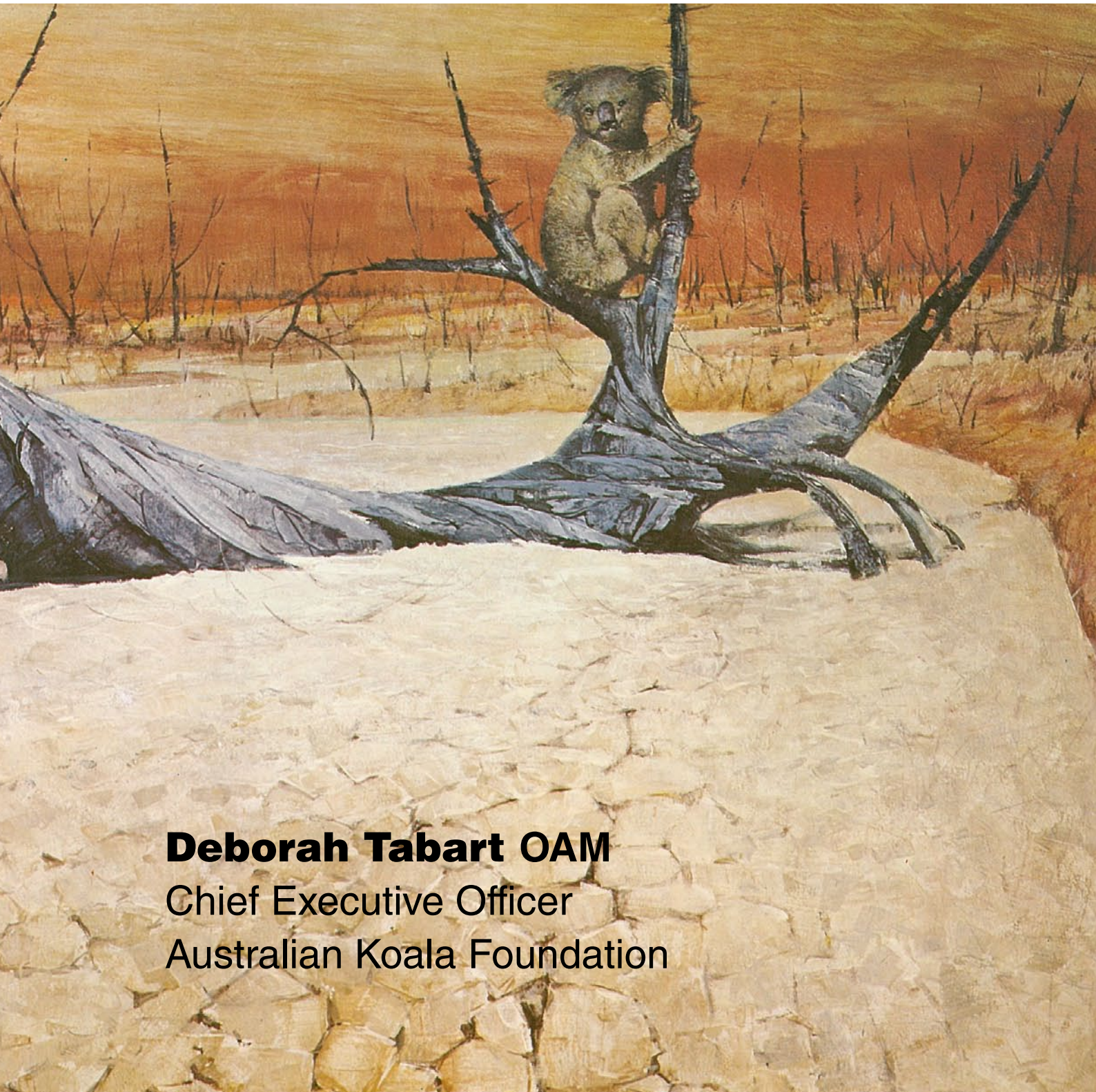


Koala Myth Becomes Scientific Fact



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Abstract

The purpose of this paper is to discuss how an old myth has become scientific fact. This paper will show how the following words, "There were no bears on the Goulburn when the white men arrived, and I believe this is because they were an easy meal for an aborigine," has now become part of the scientific literature and how a comment made in the 1800's is now influencing government policy on the koala.

