

# Farm and Livestock Bushfire Plan

Bushfire is an inherent threat in Victoria. Preparing a farm bushfire plan can help protect stock and reduce personal safety risks as well as the financial and emotional burden.

Never assume a rural property is free from the risk of bushfire. All rural and regional properties are at risk and complacency can be deadly.



Being prepared is the key to minimising the risk and impact of fire on your property and to livestock and pets.

Prepare your property regardless of whether your decision is to leave early, before a fire threatens your property, or to stay and actively defend your well prepared home.

If you decide you will leave, you must do it early on a high-risk day and well in advance of knowing there is fire in your area. On Code Red days the safest option is to leave high risk bushfire areas the night before or early in the morning. The announcement of a fire danger rating of Code Red, Extreme or Severe should be the trigger for your decision. Do not wait and see as late evacuation is a deadly option.

Understanding fire behaviour will help you to develop your fire plan and prepare your property in the lead up to the fire season.

## **Radiant heat**

Radiant heat is a major killer in bushfires. An enormous amount of heat can radiate out from a bushfire and, without protection, it will kill people and livestock.

Solid objects provide protection from radiant heat although the best protection is distance. Ensure low risk areas are large enough to enable livestock to move far enough away from the radiant heat.

Forest and plantation fires burn with much greater intensity than grass fires and produce much greater radiant heat. Therefore, low risk areas should not be next to areas of bushland or at least large enough in size to allow livestock to move far enough away.

## **Understanding Fire Behaviour**

Fire needs three things - heat, oxygen and fuel. In a bushfire, the one thing we can control is the amount of fuel (vegetation, fallen trees, hay, twigs, leaves and garden mulch) available.

The amount and type of fuel will affect the intensity and speed of a bushfire. A forest fire will be very hot yet travel relatively slowly, although spot fires ignited by flying embers can start 'new' fires well in front of the main fire. Grassland fires move much quicker but are generally less intense.

Local terrain will affect the speed a bushfire will approach your property. Fire travels faster up slopes - doubling in speed for every 10 degrees - and slower down slopes.

Weather also plays an important role in the intensity and speed of a bushfire. Extreme heat, gusting winds and low humidity dramatically increase the fire risk. Prolonged dry conditions dries out vegetation and adds to the risk.

It is important to plan and be prepared well in advance of the fire season. Do not wait until the threat is imminent.

## **Fire preparation and personal safety**

Recent fires have highlighted that good preparation and early action are essential. Your life and that of your family, farm workers and visitors must be paramount.

Visit the Country Fire Authority (CFA) website ([www.cfa.vic.gov.au](http://www.cfa.vic.gov.au)) for information on bushfire and assistance in developing a personal Bushfire Survival Plan or contact your local CFA regional office.

In times of crisis, people worry not only about their family and property but also about their livestock and pets.

Fire plans for livestock and any other animals on your farm must be just as comprehensive as your personal plan and include several options as unpredictable fire behaviour could prevent or alter the implementation of your plan and adversely affect personal safety.

A key to a successful bushfire survival plan is enacting your plan early. Do NOT wait until fire is imminent.

## **Insurance**

The financial trauma caused by bushfire can be significantly lessened if you have adequate insurance cover. Rural landholders, large and small, have much more to consider when looking for cover.

Things to consider when [choosing a rural policy](#).

## **Developing a livestock fire plan**

It is essential to have a safe, workable action plan for livestock that is able to be implemented quickly and safely.

The core of the plan should be the identification of low risk areas into which livestock can be moved. For horses, this may be taking them to another property or stables outside the area.

Prior to the fire season, sowing green summer crops and strategic spring and summer grazing are simple and effective ways to establish low fire risk areas on your farm.

When strategically placed, low risk areas such as summer crops, cultivated, irrigated or bared-out paddocks could also provide fire protection for your home, sheds, machinery and other infrastructure critical to post fire recovery.

Ploughed firebreaks and laneways around designated low risk areas to retard fire will provide further protection.

Fire can jump breaks, so care must be taken in planning and constructing effective firebreaks. Trees planted along laneways have the potential to add further fuel to the fire, especially if they are native species. Fallen tree limbs could cut-off escape routes.

Once you have developed your plan, keep it in a clearly visible place, perhaps on the fridge, together with emergency telephone numbers and your property's CFA map reference.

Every mob of animals on every property needs an individual plan that is updated every year and possibly midway through the fire season depending on changing circumstances.

