

Invasive animals on Crown Land



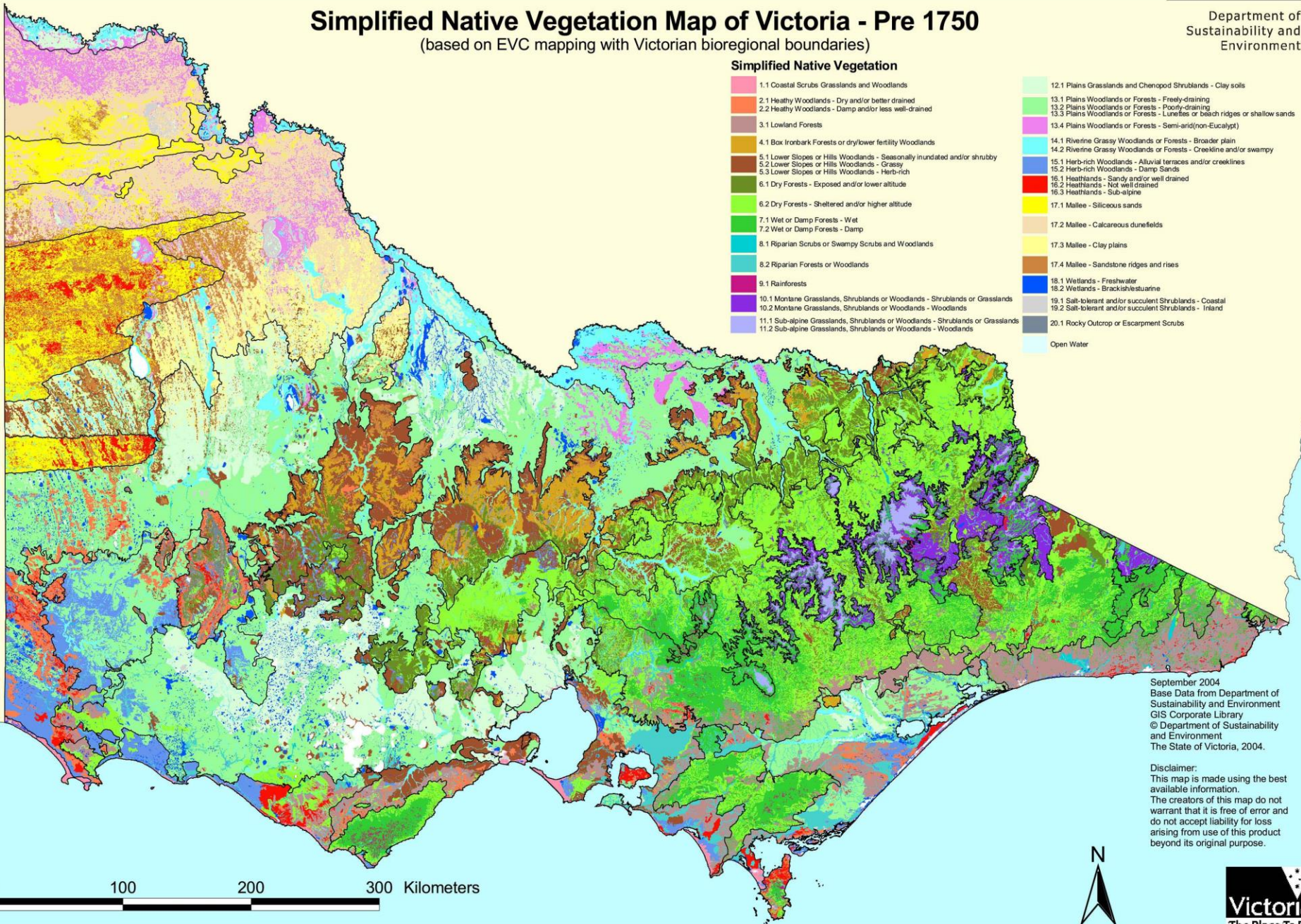
Philip Ingamells

Victorian National Parks Association

2015

Simplified Native Vegetation Map of Victoria - Pre 1750

(based on EVC mapping with Victorian bioregional boundaries)