The paper will attempt to show how today's management practices have little respect for the koala and how historical misinformation about the koala and its habitat affects everyday management in this country. It will also attempt to highlight that the Federal Government and its scientific committees have used old thinking in the scientific literature to foil protection of the koala and its habitat.

Overpopulation of the koala has become a myth and that myth is getting in the way of koala habitat being protected from rampant tree clearing in Queensland and for respectful management practices in Victoria and South Australia

That myth has come, in part from misinformation in the scientific literature and while ever the myth perpetuates, it is going to make it harder and harder for AKF and others to get koala habitat protected on the mainland of Australia.

Cover photo credit: 'The Dreamtime Book' by Ainslie Roberts and Charles P. Mountford



In 1996, the Federal Minister for the Environment decided not to list the koalas as Vulnerable under the then Endangered Species Protection Act 1992. This Act has now been replaced by the Environment Protection and Biodiversity Conservation Act (EPBC Act) and it is the intention of the AKF to try and get the koala listed under the new Act. Failing that we want to introduce a National Koala Act.

The Humane Society last December asked the Federal Minister Dr. David Kemp to review the decision because in 1996 it was agreed that they would evaluate the koala's plight in five years. The Minister has again rejected that application. The Minister took the view that there was no current data and science to suggest that the koalas' status had changed over the last five years since the last determination. The AKF was not invited to comment and indeed knew nothing of the application. (Appendix II)

So, why does the koala not get the protection that we feel it deserves. Why isn't the koala protected at a federal level given its economic importance and its iconic international status? For many reasons. Mainly because the Governments, both Federal and at State level believe they are safe, well and living happily in the bush. Most bureaucrats give no thought to the fact that they are living in suburbia being killed in the thousands each year by dogs and cars. The Government believes that because they have the National Koala Conservation Strategy of January 1998 in place that somehow this document protects the koala for future generations.

Victoria thinks they are in plague proportions, so do South Australia. New South Wales believes they are in need of a Recovery Plan, which is the only State taking their plight seriously and Queensland has them listed as a common species.

In recent times the AKF has called a working group of Koala people in South East Queensland to look at whether we can list the Koala, as Vulnerable under the Queensland Nature Conservation Act (NCA). We are hoping that we can secure a vulnerable listing at a regional level and from all accounts that Act is not capable of achieving that. Currently the population is considered to be around 10,000



animals over four local shires, Pine Rivers, Brisbane, Logan and Redlands. Last year approximately 1000 dead koalas were found and the Queensland Government estimates that at least another 1000 have been killed with no bodies recovered. So, one has to argue how long can a population of 10,000 lose 2000 animals?

With these figures I am confident that the Koala could meet the international criteria for listing as Vulnerable under the IUCN. However, because we have to meet the requirements of the Queensland NCA, we will not achieve a listing. Why, because we cannot prove that the animals are disjunct. That means we have to prove that they are completely isolated and it means that while ever there is recruitment into this population that you cannot presume or prove that the population will go to extinction in the next few years. The Federal EPBC Act cannot step in because the koala is not listed as a species vulnerable to extinction. And so, it becomes a vicious circle. You cannot get them listed because they are not listed!

In Victoria, the Government believes that overpopulation in Mt. Eccles, Framlingham, Sandy Point, Walkerville, Raymond Island, French Island and Snake Island constitute that all koalas are safe in Victoria. People all over the world are confused by the debate about too many or too few koalas in Australia.

The purpose of this paper is, however, not to discuss overpopulation. The purpose of this paper is to try and expose how the myth of overpopulation in the past is clouding the judgements of governments and managers today. This in turn has led to management practices that have little respect for the koala and its welfare and worse still stops legislation being able to step in and protect its habitat.

Overpopulation has become a myth and that myth is getting in the way of koala habitat being protected from rampant tree clearing in Queensland and for respectful management practices in Victoria and South Australia. It also helps to stop the koala being protected in Queensland from massive land clearing that occurs on a daily basis in the Brigalow and Mulga lands.



