DEFEND THE WILD



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DEFEND THE WILD

Our earth is hurting, wildlife are suffering, and we are collectively part of a consumer based system that does not serve us, the animals, or our planet. Together, we can change this.

For too long, the public has been misled into thinking Australia and its native animals are carefully protected. In reality, this land and country is approaching alarming levels of irreversible environmental damage, and as a result the extinction of various wild animals who play vital roles in balancing their ecosystems.

The promises we are given and the contorted animals and human communities, too. stories we are told about the state of this land and the animals who belong to it are misleading. We deserve to understand the science, and what's really going on – so that we can defend the wild. This booklet aims to provide this information to you in a way that is comprehensive yet accessible.

Of course, there are multiple factors contributing to the decline of Australia's wild places and faces, and it cannot be explained by a single event or industry. However, the forces driving the destruction of our natural world are few and far between, and if we can work together to protect them, we can not only help protect native animals and the planet, but alleviate the suffering of farmed

We intend for this information to be accessible for all, so we can make more informed decisions about the food we consume and clothes we wear, and help save this country, together.

Defend the Wild would like to acknowledge the Traditional Custodians of the land on which we reside.

We pay our respects to their Elders past and present, and join their calls for justice. While we refer to the land as Australia throughout this booklet, we recognise this as the colonialist naming of a country that exists upon unceded Aboriginal territory.

This always was, and always will be, Aboriginal land



HABITAT DESTRUCTION

Habitat destruction is the leading cause of species extinction in Australia and around the world.

A global issue, this decimation of land and biodiversity represents the primary threat to over 80% of all species in Oceania. Australia's relentless clearing of land has earned us the title of the worst deforesting nation in the "developed" world.

Just 50% of Australia's forests and bushlands remain intact, as compared to pre-european occupation. We have destroyed 27% of our rainforests, 19% of open forests, 11% of our woodlands and 28% of mallee forests.

Many native animals die as a direct result of the clearing process - crushed by trees or heavy machinery. Surviving animals, whose homes are demolished, are left without adequate shelter from predators, and are at risk of starvation due to the loss of reliable food sources, causing suffering and ultimately, death. Estimates suggest that almost 4.9 million animals died nationwide due to land clearing every year in the decade ending in 2015. By 2018, 10 million animals were killed each year from habitat destruction in NSW alone.

In the last 15 years, at least 13 native species have become extinct – almost one each year.

According to the government's recent State of the Environment (SOE) report, Australia has lost more mammal species than any other continent in the world.

According to data from the Australian Government's National Greenhouse Accounts (NGA), animal agriculture was the leading cause of land clearing between 2010 and 2018. This land desecration occurs for the sake of beef, lamb, dairy, leather and wool industry profits.

LAND CLEARING AND ANIMAL AGRICULTURE

Raising 'livestock' accounts for ~77% of all global farming land use. Despite this, meat and dairy consumption accounts for only 18% of global calories and 37% total protein.

Similarly, wool makes up less than 2% of the global fibre market. 'Livestock' grazing occupies about 54% of Australia's surface area, and this is before considering the land used to grow crops fed to farmed animals. Conversely, just under 8% of land has been set aside for critical nature conservation, with a further ~15% conserved as 'other protected including indigenous uses'.

In Queensland, Australia's worst deforesting state, over 90% of cleared forests were replaced by pasture for beef and leather production between 2016-2019.

A Wilderness Society analysis found that in just one year, beginning in 2018, 92,718 hectares of likely koala habitat was destroyed across Queensland with approximately 80% tied to beef and leather production. The sheep industry producing meat, wool and lanolin (used in cosmetics) is extremely land inefficient and destructive, too. To produce 1 knit sweater made of different fibres, vast differences in required cleared land occurs. In the case of Australian wool, 1837.5 square metres of land must be cleared or kept cleared. Comparatively, Australian cotton (which must be sourced with sustainable, wildlife friendly farming in mind), requires just 7.44 square metres of land must be clear.

Queensland government data for the year of 2021 showed that a massive 93% of habitat destruction was cleared for beef and leather production. Subsequently, five weeks later the iconic koala was finally listed as endangered.

For farmers and landholders, economic conditions are a huge driver of land clearing. When demand for beef and leather products are high, increasing prices, there is a strong incentive to clear more precious land for the sake of greater profits.

BROADER IMPLICATIONS

OF LAND CLEARING

Trees play a vital role in capturing and storing greenhouse gas emissions, and when cleared, that CO2 is released back into the atmosphere. This ultimately heats up the planet - contributing to climate change. Land clearing also promotes soil erosion and drought contributing to biodiversity decline and unsustainability.

SOLUTIONS

A transition away from animal-based farming in favour of plant-based agriculture would reduce global farmland needed by 75%, eliminating the need for continued land clearing.

This would also present an opportunity for rewilding and returning the land to nature. This system should be designed by Indigenous communities, who have lived sustainably on the land for more than 65,000 years prior to European settlement. Broader implications of land clearing

Climate Crisis

CLIMATE CRISIS

Australia has already begun to suffer the devastating impacts of the climate crisis; with marine heatwaves causing mass coral bleaching, catastrophic bushfires claiming the lives of three billion native animals in 2019/20, droughts impacting a massive 95% of the state of NSW in 2019, and floods, which had recently swept through QLD and NSW, claiming the lives of wild animals, community members and farmed animals.

