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Inquiry into Biodiversity Loss and Ecosystem Decline

I am an office worker, animal and nature lover, living in Ferntree Gully with my son and elderly mother. The 3 of us have always loved animals and nature and our holidays are always spent in peaceful places close to wildlife and nature. Nature is where I go to renew my spirit and to feel better. Since my childhood to the present day, I have cared for animals, rescuing and releasing, petitioning and belonging to organisations that protect animals. In the past decade I have taken part in rescuing ducks during duck shooting season, worked as a rescuer for Wildlife Victoria and volunteered at a Wild Days wildlife shelter in Narre Warren among other things. It is these experiences, along with last summer's bushfire that have me extremely concerned about Australian wildlife and their habitat. It is for this reason that I am making this submission – I cannot sit idle and watch the animals be driven to extinction and the most magnificent forests be destroyed.

My understanding of this review is to:

1. understand the impact and enormity of the decline of biodiversity in Victoria
2. the adequacy of the laws protecting the Victorian environment
3. the adequacy and effectiveness of government programs and funding protecting and restoring Victoria's ecosystems
4. mitigating climate change impacts
5. opportunities to restore Victoria's environment while upholding First Peoples' connection to country and increasing and diversifying employment opportunities in Victoria

The key issue is, I believe, to understand what the health and diversity of our natural environment in Victoria is like now, how we can protect the remaining green areas, how we can improve damaged areas and how to ensure our laws will be effective and how to better police these laws. The impacts of climate change and consideration of First Nations people must be taken into account.

The problems are:

- The industrial revolution and subsequent consumerist economic system follows the philosophy of anything being justified in the acquisition of wealth. This means animals, habitat, natural resources and First Nations heritage sites have been destroyed with impunity
- Animal agriculture has developed in industrial proportions, with Australians eating more meat than ever before and as a result, factory farming is common practice. This poses enormous threat to the climate crisis as well as the destruction of forests and ecosystems and the extinction of many endemic species. Animal agriculture in Australia emits ~50% of all greenhouse gases when projected over 20 years
- Animals are seen as a means to make money through farming, gambling and shooting. There is no consideration for the effect our actions have on the environment and the climate crisis
- Man's arrogant belief that he can correct imbalances within ecosystems has in fact caused greater damage instead: the introduction of rabbits, deer and foxes for hunting has had negative impacts on native wildlife and their habitat. Furthermore, the poisons used to get rid of these introduced species continue to wreak havoc on all living creatures, waterways, the health of the soil and the general environment
- Existing protective legislation is not effective and has never been seen to be monitored
- The belief that the destruction of ecosystems can be offset by planting trees and shrubs elsewhere is erroneous. Man cannot create a healthy ecosystem, nor can an ecosystem be replicated. Nature creates ecosystems and this takes many years or decades and is ever evolving

1. Decline of biodiversity in Victoria

Our philosophy of the mighty dollar and jobs being given the highest priority and justifying the destruction of natural areas must cease. We share this earth with all living beings from micro-organisms, bacteria and viruses to unknown varieties of flora and fauna. Without a balanced environment we threaten our own species with extinction. This disregard for the natural environment has greatly contributed to the climate crisis which led directly to the worst summer Australia has seen.

There is insufficient data on Victoria's natural environment and its inhabitants prior to black summer. We need to maintain a state (and ultimately national) database that collects comprehensive information about Victoria's wild spaces. Once this has

been documented we will be able to create enduring legislation to appropriately protect all remaining natural areas and their inhabitants.

Black summer was a direct result of our lack of care for the environment and the planet on which we live and which sustains us. The way in which fires are currently managed is woefully insufficient. Resources are so inadequate that fire emergency services defend areas of human population or farmland and leave fires that are difficult to reach within forests, to burn themselves out. Naturally this causes great environmental and habitat loss and the suffering of many animals. I believe this is one of the reasons the black summer fires got so out of control.

It is essential the state and federal governments pool their resources, utilize the army and buy as many fixed wing aircraft as possible to fight future fire storms. These same fixed wing aircraft can be refitted and used as rescue missions during flood events as well. It is important our leaders recognize that the climate crisis needs every resource available or we will lose our most precious resource, the land which nourishes us.