That myth has come, in part from misinformation in the scientific literature and whilever the myth perpetuates, it is going to make it harder and harder for AKF and others to get koala habitat protected on the mainland.

AKF believes that dead trees are a result of historic land clearing. It is also a result from deer, sheep, cattle, and pig grazing. In many places, bracken, fire and disease have all contributed to trees getting sick and ultimately dying. American biologists have suggested to me that the koala may stay in a tree until it dies because sick trees increase their sugar load as a way to try and heal. If this is the case it answers why a koala will just eat a tree to its death and then die itself rather than move to another tree in the forest which is what you see on Kangaroo Island and Framlingham. They become hooked on the taste perhaps?

The overpopulation myth is hard to argue against because obviously we can see koalas in trees and obviously those animals have contributed to the death of some forests. Over the last few years I have personally visited every site that is currently experiencing dead trees and increased koala numbers. I believe I can realistically evaluate what I have seen. In most instances, the koalas are what I would call "the last man standing." They are the visible effects of "events cascade" which have occurred over 200 years. In some places, hog deer are eating the regrowth. In others, bracken is helping to kill the trees, but in each case the managers just see "two many feral little critters" and either want them culled or controlled in some way.





Where does this attitude come from? It is my view that it comes from years of misinformation and I believe it suits our Governments to allow this misinformation to continue. It also reflects the lazy or the overworked land managers who have not been inquisitive enough to think broadly about what is causing the trees to die. Many managers just accept the literature that they are pests and over-abundant and proceed accordingly to try and cull them, sterilise them or research on them. This results in an approach that has total disrespect for the individual koala and for the species in general, particularly in Victoria and South Australia. Currently there are large numbers of koalas being experimented on, some of which will be killed in 2003 for scientific purposes. The koala has become a scapegoat for poor land use over many years and it is easier to just blame the koalas than really face the crisis that our country is now in, environmentally. On Snake Island for instance, there is the ridiculous situation where the koala is being sterilised and translocated and a Southeast Asian hog deer is protected by the IUCN redlist. What is that about? How did that happen?

This lack of respect for Koalas has in part come from another myth. That myth is the fact that koalas historically were in low numbers at white settlement. It has been argued by Roger Martin in a paper entitled "Of Koalas, Tree-Kangaroos and Men", that *"In Victoria the assumed predators of the Koala-(Aborigines and Dingoes)-had been eliminated shortly after European settlement. Harry Parris has argued, in an article which was re-printed in 1948 (Parris HS, 'Koalas on the lower Goulburn', Victorian Naturalist, 64, pp. 192-193, 1948), that Aborigines were the more significant of the two. Parris' forbears settled on the Goulburn River in the 1870's and, relying on their recollections and other published accounts of early settlers, he reconstructed the changes in Koala abundance in the area from the time of white settlement. He found Koalas were not mentioned in any accounts prior to 1850, occasionally sighted in the early 1850's, abundant by the late 1860's and in the thousands in some areas between 1870 and 1890. He observed that this increase coincided with the annihilation of the resident Aboriginal population and suggested that it was their hunting that kept Koala numbers low. Despite his failure to consider the role of other influences, such as Dingo predation and bushfires, I found Parris' argument most appealing. There*



is no doubt that Aborigines were significant predators of Koala-numerous references in the contemporary literature attest to this. There is also no doubt that the decline of the Victorian Aborigine began around 1840. Intuitively, however, I found it difficult to accept that hunting by humans was a significant force in regulation the abundance of a large mammal species”

I am glad that Mr. Martin found this notion appealing, but I do not. Interestingly, he also had doubts about this, as did his reviewers who said *“although it does present a plausible story, (the treatment of) historical population changes are speculative and unsatisfying, because of the poor data base available.”*

Given that Mr. Martin and his reviewers had doubts on this matter, then how does this thought get “into the literature.” Because it did it has become a dangerous notion for the koala as it continues to affect how managers in Victoria and South Australia, think and deal with koalas. In fact one could argue that this myth was one of the contributing factors to the koala not being listed in 1996. Mr. Martin and others continue to flaunt this myth at every opportunity and condemn anyone who would argue otherwise.

