Victorian Koala Issues, Plantations and Forest Stewardship Council Certification 2000 – 2014





Anthony Amis
Friends of the
Earth Melbourne
July 2014



TABLE OF CONTENTS

1. Summary	3
2. Why this report?	5
3. Victorian Koala Background and Significance of Strzelecki/South Gippsland Koala	10
4. Strzelecki Koala Counts November 2013-July 2014	16
5. Translocation History of Victorian Koalas	18
6. Victoria's Translocation Background	19
7. Koalas and Disease	23
8. Victoria's plantation industry	24
9. Koala Feed Trees Victoria	29
10. Koala Feed preferences (Strzelecki Region – old data)	32
11. AKF Bluegum Study	33
12. February 2014: Victorian Government Rejects FFG Listing for Strzelecki Koala	35
13. Current Victorian Government Position	37
14. Australian Government Position	40
15. Koalas and FSC Strzeleckis Summary 1998-2009	45
16. Pulling Teeth	49
17. Past Bluegum Company FSC Audits in South Western Victoria	56
16. Examples of Industry Bluegum Koala Codes of Practice	57
17. FSC Delists and Reinstates ABG	60
10 Abbuordated Time Line 2000 2014	62

1. Summary

There are two distinct koala populations in Victoria and South Australia.

One is the Strzelecki/South Gippsland koala, which is the only known remnant endemic population. All other populations are derived from translocated koalas, which lack the breeding control mechanisms found in the wild animals. This has led to problems such as over browsing in forests, where the translocated animals have been introduced. It has also forced these koalas to seek alternative feed sources in unsuitable locations such as newly established blue gum plantations in the Green Triangle region of South Australia/ Victoria.

This perceived over population has led to a complacent attitude amongst bureaucrats which has left both the endemic and translocated populations in a precarious position with no effective protective legislation.

Until recent media coverage, neither the government nor industry has been held accountable for the protection of this animal. The long term viability of the animal in Victoria and South Australia is therefore questionable.

Anecdotal observations along with animal shelter, vet and industry records would suggest that hundreds of koalas have been killed, injured or starved in both Gippsland and Western Victoria over the past decade through the activities of plantation companies. Potentially thousands could be at risk over the next decade.

Key koala management points include:

- 170,000 hectares of new blue gum plantations were planted in the Green Triangle region of South Australia/Victoria between 1996 to 2010. These plantations soon provided habitat and became a new feed source for koalas.
- The issue of koalas frequenting blue gum plantations was not properly anticipated by the plantation industry. Industry complacency led to increasing problems with koalas in 2012, when blue gum harvesting escalated.
- Perhaps hundreds of koalas had been killed injured or starved in the Strzelecki Ranges between 2000–2012. The major issue in the Strzelecki's is logging of koala habitat by the plantation company Hancock Victorian Plantations.
 Dozens of key habitat areas have been logged by the company in the past decade.
- Perhaps many more animals will be killed, injured or starved during and after logging of new blue gum plantations in the Green Triangle. No viable habitat exists for almost all of displaced animals.
- Animal care facilities will not have the resources to cope with the influx of animals.
- Proper resourcing by Government and industry needs to occur to help manage the likely displacement of thousands of animals.

- New industry protocols in regards to koala issues in plantations are an improvement, but won't address mass koala deaths, due to lack of habitat for almost all displaced koalas.
- Industry should immediately start retiring key corridor areas inside plantations and embark on additional habitat restoration, with funding by the Victorian and Federal Governments.
- Koalas are also being found in pine plantations in the Strzelecki Region. Koala management protocols should also extend to pine plantations located in known high koala population areas, in the Gippsland and South West regions.
- Many of the new plantations where koala deaths and injuries were occurring were certified by the Forest Stewardship Council, the world's supposed most trusted forestry eco-label.
- FSC was aware of the Koala issue in Gippsland region since 2000 but had effectively washed its hands of the issue in 2008.
- FSC was ill-equipped and ill-prepared to deal with issue in South West Victoria when it emerged in 2012-13.
- Victoria's only endemic koala populations occur in the Strzelecki and South Gippsland region of Victoria. These animals must be treated as a separate management unit and listed under the Federal Government's EPBC Act.
- Koalas are not listed as being threatened or endangered in Victoria. Key legislation to protect threatened species in Victoria is the Flora and Fauna Guarantee Act. In February 2014, the Victorian Government refused to list the Strzelecki Koala under the FFG Act, as it is not a distinct taxon.
- Koalas are listed under the Australian Government's EPBC Act, only in Queensland, New South Wales and the Australian Capital Territory. More information, including population counts, are required about the Strzelecki Koala before action would be taken by the Federal Government.
- A recent population count has begun in the Strzelecki Ranges and has found core populations at Morwell National Park (and surrounds) and nearby and east and south of Tarra Bulga National Park. Numbers outside of these areas are likely to be low. 40% of priority koala habitat was destroyed in the February 2009 bushfires, with reports of hundreds of koalas being killed. The current Strzelecki situation is dire.

- Translocated koalas, particularly those sourced from French Island, do not have the proper breeding and browsing controls (such as the disease Chlamydia), that wild populations have. Koalas are especially susceptible to unnatural boom and bust population issues.
- Koala over population has led to defoliation and mass tree deaths in a number of locations, particularly in Western Victoria in the past.
- Sterilisation of males, immunocontraception and hormone implants in females are some of the forms of koala population control that have been used in South West Victoria in the past. Thousands of koalas have been impacted using these methods.



September 2004: Strzelecki Ranges /Jeeralang Creek East Branch, just north of Taylors Road. Strzelecki Koala scampering for cover. At this site, Hancock logged a coupe consisting of non plantation trees including: Mountain Grey Gum, Messmate, Bluegum and Mountain Ash. This coupe was prime koala habitat.

2. Why this report?

On the 27th of July 2013, ABC Television's 7.30 Report ran a story called 'Koala's cry at timber's threat'.

http://www.abc.net.au/7.30/content/2013/s3808542 htm The report sparked outrage across the world. For example, a petition organised by German group, Rainforest Rescue was signed by over 85,000 people.

https://www.rainforest-

rescue.org/mailalert/925/australia-the-koala-s-cry-for-help

The report highlighted the death and horrific injuries to koalas due to logging of bluegum plantations. Estimates of the numbers of koalas living in the Green Triangle's 170,000 hectare bluegum plantations have ranged between 8,000 to 10,000. But who really knows?

According to an animal carer interviewed on the show: "Broken limbs, impact wounds, broken backs, severed arm. Dead mothers with joeys that are still alive, trying to survive. I had one 500 gram joey ... that had two healed broken arms. And so we can only assume from that, that the mother had been dropped previous to this incident and she had no obvious breaks, but her intestines were just pulp ... On a recent plantation, we got 28 out and that includes some of them were dead and some of them were alive. There was an original estimate from one of the workers there that were probably over 50 in that plantation. We're not sure what's happened to them."

A follow up report aired on ABC Television the 29th of October 2013, http://www.abc.net.au/news/2013-10-28/koala-deaths-trigger-apology-from-timber-giant/5050784 revealed that Australia's largest exporter of woodchips, Australian Bluegum

Plantations (ABP), owned by Global Forest Partners, had been stripped of its Forest Stewardship Council certification and that ABP had to suspend logging in key koala habitat.

The first time the issue had been aired publicly was by the Warrnambool Standard 10 months earlier, on September 19 2012, so the issue was brewing yet FSC appeared to be ignorant of this.

http://www.standard.net.au/story/344168/blue-gum-harvest-killing-koalas-wildlife-carer-claims/

For instance, ABP's Chief Executive Tony Price, had been chairman of FSC Australia and in November 2012, had even been awarded FSC Forest Manager of the Year



(image above), despite the impending problems. http://au.fsc.org/winners.292.htm
(Note: ABP is owned by Cayman Island based AIF Properties, in turn owned by Global Forest Partners)

One needs to ask the question, why didn't FSC Australia see this coming? Not reported by the 7.30 Report was the fact that Smartwood/Rainforest Alliance and FSC Australia had been well aware of the controversy regarding Strzelecki Koalas for almost a decade prior to the ABG debacle in 2013, but had not seen a similar problem looming with newer blue gum plantations.

Only one mention of the koala issue in South Western Victoria had been written in official FSC audits between 2003-12

and that was in 2006 in regards to the failed MIS company Timbercorp.

http://www.rainforest-alliance.org/sites/default/files/site-documents/forestry/documents/timbercorppubsum0
6.pdf

"The company does not have a procedure to verify the presence of Koala's prior to commencing harvesting operations
Observation: The company should establish a monitoring program to verify the presence of koala's prior to commencing harvesting operations."



February 2010: This koala died just after being found on a logging road inside an FSC certified pine plantation in the Macks Creek catchment/Strzelecki Ranges.

Forest campaigners in the Strzelecki Ranges had been alerting FSC and the certifier Smartwood/Rainforest Alliance about the destruction of key koala habitat by Hancock Victorian Plantations during FSC scoping as early as 2000. (It was revealed in early 2014, that five koalas a week had been killed during HVP's operations up to 2014 (~250 a year!)).

Yet by 2008 Smartwood/Rainforest Alliance had effectively washed its hands of the issue, directly undermining local initiatives to protect koalas and habitat by stating in their 2008 audit: "If the Koala population requires conserving then it is the State Government's responsibility to list the species accordingly and this has not yet occurred. As such there is no specific reason why HVP as a private land manager should be required to establish conservation measures for a species such as the Koala as long as it is not required by the state or federal Government."

It wasn't until 2012, that Hancock finally did produce its Koala Best Management Plan (BMP), 14 years after the company first entered Victoria! During this time Strzelecki forest campaigners had watched almost 10,000 ha of Koala habitat logged by Hancock. **Too Little Too Late!!!**



Dead Strzelecki koala postcard sent to John Hancock Financial Services in Boston as early as 1999 to highlight concerns regarding plantation mis-management in the Strzelecki Ranges.

With this kind of logic, why have Smartwood/Rainforest Alliance taken action against ABG, when not taking similar action against Hancock? One could assume that a nationally aired television show, has far more weight in terms of public relations for FSC certifiers than local media outlets and the long standing concerns of environmental organisations. It is also apparent that Hancock probably holds more political 'influence', particularly in North America, within FSC/Rainforest Alliance circles, than does Australian Bluegum Plantations.



October 2013: Several koala deaths and injuries were reported at this FSC certified Hancock Willung blue gum plantation in the eastern Strzeleckis.

According to ABC in October "The 7.30 report triggered strong denial from the country's largest plantation woodchip exporter, Australian Bluegum Plantations (ABP), which was named in the program. ABP issued its denial via the environmental certification authority, the Forest Stewardship Council of Australia (FSC).

"FSC... have been advised by Australian Bluegum Plantations 7.30 showed footage of injured koalas in plantations not owned or managed by them," the FSC statement said.

"The footage was old and not involving current processes... to manage the safety of koalas."

If this was true, then why was ABG stripped of its certification and why was this statement ever published on the FSC website?

Also note that ABG had the suspension of their FSC certification lifted in April 2014, yet this decision will most likely do nothing to resolve the crisis and controversy in South Western Victoria.

This report hopes to raise issues concerning koala management in Victoria, particularly in the areas under intensive plantation management. The report will highlight why the most important koala population remaining in Victoria is located in the Strzelecki Ranges and why plantation managers and certifying bodies have done too little too late to protect the species. The report will also reiterate calls that the Strzelecki Koala population needs to be managed as a separate management unit.

The report also hopes to raise understanding of the complexities of managing translocated koala populations in south western Victoria and will provide historical information showing that the current surge in koala numbers in plantations in the south west of the state will also most likely be followed with a population crash.





Maps of Victoria (above), showing areas of concern mentioned in this report. Map below shows location of islands where koalas were relocated to during the first half of the 20th century. All translocated koalas throughout Victoria and South Australia have been sourced from descendents of these animals, except koalas from the Strzelecki Ranges and most of South Gippsland.



3. Victorian Koala Background and Significance of Strzelecki/South Gippsland Koala.

The Koala in Victoria was almost wiped out by the 1930s. The only remnant population to survive the onslaught of white hunters and disease was a small population in the Strzelecki Ranges/South Gippsland. All other koala populations in Victoria and South Australia are descendents from a few individuals transferred to Phillip Island and French Island in the late 19th century.

A study by <u>Friends of the Earth in 2005</u> found that approximately 54% of sightings

of Strzelecki Koalas since 1990 occurred on land now managed by Hancock. Clearly, the way Hancock manages its land holdings is the single most important factor in the long term

protection of the species.

An investigation carried out by Dr Bronwyn Houlden, School of Biological Science, University of New South Wales, 20th March 1997 and 6th April 1998 confirmed that the genetic pool of South Gippsland koalas has not been compromised.

At the time Dr Houlden indicated that on a national basis koalas generally are not considered to be threatened. She advised that this assessment has unfortunately led to an extremely simplistic view of conservation of biodiversity in the species.

Her report was entitled "Low genetic variability of the koala Phascolarctos cinereus in south-eastern Australia following a severe population bottleneck" - Published in Molecular Ecology 1996, 5 269-281.

Houlden revealed that the species is composed of highly differentiated populations with low levels of gene flow between populations throughout their range. The Strzelecki Koala population constitutes a separate management unit and is significant in terms of management of biodiversity on a regional and state basis. Dr Houlden found that the Strzelecki Ranges had the highest level of genetic variation, of any Victorian population she analysed. This is important, given the low levels of genetic variability found in many populations in Victoria, which have been involved in the translocation program.

The Strzelecki koala population has high levels of genetic variability which have been detected by rare and unique genetic markers.

54% of the genetically robust Strzelecki Koala, occur on land controlled by Hancock Victorian Plantations, yet 14 years after buying these assets, Hancock did not have a Koala BMP [Best Management Practice].

Because biodiversity in the species as a whole is dependent of conservation of populations throughout the species range, the Strzelecki Ranges population, together with the South Gippsland population is nationally significant as well. The lack of genetic diversity

amongst Australian koalas could be critical to the survival of the species as a whole.

According to Houlden; "... Following a near-extinction bottleneck in the 1920s, mainland Victorian and Kangaroo Is. koalas have been involved in an extensive program of relocations. The source populations of the relocated animals were islands in Westernport Bay, which were founded by very few individuals in the late 1800s and early 1900s. The significantly lower levels of variation between southeastern Australian populations suggests that human intervention has had a severe effect on levels of genetic diversity in this

region, and this may have long-term genetic consequences".

According to John Emmins in his 1996 (PhD) Thesis entitled; "The Victorian Koala (manuscript): Genetic Heterogeneity, Immune Responsiveness & Epizootiology of Charydiosis";

It is immediately obvious in South Gippsland DNA profiles that there is great genetic variability in this *population... The table of D values* ... and the statistical analysis of the D values derived from comparisons within that population show a mean D value of 0.48 which indicates that the South Gippsland koala population is more outbred than any other study population. This was an exciting finding and indicates the importance of this population as a rich gene pool for Victorian koalas." Emmins, John Jeffrey (The Victorian Koala (manuscript): Genetic Heterogeneity, Immune Responsiveness & Epizootiology of Chlarydiosis 1996 Thesis (PhD)-Monash University.

p285 "... The most important conclusions to be drawn from the genetic study are:

1 French Island koalas are an inbred population, and their lack of genetic diversity is consistent with them having gone through a severe genetic bottleneck implicit with the colony having been established from only a few animals approximately 100 years ago.

2 The colonies (located throughout South Eastern Australia) which have been set up largely from French Island descendants during the 70 years of translocations also have limited genetic diversity. Their gene pool may be somewhat larger however due to being additional translocations of koalas from Phillip Island which presumably did not go through as severe a bottleneck as French Island animals, (or at least were derived from different individuals). The exception to this are

populations set up from French Island animals without additions from Phillip Island or elsewhere...

The South Gippsland koala population is the most outbred and genetically diverse of all the populations studied".

p286 "These findings have very

South Gippsland is reputably the "relic" ancestral population of Victorian koalas, which has not been subjected to a known genetic bottleneck

significant repercussions in the management of the Victorian koala. They also show that the relic South Gippsland koala population is of great genetic importance and that this population (and its habitat) should be conserved at all costs to maintain a large gene pool. The genetic make-up

of the remainder of Victoria's koalas is lacking in this diversity and needs to be addressed". Emmins, John Jeffrey (The Victorian Koala (manuscript): Genetic Heterogeneity, Immune Responsiveness & Epizootiology of Chlarydiosis 1996 Thesis (PhD)-Monash University.

