



**Australian  
Koala  
Foundation**

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**PERSPECTIVE ON THE MANAGEMENT OF ISOLATED/ISLAND KOALA POPULATIONS**

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Koalas in South Gippsland may hold the key to the future survival of koalas in southern Australia but their habitat is afforded little or no protection under Victorian or Federal law. It is also subject to logging. Most if not all other koala populations in Victoria and South Australia (collectively I will refer to them as 'southern koala populations') have been established as part of an ongoing translocation program. They are highly inbred and beginning to show morphological changes. This is why the management of all koala populations in southern Australia and particularly the decisions made with regard to isolated & island populations have to be carefully handled.

It is the AKF's view that Koalas in South Gippsland, Victoria may well hold the key to the future survival of koalas in southern Australia as a result of the historical twists and turns that have taken place over the past two centuries. The South Gippsland koala population centred around the Strzelecki Ranges is believed to be the only surviving remnant of the original koala population that ranged throughout Victoria and South Australia prior to white settlement. Koalas in South Gippsland are the most genetically diverse of southern koala populations and as such are crucial in terms of long term conservation. It is important to protect the koalas of South Gippsland and their habitats, for the benefit of all southern koala populations.

Most other southern koala populations outside South Gippsland are founded from French Island stock and are highly inbred. These koalas are beginning to show morphological abnormalities such as one or no testicles, and because of their very narrow genetic base, could well be vulnerable to a population crash in the future. It is imperative that this fact is recognised by everyone involved in the management of southern koalas so they will then protect the koalas of South Gippsland and their habitats. Their genetic material could be used to strengthen other southern populations and afford all those koalas a good chance of long term survival.

The Australian Koala Foundation believes that until there is an accurate census of existing animals and a clear idea of what habitat is available on private and public land across the whole state, it should not be assumed that Victoria has viable koala populations. The same applies to South Australia. The AKF has commenced work on mapping the Strzelecki ranges in South Gippsland for its Koala Habitat Atlas, which produces GIS based maps which identify and rank koala habitat so that sound land-use planning decisions can be made for the protection of koala habitats and the management of remaining populations.

Habitat is a key factor in the debate of how to manage koalas. While we quibble over population estimates, the spotlight is turned away from ongoing habitat destruction, fragmentation and isolation. The loss of habitat caused by human intervention in this country is the root cause of so called 'overpopulation' by koalas, bats, cockatoos and other threatened wildlife. Calls to cull these natives to our country who are being forced into ever decreasing habitats while we continue to clear at one of the highest rates in the world, are irresponsible and completely crazy.

To understand the problems faced by today's koalas, it is necessary to appreciate the recent history of koalas in Australia. Back in the late 1800s and early 1900s there was a thriving world trade in koala fur and by 1930, koalas were already extinct in South Australia, estimated at only thousands in New South Wales, thousands in Victoria and approximately 10,000 in Queensland. Approximately three million koala furs went to market during the early 1900s and as many as ten million were estimated to have been shot during that time. A six month open season on koalas in Queensland in 1919 alone yielded one million koala skins.

In 1930, American President Herbert Hoover banned the importation of koalas skins into the US and following public outrage in Australia, koalas were eventually protected in all states by the end of the 1930s, but their habitat was not protected and in most cases, it still isn't.

Because of the fur trade, people around Australia became concerned for the koala's survival and a 'handful' of koalas were moved from mainland Victoria to French Island and Phillip Island in the



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1880/90s. The records of this period are poor but oral history suggests that a sealer presented his lover on French Island with a gift of a small group of koalas (thought to be as few as four). Koalas were also moved from the mainland to Phillip Island at around this time. In 1923, wildlife authorities in Victoria commenced translocating animals back to mainland habitats. Between 1923 - 1994 approximately 10,000 koalas were translocated from French Island, Phillip Island and other populations founded by their stock to mainland Victoria, Kangaroo Island and mainland South Australia.

While this translocation process has restocked mainland Victoria and South Australia where koalas had lived before the fur trade, the progeny of French Island koalas founded by as few as four animals makes up the bulk of koalas that have repopulated mainland Victoria and South Australia. They are highly inbred and as I said earlier, some are beginning to show morphological changes. Wild Koalas on Phillip Island are all but locally extinct due to the pressures of habitat loss, cars and dogs.

The Victorian Government boasts that its translocation program is the most successful in the world. Successful in terms of what? The AKF argues that its so-called success lies in the fact that it has moved large numbers of koalas. But there is no research to suggest that koalas are secure in the southern part of their range as a result.