When Dr. Tim Flannery, the then Curator of Mammals at the Australian Museum in Sydney was asked whether he supported the nomination of koalas as vulnerable under the federal legislation he replied *“.the discussions of the historic status of the species are particularly poor as they do not cover the historical work by Parry (sic) and others which suggests that the Koala was rare at the time of European settlement. He also stated that the contention that Koala numbers are currently low is poorly substantiated, neglecting much relevant material”*.

Was Dr. Flannery referring to Mr. Parry or Mr. Parris? AKF has checked the literature and we cannot find a Parry dealing with historical data on the koala. So, we can presume he meant Parris. How relevant is Dr. Flannery’s incorrect comment when dealing with the issues of habitat destruction in 2002. What relevance does this have to whether a species should be listed now? Are we meant to accept, that because of Dr. Flannery’s eminence we must believe that his comment should be taken into account. Clearly the Australian Government did



and they also accepted another eminent scientist when he said that *“there is no evidence that Koala populations are threatened by forestry activities, contrary to the opinions expressed in the nominations. He stated that Koalas are the species of arboreal marsupial most closely associated with intensively logged forests, including plantations, and do not depend on mature forests.”* Again, the Government felt that this was fact. In another paper, I am confident I could argue that this is not fact but a convenient myth.

The myth is further perpetuated by Dr. Tim Low in his book *“The New Nature”* where he quotes Harry Parris again *“Harry Parris had the same idea in a later era. Growing up in the Victoria’s Goulburn River in the 1880’s he remembered crying koalas stirring his childhood sleep. Then Parris learned of an earlier settler, in the 1850’s who went for three years before seeing a koala.”* Not, in this quote, Dr. Low has said that it was Parris growing up in the valley. Mr. Martin, said it was his forbears. I am not sure who is correct, maybe neither of them.

The theme of this AKF Conference for 2002 is *“How the Past Affects the Koala’s Future”* and I would argue that this notion of whether aborigines killed large numbers of koalas is now a myth and that is currently affecting current management. Why? Because some scientists and managers believe that the koala numbers in the early 1900’s were an aberration and that it justified having a fur trade. They believe, I think, that low numbers of koalas now is normal and that



Photo credit: ‘The Koala Book’ by Ann Sharp



when they see koalas in isolates in large numbers that it is a problem. They cannot see past this and are starting to treat them as pests. Indeed the Australian Mammal Society earlier this year held workshops on “managing pest species, flying foxes, kangaroos and koalas”. Indeed the Minister for South Australia declined our invitation to send koala scientists to this Conference because the budget had already been allocated for them to attend the Australian Mammal Society so they could “explore the logic and rationale behind management programs for over-abundant native mammals”.

I am convinced that at white settlement there were large numbers of koalas and I do not believe there is any evidence to suggest otherwise, other than the musing of Mr. Harry Parris and those that have echoed him. The literature is riddled with Mr. Parris’ thoughts. In fact the myth has become so widespread that Mr. Parris is no longer cited, but his little thoughts have become part of the literature. Mr. Martin in his paper above, extrapolated on what Mr. Parris was thinking and suggested that koalas were missing between 1840 and 1850 and then they exploded after that time (which he currently thinks about modern koala populations) and to me, he has no basis for these thoughts other than the fact that aborigines eat native species. Perhaps they didn’t like koala meat? Perhaps only some tribes ate koala? Perhaps the aborigine managed the koala well? Perhaps the white settlers just weren’t looking up? Anyone who has been looking for koalas even with animals fitted with radio-tracking devices will know they are almost impossible to see. If white settlers did not expect to see such a strange animal, perhaps they didn’t.

