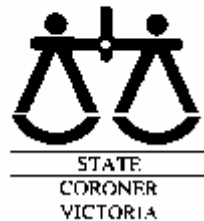


Submission to Victorian Parliamentary Rural
and Regional Services and Development
Committee Inquiry into the Cause of Fatality
and Injury on Victorian Farms



Victorian State Coroner's Office

Tuesday, 17 February 2004

Report prepared by:
Maria Batchelor
Research Officer,
Work-Related Fatalities Project,
Victorian State Coroner's Office
Phone: (03) 9684 4378
Fax: (03) 9684 4419
Email: maria.batchelor@coronerscourt.vic.gov.au

Acknowledgements:

Mr Graeme Johnstone, State Coroner, Victorian Coroner's Office

Mr Rick Roberts, Principal Registrar, Victorian Coroner's Office

Members of the Tree Felling Safety Group:

(Chairperson) Mr Yorick Piper, Construction Forestry, Mining and Energy
Union (CFMEU) (Victoria)

(Deputy Chairperson) Mr Gary Harding, Arborist

Mr Graeme McMahon, Professional Tree Feller

Ms Jane Hollingshead, Forest and Forest Products Employment Skills
Company (FAFPESC)

Mr Trevor Lawrence, Arborist

Mr Stephen Fitzgerald, Arborist

Mr Nick Murray, Victorian Association of Forest Industries (VAFI)

Ms Lina Vennix, WorkSafe Victoria (Melbourne)

Table of Contents

INTRODUCTION : WORK-RELATED FATALITIES PROGRAM	4
BACKGROUND	4
DEFINITIONS	5
1. The main causes of fatality and injury on Victorian farms and other primary industries compared to other jurisdictions.	6
2. The matter and type of these injuries compared to other industries and jurisdictions.	7
RESULTS: INITIAL WRFPP PROJECT	7
Industry (1993/94 - 1996/97)	7
Occupation (1993/94 - 1996/97)	9
Type of fatality (93/94 - 96/97)	10
Tree felling Deaths (1993/94 - 1996/97)	10
Industry (1999 - 2000)	12
Type of fatality (1999 - 2000)	13
Tree felling Deaths (1999 - 2000)	13
CORONIAL DATABASES:	14
WORKSAFE VICTORIA:	14
3. Current programs and initiatives designed to improve occupational health and safety on Victorian farms.	16
TREE FELLING SAFETY GROUP	16
BACKGROUND	16
RESULTS	16
WORK TO DATE	17
4. Any impediments to sustaining improvements in farm safety.	18
TREE FELLING	18
5. The financial and social cost of death and injury on Victorian farms.	19
6. The need for further strategies to reduce the incidence of injury and fatality on Victorian farms, what form the strategy should take and whether they are best developed by government agencies, industry bodies, worker representatives or a combination of these.	20
APPENDIX 1: TFSG RECOMMENDATIONS	21
APPENDIX 2: LIST OF ORIGINAL TREE FELLING SAFETY GROUP MEMBERS	25
APPENDIX 3: GUIDANCE MATERIAL FOR FORESTRY AND AMENITY TREE INDUSTRIES	27

INTRODUCTION : WORK-RELATED FATALITIES PROGRAM

BACKGROUND

The Work-Related Fatalities Program (WRFP) is the term given to a series of projects performed jointly by the Victorian State Coroner's Office, and the Victorian Workcover Authority (WorkSafe Victoria), with support from VIOSH Australia (University of Ballarat) over the period of 1997 – 2004/05.

The following submission is an account of this project from the point of view of the Victorian State Coroner's Office, and was prepared with emphasis on the "Tree Felling Safety Group" component of the project.

The initial project was a twelve month project, commencing in August 1997 that aimed to investigate work related causes of death in Victoria and to develop recommendations for the reduction of such fatalities. It utilised data from three sources that were available at the time, being data from the Victorian State Coroner's Office¹, and two data sources managed by the Victorian Workcover Authority². Although there were differences in the purposes of these three data collections, it was felt that the information that could be obtained by matching data across the databases would provide a much more comprehensive picture of fatalities in Victoria. Specifically, there were acknowledged 'gaps' in terms of the sort of fatalities each database captured that could be filled by matching data with the other databases (for example, self-employed persons may not have a WorkCover insurance policy and therefore deaths of the self-employed may not be found on the Victorian Workcover Authority claims database, whereas they may be found on the coroner's database or the Victorian Workcover Authority incident database. Likewise, few workplace diseases are reported to the coroner's office, whereas more information on these deaths may be found on the Victorian Workcover Authority claims database).

The second project under the WRFP umbrella was a joint project between the Victorian WorkCover Authority (WorkCover) and VIOSH Australia at the University of Ballarat, with resource and administrative support from the Victorian State Coroner's Office. This project sought to utilise the initial study's investigation and recommendations in order to identify priority areas for the development of interventions. Intervention strategies were piloted and evaluated in some of these areas while in others, the WRFP worked with

¹ The State Coroner's Office collects information on all 'unexpected', 'unnatural' or 'violent' deaths which occur in Victoria (or to Victorian residents). Each file contains information provided by police, health and safety inspectors/field officers, other relevant investigation bodies (eg. fire or transport organisations), as well as detailed medical and forensic information from the Victorian Institute of Forensic Medicine, and inquest or chambers hearing documents produced after the coroner's hearings.

² The Victorian WorkCover Authority had two databases at the time: An 'incident database' that detailed inspectors' investigations into all 'investigated' workplace deaths and injuries in Victoria, and a 'claims database' that details on all compensation claims made by Victorian workers for work-related injuries and deaths.

existing agencies to conduct the intervention. The three priority areas chosen were:

- Tree felling fatalities,
- Hydraulic related deaths, and
- Falls from heights.