French Island koalas continue to be a source population for translocation. Problems at Tower Hill, Mt. Eccles, Framlingham and Snake Island are an example of the real failure of translocations from French Island. One can only speculate on the exponential growth of problems caused by the further translocation of animals from Mt. Eccles, Framlingham and Snake Island to other parts of Victoria where they are currently being dumped. Those that survive anyway, given the information received by us after a recent translocation from Snake Island.

Fundamentally important to the future southern koala populations is the retention or re-establishment of suitable habitats. Well over 80% of Victoria and South Australia's original vegetation has been cleared. What remains is degraded farmland, small isolated patches of forest and an increasingly modified forest system where native forest is being logged and often replaced by pine plantations and monoculture eucalypt plantations.

This history and much more is part and parcel of the problems that managers, scientists, politicians and veterinarians now face in the management of Southern Koalas.

In the Australian Koala Foundation's opinion, the long-term management of wild koalas and their habitats, particularly in Victoria and South Australia, has been driven by bigger political motives that have stemmed from commercial exploitation of the animal itself and its habitat. For far too long, the koala has been blamed for the problems being seen in isolated remnants of forest and bushland. We acknowledge that Government agencies are attempting to find solutions for broader problems of land use that began at white settlement but we state emphatically that the koala is not the culprit. Poor land use practices and a dominant culture which "undervalues" wildlife are the root causes of problems of koala management.

The Australian Koala Foundation has been accused by some of not fully appreciating the extent of the over-population issues in Victoria and South Australia and I would like to challenge that notion.

I quote from a paper given by the University of New South Wales' Dr. Bronwyn Houlden at the 1999 *AKF Status of the Koala Conference* held on Phillip Island;

"The translocation programs operating in southeastern Australia have established a rare series of wild koala populations that have undergone sequential founding events. Genetic analysis has shown a cumulative increase in inbreeding, and a loss of genetic variation in these populations."

Houlden goes on to say "Inbreeding results in a loss of fertility, reproductive success and survivorship (known as inbreeding depression) in many plants and animals. Inbreeding could ultimately pose a serious threat to the long-term survival of the koala. Preliminary studies have shown that morphological abnormalities including unilateral and bilateral testicular abnormalities and other defects are prevalent in populations in southeastern Australia (up to 30% in some populations). These physical abnormalities may be a consequence of inbreeding in koalas."



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"We have assessed the consequences of inbreeding in koalas by quantifying reproductive parameters in populations with a range of bottleneck histories, levels of genetic variation and inbreeding coefficients, to determine whether these variables are correlated."

"Koalas are at an ideal point for intervention, as many of these issues could be addressed by management strategies, including the introduction of unrelated stock (or semen) into island populations." (Houlden et al, 1999)

The AKF fully appreciates the problems facing southern koala populations. We also understand the complexities of the solutions that will be required to fix those problems. However, to date we have not seen any management in either Victoria or South Australia that is going to solve the problems. We are also confident that the problems are going to get worse.

In today's workshop I hope that we can work as a holistic team towards identifying the problems and then hopefully onto identifying solutions that will give relief to managers in the field, not to mention the koalas.

In order to move forward, we need to address the culling debate. I will explain why the AKF has opposed proposals to cull koalas and why we will continue to do so. We oppose a cull because it is wrong to even suggest it. We will never support the notion, nor regret our stance on the matter.

The AKF appreciates that the South Australian Taskforce headed by Professor Hugh Possingham made the decision to advise the South Australian Government to cull the koalas on Kangaroo Island. The AKF understands why the Taskforce made that decision, arguing that koalas were not native to the Island and therefore should be removed. 'Is it better to starve to death than to be shot?' questioned certain scientists in the media.

The AKF opposed the cull from the beginning. We opposed the cull because it is wrong from a moral point of view.

I understand the argument that Kangaroo Island should be free of Koalas because they were never there in the first place, but I and the AKF are realists and we knew that the politicians would never want all the koalas off the islands. They want them there to generate tourism dollars.

And what about Victoria? There is a media frenzy whenever there are calls for a cull.

It is wrong and it would instantly give land clearers all over the country the perfect excuse to sacrifice koala habitat to the bulldozers.

We all know the Politicians in South Australia decided against a cull, knowing that it would provoke world-wide outcry and a bad image for tourism. And that they opted for the expensive translocation and sterilisation process. By default the Victorians have followed suit.

