricultural systems and can negatively impact humans and animal welfare (Australian Government 2024). The Australian Pest Animal Strategy is currently in place to provide guidance on best practice pest animal management, including animal welfare considerations (DCCEEW 2017). Our waterways are also affected by pest species such as carp. The negative impacts on water quality and decrease in native fish populations caused by this species can be devastating. The National Carp Control Plan has been funded to investigate a long-term control plan to reduce this impact (DAFF 2024).

Indigenous land management

First Nations teachings and perspectives on animal welfare, including engagement in cultural practices that involve Australia's landscape, are an important consideration in the context of animal welfare in Australia. Indigenous land management is formally recognised in the EPBC Act and the land under First Nations management contain healthy ecosystems that provide a wide array of habitats for our native species. Activities such as invasive non-native species control, biosecurity surveillance and fire management are all vital to this (CSIRO 2017). The development and operation of projects like the West Arnhem Land Fire Abatement have been successful in reducing projected greenhouse gas emissions and risk of wildfires (DCCEEW 2021b). The importance of animals to First Nations people extends beyond land management; caring for Country relies on balance as Indigenous Knowledge indicates that all things are connected and related (DCCEEW 2021a).

Sustainability

Animal welfare can be considered in the context of the UN Sustainable Development Goals (SDGs), including SDGs 14 and 15 relating to life below water and on the land. The SDGs are priorities of the Food and Agriculture Organization and are referenced in the Australian Dairy and Australian Chicken Meat Industry Sustainability Frameworks (ADF 2024; AgriFutures 2024). The Australian Agricultural Sustainability Framework seeks to demonstrate the economic, environmental and social sustainability of Australian agriculture (NFF 2024). Many Australian livestock industries have developed sustainability frameworks which include animal welfare considerations and objectives for industry. These frameworks recognise the relationship between animal and environmental care. The Australian Beef Sustainability Framework recognises both animal care and environmental stewardship as key themes (MLA 2024).

The One Welfare approach highlights the links between animal welfare, human well-being and the environment (One Welfare 2025). Environmental sustainability outcomes can result in positive flow on effects to both animals and humans, increasing overall welfare.

Consumers have been shown to correlate environmental sustainability in the meat industry with better animal welfare. Although this can be true, it is not always the case. In a study conducted around consumers and sustainable meat, it was found that some consumers linked 'RSPCA Approved' chicken with animals having outdoor access and being environmentally friendly (Garcez de Oliveira Padilha, Malek & Umberger 2021). This interpretation is not correct and occurred without these factors being outlined on the labelling criteria. The incorrect inference indicates there is a perception of interrelationship between sustainability and animal welfare.

Conservation

The risk of species extinction in Australia continues to rise. This has resulted in many zoos, landcare and conservations groups becoming dedicated to the conservation of local species. Through research, insurance populations and breeding for release, extinctions have been averted and some of the endangered wild populations are increasing (Fleming 2019). Within the aquaculture field, there are marine parks and protected areas throughout Australia's waters, as well as monitoring through data collection and assessment of marine industries, to assist with the conservation of marine life (CSIRO 2020; DCCEEW 2025a).

Antimicrobial resistance

Antimicrobial resistance (AMR) is considered to be one of the most significant threats to human and animal health by the WOAH and Australian Government (CSIRO 2022). Antimicrobials are less effective because of AMR, making it more difficult to manage sick animals and their welfare. Through shared contaminated environments, AMR can be transferred between humans, domestic animals and wildlife. Australian animal health sectors have committed to reduce the use of antimicrobials (WHA 2023a). Research grants are continually awarded to decrease AMR.

Disease outbreaks

WOAH estimates over 20% of animal production is lost worldwide because of disease (WOAH 2025). Disease outbreaks can greatly impact animal agricultural industries from reduced production, subsequently impacting food availability. Australia remains free from the world's most invasive pests and diseases, our status as an island nation has been a key factor in maintaining this position. However, global threats of H5N1 highly pathogenic avian influenza, foot and mouth disease and lumpy skin disease remain a threat to the health and welfare of Australia's animals, including wildlife. Climate change can also impact disease outbreaks. Diseases, such as equine infectious anaemia (EIA), are spread by biting insects. Outbreaks of EIA and other vector-transmitted diseases can occur after flooding events and major rainfall (Queensland Government 2025b).

