

The view from the top of Mt Tarengower in the historic goldfields town of Maldon is typical of the Victorian landscape, large tracts of cleared land surrounded by tiny pockets of bush.

## Victoria: State of Decline

### Habitat trends and native vegetation

**IMAGINE a landscape without trees, native animals or birdsong. No one would want to live in a state like that. But the fact is parts of Victoria, the most cleared state in Australia, are nearing dangerously low levels of native habitat.**

We need a plan from the State Government to deal with this problem and protect and rebuild a sustainable natural Victoria, not let it continue to decline.

The recent comprehensive statewide investigation into remnant native vegetation by the widely respected government advisory body, the Victorian Environmental Assessment Council (VEAC), offers key recommendations that could stimulate a plan for the future.

Native vegetation is the backbone of our natural heritage and essential to a healthy and sustainable environment. It provides critical habitat for wildlife, and its loss is widely recognised as a major driver of biodiversity decline in Australia.

Due to the history and pattern of development in Victoria, we are widely recognised as the most ecologically stressed state in Australia. The statistics are stark:

- More than half of Victoria's original native bushland has been cleared, including 80% of the native vegetation originally found on private land.
- A third of Victoria's major streams are in poor or very poor condition.
- Two-thirds of our wetlands have been either lost or degraded, and nearly half our major estuaries have been significantly modified.
- The highest number of threatened species in any one region in Australia

occurs in north western Victoria.

- 44% of Victoria's native plants and 30% of our native animals are extinct or threatened with extinction (VEAC 2011).

#### Opportunity for leadership and a plan of action

The Baillieu Government went into the 2010 election with no comprehensive conservation policy. As the most cleared state in Australia, with large numbers of threatened species, Victoria needs a comprehensive policy framework that will ensure our life-supporting ecosystems are healthy and managed with a strong vision for the future.

VEAC's Remnant Native Vegetation Investigation Report, tabled in Parliament in May 2011, is the culmination of 18 months work and provides the Baillieu Government with a great starting point for a comprehensive policy approach to nature conservation in Victoria.

The Victorian Government must formally respond to the recommendations of this report in Parliament within six months. This is a unique opportunity to outline a plan and policies for the future.

In its report VEAC makes a number of key recommendations on protecting vegetation along rivers, streams and roadsides, and also recommends a number of new investigations into some of the state's most stressed ecosystems.

In summary, key recommendations include:

- A biodiversity action program to translate statewide priorities into enduring actions that make the most of opportunities in local landscapes, and improve

coordination and clarity across land tenures and between stakeholders.

- Support for existing and new incentives for conservation of native vegetation on private land.
- Improving the conservation management of small and/or linear patches of remnant native vegetation on public land, including road and rail reserves, and stream frontages.
- Establishing a new statewide committee to coordinate improved management of roadsides, and new conservation licences and programs to manage publicly owned stream frontages.
- Within 10 years at least 75% of publicly owned stream frontages managed for biodiversity and habitat through new conservation licences and an incentives program.
- Public land use studies with scope to fill gaps in the protected area system in under-represented areas including:
  - Central Victorian Uplands (includes areas of iconic forests such as the Wombat near Daylesford.)
  - Wimmera (south), Dundas Tablelands and Glenelg Plain in western Victoria.
  - Gippsland Plain and Strzelecki Ranges in south-eastern Victoria.
- Increasing awareness and understanding of the importance of, and threats to, remnant native vegetation.
- Resourcing for implementation of the recommendations.

> For more detail on the VEAC recommendations see [VNPA briefing paper](#) or visit [www.veac.vic.gov.au](http://www.veac.vic.gov.au)

# The 'two track' landscape

## Victorian habitat in context

**N**ative vegetation in Victoria can be described as existing within a 'two track' landscape – part of it is made up of largely 'intact' native vegetation, often protected within national parks, while the rest is 'fragmented', and found in small patches of native bushland on roadsides, within private property, along creeks, streams and riverways.

