

# Kangaroo Island Koala Management Project

## Frequently asked questions

Who is responsible for managing koalas on Kangaroo Island (KI)?

Under the *South Australian National Parks and Wildlife Act 1972* the Department of Environment and Water (DEW) is responsible for the protection and management of native wildlife, rather than the KI Natural Resources Management (NRM) Board whose legislative mandate is derived from the *Natural Resources Management Act 2004*. Natural Resources Kangaroo Island currently receives funding from the State Government, through DEW, to manage koalas on the Island.

What is the aim of the KI Koala Management Project?

To reduce koala damage to trees by reducing koala numbers to a sustainable density (estimated 0.75 koalas per hectare).

How many koalas are there in the native vegetation versus in the blue gum plantations?

In 2015 there was an estimated 25,000 koalas in native vegetation on KI and an additional 23,000 koalas in commercial blue gum plantations. These estimates are being further investigated using spatial modelling by the University of Adelaide.

What population modelling have you previously used to guide management and how does this differ from what is now being undertaken?

In the past, the project has relied on logistic modelling. Advances in technology have allowed a spatial model to be developed that is able to incorporate more detailed information at a landscape scale and investigate drivers of population density change. This modelling is still underway by the University of Adelaide.



Are certain parts of the island more affected than others by koala over browsing?

The Dudley Peninsula still remains free of koalas. Areas with the most impacts are along the Cygnet River, Eleanor Creek, Timber Creek, Harriet River and upper Middle River catchment areas.

4. How many koalas have been sterilised or contracepted on Kangaroo Island — and how long has this program been running for?

Since 1996, the program has sterilised/contracepted > 13,500 koalas with >3,800 koala translocated back to their historic range in the south-east of the state. In 2018-19, 423 females koalas received hormone implants to reduce fertility on Kangaroo Island and 149 in the Adelaide Hills area (225 koalas implanted since 2017).



**Natural Resources**  
Kangaroo Island



Government  
of South Australia

Why do you only conduct a census every five years?

Island wide koala surveys are very labour and resource intensive and every five years is considered a suitable timeframe for detecting trends in koala population dynamics. Resources are prioritised for investment in koala management rather than frequent monitoring.

Why don't you shoot them (sterilising them is a waste of money)?

Culling is not permitted as a management option in the *National Koala Conservation and Management Strategy 2009–2014* and the *SA Koala Conservation and Management Strategy 2016*. The reasons for this include concerns around animal welfare and Australia's international image and standing as a popular tourism destination.