With approximately 600,000 species of flora and fauna in Australia, about 100 are known to have gone extinct in the last 200 years. Today there are over 1,770 that are listed as threatened or endangered. Australia has the highest rate of vertebrate mammal extinction **in the world**. Extinction begins with biodiversity loss and ecosystem decline. The five drivers of extinction are all man made:

1. Exploitation – hunting, mining
2. Habitat loss
3. Pollution – including the use of poisons to “manage” introduced species
4. Climate change – exacerbated by animal agriculture
5. Introduced species – these include animals exploited in the animal agriculture industry – causing the most destruction and a major cause of climate change

I will discuss the impacts of animal agriculture on wildlife habitats, our environment and more importantly, biodiversity in the following pages.

2. Adequacy of the laws protecting the Victorian environment

I live in Ferntree Gully and 2 years ago I heard about Development Victoria’s plan to destroy a local ecosystem including a lake named by locals as Lake Knox. This lake is a unique ecosystem where all animals, plants, fungi and micro-organisms contribute to its health and character. Lake Knox is valued and appreciated by the local community as a significant area where we can engage with nature and help to protect and support endangered species in Knox. The Blue-Billed Duck has been listed as threatened under the Victorian Flora and Fauna Guarantee Act 1988 and is listed as endangered in Victoria according to “The Advisory List of Threatened Vertebrate Fauna in Victoria – 2003”. From the Victorian Government’s Department of Sustainability and Environment’s Action Statement No. 174¹:

“In its final recommendations, the Scientific Advisory Committee (SAC 1995) determined that the Blue-billed Duck is significantly prone to future threats which are likely to result in extinction...

“Objectives of this Action Statement

“Protect and maintain existing key populations of Blue-billed Ducks by:

- ensuring that key wetland areas (including important breeding sites) for the Bluebilled Duck are secured from further environmental degradation;
- collecting and analysing information on the distribution and abundance of the Blue-billed Duck;
- ensuring that significant aggregations of Blue-billed Ducks are protected on wetlands open to duck hunting, and
- initiating enhancement and restoration of wetlands to provide improved or additional habitat.”

It is time the Andrews Government followed through with its own objectives. We know that an ecosystem takes years or decades to find its balance and once destroyed, will never return. From a human’s point of view, the natural environment is essential to our physical and mental well-being.

¹ https://www.environment.vic.gov.au/_data/assets/pdf_file/0026/32858/Blue-billed_Duck_Oxyura_australis.pdf

In the 2 years of meeting and negotiating with Development Victoria, not once have they offered to take on any of our suggestions or to address our concerns, but they insist on publicizing the “fact” that they have completed extensive community consultations. Yet a petition to Save Lake Knox with over 13,000 signatures says otherwise. Yet they are hell bent on destroying the lake only to recreate one next to it. This is senseless destruction of an environment that has taken over 2 decades to create an ecosystem that is habitat to :

- Blue Billed Duck – endangered in Victoria!
- Dwarf Galaxias fish - endangered in Victoria; vulnerable in Australia!
- Swordgrass Brown Butterfly – locally rare in Knox Remnant Swamp gums: not only an iconic species, but also habitat to wildlife, vital for carbon sequestration & cooling the landscape, and essential for the creation of soil nutrients
- Other rare and threatened plants living in and around the lake

The community is demanding the following:

- Preserve & enhance Lake Knox - administer remedial works to stabilise the wall and soften the gradient of the banks
- Protect the rare and threatened flora and fauna species associated with the lake, including the remnant trees on the northern banks
- Create a community asset, a Lake Knox Flora & Fauna Sanctuary
- Establish an appropriate buffer between lake and new/existing development
- Be initiators of sensitive urban development

Development Victoria's main reason for destroying the lake is that some of the banks of the lake are unsafe. Like a protected historic house, we don't knock it down and build another in its likeness. We strengthen its structure to make it safe but keep it as original as possible. So it should be for Lake Knox.

Development Victoria make frequent mention of the wetlands they have created elsewhere.

“The construction of some of these wetlands date back decades and have been managed by relevant drainage authorities since their establishment. Since construction, establishment and handover, there may have been ecological investigations as to the health of these wetlands by the current relevant manager, but unfortunately, we do not possess them. That said, we may undertake such assessments in the future, with the view to assessing their current habitat health and biodiversity.”