The largely-intact landscapes are contiguous areas of native vegetation greater than 20,000ha in size where native vegetation is generally considered to be in a stable, natural or semi-natural condition. These areas make up 21.4% of Victoria, almost 5 million hectares, and correspond closely with Victoria's major parks and state forests, and are mostly public land.

Fragmented landscapes are areas where there has been widespread removal and/or on-going use of native vegetation, and make up 78.6% of Victoria, almost 18 million hectares. They consist largely of private land with small pockets of public land.

Despite the fact that Victoria has cleared some 70% of its land mass for agriculture, mining and development, these cleared areas continue to retain close to 54% of the state's remaining native vegetation. Roughly half of this native vegetation is found on public land (smaller forested areas less than 20,000 ha in size, roadsides and along waterways),

while the rest is on private land.

The native vegetation surviving within these fragmented landscapes supports the majority of the state's biodiversity. Close to 40% of our native vertebrate land species (mammals, bird, amphibians, reptiles and fish not confined to marine or coastal habitats) live solely within these fragmented landscapes, and a further 45% rely on them as a major part of their habitat distribution.

These figures underline the importance of healthy native habitat within Victoria's fragmented landscapes as a cornerstone of a healthy natural environment. However, according to VEAC's Remnant Native Vegetation investigation:

- The history of significant decline in the biodiversity of Victoria's fragmented landscapes is continuing.
- The surviving landscapes nevertheless support significant and highly valued natural assets, especially in terms of their biodiversity values.
- There is considerable regional variation in this overall picture.
- While there are some important new findings, the broad picture revealed in this analysis has been well known for many years.
- Retaining existing habitat is the most cost-effective strategy and is the key determinant of the trajectory of change in ecological connectivity

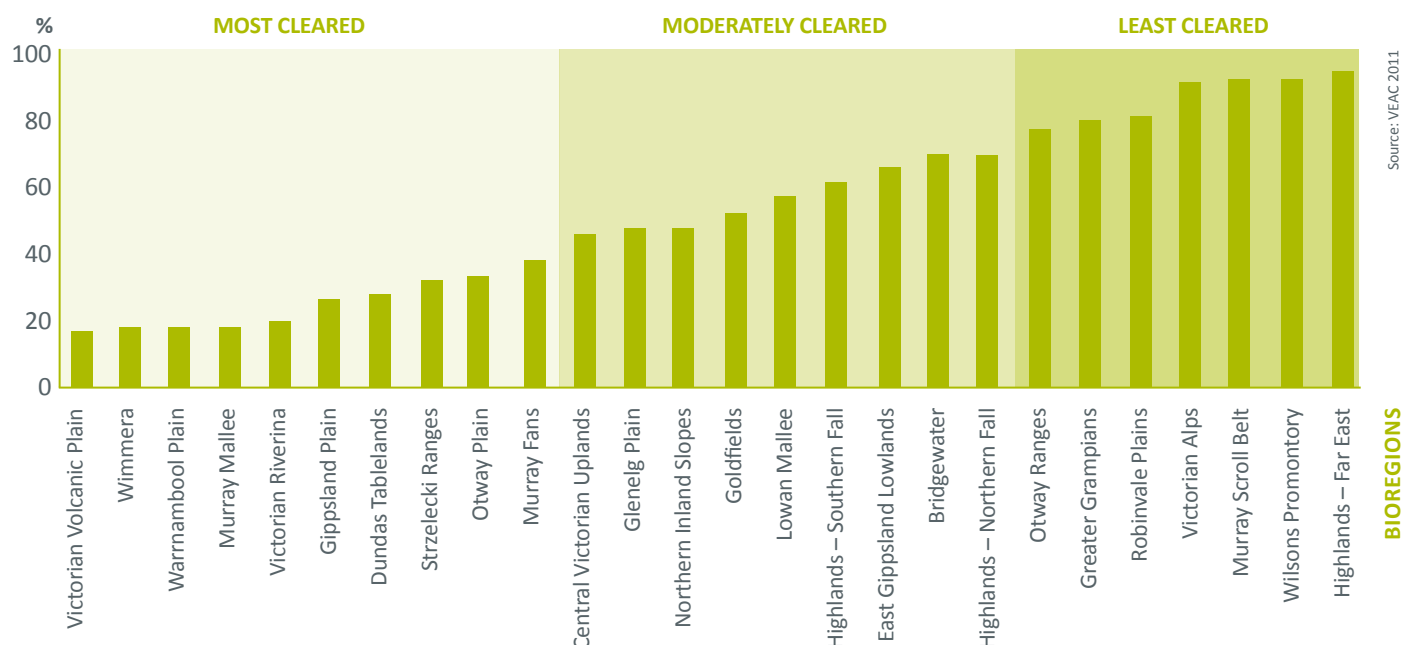
in any given landscape.