TristanLee (Genetic analysis reveals a distinct and highly diverse koala (*Phascolarctos cinereus*) population in South Gippsland, Victoria, Australia 2011) also explains the significance of the South Gippsland population and dangers associated with population genetics.

"Although koalas are widespread across the eastern coast of Australia many populations have been impacted by localised extinctions, population bottlenecks, re introductions and overpopulation, all of which can affect the health and viability of these animals.

Population bottlenecks may reduce genetic diversity, which limits the ability of the population to adapt to change, while mismanagement of some koala populations has resulted in overpopulation and consequently over browsing to the point where severe defoliation has occurred, resulting in starvation". (Masters et al. 2004; Cristescu et al. 2009; Lee et al. 2010).

Although successful in increasing numbers of koalas on the mainland, the program has resulted in koala populations in Victoria having lower genetic diversity than koala populations in the rest of Australia (Houlden et al. 1996b). Victorian populations derived from translocated animals have an average reported allelic diversity of ~3 alleles per locus (Houlden et al. 1996b) compared with populations in New South Wales that have up to 6.83 alleles per locus (Lee et al. 2010).

However, the low genetic diversity of some southern populations has not impeded their ability to successfully recolonise their former range, and koalas in many areas of Victoria and South Australia are now considered to be overabundant (Masters et al. 2004; Duka and Masters 2005). Indeed, the contemporary translocation program is now aimed at managing the problems of overpopulation on some islands. (Lee)

"Genic and genotypic analysis discriminated between the South Gippsland animals and nearby animals in the Mornington Peninsula and French Island, suggesting that the South Gippsland koalas should be considered a separate management unit to others in the region. Compared with previous Victorian koala research (Houlden et al. 1996b; Cristescu et al. 2009) the South Gippsland koalas stand out because of their much higher genetic diversity. Combined with records showing limited translocations into the area, the South Gippsland population could be an endemic population not derived from reintroduced island populations." (Lee)



Destruction of Strzelecki Koala Habitat (E.viminalis & E.cypellocarpa by Hancock Victorian Plantations. Grey Gum Track 2007.

"... the South Gippsland population appears to be of relatively high conservation value as it holds a reservoir of genetic diversity not seen in other populations in Victoria. There is no evidence of a bottleneck in the South Gippsland population. It is possible that the South Gippsland koalas inhabited a terrain that is more remote and difficult to access, particularly in the Strzelecki Ranges in the centre of our sampled South Gippsland region and thus were spared the hunting." (Lee).

Further to Lee's work Phalen and Lee have recently determined through DNA analysis that;

"Koalas in the South Gippsland area have a minimum of 4 haplotypes that represent an overlap of western Victorian and south eastern NSW populations... Our work also confirms previous work by Houlden et al. (1999), Carpenter et al. (2010), and Lee et al. (2012) showing that animals survived the fur trade and that not all animals in Victoria are descendents of animals translocated from Islands. This is particularly true for South Gippsland and given the identification of a unique haplotype by Houlden et al. (1999) in Tubbut, may be the case for animals in Victoria east of South Gippsland.

Haplotype 1 (the French Island haplotype) clearly exists in South Gippsland. Given that animals with this genotype can be distinguished from Island animals by microsatellites, it appears that these animals represent a continuum of the *Haplotype 1 population that was present* prior to the fur trade and that they do not represent translocated animals. This hypothesis is further supported by translocation records which do not show introductions into South Gippsland and finding of a Haplotype 1 animal in southern New South Wales (Houldan et al., 1999). Together, these findings show that Koalas in Eastern Victoria merit special protection and further study if their

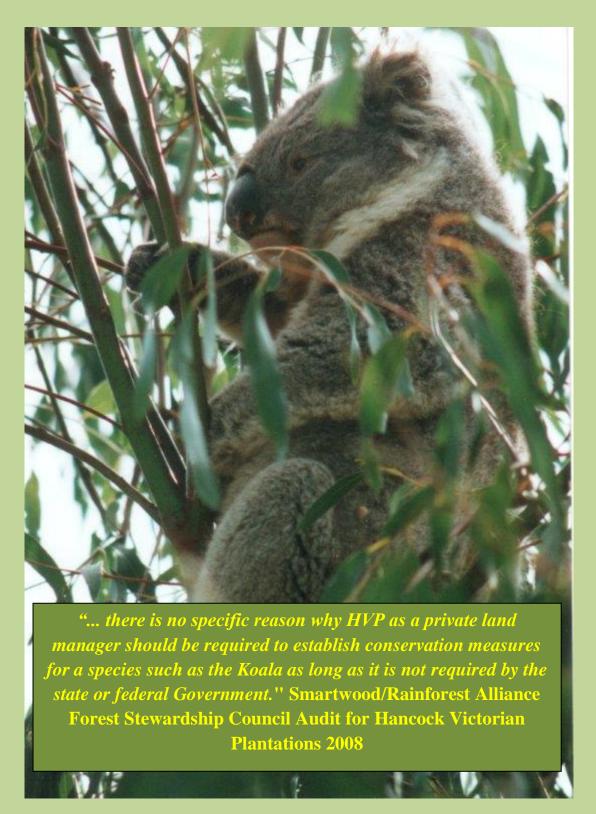
valuable genetic diversity is to be maintained."

Wedrowicz (2014 unpublished) through DNA analysis of koala scats in South Gippsland is finding that amongst the koala populations within the region, two distinct populations are occurring: "The data suggests that there are two distinct populations within the Strzelecki Ranges region, one population being more frequent on the Gippsland Plain and the other in the Eastern Strzelecki Ranges...

Because Koalas in Victoria are not regarded as being endangered, the FSC system offers them no more protection that what is legally afforded by the State Government under the Wildlife Act. FSC claims that it acts to protect rare, threatened and endangered species and their habitat. Unfortunately koalas are not afforded that protection, meaning that FSC will not necessarily act to protect the species, meaning that the system is next to useless in terms of protecting koalas.

- "6.2 Safeguards shall exist which protect rare, threatened and endangered species and their habitats (e.g., nesting and feeding areas). Conservation zones and protection areas shall be established, appropriate to the scale and intensity of forest management and the uniqueness of the affected resources. Inappropriate hunting, fishing, trapping and collecting shall be controlled.
 - 6.2.1 The likely presence of rare, threatened, endangered, or vulnerable species and their habitats (e.g. nesting and feeding areas) shall be assessed on the basis of the best available information. (A list of endangered and threatened species in Australia is referenced in Annex 3.)
- 6.2.2 Timber species on either local and/or international endangered or threatened species lists (e.g. CITES Appendix 1, national lists) shall not be harvested.
- 6.2.3 Appropriate to the scale and intensity of management, conservation zones, protection areas or other protection measures shall be established based on technically sound requirements for the protection of rare, threatened and endangered species and their habitats.
 - 6.2.4 Conservation zones should be demarcated on maps, and where feasible, on the ground.
 6.2.5 Effective procedures shall be implemented during forest operations to protect conservation zones, identified species and their habitats. 6.2.6 Hunting, fishing, trapping and NTFP collecting shall be controlled in the forest.
- 6.2.7 Applicable to SLIMF FMEs only: (note: indicators 6.2.1-6.2.5 does not apply) Where information exists on rare, threatened and endangered species and their habitat, the FME shall use this information to protect these resources.
- 6.2.9 Planning and implementation of forest operations shall be consistent with those specified in recovery/action plans or equivalent instruments and prescriptions for management and conservation of threatened (including vulnerable, rare, or endangered) species and ecological communities developed under Commonwealth, State and Territory legislative processes (AZ 4.3.3).
 - 6.2.10 Employees and contractors are trained or oriented in the recognition of rare, threatened and endangered species, aware of practical measures necessary for their protection, and encouraged to implement them (NZ 6.2.8)."

Source: Rainforest Alliance/Smartwood Interim Standard for Assessing Forest Management in Australia June 2008



Strzelecki Koala: Clearly the most important koala population remaining in Victoria and South Australia. It could also provide a key to adding to depleted Koala stocks in South Eastern New South Wales, yet the Forest Stewardship Council has effectively "washed its hands" of the Strzelecki animal. Why?

The recent (2011) Koala genetics study by Tristan Lee which further outlined the unique attributes of the Strzelecki animal, were largely the result of ear samples collected by Susie Zent from Friends of Gippsland Bush. The samples were collected for a number of years and stored in Susie's freezer.

According to Susie: "I started collecting tissue samples in 2002. Initially from animal shelters across South East Gippsland. The Morwell Vet Centre was the major collection Centre as John Butler and his team were the ones who had done native animal care pro-bono for 20 years. They were the first Vet Centre to work on koalas with Animal Shelters. We also collected road kill and people rang me if there were dead sick/injured animals on their property.

So it was a community effort. But it was Steve Phillips in the late 1990's who encouraged me to start the collection to prepare for a time when we could get the DNA work done.

It was Tristan Lee's work which was an extension of Houldens' pioneering work which established the importance of this animal and the need to recognise it as a distinct entity which required protection.

David Phalen's work further distinguishes this animal and recognises two distinct genomes related to the forests of SE NSW and the table lands of NSW.

Most samples were stored in ethanol/methylated spirits a few samples were frozen. It was easier to transport the samples in methylated spirits.

This was all done under licence from the Department.

FOGB was instrumental in getting this animal recognised. We have been campaigning for almost 20 years to have it recognised based on Houlden's initial work.

The Victorian Government has been aware of the importance of the Strzelecki/South Gippsland koala but has done nothing to protect its habitat.

It is all very good having management procedures for spotting and rescuing, but the animals are still being killed and even if they do not die during the harvest, they have nowhere to be translocated to, so they will starve.

So the community has had to undertake the work that the Dept. should have done decades ago. As stated in Victoria's koala management strategy 2004".

4. Strzelecki Koala Counts November 2013-July 2014

In November 2013, the first koala counts, using a sound scientific methodology started in the Strzelecki Ranges. An experienced team from New South Wales National Parks and Wildlife Service, along with individuals from Friends of the Earth and Friends of Gippsland Bush, started in areas near Morwell National Park and then worked through priority other areas.

The project hopes to determine approximate koala numbers in the region. Teams of between 2-4 people walk into sites located at 500m grid intersections found via 1:50,000 scale map sheets. Once the site is found with hand held GPS, 30 trees are identified in a circle. Each tree is then searched for signs of koala scats. The type of tree is also identified. A tree with a scat underneath is written down as being positive on a recording sheet. After the 30 trees are completed, the positive trees are worked out as a percentage of the whole. Sites recording 23.3% (7 positive trees) are recorded as high activity sites. This information is later fed into a computer program which creates koala contours based on count data. In this way it is possible to determine where koalas are and how they move through the landscape. By the end of June approximately 150 sites had been assessed.

At this early stage, the highest koala densities appear to be in patches of intact native forest where E.psuedoglobulus, E.cypellocarpa and E.obliqua and/or E.muelleriana occur. Lower activity generally occurs in drier forests.

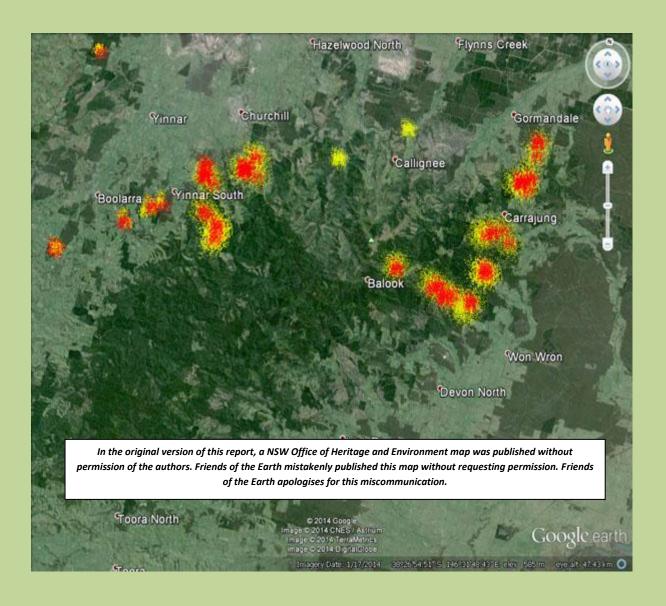
Several koala hotspots have emerged in and around Morwell National Park and to the east and south of Tarra Bulga National Park. It should also be noted that the population count has focussed on areas where koala numbers are likely to be high and the numbers found so far, are probably higher than numbers likely to be found elsewhere across the landscape.

Friends of the Earth/Friends of Gippsland Bush/Rainforest Rescue have continued to do surveys throughout May-July 2014, concentrating in the Middle Creek, Vaggs Creek, Silver Creek, Albert River and Morwell River catchments. Positive numbers of scats are anticipated to decrease due to the highly fragmented nature of the landscape. Site plots (with 30 or more trees, 500m apart) are also being more difficult to find away from large areas of intact forest.



July 2014: Koala Scats found under E.cypellocarpa, by Friends of Gippsland Bush Secretary Susie Zent. Fresh scats are collected and sent to Monash University and Sydney University for DNA analysis.

A rough map showing koala locations, based on scat counts collected between November 2013–July 2014, is shown below. Red and Yellow represent high activity sites. Sites take between 3-4 hours to complete. Hundreds of more sites surveys need to be done to determine more key koala habitat locations in the Strzelecki Ranges.



5. Translocation History of Victorian Koalas

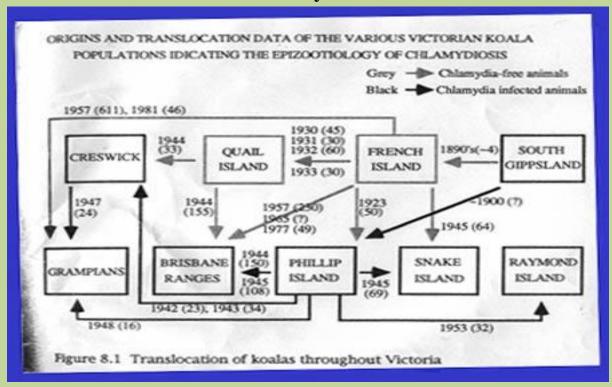
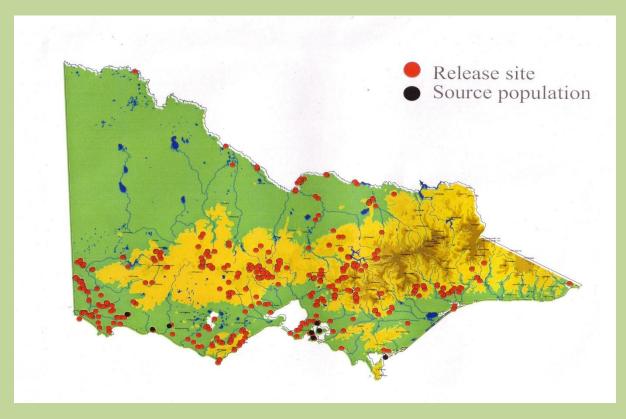


Diagram Source: p207 Emmins, John Jeffrey (The Victorian Koala (manuscript): Genetic Heterogeneity, Immune Responsiveness & Epizootiology of Chlarydiosis 1996 Thesis (PhD)-Monash University.



More detailed map showing where translocated koalas have been released in Victoria: Source: Victorian Government

6. Victoria's Translocation Background

Management of Victoria's koala population started in 1910. Most populations were effectively marooned on four coastal islands, French Island, Phillip Island and Quail Island up to the 1940's. Koalas were introduced to Snake Island in 1945. Koalas from these islands were used to reintroduce the species across their former range throughout Victoria. Over 24,000 koalas were translocated to 250 release sites in the first 84 years of the program.

One major problem that occurred with the translocated populations was over browsing of native forest, which has been reported at several Victorian locations. The problem has been so difficult to manage that since 1985 all translocations have occurred as a means of protecting native forest from over browsing. Another problem associated with the program, not fully understood at this time, is inbreeding.



Mount Eccles National Park/Budj Bim in South Western Victoria, contain Victoria's last great stand of Manna Gum (Eucalyptus Viminalis) woodlands. 30 koalas were translocated here in the 1970's. By 2002 that number had increased to several thousand.

Populations of koalas can increase quickly, with doubling occurring every 3 years in populations where the disease Chlamydia is not present. 12 years in populations where Chlamydia is present. If koala

populations are isolated in small islands of native vegetation, high densities of the animal can lead to foliage over-browsing and death of forest communities. With the forest diminished, mass starvation of koalas can occur.