It is pertinent to note that there is no data to establish the success or failure of these wetlands. We, the community, believe Development Victoria need to demonstrate acceptable outcomes especially regarding biodiversity. Instead they talk about “mitigating” the loss of the existing wetland biodiversity by:

- Revegetating and/or translocating wetland flora
- Offsetting the removal of native tree species and lost wetland vegetation
- Allowing a 12 month period for the new wetland to be established as viable habitat

Again there is no data to hand that will give any confidence to these mitigation strategies nor is there any reference made to monitoring and, in the event of failure, remedying the wetland.

The community want to see far more rigor in the form of scientific and technical assessments on wetland ecology, restoration and design in order to ensure biodiversity protection and enhancement.

We also need rigorous regulations to prevent developers from destroying existing ecosystems with the mind set of anything goes in the acquisition of wealth. Nature, animals, environments, habitats and ecosystems cannot speak for themselves but we cannot survive without a healthy planet. It is time to put the protection of animals and their habitat before the mighty dollar.

On another related topic, recently in my neighbouring Lilydale, a new development will take place to create the suburb of Kinley. There is a small mob of eastern grey kangaroos currently living there. Despite the developers requesting the mob be relocating, the Department of Environment, Land, Water and Planning (DELWP) insist they need to be killed. There has been a prolonged PR exercise in Australia to demonise our iconic kangaroos and portray them as a pest. These are the very animals we use as a marketing tool for tourists yet we treat them with such utter contempt. Kangaroos do not

procreate in such a way as ever to breed in “plague proportions”. They have incredible fertility control systems that allow a foetus to remain dormant during drought or other stressful times. Killing these and any other native animal for convenience should be a criminal offence and not a “solution” decided upon by whichever governmental organization is in power at the time. The outpouring of anger and grief over this issue has been great. I sincerely hope the government listens to the people – their voters they represent.

The bulldozing of koala habitat by a farmer of animal agriculture in south-west Victoria shortly after the black summer fires, killed about 50 koalas that we know of.² About 80 survivors went into care and some were able to be released later. As a volunteer with Koala Clancy I have learnt a lot about them and why it is so difficult to find suitable sites for koalas. During pregnancy, the mother koala will eat a few varieties of eucalypt – as many as she can find in the area – which allows the foetus to be exposed to the toxins and once weaned, will be able to tolerate those specific eucalypt species. When we rescue koalas we are not always able to find out what species they will tolerate. Wildlife carers will need to find many varieties before the koala will eat and in some cases, koalas just do not survive this process. Destroying habitat has devastating effects and I sincerely hope that the farmer who committed this atrocity is severely punished since we know very well how vulnerable the iconic, endemic koala is, nationwide. I fear the perpetrator will get a mere slap on the wrists. I would love to be proved wrong.

Between 2016 – 2018 a farmer in East Gippsland killed 406 Wedge-tailed Eagles along with a kookaburra, ravens and a raptor, in the name of animal agriculture. His punishment : a mere 14 days in jail and a \$2,500 fine. This is not even a slap on the wrist, this is the flutter of a handkerchief. I am disgusted, hurt, depressed and very angry that the law is so lenient when it comes to the killing of animals.

I am disturbed to note that despite suffering the worst bushfire season, those in power continue to log despite the outcry of environmentalists and First Nations groups who subsequently managed to stop the logging in some areas of Victoria³. They are in fact doing the work the government should be doing. A Federal court ruling in May 2020 found VicForests had breached national environmental laws.

3. Adequacy and effectiveness of government programs and funding protecting and restoring Victoria’s ecosystems

As the Lake Knox matter proves, policies, plans, action statements and even the EPBC Act are not effective in protecting ecosystems. Those in power have been able to do as they will and “apologise” later. This must change immediately. The people who speak for the land and all of its inhabitants, must be heard.

The *Protecting Victoria’s Environment – Biodiversity 2037 Plan* makes mention of the Planning and Environment Act 1987, the Flora and Fauna Guarantee Act 1988 and the Climate Change Act 2017 – certainly the first two mentioned Acts are outdated and urgently need to be reviewed and dramatically improved. The plan notes that “biodiversity management” includes ‘sustainable use of natural resources to be managed under appropriate legislation’.