J. L. Kohen in a paper entitled “Aborigines and Marsupials” says “Aboriginal Use of the Koala. One of the animals, which may also have been impacted by Aboriginal hunting, is the koala. The adoption of edge-ground hatchets in southeastern Australia within the last four thousand years would have significantly influenced



Photo credit: 'The Little Australians we'd all hate to lose' by Bill Phillips



the capacity of Aborigines to exploit this essentially sedentary animal as well as many other arboreal species including the possums and gliders (Martin 1994). Indeed, the relatively low population density of the koala in the late eighteenth and early nineteenth century is implied by the failure of anyone in the Sydney region to see a koala until the early 1800's, and even then only a foot was provided by Aboriginal people who had presumably eaten the rest of the animal. That koala populations had reached high levels by the end of the nineteenth century cannot be denied, given the enormous numbers that were being hunted for their skins in the late nineteenth and early twentieth centuries. However, it is not at all clear that the densities were initially high when Aboriginal population densities were high. Once Aboriginal populations declined, it may be that the koala populations increased. Perhaps some of the problems associated with contemporary koala populations, which live at high densities in localised habitats, are the results of the cessation of Aboriginal hunting”

Mr. Kohen says that we “cannot deny that they had increased in numbers by the turn of the century” and I am glad that he has thrown doubt on the notion about aboriginals killing them, but the point I am trying to make is that he is now quoting Martin not Parris.

Kohen quotes Martin who quoted Parris and it becomes scientific fact. This happens time and again in what I regard as a flawed scientific process.

Perhaps koala's numbers were always high. Perhaps it wasn't the cessation of aborigines hunting koalas that increased koala numbers. Perhaps there were large numbers of koalas in Australia, but not around Goulburn where Mr. Parris mused. Perhaps the early settlers weren't in areas where koalas were. As a Tasmanian, I could argue that many of the original settlements were in Tasmania and of course there are no koalas there. Perhaps I should start that myth and see how long it takes to get into the literature and become fact. It only took a few years for this myth to become fact after Mr. Martin and others regurgitated Mr. Parris' one-liner. And a one-liner it surely was.

Who was Mr. Parris? No-one appears to know. He wrote his article in Victorian Nature Vol. 64 in 1948, or did he? Two researchers have different views. One said his forebears lived then, another said it was him. Although we are led to believe that he was qualified to make his statements, when one looks at the article (Appendix 1), I find it difficult to believe that anyone would take his unsubstantiated musings seriously. The whole document consists of less than 1000 words. And the key sentence is *“there were no bears on the Goulburn when the white men arrived, and I believe this is because they were an easy meal for an aborigine”*.

Apparently Mr. Parris had *“thought about this a lot ..and concluded that the only way to check it would be to read every book I could get that had been published before 1856 of men who had travelled in this country, from Major Mitchell onward”* He carefully *“read over twenty books and not one of those men saw a bear in the Goulburn country, whereas each traveller in Gippsland recorded bears”*.

It is my argument that this myth has now been extrapolated by some to argue that killing or culling koalas in 2002 is an acceptable practice for wildlife managers because koalas were traditionally hunted and their numbers kept low by aborigines back in the 1800's. What relevance is that to today. This is a dangerous myth particularly when cars and dogs take over as excellent predators for this species.

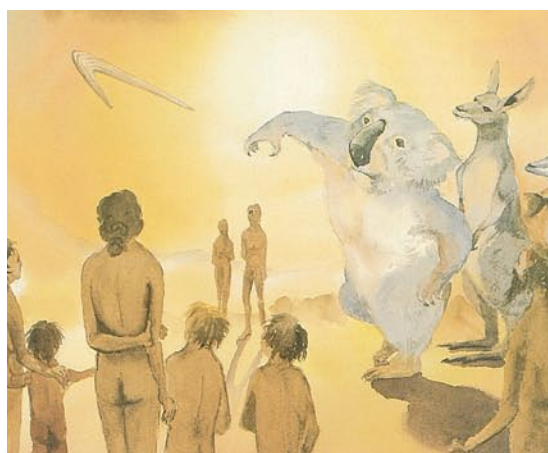


Photo credit: 'The Little Australians we'd all hate to lose' by Bill Phillips



This Conference was publicised far and wide and we sought papers on the historical influences that have affected koala habitat. We also sought papers that would encourage debate from speakers in the arenas of plant pathology, tree health and land ecology/health of ecosystems, because we believe that these are the sort of scientists who need to be involved in how to manage isolated koala habitats. Interestingly very few have been able to do so, because land managers have not employed them to think about these issues because the land managers are stuck back in the early 1900's, not living in the 21st century. They are stuck in old thinking and if you believe my premise, stuck in a myth that has no scientific basis.

