## Native trees in burnt areas

Fact sheet | January 2020



This enormous, hollow-bearing tree is hundreds of years old. It continues to grow and provide food and shelter for wildlife despite having been through numerous fires. Importantly, this old tree provides unique habitat that none of the other trees in the background offer.

# In the weeks and months immediately after a bushfire, affected landholders commence the major task of clean-up and repair.

It is during this time that some people seek to clear native trees that have been burnt or scorched during the fire. Eucalypt trees found in the Mount Lofty Ranges region are well adapted to bushfires and most will continue to grow normally following a fire. This means that unless a specific tree poses a safety risk, it is much better for the recovery of our native flora and fauna to retain as many trees as possible.

You can help your local environment recover from fire by allowing native trees to remain in the landscape and naturally regenerate

#### Our trees look dead, will they recover?

Eucalypts are well adapted to bushfires and have an amazing capacity to recover quickly. Even severely burnt trees that might initially appear dead will be actively recovering, however this activity occurs out of sight, beneath the bark! The first signs of recovery can usually be seen after a few months when new leaves push their way out from beneath the blackened bark. Known as epicormic growth, new shoots emerge from the trunk and base of the tree. During this time it is important to control the total grazing pressure to give regrowth and seedlings a chance to establish. See our web page on 'Land, livestock and pasture care after fire'.

Eucalypts with rough or stringy bark may appear to have been more severely burnt than trees with smooth bark. However this doesn't affect their ability to recover from fire as bark can protect the inner layers of the tree, and does not make them more likely to collapse. In the following months it may become apparent (when all other trees have resprouted) that some trees haven't survived. Trees that don't recover from fire are likely to be those that are under some other 'stress' (e.g. from prolonged drought, soil diseases, excess soil nutrients from fertiliser etc.). However, even dead trees provide important habitat so they shouldn't be removed unless absolutely necessary.



#### What about dead trees or fallen timber?

Dead trees and fallen timber are also essential aspects of the landscape and play an important role in recovery from bushfire.

After a fire the vegetative understorey is removed and therefore small fauna species can be particularly vulnerable to predation. For native wildlife, dead trees and fallen timber can therefore provide the required structure to allow refuge and foraging opportunities in the fire scar. One of our last remaining small marsupials in the Adelaide Hills, the Yellow-footed Antechinus, use these particular sites preferentially, as do echidnas, who use fallen hollow logs for shelter.

Dead trees and branches still retain their hollows which are features that our declining Mt Lofty woodland birds rely on (e.g. brown treecreeper). And tawny frogmouths love hunting from dead branches as it gives them the perfect vantage.

Logs and branches can also slow wind speeds, provide cover and protection to native flora and trap seeds. These seeds will later germinate and grow to help stabilise the soil, shade the soil surface and reduce soil water evaporation.

#### Are trees significant fuel for bushfires?

In a bushfire, the most significant fuels are in fact 'fine fuels' such as grass, leaves, bark and twigs, that are less than 6 mm in diameter. Fine fuels catch fire easily when dry and 'carry' a fire. To reduce bushfire risks, it is important to manage debris and vegetation that makes up these fine fuels near your home and around other assets. In areas around assets, you may need to trim low branches as they can help connect fine fuels below a tree with the tree canopy. Any trees within 20 metres of your home should not overhang the house and it's recommended to have spaces between tree canopies. But remember trees are not your enemy. They can trap embers, reduce wind speeds and act as a radiant heat shield' (source: CFS booklet 'Your guide to bushfire safety'). For further information about managing native vegetation to reduce bushfire risks, refer to the CFS website: www.cfs.sa.gov.au.



Watch with wonder as new eucalypt leaves push their way out from beneath burnt bark



Keeping fallen logs and branches provides cover from predators for short-beaked echidnas and will also provide protection and habitat for invertebrates, which are an echidna's food source

#### Why are trees important?

Trees are a critical part of our landscape. They provide important habitat for native animals like birds, possums and micro-bats (small insectivorous bats). Much of this wildlife plays an important role in keeping insect populations in balance. This is important for the natural environment and agricultural production. Trees in agricultural landscapes also provide shelter for stock and help reduce soil erosion. Trees that contain hollows are especially important because many native animals, including threatened species like the yellow-tailed black cockatoo, require these hollows to shelter and nest in. Hollows develop as trees age and are often only present in large trees that are over 100 years old. This makes these trees and their hollows irreplaceable in our lifetime, particularly in areas like the Adelaide Hills where many of the larger trees were historically logged.



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A local insectivore, the Owlet-nightjar, peers out from the safety of its tree hollow home. Photo: Danny McCreadie

#### Are burnt trees dangerous?

Only a small proportion of eucalypt trees that are burnt will collapse or drop branches during or after a fire. To determine if a burnt tree is a hazard you need to consider:

- the **likelihood** of the tree or a portion of it falling
- the **chance of it causing significant damage or injury** if it does fall (i.e. trees that are not close to houses or work areas are unlikely to cause damage even if they do fall).

If you are concerned about a tree, a qualified arborist will be able to provide advice on whether it is likely to be a risk or not.

#### Is it legal to clear burnt or dead trees?

To conserve the health of our environment and its biodiversity, native trees and bushland are protected under the *Native Vegetation Act 1991*.

- In the Adelaide Hills region, if a tree is native and dead (burnt inside and out, and structurally damaged), regardless of the height, it can be removed. However, in other regions there are restrictions about which dead trees can be removed based on the tree's circumference. Contact your local Natural Resources Centre for more information.
- It is important to keep in mind that many native trees that look dead will regenerate, in which case approval is required to remove it. If the tree is burnt, but regenerating, dead limbs can be pruned.
- Detail on clearing vegetation for fire hazard reduction, and what is permitted, is on the CFS website, under the Native Vegetation Management section: **www.cfs.sa.gov.au**.
- For all other clearance questions related to living trees please contact your local Natural Resources Centre (contact details in this fact sheet).

#### Can I collect fallen timber?

Where possible, fallen timber from native trees should be left on the ground as habitat. As mentioned, fallen timber provides shelter and foraging places for native animals, it shelters young seedlings and small plants from heat and drying winds and is important in the recycling of nutrients. In recognition of the valuable habitat provided by fallen timber, its removal from roadsides is prohibited in most local council areas under the *Local Government Act 1999*.



A regenerating tree one month after fire





### Further information, contact your local Natural Resources Centre:

Gawler (08) 8115 4600 Black Hill 8336 0901 Willunga 8550 3400

www.naturalresources.sa.gov.au/adelaidemtloftyranges/

Photo: Clive Furler



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