Examples of over-browsing leading to tree deaths, particularly Manna Gum, include Quail Island 1940's, Sandy Point in the mid 1980s, Snake Island mid 1990's, Framlingham Forest 1997-8 and Raymond Island 2004. Thousands of hectares of Manna Gum forest at Mount Eccles in the early 2000's were threatened by koalas until the introduction of hormone based contraception. Severe defoliation at Tower Hill was also likely to have occurred. This was also eventually reduced by hormonal contraception. Cape Otway is currently suffering from over-browsing of which koalas are a major contributor.



Cape Otway Road January 2014. Severe overbrowsing is occurring in this Manna Gum woodland.

Over-browsing of native forest by koalas has also been observed in non-translocated koala populations including Wilsons Promontory in 1905 and South Gippsland in the 1980's, so the problem is not confined to translocated populations only. Fragmentation of habitat, also contributes to the problem, lessening opportunities for koalas to disperse. Remnant vegetation, particularly in western Victoria could be described as fragmented.

Culling of koalas was rejected in 1996 by

ANZECC (which consists of Environment Ministers from all States and Territories) due to the iconic status of the animal and the fear of massive public backlash. Population reduction through

Koalas on French
Island Koalas
exhibit testicular
aplasia – a sign of
inbreeding?

(South Gippsland) and across comparable areas in NSW and Qld (Emmins 1996;

Houlden, et al. 1996, 1999). Therefore, there is a higher threat of inbreeding depression in Victorian Koala populations than in Koala populations further north (Emmins 1996)." Menkhorst

culling is widely used on other marsupial species in Australia such as the Kangaroo, Wallaby, Possum and Wombat, but has not occurred with the koala since the 1920's. The rejection of culling took place during the preparation of the National Conservation Strategy which was published by ANZECC in 1998.

Since 1995 the Victorian State Government has used a variety of fertility control options including:

- Translocation followed by hormone implant contraception of remaining females.
- Male sterilisation followed by release at capture site.
- Surgical sterilisation followed by translocation.
- Immunocontraception.
- Hormone implants to females followed by release at capture site.

"An unforeseen consequence of using these populations to restock the Victorian mainland is likely to have been the genetic swamping of any remnant populations by the restricted and inbred island gene pool. Thus, the level of genetic variation in Victorian Koala populations established through translocation is significantly lower than that found in the major relict Victorian population



Koala in a 13 year old Bluegum Plantation, south west Victoria January 2014. Translocated koalas do not have the proper breeding and browsing controls, that wild populations have. Descendents of French Island Koalas are especially susceptible to unnatural boom and bust population issues as they do not suffer from chlamydia.

Lack of genetic diversity can threaten the long term viability of populations making then more vulnerable to diseases caused by inbreeding and less resilient to diseases overall.

"... Mount Eccles is not the first park to be threatened by koalas. Only 70 kms away, there's this – the ghostly remains of a dead forest, killed by koalas. Four years ago, thousands of koalas ate these manna gums bare, and then they starved to death... You could stand in this position where we are now, you could probably count about 20 koalas sitting in trees. They were all very thin and wasted. There was hardly any leaves left on the tree. The bush stunk of dead animals. It just smelt terrible, it was awful. (ABC Television Catalyst Koala Wars April 11 2002.)



Over-browsed Manna Gum Woodland Cape Otway January 2014



Tourists stopping to see koalas on Cape Otway Road January 2014. Note trees that are obviously stressed.

Problems with Inbreeding in Translocated Koalas?

The Southern Ash Wildlife Shelter have observed numerous problems with the translocated populations. There have been reports of an eye disorder known as optic nerve coloboma, which affects normal nerve conduction. Vision can be disrupted and vision impairment can ensure. The Raymond Island populations appear to be suffering from chewing and absorption problems. The Melbourne Zoo's post mortems on two affected koalas has led them to change their thinking on this. They did think it was caused by a narrow lower mandible. But they now think that it could well be a tongue muscle that does not enable the koala to feed properly and thus large amounts of gum matter is drooled from both sides of the lower mouth rather than masticated and swallowed, leading to malnourishment, failure to thrive and fungal and bacterial infections.

Observations of Sandy Point koalas, where there was an estimated population of 2,000 in the 1980s but where there is no more than a handful today, has detected odd morphological differences and odd behavioural traits in comparison to the general population. Heads have been observed to be significantly rounder or flatter, with narrow mouths, smaller eye sockets—pin eyes—and limited muscle mass in the upper shoulders. The average condition score for these animals is two out of five. The odd behaviour includes clumsy and uncoordinated movement. The presentation is similar to Down syndrome but could simply be problems with bone growth instead. However, there has not been any research conducted into this population to ascertain the issue.

There are also big issues with hormone implants in translocated animals. We have found on post-mortem the uterus in a sterilised koala to be no more than shrivelled grey matter and this individual had a dependent, malnourished and dehydrated one kilogram to five kilogram back-carried young koala that it was not lactating for. It is imperative that any koala that is considered for sterilisation or translocation is given a full medical health assessment, including blood analysis, to ensure that viable and fit animals are being selected...

Source: COMMONWEALTH OF AUSTRALIA Official Committee Hansard SENATE ENVIRONMENT AND COMMUNICATIONS REFERENCE S COMMITTEE Status, health and sustainability of Australia's koala population MONDAY, 1 AUGUST 2011

7. Koalas and Disease

The most significant disease affecting Koalas is Chlamydia. Chlamydia is a bacterium which will impact most severely on koalas when their immune systems are compromised and when the animal is stressed. Stressful situations can include destruction of habitat. It is spread through sexual activity and contact with infected surfaces. Mothers will pass the disease onto their offspring. There is currently no cure for the disease. Chlamydia may therefore act as to limit to koala population growth.

Chlamydia can cause a number of problems in koalas including infections in their respiratory and urogenital tracts. The disease can cause infertility, pneumonia, blindness and death. Sick animals can be observed with pink eye, conjunctivitis and urinary tract infections which in turn can lead to incontinence known as "wet bottom" or "dirty tail". 70% of koalas throughout Australia may have been living Chlamydia.

In Victoria it is found on Philip Island, but not on French Island (or Kangaroo Island in South Australia). In the 1980's the disease reduced Philip Island's fertility rate to 15%, whereas the fertility rate on French Island was 100%. To maintain a stable population a fertility rate of 35% is required. Chlamydia has been detected in translocated koala populations.

Koala retrovirus changes the genetic code. It appears to be increase impacts of Chlamydia as well as Leukemia and lymphoma. The retrovirus is passed down through the generations as it inserts itself directly into koala sperm and eggs. It has been observed in Victorian populations.

The Dire Situation on Phillip Island – Where else has this occured?

They were translocating koalas from Phillip Island up to the end of the seventies because there were too many, and since the eighties they have been wiped out on the roads and they lose their habitat every time we have subdivisions. Now we only have 20 or so, if that, on the rest of the island and the numbers are decreasing. We do know that, when you have that sort of development, the disease chlamydia can make itself more greatly known and can actually kill them, whereas sometimes they can live with it if they are not stressed.

koalas sent back to the mainland with the last leaving in 1978. I presume that was not all in one go; it

Ms Hunt: It was done sort of annually. I think they did it much later on French Island. French Island still has way too many koalas. They are now doing hormone implants and sterilisation on French Island. They are becoming rather inbred from what I have heard.

They regularly took the koalas off Phillip Island for years because there were too many. They stopped doing that as you say in 1978, when they realised that the numbers were getting lower. After that the

8. Victoria's plantation industry

Most plantations development in Victoria prior to the World War II concentrated on exotic pine plantations, particularly radiata pine. By the outbreak of the war there were approximately 57,000 acres of softwood plantations across the state. Almost all plantations were established by the Forests Commission.

This situation changed during the 1950's with the establishment of softwood plantations by Sapfor Ltd and Softwood Holdings in the South west of State.

Australian Paper Manufacturers (APM) also established large areas of pine plantations in the Strzelecki Ranges and Gippsland region of the state.

Hardwood plantations, mostly Mountain Ash (Euclayptus regnans) were established by APM and the Forests Commission in the Strzelecki Ranges in increasing amounts after 1961. Some of the plantations were established on abandoned farmland and some were established after the clearing of native forests, including prime koala habitat. By planting endemic species in the Strzeleckis, many of these hardwood plantations quickly began to resemble native forests and the program could be more accurately described as reforestation. Mountain Ash is a koala feed tree and there were also stands of native forest within plantation boundaries and on the edge of plantations which would also have been utilised by koalas.

By the 1990's APM also started establishing blue gum plantations in the Gippsland region, including some plantings in the Strzelecki Ranges. At the end of the 1990's there was approximately

20,000ha of hardwood plantation/reforestation in the Strzelecki Ranges and within close proximity of Maryvale pulp mill.

In the late 1980's Kimberly Clark, who operated a pulp mill at Millicent in South Australia also encouraged landowners to plant blue gums as a means of reducing their reliance on native forests. By the mid 1990's approximately 3000ha of blue gums had been established in the Green Triangle region, which takes in south west Victoria and south east South Australia. Kimberly Clark stopped sourcing from native forests in 2001 and instead relied entirely on plantation grown blue gum after successful community campaigns to stop logging native forest in the Otway Ranges during the 1990's, early 2000's.

http://www.oren.org.au/campaign/kleenex1.html



Typical country used to establish blue gum plantations in Victoria post 1996 – Old sheep farming country – note contour ploughing to capture rainfall.

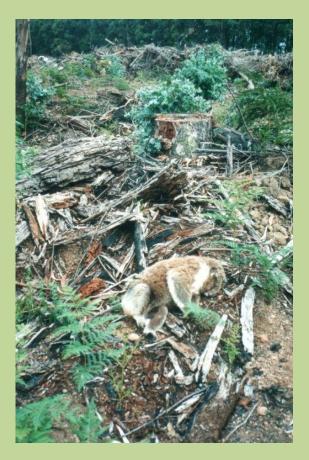
In February 1997, the Victorian Government announced 20,000ha of blue gum plantations would be planted in the south west by a consortium of Japanese companies. In September 1997, the Australian and State Governments embarked on an ambitious scheme to treble the nation's plantation base. The

majority of these plantings were conducted under the guise of Managed Investment Schemes (MIS). A number of companies emerged to take advantage of generous taxation incentives, including Timbercorp, ITC and Great Southern.

MIS plantations generally moved into farming country where sheep grazing had been a dominant land use. In the Victorian context, native forests were not destroyed to make way for blue gum plantations, but isolated stands of trees may have been removed during the establishment of plantations, with the worst example being Timbercorp who cleared 30% (6 trees) of all known nesting sites of the endangered Red Black Cockatoo in 2000 in south western Victoria.

New blue gum plantations spread across the landscape, generally in areas receiving 650-750mm of rainfall per year. Plantations also targeted shallow aquifers and as early as 2001, arguments were breaking out between irrigators and plantation companies in South Australia, over the use of groundwater.

The Strzelecki Plantations/reforestation were purchased by John Hancock Financial Services in 1998, with APM (Amcor's) plantations purchased by Hancock in August 2001.



Emaciated Strzelecki Koala in logged and converted Hancock E.cypellocarpa area.

By the mid 1990's, the environment movement by and large supported the expansion of the plantation industry, because it assumed that large areas of plantations would provide an alternative to logging native forests. Only a few years earlier most groups had been outspoken about the problems associated with the plantation industry, particularly in regards to conversion of native forest to plantation and pesticide regimes.

Environmental organisations in Australia, namely The Wilderness Society,
Australian Conservation Foundation, state based Conservation Councils and a number of smaller regional forest protection organisations held policies of no native forest logging, meaning that for them, the only option in terms of forest policy was plantation based.

Environmental Groups that did not support a plantation only policy were generally groups organising in areas where plantations were undermining agricultural communities and local environment and groups concerned about water quantity and pesticides use. Friends of the Earth was not convinced that the plantation industry was as pro-green as what was often stated, a position which was largely condemned by the forest movement.

A heart-felt plea for a change of heart.

Are you a

"Stop-the-Chop"er...

And the art-felt plea for a change of heart.

"Stop-the-Chop"er...

Are you a

"Stop-the-Chop"er...

Are you a

"Stop-the-Chop"er...

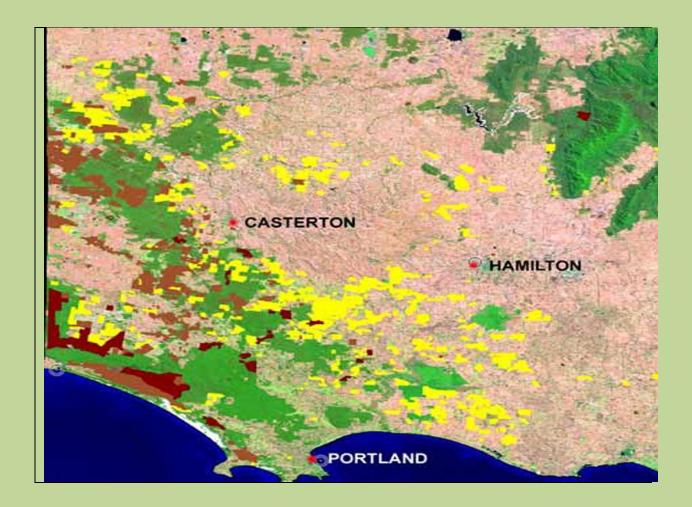
Concerned Residents of East Gippsland having a go at FoE's non support of the plantation only agenda (March 1996).

Effectively, then by 1997, the Australian environment movement was quiet about the expansion of the plantation industry across the landscape, at a time when the industry was growing at its fastest ever rate – By 2009, approximately 170,000 hectares of blue gum plantations had been established in the Green Triangle region of South Australia and Victoria in 15 years. The main aim of the movement was to shut down native forest logging throughout the entire country. As a result, the movement allowed to "cut the plantation industry some slack', meaning that if a plantation company was doing the wrong thing, then it was better not to campaign on this issue specifically, as that could

undermine the bigger prize of no native forest logging.

With this issue at its ideological core, the environment movement sat idle while Hancock kept at its dubious activities in the Strzeleckis and the plantation industry, propped up by unscrupulous financiers and often naive investors, converted hundreds of thousands of hectares of farmland into bluegum plantations. The only Victorian environmental groups working against this agenda were Friends of the Earth and Gippsland based groups Friends of Gippsland Bush and Save Our Strzeleckis as well as some individuals. By the end of the 2000's five MIS plantation companies had collapsed, with their assets gobbled up by multinational investment companies looking for a bargain.





Plantation map of South West Victoria circa 2006. The brown shading represents pine plantations and the yellow represents blue gum plantations. Essentially the yellow represents additional food sources for koalas (planted post 1996) in the south west of the state. Remaining native forest in the region can clearly be seen. One of the largest challenges for the plantation industry is how to manage koalas in blue gum plantations, particularly those located in close proximity to native forests. What happens to these animals once blue gum plantations are clearfelled? The plantations were not planted with these issues in mind. Approximately 175,000 hectares of blue gum plantations were established in the Green Triangle region between 1997-2009.

Approximately 50% of the blue gum plantations will not be grown in a second rotation because of poor site selection and poor growth rates. Almost all of the plantations in this image are in known koala zones, where koalas have been sighted – the exception are plantations in the north west of the map.

Koala numbers can double in less than 3 years. Each koala consumes between 500g-1kg of eucalypt leaves daily or around 180 kilograms of leaves per year and needs about one hectare of healthy habitat to feed on sustainably



After the cleafelling. Remaining habitat tree in blue gum plantation, south west Victoria January 2014



Recently cleared blue gum plantation in close proximity to Mount Eccles National Park. This particular site was owned by Australian Bluegum Plantations. What hope do surviving koalas have in such a decimated landscape?

