I, Simon Cooper, Coroner, having investigated the death of Kenneth Hudson Mitchell

Find, pursuant to section 28 (1) of the Coroners Act 1995, as follows

(a) The identity of the deceased is Kenneth Hudson Mitchell;

(b) Mr Mitchell died as a result of injuries sustained by him whilst felling a tree;

(c) The cause of Mr Mitchell’s death was asphyxia following the rapid compression of the chest wall and lung haemorrhages; and

(d) Mr Mitchell died at 149 Youngmans Road, Dulverton in Tasmania.

Mr Mitchell was at the time of his death in full-time employment with the Kentish Council. Part of that employment involved the use of a chainsaw. In addition, the evidence makes it clear that he was an experienced woodcutter, and would regularly arrange to cut firewood with his sons.

He was reportedly in good health, rarely consumed alcohol, and not known to have any medical conditions or injuries at the time of his death.

The circumstances surrounding Mr Mitchell’s death were that mid-afternoon on Saturday 20 July 2013, Mr Mitchell (accompanied by his 14-year-old son, Ethan) was on his property for the purpose of felling a tree. Mr Mitchell was very familiar with the property and was trained, experienced, and licensed in tree felling. The chainsaw he was using, a Stihl MS660 Magnum, was in good working order. It belonged to his employer the Kentish Council, he was familiar with it and used it regularly in the course of his employment.

Mr Mitchell had Ethan move their vehicle clear of the area where the tree was to be felled.

The tree fell on to Mr Mitchell causing massive, unsurvivable injuries which claimed his life. This tree had hanging limbs in another tree he had felled approximately 12 months earlier.

Ethan was out of sight of his father (and the tree). After approximately 10 minutes, Ethan made his way to the area where his father had been felling the tree. He immediately saw his father under the tree. Ethan ran to the entrance of the property and called his brother Scott on his mobile phone. It is necessary to move to the entrance of the property because reception on the property generally is poor.
Scott went straight away to the property; his partner telephoned for emergency services. Scott checked for signs of life but was unable to find any. Ambulance and other emergency services attended.

An investigation was commenced at the scene in relation to the circumstances of Mr Mitchell’s death pursuant to the Coroner’s Act 1995. Officers from uniform, criminal investigation, and forensic branches of Tasmania Police attended and collated evidence. It was noted by investigating Police that Mr Mitchell was not wearing any protective equipment or clothing at all.

Mr Mitchell’s body was removed from the scene and transported to the mortuary at the Launceston General Hospital where after formal identification an autopsy was carried out by Dr Terence Brain, Forensic Pathologist. Dr Brain concluded, and I accept his opinion, that the cause of Mr Mitchell’s death was asphyxia following compression.

As part of the coronial investigation a report was obtained from Mr Roger Geeves, an occupational work health and safety inspector in the employment of the State Government. Mr Geeves was for many years employed in the forestry industry and has extensive experience in the measuring of logs, operating machinery, and the felling of trees. He holds a number of qualifications including, relevantly, a tree fall qualification. Mr Geeves attended the scene of Mr Mitchell’s death in the company of police and provided a comprehensive report detailing the circumstances which led to Mr Mitchell’s death.

In addition, the circumstances surrounding Mr Mitchell’s death, along with the circumstances surrounding 5 other recent chainsaw-related deaths, was reviewed as part of the coronial investigation by Mr Rick Birch, a forester who has been an accredited assessor and Trainer in forest industry-related programs since 1999.

Having regard to all the material obtained as a consequence of the coronial investigation, I am satisfied that there are no suspicious circumstances surrounding Mr Mitchell’s death. It is quite clear that no other person was involved in his death. I find that Mr Mitchell was experienced and qualified in relation to tree felling. He had been doing so and cutting wood for a long period of time, in both his private life and work life. He had completed a course of training in relation to the use of chainsaws, and was at the relevant time the holder of a Forest Works Operator licence.

However, I am satisfied he made several crucial and ultimately fatal errors which directly led to his death. In reaching this conclusion I have had regard to the report from Mr Geeves and the review of the circumstances provided to me by Mr Birch. It is clear Mr Mitchell had no cleared escape route. There were plain faults in the initial cut. Most importantly, the tree that Mr Mitchell was attempting to fall had already been noted “hanging” in another tree. The Forest Safety Code for Tasmania expressly states that no one should ever attempt to fall a holding tree that has another tree hung up in it, as it is an inherently dangerous activity. Other issues involved a failure to have a cleared work area around the base of the tree and the failure to locate the back cut above the scarf cut. The physical evidence present at the scene observed by Mr Geeves led him to conclude, and I accept his conclusion, that it is more likely than not that Mr Mitchell was positioned underneath the hung up tree when
cutting the holding tree. Any of these failures in the tree felling procedure on their own were critical but taken in combination they proved fatal.