Criteria for selecting the top three areas included: that the issue was identified as a cause of death (preferably a major cause of death); that the underlying contributory factors/issues (for example, design problems, scheduling of work etc), were clear or well known; that intervention was likely to be effective; and that the area was not being addressed by any other internal or external major projects. Priority areas were also chosen on the basis of qualitative data supplied by re-investigation of coronial files in each of the 'top ten' areas identified by the initial study's quantitative results.

In late 1998 / early 1999, work commenced on the first intervention, that of tree felling fatalities. Work on the second (falls from heights) and third (hydraulics) areas commenced in 2000 and 2001 respectively.

The third (and current) project to receive funding under the WRFPP umbrella is a project involving the Victorian State Coroner's Office and the Victorian Workcover Authority (WorkSafe) that consists of three stages: "Traumatic Fatalities", "Non-traumatic Fatalities" and "Intentional Fatalities". In each of these stages, work-related fatalities from 1999 and 2000 in Victoria will be analysed to determine trends in the data based on information available from the Coroner's Office. At this point in time, only the "Traumatic Fatalities" stage is fully complete, with the "Non-traumatic Fatalities" stage nearing completion.

DEFINITIONS

All of the above projects utilised similar definitions. It is necessary to briefly discuss the definition of "Work-relatedness" used in the WRFPP projects, as the intention of the projects were to be as inclusive of data as possible, and any statistics (quoted in the next section, below) will need to be contextualised by this definitional decision. The basic definition used was:

Any working person who suffers a workplace-related death from injury or disease:-

- i) which occurred while the person was working for payment, profit or payment in kind (including purposes of work experience); and
- ii) which occurred within the State of Victoria, to a Victorian resident, or which occurred as a result of a contributory factor occurring within the State of Victoria.

This was different to many of the other studies reporting on fatalities at the time because it included non-external causes of death (ie disease and poisoning deaths), intentionally caused deaths (eg. suicide/homicide deaths), marginal and volunteer/work-experience workers, and bystanders to work (which is people who were killed as a result of an activity that could be defined as working, but who weren't classified as participating in work themselves).

1. The main causes of fatality and injury on Victorian farms and other primary industries compared to other jurisdictions.

The Work-Related Fatalities Project focussed exclusively on Victorian fatality data, thus no comparison was undertaken with data from other jurisdictions.

2. The matter and type of these injuries compared to other industries and jurisdictions.

RESULTS: INITIAL WRFP PROJECT

A total of 332 'work-related' deaths were identified by matching data from the State Coroner's Office and the two data sets of the Victorian Workcover Authority from 1993/94 to 1996/97 financial years. Males account for 296 work-related fatalities (89%). The average age of persons dying in work-related fatalities was 42, with a standard deviation of 18.026, a minimum age of 4, and a maximum age of 91.

Industry (1993/94 - 1996/97)

Figure 1: Work Related Fatalities by Industry (unstandardised), Victoria, 1993/94 - 1996/97

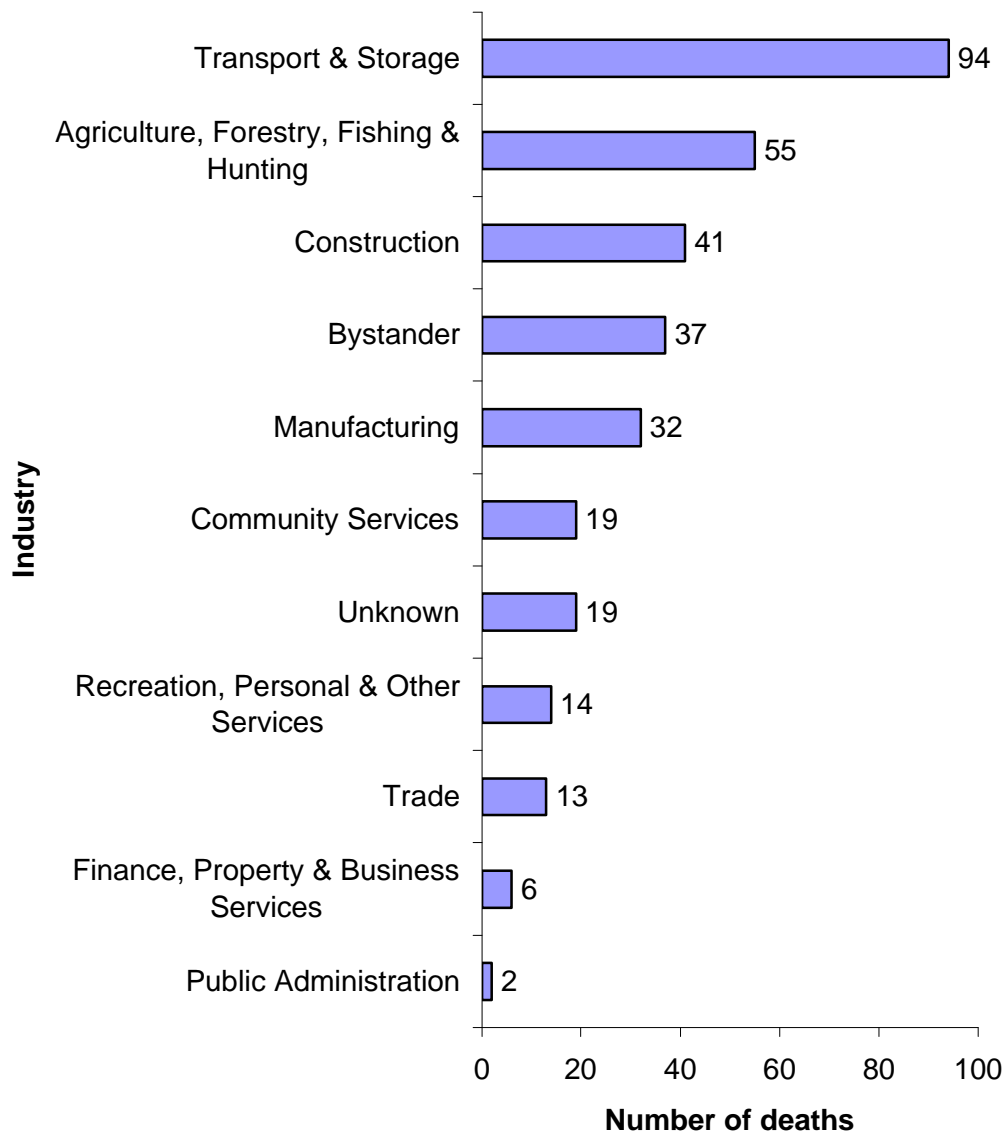


Figure 1 (previous page) shows that the "Transport and Storage" industry accounted for the highest percentage of work-related deaths in Victoria between 1993/94 and 1996/97 (94 deaths or 28%), followed by the "Agriculture, Forestry, Fishing and Hunting" industry (55 deaths or 16.5%), and the "Construction" industry (41 deaths or 12%).

