

Contact:

Ms Stefany Goldring
Chief Executive Officer
E: ceo@vfca.org.au

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The Australian Government
Department of Agriculture, Fisheries and Forestry

Submission to the renewal of the Australian Animal Welfare Strategy

Vets for Climate Action¹ (VfCA) welcomes the opportunity to contribute to the production of an updated Australian Animal Welfare Strategy (AAWS).

VfCA is an Australian charitable organisation with over 2000 supporters, providing opportunities for vets, vet nurses, veterinary support staff and the broader animal care community to tackle the climate crisis both within and beyond veterinary practice. Our vision is a world where animals and people are thriving in a healthy climate.

Veterinarians practise and promote science-based animal health and welfare every day of their working life and beyond. It follows that the AAWS should be current, comprehensive and science-based. At the present time, government animal welfare documentation in Australia barely refers to climate change and that must be addressed in the renewed AAWS.

Climate change and animal welfare

The latest Intergovernmental Panel on Climate Change synthesis report² confirms that human activities, principally through emissions of greenhouse gases, have unequivocally caused global warming. The rising global temperature is causing environmental degradation, natural disasters, weather extremes, food and water insecurity, economic and social disruption.

The latest World Meteorological Organisation annual State of the Global Climate report³ confirmed 2023 was the hottest year on record, ocean heat reached its highest level since records began, global mean sea level also reached a record high and Antarctic sea ice reached a record low.

¹ [Vets for Climate Action \(vfca.org.au\)](https://vfca.org.au)

² <https://www.ipcc.ch/report/sixth-assessment-report-cycle/>

³ [State of the Global Climate 2023 \(wmo.int\)](https://www.wmo.int)

Climate change can have a negative effect on animal health and welfare directly (e.g. increased risk of heat and cold stress) and indirectly (e.g. reducing availability of suitable habitat, decreasing quantity and quality of food and water, changing distribution of infectious disease agents, and increasing the risk of flood, fire, and drought)⁴.

There are well documented instances when climate change has had a harmful effect on the welfare of animals in Australia, resulting in ill-health, deaths and, in one case, extinction. The number of deaths has been high on some occasions.

The original AAWS listed six animal groups to ensure that the strategy was comprehensive. Below are reports relating to these six animal groups where animals have died, or may suffer in the future due to climate deterioration.

1 Livestock and production animals

Heat stress can profoundly affect cattle, making some parts of Australia increasingly unsuitable for *Bos taurus* breeds such as Angus and for dairy cattle, even if shade is provided⁵.

Much of Australia is drought-prone, and the risk is expected to increase as global warming continues. New climate modelling suggests Australians should be preparing for the possibility of megadroughts lasting more than 20 years⁶.

In northern Queensland in February 2019 an estimated 500,000 head of cattle were lost in widespread floods⁷. Cattle drowned in the floods in NSW during 2022, while others starved because the dirty water contaminated their pastures⁸.

2 Companion animals

Heatwaves, longer periods of very hot days, are a risk for pets as well as backyard hobby animals such as chickens or goats, and horses.

Serious heat stroke may be seen in dogs that are exercised excessively on hot days or left alone in houses or cars, leading to multiple organ failure and death.

Taking dogs for a walk on overheated pavements risks burning the pads of their feet⁹.

3 Aquatic animals

The sex of a sea turtle is determined by the temperature of the sand incubating the eggs. Warmer temperatures of 29.1 degrees Celsius and above produce females and cooler temperatures produce males. Increasing temperatures as a result of climate change means more females are born, disturbing the natural gender ratio. It is possible that the population of

⁴ [Impact of climate change on animal health and welfare | Animal Frontiers | Oxford Academic \(oup.com\)](#)

⁵ [Heat stress | Meat & Livestock Australia \(mla.com.au\)](#)

⁶ [A 20-year 'mega-drought' in Australia? Research suggests it's happened before – and we should expect it again | ANU Institute for Climate, Energy & Disaster Solutions](#)

⁷ Cowan et al (2019) *Forecasting the extreme rainfall, low temperatures, and strong winds associated with the northern Queensland floods of February 2019*
<https://www.sciencedirect.com/science/article/pii/S2212094719300970>

⁸ [NSW floods killed at least 1370 animals. Agriculture Minister says | news.com.au — Australia's leading news site](#)

⁹ [Top tips for protecting your pet's paws from hot pavement - BC SPCA](#)

sea turtles could be completely female in the near future which will be detrimental to the future of the species¹⁰.

The Great Barrier Reef has experienced several mass bleaching events caused by rising ocean temperatures driven by global warming. This brings long term risks not only to the reef itself but to the diversity of marine fauna living within the reef. A decline in Dugong populations in waters around the Great Barrier Reef is attributed to gillnet fishing and habitat loss—which climate change and pollution have exacerbated¹¹.

4 Animals used for work, recreation, entertainment and display

Racehorses and greyhounds may be prone to heat stress. During racing or training, the body temperature can rapidly increase and when environmental conditions are hot and humid, the normal physiological cooling mechanisms become ineffective, with potentially lethal consequences. On days above 30°C, during racing the body temperature of horses increases by 1°C for every 1 minute of racing¹² and that of greyhounds increases by more than 2°C in less than 1 minute of racing¹³.

5 Animals used in research and teaching

The *Australian code for the care and use of animals for scientific purposes* promotes the ethical, humane and responsible care and use of animals used for scientific purposes¹⁴. It states that pens, cages and containers must be protective of animals against climatic extremes. And, the welfare of animals during transport must be safeguarded, especially when there are extremes of temperature.