Comments and Recommendations

Section 28 (2) of the Coroners Act 1995 provides that a “coroner must, whenever appropriate, make recommendations with respect to ways of preventing further deaths and on any other matter that the coroner considers appropriate”.

The power to make recommendations pursuant to this provision is not one to be exercised at large but rather by reference to matters associated with, relating to or connected with the death the subject of inquiry. Nathan J said in Harmsworth v The State Coroner [1989] VR 989 at 996:

“the power to comment, arises as a consequence of the obligation to make findings… It is not free ranging. It must be comment “on any matter connected with the death”. The powers to comment and also to make recommendations…. are inextricably connected with, but not independent of the power to enquire into a death or fire for the purposes of making findings. They are not separate or distinct sources of power enabling a coroner to enquire for the sole or dominant reason of making comment or recommendation. It arises as a consequence of the exercise of a coroner’s prime function, that is to make findings.”

It is important also to recognise that the power reposed in a coroner by section 28 (2) is to be exercised primarily to attempt to prevent further deaths.

Given the circumstances of the death of Mr Mitchell is similar to the circumstances of the deaths of Mr Dransfield, Mr Howard, Mr Hyland, Mr Spanney and Mr Young, I consider it useful to address the issues arising from all of the deaths at the same time.

Clearly, if safely used, a chainsaw is a very useful tool with a multiplicity of applications, especially in the rural sector. On the other hand if not used safely, a chainsaw, especially when felling trees, is inherently extremely dangerous.

Death as a result of the use of chainsaws and tree felling is prevalent in Australia and disproportionately so in Tasmania. Data kept by the National Coronial Information Service indicates that at least 99 deaths occurred in Australia between 2000 and 2016 as a result of chainsaw use and tree felling. Of those deaths 23, or roughly a quarter, occurred in Tasmania. Tasmania’s population is just 2.15 % of the national population. It is also very apparent that deaths arising out of chainsaw use in general and tree felling in particular account for a considerable percentage of accidental deaths occurring in rural areas of Tasmania.

It is also quite apparent that there are a number of common factors which caused or contributed to the deaths of each of these men mentioned above. Those factors include (except for Mr Mitchell) a lack of any, or any formal, training. In the cases of Mr Mitchell, Mr Dransfield and Mr Hyland the absence of any, or any proper personal protective equipment (PPE); and in the cases of Mr Howard, Mr Young, Mr Dransfield and Mr Mitchell poor tree
felling techniques; and in the cases of Mr Spanney very dangerous chainsaw use practices. In every case death was, tragically, entirely avoidable had proper precautions been taken, tree felling techniques adopted and/or PPE used and worn. Given these factors I have determined that it is appropriate to consider the issue of whether to make recommendations, and if so what recommendations, in relation to each of the 6 deaths collectively.

In my view the circumstances of each death calls for the making of recommendations to attempt to prevent similar deaths from occurring in future. Each death was completely avoidable. It is important to ensure, to the extent possible, that lessons are learned from each death the subject of investigation so as to prevent, also to the extent possible, people making the same basic and deadly mistakes in the future.

Two very useful starting points for a consideration of the best safety practices in relation to chainsaw use are Forest Safety Code and the applicable Australian Standards.

The Safety Standards Committee of the Tasmanian Forest Industries Training Board Inc. published in 2007 the Forest Safety Code (Tasmania) 2007. The Code deals with all aspects of safety and hazards in forestry operations. Especially relevant in the current context are parts 4 and 5 which deal with chainsaw operation and manual tree felling respectively. The code outlines safe methods of chainsaw operation and manual tree felling and references Australian Standard 2727 – Safe Chainsaw Operations (AS 2727). The code outlines the importance of risk assessment, the basic equipment required, and mandates that ‘all manual tree felling operations are to be carried out in accordance with AS 2727’. It depicts both the proper positioning of cuts (Figure 3) and appropriate, alternative and cleared escape paths (Figure 4).

The Code also provides (at 5.8) that de-limbing or cross cutting should not be carried out from the downhill side of the log if the log has the potential to roll. Great emphasis is placed on appropriate safety procedures. The code, although directed towards the forest industry, is directly relevant to non-industry use of chainsaws as well. It is easy to understand. It should be followed by non-professional chainsaw operators and tree fellers.