The Agriculture industry could further be broken down into the following categories:

Agriculture	42
Services to Agriculture	2
Forestry & Logging	9
Fishing & Hunting	2
TOTAL	55

"Agriculture" in this context refers specifically to farming, with further divisions possible in terms of the object being farmed. "Services to Agriculture" includes such things as plant quarantine, wool-classing etc). "Forestry and Logging" included all elements of forestry and logging except transportation, and firefighting). The "Fishing and Hunting" category was also broken down into further divisions by type of catch. It was decided that any investigation of deaths beyond the current level of detail was inappropriate given the low number of deaths in each category (and the potential for increasing error as the level of detail increased).

Although "Agriculture" was shown to have the highest number of deaths within this industry category, it was felt that there were already a number of intervention projects within this part of the industry, thus it was decided to focus on the "forestry and logging" part of the industry.

Occupation (1993/94 - 1996/97)

Figure 2: Work related fatalities by occupation (Standardised by employment numbers), Victoria, 1993/94 - 1996/97

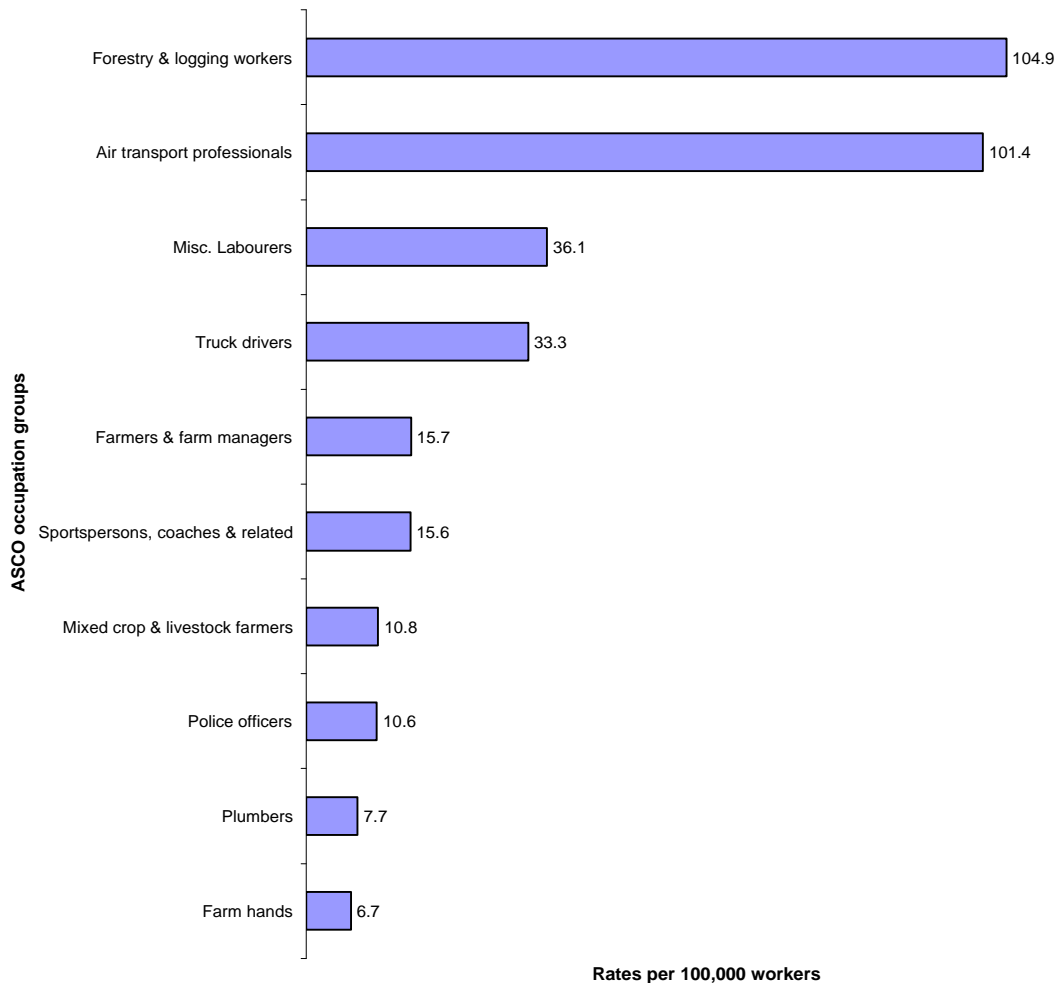
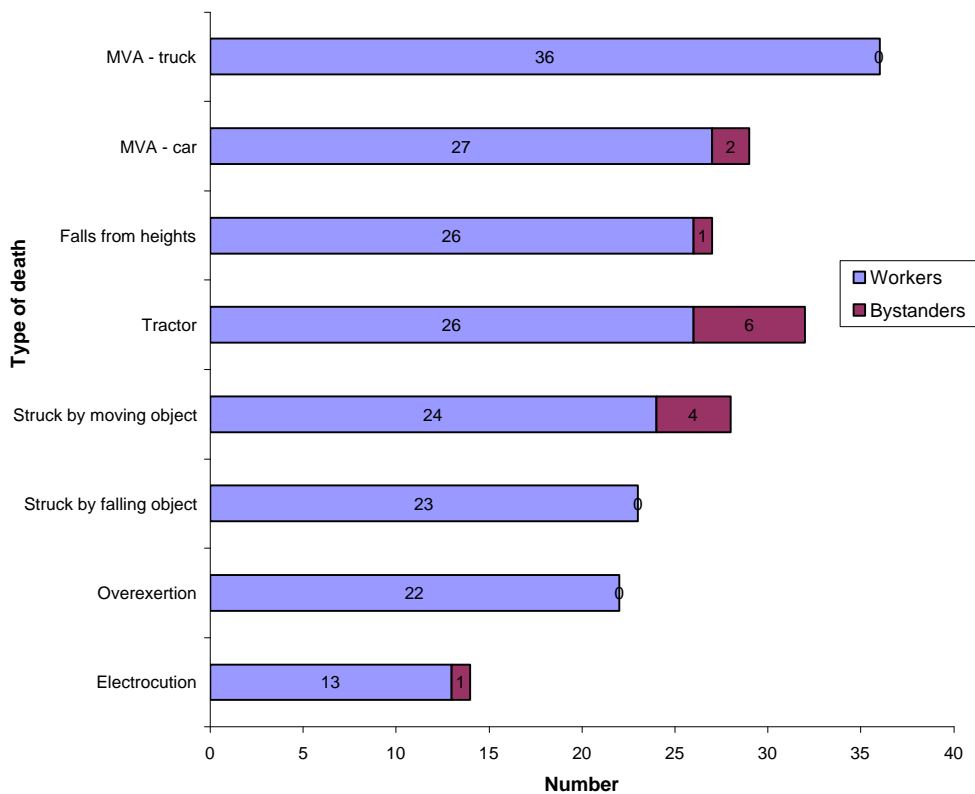


