

A better place to live

Greener, healthier, stronger

Campaspe – Maribyrnong Headwaters Bio-link

What is it?

A continuous network of native vegetation, linking Macedon Regional Park with Cobaw State Forest via Hanging Rock Reserve. An important regional resource to provide a better living environment – for wildlife....and for you.

Why retain habitat on properties?

As well as having aesthetic appeal, retaining habitat plays a major role in sustainable agriculture. It assists with pest control, erosion and salinity. It provides shelter for crops and shade for stock. It is valuable for keeping land productive and reducing greenhouse gases.



Private landholders hold the key to the survival of many plant and animal communities. Retain vegetation patches. If possible, link them to each other or to existing flora and fauna reserves. This increases the survival chances of our indigenous wildlife and improves productivity of adjacent farmed areas.

Trees are important

Land clearing and the way we use the land has left very few old Eucalypts in the landscape. These are important for large nesting hollows, and as a source of food, providing a natural larder of insects, nectar and leaves. Protect old trees wherever they grow. Fence them off in paddocks to allow natural regeneration. Over 70 years may be required for trees to mature and develop hollows. Protecting old trees preserves the habitat resources they provide until recent plantings mature.



The number of koalas at Hanging Rock is declining. Koalas eat leaves of 5 Eucalypt species local to the Newham District (Manna, Swamp, Messmate, Broad and Narrow Leaf Peppermint). Koalas go to ground if necessary in search of food but are at significant risk when they do. Land clearing, housing development and human impacts cause habitat loss.

Habitat is more than just trees

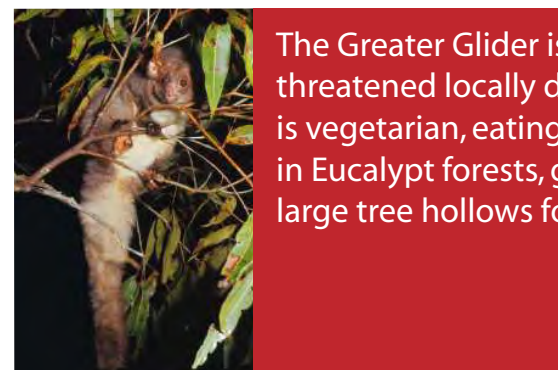
Nature is never tidy! Leaf litter, dead wood and under-storey plants are important components of habitat, providing food and shelter – leave them alone. Each layer of vegetation provides different types of habitat. For example: 1) prickly shrubs provide safe nesting sites for small birds, and 2) native grasses and sedges provide food and egg-laying sites for butterflies and moths.



Many birds and animals need dense leaf litter and dead wood, as well as existing large trees, to forage for insects, spiders and grubs. The refuge and shelter that they provide is also essential.

What will linking do?

Corridors allow for escape, movement or expansion of fauna populations. Many native animals are unwilling or unable to cross open ground. When continuous habitat is not available, an 'isolation effect' occurs. Native populations decrease faster because they can not reach isolated habitats to establish new colonies, or 'rescue' declining groups.



The Greater Glider is present at Hanging Rock Reserve, but is threatened locally due to habitat loss. A large cat-sized marsupial, it is vegetarian, eating only Eucalyptus buds and leaves. It dwells high in Eucalypt forests, gliding up to 90 metres between trees. It needs large tree hollows for shelter.

Bigger is better

Large areas of vegetation have a greater core area and are more resilient to disturbance. They can support larger populations of wildlife species, which reduces the risk of extinction. They will generally have a greater number of species and diversity of habitats. Make an environmental plan for your property. Aim to consolidate areas of vegetation and decrease the ratio of edge to area.



The Tuan, another threatened marsupial, is a keen hunter for insects, spiders, and grubs and may even eat small vertebrates. This marsupial will forage on large, rough barked Eucalyptus species with dead and rotting branches. All males die after mating and females may live for up to three years.