Greenhouse gasses

In September 2025, the government set a national target to reduce greenhouse gas (GHG) emissions by 62–70% below 2005 levels by 2035 (DCCEEW 2025b). Along with this, a Net Zero Plan outlining how we will achieve this target was released. To support this plan, an Agriculture and Land Sector Plan was also released which establishes a framework for the sectors to contribute to Australia's net zero target (DAFF 2025). The plan is focused on improving productivity and sustainability through strategic objectives underpinned by foundational actions (DAFF 2025). It also acknowledges that Australia's agriculture and land sectors have already made valuable contributions to Australia's emissions reduction goals, with world leading low-emissions food and fibre production. Since 2005 to 2021, net GHG emissions by the Australian red meat industry decreased by 78% since 2005, with a 40% decrease from 2020 to 2021 (Mayberry 2024). Improved animal health and husbandry practices can continue to support reduction in livestock related emissions (AMA 2022).

The Australian Climate Service, a partnership between the Bureau of Meteorology, CSIRO, the Australian Bureau of Statistics and Geoscience Australia, released the National Climate Risk Assessment in September 2025 (Australian

Climate Service 2025). This risk assessment addresses the need to support private investment in adaptation, and that facilitating innovation in resilience may assist industry adaptation.

Geography

Twenty-eight percent of the Australian population live in rural and remote areas. Due to their geographical

location, they face many unique challenges such as no or limited access to veterinary care (AIHW 2025; AMRRIC n.d.). The New South Wales inquiry into the veterinary shortage also outlined that it is difficult to recruit vets into regional and rural areas and clinics in these areas are closing (Parliament NSW 2024). It has been found that access to animal health services is integral to ensuring good animal welfare (Pasteur et al. 2024).



Technology and data

Technology

Developments in technology and data have implications for animal welfare that can be either positive or negative. Technologies continue to be developed and implemented in Australia and globally. The emerging discipline of 'Animal Computer Interaction' proposes that technology design is 'animal-centric'. This will provide opportunities to enrich animals' lives, better monitor their health and reduce handling requirements (Webber, Cobb & Coe 2022).

Wireless connectivity technology using telecommunications infrastructure is being deployed in dairy farms in Australia to monitor cattle productivity and health. The AWTG has published a scientific literature review of the welfare considerations for virtual fencing technology for cattle that is currently in use around Australia. The AWTG is drafting a guide which supports a national harmonised approach to promoting optimal animal welfare outcomes with the use of virtual fencing technology across the nation. Application of the technology in other species is also being explored (DAFF 2024; AWI 2022).

Artificial intelligence (AI) technology to continuously monitor livestock and notify farmers where interventions are required is being developed. At has the potential to improve animal welfare, compliance and efficiency, when used appropriately and safely. Facial recognition Al technology could improve traceability of livestock in cases of theft or emergencies and match livestock to their offspring. Advances in monitoring technology can reduce handling requirements and enable early intervention for health and disease concerns (DITRDCA 2024; Guoming, Erickson & Xion 2022; The Lucas Group 2023). Microchips which utilise AI technology and record animal health data are being developed (Countryman 2024). Remote monitoring devices have been used in racehorse training, monitoring real time exercise data with the goal of reducing injury rates (Wong et al. 2023). Newborn lamb mortality is a major economic and welfare concern. Accelerometers attached to halters are helping to detect lambing events, enabling personnel to identify birthing issues and monitor sheep (Turner et al. 2023).

Drone mustering technology allows animals to be moved at night, avoiding high daytime temperatures (MLA 2024b). Agriculture Victoria and Meat & Livestock Australia (MLA) are also exploring the use of drones to monitor sheep welfare on farms (Agriculture Victoria Connect 2025). Similar projects such as the New South Wales Wildlife Drone Hub Project is underway for wildlife tracking and monitoring (NSW Environment and Heritage

2023; Wilson, Amano & Fuller 2023). The full impacts of the use of drone technology on animals and their behaviour are still being explored.