Figure 2 shows estimates of the incidence of frequency rates by occupation (work related fatalities per 100,000 workers). ABS data from the 1996 census was used as a base-rate for numbers employed in each occupation (ABS, 1997)³. Frequency rates were only calculated for ASCO occupation codes (ASCO, 1997) where more than 5 fatalities had been recorded in Victoria for the period 1993/94 – 1996/97, resulting in the above figure only showing the top ten such adjusted occupations. Once adjusted for exposure, figure 2 demonstrates that occupations such as ‘Forestry & logging workers’ had a high frequency rate, as did ‘Air transport professionals’. ‘Truck drivers’ and ‘Farmers & farm managers’ also had high exposure rates. Frequency rates give us a clearer picture of where interventions might be appropriately targeted, as raw figures for occupation listed the top three categories as being are ‘Truck driver’ (58 cases, or 17.5%), ‘Air transport professionals’ (15 cases, or 4.5%), and ‘Farmers & farm managers’ (12 cases, or 4%) respectively.

³ Population rates from the 1996 census were assumed for each year represented in Figure 2.

Type of fatality (93/94 - 96/97)

Figure 1: Ten major types of work related fatality (workers and bystanders), Victoria, 1993/94 - 1996/97



The above figure (figure 3) demonstrates that the most common types of work-related fatalities for this period were Motor Vehicle – Truck (36 cases, or 11%), Motor Vehicle – Car (27 cases, or 9%) and Falls from heights and Tractors (26 cases, or 8% each). Other common types of fatalities included struck by moving and falling objects (24 cases or 7% and 23 cases, or 6.5% respectively). Category types are based on Victorian Workcover Authority classifications in use at the time of the initial study and were modified to reflect broad classifications for further study.

Tree felling Deaths (1993/94 - 1996/97)

It was found that a number of the falling object deaths involved trees or parts of trees (60%). Other objects included walls, concrete panels, steel structures, hay bales, truck and van bodies and other suspended loads. Further investigation was undertaken with respect to 'tree felling deaths'.

The following cases are typical examples of fatal tree felling incidents where the deceased was struck by a falling object:

- The deceased, a forestry worker, was felling a Messmate tree. As it fell, the Messmate tree brought down a rotten Peppermint tree that it was entangled with, striking the deceased fatally.
- The deceased, a tree feller, felled a tree that struck other trees on the way down. Fifteen to twenty minutes later, he started stripping the fallen tree when a branch that had been hung up fell, hitting him in the head.

Tree felling deaths occurred in a number of industries: forestry and logging, amenity tree (such as arboriculture, tree removal and DIY type occupations), as well as in the general agricultural industry (such as farmers who were carrying out tree related work at the time of incident).

Fifteen (15) tree-related fatalities were identified between 1993/94 and 1995/96 in Victoria. One of these was a fall from height, one was an electrocution while trimming trees, and the remaining 13 were struck by a tree or branch. Of those deaths involving trees/branches, the majority of cases involved trees unexpectedly falling, splitting, or catching on other trees and later falling.

A fatality rate of 104 deaths per 100,000 workers in the forestry industry was calculated using ABS data (see Figure 2). Data on the numbers of workers in arboriculture or related industries was unavailable and hence a rate could not be calculated for this group of persons. A number of deaths also occurred to farming persons and general 'handy-persons' and it was felt that calculating a rate for this group would not be valuable as 'tree felling' was not in the common nature of the work and hence there could not be a meaningful comparative relationship with the normal population.

Due to numbers of cases being relatively low, it was not possible to extrapolate any patterns in terms of specific occupations at risk (other than those persons engaged in felling trees), seasonal patterns or times of the day. It was found however, that a number of the deceased persons were in the 40 – 50 year age bracket, and that the majority of deaths occurred to persons who had been working in their industry for a number of years.