The VEAC discussion paper contains detailed summaries of each bioregion. Key points include:

- The most cleared parts of the state tend to cover larger areas of land.
- Nine of the 10 most cleared landscapes have relatively flat terrain and fertile soils, and retain less than 40% of their original native vegetation.
- Moderately cleared bioregions have between 40-70% of native vegetation remaining and are characteristically foothills or less fertile flatter country.
- More cleared bioregions tend to have a lower proportion of native vegetation on public land.
- In four of the fragmented bioregions, road reserves account for more than 5% of total remnant native vegetation (Murray-Mallee 9.4%, Warrambool Plain 6.8%, Wimmera 6.3% and Victorian Riverina 5.7%).
- The proportion of native vegetation in conservation reserves significantly reduces in more cleared landscapes to between 16% and 18% in 'most' and 'moderately' cleared landscapes compared with 44% in 'least cleared' landscapes (VEAC 2010).

> The full VEAC report can be downloaded from [www.veac.vic.gov.au](http://www.veac.vic.gov.au).

### Proportion of native vegetation in fragmented landscapes in each of Victoria's bioregions



Native vegetation in Victoria is often considered in terms of the biogeographical region (bioregion) in which it occurs. Bioregions are a landscape-scale classification of the environment using a range of attributes such as climate, geomorphology, geology, soils and vegetation. There are 28 terrestrial bioregions identified within Victoria.

# The Victorian bush, a journey through time

→ 1750

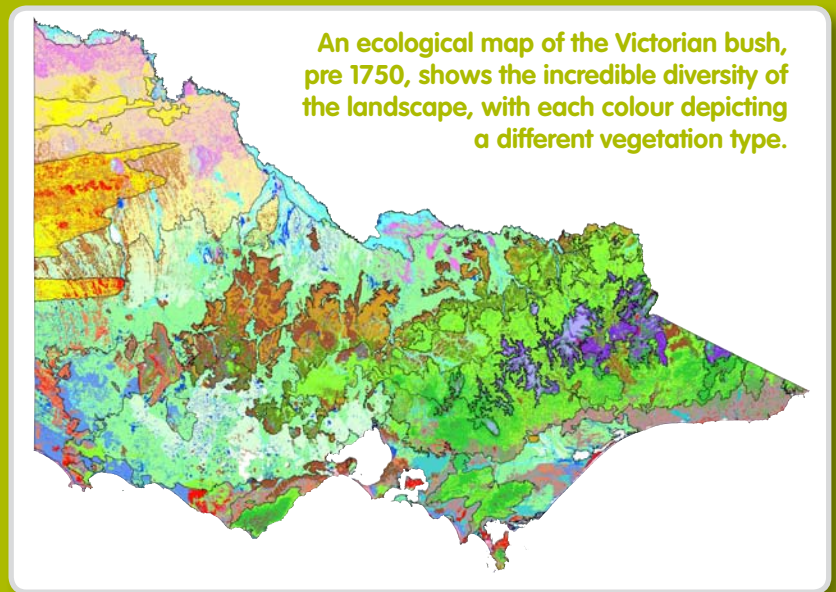
## way back when

Back in 1750 Victoria was a very different place from what it is now.