Simplified Native Vegetation

- 1.1 Coastal Scrubs, Grasslands and Woodlands
- 2.1 Healthy Woodlands - Dry and/or better drained
- 2.2 Healthy Woodlands - Damp and/or less well-drained
- 3.1 Lowland Forests
- 4.1 Box Ironbark Forests or dry/lower fertility Woodlands
- 5.1 Lower Slopes or Hills Woodlands - Seasonally inundated and/or shrubby
- 5.2 Lower Slopes or Hills Woodlands - Grassy
- 5.3 Lower Slopes or Hills Woodlands - Herb-rich
- 6.1 Dry Forests - Exposed and/or lower altitude
- 6.2 Dry Forests - Sheltered and/or higher altitude
- 7.1 Wet or Damp Forests - Wet
- 7.2 Wet or Damp Forests - Damp
- 8.1 Riparian Scrubs or Swampy Scrubs and Woodlands
- 8.2 Riparian Forests or Woodlands
- 9.1 Rainforests
- 10.1 Montane Grasslands, Shrublands or Woodlands - Shrublands or Grasslands
- 10.2 Montane Grasslands, Shrublands or Woodlands - Woodlands
- 11.1 Sub-alpine Grasslands, Shrublands or Woodlands - Shrublands or Grasslands
- 11.2 Sub-alpine Grasslands, Shrublands or Woodlands - Woodlands
- 12.1 Plains Grasslands and Chenopod Shrublands - Clay soils
- 13.1 Plains Woodlands or Forests - Freely-draining
- 13.2 Plains Woodlands or Forests - Poorly-draining
- 13.3 Plains Woodlands or Forests - Lunettes or beach ridges or shallow sands
- 13.4 Plains Woodlands or Forests - Semi-arid(non-Eucalypt)
- 14.1 Riverine Grassy Woodlands or Forests - Broader plain
- 14.2 Riverine Grassy Woodlands or Forests - Creepline and/or swampy
- 15.1 Herb-rich Woodlands - Alluvial terraces and/or creeklines
- 15.2 Herb-rich Woodlands - Damp Sands
- 16.1 Heathlands - Sandy and/or well drained
- 16.2 Heathlands - Not well drained
- 16.3 Heathlands - Sub-alpine
- 17.1 Mallee - Siliceous sands
- 17.2 Mallee - Calcareous dunefields
- 17.3 Mallee - Clay plains
- 17.4 Mallee - Sandstone ridges and rises
- 18.1 Wetlands - Freshwater
- 18.2 Wetlands - Brackish/estuarine
- 19.1 Salt-tolerant and/or succulent Shrublands - Coastal
- 19.2 Salt-tolerant and/or succulent Shrublands - Inland
- 20.1 Rocky Outcrop or Escarpment Scrubs
- Open Water

0 100 200 300 Kilometers



September 2004
 Base Data from Department of Sustainability and Environment
 GIS Corporate Library
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 The State of Victoria, 2004.

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 This map is made using the best available information.
 The creators of this map do not warrant that it is free of error and do not accept liability for loss arising from use of this product beyond its original purpose.