Landscape thresholds

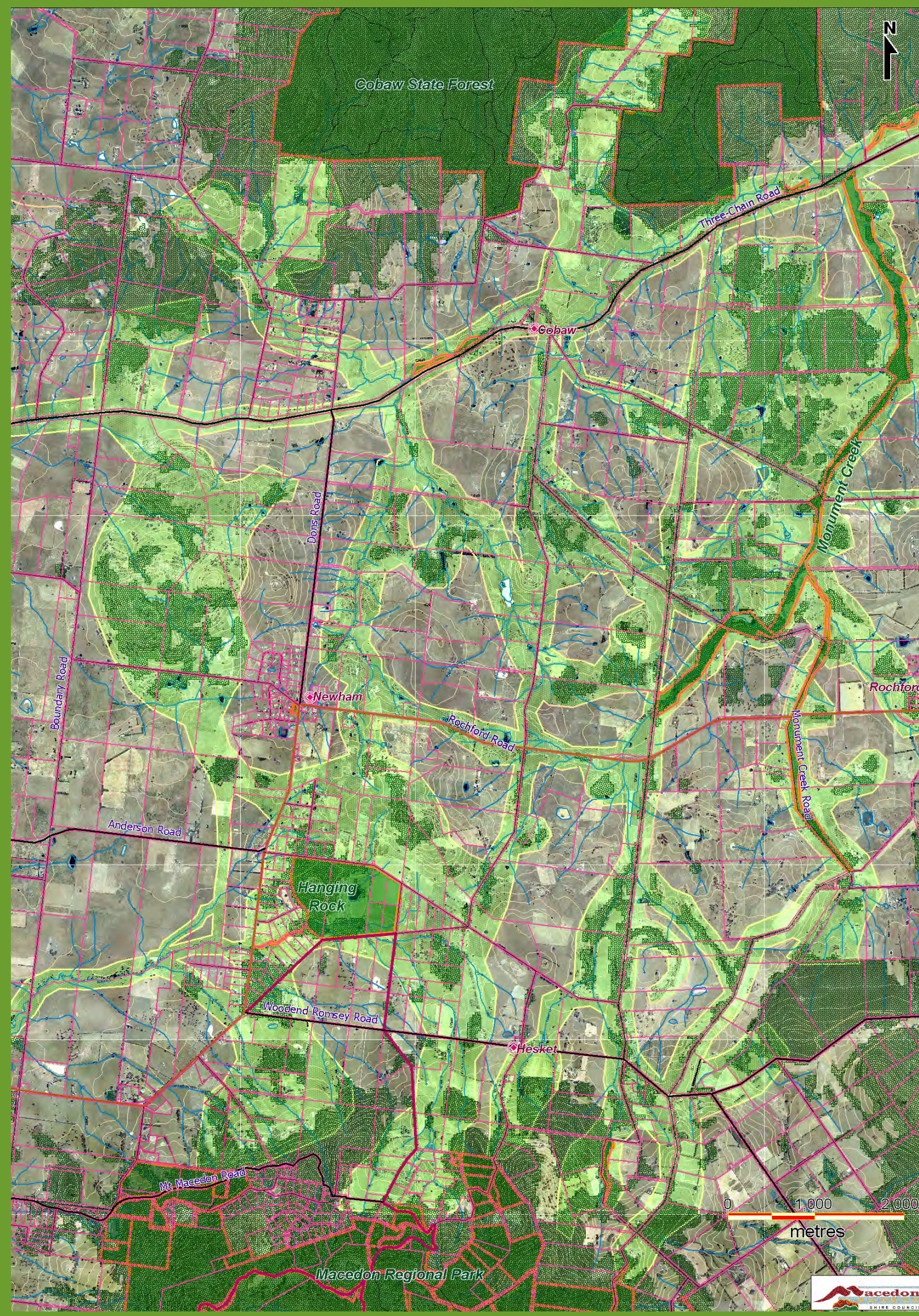
Relationships in nature are not linear! Thresholds are points where a dramatic change occurs in response to a small change in one or more influential factors. For example, woodland bird communities collapse below 10% native vegetation cover. To maintain healthy populations an average of 30-35% cover is necessary.