9. Koala Feed Trees Victoria

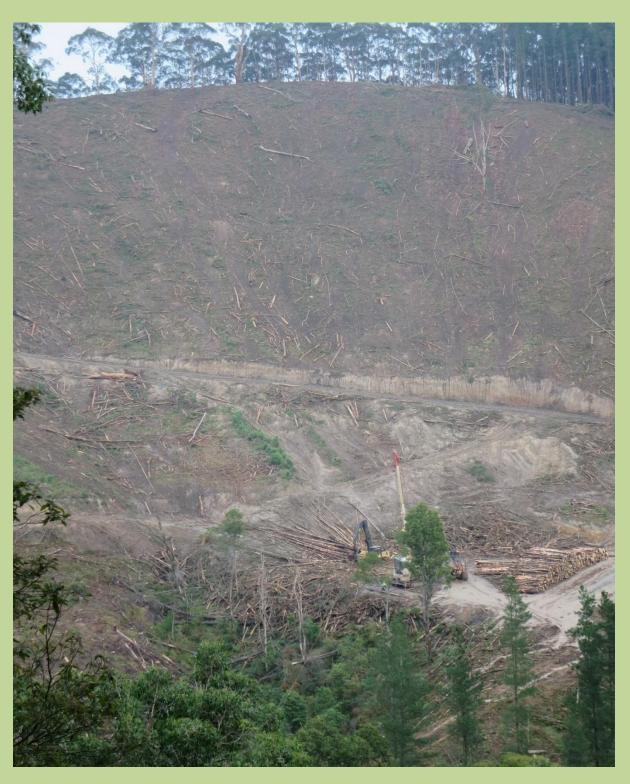
Common Name	Scientific Name	Classification
River Red Gum	E. camaldulensis	Preferred
Southern Blue Gum	E. globulus	Preferred
Swamp Gum	E. ovata	Preferred
Manna Gum	E. viminalis	Preferred
Apple Box	E. angophoroides	
Brown Stringybark	E. baxteri	
Coast Grey-box	E. bosistoana	
Southern Mahogany	E. botryoides	
But But	E. bridgesiana	
Mountain Swamp Gum	E. camphora	
Mealy Stealybark	E. cephelocarpa	
Yertchuk	E. consideniana	
Mountain Grey Gum	E. cypellocarpa	
Broad-leaved Peppermint	E. dives	
Bundy	E. goniocalyx	
Black Box	E. largiflorens	
Yellow Gum	E. leucoxylon	
Red Stringybark	E. macrorhyncha	
Yellow Box	E. melliodora	
Grey Box	E. microcarpa	
Yellow Stringybark	E. muelleriana	
Messmate Stringybark	E. obliqua	
Snow Gum	E. pauciflora	
Red Box	E. polyanthemos	
Narrow-Leaf Peppermint	E. radiata	
Mountain Ash	E. regnans	
Candlebark	E. rubida	
Silvertop Ash	E. siebera	
Gippsland Red Gum	E. tereticornis	



June 2014: Recent surveys by Friends of the Earth, in the Strzelecki Ranges have also revealed high numbers of koala scats within pine plantations. Scats have been recorded up to 60 metres inside plantations. At the above site 9/30 trees in a site plot had koala scats underneath. Are koalas in South Western Victoria also frequenting pine plantations and if so are they also being killed and injured when pine plantations are logged?



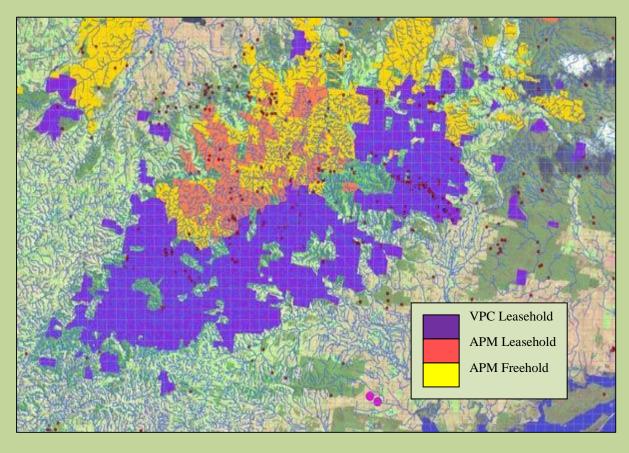
March 2014: Plantation edge effect. Plantations in close proximity, even pine plantations, to native forest can provide koalas with shelter. At this site on a ridge line in the Strzelecki Ranges between Middle and Vaggs Creek, high numbers of scats were recorded in both the blue gums and adjacent pine plantations. Since November 2013, the first audits regarding Strzlecki Koala population numbers have been undertaken.



June 2014: Recent logging of pine plantations at Vaggs Creek/Strzelecki Ranges. Koala surveys earlier in the year had recorded high numbers of koala scats at the ridge of this plantation. The question needs to be asked, what happened to the koalas that were recorded at this site during logging and for how long has Hancock known that their plantations provide habitat for koalas. Following logging comes fertiliser and herbicide application. A sustainable outcome? Vaggs Creek lies between the known koala hotspots of Morwell National Park and Middle Creek.

10. Koala Feed preferences (Strzelecki Region – old data)

Common Name	Scientific Name	Classification
Mountain Grey Gum	E. cypellocarpa	Preferred
Blue Gum	E. globulus	Preferred
Yellow Stringybark	E. muelleriana	Preferred
Manna Gum	E. viminalis	Preferred
Messmate	E. obliqua	Less Preferred
Mountain Ash	E. regnans	Less Preferred
Yertchuk	E. consideniana	Less Preferred
Apple Box	E. angophoroides	Less Preferred
Narrow-Leaf Peppermint	E. radiata	Least Preferred
Swamp Gum	E. ovata	Least Preferred
Silvertop Ash	E. sieberi	Least Preferred



The above map highlights land use purchased by Hancock Victorian Plantations in 1998 and 2001, in the Strzelecki Region. Effectively the company controls the region. Red dots indicate koala sightings 1990-2005. 54% of all sightings occurred on Hancock land. For 13 years, from 1998 to 2011, Hancock did not have a Koala Management Plan. This coincided with the conversion of approximately 9000 hectares of Mountain Ash to Shining Gum, a non-koala feed tree, not to mention hundreds of hectares of other koala feed trees.

11. AKF Blue gum Study

In March 2005, the Australian Koala Foundation in conjunction with 6 plantation companies operating in Victoria's western district announced that a trial would be commencing to track koala scats in blue gum plantations. The goal of the project was to determine whether blue gum plantations acted as koala corridors and buffer zones in degraded habitat areas. At the time, little was known about koalas in bluegum plantations. This was apparently the first time this issue had been studied.

"Right now we don't know for certain if koalas are using plantations for any significant length of time - do they avoid plantations, feed at the edges, pass through on their way to somewhere else, or are they spending longer periods of time in plantations?

Ballarat Courier March 23 2005

http://www.thecourier.com.au/story/584018/dropping-in-on-our-blue-gum-koalas/

Perhaps as a direct result of issues raised during this study, in Smartwood/Rainforest Alliance's 2006 audit of certified company, Timbercorp, a reference to koalas was included for the first time, under audit observations http://www.rainforest-alliance.org/sites/default/files/site-documents/forestry/documents/timbercorppubsum0 6.pdf that;

"The company does not have a procedure to verify the presence of Koala's prior to commencing harvesting operations Observation: The company should establish a monitoring program to verify the presence of koala's prior to commencing harvesting operations."

In June 2008 the results of the AKF study were published in Use of Bluegum Plantations by Koalas

https://www.savethekoala.com/sites/default/files/docs/conserve/BGKoalaReportFinaL08.pdf

"The key findings of the study were:

- 1) No koala activity was found in Blue Gum plantations when there was no koala activity in adjacent native forest.
- 2) When koala activity was detected in adjacent native forest, it was almost always greater in the native forest than in the Blue Gum plantation.
- 3) Plantation age, size and average dbh (diameter at breast height) of trees were weak predictors of the use of Blue Gum plantations relative to adjacent native forest.
- 4) Within plantations, koalas were more likely to use large blue gums close to native forest than small blue gums far from native forest."

Key Recommendations

"Dissemination of findings to all stakeholders through the publication of a paper in a scientific journal as well as in an industry magazine and via public forums such as industry field days.

Explore the possibility of preestablishment and pre-harvest desktopsurveys to determine the likelihood of koala occurrence in plantations and for the need for pre-harvest Koala survey to protect individual koalas in plantations with high Koala activity levels. This would need to be linked with the development of protocols and realistic, practical management strategies as part of further research.

Further data analysis (and possibly data gathering) resulting in a process that would also contribute to the development of a predictive model for Koala use of native vegetation as well as Blue Gum plantations.

Undertake a radio-tracking program to establish Koala home range behaviour in both Blue Gum plantations and neighbouring Koala habitat.

Investigate the importance of retained remnant trees within a plantation design, of incorporating Koala corridors in a plantation layout and the potential for maximising plantation edge with native forest and/or staggered planting/harvesting regimes when practical and financially viable. Investigate use of Blue Gum plantations by koalas near a known Koala isolate eg. Mt Eccles.

Investigate a Koala-friendly eco certification program to raise awareness of the plantation industry's commitment to Koala conservation."

Media reports quoting the AKF in September 2008 (Plantations not a threat to Koala's existence Courier Male 4/9/08), appeared to make the argument that koala populations in plantations would not become a major issue.



Koala in retained Stringybark tree, inside bluegum plantation, western Victoria January 2014.

"A STUDY has found the benefits blue gum plantations can play in helping the koala better survive. The Use of Blue Gum Plantations by Koalas report found fears that large populations of koala's are likely to inhabit plantations and destroy them is false. Instead they are more than likely to move through plantations to get to other areas of native forest."

Australian Koala Foundation chief executive officer Deborah Tabart said the survey would also help guide the timber industry in managing koalas' in their plantations.

"The last thing people want is a whole lot of koalas' in a plantation before it gets logged, so this report basically says they aren't a threat to that," she said.

"It's such a new industry and often these things are fears rather than realities and this report has shown it's not a reality and there could be great opportunities for the koalas' on the edge of these plantations to get a little bit of food on the way through.

"The Victorian koala has had problems in the past getting stuck into pockets of forest so I think this is a golden opportunity to link them so they can get out of there."

The report was released in Ballarat yesterday. Ms Tabart said the biggest threat to the koala was logging of native forests and urban development"

Could these statements have been interpreted by companies and FSC that the problem of koalas in blue gum plantations was not going to be a major issue at all?

12. February 2014: Victorian Government Rejects FFG Listing for Strzelecki Koala

Flora and Fauna Guarantee Act 1988

Scientific Advisory Committee

Letter to Susie Zent 17/2/2014

Secretary Friends of Gippsland Bush

"Re: Consideration of the "Strzelecki Koala" as a species suitable for nomination as a threatened species under the Flora and Fauna Guarantee Act

The Scientific Advisory Committee (SAC) has provided the following response to your query to and regarding Koalas.

I understand that you have had some discussions with regarding a proposal to nominate the population of the koala in South Gippsland as a threatened species under the Flora and Fauna Guarantee Act (1998). He advised the SAC of the proposal, which we then discussed. The Committee's view is that the proposed nomination does not qualify for consideration under the FFG Act, and that you would be better advised to seek other avenues to assist in conserving the South Gippsland Koala population.

We are aware that the South Gippsland koala population appears to be more genetically diverse than koala populations in other parts of Victoria, based on microsatellite studies. As you may be aware most of those animals are descendents of koalas that were originally introduced to the islands of Western Port and translocated from there from the 1920s onwards; their gene pool is consequently less diverse. The South

Gippsland population is therefore seen as especially worth conserving.

The reasoning behind regarding such a nomination as inappropriate is essentially this:

1] Under section 11 of the FFG Act, 'a taxon or community of flora and fauna is eligible to be listed if it is in a demonstrable state of decline which is likely to result in extinction or if it is significantly prone to future threats which are likely to result in extinction.'

To be considered, then, what is nominated must be either a taxon or community.

2] Under the FFG Act, a taxon means 'a taxonomic group of any rank into which organisms are categorised' and includes subspecies, species, genera, families and may also include variants, races or breeding populations which are identifiably distinct or otherwise significant.

While the end part of this statement looks pertinent, the key words here are 'taxonomic group'. To be considered for listing under the FFG act, the South Gippsland koala population would have to be a recognised component in a scheme of classification accepted by the general scientific community. That means that the South Gippsland koala population would have to have been adequately described and named in a peer-reviewed taxonomic journal, and then recognised by other members of the scientific community who work in the field. The South Gippsland koala has not been recognised in this way as a distinct taxonomic group.

3] The SAC is required to refer to Museum Victoria as the relevant authority when

any question arises as to the validity of an animal taxon. Their advice on this situation is that the South Gippsland koala population is not a recognised taxonomic group, and that microsatellite variation is not likely to be sufficient to define such a group taxonomically. However they do believe its distinctiveness does provide a sound basis for its protection.

4] The overarching authority for zoological classification is the International Commission for Zoological Nomenclature (ICZN). The ICZN does not recognise as taxa any groupings below the subspecies level. This means that, if Gippsland koalas are not recognised as distinct subspecies, they would not be recognised as an animal taxon by that authority.

Consequently the SAC cannot consider for listing the South Gippsland koala population as a threatened taxon under the FFG Act even if the Koalas in South Gippsland were shown to be endangered. You would be wise not to waste your time pursuing that route any further. There are

other ways of ensuring long term conservation of these animals.

One such approach is to seek funding for on-ground habitat rehabilitation by local volunteers. Support for this can be sought from private individuals and NGOs rather than government agencies (though governments to offer such financial assistance from time to time). You probably know this already.

A second approach might be to investigate the listing under the Commonwealth EPBC Act on the basis that the EPBC Act uses the word 'species' rather than 'taxon'. For taxa at levels below the species, a decision on what constitutes a 'species' within the meaning of the Act rests on a decision by the Minister rather than on accepted science. We strongly suggest the direct funding approach rather than the bureaucratic one, which is likely to prove difficult and would necessarily result in effective field conservation measures for Gippsland koalas..."

"ACTING CHAIR: What research is the Department of Sustainability and Environment doing? Mr Menkhorst: None.

ACTING CHAIR: What is the status of the koala in Victoria?

Mr Menkhorst: Its official status is that it is protected wildlife, as are all native vertebrates except fish. That is all. It is not listed as a threatened species under the Flora and Fauna Guarantee Act. But it has not been nominated for listing, so it has not been assessed....

Senator DI NATALE:Okay. Given that the koalas in south Gippsland express most of that diversity, you mentioned it is an issue where koalas and timber harvesting coexist. What sort of issue is it? Just describe for me why it is an issue?

Mr Menkhorst: Clearfell logging results in the death of animals that were depending on those trees that were taken away. Individual animals might be able to move into adjacent unlogged forests, but one should assume that that adjacent forest is already occupied by that species. The immigrant animals usually do not fare well. What you are doing is forcing more animals into less habitat which simply does not work. Those immigrant animals are likely to suffer a lingering death. So clear-felling reduces the area of habitat, so that is going to reduce the total But that habitat is regenerated under a logging regime, so at some point in the future the regenerating habitat will become suitable for koalas and koalas will reinvade that area and live in it until it is logged again. So the impact is not as dramatic as clearing vegetation for agriculture, for example, where it is cleared permanently."

Source: COMMONWEALTH OF AUSTRALIA Official Committee Hansard SENATE ENVIRONMENT AND COMMUNICATIONS REFERENCE S COMMITTEE Status, health and sustainability of Australia's koala population MONDAY, 1 AUGUST 2011

13. Current Victorian Government Position

Victorian government

"On a national level, the Koala is not secure (Melzer, et al. 2000) and there exists a great deal of national and international concern for its conservation (Cork, et al. 2000). The level of international concern is reflected in the decision in May 2000 by the U.S. Fish and Wildlife Service to list the Koala as a threatened species under the U.S. Endangered Species Act. This decision was based largely on documented rates of vegetation clearance within the Koala's distribution.

In 2012, koalas in Queensland, New South Wales and the Australian Capital Territory were listed as Vulnerable under the Environment Protection and Biodiversity Act 1999 (EPBC Act). In Victoria, the Koala has not been listed as threatened under the Flora and Fauna Guarantee Act.". p4 Victoria's Koala Management Strategy DSE 2004.

"Responsibility for native fauna in Victoria is vested in the Crown under the provisions of the Wildlife Act 1975. This Act confers protection on all vertebrate animals (except fish) that are indigenous to Australia. Strategic responsibility for management of Koalas in Victoria rests with the Biodiversity and Natural Resources Division of the Department of Sustainability and Environment (now DEPI) and extends across all public and private land. This strategic responsibility includes the definition, authorisation and coordination of appropriate Koala management practices. Responsibility for on-ground action rests with the relevant land manager, within the bounds of legislative provisions, this strategy and associated guidelines". p 5 Victoria's Koala Management Strategy DSE 2004.

Other relevant acts include; Wildlife Act 1975, National Parks act 1975, Forests Act 1958, Sustainable Forests (Timber) Act 2004, Planning and Environment Act 1987*, Prevention of Cruelty to Animals Act 1986 and Victoria's Biodiversity Strategy.



Remains of a dead koala found in a recently cleared blue gum plantation managed by Australian Bluegum Plantations – January 2014

*In terms of the Strzelecki Koala, local government is a major player in the survival of this animal, as most of the land regarded as Strzelecki Koala habitat is for all intents and purposes now classed as private land.