In 2021 the Intergovernmental Panel on Climate Change (IPCC) released their most comprehensive report on the global climate crisis to date, which stated that "it is unequivocal that human influence has warmed the atmosphere, ocean and land".

THE CLIMATE CRISIS' IMPACT ON BIODIVERSITY

Climate change poses a serious threat to Australian biodiversity, and our vulnerable wildlife will be faced with having to adapt to changes in water availability, fire regimes and land use, all while avoiding predation.

Australia's current pledged levels of emissions will see half of all birds and reptiles, two-thirds of mammals, and close to 80% of amphibians disappear. According to a report released by the World Wildlife Fund, even if global mean

temperatures were kept to 2°C, south-west Australia is predicted to become unsuitable for 30-60% of species across all groups.

The likelihood of extinction for a large portion of currently endangered and non-endangered species is high, unless swift action is taken to alleviate the destructive effects of climate change on wild-living populations of animals.

DRIVERS OF THE CLIMATE CRISIS IN AUSTRALIA

Fossil fuels

Fossil fuels are the leading contributor to global greenhouse gas emissions. The burning of fossil fuels converts carbon to carbon dioxide and, if not captured and stored, is released into the atmosphere, warming the planet.

Fossil fuels supply around 80% of the world's energy, and there are three main forms; coal, oil and gas. Australia's

coal production is the sixth largest in the world and has the highest coal power emissions per capita. The IPCC's 2021 climate report has called for urgent action to phase out fossil fuels in order to prevent global warming from rising to 1.5C.



THE ANIMAL INDUSTRIAL COMPLEX

Animal agriculture is a huge emitter of greenhouse gas, accounting for 16.5% of total global emissions.

A distinct lack of understanding and knowledge of the Worldwide, the production of animal-based foods, including growing crops to feed animals and pastures used for grazing, Australian landscape following European occupation in the is responsible for contributing 57% of all greenhouse gas late 1700s has led to inappropriate farming practices that have dramatically depleted limited natural resources. emissions linked to food production. In 2017, agricultural production accounted for approximately half of Australia's surface area, mostly for grazing (340.8 million hectares).

Clearing for grazing and fodder

Australia is a leading exporter of beef, the seventh largest Methane is a greenhouse gas approximately 84 times more cattle skin exporter and currently one of seven nations potent than CO2 over a 20 year period, and also breaks responsible for 50% of global biodiversity loss. Cattle down in the atmosphere faster. Though the entire agriculture farming has driven significant land clearing in Australia's sector contributes approximately 13% of greenhouse gas worst deforesting state, Queensland, responsible for the emissions in Australia each year, 42% of methane emissions removal of 549,844 hectares of woody vegetation between are produced by animal agriculture. 2018-2019.

Globally, upwards of 70 billion land animals are raised for food and fibre every year; consuming a massive amount of feed, namely soy and cereals. Of all soy crops grown in the world, between 70-75% is fed to these farmed animals, while only 6% is consumed directly by humans.

MOVING FORWARD

Ending fossil fuel subsidisation and production, while eliminating the methane produced by ruminant animals, is essential to halting rapidly rising global temperatures. Transitioning to an entirely plant-based agricultural system by 2050 could sequester 99-163% of our carbon emission budget to 1.5C. This can be achieved by looking towards Indigenous communities and environmental scientists.

Methane

Cows, sheep and goats produce and release methane into the atmosphere through belching, passing wind, or as their manure breaks down. When comparing the impacts of producing animal protein with plant protein, 100 grams of beef emits on average 50kg of greenhouse gas emissions, whilst the same amount of tofu produces just 2kg.



Kangaroo Killing

KANGAROO KILLING

Kangaroos play a pivotal role in the Australian ecosystem, promoting the regeneration of native plants and reducing fuel loads in forests and grasslands.

Tragically, these incredible creatures are killed in the thousands each night to satisfy an unnecessary and declining sports leather and pet food industry, justified by an inaccurate and morally repugnant 'pest species' status.

Australia's culling of kangaroos is the largest land-based slaughter of mammalian wildlife in the world, devastating not only kangaroos but the broader ecosystem, too.

SOCIAL, SLOW GROWING AND REPRODUCING ANIMALS

Kangaroos have lived on this land for over 20 million years. They are incredibly social animals, living within large family groups known as 'mobs'. There are 45 living species of kangaroos and wallabies, with some kangaroo species already slaughtered to the point of extinction for fashion.

Joey mortality rates are high. They are only able to survive under optimal conditions, which is unrealistic given the number of risk factors kangaroos currently face. During times of drought, kangaroo populations are known to decline by as much as 65%.

MISLEADING INDUSTRY CLAIMS

A common justification for the killing of kangaroos is their claimed competition for available resources with farmed animals, and the alleged damage they cause to infrastructure. The Australian media often wrongly claim kangaroo populations have exploded, which given their breeding habits and high infant mortality, is false. More accurately, kangaroos continue to lose viable habitat to relentless land clearing, particularly for animal agriculture. In optimal conditions, kangaroo populations simply would not be able to grow continuously, but rather reach a point of equilibrium and stability.

INACCURATE MEASURES TO DETERMINE KILLING QUOTAS

Kangaroo kill limits outline the number of kangaroos the industry can slaughter each year, which is claimed to be 10%-15% of the targeted species population. Various scientists have questioned the accuracy of methods used to estimate population numbers, calling into question the legitimacy of the entire system.

