Victorian Koala Management Strategy



Summary

The Department of Energy, Environment and Climate Action has developed a new Victorian Koala Management Strategy (VKMS).

This fact sheet provides a summary of the VKMS.

Why is a new koala strategy needed?

Victoria's previous Koala Management Strategy was released in 2004. Since that time, new issues impacting koalas have emerged and others have increased in significance including:

- climate change
- major bushfire events
- the establishment of commercial blue gum plantations within the koala's distribution range.

Other issues identified in the 2004 strategy have evolved and there have been scientific advances in some areas, such as genetics. These new and evolved issues and scientific advances need to be reflected in a new strategy.



Photo credit: Marcia Riederer

How was the new strategy developed?

The VKMS has been developed collaboratively with a with a working group that included Traditional Owners, scientists, animal welfare organisations, wildlife carers, the blue gum plantation industry, veterinarians, Zoos Victoria, Phillip Island Nature Parks, Parks Victoria and other Government agencies from Victoria and interstate.

Feedback received from the community during the public consultation period for the draft strategy has also helped to inform the strategy. For more information about the public consultation process or to download a copy of the consultation report, please visit the consultation page on the Engage Victoria website at: <u>http://engage.vic.gov.au/VKMS</u>.

Purpose

The VMKS sets out actions to address koala management issues over the next 10 years.

Vision

The vision for the VKMS is that Victoria's koala populations and habitat are secure, healthy and sustainable in the long-term.

VKMS content overview

The VKMS groups issues relating to koala management in Victoria into ten themes. It discusses previous management approaches and identifies knowledge gaps for each theme. It sets a goal for each theme and includes 1-2 high level actions to address the key issues in the theme.





A summary of the ten themes is provided below, along with a summary of the implementation and monitoring, evaluation, reporting and improvement sections of the VKMS.

Theme 1: Traditional Owners and koalas

Main issues discussed

- The importance of koalas to Aboriginal people in Victoria.
- The inherent cultural right that Aboriginal people have to care for Country.
- The impact that overabundant koala populations can have on culturally significant areas, such as the Budj Bim Cultural Landscape.

Theme goal

Traditional Owner priorities for Country that relate to koalas are supported and the impacts of overabundant koala populations on culturally significant areas are minimised.

Actions

Action 1.1 Partner with Traditional Owners to undertake actions on Country that will benefit koalas or their habitat

Action details	Partners
This action will involve:	DEECA
Working with Traditional Owner groups to understand their priorities for Country	Traditional Owners
and how these could benefit koalas or their habitat.	Parks Victoria
 Linking the implementation of relevant actions in the VKMS to actions in Country Plans to enable the implementation of both the VKMS and Country Plans. 	Universities
	TAFEs
 Establishing partnership arrangements with interested Traditional Owner groups to deliver relevant actions on Country. 	
 Building capacity of Traditional Owners to deliver actions on Country that will benefit koalas or their habitat. 	

Action 1.2 Support Traditional Owners to protect culturally significant areas from koala over-browsing

Action details	Partners
This action will involve:	DEECA
Engaging with Traditional Owners to determine culturally or environmentally	Traditional Owners
significant areas that may require protection from the impacts of overabundant koalas.	Parks Victoria
 Establishing partnership arrangements with Traditional Owner groups to undertake koala management activities on Country including habitat and koala assessment and monitoring, and koala management program planning and delivery. 	
 Building capacity of Traditional Owners to undertake koala and habitat monitoring and koala management programs. 	



Artist: Dixon Patten, Bayila Creative

Theme 2: Koala overabundance

Main issues discussed

- That koalas can reach unsustainable densities in parts of Victoria including Cape Otway, French Island and Raymond Island.
- The impacts that high koala densities have on habitat, koala welfare and other species.
- The methods used to manage overabundant populations and the cost of management programs.

Theme goal

The impacts on ecosystems and koala welfare associated with overabundant koala populations are reduced.

Actions

Action 2.1 At key high-density koala population sites, undertake habitat monitoring to detect change in condition and implement evidence-based management programs to protect habitat and koala welfare.