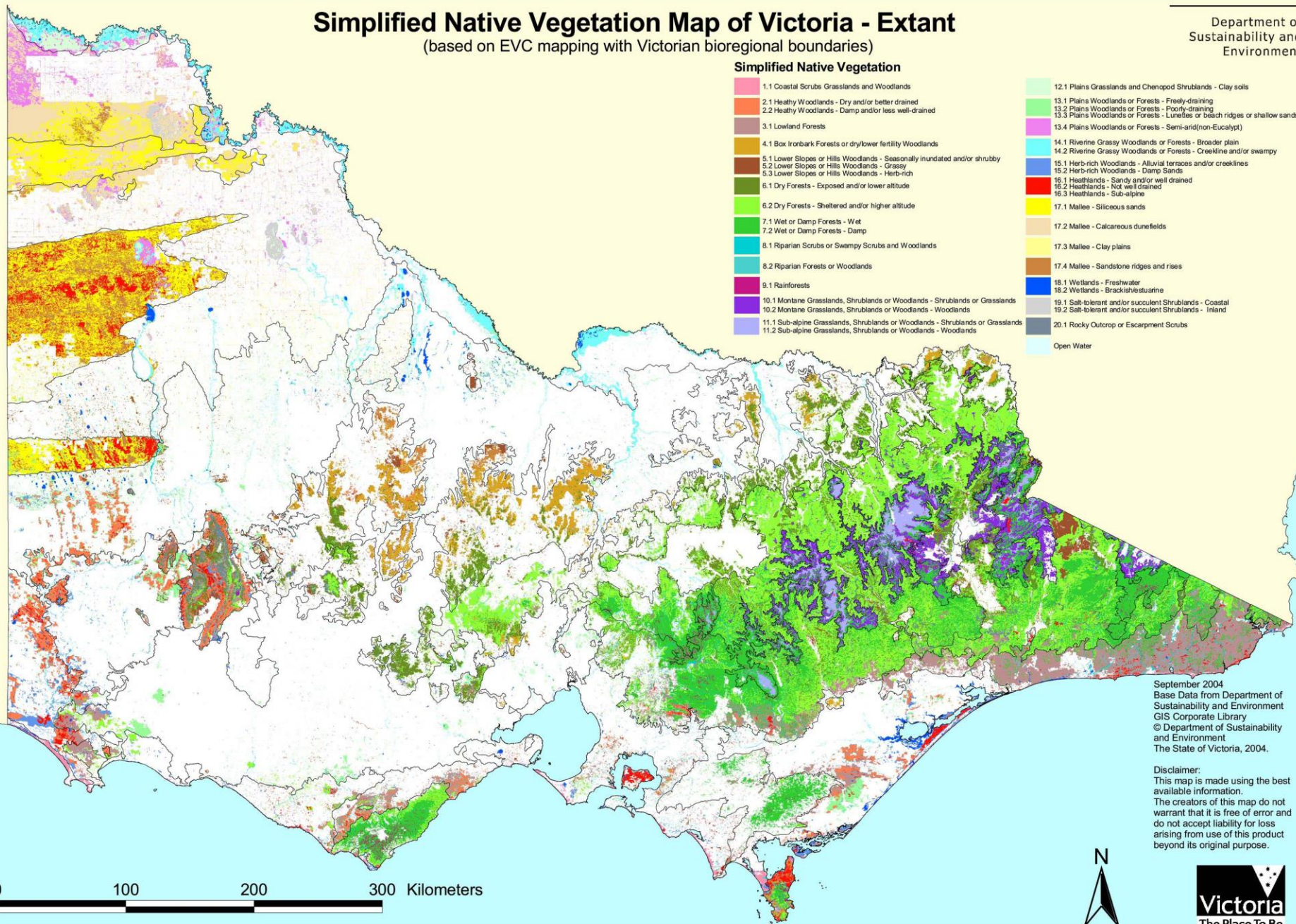


Simplified Native Vegetation Map of Victoria - Extant

(based on EVC mapping with Victorian bioregional boundaries)

Simplified Native Vegetation

- | | |
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Victoria's crown land hosts around 100,000 native species, many of which are threatened with extinction.

DELWP's 'advisory list' identifies close to 1,000 endangered, vulnerable or rare native plants.