The national code for the killing of kangaroos requires shooters to aim for a single shot to their head, to achieve instantaneous loss of consciousness. Despite this, weather conditions, impaired vision due to darkness, the small size of the kangaroo's head, unexpected movement by startled kangaroos and the skill or experience of the shooter can affect shooter accuracy.

A study conducted in 2009 found that as many as 40% of kangaroo carcasses assessed in chillers were improperly shot, causing kangaroos significant suffering and pain before eventual death. Currently there are no mandatory skills training for kangaroo shooters.

KILLING OF JOEYS

It is recommended by the industry that any dependent joeys also be killed, which is actioned by decapitation, a heavy blow to the head, or a shot to their head or chest. Some joeys manage to escape this fate and face life extremely vulnerable to predation, starvation and exposure. It's estimated that as many as 440,000 dependent joeys are brutally killed or left to starve by shooters each year.

OTHER THREATS TO KANGAROOS

The impact of the catastrophic 2019–20 bushfires – which killed or displaced between 1 billion and 3 billion animals, including five million kangaroos. These bushfires were a horrifying reminder of the devastating consequences we will continue to face if we do not address the climate crisis immediately.

Other threats include land clearing to make way for animal agriculture and vehicle collisions. Land clearing removes important habitat for kangaroos, and data shows that as many as 90% of car collisions with animals involve kangaroos.

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THE NON-COMMERCIAL KILLING OF KANGAROOS - LICENCE TO HARM

Landholders in NSW, Victoria and Tasmania can apply for a 'licence to harm' kangaroos who are reported to have committed certain disturbances on their property.

The non-commercial killing of kangaroos has significantly worse welfare outcomes for kangaroos, as the code of practice relies on self-reporting as regulation and requires no formal training before hunting kangaroos.

SOLUTIONS AVAILABLE

Kangaroo leather alternative companies are producing materials derived partly from pineapple leaves and cacti, that are designed to have more flexibility and movement than their animal-derived counterparts. These materials often have far lower environmental impacts when considering climate and biodiversity threats, too.

In order to protect Australian wildlife, we must begin a transition away from animal-based farming in favour of an Indigenous led, plant-based system, to free up vast areas of land that will rewild important habitat for wildlife to flourish.



MISGUIDED AND LETHAL DINGO 'CONTROL'

Since European occupation, dingoes have been regarded as a serious threat to farmed animals, particularly sheep. Consequently, the Australian government has spent millions on dingo "control programs", targeting them extensively with poison baiting, bounty systems and trapping.

Dingoes can be found in every state of mainland Australia. They live in vitally important packs, allowing the adults to pass on their culture to their young and keep pack numbers stable.

THE NATIVE DEBATE

Professor Peter Banks produced a research paper outlining the three criteria that must be assessed when determining an animal's native status:

- 1. **Evolution:** Has the animal evolved in their new environment?
- 2. **Adaptation:** Do deep endemic species recognise and respond to the animal?
- 3. **Impact:** Does the animal have an exaggerated impact on native species?

Dingoes have lived in isolation in Australia for millennia and exhibit different skull shape, reproductive habits, vocalisations, behaviour and genes from their ancestors. Secondly, Australian mammals recognise dingoes as a dangerous predator and show appropriate responses. Too, dingoes impact benchmark with those of other native predators.

KILLING IS INEFFECTIVE

In states where dingoes are considered "pests", they can be killed using poisons such as 1080 ('ten-eighty'). Scavengers and carnivores are killed through secondary poisoning if they feed on the bodies of animals who have died from 1080 poison, and it can spread into the ecosystem, even killing birds who eat insects that have fed on the bodies of 1080 victims.

Steel-jaw traps are another way dingoes are killed, and in some states are laced with poison. When shooters return to their traps, they shoot dingoes with a rifle to the head. For those not regularly checked, death by starvation and dehydration can take as long as a week.

South Australian, Victorian and Queensland State governments have active bounty systems in place that incentivise the killing of dingoes. These schemes award landholders who present the pelt of a dingo a fee of up to \$120.



BAITING, TRAPPING AND SHOOTING, TRAPS LACED WITH POISON & BOUNTY SCHEMES

When the parents or the mature dingoes of a pack are killed, the juveniles are left with no one to teach them how to hunt native prey. As a result, the original pack splinters into various smaller packs. These smaller packs can face difficulty taking down their typical larger prey animals like kangaroos, and as a result can lead packs to prey on smaller and easier targets like sheep.

Some dingo ecologists argue that destabilising dingoes' family packs with baiting and other eradication programs actually increases the likelihood of dingo numbers increasing, because the juvenile dingoes may breed with each other and with domesticated dogs.

Essentially, without human intervention, dingo populations would remain healthy and stable, meaning domesticated animals are less likely to be targeted by dingo packs. This means that throwing out lethal control of these animals could actually act to reduce farmed animal mortality, not increase it.

ALLIES IN THE BIODIVERSITY CRISIS

Dingoes are biodiversity regulators whose presence and unimpeded existence in an ecosystem acts not only to control numbers of larger herbivores such as kangaroos and wallabies, but also suppresses numbers of animals who may pose a threat to smaller native wildlife too. Numerous conservationists and ecologists believe that the conservation status of the dingoes in Australia varies Dingoes are the only natural predator to native kangaroos, helping keep their populations in balance within the ecosystem. If population numbers of kangaroos was of genuine concern to the Australian government, and hunting was not just to satisfy a lucrative kangaroo leather and meat trade, why would the same government so ferociously remove the only natural predator to kangaroos in the ecosystem?