Action details	Partners
This action will involve:	DEECA
 Identifying sites with high-density koala populations. 	Universities
 Developing and implementing a habitat monitoring program. 	Parks Victoria
 Developing an evidence-based framework for koala management programs that: 	Traditional Owners
 identifies trigger points for intervention prior to significant impacts on habitat or 	Landholders/managers
koala welfare occurring	Vets
 identifies appropriate management interventions for different scenarios that consider habitat, land-use, carrying capacity, koala welfare, disease risk and 	Wildlife carers
genetic management	Blue gum industry
 includes a standard protocol for data collection and management 	
 includes a process for evaluating koala management programs. 	
 Developing a database to store data from management programs that will enable data sharing and data analysis to inform improvements to the koala management framework. 	
 Undertaking koala management programs at high-density populations, as needed, in accordance with the framework. 	
 Exploring the development of regional koala management plans that consider the context of the broader landscape to determine how best to manage koala populations in an area. 	
 Undertaking research into the causes of overabundance and the potential for novel contraceptive methods that have not been used in Victoria. 	
 Supporting re-vegetation projects at impacted sites. 	

Action 2.2 Revise the 2004 translocation protocol.

Action details	Partners
This action will involve:	DEECA
 Reviewing the translocation protocol from the 2004 VKMS to determine what changes are needed, based on the outcomes of previous translocation programs. 	Universities Parks Victoria
 Development of a new translocation protocol that considers: 	Traditional Owners
 minimum habitat requirements and habitat availability for release sites, including identifying areas of suitable habitat that can be used as release sites 	Vets
 expertise of personnel involved in the translocation 	Wildlife carers
 disease risk 	
- genetics	
 selection of individuals for translocation 	
 translocation methods including capture, handling, transport and release requirements and equipment 	
 post-release monitoring requirements 	
 data recording requirements 	
 community consultation requirements 	
 requirements for future planned burns near release sites 	
 guidance for relocation of koalas following bushfires. 	
 The new translocation protocols will be used to inform koala conservation and management activities. 	



Theme 3: Koala rehabilitation

Main issues discussed

- That sick, injured and orphaned koalas need specialist care and facilities to be successfully rehabilitated.
- The limitations of the current Victorian wildlife rehabilitation system in relation to koalas.
- The issues associated with koala rehabilitation following the 2019-20 bushfires.

Theme goal

The standard of care for koalas requiring rehabilitation is improved.

Actions

Action 3.1 Develop standards for koala rehabilitation to encourage a consistent, best practice approach to koala rehabilitation across the state.

Action details	Partners
This action will involve:	DEECA
• Engaging with vets, animal welfare experts, Zoos Victoria, wildlife carers and	Zoos Victoria
Animal Welfare Victoria to finalise the standards of care for koala rehabilitation. The standards may include guidance on topics such as:	Vets
 minimum training/experience requirements 	Animal welfare experts
 facilities and equipment 	Wildlife carers
 koala triage assessment 	Animal Welfare Victoria
 capture and handling 	
– treatment	
 feed requirements 	
 preparation for release 	
 pre-release assessment 	
 release protocols 	
 post-release monitoring protocols 	
 record keeping. 	
 Supporting post-release monitoring where possible to investigate the success of rehabilitation. The information gained will be used to further refine the standards of care. 	

Theme 4: Koala genetics

Main issues discussed

- The low genetic diversity observed in some Victorian koala populations and the reasons for this.
- The impacts that low genetic diversity can have on a population and techniques for improving genetic diversity.
- The higher genetic diversity found in the South Gippsland koala population.
- The gaps in our understanding of the genetic diversity of Victoria's koala populations.

Theme goal

Understanding of the genetic structure of koala populations in Victoria is increased to aid conservation of Victoria's koalas.

Actions

Action 4.1 Undertake state-wide genetic surveys of Victorian koala populations.	
Action details	Partners
This action will involve:	DEECA
Developing and implementing a genetic survey program to better understand:	Universities
 the genetic diversity of koala populations across Victoria 	Vets
 the significance and spatial boundaries of the unique Strzelecki/South 	Wildlife carers
Gippsland genome	Traditional Owners
 whether other populations of genetic significance exist 	Parks Victoria
 the level of gene flow between populations 	Landholders/managers
 population structure 	Blue gum industry
 disease prevalence. 	General public
 Samples for the genetic surveys will be taken in both a targeted way and opportunistically, for example during koala management programs or when a koala requires veterinary treatment. 	
• The genetic surveys may be conducted concurrently with disease surveillance (Action 5.1) and koala population monitoring (Action 7.1).	
 The genetic surveys will be conducted across all land tenures where permission is granted. 	

