

# ASSESSMENT OF CATTLE BURNT IN BUSHFIRES

**Jakob Malmo**

Maffra Veterinary Centre, 10 Johnson Street, Maffra, Victoria. 3860

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## Introduction

Unfortunately, bushfires in summer are a common part of the Australian landscape. Despite that, it seems that many veterinary practitioners have little or no experience in dealing with burnt livestock, even though cattle are common victims of bushfires.

Cattle generally suffer fewer losses than sheep in the event of bushfire. Cattle can be affected when they are left in paddocks with a high fuel load such as dry grass. Cattle can be trapped, for example, behind fences and the results can be horrendous.

In this presentation I intend to discuss my experiences following the Aberfeldy-Seaton in 2013. You may not think of an area such as the Macalister irrigation District as being prone to bushfire. But many of our beef cattle clients, and some of our dairy clients with turnout paddocks, have properties adjoining bush in the Great Divide. Fires can come out of the bush and rapidly spread over our grassland.

In recent years we have had fires in 2006, 2007, 2013 and there were severe bushfires east of us in 2014. But only in the 2013 and 2014 bushfires were there significant cattle losses.

At least in Victoria, Department of Environment and Primary Industries (DEPI) staff visit fire affected areas after the all-clear is given and it is safe to enter the fire grounds. Teams conduct rapid assessments that include:

- The location, boundaries and extent of the burnt area
- The approximate number of private properties burnt
- The initial assessment of the number of livestock burnt

DEPI staff are then assigned to visit properties as soon as possible to assist with a more detailed assessment of damage, and to assist stock owners with management of their livestock that have been through the fire. The

priority is to deal with animal welfare needs and refer any human welfare concerns to the appropriate agency. The initial concern will be to assess livestock and destroy those that are suffering.

## The 2013 Aberfeldy-Seaton fires

To give an idea of how quickly the fires can move, I shall relate my personal experience with this fire. I had cattle running on dry country in the Seaton area. On the evening of 17 January, 2013, my farm manager and I looked out from my home at Tinamba and saw the red glow of the Aberfeldy fires – some 40 km away.

We made the decision that if the fires continued to move towards Seaton, we would move our cattle out early in the following morning.

But the fires moved much more quickly than that – by early on the morning of January 18 the bushfires had come down from Aberfeldy to Seaton and burnt through to the Lake Glenmaggie caravan Park.

As a concerned stock owner, I wanted to get into my own property to check on the livestock that were there. Later in the day, when the fires had calmed down a little, I attempted to drive to our property at Seaton to assess the livestock and the property damage, but was stopped by a police roadblock.

That evening I had a phone call from one of my clients (a very near neighbour to our property at Seaton) who said he had a lot of dead burnt cattle and a lot of live injured cattle. I promised to try and get in next day to assess his stock, but was stopped again by roadblocks and could not talk my way through. On the Sunday there was a public meeting at Heyfield where I bought up my concerns about lack of access, and was promised that within 2 hours I would have access to these properties. But when I then approached the police roadblock, I was again stopped and no way allowed through.

I turned back and went around some back roads, only to find another police block as I



got close to our Seaton property. This time I talked to the police officer, explained what I was trying to do and his response was "go to it, mate. Good luck!!" A very decent cop, and common sense prevailed.

I first drove to our own property – all the fences, hay sheds, tractors and stockyards had been totally destroyed. I found the carcass of 1 steer (he had been caught in the corner of the paddock), but all of the other cattle appeared unharmed. But why access is restricted was brought home to me by the fact that when I drove in to our property the track was clear, but on the way out some 10 minutes later a very big gumtree had fallen across the track – you would not have wanted to be in the wrong place at the wrong time.

I then drove to my neighbour who had called on the Friday night. He was genuinely thrilled to see me – his comment was that someone who he knew and trusted had arrived to help him. My neighbour was under extreme stress and strain at this time and it was showing. But it was not made easier by the bureaucracy. On the Sunday morning before I was able to get in, his wife tried to leave the property to get food for the workers on the farm. She was informed by the police that if she crossed their roadblock she would not be allowed to come back in. My neighbour was so incensed by this action that he had to be physically restrained to stop him from taking further action. I mention this because we need to realise that we are not only dealing with the injured livestock, but with very severely stressed farm operators who need our full understanding and support.

### Assessment of the livestock

We first drove to a wooded area where I have never seen such a horrendous sight in my professional life. There were bloated dead cattle everywhere – their abdominal walls in many cases had ruptured and the rumen was protruding. There were over 60 dead fat Angus cattle at this site and it is a sight that I shall never forget.

We had the remainder of the cattle in the yards and proceeded to assess their condition. I believe that it is necessary to have cattle in the yards so that each animal can be given an adequate individual inspection.

By now it was around 4 PM and we did not have a lot of daylight. There were around 300 cattle in this mob.

Our aim was to divide the cattle into 3 groups:

1. Those that on animal welfare grounds needed to be euthanased immediately
2. Those that had obvious burns, but were assessed as not needing to be destroyed on animal welfare grounds and as having a reasonable chance of recovery given reasonable nursing.
3. Those animals that appeared normal

I should point out that on this property all of the hill country and fences had been burnt, but the houses and stockyards sheds etc. had survived. They also had some river flats which had not been burnt and could provide at least short-term feed for the cattle.

#### 1. Grounds for immediate euthanasia

- Extensive damage to the legs and feet with swelling of the legs and the burnt skin having a dry and leathery appearance. The hooves were starting to separate at the coronary band.
- Severe burns to more than around 10 to 15% of the body – this skin was likely to slough.
- Severe burns around the face and eyes so that the surface of the cornea was dry and damaged.
- Animals suffering from smoke or flame inhalation resulting in acute pneumonia as evidenced by laboured breathing, frothing at the nose and mouth and severe coughing.
- Animals which are down and unable to rise because of burn injuries.