The Media and the public are assured that the Governments are committed to doing the best by the koalas, with good science and good veterinary practices in hand. We constantly hear rhetoric about translocation and sterilisation being in the best interests of the bush that is damaged and in the best interests of the koalas themselves. However neither end result has been achieved. An ill conceived process that disregards social structure, habitat viability and dignity of the animals is doomed from the beginning.

It is imperative that Government takes full responsibility for koalas and treats them with the respect and dignity they deserve, especially given that they want to exploit them. It is even more important for the scientific and veterinary communities to have this understanding and respect and give the koalas genuine assistance.

Before the fertility trials began on Kangaroo Island and several times during my time at AKF we have tried to make scientists and wildlife managers in Victoria and South Australia aware of research conducted at Koala Beach in northern NSW on the social hierarchy of koalas. More importantly we have tried to explain to wildlife managers that an appreciation of social order is extremely important for management decisions especially with regard to the animals that exist in isolated habitats.

To date, that has fallen on deaf ears. Translocations are based on a "closest to the ground" mentality with little or no regard for social order, rather than a "which is the best animal to take" approach. They



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are also undertaken in a gung-ho fashion reminiscent of the wild west. We cringe when we see the techniques used to capture and transfer animals, often with untrained volunteers. In a moment, I will illustrate the cruelty inflicted on koalas as part of these translocations undertaken with total disregard for the animals' welfare and that of their families.

The AKF is disgusted by the fact that the koala has been cast as the villain in the over population debate. No-one can go into any isolated habitat and not see the damage that sheep, cattle and humans have wreaked over the years. How can the koala be blamed for all this degradation and how can we, as Australian citizens allow the international public to believe this.

Do you really think it is fair to blame the koala for all the land use problems on Kangaroo Island? Or on French Island where people burnt 8 tonnes of wood per day to feed a chicory industry and a salt industry during the early 1900s? Or indeed on the mainland where over 80% of the koala's original habitat has been destroyed?

Is it fair to blame the koala for years and years of poor land management and then if we do, is it fair to shoot them out of the trees while they sit there defenseless and unable to speak for themselves?

Did anyone on the South Australian Taskforce really believe that the Politicians and the public would allow a cull and if not, why did they engage in a culling debate in the first place?

I never believed that the Government would condone the cull. The committee involved were either pawns of the Government or incredibly naïve in believing that they would. I also found it extremely frustrating to be told by members of that committee that they had the koalas' welfare at heart and that the AKF was unreasonable because we would not allow them to be shot. "What fresh hell is this?", I thought to myself.

So then they opted for the translocation and sterilisation process - the soft cull as it were. Ironically in my opinion, those who advocated shooting the Koalas (sometimes vets) watched as these animals died slowly and painfully after botched veterinary procedures and translocation practices that showed little or no respect for this wonderful species.

We have evidence that animals have suffered from translocation and fertility control in Victoria and South Australia. Veterinarians among others have been involved in what I can only describe as cruelty.

We know that veterinarians with little or no bush experience have performed some of this surgery. We also know that Veterinarians working with zoos and other institutions have stood by helplessly watching as surgery is performed on these animals. They cannot speak out publicly for a range of reasons. The AKF is under no such censorship.

We have tag numbers and detailed descriptions that the public have given us, of large numbers of koalas who suffered greatly. I want it known that the AKF will continue to oppose this practice as long as it continues because of the appalling and cruel things that are being perpetrated on koalas in Victoria and South Australia.

I will quote from one woman who wrote to the Foundation;

"On the 6th November, I received into my shelter a male koala, approximately 12 months old, vasectomised, without an ear tag, weight being 1.5 kg - found at ....(a) camping ground. His condition was extremely poor, obviously starved, dehydrated (sunken eyes and no elasticity in skin) and showing signs of pneumonia. He died 7 November. The Autopsy revealed pneumonia and emphysema.

Since then I have admitted to this shelter three koalas - tag number 243 - vasectomised male, dehydrated and thin - Ear tag number 143...comatose, dehydrated, thin. Tag 206 - female, dehydrated and thin, arrived comatose, consequently all have died. Tags 137 and 84 both taken from dead koalas are in my possession - both of these koalas were debilitated, thin, dehydrated, starving/malnourished....One that survived for ten days went through a toxic stage. Interesting to note that none of the stitches where they had been sterilized had dissolved. I now have tags 241, 218, 245, 256, 117 - all these animals are now dead. Koala 141 is still in the camping ground but unhealthy."



