

Dry Forests & Woodlands

Dry forests and woodlands dominate the remnant vegetation on the drier slopes and ridges in Nillumbik. They have an open to closed canopy of gums that includes scattered large old trees. The mid-storey of small trees and shrubs is open to sparse, but can be more dense on lower slopes. The under-storey is a mix of grasses, lilies, orchids and herbs, which grow among fallen leaves, branches and rotting logs.

Dry forests and woodlands provide the habitat for a rich variety of indigenous flora and fauna.

Why dry forests and woodlands are important

Dry forests and woodlands create the bushland character of Nillumbik, and contribute to the forested highlands that are such a feature of eastern Melbourne.

They are extensive, occur on both public and private land and connect Kinglake National Park to the Yarra River and Warrandyte State Park. This landscape 'connectivity' is vital to maintaining a healthy environment, keeping the natural systems operating well and providing pathways for animals in an otherwise fragmented landscape.

Dry forests and woodlands provide essential habitat for myriad native animals, especially invertebrates, and plants, including rare and threatened species.



The approximate area of dry forest and woodland in Nillumbik is 21,000 ha of which 15,000 ha is on private land.



What healthy dry forests and woodlands look like

Healthy dry forests and woodlands have trees of different ages, including big old trees with numerous hollows. Fallen branches and rotting logs create feeding places and shelter for a rich diversity of native birds and animals, especially invertebrates. The shrub layer is sparse and its native peas, heaths and wattles are not stunted from over-browsing by deer or wallabies.

The understorey is mostly tussock grasses interspersed with native herbs, sedges, rushes, lilies, orchids and other wildflowers. It has few or no weeds. Leaf litter protects the soil and creates foraging areas for ground-dwelling animals. In spring, these forests and woodlands are full of wildflowers, insects, bird song and nesting activity.

Animals found in dry forests & woodlands

A rich variety of animals may be found, including rarer species such as:

- Brush-tailed Phascogale
- Common and White-footed Dunnart
- Spotted Quail-thrush
- Powerful Owl
- Speckled Warbler
- Swift Parrot
- Tree Goanna
- Southern Toadlet

More commonly seen species include:

- Agile Antechinus
- Swamp Wallaby
- Short-beaked Echidna
- Common Wombat
- Common and Blotched Bluetongue lizards

In addition to those listed above, there is a rich diversity of woodland birds, reptiles and invertebrates.

Plants found in dry forests & woodlands

There are also rare and threatened plants that occur in these forests and woodlands, including:

- Round-leaf Pomaderris
- Clover Glycine
- Red Ironbark
- Matted Flax-lily
- numerous rare and threatened orchids

Healthy dry forests and woodlands are extensive and well connected with surrounding remnant vegetation, allowing movement of plants and animals across the landscape.

The threats to our dry forests and woodlands

Lack of knowledge, skills & resources

Land owners are often keen to care for their land but may not have enough knowledge to feel confident in doing so, or they lack the resources such as time or money to tackle major works.

Incremental land clearing and disturbance

The total area and quality of dry forests and woodlands is gradually declining as a result of legal and illegal clearing and damage to the understorey. This can affect the forest's connectivity leading to increased isolation of plant and animal populations. It also exposes the soil to compaction and erosion, enabling weeds to invade. Excessive removal of dead trees and logs for firewood removes important habitat.

Invasion by woody weeds

Woody weeds such as Sweet Pittosporum, Bluebell Creeper, Boneseed, Blackberry and Cootamundra Wattle invade and dominate the mid-storey, altering the habitat structure and shading out the native understorey.

Invasion by grassy and herbaceous weeds

Introduced grasses and weedy herbs and climbers alter the open tussock structure of the understorey, and can out-compete native species and eliminate foraging sites for ground-dwelling animals and birds.

What we can do to keep them healthy

Build skills, share information and provide resources

- Equip land owners with the knowledge and skills to manage woody and grassy weeds, and provide information on rare and threatened species, and pest animal management.

Prevent further clearing and restore connectivity

- Increase community understanding of the consequences of clearing and/or damaging native vegetation.
- Use regulatory tools such as planning controls and perpetual covenants to prevent further loss and degradation of forests and woodlands.
- Use natural regeneration and revegetation to restore habitat along key vegetation corridors and between isolated remnants..
- Encourage the responsible sourcing of firewood or use alternative fuels.

Minimise the impact of woody weeds

- Focus control efforts for woody weeds in the highest quality areas of dry forest and woodland.
- Prioritise other areas as resources allow.
- Enhance and utilise the regulatory framework and incentives to support weed control efforts.

Minimise the impact of grassy and herbaceous weeds

- Focus control efforts on patches of high value understorey such as orchid-rich areas or critical habitat for ground-dwelling fauna.
- Trial ecological and traditional burning to restore the health of the understorey.

The threats to our dry forests and woodlands

Shortage of tree hollows for animals that need them

Past tree harvesting has reduced the number of hollow-bearing trees. Many remaining trees are less than 80 years old and too young to produce hollows. Many of the existing old hollow-bearing trees occur along roadsides where they risk removal from road widening and maintenance work.

Damage by pest animals and stock

Sambar and other species of deer are growing in number. They browse heavily on native shrubs, and damage soil and creek lines by trampling them and creating wallows. Wallabies and rabbits are also over-abundant and eat native shrubs and orchids. Stock such as cattle, sheep and horses with unrestricted access damage native vegetation and compact or destabilise the soil.

Predation by foxes and cats

Foxes and cats prey on small native animals, particularly those that spend a lot of time on the ground.

What we can do to keep them healthy

Protect and supplement tree hollows

- Retain and protect large hollow-bearing trees including on roadsides.
- Establish methods to assess the landscape-scale availability of tree hollows and the numbers needed by hollow-dependent species.
- Supplement natural hollows with nest boxes and/or chainsaw hollows for rare and threatened species.
- Trial methods for accelerating the development of tree hollows.
- Rake hoe litter and other flammable material away from the trunks of hollow-bearing trees prior to initiating controlled burns.

Minimise the impact of pest animals and stock

- Take a collaborative approach across public and private land for the management of deer and rabbits.
- Use exclusion fencing to protect significant sites, especially where wattles, heaths, native peas and orchids are found, or can be replanted.
- Use fencing to restrict stock access.

Reduce predation pressure from foxes and cats

- Target fox control programs to breeding and dispersal times for rare animals and ground-dwelling birds.
- Increase community understanding of the threats cats pose to native animals, encourage people to keep their cats indoors, and provide training in the use of cat traps.