Forests, woodlands, deserts and wetlands were filled with an extraordinary mix of native plants and wildlife.

One of the most striking feature of this landscape was the grasslands, which stretched all the way from what's now the edge of Melbourne to the South Australian border.

So rich was this ecological tapestry that if depicted on a map it would have formed a fabulous carpet of colours.



### MAP LEGEND

- Coastal Scrubs Grasslands and Woodlands
- Heathy Woodlands
- Lowland forests
- Box Ironbark Forests or dry/lower fertility Woodlands
- Lower Slopes or Hills Woodlands
- Dry forests – Exposed and/or lower altitude
- Dry forests – Sheltered and/or lower altitude
- Wet or Damp Forests
- Riparian Scrubs or Swampy Scrubs and Woodlands

- Riparian Forests or woodlands
- Rainforests
- Montane Grasslands, Shrublands or Woodlands
- Sub-alpine Grasslands, Shrublands or Woodlands
- Plains Grasslands and Chenopods Shrublands
- Plains Woodlands or Forests
- Plains Woodlands or Forests – Semi-arid (non-Eucalypt)
- Riverine Grassy Woodlands or Forests
- Herb-rich Woodlands

- Heathlands
- Mallee – Siliceous sands
- Mallee – Calcareous dunefields
- Mallee – Clay plains
- Mallee – Sandstone ridges and rises
- Wetlands
- Salt-tolerant and/or succulent Shrublands
- Rocky Outcrop or Escarpment Scrubs
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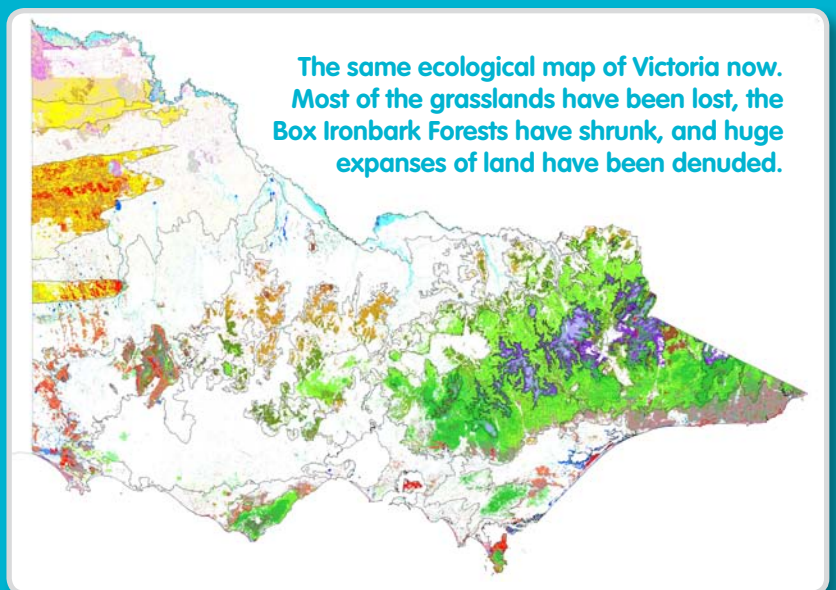
→ 2011

## the picture today

Now, 260 years on, Victoria is the most cleared state in Australia.

We have lost at least half of our original native vegetation, and every year another 4000ha of bushland is lost.

Our grasslands have all but vanished and our Box Ironbark Forests, honeypots for many of our birds in winter, have been devastated.



# Protect, restore, reconnect

## A short history of vegetation clearing controls

**A**long with the establishment of national parks and other conservation reserves, the control of native vegetation clearing is one of the few tools that have been statistically demonstrated to help protect, and assist, in the recovery of threatened species (Taylor et al 2011).

