



# Actions for Biodiversity Conservation

## *Conserving threatened species and communities in Victoria*

### Introduction

The Actions for Biodiversity Conservation (ABC) is an information system that has been designed and built by DSE to store information on the management of threatened species, communities and threatening processes across Victoria. It was first implemented in 2004 and currently contains information on approximately 400 species and communities at 2000 locations across Victoria.

ABC clearly identifies **what** has to be done **where** and by **whom**, in order to conserve a species or community. The system is based on:

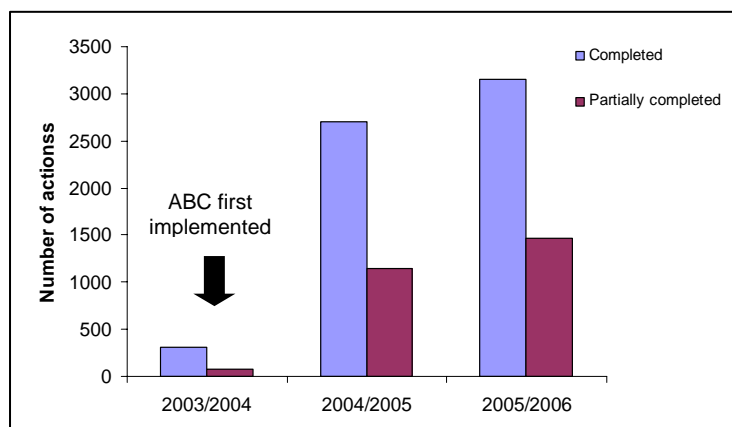
- items (species, communities or threatening processes)
- locations
- threats
- objectives
- actions
- organisations and individuals who carry out actions
- results.

ABC stores information about each of these elements to allow for a range of extracts, analyses and reports to be prepared.



### Benefits of the ABC approach

Information within the ABC provides land and water management agencies with a means to review their priorities and progress. Previously the focus was on managing individual species prioritised according to their conservation status. The ABC provides a landscape-based approach to management. Actions that benefit more than one species at a given location are readily identified and implemented. While it may not be possible to complete every action required for threatened species each year, the ABC framework can help maximise the outcomes achieved for biodiversity.



### Measuring progress

The number of actions recorded and completed has greatly increased over time, as illustrated by the graph at left. Analysis of information in the ABC can indicate the progress and focus of management actions as well as assist in developing strategic directions for the future.

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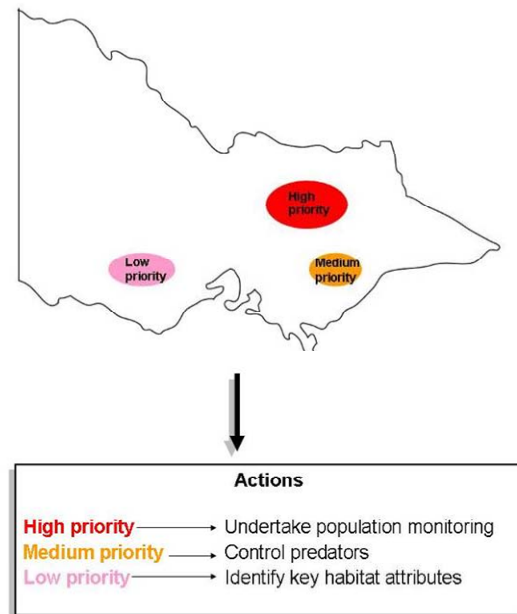
The key steps for conserving threatened species and communities within ABC are:

## 1. Identify locations and assign priorities

Each species or community has one or more locations identified as important for its management. These locations are prioritised according to their importance in conserving the item: a **high priority location** is one that provides the best opportunity for long term survival of the species or community, because (for example) it supports a large, healthy population within a large area of habitat in good condition.

## 2. Identify and prioritise threats and actions

One or more management actions are assigned at each location identified for a species or community. These actions can be drawn from the full range of management activities. Each action is prioritised: a **high priority action** is one that, if implemented, would contribute most to reducing the risk of further decline or extinction of the population, either directly or by protecting, enhancing or restoring its habitat.



## 3. Record and report on activity

An annual review of actions is undertaken for all species and communities in the ABC. The implementation of actions scheduled for the past year is reported by DSE and actions for the coming year are reviewed. The pie chart shown here is an example of how ABC reports could be used to demonstrate progress in undertaking and completing different classes of actions.

## 4. Estimate conservation trends and explore management effectiveness

We manage threatened species and communities in order to arrest their decline and, ultimately, to recover them to a viable state. During this process, we need to know whether the overall level of threat is declining and whether the population or its habitat is improving. By estimating the trends based on measured data and expert opinion, we can report on individual populations or aggregate the trends across different areas and/or different species to provide a useful high level indicator of progress.

If we then include information on management activity, we begin to assemble a picture of management effectiveness, where the observed or estimated trends can be related to patterns of management activity. While this doesn't prove that the action we have taken has produced a particular outcome, it provides prima facie evidence which can then be verified under more controlled circumstances, such as in an adaptive experimental management program. ABC is currently being developed to accommodate trend information and to link it to management information using a modelling approach based on Bayesian Belief Networks.

## Further information

For further information, please contact the ABC Team:

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