Section 4 of Australian Standard 2727 deals in much more detail with the safe operation of chainsaws. It recommends the use of helmets (see 4.4(c)). It deals with site evaluation, tree assessment and worksite preparation before tree felling is attempted (see 4.5.3.2, 4.5.3.3 and 4.5.3.4 respectively). Those parts of the standard provide an easily understood guide to safety which, if followed, would likely have avoided several of the deaths the subject of these enquiries.

Section 4.5.3.5 of AS 2727 deals with the process of actually felling trees. It is worth setting out in full.

“The felling operation - All trees should be felled using a scarf and back cut.

The basic requirements for tree felling are shown in Figure 4.10 and are described as follows:
(a) Scarf - The principal function of the scarf is to direct the falling tree in the desired direction. The scarf should determine the direction of the fall. Cuts used to form the scarf should meet with no overcutting or undercutting and should be cleaned out. There are several types of scarf.

(b) Back cut - The back cut releases the tree, allowing it to fall, and is made after the scarf has been cut. The back cut should be horizontal and placed above the bottom of the scarf, forming a step which is intended to prevent the tree from sliding back over the stump during the fall.

(c) Holding wood - The holding wood acts as a hinge which controls the tree’s fall. The holding wood should be intact across the stump to maintain the direction of fall.”

It is apparent that compliance with the basic safety requirements set out in the Code and the AS 2727 will prevent fatalities in the future and would have prevented most of the fatalities the subject of these investigations.

I also observe that a fundamental issue in each case (except possibly Mr Mitchell’s death) was the absence of training. It is no answer to an absence of formal training to say that a person has been using a chainsaw for ‘years’ without incident. All that this means is that a person has practical experience; it in no way ensures correct techniques are used, because those techniques must be properly learnt in the first place. Training and at least some basic level of competency assessment is, in my view, essential. Training and assessment is of limited value if skills and techniques are not reasonably regularly reviewed.

In addition, as part of the investigation into these deaths, comment and assistance was sought from the three bodies identified as likely having the most contribution in relation to chainsaw and tree felling safety; namely the Forest Industries Association of Tasmania, WorkSafe Tasmania and the Tasmanian Farmers and Graziers Association (TFGA). Only the TFGA responded to the invitation to make a submission. No response, or even acknowledgement of the invitation, was received, at all, from either the Forest Industries Association of Tasmania or WorkSafe Tasmania.

The TFGA acknowledged that deaths relating to the use of chainsaws occur all too frequently and are a matter of great concern to the association and its members. The association observed that it was notable that persons who had received training were significantly under-represented amongst those suffering fatal injuries from chainsaw uses. This is undoubtedly correct and serves to highlight the importance of training to assist to avoid preventable deaths in the future.

I turn to the making of formal recommendations. I acknowledge that for the recreational or non-business chainsaw user it is important that regulatory requirements are not unduly onerous. However presently there is no regulation, at all, of the non-work related chainsaw use, and particularly tree felling. This is in contrast to boat and firearm use. I note that currently it is possible to purchase a chainsaw from a retail outlet other than specialist dealers, a situation that is very similar to the pre-firearm regulation position with respect to weapons and ammunition. I also note that there is no age limit, at all, on the use of a
chainsaw for any purpose, including tree felling. It is acknowledged that none of the men whose deaths have been investigated were children, but that is, in my view not to the point.

I make the following recommendations:

- I **recommend** that all chainsaw operators must undertake a government approved chainsaw training prior to purchasing or using a chainsaw.

- I **recommend** that all persons selling chainsaws must be accredited chainsaw operators.

- I **recommend** that all chainsaw operators must undergo regular practical reassessment.

- I **recommend** that all land owners be required to ensure that people permitted to use chainsaws on their land be appropriately qualified.

- I **recommend** that no person under the age of 16 years be permitted to own or use a chainsaw in any circumstances.

I thank the TFGA for its helpful submission. I acknowledge the contribution of Mr Roger Geeves to this investigation.

I express my sincere thanks to Mr Rick Birch for the very great assistance he provided to the Coronal Division in relation to the investigation of Mr Mitchell’s death as well as the 5 other deaths referred to in these recommendations and comments.

In conclusion I convey my sincere condolences to the family and loved ones of Mr Mitchell.

**Dated** 11 August 2017 at Hobart in the State of Tasmania

**Simon Cooper**
**Coroner**