Numerous conservationists and ecologists believe that the conservation status of the dingoes in Australia varies between threatened and critically endangered, fearing their extinction could be imminent.

SOLUTIONS AVAILABLE

We must be more conscious of lowering our impact on the natural world and learning to work with nature, not against it. We can learn many lessons from Indigenous communities around the world who protect and maintain symbiotic relationships with the land and animals through living thoughtfully, we just need to listen and join their calls for justice. In order to truly protect wildlife, we must revolutionise our current food system; moving away from animal-based agriculture in favour of an Indigenous led, plant-based system.

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THE KANGAROO AND THE DINGO



EMU FARMING

Emus are native to Australia and play an important ecological role within the ecosystem as seed dispersers. Sadly, emus are farmed across Australia for their oil, skin, eggs and feathers. Wild living emus face increasing threats from climate change and diminishing habitats.

In 1996, there were estimated to be 500 emu farms across Australia. By 2018, that number had dropped to less than 12. However, those that remain can confine over 6,000 emus.

A recent Australian review found that while chicken producers had over 400 studies relating to animal welfare science to review, emus had just 3.

BREEDING

Despite natural mating being the prominent method currently utilised in emu farming, the industry has been forthcoming about their interest in developing "reliable" artificial breeding practices. This is so emus can be subject to genetic manipulations through selective breeding in an effort to make them more "economically viable".

INDUSTRY STANDARD MUTILATIONS

The amputation of an emu's toe is a legal, standard industry practice across the farming of ratites. This involves the removal of the end of day-old emus toes to "decrease skin injury caused by claws and to reduce stereotypic aggression. These injuries will ultimately damage the "final product", namely their skins, thereby making them less profitable for producers.

Such amputations are also carried out because it minimises the risk of injuries to handlers during transport to slaughter.

TRANSPORT

In Australia ratites are known to be transported for up to a massive 36 hours, despite Australian Codes of Practice outlining the stressful transport of ratites should be kept to a minimum.

HEALTH ISSUES

Emus raised under factory farm conditions are known to suffer from panting, bodily swelling, coughing and lameness. Ammonia and urine commonly build up in housing facilities, which can lead to respiratory issues and burning of the eyes and nostrils.



HOUSING

Despite their incredible role in nature as seed dispersers, emus are kept in large, usually barren and fenced off paddocks.

Australian Codes of Practice allow for emus to be raised in intensive, semi-intensive and free-ranging conditions. Intensive operations, commonly known as factory farming, is often a more desirable option for producers as more product (skins, oil, eggs and meat) can be produced on a smaller area of land.

On farms, emu chicks are deprived of the important paternal guidance they would ordinarily get in the wild where they would spend two years with their fathers learning life skills. Instead, chicks are placed into group housing from the time they hatch.

EMUS ABROAD

Emu farming abroad has been problematic and largely unsuccessful. This is because emu farming cannot realistically compete with the rearing of "traditionally" farmed animals, such as cows.

However, there are still large emu farming industries in India and the United States.

SLAUGHTER

Prior to being killed ratites are denied food for 24 hours, and when coupling that with the time they travel on trucks to slaughtering facilities, they are likely to be deprived of food for much longer. Slaughter methods have been found to cause significant stress and both methods of electrical stunning and captive bolt stunning are known to often be ineffective or inaccurate.

SOLUTIONS ARE AVAILABLE

Plant-based alternatives to emu oil

Emu oil is used in both cosmetics and therapeutic treatments, including soaps, hair products, and deodorants. It is also consumed to treat joint and muscle pain, inflammatory bowel disease, skin conditions and arthritis. A plant-based alternative to emu oil has been developed that can be used in the same way as emu oil. The emu farming industry is relatively small in Australia, with only a handful of farms still in operation. Research indicates this industry has been a difficult one for most producers, struggling to make ends meet, or to establish the markets needed for a profitable business.

Emu oil gets its anti-inflammatory properties due to being high in fatty acids content and omegas. Both of these can be derived from plant-based alternatives including hemp seed oil, hemp seed oil capsules, or plant-based omega tablets.

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This can result in either multiple attempts at stunning, causing further pain and suffering to the animal, or leaving them to be slaughtered while they are still conscious/ sensible to pain.

A just transition out of emu farming



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CROCODILE FARMING

Crocodiles have lived on this land for over 100 million years and play an

important role in the ecosystem, maintaining the diversity and productivity of

wetlands.

Today, these ancient reptiles are being factory farmed and slaughtered for their skins to satisfy the desires of a lucrative luxury leather handbag and accessories trade.

Despite crocodiles having a natural lifespan of 70 years, the crocodile industry kills them at 2 - 3 years of age to be turned into luxury fashion items. Tragically, there are now more crocodiles living in confinement and misery on Australian farms than in their native habitat.

THE HISTORY

After WW2, a market opened for Australia to begin killing crocodiles and selling their skins for profit internationally.

In the 1950s and 60s, killing crocodiles for their skins became so intensified that the species was driven to near extinction. In the 1970s, crocodiles were afforded a selection of protections to conserve the just 3,000 crocodiles remaining in the wild in the Northern Territory.

Since the ceasing of hunting crocodiles in the wild, their populations have increased to 100,000 across the country.

Though the crocodile industry claims this increase in population numbers is due to the introduction of farming, analysis of rising populations shows that populations were already increasing at a similar rate to that seen after the introduction of commercial farming.