AKF will not accept that the koala is totally responsible for the defoliation and degradation of their habitat, and believe strongly that there are additional factors at work including tree disease, salinity, edge effects, fungal infections and pollution. It is time that Governments stood up and accepted that land management particularly in Victoria and South Australia must be faced with twenty first century thinking. Management of land by managers and conservationists today and beyond will need multi-disciplinary teams working together to find holistic solutions to problems such as Kangaroo Island and Framlingham Forest.

When that happens, I can see a future for the koala and its habitat. To date, after nearly 15 years in this job, as Executive Director of the Australian Koala Foundation, I sometimes feel that we are fiddling while Rome burns.

So often we focus on small problems and believe it or not I believe Framlingham and other isolates are small problems when you compare them to the rest of Australia. The koala is suffering from the problems that our country is currently facing. Koalas die in bushfires and in drought. Koalas and their colonies are affected by broadscale land clearing. The koala is often penalised for being too cute. Many wildlife groups condemn both the koala and the AKF for not appreciating the bigger picture.



I beg to differ. If the koala is to be saved, then the bigger picture must be dealt with. Until we get our landuse under control, the koala is not safe and this is ridiculous given that it is one of the world's icons and that it is a key tourism attraction for our country.

If you cannot save the koala, it will be impossible to save our bush.





Appendix I

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H. S. PARRIS, *Koalas on the Lower Goulburn*[Vict. Nat.
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KOALAS ON THE LOWER GOULBURN

By HARRY S. PARRIS, Hawthorn, Vic.

When I was a child my family lived on the Goulburn River near Nagambie. At this time "bears" were very numerous and at night would climb about the house, and the crying of the baby bears would waken our family. The mother bear would grab a baby and, putting it across its knee, so to speak, would spank it soundly with its open hand and the baby would cry just like a human baby.

I have a note that in 1886 my father remonstrated with a lad for shooting a bear on his property, so there was some idea of protecting the bears then.

I learned from Major Day that when his father, William Day, came to live on the Goulburn at Noorilim in 1856 he and his family lived there for about three years before they saw a bear. One day one appeared and seemed a wonder animal to them, but some of the other residents knew what it was as they had seen them in other places; however, within a month there were quite a number about, indicating a migration.

Ten years later (1868), almost at this exact spot, Mr. John Miller shot five koalas from one tree. (This would be a family, as a male bear may have as many as four wives, or possibly two females and two young bears.)

So from many records I know that from 1870 to 1890 bears were in thousands on the red-gum timber of the Goulburn and around Broadford and Reedy Creek.

I thought a lot about Mr. Day's statement and concluded that the only way to check it would be to read every book I could get that had been published before 1856 of men who had travelled in this country, from Major Mitchell onward. I carefully read over twenty books and not one of those men saw a bear in the Goulburn country, whereas each traveller in Gippsland recorded bears. An example is James Dredge, the first Protector of Aborigines on the Goulburn, who lived at Mitchell's Town for one year (1839-40) and kept a diary which he wrote up almost daily. He did not record seeing a bear.

So I think I can say there were no bears on the Goulburn when the white men arrived, and I believe this is because they were an easy meal for an aborigine. In the red-gum country they were easily procurable and so were eaten out, but in the tall-timbered country they were not so easy to obtain.

Some writers have said the blacks would not eat koalas, but I think this is incorrect. In his book, *An Australian Squatter*, W. H. Brodribb writes: "Our black man had to procure us a monkey or sloth nearly every day. The flesh is far from being nice; still we



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H. S. PARRIS, *Koalas on the Lower Goulburn*

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were glad to eat it. Sometimes he would procure for us an opossum or bandicoot; they are considered a delicacy as compared with the monkey (native bear).” I therefore contend that the bears increased as the blacks decreased, and in the fifties and sixties they spread over a greatly increased area and apparently lived and thrived in red-gum country, even if they prefer the manna gum—so could we not re-establish them on the Goulburn now?