According to Victoria's Koala
Management Strategy p5 "Local
Government planning schemes play a key
role in land-use planning and zoning, and
thus strongly influence the capacity to
maintain Koala habitat on freehold land
and other land within the jurisdiction of
Local Government". Victoria's Koala Management
Strategy DSE 2004.

In a letter from State Environment Minister Ryan Smith to Julie Prior Wonga Park Koala Shelter [November 10 2011]

"... Over the past 15 years the Department of Sustainability and Environment (DSE) has actively participated in the preparation of the National Conservation and Management Strategy. The Victorian

Government prepared a state wide Koala Management Strategy (2004) and is implementing it as resources allow.

While the koala is listed as "vulnerable" in both New South Wales and Queensland, it is important to note that the status of the koala in Victoria is fundamentally different to other states of Australia. The Victorian population is secure and widespread in lowland and foothill forests and woodlands across southern, central and north-east Victoria where the annual rainfall exceeds 500mm. Population densities vary greatly with habitat quality, and, in some areas, population densities are unsustainably high. These populations are being managed to reduce ecological degradation caused by over browsing and to protect animal welfare. DSE and Parks Victoria, in consultation with Zoos *Victoria and research experts, constantly* reviews management approaches, including relocation, to evaluate their effectiveness and ensure that the welfare of translocated Koalas in particular is not compromised...."

In a letter to Anthony Amis, 4 Dec 2013, – Friends of the Earth Melbourne Ryan Smith explained

"... In 2012, koalas in Queensland, New South Wales and the Australian Capital Territory were listed as Vulnerable under the Environment Protection and Biodiversity Act 1999 (EPBC Act). In contrast, Victoria has a large and thriving koala population, which is considered secure. For this reason, the koala was not listed as vulnerable under the EPBC Act, nor under Victoria's Flora and Fauna Guarantee Act 1988. However, koalas are protected under Victoria's Wildlife Act 1975 and the Prevention of Cruelty to

Animals Act 1986. Victoria's Koala Management Strategy (2004) also recognises that nationally, koalas are not secure and are in decline.

Parks Victoria and the Department of Environment and Primary Industries (DEPI) have been managing the issue of overpopulations of koalas at a number of sites in Victoria for many years. However, the presence of koalas in blue-gum plantations is a relatively new management issue. While the industry is largely self-regulated, it must still abide by the Wildlife Act 1975 and the Prevention of Cruelty to Animals Act 1986. The companies are also subject to scrutiny by the Forest Stewardship Council (FSC), which recently initiated an independent audit by Rainforest Alliance of Australian Bluegum Plantations (ABP) and the Green Triangle Plantation Forest Company of Australia (GFPC). As a result ABP had its FSC Certification cancelled.



Koala observed in blue gum plantation, south western Victoria - January 2014

DEPI and industry are jointly working to ensure koalas are managed humanely and effectively. Local plantation owners and operators, with input from the department and local wildlife carers, have developed the recently released industry-wide koala management policy and associated guidelines for plantation harvest operations. The guidelines provide clear instructions on the detection of koalas prior to harvesting and the minimum retention of trees surrounding the koalas when located. ABP have also suspended harvesting in areas known to have high koala populations until they are sure the new policy and guidelines have been implemented.

In addition, DEPI is working jointly with industry to look at the use of infra-red technology for improving koala detection. DEPI is also providing guidelines on the provision of effective refuge areas on harvested blocks and closer monitoring of koalas left in these areas.

DEPI will continue to monitor industry's adherence to the Wildlife Act 1975 and the Prevention of Cruelty to Animals Act 1986. Where it has been determined clear breaches of the legislation exist, DEPI will undertake appropriate enforcement action...



Recently cleared blue gum plantation in close proximity to Mount Eccles National Park January 2014

Victorian Environment Minister submission to Senate Enquiry

"One area where koalas and timber harvesting is an issue is the Strzelecki Ranges where private plantation forestry occurs in areas occupied by the genetically diverse South Gippsland Koala population. However the timber company involved, HVP Plantations, is well aware of its responsibilities in this area and is in the process of developing a detailed koala management strategy aimed at minimizing impacts on koalas. ...



Logging of key koala habitat 2007 by Hancock Victorian Plantations – Morwell River Catchment – Strzelecki Ranges

Viewed state wide, the Victorian
Government believes that the conservation
status of the Koala in Victoria is secure.
Its broad distribution and high population
densities, combined with habitat protection
measures now in place, provide some
confidence that the species is buffered
against the impacts of the major threats
discussed above. The threats are not likely
to impact directly on all populations at any
one time. In the longer term, however,
climate change scenarios that indicate
reduced rainfall and increasing threat of
wildfire pose serious concerns about the
future prospects of the Koala in Victoria.

14. Australian Government Position

On the 30th of April 2012, Federal Environment Minister Tony Burke, listed the Koala as Vulnerable under the EPBC Act, however the listing did not extend into Victoria or South Australia.

http://www.environment.gov.au/minister/archive/burke/2012/mr20120430.html

...Minister Burke has decided to list koala populations in Queensland, New South Wales and the Australian Capital Territory as vulnerable under national environment law.

"People have made it very clear to me that they want to make sure the koala is protected for future generations.

"My decision to list the koala under national environment law follows a rigorous scientific assessment by the Threatened Species Scientific Committee which gathered information from a variety of experts over the past three years.

"Koala populations are under serious threat from habitat loss and urban expansion, as well as vehicle strikes, dog attacks, and disease.

"However, koala numbers vary significantly across the country, so while koala populations are clearly declining in some areas, there are large, stable or even increasing populations in other areas.

"In fact, in some areas in Victoria and South Australia, koalas are eating themselves out of suitable foraging habitat and their numbers need to be managed.

"But the Queensland, New South Wales and Australian Capital Territory koala populations are very clearly in trouble, so we must take action. "That is why the scientific committee recommended to me to list the Queensland, New South Wales and Australian Capital Territory populations as threatened, rather than to list the koala as nationally threatened across its full range."

6 months earlier, on the 25th of November 2011, the Threatened Species Scientific Committee recommended that: http://www.environment.gov.au/biodiversity/threatened/species/pubs/197-listing-advice.pdf

- (i) The Committee recommends that the Minister declare the combined koala (Phascolarctos cinereus) populations in Queensland, New South Wales and the Australian Capital Territory to be a species for the purposes of the EPBC Act under s517 of the Act.
- (ii) The Committee recommends that the list referred to in section 178 of the EPBC Act not be amended by including the koala (Phascolarctos cinereus) over its national extent.
- (iii)The Committee recommends that the list referred to in section 178 of the EPBC Act be amended by including in the list in the Vulnerable category the combined koala (Phascolarctos cinereus) populations in Queensland, New South Wales and the Australian Capital Territory.
- (iv) The Committee recommends that there should be a recovery plan for this species.

In terms of populations of Koalas in Victoria, the committee wrote p28: *The size of the koala population in Victoria is largely a function of the translocation program that has been operating for several decades. Most potential koala habitat now has established koala populations.*

In its 2010 listing advice the TSSC used an estimate of the total population for Victoria of 73 500 but the Victorian government, in its submission to the Senate inquiry, stated that this was "certainly an under-estimate" (Senate Environment and Communications References Committee 2011)... p29) The koala population of Victoria can be considered to be broadly stable or declining slightly at the state level, although individual population trajectories may vary. The current koala population estimate of Victoria is unknown but considered to be large, and thus has a

buffering effect on declines in other states. However, no formal estimate was provided and thus the Committee has had to consider a broad range of estimates as plausible and to consider the influence of those values on the determination of the national trend. Additionally, there are few data by which to discern a trend in the state population but the Committee has noted the exposure of some populations to predation by dogs, vehicle strike and wildfire; and some localised increase due to revegetation.



In its deliberations the Committee has considered a range of population sizes between 150 000 and 300 000 and inferred

a 20 year decline in the Victorian koala population of between 5 and 10%...

P32 Conversely, koalas remain at least locally abundant in Victoria and South Australia. Some populations in these states are "over-abundant" and must be managed to reduce population density in order to prevent habitat degradation. However, other populations in these States face similar threats to koalas elsewhere, and may face further problems in the future associated with their relatively low genetic diversity.

Advice to the Minister for Environment Protection, Heritage and the Arts from the Threatened Species Scientific Committee (the Committee) on Amendment to the list of Threatened Species under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act), 30 September 2010

http://www.environment.gov.au/biodiversity/threatened/species/pubs/koala-listing-advice.pdf

(p3) ... Koalas are widespread in the low altitude forests and woodlands across central and southern mainland Victoria, and also occur on four islands (Raymond, Snake, French and Phillip) (Menkhorst 2004, 2008).

In Victoria, large regional koala populations occur in the Strathbogie Ranges, Cape Otway, South Gippsland (including the Strzelecki Ranges), forests of the Naracoorte Coast Plain Bioregion, forests and woodlands on Mt Eccles lava flow (between Mt Eccles and Tyrendarra) and the Victorian Midlands Bioregion.

In Victorian forests and woodlands, the population density of koalas is generally less than one koala per hectare (Menkhorst 2004). However, there are several sites where koalas can be at

greater densities, including the
Strathbogie Ranges, Cape Otway, Mt
Eccles National Park, Warrandyte State
Park, French Island and Raymond Island
(Menkhorst 2008). In some areas, the high
density of koalas is putting unsustainable
browsing pressure on tree species (Martin
1985a; McLean 2003). These areas
include Mt Eccles National Park, Snake
Island, Raymond Island and parts of the
Otway Ranges (Menkhorst 2008). Some of
these populations are subject to population
management programs.

(p11) Koala habitat may also be lost due to logging, however the effect at the population level is a function of the management regime. For example, while clear felling will remove habitat, koalas may persist in selectively-logged forests (Kavanagh et al. 1995; Kavanagh et al. 2007). Thus the level of threat posed by logging is situation-specific and is determined by the appropriateness of the management regime, and adherence to its prescriptions. Koalas have also been recorded to have established home ranges within revegetated eucalypt woodlands.

P 17) In recent times devastating fires have occurred (e.g. Victoria's Black Saturday in 2009 and wildfires in Pilliga 1998 and 2006) and in 2009 governments introduced a new fire risk category (Catastrophic). The mortality of koalas resulting from these fires has not been quantified, but loss of habitat was extensive and koalas are particularly exposed to injury in crown fires that occur in these intense bushfires. The National Koala Abundance Workshop noted that a substantial proportion of koala habitat has been burned in Victoria in recent years.

P18) Much of the substantial population of koalas in Victoria and South Australia live in areas where over-population is a

significant problem. The density of koalas is so high that they may damage the food trees on which they depend, resulting in a substantial population crash, such has occurred a number of times in Victoria (e.g. at Framlingham, Walkerville, Sandy Point) (Martin 1997; Martin and Handasyde 1999; Menkhorst 2008).

P18) The National Koala Abundance Workshop also noted that koala populations have also been reduced in some Victorian populations, again with substantial effort: at Mt Eccles National Park, some 8000 koalas have been sterilised over several years and the population has been reduced to approximately 6000 from approximately 11 000 in 2004. It is often noted that this expenditure comes at the cost of conservation efforts for other species (Duka and Masters 2005) and it will have to continue into the future indefinitely. While culling has been suggested to be one of the few logistically feasible ways to reduce populations before they reach the point where habitat damage occurs, it is considered an unacceptable alternative (Martin 1997; Tabart 1997; Menkhorst 2008; Natural Resource Management Ministerial Council 2010).

P18) Significant large populations may not be amenable to control by sterilisation. Large populations occur at Otway and Strathbogies Ranges and are not subject to fertility control (Menkhorst 2008) so remain vulnerable to resource depletion and rapid and substantial population decline (Martin 1997). Current management aims to maintain koala population density at or below one koala per hectare to prevent over-browsing and damage to habitat is (Menkhorst 2004;

Duka and Masters 2005). It was reported to the National Koala Abundance Workshop that in 2009 koala densities in some manna gum (E. viminalis) stands of Cape Otway were up to 17.1 koalas per hectare. Substantial loss of manna gums in the area, and a crash in the koala population, is a likely outcome.

P18) ... genetic variability is low across most Victorian and South Australian koala populations and they have suffered severe bottleneck and founder effects (Houlden et al. 1996; Seymour et al. 2001; Cristescu et al. 2009). The studies of Seymour et al. (2001) and Cristescu et al. (2009) both investigated the relationship between genetic diversity and testicular abnormalities. Seymour et al. (2001) compared inbreeding across several populations and identified a correlation between the level of inbreeding and the proportion of the population exhibiting testicular abnormality. Cristescu et al. (2009) did not find the same trend when they examined the relationship between an estimate of an individual animal's level of inbreeding and testicular abnormality, within the Kangaroo Island population. However, they cautioned that this should not be seen as definitive as the high proportions of abnormalities means the genes are widespread and can be passed on without the individual's parents necessarily being closely related. In addition to the abnormalities considered above, inbreeding also has effects on testicular and sperm morphology, and thus on reproductive characteristics of male koalas (Montgomery 2002). The above studies caution that the high numbers of individuals should not be taken to indicate that the populations are genetically safe. The majority of Victorian koalas, and all

South Australian koalas, are derived from a limited number of individuals and thus represent little genetic capital (Houlden et al. 1996; Seymour et al. 2001; Cristescu et al. 2009). ..However, the inbreeding coefficients measured for all southern Australian koala populations examined to date are above a threshold where extinction is considered substantially more likely (Frankham 1995; Houlden et al. 1996; Seymour et al. 2001; Cristescu et al. 2009).

Low genetic variability, as exhibited by both Victorian and South Australian populations, also reduces the population's ability to adapt to change, which may exacerbate the effects of disease, overbrowsing or climate change (Houlden et al. 1996; Seymour et al. 2001; Cristescu et al. 2009). The Koala Research Network has raised concern about the vulnerability of these populations to KoRV (Koala Research Network 2010).

Victoria

... High population densities (Mt Eccles NP, Otways etc.), Medium density/large area (Ulupna Island, Brisbane Ranges etc.), Low density stable (You Yangs NP, Wilsons Promontory etc) and Low density declining (Macedon Ranges, Phillip *Island). The population total summed to* roughly 73 500, however these are estimates and there have been few detailed surveys in some areas. This estimate is considerably lower than previous estimates for Victoria, such as the estimate of >100 000 animals on the Strathbogie Ranges alone (Martin 1997). This is most likely to be a function of a difference in the method of calculating the estimate. However, Martin has noted that his recent observations in the Strathbogie Ranges suggest that the population has declined, based on reduced sightings of koalas overall, reduced proportion of females with back young, fewer road-killed

koalas and tree death due to drought (Martin 2010 personal communication).



Prime Koala habitat E.globulus destroyed by Hancock Victorian Plantations Strzelecki Ranges Bullock Track when surrounding pine plantation was logged.

P25) ...The koala population of Victoria can be considered to be broadly stable at the state level, although individual population trajectories may vary. The current koala population estimate of Victoria is significantly reduced from the numbers used in previous assessments, but this is probably mostly due to a refinement of the method of population estimation and thus cannot be taken as evidence for a decline.

Associate Professor Robert J.S. Beeton AM FEIANZ Chair Threatened Species Scientific Committee Year?



Jan 2014: Remnant vegetation – Draffen's Block/South West Victoria. No Koala sited at this location, although plenty of old scats were found.



January 2014: Many old koala scats were found at Draffens Block plantation, but no koalas were observed, leading to the conclusion that koalas had either vacated the area or had died.

Apparently 20 koalas were removed from this plantation. Where were they relocated to?



February 2009: The 2009 Churchill fires, represented a loss of 40% of Hancock's priority koala habitat. Hundreds of koalas were reported to have been killed in the fires. Koalas started moving back into the burnt areas 4-5 years after the fires.



Feb 2009: Several days after the fires, Hancock started logging the Koala stronghold of College Creek, despite objections from conservationists.

15. Koalas and FSC Strzeleckis Summary 1998-2009

This summary was first in a more detailed article, published on the FSC Watch website. It highlights issues facing Strzelecki forest campaigners at that time and highlights the fact that Hancock was publicly acknowledging the importance of the Strzelecki Koala as long ago as October 2000, yet the issue was not regarding as important enough to warrant Best Management Practice, over 8 years later.http://www.fsc-watch.org/archives/2009/02/23/FSC_Hancock_an

January 19 2009

d Sma

Strzelecki Koalas

Under the heading Koala Bear Management, the 2008 Smartwood audit states;

"However, in Victoria the Koala is not offered additional protection as a species let alone as distinct populations. As such HVP or any other forest manager for that matter is not required to establish specific management plans for the species ... If the Koala population requires conserving then it is the State Government's responsibility to list the species accordingly and this has not yet occurred. As such there is no specific reason why HVP as a private land manager should be required to establish conservation measures for a species such as the Koala as long as it is not required by the state or federal Government."