RESULTS: CURRENT WRFP PROJECT

Out of 3983 reported deaths reported to the Coroner's Office in 1999 and 4266 in 2000, 175 of these cases were found to be traumatic work-related deaths of interest to the current study. 90 of these deaths occurred in 1999 and 85 in 2000. Of these 175 cases, 32 are still "Open" cases (that is, they haven't yet been completed) and are thus excluded from some analysis at this stage. Similar results to the 1993/94 - 1996/97 data were found with respect to industry, incident type, and place of incident in the 1999 and 2000 data.

Industry (1999 - 2000)

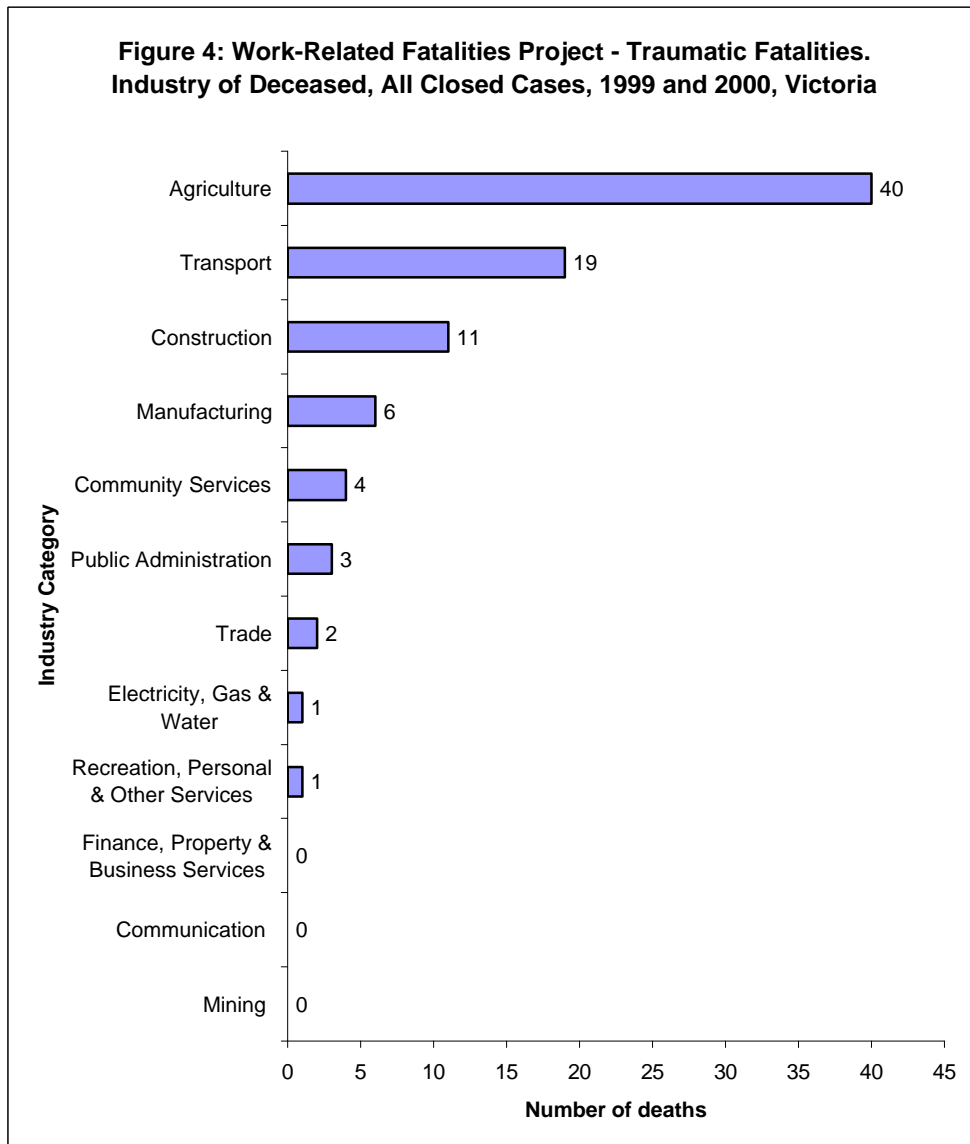


Figure 4 (above) shows that the "Agriculture" industry group occurred frequently amongst this sample with 40 deaths (or 28%), followed by "Transport" with 19 deaths (or 13%).

Type of fatality (1999 - 2000)