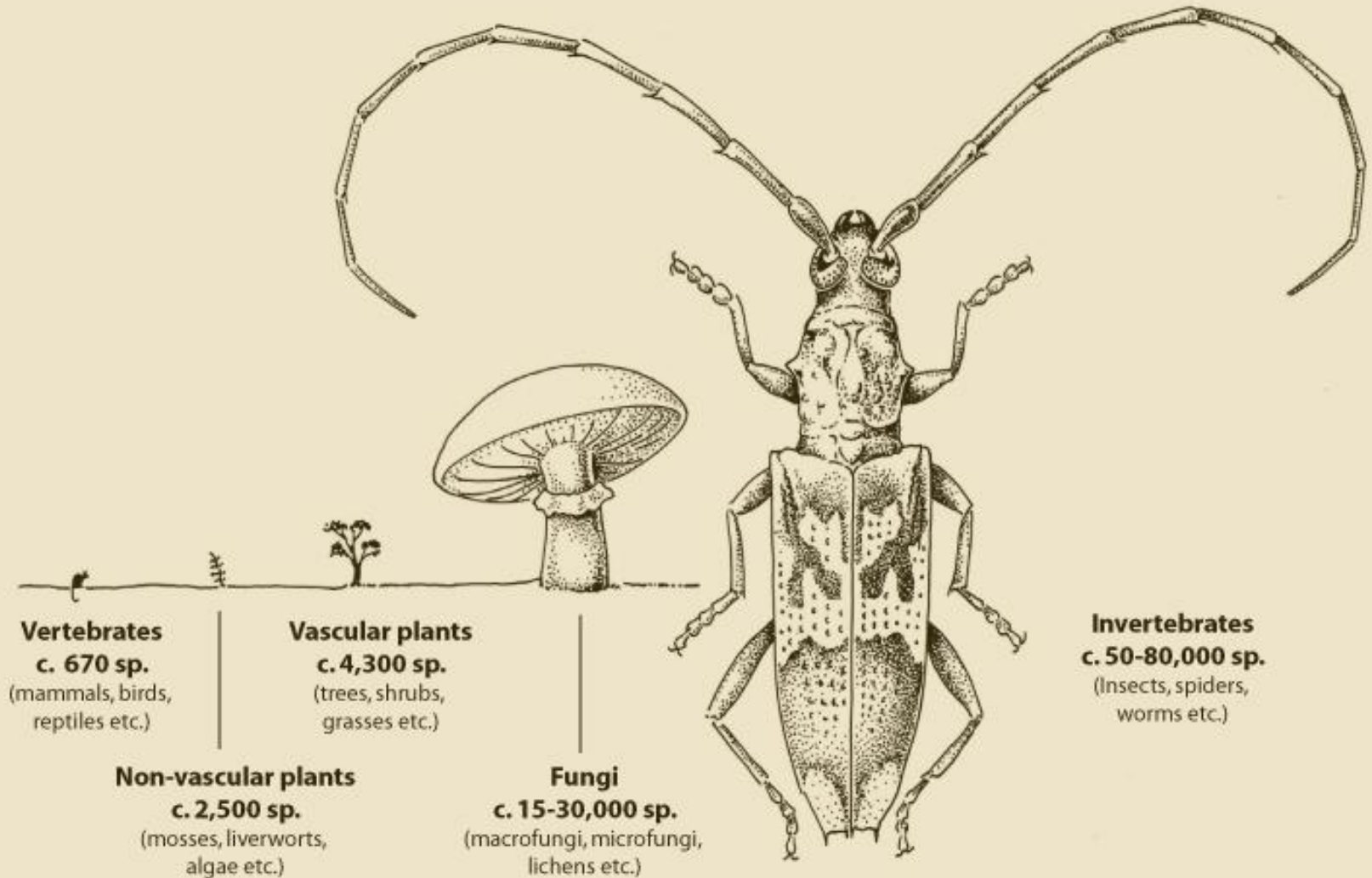






Relative numbers of native species in Victoria

Size approximates relative number of species. Total number of species possibly around 100,000.