This is a dangerous statement since there really is no way of using natural resources sustainably – that is doublespeak for decorating the truth which is really habitat destruction. This speaks to my concern of a consumerist society that puts money before environment. It is a thought process that must change if we and our unique environment, are to survive.

Incorruptible laws must be created which are enforced and regulated by an independent regulator. The EPBC Act should demand extensive research and comprehensive data collection to better inform decision-makers on environmental and cultural aspects. A single, state-wide accessible (and ultimately a central nation-wide) database should be created to ensure a central, reliable source. Both research and the establishment of a central database will require funding but that should be found as a priority.

4. Mitigating climate change impacts

According to a report published in the International Journal of Climate Change, **animal agriculture is the largest contributor to greenhouse gases in Australia** – 50 per cent of our nations emissions come from animal agriculture.⁴

Methane emissions are well documented but we rarely speak about the other contributions to this crisis:

² <https://time.com/5777362/australia-koalas-killed-logging-site/>

³ <https://ncreview.com.au/2020/07/07/logging-shutdown/>

⁴ <https://www.emerald.com/insight/search?q=animal+agriculture+is+the+largest+contributor+to+greenhouse+gases+in+australia&showAll=true>

- Fertiliser for crops
- Petrol to run the trucks that transport these animals to slaughter
- Electricity to freeze the bodies uses vast amounts of fossil fuels
- Put all of this together and we are releasing huge quantities of carbon dioxide into the atmosphere

According to Dr Barry Brook, Professor of Environmental Sustainability, University of Tasmania: “livestock emissions, on their own, will cause significantly more warming in the next 20 years than all our coal-fired power stations”⁵

Nitrogen and phosphorus are bi-products of animal agriculture and most of these harmful chemicals contaminate land and water worldwide. This is detrimental to wildlife, humans, sea life, killing fish, bees and is creating “dead zones” in the oceans as well as destroying our iconic and world heritage site, the Great Barrier Reef.

Factory farming will cause more pandemics. “When we overcrowd animals by the thousands, in cramped football-field-size sheds, to lie beak to beak or snout to snout, and there’s stress crippling their immune systems, and there’s ammonia from the decomposing waste burning their lungs, and there’s a lack of fresh air and sunlight — put all these factors together and you have a perfect-storm environment for the emergence and spread of disease,” said Michael Greger, the author of *Bird Flu: A Virus of Our Own Hatching*. He also said: “If you actually want to create global pandemics, then build factory farms.”⁶ This book was published in 2007.

In a TV program hosted by Craig Reucasse “Fight for Planet A” he interviews Professor Nicholas Paul (University of the Sunshine Coast) about his research on feeding seaweed to cows to reduce methane emissions. This will not solve the problem but rather make it worse as we meddle with the balance of the oceanic ecosystems which further influences our climate.

We feed animals to feed humans which has resulted in food shortage that hits the poorest the hardest. 760 million tonnes of grain are fed to animals on factory farms so people can eat meat. It takes approximately 16 kg of grain to produce 1 kg of meat. The world’s cattle eat food that could feed 8.7 billion people: more than the population of the earth! Yet most of Africa starves while first world countries suffer heart disease, diabetes and obesity.

In a drought stricken country we are limiting people to quick showers and not watering their gardens when the Australian Bureau of Statistics show that animal agriculture uses 1/3 of Australia’s water supply.

In 2007, Charles Sturt University found that a vegetarian diet could save up to 35% of household water use. National Geographic research found we can each save over 800,000 litres of water a year (2,000 litres a day) by going vegan.

A Statewide Landcover and Trees study found over 90% of land clearing in recent years has been for animal agriculture. We have the highest extinction rate on the planet and this land clearing is killing koalas, possums, gliders, cockatoos, goannas, skinks and geckos and annihilating the balance of earth’s ecosystem.

While I would love it if the world went vegan I am a realist, and would like to see more education about healthy diets and the environmental cost of food choices. Society needs to understand it is not essential (in fact it is unhealthy) to eat meat 3 times a day. For the good of human and environmental health it is imperative we reduce our carbon footprint by drastically reducing meat consumption. Plant based food products are a major source of income and are producing extremely healthy and tasty meals. There is simply no need for meat anymore.