The Koala is considered to be nationally significant, therefore it is reasonable to expect conservation measures for this species on **all land tenures**. The Strzelecki Koala is the only endemic Koala population remaining in Victoria and it IS recognised as a distinct Management Unit.





Conservationists have been highlighting Hancock's role in destruction of prime koala trees since the late 1990's. Manna Gum (E. viminalis) was logged at this site in May 2000 (Hemphill Track off Hatchery Road). Many old growth trees prime koala feed trees removed on this site in 2001. To add insult to injury during the Smartwood scoping of the HVP Estate the team was taken to this location and a koala was seen in one of the remnant feed trees. This was one of many sites observed and documented where identified koala sites were destroyed with apparent impunity from the Certifying body. We have had to wait until 2013 to see any proactive action by HVP to protect this unique koala population. In 2013 there were still numerous koala deaths in the HVP Plantation

According to the Koala Management Strategy the land manager is required to protect this species. How can any land manager do this without a Management Plan?

Estate.

On January 22, 2007 Owen Trumper Manager Grand Ridge Plantations (a Hancock Subsidiary) stated: "We do not have a Specific BMP for Koalas. Grand Ridge Plantations is currently working with the Australian Koala Foundation on a Koala Management Plan. This project is awaiting the completion of the current EVC mapping project in the Strzelecki ranges."

The 2008 audit statement by Smartwood is actually a major step backwards from the situation that occurred before the FSC certification. Realising the sensitivity of the koala issue, Hancock very early wanted to show that it was working to conserve the species. On 2 October 2000 Hancock and the Australia Koala Foundation (AKF) announced a joint MoU to learn more about koalas on Hancock land.

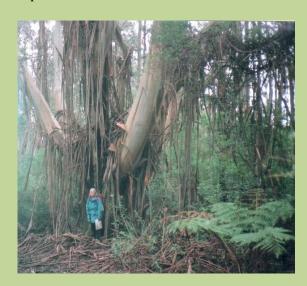


Destruction of key koala habitat by Hancock, Snakeback Track 2007

The press release stated:

*"The scientific community regards the Strzelecki koala population as making an important contribution to the national koala gene pool" Mr (Kevin) White (CEO Hancock) said. "This MOU along with the field studies, will hopefully lead to a situation where critical koala habitat on HVP's holdings will be permanently protected."

(Deborah) Tabart (from the Australia Koala Foundation) said "This MOU and the final Koala Habitat Atlas that will be produced could lead the way to sustainable logging by all companies in the Strzelecki Ranges. The koalas in this region are critical to the future of Victorian koalas and we are delighted that HVP understands their scientific importance."*



Snakeback Track before the logging.

Almost one decade later neither the Atlas or the Koala Best Management Practice are anywhere to be seen, with rumours suggesting that Hancock have refused to hand over Strzelecki information that can be properly used by the Australia Koala Foundation. Strange given that Hancock has extensively studied their land holdings for the past decade and have a database second to none. Meanwhile Hancock have logged almost 6000ha of Mountain Ash/Koala habitat (which are koala feed trees) and converted these trees to Shining Gum Plantations a non-koala feed tree. (Approximately 3500ha of koala habitat has been converted since FSC certification by Hancock in February 2004.)

In its initial audit in 2004/5, Smartwood wrote "Further work is also being carried out by the Australia Koala Foundation to detail koala habitat in the Strzelecki Ranges and a draft Koala Habitat Atlas is expected soon" (page 58).

Four years later we have seen nothing produced neither by the company or the

Australia Koala Foundation. It would appear that Smartwood too has now

washed its hands of any responsibility in protecting this species.

ACTING CHAIR: But what happens when they get logged?

Miss Sewell (Hancock CEO): We have developed a koala operating standard, which dictates our planning and operations around the areas that are viewed as being koala habitat. For example, we go in and have a look immediately prior to the logging to determine whether there are koalas in that plantation at that particular time. If there are, we withdraw from that area until such time as they have passed through it... ACTING CHAIR: Is it established that these plantations involving native species are not koala habitat? Miss Sewell: A number of our eucalypt plantations are a feed source for koalas, but not necessarily prime habitat

ACTING CHAIR: The koalas travel through these native species plantations and feed there. Are you sure that whenever koalas occupy those plantation areas they become non-logging areas for Hancock? Miss Sewell: We have an operating standard which requires us to determine that koalas are not present in that particular harvesting coupe at the time that the harvesting is undertaken.

ACTING CHAIR: How is that assessment done?

Miss Sewell: Visually...They go through the area. If we have commenced harvesting and we do come across a koala then we will leave a tree or trees behind. We will either withdraw from the area and then come back or we will leave trees behind...As part of the planning operation that coupe would be walked and then inspected visually as they commence the harvesting of that coupe. If koalas are found, again, the harvesting will be temporarily withdrawn until such time as the koalas can move through the area...

ACTING CHAIR: ... Is the whole of the area to be logged assessed for a koala presence visually—and I presume that means for pellets as well—before a logging operation is undertaken or is the area to be logged the next day visually looked at?

Miss Sewell: ...As part of our planning, we will determine whether there are koalas in the harvesting area, in which case we will make a decision to move to a different area. But, once we have started... it does take some time to harvest through that. If a koala is identified once the harvesting has started, we will move the harvesting area to a different area to allow the koalas to move through.

...ACTING CHAIR: Logging operations are begun and koalas are found to be in the coupe, so the logging operations are stopped. Has that ever led to a permanent stop of logging of a coupe, or is the coupe always eventually logged once it is found that koalas have moved away?

Miss Sewell: Some of those trees within that coupe may be permanently left behind, even though they are plantation trees, but not necessarily the coupe itself ...

ACTING CHAIR: You just mentioned wildlife corridors. Are these permanent?

Miss Sewell: If it is on native forest, it certainly is.

ACTING CHAIR: And if it is in native plantation?

Miss Sewell: It depends. If it is in a plantation where it is a buffer then, yes, it is. But if it is a plantation per se then no.

ACTING CHAIR: Are you able to tell the committee which wildlife corridors are permanent and which are not?

Miss Sewell:If it is a buffer around certain elements then it is permanent.

ACTING CHAIR: But I am interested in the wildlife corridors which are going to enable koalas to move from one habitat to another. You have given evidence that the native species plantations are not protected and that, if koalas are found in them, you wait until the koalas move out before you continue logging. I just wonder if the koala wildlife corridors that you are speaking about include such areas of native plantation. Miss Sewell: Where there are buffers they certainly are. I can provide information on notice as to the extent of those.

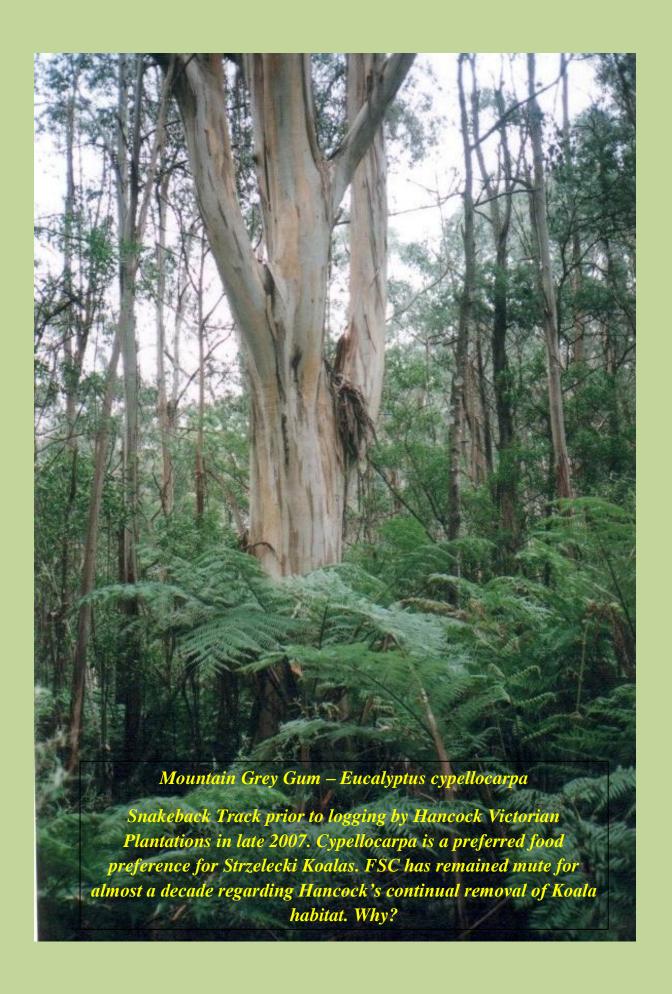
ACTING CHAIR: And where there are not buffers?

Miss Sewell: It is plantation.

ACTING CHAIR: So the corridor can be logged under those circumstances?

Miss Sewell: If it is a plantation it can be logged, yes.

Source: COMMONWEALTH OF AUSTRALIA Official Committee Hansard SENATE ENVIRONMENT AND COMMUNICATIONS REFERENCE S COMMITTEE Status, health and sustainability of Australia's koala population . MONDAY. 1 AUGUST 2011



16. Pulling Teeth

Hancock's FSC Audits

Certification Code: SW-FM/COC-1128 Date of Certification: February 1, 2004 Date of Public Summary: January 2004

Updated November 2004 Updated September 2005

http://www.rainforestalliance.org/sites/default/files/sitedocuments/forestry/documents/hancock_victorian.pdf

At the time of this audit, community members still believed that FSC could deliver some positive outcome in regards to Koalas in the Strzeleckis. This was confirmed by an excellent audit team that certainly gave the impression that concerns raising koalas would get a "good hearing". The 2004 audit highlights that the community was certainly pressuring Hancock and FSC to get some a result on further koala habitat protection.

(p 9) Virtually all forest management areas have wallabies and kangaroos, and although koalas are widespread across the State the koala management issues for HVP are concentrated in the Strzeleckis. The presence of high proportions of native eucalyptus vegetation, koala and other important wildlife species in HVP estate in the Strzeleckis has created special management challenges for HVP. For this reason, HVP has collaborated with ENGOs and other organizations on a biodiversity study in Strzelecki Ranges that has identified critical core areas (high conservation value forests) for conservation of Cool Temperate Rainforest (an FFG Act listed community), threatened fauna species such as Strzelecki Burrowing Crayfish, large forest owls and possibly the Spot-tailed Quoll, and other important species such as koala. HVP has a voluntary moratorium in place on timber harvesting in the identified core areas of high biodiversity value in the Strzeleckis."

Table 2. Summary of Forest Areas Visited by SmartWood Assessors & Key Issues

(p 14) Stakeholder concerns regarding conservation of Cool Temperate Rainforest and significant fauna, particularly koala ...

(p22) Stakeholders were particularly concerned about the protection of native vegetation as koala habitat in the Strzelecki Ranges.

(p22/23) Most stakeholders argued not for a national park, but for enhanced management of native vegetation in the Strzeleckis by HVP, with a particular emphasis on koala habitat.

(p 24) Community relations & workers rights HVP faces strong community concerns in regards to its management of plantations in the Strzelecki Ranges, in particular. Key concerns being addressed include conservation of native vegetation and koala habitat...

As a result of this pressure Smartwood applied the following conditions on Hancock.

(p31) Condition 9.1.1: By the end of Year 1, HVP is to develop an explicit written conservation strategy for high conservation value Ecological Vegetation Classes (EVC) and high conservation value wildlife habitat throughout its estate that specifically addresses each bioregion and has been subjected to scientific peer review.

(p31) Condition 9.3.1: By the end of Year 1, HVP is to incorporate consideration of high conservation value EVCs and wildlife

habitat into the Management Plan Summary.

SmartWood Certification Monitoring Audit Addendum to the Public Summary for Hancock Victorian Plantations Pty. Limited 2005; SW-FM/COC-1128

By 2005 it became clear that Hancock was not adequately resolving conditions imposed on it by Smartwood/Rainforest Alliance. It also become obvious that Hancock was arguing that work being carried out by the Australia Koala Foundation would somehow override the conditions imposed on it under the FSC system. Meanwhile Hancock was logging key koala habitat across its estate at the rate of approximately 700ha per year (2ha/day).

(p 58) Further work is also being carried out by the Australian Koala Foundation to detail Koala habitat in the Strzelecki Ranges and a draft Koala Habitat Atlas is expected soon.

However, even the on-going draft of the Koala Habitat Atlas and Hancock's obvious stalling on new EVC strategies and Koala BMP, appear to not have held much sway with the auditors.

"(p 59) These documents are over 50 pages but every page is dated 12/04/02. The Policy and Procedure document are marked as draft. Thus, it does not appear that any work has been done to "finalize" the Threatened Species BMP since the Condition was imposed in January 2004."

Attachment D is a comprehensive document containing clear management prescriptions for a wide variety of species. However, the team was provided with no evidence that these were being put into

practice.. The strategy for koalas states, "When koalas or evidence of koalas are detected in a coupe or area, habitat will be retained according to these specifies. Habitat retained must be mapped and identified as an exclusion area." The specifications include the following "Where one or two trees with evidence of koala presence are found, harvesting must be excluded from within a 50 exclusion zone around of (sic) each of these trees". Field staff in Ballarat district told the assessment team, that they occasionally find evidence of koalas within planned coupes. But they were not aware of either of these requirements and the listed management measures were not being followed in planning

(p 60) "operations in those areas. Other HVP staff also appeared to be unaware of the precise requirements of species such as owls and koalas."

In February 2005, HVP responded to a letter from an individual who was concerned about "threatened koala populations in HVP land holdings". The response does not make any mention of the BMP, or describe any of the management prescriptions for koalas set out in the BMP.

The team concludes that, in addition to not yet being finalized, the BMP does not appear to be put into practice, as required by the condition.

The team notes that the BMP documents are all marked "Commercial in Confidence". Thus, are not available to the public or interest groups, which limits the extent that HVP can be held accountable to the BMP.

Finally, the audit team reviewed the Procedures for Operational Planning and

Management (Revision 2, Feb 9, 2005) and the Policy for the Planning and Conduct of Timber Harvesting Operations on Company Land (Revision 3, Feb 9, 2005) to see if they make any mention of threatened species. Neither document does. This lends to the case that the BMP for threatened species and communities is not implemented.

Hancock Victorian Plantation Pty.Ltd. in Victoria, Australia Certificate Code: SW-FM/CoC-1128 Audit Dates: March 13-22, 2006 Report Finalized: August 22, 2006

http://www.rainforestalliance.org/sites/default/files/sitedocuments/forestry/documents/hancockplantations pubsum06.pdf

(p 13) Of the 12 CARs audited, 8 were fully met and CLOSED. Four CARS were not met as follows:

- •1 MAJOR CAR was not met and should lead to suspension of the certificate •1 MAJOR CAR was only partially met and should lead to suspension of the
- certificate. •2 CARS were not met. Both are related to
- communication and interaction with stakeholders and become a single MAJOR CAR.

A total of 4 MAJOR Corrective Action Requests are issued in this audit report three MAJOR CARs that must be met within 6 months of the finalization of the audit report and one MAJOR CAR that must be met by the next audit. All four of these are listed in Section 2.4. Following the field audit, HVP provided additional evidence and information that resulted in a determination that the 2 Major CARs which had not been met were fully met and closed. However, in that process, there was an additional MAJOR CAR added and it was agreed that a field audit would occur the first week in

February to close out all MAJOR CARs and any CARs due for 2007 since the audit will also serve as the 2007 annual audit. It has been made very clear to HVP that failure to complete the MAJOR CARs within the time allotted will result in suspension of the certificate.

(p 36) Audit findings:

The Company has continued work on mapping EVCs, using new air photos with improved resolution that provide a better result. Because of these improved tools, refinement of work already carried out to the same standards has been included in the program. Most recent work in the EVC mapping program has been in the Jeeralang block, some 3585 ha having been completed. This brings the total area covered in the program to 22,509 ha, a proportion of 45% of the 49,912 ha of Custodial Land (area

(p37) statement, FSC/SmartWood Certification Assessment Report for HVP, Jan 2004), which is ahead of the 40% required for year 2. GRP also recently received National Estate funding to continue this work.

