

# Bushland (open forest) habitat and threatened species (5/6/7)

Open forests are sometimes called bushland, but bushland means other things as well – it is also used to describe woodlands and grasslands.

Open forest occurs when the tree foliage (called the canopy) shades between 30 and 70 per cent of the ground. Five per cent of Australia is open forests. Every Australian state and territory has open forest and it can be found in mountainous areas, along river systems, on the plains and near coastal regions.

One of the most common trees in our open forests is the Eucalypt. There are over 800 different species of Eucalypts in Australia.

Open forests provide a place of shelter and protection for many different types of creatures. Some live there all the time while some creatures move between the bushland and other habitats.

Kangaroos and wallabies rest in the bushland during the day. Lyrebirds fossick on the forest floor. Wombats burrow into the earth and find food on the bushland floor. Koalas, possums, kookaburras, cockatoos and galahs live in the trees.

The bushland floor is covered with litter from the trees – fallen leaves, branches and trees. Smaller plants can also be found on the bushland floor. The trees and bushland litter are home to animals, birds and thousands of different types of insects. Reptiles such as snakes and lizards can be found amongst the decomposing forest floor litter, under rocks and in the hollows of logs.

Other animals that live in open forests are the Leadbeater's possum, Yellow-Bellied glider, Long-footed potoroo, Swift parrot, Three-toed Snake-toothed skink, Pygmy copperhead, Peppered tree frog and Stuttering frog.

The threats to our plants and animals that make up open forests include diseases such as the deadly Chytrid fungus that affects frogs and introduced plants and animals that compete with native species for resources. Fire and habitat loss are also continual threats to the open forests of Australia.

## A Threatened Species

The nationally endangered **Baw Baw frog** is found only in an area of 80 square kilometres on the Baw Baw plateau, Victoria.

The Baw Baw frog needs a special habitat. It breeds in wet areas in subalpine heathland and forest. It lays its eggs in foam nests in natural cavities in or under dense vegetation, logs, soil or rock. In the non-breeding season, the frogs shelter beneath dense vegetation, roots, logs, rocks and leaf litter near their breeding sites. These sites provide protection from extreme weather conditions.

Baw Baw frogs breed once a year between early October and late December. Unlike most tadpoles, Baw Baw tadpoles do not feed, instead hatching with a yolk sac that feeds them until they turn into frogs. They do not swim either; instead they develop under vegetation and leaf litter where there is little free flowing water.

Once thought to number between 20 000 and 30 000 frogs, now less than 600 remain. The reasons for the decline of the Baw Baw frog are unknown, but could include climate change, pollution, habitat destruction or disease.



Illustration: Barbara Cameron-Smith

# Rainforest habitat and threatened species (5/6/7)

Australia has two million hectares of rainforests. Most are found along the east coast of Australia.

Trees in rainforests grow very closely together – the leaves form a thick canopy, which means that very little light gets through to the forest floor. Most rainforests occur in areas of high rainfall. The term 'rainforest' covers cool temperate southern Beech forests in Tasmania and tropical vine forests in Cape York.

Rainforests have many different levels. The forest floor is dark, warm and full of plants, creatures and decaying litter from plants and trees. And there are smaller trees that live under the canopy or umbrella of the larger trees, and there are trees that have managed to grow above the canopy – emergent trees.

Tropical and subtropical rainforests have:

- many specialised growth forms such as vines, epiphytes (plants that grow on trees), mosses and ferns

- a diverse range of tree types growing very close together and
- a range of tree heights.

Cool temperate rainforest has fewer species than other types of rainforests. Sometimes they can even be dominated by a single species, such as Beech trees.

Mammals and frogs, including the Southern Cassowary, Daintree River Ringtail Possum, Lumholtz's and Bennett's tree kangaroos, Striped Possum, Spotted Cuscus, Double-eyed Fig Parrot and Fleay's frog live in rainforests.

Lizards, pythons, geckos, skinks and frogs also live in rainforests. And in the warm damp earth fungi, bacteria, algae, worms and insects live breaking down the litter into nutrients that help to feed the trees and plants.

## A Threatened Species

The endangered **Hairy Quandong** is a slender rainforest tree that grows up to 15 metres high.

The Hairy Quandong is under threat. The main cause of its decline is the invasion of the introduced plant, Lantana, from Brazil many years ago. Lantana is a prickly weed that forms dense thickets, and chokes off native species. Lantana, without native predators to control it, loved the Australian conditions and spread rapidly, with seeds mainly being spread by birds.

Scientists are trying to find if a natural predator that keeps Lantana under control in Brazil, a fungus, will be suitable for use in Australia. They must be very careful, as sometimes predators introduced for one purpose spread and cause new problems themselves – the cane toad is an excellent example of this danger.

Until a better natural method is found, weeding Lantana by hand and spraying with herbicide is the only way to control the species.

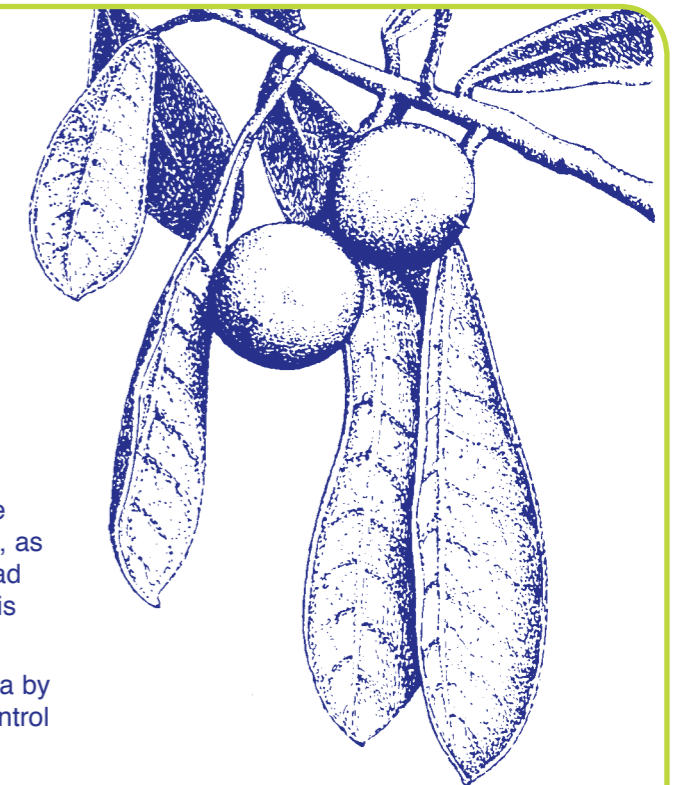


Illustration: Pat Reynolds