6 Native, introduced and feral animals

Nearly three billion vertebrate wild animals – mammals, reptiles, birds, and frogs – were killed or displaced in the mega bushfires of 2019-20¹⁵.

An extreme heatwave in far north Queensland, when temperatures were over 42°C, killed more than 23,000 spectacled flying foxes, equating to almost one in every three individual animals in the population¹⁶.

An Australian rodent in the Torres Strait Islands, the Bramble Cay melomys is the first mammal to become extinct due to climate change. Rising sea levels and storm surges are thought to have resulted in loss of habitat for this animal¹⁷.

¹⁰ [Green turtles and climate change | WWF Australia](#)

¹¹ [Long-term decline in GBR dugong populations confirmed - JCU Australia](#)

¹² Brownlow MA, Dar AJ and Jeffcott LB (2016) Exertional heat illness: a review of the syndrome affecting racing Thoroughbreds in hot and humid climates. *Australian Veterinary Journal* 94: 240–247.

¹³ McNicholl J, Howarth GS and Hazel SJ (2016) Influence of the environment on body temperature of racing greyhounds. *Frontiers in Veterinary Science* 3: 53. DOI: 10.3389/fvets.2016.00053

¹⁴ [Australian code for the care and use of animals for scientific purposes | NHMRC](#)

¹⁵ [New WWF report: 3 billion animals impacted by Australia's bushfire crisis - WWF-Australia | New WWF report: 3 billion animals impacted by Australia's bushfire crisis | WWF Australia](#)

¹⁶ [How one heatwave killed 'a third' of a bat species in Australia \(bbc.com\)](#)

¹⁷ [Barrier Reef rodent is first mammal declared extinct due to climate change - UQ News - The University of Queensland, Australia](#)

Duty of Care

The World Organisation for Animal Health states in its Animal Welfare Strategy¹⁸ that animal welfare “is a responsibility that must be shared between governments, communities, the people who own, care for and use animals, civil society, educational institutions, veterinarians and scientists.”

In Australia, States and Territories are responsible for animal welfare legislation and enforcement. Within that legislation, the Duty of Care for domestic animals lies with the owner or the person caring for the animals.

The owners of animals can do little as individuals to mitigate climate change. Yet they are expected to manage the consequences, for example to shelter their animals from extreme heat events, to move their livestock to higher ground during floods and include their pets in evacuation plans.

Native wildlife are left to care for themselves during severe weather events.

It is the responsibility of governments to address climate change and reduce the risks for the environment, humanity and all animals. Legislation, policies and plans must be in place to reduce greenhouse gas emissions as speedily as possible, to achieve the legislated target of reducing Australia’s net greenhouse gas emissions to 43% below 2005 levels by 2030 and reaching Net Zero by 2050.

The responsibility of governments to address climate change, for the sake of the health and welfare of all animals, now and in the future, must be recognised in the renewed AWSS.

Animal Welfare Standards and Guidelines

As documented above, climate change and severe weather events are already affecting the welfare of all animal groups.

As climate change progresses and the temperature increases, suitable habitats for ticks, flies and mosquitoes are likely to spread to new and different parts of the country. The distribution of vector-borne diseases will change correspondingly, with the potential to cause increased disease risk to animals and humans.

All Animal Welfare Standards and Guidelines must be revised to include the health and welfare risks associated with climate change. The more recently revised documents do refer to extreme weather, without mention that climate change will result in deteriorating climate and weather over time with associated disease risks.

In order for animal owners to be fully aware of climate risks and have plans in place to ensure the safety of their animals, awareness and education programs will need to be budgeted for.

¹⁸ [EN_OIE_AW_Strategy.pdf \(woah.org\)](#)

Recommendations

1. The renewed AWWWS must be current, comprehensive and science-based. It must recognise the consequences that human-caused climate change has delivered for the health and welfare of all animals.
2. The renewed AWWWS must require the Commonwealth, State and Territory governments to recognise the impact of the increasing temperature and severe weather events on the health and welfare of all animals and accept the responsibility for delivering rapid target-based action on climate change to reduce that risk.
3. The Australian Animal Welfare Standards and Guidelines need to be urgently revised and updated to recognise the risks of climate change and the responsibility of animal owners and carers to be conscious of those risks and prepared to respond.

Further support from VfCA

VfCA would be pleased to provide further support for the review of the AAWS.

VfCA is engaging globally after presenting at the General Assembly of the World Veterinary Association. Members of the VfCA Board have met with veterinary representatives in Europe, UK, USA, India, Japan, China, USA and New Zealand to pursue the care of animals as the climate deteriorates. Nobel Laureate and Veterinarian Prof Peter Doherty is VfCA's active patron.

The Australian veterinary profession is a key player in the livestock industry and is well aware of the valuable export trade in meat, wool and dairy products. Australia exported \$80.4 billion in agriculture, fisheries and forestry (AFF) products in the 2022–23 financial year – a record high, and a 17% increase on the previous year¹⁹.

VfCA can assist in safeguarding Australia's animal health and welfare reputation despite the climate crisis, ensuring ongoing respect from trading partners

Signed:

Dr Jeannet Kessels BVSc (Hons)
Chair
Vets for Climate Action
E: chair@vfca.org.au

Author:

Dr Janet Berry PhD BVMS

¹⁹ [Overview – Agriculture, fisheries, and forestry exports in 2022–23 - DAFF](#)