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Will the politicians in Victoria and South Australia admit to these animals being poorly treated? Will the Vets who performed the operations admit the animals have suffered and died at their hands?

If the problem is to be solved, then management solutions will have to be found that not only take into account animal welfare, good science and habitat quality, but that also deal effectively with political mandates.

And, the AKF hopes that in the future the koalas in Victoria and those who manage them will be seen as an asset to our biodiversity and our tourism industry -- not as pests to be eradicated.

Now that the United States Government has listed the Koala as *threatened* under their *Endangered Species Act*, I am hoping that our Governments will take heed. When I meet with biologists in the US, they assure me that overpopulation by inbred animals in isolated habitats spells trouble and is not an indication that 'all is well', as some in Australia would have us believe. In fact they warn us to take heed of the comments in the Federal Register with regard to the listing so that we do not remain complacent as a country in our management practices. Sadly, they have seen it all before in many countries around the world.

I know that in history's pages the AKF's stance on 'no culling' will be seen as correct. Culling is wrong and would set a precedent in this country that our koalas cannot afford. Can't you just hear a Queensland farmer saying "let's shoot these bloody koalas", because he wants to clear for further cattle grazing.

That is what is happening to the fruit bats down the eastern seaboard of Australia. The recent bat cull in the Royal Botanical Gardens of Melbourne is the end result of such thinking and I am appalled by it. So should every decent biologist and citizen in this country. When I hear a biologist call for a cull, I start to question his or her credibility and love of animals.

Aren't you tired of all this? I am and I want to find common ground where we can all agree on what needs to be done. Our Politicians do not know what to do, most of the managers on the ground don't know what to do and I know that many agree with AKF thinking. It is time for groups like the Australian Veterinary Association to lead the way and find solutions that will work.

It is time to take a real-world view and that real-world view is that no politician is going to remove koalas from Kangaroo Island or any other Island because they make money via tourism. They make huge amounts of money.

At present at least 500,000 tourists visit Kangaroo Island each year, in part to experience nature, and part of that is the koala.

The AKF's real world view is that if our Government is going to exploit the koala in one way or another, then it must give them the dignity and respect they deserve in return and manage them compassionately with a long term strategy, not just knee-jerk reactions.

With the money made from tourism, I expect them to manage the koalas properly. The AKF believes it can be done and I know it can be done with dignity, respect and consideration of the Koala.

When scientists and others try to lead the media and the public to believe that it is in the koalas' best interests to be shot, I cannot tell you how frustrated that makes me feel. It sanitizes the thought of killing and implies that somehow there is no other option. That is nonsense. There are plenty of other options and it is time for us to discuss them. I look forward to doing so in the workshop.

Some of the questions that need to be addressed include:

- Is it possible to stabilise all Island populations (and in that description I include islands of isolated habitat surrounded by cleared land)?
- What scientific disciplines are needed to achieve that?
  - Does the lack or presence of chlamydia play a role in stabilising populations on fragmented and isolated habitats?
  - Will the morphological changes now occurring on Islands as a result of genetic bottlenecks cause new management problems?
  - How do you prevent further habitat damage from the animals that are moved constantly?



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- Is further research necessary?
- Are current management protocols sufficient?
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- Is there sufficient knowledge of suitable habitat available to wildlife managers particularly in Victoria?
- Is the pressure of over-population in areas that are ready to collapse ecologically, driving the programme or is the programme sound?
- Is management addressed over all land tenures or just on Government lands?
- Does the Government have an overview of the situation over all land tenures?
- What role do vets play in the process?
- Are the vets who are currently involved suitably briefed on the holistic approach that is needed?
- Is there really a big picture view to the whole problem or just knee-jerk reactions when a politician is under pressure ?

I am convinced that the latter is the reality and I plead with all of you to understand that unless the politicians are given solutions that are politically expedient in addition to having sound management principles then the problem will not go away.

Please be clear, the AKF does not underestimate the problems of isolated koala populations and the damage they cause. But do not underestimate our determination to highlight the fact that this is not the koalas fault. It is the end result of 222 years of land degradation. Retention and renewal of habitat is the only answer in the short and long terms.

I am positive that vets will play a tremendous role in the future, but each of us must respect and endorse the views of others along the path to resolution.

I do not think that has happened in the past and I am confident that politicians and bureaucrats alike have used the infighting between different factions to divide and conquer for their own ends.

Hopefully this forum will recommend a way forward that will allow the Koalas in South Australia and Victoria to live in peace.

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