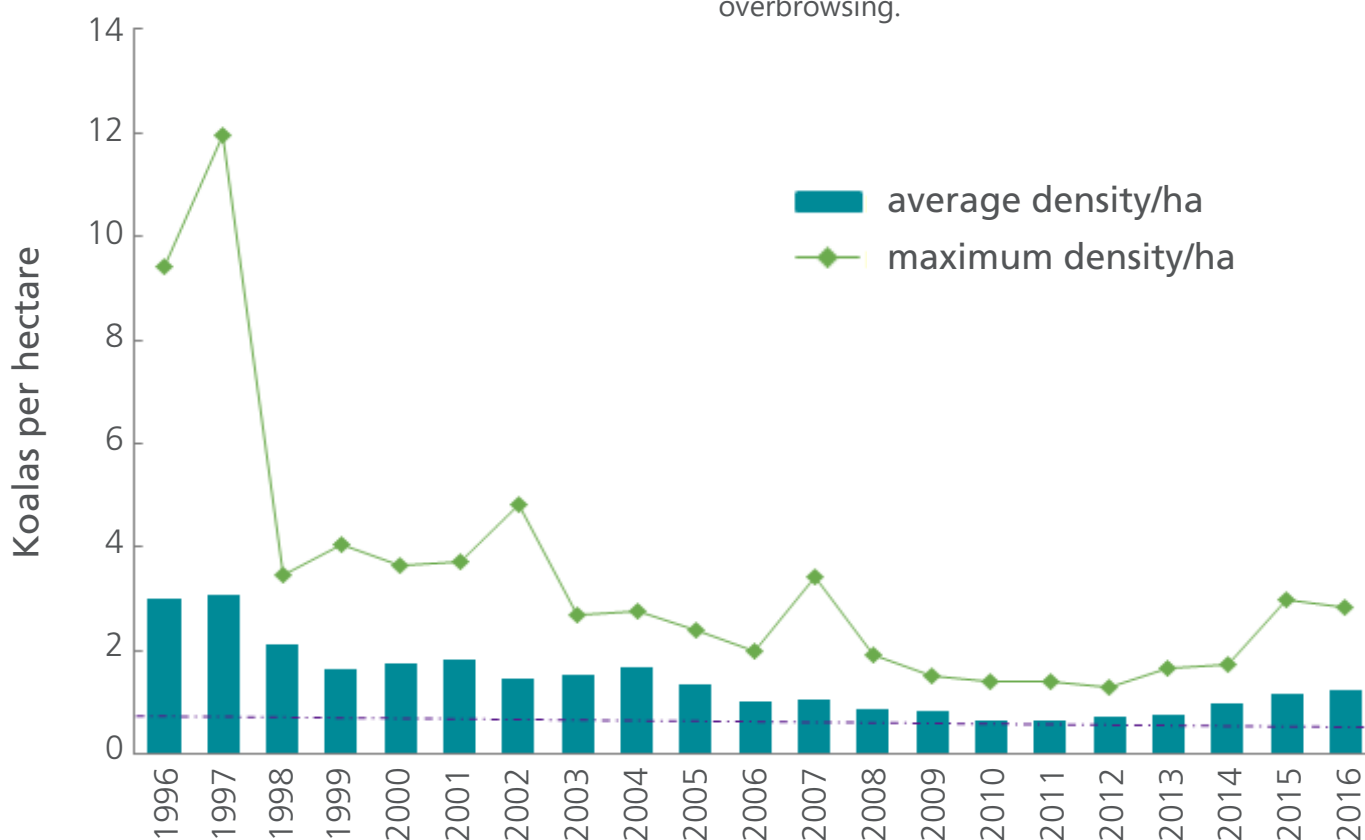
Fertility control has been shown to be effective in the areas it has been focussed with resulting declines in koala density and improved tree condition.

How valid has your management approach to date been given the rise in koala numbers – hasn't it been a waste of time and money?

Koala numbers were reduced from an estimated 27,000 in 2001 to 14,000 in 2010 and the project then went into a maintenance phase in terms of sterilisation rates. A number of other factors have also probably contributed to the recent increase, including an additional food source in the form of blue gum plantations, favourable weather conditions and a lack of drought and fire. These factors are beyond the control of the project. Koala populations are known to double every four years in the right conditions. Numbers would have been a lot higher today if sterilisation hadn't taken place and significant over-browsing would have occurred in densely populated areas had koalas not been managed.

Has tree condition improved since koala management began?

Yes in some areas where koala management has been focussed, such as in the Cygnet River catchment. As well, >15,000 trees have been planted to restore habitats and > 400 large manna gums collared to protect them from koala overbrowsing.



Above: Average and maximum koala density in the Cygnet River catchment

## What is the conservation status of koalas?

Koalas are a protected species under the *National Parks and Wildlife Act 1972* and are considered to be abundant in South Australia.

In Australia, koalas have two different conservation statuses depending on where they live. Northern koalas are considered to be vulnerable and southern are not.

In April 2012, following a Senate Inquiry into their status, health and sustainability, the Federal Environment Minister announced that Australia's most at risk koala populations in Queensland, New South Wales and the Australian Capital Territory would be listed as 'vulnerable' to extinction under the national *Environment Protection and Biodiversity Conservation Act 1999*.