THE INDUSTRY TODAY

Australia accounts for 60% in the global trade of crocodile skins, two-thirds of which comes from the Northern Territory, the largest producer and dominant supplier of crocodile skins worldwide.

There are 13 known commercial crocodile farms in Australia, which in 2002 held over an estimated 68,000 crocodiles. Five of these farms are known to be owned and controlled by luxury fashion house Hermès, and several others by Louis Vuitton.



FAILING CODES ALLOWING MISLEADING CLAIMS OF HIGH WELFARE

Crocodiles are living miserably in tiny, barren pens and wire cages on farms to keep their skin blemish-free. Under current Codes of Practice it is not even required that they be afforded the length of their own body in space to live in.

This allows fashion companies to boast high welfare standards, when their farming facilities marginally exceed the extremely poor government requirements.

Further, Codes of Practice are not currently legally binding due to the exemption of farmed animals from protection in the Australian Prevention of Cruelty to Animals Act.

The Code of Practice for the farming of crocodiles rightfully acknowledges that knowledge on reptile nervous systems and welfare is a developing field.

As such, the current Code stipulates it should be reviewed within five years of publication. Despite this, the Code is a whopping 12 years old and has not been reviewed once.

(NOT) A PROTECTED SPECIES

Today, crocodiles have been granted "full protection" in the Legally, crocodiles can be shot in the head, and if they Northern Territory, Western Australia and Queensland. This are below 2m in length, can be bludgeoned to death means that crocodiles cannot be "taken", "interfered" with. with a hammer or other tool. Footage released by Farm trapped or shot without holding a permit. However, this Transparency Project reveals crocodiles being electrocuted "full protection" has done very little to protect crocodiles in their pens, dragged out as their bodies convulse, a bolt as individuals; on the contrary, past protections have now gun shot through the tops of their heads, before a knife is been removed following a proposal to farm the species for used to sever their spinal cord and a rod is forced into the luxury leather. This means that crocodiles had parts of their incision to scramble their brains. protections revoked so that they could be profited from, under the guise of conservation.

SOLUTIONS AVAILABLE

Defend the Wild

Kindness Project's Northern Territory Crocodile Industry Transition Plan was created to identify several ethical industries that, with the right investments, could not only replace the jobs and revenue of the crocodile industry, but surpass them. An investment into the solar industry alone, for example, holds a potential value of AUD\$2.1B, as well as the capacity to create 8,000 jobs.

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THE SLAUGHTER

The fashion industry is capable of moving beyond the use of all reptile skins, with many luxury brands, large retailers and Melbourne Fashion Week having already banned all exotic skins. More sustainable and ethical materials made from cork, processed mango-waste, mycelium and other biomaterials are able to be embossed to replicate the scales of crocodiles.



Duck shooting

DUCK Shooting

Thousands of native ducks are shot annually as part of the recreational duck

shooting season held in several Australian states.

Thankfully, shooter numbers are declining and increased public pressure and concern

for our native species give hope that the days of duck shooting are numbered.

Given the welfare concerns, duck hunting has already been prohibited in Western Australia, NSW and Queensland.

All ducks which are deemed 'game' species in annual duck seasons are native species. Like all native species, 'game' ducks are in a delicate balance with the rest of the wetland ecosystem and help to keep invertebrate numbers in check.

A FATE WORSE THAN DEATH

Incidents of shooters not abiding to the maximum number of birds they are permitted to kill on any given day seem to be a near-annual occurrence. A 2017 inquiry into the adequacy of the Victorian GMA's ability to enforce compliance stated "...non-compliance with the game hunting laws is commonplace and widespread."

Formal hunt tally figures do not take into account the wounding rate of hunted birds. Shotguns operate by projecting a 'cloud' of pellets spread over a larger area. A natural consequence of this is that in addition to shooting

ALREADY UNDER PRESSURE: CLIMATE CHANGE

Australian native waterbirds are already facing severe environmental pressures associated with climate change without the additional pressure of shooting. The Eastern Australian Waterbird Survey disturbingly highlighted that waterbird numbers are currently 25% of long term average, and the numbers are the third lowest since surveying began 39 years earlier. Another important environmental hazard to mention is the voluntary anti-shooting effort that cleans up a multitude of spent shotgun cartridges, rubbish, environmental damage and other debris left behind by hunters. at the target animal, there will be some inevitable 'collateral damage' to surrounding animals. This is compounded by the fact that there is no compulsory accuracy test prior to being awarded a game licence.

There is no consideration of the behavioural stressors to wild animals that have their environment invaded by the sound of guns, and the potential loss of their bonded mates, with some game and non-game species mating for life and maintaining family groups.

COLLATERAL DAMAGE

At least 260 protected species were killed during the 2017 opening season at Koorangie and many more injured, including species which are not ducks at all.

Disturbingly, hunting is routinely permitted in the poor visibility conditions before sunrise and after sunset, contributing to the risk of accidental shooting and demise of the species.

FINANCIALLY AND MENTALLY UNJUSTIFIABLE

Ecotourism is a rapidly growing industry worldwide, with birdwatching in particular being extremely popular. The Australian industry is estimated to be worth \$1.6 billion in annual revenue, more than what duck shooting currently offers. The duck hunting season deprives rural communities of the tourism revenue and goodwill associated with birdwatching and ecotourism.