Action 4.2 Develop a genetic management plan for Victorian koalas.	
Action details	Partners
This action will involve:	DEECA
• Developing a genetic management plan for Victorian koala populations, based on the results of the genetic surveys undertaken for Action 4.1.	Universities
 The genetic management plan will be developed by a geneticist and will be used to inform koala management programs. The plan will consider approaches such as gene flow augmentation and translocation between states. 	

Theme 5: Disease in koalas

Main issues discussed

- The diseases that can affect koalas and the available treatment options.
- Known disease prevalence in Victorian koalas.
- The gaps in our understanding of disease prevalence and impact on Victorian koalas.

Theme goal

The health status of koala populations in Victoria is better understood to inform koala conservation and management activities.

Actions

Action 5.1 Develop and implement a systematic koala disease surveillance program across Victoria that will enable early detection of new diseases and ongoing monitoring of established diseases.

Action details	Partners
This action will involve:	DEECA
Developing and supporting a systematic koala disease surveillance program that	Universities
includes clinical sign/syndromic reporting of koala health observations (which may trigger sample collection or field investigation), submission of samples for targeted	Vets
disease testing and pathological examination of dead koalas. The surveillance	Wildlife carers
program will:	General public
 provide disease diagnosis, disease agent identification and will allow early detection of new or previously un-detected diseases and ongoing monitoring of 	Traditional Owners
established or endemic diseases	Parks Victoria
 be distributed across the state to represent key koala populations 	Zoos Victoria
 be collaborative and obtain data and samples from a variety of sources including keels management programs, wildlife sources, yets, researchers and 	Landholders/managers
including koala management programs, wildlife carers, vets, researchers and the general public	Blue gum industry
 have an iterative design and be updated with new knowledge and recommendations from Disease Risk Analyses. 	
 Reviewing and building on existing wildlife disease surveillance networks in Victoria. 	
Reporting disease surveillance into existing wildlife health databases.	
 Developing and distributing information to assist people identify and report diseased koalas. 	
 Using the information gained through the disease surveillance program to inform koala conservation and management activities. 	
• Disease surveillance may be conducted concurrently with the genetic surveys (Action 4.1) and koala population monitoring (Action 7.1).	

Action 5.2 Review the National Koala Disease Risk Analysis (DRA) to identify priority diseases, effective mitigation strategies and knowledge gaps for Victoria	
Action details	Partners
This action will involve:	DEECA
Undertaking a review of the National Koala DRA to determine the priority diseases	Universities
and effective mitigation strategies for Victoria.	Vets
 Considering whether there are different factors in Victoria that may impact disease that were not considered in the National Koala DRA that warrant an additional DRA process to fill the knowledge gaps. Factors to be considered may include: 	Australian Government
 genetics and connectivity between populations 	
 population density and population trends 	
 habitat and land-use 	
 climate change predictions 	
 environmental contaminants 	
 different strains of infections present in Victoria. 	
Using the DRA results to inform koala conservation and management activities.	



Theme 6: Habitat conservation

Main issues discussed

- The causes of habitat loss in Victoria.
- The impact of habitat loss and fragmentation on koalas.
- The impact that overabundant koalas can have on habitat.
- The need for a joint approach to habitat protection and management across land tenures.

Theme goal

Koala habitat is conserved and initiatives to increase and connect habitat are supported.

Actions

Action 6.1 Develop a comprehensive koala population and habitat decision support tool for Victoria to inform koala and habitat management activities, including koala translocation programs, fire management and habitat protection and restoration.

Action details	Partners
This action will involve:	DEECA
 Using the results of koala population surveys to develop koala population distribution maps and population models. 	Universities
 Undertaking koala habitat modelling to develop koala habitat maps and determine habitat availability. 	
 Developing the decision support tool that can be used to identify: 	
 priority areas of habitat for protection or restoration 	
 potential climate refuge areas 	
 koala populations at high risk of requiring management to protect habitat 	
 potential translocation release sites. 	

Action 6.2 Develop and support initiatives to increase the extent of koala habitat and improve habitat connectivity.

Action details	Partners
This action will involve:	DEECA
Identifying areas where koala habitat should be increased, or habitat connectivity	Councils
improved.	CMAs
 Working with Councils, CMAs, NGOs, Landcare, Traditional Owners, Parks Victoria, landholders/managers, the blue gum industry, community groups and the 	NGOs
community to develop and support initiatives to increase the extent of koala habitat	Landcare
and increase habitat connectivity.	Traditional Owners
 Providing information to landholders about how to increase koala habitat, including which tree species to plant. 	Parks Victoria
	Landholders/managers
	Blue gum Industry
	Community groups
	General public



Theme 7: Understanding koala populations

Main issues discussed

- The reasons why it is important to understand koala population dynamics.
- Koala population survey methods.
- Our current understanding of Victoria's koala populations.