Vegetation clearing on private land in Victoria is largely controlled through Native Vegetation regulations in the Planning and Environment Act and Native Vegetation Framework. Victoria was a leader in introducing controls on broad-scale clearing of native vegetation in the late 1980s. Over the past 30 years, these initiatives have been built on by both major political parties.

By the mid-1990s the annual clearing rate of woody vegetation in Victoria had dropped to about 1500ha per year, compared to 9407ha a year in 1987-1990, and 10,766 a year between 1972 and 1987 (VCLPC 1996). The estimates of clearing between 1998 and 2005, which involved better tracking of impacts on native grasslands, were around 4000ha per year, equating to roughly 1200ha of woody vegetation and more than 3000ha of native grassland per annum.

Numerous independent reports to government, including the Victorian Catchment Condition Report (2007), State of the Environment Report (2008), and most recently the VEAC report (2011) have reinforced the need to retain remnant native vegetation.

Native vegetation retention is the most efficient and effective way to ensure habitat for threatened plants and animals. Landscapes composed of remnant native vegetation are found to support a higher diversity of species than those with revegetation alone (Clarke et al 2009).

Theoretical modelling and empirical studies suggest that the effects of landscape fragmentation on biodiversity become apparent when native vegetation cover drops to between 10% and 30% (Radford et al 2004), although individual species respond differently.

In restoring landscapes containing remnant native vegetation at these thresholds, we need to consider whether restoration efforts are best targeted at increasing the size of individual remnants, or at enhancing connectivity.

All governments over the past 40 years, including Coalition governments, have had policies in place to help retain native vegetation. The Coalition has a proud history of introducing initiatives to halt



### Key milestones in protection of Victorian native vegetation

- Creation of the first Ministry of Conservation in 1970: Bolte Government.
- VEAC's predecessor, the Land Conservation Council (LCC), established in 1971: Bolte Government.
- Trust for Nature, the first such private organisation, established 1972: Hamer Government.
- The Garden State Committee established in 1976: Hamer Government.
- The first revegetation grants in Australia in the 1970s: Hamer Government.
- Flora and Fauna Guarantee Act: 1988, Cain Government.
- Native vegetation controls: 1989, Cain Government.
- Intergovernmental Agreement on the Environment, 1992: Kirner Government.
- Catchment and Land Protection Act 1994: Kennett Government.
- First Victorian Biodiversity Strategy, Victoria's Biodiversity – Our Living Wealth, including net gain concept, 1997: Kennett Government.
- Native Vegetation: a Framework for Action, 2002: Bracks Government.
- Land & Biodiversity at a Time of Climate Change, 2009: Brumby Government.
- VEAC Final Report on Remnant Native Vegetation, 2011: Ballieu Government.

and reverse the loss of biodiversity in Victoria, including initiating the current native vegetation framework during the Kennett years.

'Net gain' was introduced by the Kennett Government when it launched Victoria's first biodiversity strategy in 1997. This was the first such strategy to be released by a state government. It adopted the current net gain goal that there should be "a reversal, across the entire landscape, of the long-term decline in the extent and quality of native vegetation, leading to a net gain". The first target was 'no net loss by the year 2001'.

The Kennett Government initiated Victorian native vegetation policy reform, published early in 2000 just after the government lost office. These concepts were further developed and adopted in *Victoria's Native Vegetation Management – a Framework for Action* ('the Framework'). This was adopted as government policy in August 2002 and became statutory policy in July 2003, when it was incorporated under Clause 81 of all planning schemes.

VNPA supports the like-for-like objectives of the Framework, particularly those requiring applications to go through a three-step process of 'avoid, minimise, offset'. Offsets are to be as close as

possible in vegetation type to the lost vegetation, or 'like for like', leading to opportunities to optimise conservation. For example, the Framework limits the amount of revegetation allowed to offset losses of higher conservation significance.

### References

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