Landscape thresholds are useful for land management, helping us to recognise ecological limits. Put in stepping stones. Plant a single tree. Even small measures move our landscape away from dangerous thresholds and are a step in the right direction. Anything is better than nothing!

A simple sustainable improvement to our local district that benefits everyone – environmentally *and* economically.

Possible areas for vegetation 'links'. Suggested minimum width of links – 30 metres. Participation is voluntary.



You can help

Anything, no matter how small, will make a difference.

1. Protect remnants of native vegetation – especially streambanks, scarce types of habitat, large areas, and mature trees with hollows
2. Enhance and enlarge existing vegetation, and improve the 'structure'
3. Increase the 'connectivity' of the landscape through revegetation of cleared land
4. Eliminate pest plants and animals
5. Manage pet animals

Join your local Landcare group
Work with your neighbours
Participate in local projects
Take advantage of government initiatives
Take a small step now towards a better local environment

Why is it important?

Biological diversity ensures a healthier and more robust environment – far better able to adapt to changing conditions, such as climate changes or population increases. It improves local amenity and raises property values.

Habitat degradation

Extensive clearing in the past has removed most of the habitat for many local native species. Remaining vegetation is often in small patches or in narrow strips. Old trees are disappearing and replacements will take many decades to approach their size. Understorey has been lost.



Over-grazing, rabbits, timber removal, increased nutrients from stock, inappropriate fire regimes and tree die-back all contribute to habitat degradation. They do this through compaction, erosion, acceleration of tree decline and death, restriction of tree and shrub regeneration and simplification of the composition of vegetation.

Pest animals

Rabbits compete with native species and livestock for food, cause erosion and facilitate the spread of weeds. Rabbits and hares both eat the foliage of native plants, decreasing herbs and grasses in variety and amount, and preventing the regeneration of trees and shrubs. Domestic cats will kill wildlife *even if they are well-fed*, and do not respect boundaries. Keeping cats enclosed is the only way to protect wildlife nearby.



Cats and foxes compete with native carnivores, such as the brush-tailed phascogale (tuan). It is important that rabbit and fox control programs run together. Otherwise, as rabbit and hare numbers fall, foxes will look to native animals to fill the gap in their diet – and ground-dwelling mammals are easy targets.

Timber harvesting and firewood collection

Be selective when you collect firewood, in order to limit the impact on biodiversity. Hollow logs are important for small animals, so leave them alone and take solid, smaller diameter pieces instead. Don't take it all! Collecting firewood from public land, including roadsides and State Forest is illegal without a permit.



Growing more native vegetation on your property has many possible benefits apart from wind protection. It may provide income by offsetting carbon emission or native vegetation clearing. You may grow a native timber lot as a future firewood source or as a fine timber source.

Unsustainable land use

Consider the capability of the land – where trees have been left in the landscape it is generally because the land is not suitable for agriculture. These areas may have no productive grasses and soils may be infertile. Separating grazing areas from bushland has advantages for agriculture and the environment.



Trampling caused by horses' hard hooves causes great harm to the lower and middle storeys of vegetation. Overgrazing can greatly affect much regeneration as horses will eat from the top down. Decimated young trees often cannot grow back quickly enough as horses will eat the young shoots and buds.

Pest plants

Weeds, whether introduced or native, compete with local native plants for space and resources. Where soil has been disturbed or nutrient levels increased the ground layer is often dominated by weedy annual species that out-compete most native plants and simplify the ground layer. This effect is often seen along roadsides, around rabbit warrens or where stock has 'camped'.



Most environmental weeds were originally introduced to Australia as garden plants (for example: Blue Periwinkle, Patersons Curse and Gorse). Consider the 'weediness' of plants introduced to your garden and their ability to jump the fence onto roadsides and into 'the bush'.

Edge effects

Species near the edge of an area of bush may be affected by weed invasion, soil disturbance, noise, adjacent land-use, higher light levels, wind and higher levels of predation.



Miners live in groups of up to 30 and defend their territory aggressively. They force out native species, such as small insectivorous woodland birds. Rich pasture and multiple farm dams surrounding bush remnant encourage unnaturally high kangaroo numbers, placing added pressure on the bush.