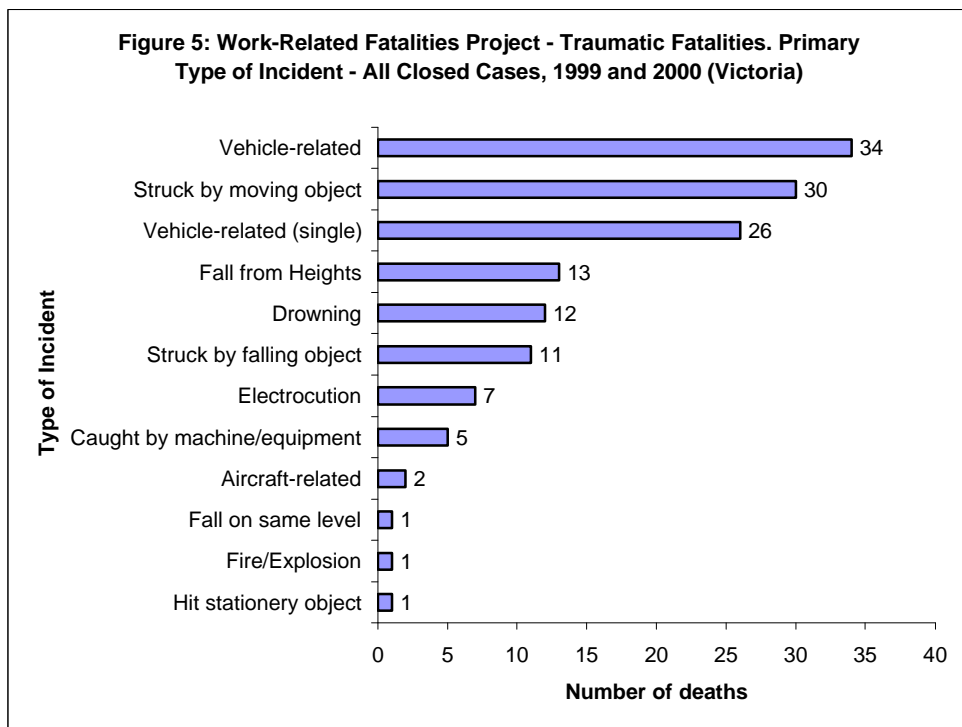


Figure 5 (above) shows that of the Traumatic Work-Related fatalities for 1999 and 2000 (Victoria) that were closed, "Vehicle-related deaths" (n=34 or 24%) accounted for the highest number of deaths during that period. "Struck by moving object" (n=29 or 20%) accounted for the next highest number of deaths, followed by "Vehicle-related (single)" (n=26 or 18%). Standardisation of these figures will allow a more meaningful discussion of rates of deaths.

Tree felling Deaths (1999 - 2000)

In 1999 and 2000, there were 4 (four) struck by falling object (tree) deaths in Victoria. Only two of these fatalities appear to have occurred to a person directly employed within the forestry or amenity tree industries, while the other two were a farmer (engaged in cutting down a tree) and a child (struck by a falling tree). Summaries of these cases follow:

- The deceased, a 64 year old farmer, was cutting down a large tree on his property using a chainsaw when the tree broke free and fell on him, crushing him.
- The deceased, a 72 year old seed collector was collecting seeds amongst fallen trees in a forest logging coupe when he was apparently struck by a falling manna gum tree limb (7m long, 11cm diameter), that was hung up in a tree that remained standing.
- The deceased a 52 year old general labourer was working on a tree felling site, assisting to clean up after the removal of a large quantity of pine trees. During 'snigging' of the first felled tree, the tree hit another felled tree, causing the limb of the second tree to swing around and hit the deceased in the head. The deceased had not been part of the snigging operation.
- The deceased, a 6 year old child was one of 10 people in the rear tray of a utility being driven by her father. A large tree limb has fallen down possibly due to heavy snowing in the area, striking the deceased as it has fallen across the back section of the vehicle.

The following extra statistics were generated as a means of extending the time period covered by the preceding Work-Related Fatalities Project information.

CORONIAL DATABASES:

A search of the Victorian coronial database from 2001 - 2003 (to 5th December) using the National Coroners Information System (NCIS) and TOPIC, a text-based search tool used by the Victorian State Coroner's Office, showed that there were 5 tree-felling deaths in this time (see table below).

Although this was only a quick text-based search and therefore not exhaustive, it has been compared to tree-related deaths from the previous WRF1 and WRF2 projects to determine whether the launch of guidance material in the amenity tree / forestry industries has had any impact on the number of tree-related deaths since its release in July 2000.

Project that data is from	Year (Financial or Calendar)	Number of tree-related deaths
WRF1	1993/94	2
WRF1	1994/95	8
WRF1	1995/96	3
WRF1	1996/97	2
WRF2	1999	2
WRF2	2000	2
NCIS/TOPIC	2001	1
NCIS/TOPIC	2002	3
NCIS/TOPIC	2003	1

Apart from the 1994/95 year, where the number of deaths was unaccountably high, there does not appear to be any patterns easily discernable in the above table. This may be, in part, due to the differences in the way that the deaths were identified. Also, as there is also a 'severity' component to whether an injury becomes a fatality, it is hard to know, without comparative injury data whether the number of injuries (fatal or not) have increased or decreased.

WORKSAFE VICTORIA:

A data request was sent to the Victorian WorkCover Authority in order to try to assess whether the work of the Tree Felling Safety Group had had any impact on injury and fatality statistics in the forestry industry. A search of the Claims database was performed to identify forestry industry deaths and injury claims over the period 1993/94 - 2002/03.

The following table shows number of injury and fatality standard claims for the period 1993/94 -2002/03. This data is based on the WIC codes A0303K (Logging) and A0304L (Forestry and services to Forestry) and therefore will not include all tree felling activity (amenity). Data is extracted as at 31 August 2003.

	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03
Forestry industry INJURY claims (by incident date)										
Number of injuries	103	94	88	80	76	60	62	56	43	63
Percentage of all industry (%)	0.32	0.30	0.27	0.25	0.26	0.20	0.20	0.31	0.15	0.28
Forestry industry FATAL claims (by incident date)										
Number of fatalities	1	1	1	1	2	1	1	0	0	0
Percentage of all industry (%)	0.84	0.95	0.78	0.86	1.78	0.81	0.95	0.00	0.00	0.00

It is important to note that while the raw figures from above do appear to be decreasing over the period, the proportion of forestry claims to all claims (both injury and fatalities) remains relatively steady over the period.

It would be prudent to revisit these figures in the future when more data about the period post July 2000 becomes available.

3. Current programs and initiatives designed to improve occupational health and safety on Victorian farms.

TREE FELLING SAFETY GROUP

BACKGROUND

Tree felling related deaths were chosen for the first intervention of the WRF, involving both the forestry and arboricultural industries as well as more general 'amenity tree workers'. Focus groups were conducted, to investigate more closely the issues surrounding the hazards of tree felling from the perspectives of representatives these industries. These focus groups were held in October/November 1998 and identified several issues that are contributing to deaths not only in arboricultural, amenity tree and forestry industries but also among home-handly persons, and organisations such as the Country Fire Authority (CFA) and the State Emergency Service (SES).

The number and diversity of issues brought up by the focus groups prompted the development of an industry group called the "Tree Felling Safety Group" (TFSG) (See Appendix 2 for list of original TFSG members). The aim of the TFSG was "to develop workable solutions / intervention strategies for tree felling hazards and assist in implementing and monitoring interventions". That is, the group was developed to prioritise the issues identified by the focus groups and then draw on members industry experience to determine 'workable' solutions and intervention strategies.