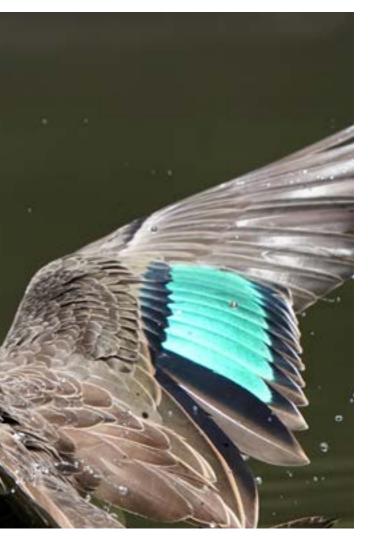
Volunteers from the Coalition Against Duck Shooting and other welfare organisations attempt to warn ducks away In the wake of the deadly 2019-2020 bushfires experienced from shooters' guns, rescue wounded birds and bring them in Australia, communities banded together to support one to shore for triage by veterinary volunteers, and importantly, another and our native wildlife. The last thing many wanted provide additional monitoring of shooter behaviour and draw to happen was further desecration of native species. Sadly, it to the attention of authorities. While the mental health all Australian states with a remaining annual duck hunting benefits of shooting to those involved is often touted, the season proceeded to declare that a 2020 shooting season converse poor mental health of those left picking up the could go ahead. pieces is perpetually ignored.

A 'LEGITIMATE' ACTIVITY?

Despite ongoing claims of legitimacy and ethics, a hunter knowledge survey commissioned by the Game Management Authority itself in 2019 exhibited a disturbingly low knowledge base regarding basic duck hunting principles: only 37% of the sample population could correctly answer

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Duck shooting



A Morgan Poll conducted in 2007 found an overwhelming majority of Victorians think duck shooting should be banned, and subsequent polls have shown similar results, demonstrating how meaningful native birdlife is to the majority of Victorians.



Ocean destruction

OCEAN DESTRUCTION

The world's oceans play an important ecological role that is essential to the health of our planet. Approximately 70% of oxygen in the atmosphere is produced by marine plants, whilst absorbing 50 times more carbon dioxide than our atmosphere, making it a vitally important ally in the current climate crisis.

Australia's marine environment is currently under threat due to a range of human-driven risk factors.



Bleaching occurs when coral becomes stressed by changes in environmental conditions, like an increase in temperature, turning it completely white and lifeless. In total, only 2% of the Great Barrier Reef has been untouched by bleaching since 1998.

When bleaching occurs, wildlife are forced to go in search of alternative food sources and a new viable habitat.

MARINE HEATWAVES

A marine heatwave is a short period of unusually high sea or ocean temperatures due to mounting greenhouse gas emissions.

In February 2020, the sea surface temperatures on the Great Barrier Reef were the warmest they had been since records began in 1900.

Marine heatwaves have also been identified as a major threat to oceanic biodiversity, causing habitat loss, disruptions to the food web, migration and mass mortality.

FISHING

Commercial fishing impacts the wider ocean ecosystem. competing with higher order predators for available food sources, causing habitat destruction through fishing methods and killing an estimated 20 million non-target species, known as "by-catch", every year.

If we continue to fish at the rate we are currently, scientists predict we could be facing a 90% collapse of species abundance in just under 30 years.

Australia also has numerous intensive fish farms across the country, which grow fish on land in large tanks, or out at sea in cages, which comes with a plethora of damaging environmental consequences too.

Trawling is a common practice that involves dragging weighted nets along the ocean floor, which erodes the bottom of the seabed and frequently drags up plants and coral populations that are of vital importance in marine ecosystems.

According to the United Nations, 95% of worldwide ocean damage is directly linked to bottom trawling.

Lost and abandoned fishing gear is another grave concern associated with the fishing industry. It is estimated that more than 650,000 marine animals, including dolphins, whales, seals and turtles are killed or injured in fishing nets each year.

Written in the government's recently published SOE report, pesticides and chemical pollutants from agriculture are suspected of causing 8% of fish deaths in coastal and inland catchments in New South Wales over the past 20 years.

Farmed fish

Fish farms generate a large amount of waste, which spills out into the ocean, causing nitrogen pollution in the water and can severely stress or kill wild populations of fish.

Most farmed fish species are carnivorous and rely upon wild-caught populations for feed, meaning wild fish must be caught in order to feed the growing populations of fish raised

in farms. In 2017 a Senate Inquiry into 'Shark mitigation measures' found substantial evidence that the mesh nets and drumlines Seals do not have an impact upon safety, negatively impact the marine ecosystem and provide beachgoers with a false Despite being a protected species, Australian fur seals sense of security, and as such recommended ceasing their have been subjected to relentless control by the Tasmanian use in favour of non-lethal methods and technologies. The salmon industry. Consequently, nets, seal barriers, prevalence of non-target species caught in these devices explosives, and a range of other measures have been used presents an easy meal for larger, more dangerous, sharks. by the Tasmanian salmon industry to "deter" them from This means that shark nets and drumlines can actually attract entering a particular area in search of food. sharks closer to the shoreline for an easy meal.

SOLUTIONS AVAILABLE

A phase out of industrialised fishing and government subsidies

To reduce coral bleaching and ocean heating, we need to A carefully planned phase-out of industrialised fishing combat the climate crisis – and we can do this through a operations and harmful subsidies could protect the just transition away from fossil fuel mining and intensive broader marine environment and its inhabitants protected animal agriculture. Large scale fishing vessels receive the from ecological collapse, as well as reduce pressures on largest share of subsidies, many of which originate from rich communities who rely heavily on coastal environments for countries but fish in the waters of poorer countries, passing their survival. the risk of overfishing to those who can least afford it.