Theme goal

Knowledge of the size and distribution of Victoria's koala populations is improved to inform koala conservation and management activities.

Actions

Action 7.1 Establish a long-term state-wide monitoring program to improve knowledge of koala population distribution, abundance and population trends.

Action details	Partners
This action will involve:	DEECA
 Developing a koala population monitoring program, which may involve a citizen 	Universities
science component.	Australian Government
 Surveying koala populations throughout Victoria, including lower-density inland populations and the Strzelecki/South Gippsland populations. 	CSIRO
	Traditional Owners
 Implementing the monitoring program across all land tenures where permission is granted. 	Parks Victoria
 The monitoring program will complement the National Koala Monitoring Program (NKMP) established by the Australian Government and the CSIRO. 	Landholders/managers
	Blue gum industry
 The monitoring program may be conducted concurrently with the genetic surveys (Action 4.1) and disease surveillance (Action 5.1). 	General public
 Results from the monitoring program will be published and made available to the NKMP and the community. 	Community groups

• Results from the monitoring program will be used to inform koala management programs and habitat protection and restoration activities.



Photo credit: Marcia Riederer



Theme 8: Climate change and managing fire impacts

Main issues discussed

- The reasons why koalas are particularly vulnerable to climate change.
- Predicted impacts to koalas from climate change.
- The impact of bushfires on koalas.
- The Fire Analysis Module for Ecological values (FAME) tool used for planned burns.

Theme goal

The potential impacts of climate change and bushfires on Victoria's koala population are understood and actions are taken to mitigate them.

Actions

Action 8.1 Use existing climate change models to better understand what a changed climate means for koalas and habitat across the whole of Victoria.

Action details	Partners
This action will involve:	DEECA
 Identifying existing climate change models that are relevant to koalas and koala habitat. 	Universities
 Determining if refinements to the models are required and undertaking these refinements. 	
 Considering how the predictions from the models can be incorporated into koala management programs and habitat protection and restoration activities. 	
 The models will be used to identify potential climate refuge habitat, to better understand predicted koala responses to drought and increased temperature, to understand potential impacts to koala habitat from climate change and to identify potential mitigation strategies. 	

Action 8.2 Use koala population data to inform planned burning activities and the wildlife welfare response during bushfires.

Action details	Partners
This action will involve:	DEECA
Using koala population data to inform:	Parks Victoria
 planned burning activities 	Wildlife carers
 standard mitigations during planned burning activities, such as designation of wildlife welfare arrangements 	Vets
 the wildlife welfare response initiated during bushfires. 	

Theme 9: Koalas in blue gum plantations

Main issues discussed

- The impacts on koalas from the establishment of commercial plantations within the koala's distribution range in south-west Victoria.
- The regulatory framework that has been introduced to reduce the impacts of plantation management operations on koalas.
- The improvements the industry have made to their practices to protect koala welfare.

Theme goal

Impacts to koala welfare from blue gum plantation harvesting continue to be minimised.

Actions

Action 9.1 Investigate options to manage koala populations in blue gum plantations that protect koala welfare and ensure the industry remains viable and can continue to operate.

Action details	Partners
This action will involve:	DEECA
Considering a range of factors to determine options to manage koala populations in	Blue gum industry
blue gum plantations.	Universities
Factors to be considered include:	
 results of koala population surveys 	
 habitat availability modelling 	
 industry knowledge and experience 	
 technology and infrastructure options available 	
 cost implications. 	

Action 9.2 Investigate options to manage the impact of koala displacement on koala welfare and other values and incorporate them into management.

Action details	Partners
This action will involve:	DEECA
 Undertaking research to better understand koala movement from plantations following harvesting and associated impacts on koala welfare and other values. Identifying and assessing potential options to manage these impacts. 	Blue gum industry
	Universities
	Landholders/managers
	Wildlife carers
	Vets



Theme 10: Community perception and socioeconomic significance

Main issues discussed

manage koalas and koala habitat.

- The importance of koalas to the Australian and international community and the impact this has on koala management.
- The public's perception of the status of Victoria's koala populations.
- The importance of involving the community in koala management activities.