In addition to the EVC mapping program, the fauna survey program is continuing, with Livingston and Turton Blocks assessed in early 2006. The Koala Habitat Atlas work being carried out in association with the Australian Koala Foundation is awaiting information from the EVC mapping work.

Planning is in progress to extend the EVC mapping program to the HVP estate outside GRP. This Condition was also reviewed in the 2005 annual audit and progress to meet the Condition is satisfactory. SmartWood guidance to auditors is that "throughout the life of the certificate conditions" should be closed when the underlying non-conformance that led to the Condition is addressed. Thus, this Condition is closed. HVP is expected to continue to undertake this mapping work

(p 40) Since the assessment report in 2004, HVP has made little progress to meet this Condition. In a submission to the audit team, HVP suggested three species that they felt could serve as indicator species and that would partly meet this condition. These proposals were partly based on ongoing or proposed work with these species.

The species are: -

Koala, based on the developing HVP work with Australian Koala Foundation. This work includes mapping of vegetation and koala habitat and development of a management plan, largely in response to community concerns for genetic integrity and population diversity...

(p 47) 2.7 Audit decision

While there has been considerable progress made on most of the conditions and CARs that were audited for compliance, the audit team has found that HVP has barely maintained certifiable performance and has not adequately addressed Conditions and CARs as defined by SmartWood and FSC policy. A total of 27 conditions and CARs were audited. 18 were met and closed. 7 were not met or remain open as follows:

- •All MAJOR CARs were met although resulting in an additional MAJOR CAR;
 •2 CARs were not met and become a single MAJOR CAR with a 5-month timeline for completion;
- •3 Conditions were not met and become MAJOR CARS all with 5-month timelines; and,
- •2 Conditions remain open and are ongoing through the life of the certificate; The five additional MAJOR CARS are listed above in Section 2.4. All of these

MAJOR CARs must be met within 5 months of the finalization of this audit report or by the agreed upon 2007 audit period of February. FSC policy requires that if MAJOR CARS are not met, the certificate should be suspended until such time as they have been adequately addressed or until such time allowance as provided by FSC and SmartWood policy. Thus, it should be noted that failure to address the MAJOR CARS identified in this report during the 2007 audit will result in suspension of the certificate.

Forest Management 2007 Annual audit Report for: Hancock Victorian Plantation Pty.Ltd. in Victoria, Australia

(p25) At around the time of the previous audit, HVP began to communicate with staff at DSE, Australian Koala Foundation (AKF), Monash University and others, asking for advice about species and monitoring programs that would meet this CAR. Questions were raised about the objective of monitoring and about species that could be monitored practically to meet those objectives. Some good discussion and ideas were generated and resulted in a list of species suitable for monitoring that could complement the work that was already taking place.

Within the Strzelecki Ranges Bioregion, HVP initially suggested three species that they felt could serve as indicator species and that would partly meet this CAR. These proposals were partly based on ongoing or proposed work with these species.

The three species are:

-Koala, based on the developing HVP work with AKF. This work includes mapping of vegetation and koala habitat and development of a management plan, largely in response to community concerns for genetic integrity and population diversity. Permanent monitoring plots have also been established to monitor the presence and activity of the Koala. ...

(p26) In summary, HVP have provided a shortlist of species that can be realistically and practically monitored as an index of diversity and ecosystem health in HVP's custodial lands. The results of the monitoring are not being provided to SmartWood on an annual basis, although reports of faunal surveys done in the GRP area were available to the audit team. For this audit that is understandable since the monitoring activities had only began in January but the annual summary will be required in future audits.

Forest Management 2008 Annual audit Report for: Hancock Victorian Plantations Pty Ltd. in Victoria, Australia

(p 7) 4. Koala Bear Management Plan

Another comment from stakeholders was related to the Koala population in the Strzelecki. In respect of the Koala population, they represent a distinct population and would possibly be recognized as a distinct Management Unit (i.e. a distinct phylogenetic lineage). However, in Victoria the Koala is not offered additional protection as a species let alone as distinct populations. As such HVP or any other forest manager for that matter is not required to establish specific management plans for this species.

SmartWood however would like to suggest that in response to the stakeholders concerns HVP continue with the publication of the Koala Habitat Map. If the Koala population requires conserving then it is the State Government's responsibility to list the species accordingly and this has not yet occurred. As such there is no specific reason why HVP as a private land manager should be required to establish conservation measures for a species such as the Koala as long as it is not required by the state or federal Government.

Comments on 2008 by Susie Zent – Friends of Gippsland Bush

Koala Bear Management Plan

It is obvious that the ecologist used during this audit who comes from WA is not familiar with Rainforest or Koalas. Firstly Koalas are NOT BEARS they are marsupials which are unique to Australia.

The Koala is considered to be Nationally significant therefore it is reasonable to expect conservation measures for this species on <u>all land tenures.</u>

The Strzelecki Koala is the only endemic Koala population remaining in Victoria and it **IS** recognised as a distinct Management Unit refer to Dr. Bronwyn Houlden's publications provided in past audits and Victoria's Koala Management Plan attachment 3.

According to the Koala Management Strategy the land manager is required to protect this species how can any land manager do this without a Management Plan?

Why was the following statement written: "If the koala population requires conserving then it is the State Government's responsibility to list the species accordingly and this has not yet occurred. As

such there is no specific reason why HVP as a private land manager should be required to establish conservation measures for a species such as the Koala as long as it is not required by the state or federal Government".

What has changed since the FSC audits first occurred? This was never the position of Smartwood in the past and one can only conclude that SW are now "singing off the companies song sheet". This comment now makes FSC irrelevant as it cannot be assumed that FSC will deliver anything better than nothing. If Hancock/Smartwood are claiming that conservation measures are not important for genetically diverse koalas inhabiting the Strzeleckis, why are they happy to get PR elsewhere for Koala preservation efforts? All of the Koalas outside the Strzeleckis are from translocated populations with a greatly diminished gene pool.

"We do not have a Specific BMP for Koala's. Grand Ridge Plantations is currently working with the Australian Koala Foundation on a Koala Management Plan. This project is awaiting the completion of the current EVC mapping project in the Strzelecki ranges." Owen Trumper Manager Grand Ridge Plantations January 22, 2007.

Forest Management 2012 Annual audit

Report for: Hancock Victorian Plantations Pty. Ltd in Victoria, Australia

Report Finalized: 19 October 2012 Audit Dates: 22–25 May 2012

- P 7) Concerns were raised about the effectiveness of HVPs management of koala populations within its estate. In particular concerns were raised with regards to:
- whether HVP had a "whole of estate" approach to Koala management, in particular that the role of plantations were considered when mapping and managing koala populations
- whether HVP had invested in research into koalas use of plantation species especially E.nitens

HVP provided auditors with a document updating the status of Koala Management on HVP land, particularly in Gippsland. In addition, the audit team spoke with Dr Wendy Wright who has been involved in developing funding proposals and projects linked to monitoring/research into koala

populations and movements within the HVP estate. As part of an MOU with the Australian Koala Foundation a Koala Habitat Atlas for South Gippsland was developed, this process took substantially longer than either party expected and was completed in 2009. A second MOU with AKF was not agreed. Subsequently HVP has taken the information in the Koala Habitat Atlas and developed a Koala Habitat Management GIS layer available to all operational planners.

BMP documents have been finalized and peer reviewed with Peter Menkhorst and the Southern Ash Wildlife Centre. These include operational guidance for planners and contractors. Documents relating to the Koala Management Plan are available via the HVP intranet.

HVP has been engaged in developing proposals for ongoing monitoring and research into koala behaviour and population movement within the plantation and native forest components of the estate. This was to be a two pronged project – looking at distribution of koalas across the entire estate and also using scats to determine distribution and movement of individual koalas across plantation coupes and from one piece of remnant vegetation

to another. Funding bids have been unsuccessful thus far.... http://fsc.force.com/servlet/servlet.FileDownload?fi le=00P4000000ITs76EAD

2013 Audit

OBS 08/13 Reference Standard & Requirement: Rainforest Alliance Interim Standard for Assessing Forest Management (FM-32 – Australia) (20 08): Indicator 9.4.3

Description of findings leading to observation:

The FME's Koala Population Census Project commenced in 2011. It is an annual survey program to estimate the total koala population for the HVP estate and provide a baseline for measuring future population trends. The Environmental Projects Catalogue for Gippsland includes numerous (70+) environmental projects that have been undertaken by HVP since 1998. Some of the indicator species included in this Catalogue include Powerful Owl, Gippsland Giant Earthworm and Spottailed Quoll.

http://fsc.force.com/servlet/servlet.FileDownload?file=00P4000000ITs76EAD

It should be noted that although Hancock have logged thousands of hectares of koala habitat since arriving in Australia in 1998, there are some key issues that they have worked on in regards to Koalas.

- 1): Hancock embarked on an eight year project to map, identify and record flora species within 15,000 patches of vegetation inside 37,000 hectares of land in Gippsland.
- 2): In the early stages, the Australia Koala Foundation enlisted the help of University students to install a network of survey plots, to determine what eucalypt species koalas prefer to eat. The results were then applied to HVP's maps to create Koala Atlas. The Atlas is used to prioritise areas for restoration and linkages (unquantified as yet).
- 3): Hancock consulted with Peter Menkhorst and Monash University to develop Koala Best Management Practices (BMP). The BMP's were completed in 2012.
 - 4): Hancock provide a training course on koala management for staff and contractors.
- 5): Hancock have worked with Monash University who have perfected a way to extract DNA from koala scats. Scats are currently being collected and assessed by Monash University.

17. Past Blue gum Company **FSC Audits in South Western** Victoria.

Perhaps unsurprisingly, there was little attention placed on koala issues via the FSC process during the years preceding 2013. During that time, a number of companies operating in South West Victoria were certified by the FSC. These included Timbercorp and Elders/ ITC. Both of these companies failed during the MIS 'meltdown' which occurred between 2008-2012. Prior to the collapse of these companies several FSC audits occurred and it would appear that koala issues did not raise much attention at all.

In regards to Timbercorp, the first mention of koalas occurred in 2008 when during their FSC audit (see: http://www.rainforestalliance.org/sites/default/files/sitedocuments/forestry/documents/timbercorppubsum0 8.pdf) under section 2.6 Audit Observations

p12 "The company does not have a procedure to verify the presence of Koala's prior to commencing harvesting operations

Observation: The company should establish a monitoring program to verify the presence of koala's prior to commencing harvesting operations."

It is unclear whether this observation was ever properly resolved.

In regards to Elders (ITC), certified since 2003, koalas were not mentioned specifically but concerns were raised by ENGO's in 2005 (http://www.rainforestalliance.org/sites/default/files/sitedocuments/forestry/documents/integratedtreecroppi ngFMpubsum05.pdf)

Some ENGO's are concerned about the potential certification of plantation estates when harvesting has not yet begun. There are concerns that certification may be

"rushed through" so that Japanese woodchip buyers can be assured their woodchips are from FSC sources or potential investors in new paper mills in Australia can be assured there will be little environmental problems with these projects in terms of wood procurement."

A condition was also written concerning rare, threatened or endangered species, however koalas are not specifically mentioned as they would not have been categorised as rare, threatened or endangered.

(p 23) Condition 16

"Prior to further plantation establishment, data on rare, threatened and endangered species collated in accordance with Criterion 6.1 and by other means shall be explicitly considered during planning and operational practices through formal documentation of guidelines. ITC should develop these in consultation with relevant experts. All areas identified as conservation zones and/or protection areas supporting such species shall be clearly identified on maps (Criterion 6.2).



Jan 2014: Remnant Stringybark found within ex Timbercorp plantation near Mount Eccles, south western Victoria. This tree had a koala in it at the time.

16. Examples of Industry Bluegum Koala Codes of Practice

Please note that this practice was implemented 2 months following the exposure of the issue via the media in July 2013. The major problem with this and similar plans is what happens to displaced animals, once their habitat has been removed? There is no simple answer to this obvious quandary.

Green Triangle Regional Plantation Committee Inc September 2013

http://www.austgum.com.au/australian-plantations-woodchips/documents/GTRPC%20Koala%20Guidelines.pdf

2.PLANNING

During planning for harvest operations companies should obtain and consider the following information in developing harvesting prescriptions:

- a. Koala density:
- i. Pre-harvest survey to estimate Koala population.
- ii. Population data provided by relevant government agencies.
- b. Presence of neighbouring remnant native vegetation or blue gum plantation that koalas may relocate to.
- c. Size of the planned harvest area and harvest rate in high population areas.
- d. Sequence of harvest to prevent isolating populations from neighbouring habitat.
- i. Where koalas are present and it is practical to do so, harvesting should be planned to facilitate natural dispersal into adjacent habitat.

e. Prior to the commencement of harvest operations, companies are to have updated carer details. In isolated and densely populated plantations, working with Department Environment and Primary Industries (Vic) (DEPI) and carers should be considered to ensure best outcomes are obtained.

3.OPERATIONAL CONTROLS

As a minimum, the following operational controls should be implemented for all harvesting operations where koalas are present or are suspected to be present:

a. Harvest inspections

- i. Subject to the initial density survey, prior to the commencement of harvesting each day, and at regular intervals throughout the day (i.e. after meal breaks) the harvester/buncher operator (or other suitably trained or experienced personnel) should walk the area to be harvested to check for the presence of koalas. A system to document and record this is required.
- b. Trees with koalas should be clearly marked with paint to alert the machine operator.
- c. A minimum of five trees must be retained immediately adjacent to the Koala tree. Retained trees may be subsequently harvested if/when koalas are no longer present
- d. Felling of trees likely to impact any tree with koalas present should be directed away from the koala tree.

 Consideration should be given to:
- e. Temporary retention of neighbouring trees
- f. The area and number of trees to be retained is related to the density of koalas as well as the surrounding habitat for the koalas. Consideration should be given to

retaining more than the minimum five trees to provide refuge for the koala and to act as protection from the falling of trees during harvesting.

g. Use of aids to assist in koala location before and during harvesting.

h. A post-harvest assessment should be conducted (with a carer, if possible) to identify any injured or dead animals.

Details recorded should include;

- •Date Counted
- •Block Location
- •Name and Contact Details of Contractor (person counting koalas)
- •Number of Koalas left on the block i.Injured animals are to be reported as per point 4d Koala Welfare requirements.



Inside a blue gum plantation in south west Victoria. Spot the koala!

Australian Bluegum Plantations have implemented the following Koala Management Procedure. A full copy can be found at:

http://www.austgum.com.au/australian-plantationswoodchips/documents/Koala-Management-ProcedureV9_final.pdf

3.1 Koalas in Bluegum Plantations

ABP acquired approximately 76 000 hectares of blue gum plantations in the Green Triangle region in 2010. These plantations were established on cleared agricultural land from 1999 onwards. The widespread extent of koala habitation in ABP plantations is something the Company did not fully comprehend.

In July 2013, DEPI released a statement acknowledging:

There are significant numbers of koalas across suitable habitat in the South west. The high population densities have resulted in many koalas moving into the blue gum plantation estate in the region. This is a significant issue for the timber plantation industry that they haven't had to address in such magnitude before

.ABP plantations will be harvested but the Company is committed to doing so in a manner that protects koalas from injury...

4.1 In the Koala Zone

In plantations identified to be within the Koala Zone, ground spotters will be implemented in accordance with the following policy:

•Ground spotters will be assigned at a ratio of one spotter per feller buncher or a maximum of up to three single grip harvesters and two spotters for between four to six single grip harvesters.
•No harvesting is to occur unless the area has been surveyed by a spotter.

- •Spotting to only occur in daylight hours.
- •If no koalas are spotted for 14 continuous days, spotters can be withdrawn and revert to Harvest Operator inspections.
- •If a koala is sighted, spotters are reintroduced.

4.2 Planning the Sequence of harvesting.

In the Koala Zone, the sequence of harvesting is to be planned to progress towards identified refuge areas. If there are no refuge areas present, an area of plantation can be retained as a control option

.On freehold land, consideration should be given to phasing harvesting over time to reduce the adverse impacts to koalas...

In relation to incident management, ABP will implement the following process

- •Koalas with apparent or potential injuries are to be conveyed to an approved veterinary clinic.
- •Suspected ill koalas are to be conveyed to the appropriate wildlife carer.
- •Juvenile koalas are conveyed to the appropriate wildlife carer.
- •If a dead koala is found and it is apparent that the koala has died from operational activities, the incident is investigated to ascertain the causes. The koala is to be buried and the incident details reported to DEPI

If the cause of death is not apparent, then the dead animal is to be conveyed to a veterinary clinic in an effort to ascertain the cause of death.