#### 2. Grounds for assessing that the animals could survive with reasonable nursing

- These animals had less than 10 to 15% of their body covered by moderately severe burns.
- They did not have severe separation of the hooves at coronary band – although in some there was some separation at the heels.
- The animals looked bright and alert.
- Cows with calves at foot require careful examination of the teats and udders – burnt teats may mean that the cow will



reject the young calf which may die without intervention.

### 3. The animals that appeared normal

These are cattle that were apparently either undamaged, or had only minor singeing of the hair and had sound feet. It should be noted that even with an initial conservative assessment some livestock may deteriorate later due to burn injuries that were not initially obvious. Therefore it is important that all burnt livestock was reassessed several times after the fire.

We reassessed these animals in about a week's time to ensure that they were still bright and alert, and had no signs of further injury.

The problem arose as to what to do with the approximately 35 animals that were assessed as requiring immediate euthanasia. By this stage an officer from DEPI, and an officer of the local shire, had arrived and they started to work through the various options for destroying these animals and disposing of their carcasses. They were considering bringing heavy machinery such as bulldozers and bobcats to bury the animals that were to be euthanased. I suggested that before they explored these options, I should ring our local knackery and see if they could help. Even though it was late on Sunday afternoon, the knackery operator had no hesitation in offering to bring in all of his off-duty staff and their trucks so that they were able to very quickly and efficiently euthanase these cattle and take them back to the knackery for processing.

The prompt euthanasia and removal of these cattle was massively appreciated by the owner of the cattle – it was at least one pressure point removed from him.

There were approximately 50 cattle that we assessed as animals that should at least be given a chance and given nursing. The most severely affected animals were treated with procaine penicillin and given pain relief. The less severely affected animals were treated with intramuscular procaine penicillin for 3 days and the whole mob was then reassessed.

A further 5 or 6 were subsequently removed for euthanasia, mainly because they had started to become lame due to suffer severe separation of the hooves at the coronary band.

I continued to reassess this mob of cattle every 3 to 4 days until they were close to back to normal. It was noted that some of these animals had suffered moderate burns to the teats and it would be necessary at a later stage to assess whether or not these teats were likely to be functional. But at least they could survive and sold as fats if need be.

We also reassessed the animals that we had classified as suffering no apparent damage. At this subsequent examination we found a few that had obvious burns of the udder and teats, but they did not require treatment. A few were suffering from some separation of the hooves at the coronary band at the rear of the hoof, but not severe enough as to cause lameness.

There were no bulls in this mob of cattle, but I recognise that if bulls had been present it would be necessary to carefully evaluate both the sheath and scrotum.

### Lessons I learned from this experience

The fact that we were not able to gain access to our livestock for 2½ days after the fire caused great frustration. It was worse than this for my neighbour who needed professional help urgently, and at a much earlier stage. I did a fair bit of work with the media to try and have this situation improved and was given assurances that at least DEPI staff would come in with the first people to enter the fire scenes. What caused massive angst in our area was that the media was allowed into the fire area before support services such as veterinarians and other advisors were allowed in.

The people whose properties have been burnt out are under enormous stress and need as much support as we, and other agencies, can give them. Bureaucracy should not be seen to make it more difficult for them.

Even though I consider myself as a reasonably experienced veterinarian, I had not had experience with such a situation and while resources from the Victorian and New South Wales DPI were of great assistance, I think it would be great if the ACV were to pull together as much information as they could on this issue and have this available on a website that can immediately be accessed by any veterinarian faced with a situation such as the one I was confronted with.

While an initial assessment can be made on all the animals, it is necessary to revisit this assessment on several occasions.

Having said that, I think it is important to be definite in the initial decisions that you make – these animals need to be euthanased and they need to be euthanased now. My client was grateful that the decision as to whether or not to destroy his livestock was not on his shoulders – he readily passed it to me and wanted definite decisions from me.

While caring for the livestock that were injured during the fire is of great importance, we also need to recognise that resources such as fodder and fences to hold in stock may not be available and we need to know who to call on to assist with this situation.

There are likely to be other veterinarians in this audience who have more experience with dealing with burnt livestock that I have and I would very much like to hear of their experiences and their views on how such a situation can best be managed.

### Conclusion

I think it is relatively uncommon for veterinary practitioners to be confronted with such a situation.

Based on the literature that I can assess, there does not appear to be a great deal of published work to describe the injuries that result to cattle in bushfires, and the assessment of these injuries.

While some resources are available to help, my view is that it would be very helpful if the ACV (and ASV) were able to pull together a range of information that could be useful for those veterinarians who find themselves in this situation.

### Further reading:

Assessing cattle after a bushfire

[www.depi.vic.gov.au/fire-and-emergencies/recovery-after-an-emergency/livestock-after-an-emergency/assessing-cattle-after-a-bushfire](http://www.depi.vic.gov.au/fire-and-emergencies/recovery-after-an-emergency/livestock-after-an-emergency/assessing-cattle-after-a-bushfire)

AJ Winterbottom 2008

Assessing bushfire burns in livestock

Department of Primary Industries, NSW Government

January 2013 Primefact 399 second edition

J M Morton, D H Fitzpatrick, D C Morris and M B White. Teat burns in dairy cattle – the prognosis and effect of treatment. Aust. Vet. Jnl 64:3 69 -72 1987

R L Willson . Assessment of bush fire damage to stock. Conference paper: AVA Conference, Adelaide, May, 1966