Victoria's native species and ecosystems are given legal protection:

- Globally under the International Convention on Biodiversity
- Nationally under the Environment Protection and Biodiversity Conservation (EPBC) Act
- Statewide under the National Parks Act, the Catchment and Land Protection (CALP) Act and the Flora and Fauna Guarantee (FFG) Act, among others.

According to Article 8 of the International Convention on Biological Diversity which Australia has ratified, signatories must, among other things:

- *Establish a system of protected areas or areas where special measures need to be taken to conserve biological diversity;*
- *Rehabilitate and restore degraded ecosystems and promote the recovery of threatened species, inter alia, through the development and implementation of plans or other management strategies;*
- *Prevent the introduction of, control or eradicate those alien species which threaten ecosystems, habitats or species; etc.*

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- They have been restricted to accredited volunteers (eg programs at Yellingbo, Dandenong Ranges National Park, Warramate Hills Nature Conservation Reserve and Wilsons Promontory National Park)
- Each trial only removed quite small numbers of deer.

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 - limited to periods of time when suitable accredited volunteers are available.
 - Volunteers limited in the means they can use (no silencers, no capacity for aerial attack etc).

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Goat eradication programs by Parks Victoria (eg in Warby-Ovens National Park, Snowy River National Park and Murray Sunset National Park) have all relied on the involvement of professional shooters, as well as accredited amateurs.

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Feral horses in the high country will also require a strategic mix of programs.

Again, the most effective and humane strategy in more remote areas will involve the employment of professional shooters.

A coordinated cross-border program with NSW will be essential.

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Expansion of amateur hunting?

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1/ The Victorian experience of an exploding deer population despite a very large amateur deer harvest should be enough evidence that simply expanding hunting opportunities isn't the answer.

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Expansion of amateur hunting?

2/ Amateur shooters concentrate their attention on relatively accessible areas, allowing healthy and large breeding populations in remoter areas.

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3/ Amateurs often target 'trophy' stags, but a new buck quickly takes its place, leaving females to continue breeding.

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4/ There is no strategic culling in areas where the most vulnerable ecosystems are being damaged.

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Expansion of amateur hunting?

5/ There are significant safety issues already, and any expansion of amateur hunting into additional park areas, without the means to control inexperienced and/or 'rogue' hunters, could be very dangerous.

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The most cost-effective pest control strategy is early intervention.

Failing that, the most cost-effective technique is an initial target that brings the pest population down to a level that is relatively easily manageable in the long-term.