A virtual reality stunning training tool was developed by LiveCorp and MLA to ensure optimal welfare outcomes by providing opportunities for training for abattoir personnel (LiveCorp 2024).

Illegal wildlife trafficking is a threat for many species at risk of extinction. The Australian and New South Wales governments have implemented Rapiscan Systems which are 3D x-ray CT scanning technology to combat this trade through mail and traveller luggage pathways (DCCEEW 2022).

'Organ on a chip' models and AI are also being developed to reduce and replace animals used in research. The New South Wales government has committed \$4.5 million to establish the Non-Animal Technologies Network and partner with research institutions to support this work (NSW Government 2025).

Advances in genetics

Breeding to improve the resilience and welfare of production, working and companion animals is supported by research initiatives in Australia. Genetic selection to improve disease and heat resilience of livestock and reduce reliance on painful husbandry procedures is a focus of Australian agriculture initiatives (CSIRO 2023; MLA 2024a). Examples include breeding and selecting for sheep with a reduction in breech wrinkle, increasing resistance to flystrike, and breeding cattle without horns (CSIRO 2021a; 2024). The breeding of salmon resistant to gill disease is being undertaken by the CSIRO and will support the Tasmanian Atlantic Salmon industry (CSIRO 2021b).

Dog ownership in Australia is increasing, driving the need to manage the incidence of heritable diseases, an initiative encouraged by veterinary associations (Trounson 2018). DNA testing is one technique enabling dog breeders to select against negative traits such as those in the 'snub nosed' breeds (Dutrow, Serpell & Ostrander 2022; AVA 2023). Selecting favourable traits in working dogs could reduce wastage in this group (AgriFutures 2015).

The global rate of wildlife extinctions is accelerating. Major efforts, from a range of stakeholders are underway to combat the challenges faced from climate change, infectious diseases and globalisation. 'Targeted Genetic Intervention', a concept of increasing species resilience to these threats is an example (Kosch 2022).

Taking advantage of data

Basing animal welfare policy and practice on the best available science and evidence ensures modern and up to date outcomes for animal welfare. The renewed Australian Animal Welfare Strategy aims to maintain Australia's commitment to modern, sustainable, evidence and science-based animal welfare practice. The Australian Government has committed to various initiatives to support accurate data reporting and analysis during live animal export (DAFF 2023). The Business Research and Innovation Initiative, managed by the Department of Industry Science and Resources, is providing grants to solve challenges faced by Australian businesses. Round Pixel was awarded \$1 million to develop the project 'Smart Technology Delivering Animal Welfare and Supply Chain Efficiency', for remote and automated monitoring of export livestock health and welfare (DISR 2023; Round Pixel 2020). Programs such as Microsoft Power BI can be used to effectively collate and analyse data for outcomes relating to live animal exports and imports.

The Future Drought Fund is supporting technology to track water and grazing radius of cattle in the Northern Territory, and GPS cattle tracking in South Australia. Data

outcomes from these projects can improve rangeland management and promote consistent feed availability for cattle (Watt 2024).

Lifecycle traceability has been identified as a key component in managing the welfare of various animal groups in Australia. Programs of animal traceability in Australia include the National Livestock Identification System for cattle, sheep and goats, the agreed tracing of registered greyhounds in Victoria and the National Horse Traceability Implementation Taskforce group (Australian Racing Greyhound 2024; NSW DPI 2023; DAFF 2022).

Rural Research and Development Corporations help drive agricultural innovation and the update of technology. Industry and the Australian Government co-invest in a range of research, development and extension activities to support continuous improvement in animal welfare (DAFF 2025).



