

Reducing bushfire fuel by slashing



Before and after slashing work in Sturt Gorge Recreation Park

Each year select national parks and reserves are slashed to reduce the risk of a bushfire spreading

How removing dry fine fuels reduces the risk of fire spreading

Bushfires are spread by **dry fine fuels**, smaller in diameter than your index finger such as grass, leaf litter, twigs, bark and other vegetation, similar to what you would use to light a campfire or a wood fire in your lounge room.

When flames come into contact with these fuels, they heat up very quickly and ignite, causing the fire to spread.

However, **moist fuels** such as green grass require more heat to ignite so they don't burn until they are dried off and brown (cured).

And **coarse fuels**, such as fallen branches, take a long time to heat up and ignite. They may eventually catch fire and burn but they don't cause the fire to spread.

So when a fire reaches an area where there is not a lot of dry fine fuel, it slows down. If it reaches an area where there is no fine fuel it will stop spreading.

National Parks slashing program

Slashing is part of an annual National Parks and Wildlife Service SA (NPWSSA) program to reduce dry fine fuel.

It is also a standard part of every Fire Management Plan produced for national parks and reserves.

These plans work alongside zoning standards set by the Country Fire Service which help define the threshold of a certain area for fuel loads or for conserving plants and animal habitats, so it's understood when action needs to be taken.

A fire management plan takes into consideration that:

- slashing depends on the season for grasses to cure
- slashing starts in the north, where grass cures earlier and works its way down to southern parks
- as the time for slashing draws near sites are constantly monitored
- areas which are high risk are prioritised on a rolling program.

Slashing is just one of many fire management activities undertaken to manage fuel.

Other tools include modifying vegetation through prescribed burns, weed control, and lopping, chipping, crushing or piling vegetation, depending on the type of vegetation and the scale of treatment needed for each site.

How slashing reduces risk

Fire management planning determines how to reduce the risk of bushfires while at the same time, preserving the natural values of our reserves including protecting and conserving our native plants and animals and providing areas for recreation.

When choosing where to slash, neighbouring buildings and assets to the reserve, or within the reserve are considered, along with park boundaries, the fuel type and the location of fire tracks.

The way slashing reduces bushfire risk is to reduce dry fine fuel loads.

This slows down a bushfire, or stops it when it reaches the newly-created fire break area. The flames will be smaller making it easier and safer for firefighters to suppress and less likely to spread beyond the slashed area.

When slashing fire breaks along roadsides, they tend to be narrow as roads also serve as a fuel break, however near houses and other buildings slashed breaks are much wider.

Slashing also occurs along the network of fire tracks to ensure safe access for vehicles and to provide low-fuel breaks to slow the spread of any fire.

In areas which can't be slashed, fuels are reduced through other means such as prescribed burning, vegetation thinning or weed control.

Slashing once the grass cures

Grass becomes a fire risk once it cures and turns brown, which is when it is slashed.

While the grass is green, it contains too much moisture to burn well and doesn't pose a fire risk. Slashing green grass too early is also ineffective as the grass continues to grow which makes repeat visits necessary.

Although slashing is scheduled annually, in accordance with fire management plans, the exact timing varies due to seasonal variability.

Grass also cures at different times from one year to the next. In dry years the grass cures early; and a wetter spring causes the grass to cure later.

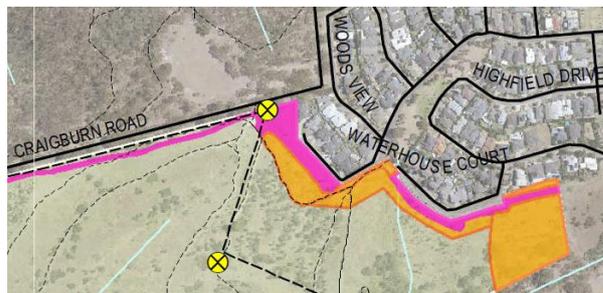
Curing rates are monitored and slashing commences when the grass cures. This typically starts in reserves to the north as the area is drier and warmer and the grass cures earliest. Then the slashing program works its way down south to complete.

Hand slashing vs machine slashing

Each reserve's slashing plan identifies where and when an area will be slashed by machine and by hand.

After a tractor has completed the bulk of the slashing in a reserve, NPWSSA seasonal fire crew follow-up selected areas with hand slashing in areas a tractor can't get to.

Slashing in a reserve is not considered complete until both machine and hand slashing have been finalised.



A fire management plan will identify where slashing will occur and if it will be slashed by machine (pink) or by hand (orange)



Seasonal fire crew help with reducing fuels through slashing, other vegetation thinning works, weed control and prescribed burning

A shared responsibility

While reducing fuel is the main way to reduce the risk of bushfire, under catastrophic fire danger conditions bushfires can still burn across the landscape with very low fuel loads.

However, all activities to reduce fuel have some moderating effect on the fire and allow for safer suppression opportunities when conditions improve.

This is why planning and being prepared for a bushfire is a shared responsibility.

It's important to have a Bushfire Survival Plan, prepare your property well prior to the fire danger season, and have a plan for total fire ban days.

The CFS has resources to help you understand your role in bushfire preparedness and planning: cfs.sa.gov.au.

More information

environment.sa.gov.au/topics/fire-management