

1 FACT VS FICTION

EXPOSING MYTHS ABOUT PRESCRIBED BURNING IN SOUTH-WEST FORESTS



MYTH: “Prescribed burning is the best way to protect life, property and biodiversity from wildfires.”

FACT: Smoke from prescribed burns kills people.

Between 2002 and 2017 smoke from prescribed burns was estimated to have caused the death of 21 people in south-west W.A. In this period four people died directly from wildfire. Estimated health-related costs in 2017 alone were \$24.1 million (Fact Sheet 4).

FACT: Prescribed burns have escaped and destroyed houses. (Fact Sheet 8).



Dwelling destroyed by out-of-control prescribed burn in Margaret River.

Source: Report on “Investigation of the house losses in the Margaret River Bushfire 23 November 2011”, Department of Fire & Emergency Services, October 2012.

FACT: Prescribed burns kill animals and plants.

Prescribed burns kill mammals, birds, reptiles, frogs, insects and plants. They cause old, valuable habitat trees to collapse pushing already threatened species closer to extinction. Many plant species and communities are not adapted to frequent, hot fire. (Fact Sheet 3).



A critically-endangered ringtail possum after Warrungup Spring prescribed burn in 2018.

Source: Allison Dixon.

FACT: Frequent prescribed burning is causing biodiversity loss.

In most of its prescribed burns DBCA is allowed to injure or kill any number of threatened plants and animals. (Fact Sheet 3).

“Where prescribed burning impacts restricted, discontinuous or rare habitats, there is a high probability of species loss and irreversible changes to biodiversity.”

Humane Society International, 2022.



Critically endangered *Banksia verticillata* killed in prescribed burn at Poison Hill, Nuyts block, April 2018.

MYTH: “Aboriginal people burnt the forests extensively and the Department of Biodiversity, Conservation and Attractions (DBCA) is simply continuing Noongar land management practices.”

FACT: DBCA’s prescribed burning differs from Noongar use of fire in scale, intensity and frequency.

Noongar people did not burn the karri or tingle forests or other sensitive environments. Deliberately or accidentally, DBCA burns every ecosystem type in the south-west forest region. (Fact Sheet 6).

FACT: Prescribed burns produce greenhouse gases and contribute to climate change.

Annual prescribed burns totalling approximately 200 000 ha have GHG emissions equivalent to about 10% of Western Australia’s reported annual emissions. (Fact Sheet 7).

FACT: State and federal legislation is not being applied to DBCA's prescribed burning program.

- The federal *Environment Protection and Biodiversity Conservation Act 1999* is not being applied to protect the south-west's precious biodiversity from prescribed burning.
- Under the state *Biodiversity Conservation Act 2016*, DBCA's minister authorises DBCA to take (kill) or disturb any number of threatened fauna and flora during prescribed burns.
- Prescribed burning is exempt from the *National Environment Protection (Ambient Air Quality) Measure*.
- Prescribed-burn greenhouse gas (GHG) emissions are accounted for as 'natural variations' and not included in Australia's reported totals. (Fact Sheets 3 and 4).

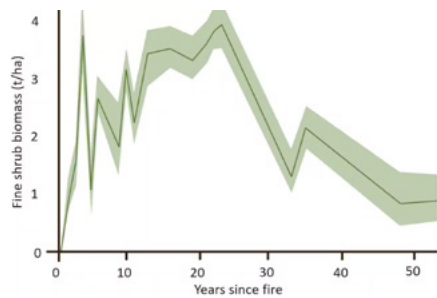
MYTH: "Prescribed burning reduces the fuel load."

FACT: Burning stimulates growth, increasing fuel load.



Dense understorey in jarrah forest after burning.

Source: Philip Zylstra, <https://theconversation.com/coming-of-age-research-shows-old-forests-are-3-times-less-flammable-than-those-just-burned-179571>



Graph showing that the fine shrub biomass peaks 25 years post fire then declines.

Source: figure 5-7 <https://openresearch-repository.anu.edu.au/handle/1885/10037>

Philip Zylstra.

(Fact Sheet 5).

FACT: Prescribed burning stops natural reduction of forest floor fuel load.

Prescribed burns kill microbes, invertebrates and fungi that decompose and reduce flammable litter naturally, and animals that turn it over.



A single Woylie (weighing around 1.2 kg) turns over approximately 5 tonnes of soil per year.

Source: Humane Society International Australia.

(Fact Sheet 5).

MYTH: "Keeping 45% of the south-west forests with a time-since-burn of less than 6 years allows fire suppression when a wildfire reaches an area with low fuel load."

FACT: In extreme fire weather ground-level fuel loads play no part in fire propagation.

Almost all damaging wildfires occur in extreme fire weather. Fire quickly climbs to the tree crowns and then travels at that level. Only a wind or weather change will stop it. (Fact Sheets 2 and 5).

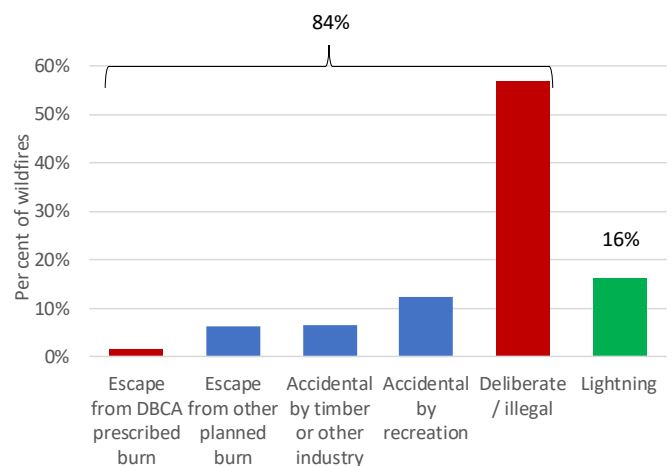


Source: DFES website: <https://www.dfes.wa.gov.au/hazard-information/bushfire/during>

MYTH: "Reducing the fuel load is the only way to protect people and property from wildfires."

FACT: Most wildfires are started by people.

From July 1991 to December 2023, around 8400 south-west wildfires were recorded in the DBCA_060 database. The main cause was arson (59%). More can and should be done to stop arson. (Fact Sheet 8).



FACT: Immediate detection and rapid suppression of ignitions is the safest and most effective way to protect life, property and biodiversity from wildfires. (Fact Sheet 8).