## **Low risk areas**

Low risk areas for livestock during a bushfire should be centrally located and easy to access. Strategically placed, they can act as a bushfire barrier as well as a low risk area that animals can be moved early on high fire danger days. Low risk areas should *not* be next to areas of scrub or bushland or at least large enough in size to allow livestock to move far enough away from the fire.

Bushfires are most prevalent on hot, windy days and confined animals are susceptible to radiant heat, heat stress and dehydration. All low risk areas should have

- sufficient drinking water to enable stock to remain in this area during periods of high to extreme temperatures for many hours or days; and
- protected by firebreaks and be free of leaf, twigs and bark build-up;

Thought should be put into the preferred location and take into account terrain, accessibility, the most likely direction of the fire threat, prevailing winds in the summer months and location of forests and bushland. Bushfires tend to start on north-wind days, but a lot of damage is caused after the south-westerly change arrives widening the fire front. Consider this when planning your low-risk paddocks.

Farms with large numbers of sheep and cattle may need to manage several low risk areas on the property.

Low risk areas include:

### **Cultivated paddocks**

Areas cultivated and kept clear of regrowth can provide protection from fire. Business objectives may not allow these unproductive areas to exist on some farms.

## **Bared-out paddocks**

These are paddocks that have been heavily grazed in spring and early summer to reduce dry feed. They can provide a low risk area when they are well defended by fire breaks.

The differing grazing habits of cattle and sheep can be used to help reduce the available feed in the designated paddocks to an absolute minimum.

Crash grazing, using very large mobs of wethers, can be an effective strategy to reduce the quantity of available fuel prior to the fire season.

For erosion control, attempt to leave about 500 kilograms of dry matter per hectare (kg DM/ha) of dry pasture.

## **Green paddocks**

Irrigated paddocks and green summer crops don't burn as readily as dry feed. As well as providing a bushfire refuge and fire break, these paddocks continue to be productive.

## **Yards**

Using yards as a low risk area may be a consideration, however extra care should be taken in preparation for the coming fire front. Wetting down the surrounds and extensive fire breaks around the yards are recommended.

Sheep often refuse to move once conditions get very hot, so they should be moved early in the day.

A large, well fenced sand menage could be an option for horses, provided there are no trees or buildings nearby that will burn readily.

It is not recommended to shut horses in stables or small yards unless the area is well protected from bushfire. Past experience of bushfires indicates horses are likely to receive only minimal burns if given plenty of room to move. They will gallop through flames or around their edges, and stand on the blackened, previously burnt area and remain there until the fire has passed.

Cattle are skilful at moving to avoid fire, so may be kept in low risk paddocks with relative safety.

The mobbing instincts of sheep could prevent movement away from a fire if kept in the open, so more confined areas would be more suitable.

It is important to remember low risk areas must be available at all times during the fire season and at short notice. On days of Extreme, Severe or Code Red fire danger rating, put your livestock in your low risk area or, if you work away from the property, you might do this the night before.

## **Evacuating livestock**

Your livestock fire plan may be for early evacuation of livestock to a safer district, but evacuations present unique problems. Make arrangements well ahead of time for a place to temporarily relocate your animals.

Options could be showgrounds, sale yards, parks, racetracks, pony club grounds or placement with family and friends. Identify several possible retreat routes from your property in case fires block your escape. Decide in advance which animals you will evacuate and make sure they are suitably trained for transport.

### **Managing fire risk when you do not live permanently on the property**

If your livestock are on property in high-risk areas that you may not reside, consider moving them to a safer location during the fire season or leave them in well grazed paddocks with supplementary feed.

If your livestock are agisted, develop a livestock bushfire plan with the landholder.

### **Managing horses during a fire emergency**

Fire-safe gear for horses is important. Don't use synthetic (nylon or plastic) halters or lead ropes. These can melt and cause serious burns to your horse and its handler. Leather halters and cotton lead ropes, while generally not as strong as nylon, will be safer. Radiant heat can cause metal buckles to become hot and cause burns to the animals. Don't use nylon fly masks or other synthetic tack or equipment.

Permanently identified horses (microchipped, branded or identified by a drawing, which includes whorls and white markings) will help to more quickly reunite them with their owners if separation occurs during a disaster.

In an emergency, at the very least, be prepared to paint your name and phone number on the horse itself using livestock grease crayons like the ones used to number horses in endurance rides, or clip similar details into its hair coat or paint its hooves. Neckbands, hip stickers and identification tags on leather head collars can also be useful.

### **Other animals**

Don't forget other animals you may have on farm such [as working dogs or small pets](#). Ensure you include them in your plan. If you can't take them with you ensure they are in a protected place with shelter, food and plenty of water.