Defend the Wild



SHARK NETS & DRUM LINES

Sharks are top-order predators in the ocean and prey upon weak and diseased animals, improving the ecosystem and helping to regulate the health of fish populations. Despite shark attacks being extremely rare, drumlines and shark nets are deployed off-shore with the aim of reducing their populations in both New South Wales and Queensland.



AGRICULTURAL FENCING AND NETTING

s die due to starvation, predation while those who are rescued are

Every year thousands of wild animals die due to starvation, predation and injury while trapped in fences, while those who are rescued are often euthanised due to the severity of their injuries.

FRUIT NETTING

Due to continued displacement from their natural habitat due to tree clearing and extreme weather events, native animals are increasingly resorting to flowering and fruiting trees as a food source. Though other lethal methods, including electrocution, have been used to deter unwanted wildlife in the past, netting has become a popular solution to keep native animals from eating fruit. Some types of netting however, can be deadly for wildlife, with backyard nets likely causing more harm to wildlife than even commercial vineyards.

EXCLUSION FENCING

The most infamous exclusionary fence in Australia is the notorious Dingo Fence. Though it is primarily used to protect sheep from dingoes, there are a range of unintended consequences that include significant welfare impacts for animals on the outside of the fence and wider environmental consequences.

Exclusionary fencing poses a significant threat to wild animals, restricting their movement and disrupting normal behaviours such as feeding, migration, breeding and social patterns.

Despite the shortcomings of existing approaches, there are a range of options or alternatives that may minimise the harm caused by fences. Fences could be aligned along natural ecological boundaries, such as waterways, to minimise the impact on ecosystems.

Other designs have been developed that allow animals to pass through with less injury.



BARBED WIRE FENCES

Though the invention of double strand barbed wire fences seemed revolutionary to industrialised farming, it has been devastating for indigenous animals. Some of the species known to become caught in barbed wire fences are sugar gliders, flying-foxes and macropods like kangaroos and wallabies.

Even when found alive, rescuers record high rates of euthanasia for animals caught, as they often cause great trauma to their wings and other parts of their body as they struggle to escape. For those who manage to survive or escape, many subsequently die of exposure, starvation, infection or predation following entanglement.

Our precious wildlife are already grappling with the loss of substantial areas of viable habitat to make way for grazing animals and feed crops. Whilst there are kinder solutions to these issues such as wildlife-friendly fencing, our wildlife will continue to suffer at the hands of animal agriculture through climate change, land clearing and persecution unless we change our diets.

Wildlife friendly fencing

Wildlife Friendly Fencing is an initiative that aims to raise public awareness around the impacts of agricultural fencing on wildlife and develop guidelines for more wildlife friendly practices. These include plain wire fencing, split polypipe fencing, electric fencing, virtual fencing and nylon wires. Lastly, the best solution is to share our natural resources with hungry wildlife, who have continued to lose more and more viable habitat due to unsustainable colonial expansion. We can live in a world that works with nature, sharing resources and protecting the natural world, rather than using it as a commodity to be exploited.

Safer netting alternatives

The test for whether or not wildlife will become tangled in netting is if your finger can pass through their holes. If they cannot, wildlife should not be able to become entangled in these nets.

Wildlife Friendly Fencing outline the two ways to protect backyard fruit trees from animals:

- 1. **Protecting the whole tree:** Wildlife Friendly Fencing only recommend Fruit Saver nets, Hail Guard or Vege Net, all nets that pass the 'finger test'
- 2. **Protect individual fruit:** Search online for 'fruit netting bags', look for Green Harvest and Native shop. Protecting individual fruit can allow food to be shared with wildlife too.

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Agricultural fencing and netting



Sharing trees with hungry wildlife

Long term solutions

Though the erection of wildlife friendly fencing or netting can act to immediately reduce the impact agricultural fencing has on wildlife, there are a plethora of other threats the animal industrial complex poses to wildlife, which desperately need to be addressed.

Our current farming system is resource intensive, drives the lethal control of native species, demands the destruction of vital habitats and contributes significantly to the climate crisis. In order to truly protect the living world we need to begin planning (and investing) towards a just transition from animal-based farming to plant-based, and Indigenous led permaculture practices.



MOVING FORWARD

INDIGENOUS LAND RIGHTS

The struggle for climate justice and the protection of wildlife has roots in the struggle for Indigenous land rights and cannot be achieved in isolation from each other.

Defend the Wild advocates for a treaty to be established between government and First Nations people, with genuine and meaningful land rights returned to their rightful owners.

Further, Defend the Wild believes that traditional Indigenous permaculture practices are vital in redesigning our current, unsustainable food system.

COMPASSIONATE CONSERVATION

Compassionate conservation aims to promote and establish new pathways in conservation that enable positive coexistence between humans and nature.

It recognises the inherent value of every wild animal, whether they are a native species or not, facilitating open dialogue with the objective of shaping kinder conservation practices for all free living animals.

7 PRINCIPLES OF ETHICAL WILDLIFE MANAGEMENT

Defend the Wild promotes the use of the seven principles of Ethical Wildlife Management, first outlined by a team of 20 academics from across the world, when considering the conservation of the natural world.