The TFSG was made up of a range of representatives of forestry workers, arboriculture related workers and trainers, 'urban tree workers', local government workers, and unions and WorkCover. Meetings commenced in early February 1999, and have been held regularly since then.

While fatalities occur across the range of tree felling activities, the various parts of the industry vary in terms of regulation, work methods, contracting procedures, and the like. While this created some initial problems, it was generally acknowledged that each sub-industry had commonalities in terms of job function and types of hazards, and that a co-ordinated intervention or set of interventions would be beneficial.

RESULTS

The TFSG made a decision to focus attention on workers in the arboriculture/amenity tree industry and forestry industry where exposure to risk is high. Prevention strategies for workers such as farmers and home handy-persons were felt to be too large in scope for this group of volunteers. It was also felt that there would naturally be an amount of 'trickle down' to these groups by the actions taking place within the other tree related industries.

The TFSG produced a set of draft recommendations in August 1999. For the purposes of consultation with as wide a range of industry representatives as

possible, seminars were held in 6 regional areas (MaryVale, Benalla, Ballarat, Colac, Orbost & Healesville) plus Melbourne, in August and September 1999. The seminars provided the TFSG with a better understanding of industry's views on priority issues and assisted to canvass the draft recommendations with industry.

The TFSG seminars were overwhelmingly successful, with over 500 participants attending the 7 sessions. Feedback was positive, and the priority issues for the industry were identified and incorporated in to the TFSG final recommendations, which was presented to the Work Related Fatalities Project Reference Group (the project steering committee) in December 1999 (See Appendix 1 for a copy of these recommendations).

WORK TO DATE

These recommendations were accepted by the Victorian WorkCover Authority and two major projects began as a direct result: an ergonomic assessment of fatigue in forestry coupes, and the development of guidance material for the Forestry and Amenity Tree industries respectively. These two guidance material documents were subsequently launched by the then Minister for WorkCover (Mr Bob Cameron) and the Victorian State Coroner (Mr Graeme Johnstone) in July 2001 (see Appendix 3 for documents).

Further work has been developed by a number of industry agencies that builds on the work of the TFSG. In 2002, the Victorian State Coroner (Mr Graeme Johnstone) was asked to help launch the development of the "Forest Industry OHS Stakeholder Forum", a peak body formed by WorkSafe Victoria and the Victorian forest industry to address occupational health and safety hazards and provide solutions to reduce risks faced by forest, harvesting and sawmilling workers.

The TFSG continues to meet and is currently working on a process for development guidelines to achieve greater consistency and quality of investigations of tree-related fatalities.

4. Any impediments to sustaining improvements in farm safety.

TREE FELLING

The following factors have been identified by the TFSG (although there is not consensus within the group as to the relevant importance of each factor). For ease of reading, these have been broken up into each of the areas covered by the TFSG, however, please note that some factors apply for more than one industry:

Forestry industry:

- Environmental constraints on when logging can be performed
- Reduced sustainable yield increases pressure for work to be completed quickly, rather than safely (and use of piece rates in payment schemes)
- Protestor action impedes OHS initiatives in the coupes
- Fatigue issues continue to impact negatively on OHS outcomes for fallers and other workers at the coupe level (eg pressure on workers to maintain production output)
- Difficulties of policing OHS in the forestry industry due to complexity of issue of responsibility of various key agencies (eg. WorkSafe, DSE, and DPI)
- Certification skill level perceived to be dropping, and only 'entry level' training required (Forest Operators Licence) plus no requirements to re-train or update levels of skills

Amenity tree industry:

- Difficulties in accessing all parts of industry given no peak body
- Difficulties in changing perceived 'she'll be right' attitude in unregulated part of industry
- Certification skill level perceived to be dropping, plus no need in some parts of industry to hold any of the recognised national training certificates/competencies in order to secure employment
- Price driven market for amenity tree / arboriculture services, leading to a potential for OHS to be marginalised in lieu of keeping costs down to maintain competitiveness of price
- Lack of consensus amongst industry about appropriate safety equipment that should be used (ie carabiners / hard-hats)
- Large numbers of self-employed workers

Farming / Emergency services / DIY field:

- Rise of non-regulated sectors (such as farm forestry / agro-forestry)
- Levels of skills of emergency service workers dealing with complex tree issues (ie diseased trees, trees struck by lightning, tree rescue situations) perceived to be inadequate
- Lack of understanding by general public about dangers of falling trees / chainsaw use etc.

5. The financial and social cost of death and injury on Victorian farms.

The WRFPP project was not involved with calculating 'costs' as such. The nature of the project has, however, provided insight into the devastation of the loss of a worker on his family, his work mates, and those who witness the death or have a role to play in the fatality investigation process.

6. The need for further strategies to reduce the incidence of injury and fatality on Victorian farms, what form the strategy should take and whether they are best developed by government agencies, industry bodies, worker representatives or a combination of these.

The TFSG is yet to implement a number of the recommendations made in their initial 1999 report (See Appendix 1), although work continues with many different agencies in order to achieve a reduced incidence of injury and fatality in the tree felling industries.

APPENDIX 1: TFSG RECOMMENDATIONS

The recommendations made by the TFSG included the following issues:

1. Fatigue

A data collection and evaluation project should be carried out to discover the potential impact that fatigue and production pressure may have in the workplace. The project should concentrate on the commercial harvesting and line clearing sectors. The aim of the project is to collect and review data on these issues. Such a project may also include some initial field work if deemed appropriate. This process should be undertaken in consultation with key industry stakeholders.

Outcomes of the project should include a findings report and a targeted industry education campaign, aimed at addressing the issues surrounding workplace fatigue, production pressures and how to manage them. The findings of this project should also be disseminated to the key industry stakeholders for their use.

This project would require the funding/resourcing of an external person or organisation acceptable to industry parties with specialist skills in research and fatigue management. If such experience exists within WorkCover, this would also be suitable subject to acceptance by industry parties.