- •The ABP Representative or ABP Harvesting Manager will document all incidents (including near miss) on an ABP Incident Report Form
- . The HSEC Officer is informed so details can be entered into the ABP Incident Register.
- •Incidents must be investigated thoroughly to determine root cause. Determining the root cause assists in assigning appropriate preventative actions.

- •Summary details of incidents as required by DEPI are to be entered into the Koala Record Register.
- •Updates shall be provided by the ABP Representative to the appropriate contact within DEPI, forwarding the Koala Record Register as required after an incident.
- •The Koala Record Register is available to view at a regional office upon request from interested stakeholders.



Almost the entire plantation base of Australian Bluegum Plantations in Victoria is in what the company calls the Koala Zone' where koalas have been observed. Thousands of koalas could potentially inhabit this region.

17. FSC Delists and Reinstates ABG

October 2013 – Australian Bluegum Plantations Stripped of FSC Certification

<u>http://www.rainforest-alliance.org/abp-gpfl-statement</u>

"Since late July 2013 the Rainforest Alliance, a certification body accredited to audit against the Forest Stewardship Council (FSC) standards for responsible forest management, has been conducting investigative audits into allegations that harvesting practices in blue gum plantations in southwest Victoria have harmed koalas living in those plantations. The investigative audits focused on two FSC-certified plantations owned by Australian Blue Gum Plantations (ABP) and Green Triangle Plantation Forest Company of Australia Pty Ltd (GPFL).

As a result of these audits, the Rainforest Alliance has found certain nonconformances with the FSC standards, with the following outcomes for each company:

Green Triangle Plantation Forest Company of Australia Pty Ltd (GPFL)

has been issued two minor nonconformances. One non-conformance is related to failing to have assigned a staff member with the responsibility for koala management procedures. The other nonconformance was issued because GPFL's stakeholder database did not include any wildlife carers or NGOs with a specific interest in wildlife and koalas (e.g., Wildlife Victoria, Australian Koala Foundation) or details of relevant Department of Environment and Primary Industries (DEPI) staff.

The company has until their next annual audit to address these non-conformances. The next annual audit will be scheduled in

early 2014 with the actual audit to take place before the end of March 2014.

In allowing GPFL this time to correct its non-conformances the audit team gave significant weight to the fact that in August the company ceased wood sales and therefore harvesting operations on its lands until an appropriate protocol could be established that would minimise potential risk to koalas. In addition, during harvesting on the GPFL-owned Draffen Plantation, the pulpwood purchaser responsible for that harvest proactively worked with DEPI, Wildlife Victoria and other experts to try and minimise the impact on koalas.

In spite of those efforts, the fact that the harvest resulted in the need for some 20 koalas being removed from the plantation has led experts to conclude that protocols previously considered "best practice" in terms of managing koalas in active harvest zones were actually inadequate when the animal's population is as sizeable as it is on many blue gum plantations in southwest Victoria.

Australian Blue Gum Plantations (ABP)

has been issued six major nonconformances, which requires the suspension of their FSC certificate. Per FSC rules, suspension is required when five or more major non-conformances are found. The suspension will take affect 30 days from the date ABP received the audit team's final report to provide sufficient time for ABP to cease using all FSC trademarks and references and make alternate sales arrangements. The final report was issued on October 17, 2013.

The six non-conformances relate to ABP's failure to halt harvesting in high koala population areas; inadequacies in ABP's koala management procedures and their application by contractors; inadequate training for staff and contractors in the identification, assessment and handling of

koalas on harvest sites; and failure to properly monitor impacts on koalas and to use the results of monitoring to make appropriate adjustments to forestry operations."

April 2014 The Rainforest Alliance lifts suspension of Australian Blue Gum Plantations' FSC Certificate

"The Rainforest Alliance has lifted the suspension of the Forest Stewardship Council (FSC) forest management certificate of Australian Blue Gum Plantations (ABP) following the successful closure of major non-conformances related to impacts on koalas as a result of harvesting practices in blue gum plantations in south western Victoria.

The Rainforest Alliance suspended ABP's certificate in October 2013 following a complaint investigation audit in August 2013 that resulted in six (6) major nonconformances being issued. The Rainforest Alliance conducted a reinstatement audit in January 2014 to determine whether or not ABP had addressed the issues raised in the major non-conformances...

Specifically, ABP has:

- Improved its approach to stakeholder consultation including updating its stakeholder register, providing stakeholder engagement training for front line staff via a leading expert, and encouraging and facilitating meaningful participation of stakeholders in the development of the Koala Protection and Management Plan and related Standard Operating Procedures. Stakeholders interviewed during the audit acknowledged improved relations and engagement with the company.
- Updated and improved its Koala Protection and Management Plan based on collaborative input from

- other forest managers, the Victorian Department of **Environment and Primary** *Industries (DEPI), the South* Australian Department of Environment, Water and Natural Resources and wildlife carers in Victoria and South Australia. Changes to practice have included the employment of independent spotters whose specific role is to search coupes for koalas in advance of harvesting operators, trialing of thermal imaging technology to help spot animals in trees, and trialing of physical barriers on trees with the aim of containing koalas within the tree where they are initially located such that they do not wander around an active site and become endangered by forestry operations.
- Started working with a zoologist from Ecoplan Australia to establish koala population densities and investigate koala behaviour in plantation settings including movement of koalas before, during and following harvesting operations.
- Employed a Koala Project Officer (September 2013) whose role is to provide training in koala protection, management and monitoring. This Koala Project Officer, with other trained ABP staff members, has delivered training sessions related to the Koala Protection and Management Plan and Standard Operating Procedures.
- Halted harvesting in coupes with high koala densities and identified a Koala Zone – where koala numbers are known to be high.
 More recent developments in the company's procedures such as use of dedicated and independent spotters are allowing ABP to return to harvest in the Koala Zone

- while maintaining a low risk of injury to koalas.
- Improved the process of reporting koala incidents and established improved post-harvest surveys to specifically include notes on the health and welfare of any koalas observed on a harvested site including any proposed plan for follow-ups. This new procedure has resulted in further changes in practice for example, the halting of post-harvest burning operations until procedures can be improved to minimize the risk of harm to koalas.
- Improved ongoing monitoring of koalas, and the sharing of information related to monitoring via the ABP website.

ABP's FSC certificate is reinstated effective 8 April 2014. The company will continue to be audited annually by the Rainforest Alliance to ensuring ongoing conformance with the standard. The next annual audit is expected to take place in late May 2014.

18. Abbreviated Time Line **2000** – **2014**

May 9 2000: Koalas listed under US Endangered Species Act

May 27 2000: FSC Auditors witness koala perched in tree on edge of Strzelecki clearfell. http://hancockwatch.nfshost.com/docs/logging_practices_update-281000.htm

May 29 2000: Latrobe City Council steps ups efforts to get Strzelecki Koala listed as an endangered species.

Oct 2 2000: Memorandum of Understanding between Hancock Victorian Plantations and Australia Koala Foundation – Field studies to determine Strzelecki Koala population with Koala Habitat Atlas to be produced. Five major North American Zoos also participating.

2002: Susie Zent/Friends of Gippsland Bush begins preserving koala ears for future DNA analysis.

September 2002: Prime koala destroyed – Jeeralangs/Strzelecki Ranges by Hancock Victorian Plantations. http://hancockwatch.nfshost.com/docs/oct02.htm

October 2002: Prime koala habitat destroyed by Hancock Victorian Plantations on Jeeralang West Road Strzelecki Ranges. http://hancockwatch.nfshost.com/docs/oct02.htm

July 30 2003: 3000 female koalas at Mount Eccles to receive contraceptive implant under skin. Population at Mount Eccles estimated to be 10,000. This option seen as better than sterilization which had been used in the past, but had a high mortality rate. 65% of trees at Mount Eccles had less than half their canopy cover.

January 2004: Budgeree Road/Strzelecki Ranges, road widening controversy appears – linked to TIRES road funding. http://hancockwatch.nfshost.com/docs/04jan.htm

March 2004: Bluegum native forest cleared by Hancock in Middle Creek catchment/Strzelecki Ranges. http://hancockwatch.nfshost.com/docs/04march.htm

April 2004: Koala habitat destroyed by Hancock Jeeralangs/Strzelecki Ranges. http://hancockwatch.nfshost.com/docs/04april.htm

September 2004: Prime koala habitat logged by Hancock in Jeeralang Creek East Branch/Strzelecki Ranges. http://hancockwatch.nfshost.com/docs/04sep.htm

October 2 2004: \$500,000 fertility control program, contraceptive implants announced by Minister John Thwaites. Nearby population at Tower Hill had received implants over past 6 years and their had been no koala conceptions during that time.

March 23 2005: Australia Koala Foundation and plantation companies announce project to determine whether blue gum plantations act as corridors and buffer zones in poorly degraded habitat areas.

July 2005: Prime Koala habitat logged by Hancock Victorian Plantations – Bennett's Creek/Strzelecki Ranges. http://hancockwatch.nfshost.com/docs/05aug.htm

September 2005: Friends of the Earth publish Koala mapping project in Strzelecki Ranges.

October 2005: Road-widening controversy Budgeree Road South Gippsland. Victorian Civil and Administrative Tribunal rule that several hundred trees (damp forest habitat) can be cut down. Road widening largely for the benefit of the plantation industry.

November 29 2005: Starving koalas from Tower Hill being found in nearby beaches and towns (Port Fairy and Purnim), as food sources decline at Tower Hill and koala numbers increase.

October 2006: Hancock log prime koala habitat at Snakeback Track/Strzelecki Ranges. http://hancockwatch.nfshost.com/docs/06nov.htm

January 2008: Hancock log prime koala habitat at Grey Gum Track/Strzelecki Ranges. http://hancockwatch.nfshost.com/docs/08jan.htm

May 2008: Hancock log prime koala habitat Dubois Track/Strzelecki Ranges. http://hancockwatch.nfshost.com/docs/08may.htm

June 2008: AKF release report Use of Blue Gum Plantations by Koalas. The key findings of the study were: 1) No koala activity was found in Blue Gum plantations when there was no koala activity in adjacent native forest. 2) When koala activity was detected in adjacent native forest, it was almost always greater in the native forest than in the Blue Gum plantation. 3) Plantation age, size and average dbh (diameter at breast height) of trees were weak predictors of the use of Blue Gum plantations relative to adjacent native forest.4) Within plantations, koalas were more likely to use large blue gums close to native forest than small blue gums far from native forest.

September 4 2008: Courier Mail (Queensland) article stated that blue gum plantations can play a role in helping the koala better survive. The Australia Koala Foundation report *Use of Blue Gum Plantations by Koalas* report found fears that large populations of koala's are likely to inhabit plantations and destroy them is false. Instead they are more than likely to move through plantations to get to other areas of native forest. Australian Koala Foundation chief executive officer Deborah Tabart said the survey would also help guide the timber industry in managing koalas' in their plantations.

"The last thing people want is a whole lot of koalas' in a plantation before it gets logged, so this report basically says they aren't a threat to that," she said.

December 2008: Prime koala habitat logged by Hancock. Jefferey Creek/Strzelecki Ranges. http://hancockwatch.nfshost.com/docs/08dec.htm

February 2/3 2009: Sam the Koala burnt during CFA Burn off near Mirboo North.

February 9 2009: 40% of Strzelecki Koala primary habitat burns in bushfires. http://hancockwatch.nfshost.com/docs/09feb.htm February 2009: Hancock log prime Koala habitat at College Creek/Strzelecki Ranges. http://hancockwatch.nfshost.com/docs/09feb.htm

February 11 2009: Sam the Koala makes Global News.

August 6 2009: Sam the Koala dies.

November 8 2009: Article published in Age regarding people cutting off the ears of dead koalas for DNA analysis.

December 16 2009: The International Union for Conservation of Nature states that koalas are vulnerable to climate change. More carbon dioxide in the air means less nutritional value in gum leaves.

February 13 2010: Sam the Koala revealed as being an imposter, report published online suggests that the issue was an elaborate hoax. http://www.smuggled.com/Koala_Sam_Is_A_Fake_An_Imposter_and_Fraud.htm

June 2010: Regenerating Blue gums poisoned by Hancock at Kelly Track/Jack River/Strzelecki Ranges. http://hancockwatch.nfshost.com/docs/10june.htm

March 8 2011: Scientific paper published by the University of Sydney (Tristan Lee) confirms work done in the 1990's by Barbara Houlden that the koala population in the Strzelecki Ranges has a genetic background which differs from other koalas in Victoria. Much of the DNA was collected from sampled ears.

August 1 2011: Senate Enquiry hears that a Victorian population of koalas is being threatened by logging, a Senate inquiry has heard. Friends of the Earth is calling for the Strzelecki Koala to be recognised as a threatened species because its natural food source is being eroded by logging.

September 2011: CRC for Forestry Technical Report 215 claim that the koala is known to use eucalypt plantations and feed on young blue gum trees when plantations are adjacent to remnant native vegetation. As koalas strongly prefer large eucalypt trees, it is unlikely that they use young eucalypt plantations as primary habitat. Rather, speculate that koalas use blue gums as an extension of their range – reiterating earlier claims by the AKF.

September 22 2011: Friends of the Earth and Friends of Gippsland Bush today announce that they were disappointed with recommendations made by the Senate Standing Committee on the Status, Health and Sustainability of Australia's Koala Population. The recommendations did not include listing of the Strzelecki Koala.

April 16 2012: \$600,000 granted by Victorian State Government to Friends of Strzelecki Koala/South Gippsland Landcare Network. A large portion of Strzelecki Koala habitat lies within the electoral boundaries of Deputy Premier Peter Ryan. (Fencing, weed control, and revegetation will be the main benefactors from the funding).

May 1 2012: FEDERAL Environment Minister Tony Burke increases protection of koalas in northern states (Queensland, New South Wales, ACT), but come under fire for not extending the threatened species listing to a population in Victoria's Strzelecki Ranges.

August 21 2012: ABC highlights koala over population at Cape Otway in Victoria, where large areas of Manna Gum forests are dying off.

September 19 2012: Department of Sustainability and Environment meet with bluegum plantations to relay concerns about koalas in south western Victoria. Wildlife carers report animals being killed during logging. This is the first public appearance of the issue – first published in the Warrnambool Standard, 10 months prior to the issue going national.

July 22 2013: ABC 7.30 Report airs Koala's Cry at Timber's Threat regarding koala deaths in blue gum plantations in South Australia and south western Victoria. Company highlighted was Australian Bluegum Plantations.

July 24 2013: Timber industry plays down concerns over koala deaths. An estimated 8000 koalas in blue gum plantations in Victoria's south west.

July 25 2013: Mount Gambier based wildlife rescuer calls for independent regulation of the issue.

October 14 2013: Industry wide policy guidelines adopted by all Victorian Association of Forest Industries members that commit to protect koalas in blue gum plantations . 30 members of the Green Triangle Regional Plantation Committee also sign up to the new guidelines.

October 2013: Koala deaths and injuries reported at Willung, Gippsland after logging in bluegum plantation.

October 28 2013: Australian Bluegum Plantations, loses Forest Stewardship Council certification over the koala controversy.

October 29 2013: Australian Bluegum Plantations apologises for killing koalas and suspends operations in areas known to have high koala populations – areas between Port Fairy and Heywood.

October 31 2013: Petition signed by 83,000 and organised by German based Rainforest Rescue people delivered to Victorian State Government concerning koala deaths in plantations.

November 11 2013: Koori Elder calls for Koala culls at Framlingham State Forest, due to over population and lack of vegetation.

November 18 2013: First Strzelecki Koala count started, implemented by NSW Parks and Wildlife Service. Over 160 sites counted for koala pellets between November and July 2014.

December 2013: Hancock Watch repeat claims of koala deaths at Willung blue gum plantations. http://hancockwatch.nfshost.com/docs/13dec.htm

January 4 2014: Wildlife rescuer argues that koala sterilisation will have to occur in the South West, if alternative habitat cannot be found. Claims of tens of thousands of koalas in bluegum plantations in the Green Triangle region.

February 17 2014: Victorian Government rejects nomination for Strzelecki Koalas under Flora and Fauna Guarantee Act and recommends pursuing listing under Federal EPBC Act.

April 8 2014: Australian Bluegum Plantations has their Forest Stewardship Council certification reinstated.

June 2014: Hancock log key koala habitat at Snakeback Track/Strzelecki Ranges. http://hancockwatch.nfshost.com/docs/14june.htm



Koala claw marks on remnant Stringybark inside Bluegum plantation.