These principals are:

- 1. where practical, modify human practices;
- 2. provide evidence-based and scientific justification;
- 3. set clear and achievable outcomes and objectives;
- 4. cause the least harm possible;
- 5. consider community values
- 6. provide long-term answers, not band-aid solutions and;
- 7. be informed by specific data about specific situations.

BECOME A WILDLIFE DEFENDER

You can protect wildlife in your day-to-day life by ensuring more wildlife-friendly meals, wardrobes, and self-care routines.

Head to our website to learn more, and sign the pledge to become a Wildlife Defender. Join a growing community of people dedicated to the protection and preservation of this country's unique wildlife and their environment:

www.defendthewild.org/wildlife-defenders

SUSTAINABLE MATERIALS

What we welcome into our wardrobes influences the world around us. Many of our clothing items can come from animals that were exploited and tortured, and can cause significant harm to our environment.

The most important things we can all do are:

- Care for the clothes we already have. Wash them only as needed and directed. Repair them when they're worn down or damaged.
- See if you can buy pre-loved clothes before finding something new.
- When buying new, ask yourself if it's something you'll love and wear for years to come, and if it's made by a brand that values slow, sustainable fashion.

Materials that are inherently unsustainable or which have a significant and harmful impact on the planet include all animalderived materials, virgin synthetic materials, and cellulosic materials made in non-certified supply chains.

If we're to see a sustainable fashion future, brands must commit to phasing out unsustainable materials, replacing them with those which have a lesser impact on our finite planet – like sustainably grown plant-based, lab-grown and recycled materials

ALTERNATIVE PROTEINS

Cultured meat

Cultured meat describes real meat that is grown directly from cells, eliminating the need to slaughter animals alltogether, and reducing the need for farmland and therefore greenhouse gas emissions and land clearing.

It is created by taking a small sample of stem cells through a harmless procedure, and replicating those cells in a culture outside of an animal's body.

The result is clean meat with identical components of conventional meat on a cellular level, but without pathogens or faecal contaminants, whilst produced with a lower environmental footprint to conventional meat.

Products of precision fermentation

Precision fermentation is a technology that has been used in the production of rennet for cheese and vitamins such as B12 for nutritional supplements. In recent years innovative food companies have been using precision fermentation to create animal-based foods without the ongoing need for animals.

RENEWABLE ENERGY

In future, the majority of Australia's energy will come from wind and solar photovoltaic (PV) - the most affordable technologies.

Any gaps that would remain in supply would be filled by a variety of on-demand renewables and storage, like concentrating solar thermal with storage, pumped hydro, batteries (grid and domestic), sustainable bioenergy and more. A renewable energy system that reduces the cost of living for millions of Australians could be pivotal in raising standards of living for the middle class.

A JUST TRANSITION TO PLANT-BASED AGRICULTURE

A transition away from animal-based agriculture is undoubtedly a complex endeavour, and farmers should not be burdened with the responsibility of revolutionising our current food system without appropriate support and financial assistance from governing institutions.

Defend the Wild advocates for the establishment of government assistance programs to support farmers in transitioning from animalbased farming operations to sustainable, wildlife friendly alternatives. Further, Defend the Wild advocates for such a transition to be designed and led by First Nations people.

REDUCTION IN GLOBAL PLASTIC USE

Reusable alternatives

Trying to eradicate our personal waste as much as possible is one of the best things we can do to help our planet. Some reusable alternatives to invest in include shopping & produce bags, longlasting food & drink packaging, personal care products and kitchen products. Bioplastics are biodegradable plant or biological-based replacements to fossil-fuel derived plastics, and will help us transition from plastics that pollute the environment and pose a serious threat to marine species to a kinder and more sustainable alternative. These include products such as hemp and mycelium.

Traditional alternatives

Traditional alternatives are generally created with mostly whole food ingredients like vegetables, legumes and whole grains. These differ from plant-based products that are designed to have an appearance, flavour or texture comparable to conventional animalbased products, who serve increasingly conscious consumers who desire the taste of animal products without the animal welfare or environmental concerns.

Plant-based meats

Though humans have considered animal products, particularly meat, to be an essential part of their diets, vegetarian and vegan diets have been practised for centuries and the health benefits of plantbased diets have been well addressed and acknowledged.

While food additives are used in many plant-based products for a range of purposes, these are generally shared by many other foods, including meat. Though the primary purpose of additives in plant-based meats differ to those in animal meat production, they relate primarily to flavour, colour and preservation.



WILDLIFE PROTECTION COMMITMENT

The Wildlife Protection Commitment is a commitment to the continuous betterment of practices by brands, businesses, and institutions who understand the responsibility we all share, as citizens of this earth, to protect the wild.

In the absence of government action we as a community must take hold of responsibility, and help pave the way to a better future for the natural world and all its inhabitants.

The preservation of the environment is essential, not only for protecting our precious native wildlife, who play a vital role in keeping ecosystems healthy, but for the future of humankind too. None of us can afford to take a passive approach The Wildlife Protection Commitment is built on to protecting the world's wild places; it is the responsibility of us all to reduce our impact on native wildlife and protect the habitat they call home.

The Australian Wildlife Commitment seeks to set out realistic and impactful commitments for socially responsible brands, businesses, institutions and individuals to reduce their impact whilst providing support and advice and through such a transition.

Brands, businesses, institutions and individuals are a part of the Australian Wildlife Protection Commitment devoted to continuously reducing their footprint whenever practical and possible, with a view to have the lowest impact possible.

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LEARN MORE & TAKE ACTION: www.defendthewild.org