Theme goal

The community has a greater understanding of the complexity of managing Victoria's koala populations and are supported to contribute to koala conservation and management.

Actions

Action 10.1 Develop and implement a community and stakeholder education and engagement program that promotes the VKMS and the issues it addresses.

Action details	Partners
This action will involve:	DEECA
 Working with experts in communications, behavioural science, ecology and animal welfare to develop and implement an education and engagement program about the VKMS and the issues it addresses. 	Universities
	Vets
	Traditional Owners
	Wildlife welfare organisations
	Wildlife carers
	Communication experts
	Blue gum industry
	Councils
	CMAs
	Schools
	Community groups
	General public

Action 10.2 Increase opportunities for community involvement in koala conservation and management.

Action details	Partners
This action will involve:	DEECA
 Identifying active community-based koala conservation and management programs 	Traditional Owners
so that existing efforts can be supported.	Councils
 Identifying new opportunities for community involvement in koala conservation and management activities, for example: citizen science surveys, ongoing monitoring and revegetation. 	CMAs
	Parks Victoria
 Facilitating community involvement in these activities and supporting communities to conserve and manage koalas in their local area. 	Community groups
	General public
 Providing information to the community about how they can help to conserve and 	

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Implementation

The delivery of the actions in the strategy is the responsibility of DEECA in partnership with Traditional Owners, public and private landholders and managers, Parks Victoria, Zoos Victoria, Local Government, Catchment Management Authorities, universities, the blue gum plantation industry, wildlife carers, vets, conservation and community groups, and the Victorian community.

A separate implementation plan for the strategy has been developed by DEECA and will be published on DEECA's wildlife website at: <u>https://www.wildlife.vic.gov.au/our-wildlife/koalas</u>. The implementation plan outlines how each of the actions will be delivered, the timing of their delivery and who will be involved. The implementation plan will be a live document and will be updated as needed throughout the life of the strategy.

Action 11.1 Establish a working group that includes government and non-government representatives to facilitate the delivery of actions in the VKMS and monitor its implementation

Action details	Potential working group members
This action will involve:	DEECA
 Identifying and engaging government and non-government representatives to be part of a working group that will be responsible for: 	Traditional Owners
	Parks Victoria
 assisting in the development of a monitoring, evaluation, reporting and improvement framework 	Zoos Victoria
 facilitating the delivery of actions in the VKMS 	Animal Welfare Victoria
 monitoring the delivery of actions and progress towards the strategy's goals 	Wildlife carers
 publishing progress reports on the delivery of the strategy. 	Wildlife welfare organisations
	Blue gum industry
	Melbourne Vet School
	Universities
	CMAs
	Local Government

Monitoring, Evaluation, Reporting and Improvement

The working group that will be established under Action 11.1 will help monitor the delivery of the actions in the strategy. A monitoring, evaluation, reporting and improvement (MERI) framework will be developed by DEECA in collaboration with the working group. The MERI framework will measure the success of individual actions and identify how each contributes to the strategy's goals and vision.

The strategy will be reviewed after it has been in place for two years to assess progress towards delivering the strategy's vision, goals and actions. The review will also determine the priority actions for the next phase of delivery. A further review schedule for the strategy will be determined by the working group.

The review schedule and reports on the progress made towards delivering the strategy will be published on DEECA's wildlife website at: <u>https://www.wildlife.vic.gov.au/our-wildlife/koalas</u>.

Where to find out more about the VKMS

For more information about the VKMS or to download a copy of the strategy or implementation plan, please visit DEECA's wildlife website at: https://www.wildlife.vic.gov.au/our-wildlife/koalas.

For more information about the public consultation process for the draft VKMS or to download a copy of the consultation report, please visit the consultation page on the Engage Victoria website at: http://engage.vic.gov.au/VKMS.

If you have questions about the VKMS, please contact DEECA's Wildlife Policy Team at: wildlife.policy@delwp.vic.gov.au.



Artist: Dixon Patten, Bayila Creative

Art Narrative:

This artwork is titled: kula karan bulam bulam, which means 'Koala amongst plenty of trees' in Gunnai Language. The koala's natural habitats are under threat, this artwork encourages our connection to Country and our responsibilities to caring for our environment(s). The circle motifs depict us coming together to play our part in education and conservation, which has a ripple effect beyond our place and time. The 6 gum leaves around the circle depict our 6 seasons and acknowledging such things make us aware of how to adapt and work with the environments in a purposeful way.

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