Bushwalking Bushfire Safety

About bushfires

Australia like several other countries in the world has a reputation for serious bushfires. A basic understanding of bushfires is useful if you are a bushwalker or spend time in the outdoors.

Bushfires are usually started accidentally - things like dry lightning strikes, flying embers from an existing fire, or the careless actions of humans can all ignite a fire.

Bushfire behaviour is influenced by three main factors:

- **Fuel**
  The type of fuel, the amount of fuel, its moisture content and the arrangement of the fuel determines the intensity and rate of spread of a fire. For example, in forest land the fire burns with high intensity but moves slowly, whereas in grassland the fire is less intense but moves quickly.

- **Weather**
  Fires will be more intense on hot dry days than on cool humid days. Fires move more quickly when it is windy and wind changes can affect fire behaviour dramatically.

  Note that a big fire can create its own micro-climate and will ‘suck’ in oxygen to maintain a blaze – a wind that will appear to move toward the fire even though the fire is heading in the opposite direction.

- **Topography**
  The lay of the land has considerable effect on the way the fire travels. A “preheating” effect causes the fire to move more quickly uphill (roughly doubling in speed for each 10 degree increase in the slope)

The key to surviving a bushfire is to understand these factors, predict how they will interact, and take appropriate actions. The best way to avoid the risk of being caught in a bushfire is to avoid walking at high risk times and in high risk locations.
When you are planning a bushwalk, check the following:

- Bushfire fire warnings
  - Rural Fire Service
  - Fire & Emergency Services
- Fire bans
- Weather forecast – get a weather app for your phone
- Park Alerts and closures

Then make a sensible call - to go or not to go!

Be prepared!
Before you go

- Research your route – take a map (will the map on your phone work?)
- Plan an escape route and/or shelter
- Is there water available on the walk?
- Does someone in your party have first aid training?
- Intentions – let someone know where you are going and when you will be back?

What to take
This list only covers items that may help in the event of a fire emergency. Not all these items are always necessary, but worth considering.

- Maps, compass
- Communications – is your phone charged? Should you take a power bank?
- Whistle
- Personal Locator Beacon (PLB)
- First Aid Kit
- Cigarette lighter – in case you need to light a fire!
- Water
- Appropriate footwear and clothing – remember synthetic clothes melt!

On the trail!

- Keep to your planned route and don’t leave the trail
- Be alert – know where you are and note your likely escape routes
- Keep your party together
- Take care when using a cooker and think carefully before lighting a fire
- If you smell smoke or see evidence of a fire:
  - Don’t panic
  - Plan to leave immediately
  - Call 000 to alert the authorities
If you are unable to leave early and are caught in a fire:

- Don’t panic!
- Call 000 or activate the PLB
- Don’t try to outrun the fire - attempt to get out of the path of the fire by heading off to the side where the fire will be less intense
- Don’t head for higher ground – fires move faster uphill!
- Find a cleared area with rocks, hollows, embankments, streams or roads
- Move to burnt ground when the fire has passed – you may be able to light a fire ahead of you to create a cleared area the bushfire will move over quickly
- Keep well clear of the fire – sudden intense radiant heat can ‘bake’ you on the spot – and suck all the air your lungs too!
- Protect yourself from radiant heat – find shelter, if possible, and replace any synthetic clothing
- Keep low to try and avoid the smoke and cover your skin.
- Drink water and cover your mouth with a damp cloth
- As a last resort you may need to run through the flames to a burnt-out area. Choose a relatively clear area where flames are less than a metre high, take a deep breath, cover your face and run.

When the fire passes by you, move to already burnt ground (if you haven’t already) and commence first aid, if necessary. Notify authorities of your situation and, again if necessary, await rescue.

Useful Resources

- [Bushwalking](Outdoors Queensland)
- [Intentions](forms & apps)
- [Apps for Outdoors](navigation, first aid, safety, weather)
- [Are You Bushfire Prepared?](

References

- [Australian Hiker](
- [Bush Fire Safety for Bushwalkers](
- [Bushfire Safety for Hikers](
- [Hiking safely in Australia’s bushfire season](

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