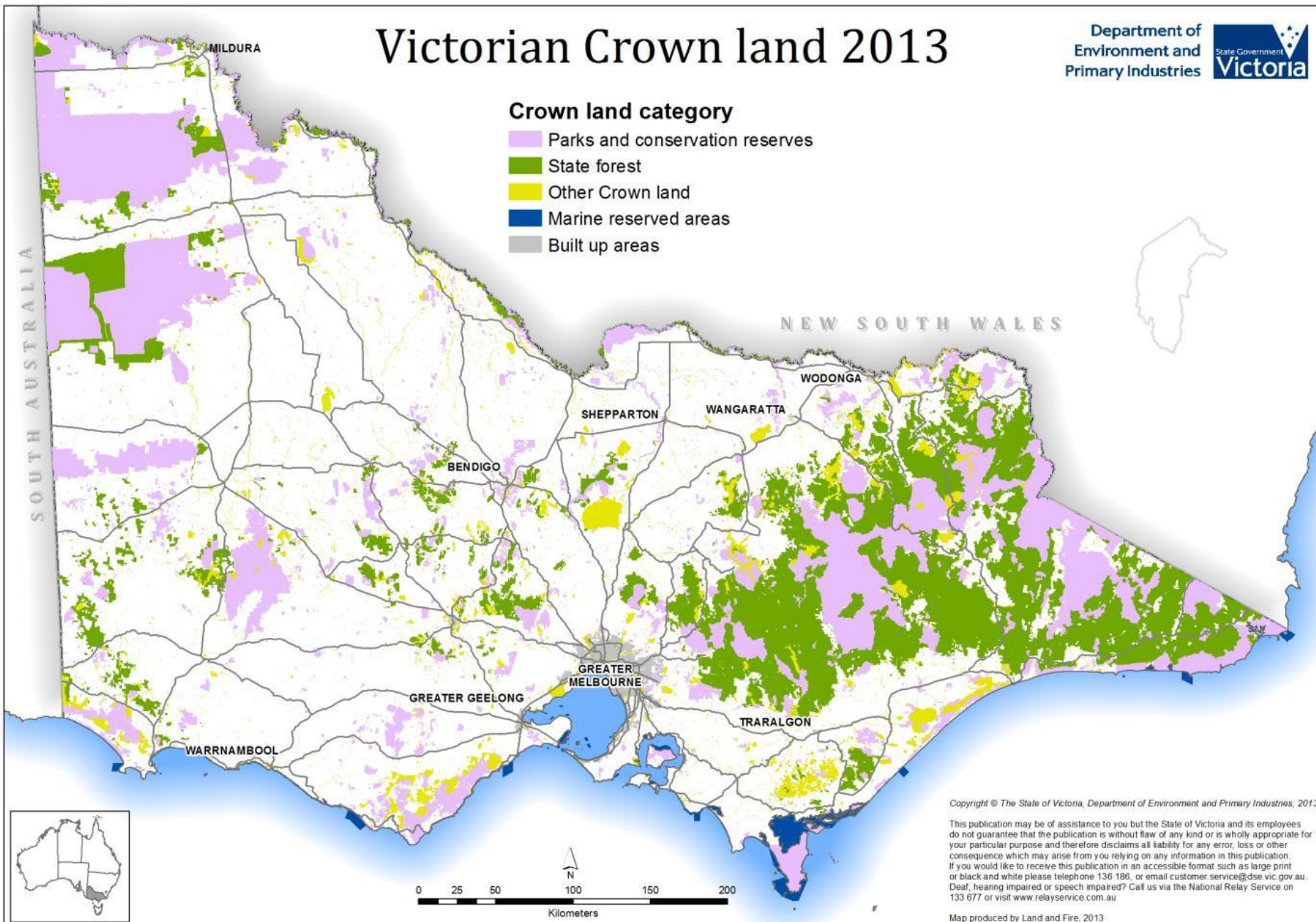
Victorian Crown land 2013

Department of
Environment and
Primary Industries



Crown land category

-  Parks and conservation reserves
-  State forest
-  Other Crown land
-  Marine reserved areas
-  Built up areas



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Map produced by Land and Fire, 2013

Chum Creek – Dandenong Ranges







O'Shanassy Aqueduct

































Deer management by Melbourne Water: Cardinia Reservoir

Deer management by Melbourne Water: Cardinia Reservoir

- Original estimate of deer in the area is around 600.
- Cull designed to remove 200 deer over a 12 month period.

Deer management by Melbourne Water: Cardinia Reservoir

- First stage of the cull (*Oct 2016*) ran for 3 days in which they culled 91 Sambar deer
 - contracted professional marksmen
 - a 'Populous Place' under definitions of the Firearms Act
 - visual ID done by thermal imaging and night scopes
 - humane kills with head shots using silencers
 - carcasses removed the same day.



Monbulk Creek, Dandenong Ranges

1.

We need well-informed state-wide feral animal containment strategies, based on the need to protect vulnerable ecosystems and species.

They must be cross-tenure programs, capable of protecting the integrity of our national parks and other public land in the long term.

2.

We need serious research into effective, humane biological, genetic and other controls.

3.

We need adequate, dedicated funding for pest management programs across the state, and transparent allocation of that funding.