The Federal Government is currently developing a recovery plan for these koala populations. Koalas in South Australia and Victoria were excluded from the listing because of their population abundance in these states. Koalas are rated as of least concern in SA because their traditional range was in the South East and they have now been introduced into other areas of the state.

## Why not move koalas from Kangaroo Island to other regions in Australia?

The South Australian Government does not generally support the translocation of koalas as a primary management tool. Translocation is expensive and much of the available habitat in Australia already contains koalas. There can also be no guarantees that individual koalas will survive or adjust well to a new habitat.

It is also important to note that the koalas found in South Australia and Victoria ("southern" koalas) have adapted to a cooler climate and are therefore heavier and have thicker fur than their northern counterparts in Queensland. Southern koalas also eat different species of Eucalypt and because koala joeys receive their food preferences (via gut flora) from their mothers, they may not be able to digest Eucalypts from other locations. For these reasons koalas from South Australia would be placed under great stress and would be unlikely to survive if they were translocated to Queensland.



Above: Drones have been trialled as a method to detect koalas in blue gum plantations.

## Why don't you provide koalas to zoos?

As with translocation, exporting koalas is an extremely difficult process that is regulated by national and state legislation. The zoo receiving the koalas must ensure they can look after the animals from birth and have the appropriate Eucalypt species available as feed, as the diet of the mother is a key consideration for raising koala joeys. Koalas have specific needs and do not adapt easily to captivity.

The DEW can, and has, transferred wild koalas into captivity within South Australia. The DEW also has a policy in place to guide the transfer of rescued joeys from carers into wildlife parks/zoos via a tender system.

## What has the cost of the Kangaroo Island Koala Management Project (KIKMP) been to date?

\$9.2 million for the last 23 years of koala management on the Island.



## Has there been adequate resourcing for the project?

Yes — the resourcing has been adequate, the population was halved between 2001 and 2010. Based on the 2010 census results the project entered a maintenance phase as koala densities were in decline. However, a review is now underway to determine appropriate fertility control targets and future resourcing.

## Why are koalas difficult to see in the landscape even though their numbers are high?

Koalas can be difficult to detect. Their coat blends in well against the bark of trees and gum leaves. Much of the high quality and populated koala habitat is on private land or is difficult to access.

## Do possums pose an additional problem that exacerbates koala impacts?

In some situations possums may heavily impact trees. Impacted trees are likely to benefit from a period of no browse pressure to enable them to recover. Possum activity appears to be a secondary driver of tree decline rather than a primary driver.

## Why didn't you count the koalas in the blue gum plantations before the 2015 census?

While the focus of the project is on protecting native vegetation, koalas have been counted in plantations at a few sites since 2010, once the trees were large enough to become koala habitat. During the following years koalas were at low numbers in the plantations but have increased significantly more recently. In 2015, resources were redirected from monitoring native vegetation to expand the number of monitoring sites in plantations to 19.

It is currently estimated about 23,000 koalas reside in blue gum plantations on the Island however, their distribution in plantations is so patchy that confidently estimating a population size is difficult. In 2016 researchers from the University of Adelaide trialled using drones to count koalas. The technique was found to be effective but the cost of using drones to estimate population size in the plantations is still being determined.

## Why haven't you managed koalas in the blue gum plantations?

Koala management and census activities did not initially take place in timber plantations because:

- » electric fences were in operation around the timber plantations until 2008, which excluded koalas and other native browsers and thus koalas only started to establish themselves properly in the plantations after that point
- » it proved extremely difficult to count koalas in this habitat due to the height of the trees
- » there are operational challenges to catching koalas in the tall, limbless and closely planted trees in blue gum plantations, where standard arborist climbing techniques used in native vegetation cannot be deployed
- » the program's key goal is to protect native vegetation not blue gums.



*Above: A koala in a defoliated tree on Kangaroo Island.*

Are there going to be difficulties — including the injury of koalas — with harvesting the blue gums due to koala abundance in the plantations?

