

Submission to the Victorian Parliamentary Extinction Inquiry (which relates to the threat of extinction of native species in Victoria.)

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Submission:

Global warming causing climate change and more extreme weather conditions is highly likely to continue and even gather pace over coming years. This is highly likely to put the natural ecosystems and species of Victoria under high pressure in their attempts to survive; bushfires being prominent among the resultant threats. Extreme heat and wind conditions promote catastrophic bushfires, as we so sadly saw in the summer of 2019-20 and in 2009 in Victoria.

Personally I feel a great deal for the natural living world and the destruction of Australia's natural heritage causes me great pain and distress. I call for the Victorian Government to take better care and give much better protection for the natural ecosystems of this state.

The experiential engagement with these rich natural systems to gain aesthetic pleasure and uplifting of the spirit is a highly valuable thing. Out of this experience comes human creativity as well as the immediate benefits, which can feed into high quality contributions in the arts including dance, visual art using traditional or digital technology or art forms and mediums that have not yet been invented.

Recent scientific investigations have shown that natural environments confer health benefits; see <https://www.nature.com/articles/s41598-019-44097-3>. Consider this in regard to our own population but also that many parts of the Asia, in particular, are likely to suffer overcrowding with over-population and great losses of their natural riches. An effect of this would be the high valuing of Victoria's offerings for engaging with nature by these people as tourists seeking health and general spiritual benefits. Degraded natural settings would not offer an attraction in this regard.

The value of biodiversity must be understood far better than currently seems to be the case. In the the field of medicine I see many reports of researchers pursuing biological chemicals from plants and animals to assist their search for health remedies for various ailments. I suspect that the average person, and probably the average parliamentarian, would have no real idea about the obscure substances attainable from natural ecosystems. Two that come to mind are the gastric-brooding-frog which kept its young in its digestive tract, as it was able to turn off the digestive acids etc. This was of interest to researchers into gastric illnesses. This frog is now extinct, as I understand it. The blood of Tasmanian abalone has been sought because of its anti-viral effectiveness; a very apposite capacity in

this time of COVID-19 (see:

<https://www.abc.net.au/news/2014-08-20/chance-abalone-discovery-leads-to-herpes-treatment-hope/5683294>). We do not know enough about the living things in Victorian ecosystems to be able to put a value on them in regard to what they may offer for human health. They must be preserved.

Related to the above is the value of biodiversity for the better development of our food resources by offering new foods and sustaining more traditional ones. Food scientists seek new ways to give better resilience to food crops. They need all the biodiversity they can get. Victorian eco-systems with their biodiversity must be preserved.

Related to the medical uses of biologically occurring substances are the engineering possibilities. Such things as spiders webs have been regarded as having surprising structural properties i.e. high strength and flexibility for their dimensions. There may be a whole range of naturally occurring substances in Victorian ecosystems about which we do not know that could be of high value in the future when challenges that we have not yet imagined will have to be faced and dealt with. Engineering for medical instruments, procedures and prostheses using such substances are likely to be important. The surviving Victorian ecosystems must be preserved.

I note the advance of artificial intelligence and its likely impacts on employment in the future. It seems likely that people in the future will not have jobs as we have known them, that they will work many fewer hours a week in jobs they do for a reasonably comfortable life. It also seems very likely that a vast number of people will use the additional time that they have to engage with nature along with their friends in a variety of ways. I expect that this will include scientific research, video and still photography, audio recording and more, using highly advanced, miniturised cameras, motion sensitive cameras, infrared cameras, drone mounted cameras and so on. I expect that this sort of activity will become their dominant activity in an average week and possibly be their jobs in many cases. The quality of their opportunities in this depends on us, at this time, preserving the natural ecosystems. If the many thousands of years of evolution of these systems and the animals and plants that constitute them are destroyed or corrupted in this coming time then future generations cannot have the great joy of discovering the many complexities and the joyous beauty of them.

European and later arrivals in the Australian continent have tampered with this continents natural ecosystems to an enormous extent. Remembering that ecosystems are self-sustaining, complex systems this reality is dangerous for the sustainment of the liveability of Australia for any large population. This is another dramatic reason why we must preserve our natural ecosystems.

I am confident that there are many other reasons why we ought to be strenuously preserving and assisting the health of our natural ecosystems that are beyond my knowledge or understanding. Our arrogance must know better bounds.