There is just one other point. At certain times the manna gums become poisonous to bears and they have to move to other trees, and this is especially true of the young tips that grow after a bushfire. We also know that on “Black Thursday” (February 6, 1851) most of Victoria was burnt, and this might have been a factor in the bears’ migration.

Bandicoots used to be found in grass tussocks on the Baillieston side of the river. I wonder if there are any left now. I am pleased to find that wallabies can now (1947) be found round Baillieston, and I do hope they are allowed to multiply.

Referring again to the koala, I appeal to those property-owners on the Goulburn who have made their properties sanctuaries for native game to make an effort to re-establish the best-loved of all wild animals, the native bear, even if it means planting certain trees necessary to give the bear the variety he requires. I also appeal to the F.N.C. to assist in this matter.

THE SACRED QUETZAL BIRD

The colour-film screened by Mr. David Fleay at the January meeting of the Club contained a brief shot, taken in an American zoo aviary, of the quetzal of Honduras, the first movie of this unique bird seen in Melbourne. Recently to hand is a book *Jungle in the Clouds*, written by Victor W. von Hagen, F.Z.S., and published by Robert Hale Ltd., London. The author of this work (referred to by Mr. Fleay in his address) narrates how he achieved the distinction of being the first to capture specimens of the rare quetzals in the rain-forests of Honduras and to send them alive out of the country of their origin.

Never hitherto photographed and never caught alive, this sacred bird of the Aztecs was regarded with superstitious awe, the brilliant plumes being worn only by the chiefs and high priests. After describing its magnificent appearance and exquisite movement, von Hagen relates in vivid style the search, location and capture, gives observations on feeding and breeding habits, and sketches the elaborate preparations for the final despatch of the birds overseas.

The book scintillates with tropical local colour, as if to match the iridescence of the principal subject. Accounts are also given of the rapacious giant umbrella ants, the tinamou bird, and the three-toed sloth, with other strange fauna and flora. Descriptions of the present inhabitants of the jungle, who are Jicaque Indians, the former Maya civilization that astonished the European conquerors, and the ruins with works of art in which the quetzal motif appears, as the shape of the plumed serpent, impart ethnological and archaeological character to the book.

H. C. E. STEWART.



Appendix II



The Hon. Dr David Kemp MP
Minister for the Environment and Heritage

Ms Deborah Tabart
Executive Director
Australia Koala Foundation
GPO Box 2659
BRISBANE QLD 4001

Dear Ms Tabart

In recognition of your interest in the conservation of koala, I wish to advise you of the outcome of the review of the status of koala under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*.

At its 10th meeting in December 2001, the Threatened Species Scientific Committee reviewed the conservation status of koala. This is in accordance with a recommendation made by the former Endangered Species Scientific Committee in 1996. At that time, the koala did not meet the criteria for listing as Endangered or Vulnerable under the *Endangered Species Protection Act 1992*.

The Committee's recommendation after the 10th meeting was that there is no compelling publicly available data or information to support the suggestion that koala has significantly declined or become more threatened at a national level since 1996. The Committee concluded that there is currently no scientific basis to support koala meeting the criteria for national listing under the *Environment Protection and Biodiversity Conservation Act 1999*.

Though I concur with the advice of the Committee that koala is considered to be secure at the national level, I am aware that the conservation status of koala varies from secure in some areas to vulnerable or extinct in others. For example, in South Australia, because of introductions, the koala is now found over a greater range than at the time of European settlement. In light of this, I wish to advise you that should new or additional scientific information be made available which indicates the koala is under a new or increased level of threat such that its survival is threatened nationally, the koala would be eligible to be re-nominated for listing under the *Environment Protection and Biodiversity Conservation Act 1999*.

As you would be aware, the National Koala Conservation Strategy, which aims to provide a national framework for the conservation of koalas, was released in 1998. This Strategy acknowledges that conservation of koala is a complex task requiring an integrated management approach involving community and government participation at all levels. I remain optimistic that the implementation of actions contained within the strategy will promote the conservation of all significant populations of koalas throughout Australia.

Thank you for your continued interest in this important matter.

Yours sincerely

A handwritten signature in black ink that reads "David Kemp".

DAVID KEMP

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