



“There is no later – this is later.”²



Do you remember Lewis the koala? I first saw him one evening in November 2019. My wife and I were sitting watching the news. We saw the orange glow of fire above the burning forests of Australia and a video of a woman rescuing a small koala from a burning tree. It cried in pain and fear. That cry cut to my heart and made my wife weep. But the tears were not just out of compassion for the poor creature – they were also born out of the realisation that Climate Change is not something that will happen in the distant future - it is real and we are witnessing it on primetime television - now.

“Not with a bang – but a whimper”³

The footage showed the koala, later nicknamed Lewis, being rescued by Toni Doherty after she spotted the distressed creature in a forest fire in New South Wales.

She carried him in her shirt to the koala hospital in Port Macquarie. The koala’s burns were so severe that the vets were unable to save him and tragically he was “put to sleep.”¹ The hospital treated dozens of injured koalas like Lewis during the wildfires and thousands more are feared to have died in the bush.

The distressed creature and its pitiful cries received global attention. Lewis became the symbol of the plight of Australian wildlife.⁴



One very real consequence of our high-carbon lifestyles is literally to cause the Earth to burn and push multiple species towards extinction. Climate Change is happening now - it is manifested in the megafires of Australia and the whimpering of one small koala.

“Australia has the highest rate of species loss...in the world.”⁵

Australia supports a rich diversity of mammals with over 300 different species. About 244 of these are endemic to Australia. However, since European colonization some 200 years ago, 34 species or sub-species of native mammals have become extinct. This is the highest rate of any region in the world.⁵ Sadly, due to human activity, this tragedy seems set to continue.

Koalas, *Phascolarctos cinereus*, are one of the iconic animals of Australia.⁶ They are arboreal folivorous marsupials that live mainly in New South Wales (NSW), Queensland, South Australia and Victoria in forests typically dominated by eucalyptus trees.⁷ A study undertaken in 2012 estimated that there were some 330,000 individual koalas in Australia.⁸

Koalas have always suffered large natural fluctuations of population. Crashes were often associated with over-browsing or periods of low rainfall or very high temperatures. But over recent times threats have become more pronounced and there is evidence of an overall reduction of population. Nationally over the period 1990-2010 the population fell by about 28%.



Over a similar period, the population decreased by 80% in Queensland. This declining trend has resulted in the koala being categorised as VUNERABLE on the IUCN Red List.⁷

“Koala decline has been happening slowly and silently.”⁹

Prior to the mega-fires that swept across the Australian landscape in 2019-20 Koala populations were in decline¹⁰ due to a combination of reasons: In part it was driven by hunting for their pelts in the Nineteenth and early Twentieth centuries.⁷ Another of the main factors is deforestation which has been occurring over large areas for many years.

Thousands of hectares of forest have been destroyed through clearing for agriculture and logging and many more cut down for residential and commercial development.¹⁰ The destruction and degradation of koala habitat is particularly prevalent in coastal regions where urban development is rapidly encroaching on eucalyptus forests.⁶

Koalas are unable to cope with temperatures in excess of 36°C for long periods. In Australia long heatwaves are becoming more common. The Pilliga Forest – near Narrabri in north-west NSW - used to have one of the largest koala populations in the state. These have now almost gone because they have been killed-off by series of heatwaves.¹⁰ In particularly hot periods koalas descend to the ground in search of water and become exposed to predators like dingos.⁶ More recently there has also been a rise in sexually transmitted disease, especially chlamydia, which has affected populations.⁶

Until recently the functional extinction of the koala was considered a remote possibility but due to the increasing effects of Climate Change and the wide-scale and rapid destruction of mega-fires ¹⁰ there is now a very real prospect extinctions in localised areas.

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