### **Community action**

Rural communities are well known for working together in times of crisis. Consider having an annual meeting with neighbours, friends or other mutual interest groups to discuss fire contingency plans and establish ahead of time who will check on and help whom and which resources will be shared.

### **Enacting your fire plan**

It is important to have a written Bushfire Survival Plan and to practice it regularly.

Don't keep it to yourself. Involve all family members and others who live or work on your property.

Establish a trigger to activate your fire plan. The immediate threat of a bushfire is too late as there is an unacceptable risk to human life.

Victoria has adopted the national Fire Danger Rating scale to help people to understand the fire danger. Monitoring daily weather forecast, the fire danger rating (FDR) and your local ABC radio.

The CFA recommends activating your Bushfire Survival Plan on days with an FDR rating of Severe, Extreme or Code Red (catastrophic).

Early implementation of your fire plan will lower the risk to personal safety and to the safety of your animals.

This means moving your livestock onto your low risk areas the night before or early in the morning of high risk days as they can be difficult to move when stressed by smoke or fire. Waiting until you see smoke or flames is a deadly option.

If you are lucky and not impacted by fire, the worst that you will have to face is a little drafting afterwards to separate the livestock back into their mobs or herds.

## **Fences**

If your fences are electrified, make sure your boundary fences are stock proof even without electricity as the power often goes out during a bushfire.

Cutting internal fences to allow stock to move with the movements of the fire is NOT recommended. Containment in a secure, low risk, area is more suitable and should reduce stock confusion and distress as the fire front passes.

Fences along roadsides should NOT be cut. Loose stock can cause accidents during fire, particularly when visibility is low due to smoke haze and can be difficult to manage after the fire front passes.

## **Protection for you, your family and farm workers**

The CFA booklet *Defending your Property* is an invaluable source for a list of items necessary for personal protection, suggested tools and equipment to have on hand the resources necessary for defending your home.

The booklet is part of a [bushfire series](#) and is available from the CFA website or by contacting the Victorian Bushfire Information Line (VBIL) on **1800 240 667**.

The right clothes can help shield you from radiant heat, burning embers and flames. If you must go out checking stock in shorts and sandals on high fire risk days, make sure you at least take your safe clothing kit with you in case a fire starts while you're out. Radiant heat kills.

A word to the wise: condition your pets and horses to your strange appearance ahead of time.

## **Preparing for the fire season**

Everyone in Victoria who lives on a farm needs to prepare their property for bushfire - even if you plan to leave early on fire risk days.

A well prepared farm has a greater chance of surviving a bushfire. Remove tree branches that hang over your house or shedding. Cut the grass and get rid of material, such as dry grass, leaves and twigs, that can catch fire.

Clean up fallen branches, leaves and twigs under farm plantations and along farm access routes and laneways. Use a rake to remove loose, ribbon bark that could carry fire up into the canopy of trees.

Clean out the gutters and remove flammable material against or under sheds. Keep vegetation and other flammable material well back from plastic tanks as even full tanks can melt and rupture. Tanks should be made from galvanised iron or concrete could be a better option.

Consider installing strategically placed fire hose reels around the home and sheds.

Keep petrol, diesel and other flammable supplies away from you home and shedding. Consider a well protected, dedicated storage area.

Identify alternative farm exit routes in case the primary access is blocked by a fallen tree or spot fire. If there is only one obvious exit, a set of wire cutters in each vehicle could be a life saver. Know where roadside drains are shallow enough to enable you to drive onto the road.

A farm water supply is only as good as its weakest link. Surface laid poly pipe and tap or trough poly risers could be that weak link. Keep grass and other flammable material away or bury poly pipe to a depth of at least 300mm and replace poly risers with fire resistant pipe.

Don't use empty bays of hay sheds to store valuable farm machinery. As well as the risk of machinery or flying embers setting the hay alight, there is the threat of spontaneous combustion. (Ed: [Link to haystack fires](#))

The electricity supply is usually one of the first casualties during a bushfire. Make sure you take this into account in your fire planning so you have an alternative means of accessing water for stock as well as fire fighting.

Check and run fire pumps or generators at least monthly during the fire season to ensure they will run when needed. Protect fixed pumps or generators from radiant heat. Excessive heat can melt plastic motor parts or vaporise the fuel.

Check fire extinguishers are full, charged and, where necessary, securely mounted on tractors, headers and other farm machinery.

**Develop and practice your Bushfire Survival Plan now**

For more advice on [Fire safety on the farm](#) go to the CFA website