The DEW takes the welfare and protection of all koalas seriously and has documented policies and procedures for the intervention and care of sick or injured koalas. These policies and procedures apply to all koala welfare interventions and are not specific to blue gum harvesting operations. However, DEW has collaborated with Primary Industry and Resources SA, the forest industry and local wildlife carers to develop ways of achieving good management outcomes for koalas, and other wildlife, living in blue gum plantations.

The *South Australian Koala Conservation and Management Strategy 2016* sets achievable actions aimed at specifically reducing the risk of koalas being injured during forestry harvesting. These actions reflect the forestry industry's commitment to support the development of best practice policy and guidelines and their implementation.

Forestry companies across the State will be expected to abide by these policies and guidelines once they are finalised. These are likely to include training for contractors and their staff and employment of 'koala spotters' to locate koalas ahead of harvesting operators and advise of their presence. The DEW will continue to work closely with the industry to finalise the development of these policies and to make sure that they include long-term planning for harvesting operations.

The industry is committed to continual improvement through reviewing new technology and research and changing their practice as appropriate.

The DEW will continue to seek assurance that steps are taken to monitor the welfare of koalas in plantations state-wide, that procedures are put in place for incident management and reporting, and that training programs are delivered to forestry staff on koala behaviour and handling techniques.

The DEW will also encourage an ongoing working relationship with all stakeholders, sharing of information, and the review of koala related blue gum harvesting policy and guidelines on a timely basis.

How many koalas are there in SA?

Contrasting with the eastern states (NSW, Queensland and the ACT), South Australia's koala population has increased in recent years to around 200,000 koalas. South Australia's koala population is at unsustainably high densities in some areas in the Mount Lofty Ranges and on Kangaroo Island.

The population continues to increase at both sites, with around 50,000 on Kangaroo Island and around 150,000 in Mount Lofty Ranges.



*Above left: A manna gum in 2002 suffering from koala over-browse.*



*Above right: The same manna gum regenerating in 2008 following koala sterilisation and translocation from the area.*

How many koalas are targeted for fertility control and over what time period. And why is this happening?

DEW is managing koala populations through fertility control on Kangaroo Island and in the Mount Lofty Ranges, in areas where they occur at unsustainably high densities.

The department is using long-lasting non-surgical contraceptive implants — which are placed under the skin of koalas. The whole procedure including weighing the koala and recording all relevant data, only takes about 10 minutes and can be conducted at the base of the tree with the koala then being released back into its habitat. Base of tree hormone implants are now the preferred method for fertility control in SA, given improved animal welfare outcomes (anaesthetic no longer required) and efficiencies and has replaced surgical sterilisation.

The aim is to reduce koala breeding to a sustainable level to protect native vegetation, and reduce the risk to the koalas themselves of food shortages caused by over-browsing.

What is being done to ensure a sustainable koala population remains in the state?

DEW is continuing to monitor koala densities in key areas of South Australia. DEW is working in collaboration with researchers and other stakeholders to ensure a sustainable koala population continues to thrive with enough food and habitat in the state and has developed a Koala Conservation and Management Strategy to guide action.

DEW has also established the Koala Stakeholder Working group with representatives from different groups/agencies to foster a shared responsibility for koala conservation and management in the state.

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The aim is to reduce koala breeding rates to a sustainable level to protect native vegetation, and reduce the starvation risk to the koalas themselves that can be caused by over-browsing.

Are koalas in South Australia at risk of going extinct?

No. In fact, South Australia's koala population is at unsustainably high densities in some areas of the Mount Lofty Ranges and on Kangaroo Island.

South Australia has only relatively small areas that contain suitable koala habitat with the right mix of preferred food trees. This puts pressure on those areas where koalas are present in high densities, such as in the Adelaide Hills and Mount Lofty Ranges and on Kangaroo Island.

*Below: Koala damage in Flinders Chase National Park.*



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