Future trends

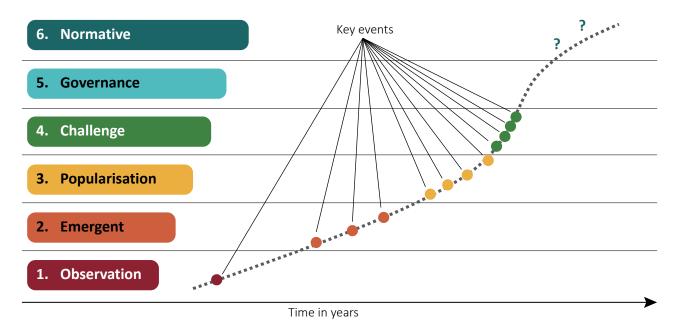
While developing this environmental scan, potential future trends in animal welfare were identified. Factors such as climate change, increased disease outbreaks, greenhouse gas emissions, sustainability, advances in artificial intelligence and changing societal views seem to play a significant role in the future of animal welfare in Australia.

Social maturity curve

A social maturity curve can be used to predict the future sociological challenges for animal welfare in Australia (see Figure 3 for an example). Animal welfare is currently approaching the end of phase 4: Challenge. This is when you see large amounts of growing interest and research occurring as well as advocacy and pushback. From this, a prediction can be made for the future: as the public develop a better understanding of what they perceive as

good animal welfare, they will begin challenging decision makers and demand further regulation from Government. The fifth phase is 'Governance'. Here you will begin to see policy developed, refined and implemented to meet community expectations. Moving into phase 6: Normative, there will be a focus on socialisation of the new views and values. At this stage, those of who are not aligning with these new expectations will likely face social penalties (Hampton & The-White 2019; Hill et al. 2012). Polarisation of stakeholder views can feature at any point of the curve. It should be noted that this is a simplified model. Once society settles into the normative phase, there is a possibility of a cyclical pattern occurring where observation again begins to occur. What is emergent today, may be normal in future or even a future challenge.

Figure 3 Example social maturity curve



Climate change

Research has shown that climate change will worsen in the future and global temperatures have been predicted to continue rising (NASA 2024). This will have significant implications for animals worldwide. Increases in severity and frequency of natural disasters, changes in pH of the ocean and higher ambient temperatures are likely to result from this causing negative animal welfare (RSPCA 2020). A change in vector distribution due to climate change may see heightened risks from endemic vector-borne diseases and from currently exotic diseases such as Lumpy Skin Disease and Nipah virus (ABC 2022).

Climate change poses significant risks to the productivity and profitability of primary industries, and the quality of food and fibre products (DAFF 2025). Given a link between improved animal health, increased productivity and reduced emissions, reductions in GHG emissions could see positive animal welfare through reduced disease and illness prevention (AMA 2025). Appropriate planning and coordination will be needed to reduce decarbonisation transitional risks, balance different land uses and support agricultural industries and communities. To better prepare for and manage the increasing risks from climate change, the Government has delivered Australia's first National Climate Risk Assessment and National Adaptation Plan (DAFF 2025).

Sustainability

The predicted increase in demand, including animal protein, for food is 35% by 2030 due to a growing population (AMA 2022). This growing demand for animal protein must be met with improved productivity and efficiency to meet consumer needs. Higher standards of animal health and welfare may play a large role in meeting these requirements as both factors contribute to increased production.

Disease outbreaks

Infectious disease outbreaks have increased in line with global population growth, air travel, urbanisation, livestock handling and wildlife harvesting. A rise in infectious disease outbreaks is predicted in future as they are driven by factors such as rising population density and global environmental change (CSIRO 2022). Scientific advances and emerging technologies provide solutions in animals for improving individual and herd immunity and disease prevention, as well as rapid, specific diagnostic processes and targeted, effective treatment options (AMA 2022).

Artificial intelligence

The rise of artificial intelligence, accessible remote production data and geoengineering advances are some of the future cross-sectoral forces being explored by AgriFutures. These trends will require consideration for their impact on Australian animal welfare. The mega trend 'Increasingly autonomous' is also one of seven megatrends identified by the CSIRO's 'Our Future World' report (CSIRO 2022).



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