5. Restoring Victoria’s environment while upholding First Peoples’ connection to country and increasing and diversifying employment opportunities in Victoria

While the destruction of the 46,000 year old Juukan Gorge by Rio Tinto occurred in the Western Pilbara, this disregard for heritage sites is a common occurrence nation-wide. What is unbelievable is that nobody at Rio Tinto (a British company) lost their job and little has been done in the way of compensation. How can we compensate for the loss of a 46,000 year old sacred, historical, anthropologically and archeologically important site. Had Stonehenge (a mere 5,000 years old) been destroyed, heads would have rolled. Even more horrifying is the fact that there was such total disregard for First Nations people that they were not even consulted about the use of this site. Aboriginal Heritage sites need robust protection through incorruptible legislation.

⁵ <https://www.peta.org.au/issues/food/meat-environment/>

⁶ https://www.vox.com/future-perfect/2020/4/22/21228158/coronavirus-pandemic-risk-factory-farming-meat?fbclid=IwAR2wmpLhLWr76_egevaB772NH2W16EUWI0LfpHCxwXAYfvRitsvmNGXLpfl

Working together with First Nations people on improving our land management will first require a genuine acknowledgement of the Uluru Statement of the Heart. I was born in South Africa and at the age of 6 was ashamed of my white skin because it implicated me as a racist, which I am not.

With Nelson Mandela's release and subsequent Presidency, apartheid was successfully dismantled. This achievement was mainly due to his collaboration with Archbishop Desmond Tutu and the creation of the Truth and Reconciliation hearings; a world-wide first. This has since been replicated in many countries as the need to be heard and healed becomes crucial.

The Uluru Statement of the Heart asks for the establishment of a 'Makarrata Commission' which will be essentially an Australian truth and reconciliation commission. The Uluru Statement also asks for a First Nations Voice to be enshrined in the Australian Constitution – this is the very least we can do to make reparation for the atrocities and shameful treatment these nations have endured.

A Makarrata Commission will be immensely beneficial to all Australians. Only once we have established some trust with the First Nations people could we collaborate successfully with them. Trust will take a long time to establish and in the meanwhile their knowledge and expertise in land management, bush food and cool burns is critical to the future of Australia.

National Geographic talks about 11 of the fastest growing environmentally friendly jobs such as:

- Rooftop food gardens in urban areas
- Water quality technicians
- Natural scientists
- Green builders – including earth ships and tiny houses
- Bio fuels⁷

Establishing First Nations' training and recruitment strategies such as the Aboriginal Employment Strategy (AES)⁸ and promoting and supporting First Nations entrepreneurs is growing slowly but more can be done. We need to establish closer relationships with First Nations people and support them in the way they want us to, instead of telling them what they should want. We need to listen rather than tell – simply showing respect to people who continue to live within their environment rather than destroying it, is our lesson. Until Australia was colonized, First Nations people had cared for the land and its inhabitants and in this regard we can learn an enormous amount.

Conclusion

We need to stop exploiting native animals, their habitat and First Nations' heritage sites and start protecting them as a priority, with the creation of powerful, incorruptible laws.

Our education system in schools, tertiary and other forms of learning must include a focus on healthy eating and the environmental costs of our food choices. Making factory farms illegal is a good place to start. Not only are factory farms cruel, they are disease-ridden places that will cause another pandemic – it is just a case of when, not if. Animal agriculture is exacerbating the climate crisis. It is imperative we change the way we eat as a nation.

We need to change the way we think of all animals and the importance they play in keeping the environment in a state of balance. Keeping the planet healthy should be our priority – or we will be creating our own extinction.

Managing introduced species with poisons or bullets has not worked. Poisons kill indiscriminately and degrade the environment. Funding research into alternative and effective solutions such as relocation and fertility control is urgently required.

Most current laws that should be protecting wildlife and habitat are ignored and are not monitored or regulated. Creation and implementation of powerful, incorruptible laws that are prosecuted is paramount.

The policy of "offsetting" needs to be abolished and all remaining ecosystems must be rigorously protected. Thorough data collection of existing ecosystems, threatened and vulnerable species and all species in all environments is urgently required and there should be one centralized state-based database.

Protecting all native species and their habitat is paramount and no amount of money should over-ride that.

⁷ <https://www.nationalgeographic.com/environment/sustainable-earth/11-of-the-fastest-growing-green-jobs/#/55050.jpg>

⁸ <https://aes.org.au/>