2. Licensing and Enforcement Issues

COMMERCIAL HARVESTING: *The commercial harvesting industry representatives on the TFSG, namely VAFI, CFMEU and FAFPESC, should oversee the establishment and operation of an industry review to examine the complex issues surrounding licencing, enforcement, information dissemination and training support as they relate to safety and safety management in the native forest, plantation and farm forestry sectors.*

The primary focus of the review should be to investigate existing systems and alternatives; canvas these with industry; and recommend a framework for licencing, safety management, regulation and enforcement to the industry and statutory authorities. Consultation should occur with urban tree work industry representatives when considering these issues, with particular respect to state-wide licencing issues.

The TFSG recommends that this review be administratively supported and funded by the Victorian WorkCover Authority. An initial estimate of costs for a 12 month review and reporting process will be in the vicinity of \$100,000. An initial funding proposal appears as Attachment A of this report.

URBAN TREE: *The TFSG recommend that an investigative project be conducted to gather all relevant data on work related injuries, public liability claims and income protection insurance claims attributable to the urban tree industry. This information should be drawn from existing information with WorkCover and insurance agencies. The terms of reference for this project should be determined by the TFSG in consultation with key stakeholders.*

The TFSG, in conjunction with the ISAA, promote the findings and recommendations of the report and solicit responses from industry on the development of licencing systems and agreed industry standards.

A report be presented to the Work Related Fatalities Project Steering Committee, containing a series of recommendations relating to the aforementioned issues and the findings of the review process.

OTHER : There is a need for emergency workers to be sufficiently trained in correct techniques for tree removal, trimming and felling. The TFSG recommends that contact is made with each of the relevant groups through an open letter recommending a review of training regimes and providing guidance as to what areas such a review should concentrate on.

3. Codes of Practice

COMMERCIAL HARVESTING: As previously noted, this Code of Practice is widely used by the commercial harvesting sector. The TFSG recommends that a review of the document be carried out to address the issues outlined above. This review should be undertaken by the Victorian WorkCover Authority in conjunction with an industry working party to ensure that all aspects are addressed through this review process.

URBAN TREE: The TFSG recommends that the Victorian WorkCover Authority, in conjunction with key industry stakeholders, develop a Code of Practice for Amenity Tree Work. There are approximately seven (7) significant documents in existence that may be used as a basis for the Victorian Code of Practice, including the NSW Code of Practice for Amenity Tree Work. The ISAA may be able to provide expertise in this area.

4. Awareness Campaign

A multi-media awareness campaign should be undertaken. The project may be managed through the TFSG in conjunction with the State Coroner's office. Funding sources may also be explored through the TFSG. It has been suggested that the Australasian College of Surgeons Trauma Committee has expressed an interest in the work of the TFSG and may be willing to work on a cooperative venture.

Such a campaign should be aimed at informing the general public as to why they shouldn't be carrying out these tasks themselves and why they should hire an appropriate contractor to carry out the work. Another aspect of such a campaign may be the issue of tree pruning and clearing around power lines.

A campaign may include print media advertisements, television advertisements and a mail-out campaign in cooperation with local government offices. Public events such as the Victorian Flower and Garden Show (April), Working with Wood Show (October) and appropriate WorkCover field days

will also provide an excellent opportunity to distribute appropriate literature and information to the general public on this issue.

5. Accident data collection and dissemination

The TFSG recommends that a central agency develops and implements a system of data collection. The central agency should be an organisation or body that is acceptable to all parties within the commercial harvesting sector. Such a system may also be extended to include the urban tree work industry, farm forestry and other sectors if appropriate. Such a system may take the following form:

- *A network to notify central agency of accidents and incidents as they occur;*
- *Targeted safety alerts to be produced by central agency;*
- *Safety alerts to be disseminated to industry and relevant agencies through network.*

The data collection project would have a two-fold benefit. It would allow accurate information about accidents and incidents to be circulated through industry quickly and efficiently, raising awareness of safety issues. The collection of data at a central point would also prove useful for statistical purposes.

The TFSG are currently holding discussions to identify the agency most suitable to perform this task. Seed funding will be required to implement this project, however the amount required will be dependent upon the agency chosen as most suitable to undertake the project.

6. Planning Review

The Department of Natural Resources and Environment, as well as plantation owners and managers, in consultation with principle harvesting companies and the workforce should review all aspects of regulation and planning for harvesting (including coupe and residual log allocation) to ensure OHS considerations are a priority. These groups should report on this review process to WorkCover and stakeholders within 12 months.

7. Continuation of the TFSG

It is the consensus of the TFSG that it continues to meet on a bi-monthly basis. Key benefits of the group continuing to meet are:

- *Ability to monitor the progress of above recommendations as they are implemented;*
- *Focal point for industry and external agencies to direct queries and discussion issues to;*
- *Allows members of group to continue exchanging ideas and concepts from one sector to another.*

The TFSG requests financial assistance from the Steering Committee of the Work Related Fatalities Project to continue to meet on a regular basis. This financial assistance is required for:

- *Venue and catering costs;*
- *Mileage and travel costs for participants;*
- *Reimbursement of administration and related costs where required.*

8. Farm Forestry/Agro-Forestry

During discussions with industry and external agencies it has become clear that farm or agro forestry has the potential to become a major occupational health and safety issue, particularly over the next 2 – 10 year period. In many instances agricultural farmers are planting large tracts of fast growing trees. Once these trees mature the farmers must ‘harvest’ their crop and on-sell it to a processor. As previously mentioned tree felling and removal is a highly skilled and specialised occupation. There is a high level of risk in farmers carrying out this work with little or no training, information, equipment or experience.

The TFSG wish to make an 'auxiliary recommendation' that members of the group meet with Farmsafe Officers (Victorian WorkCover Authority); Victorian Farmers Federation; Agro-Forestry groups and other key stakeholders to develop a strategy for managing this issue. Victorian WorkCover Authority presence at regional field days provides an ideal opportunity to distribute appropriate information and literature.

APPENDIX 2: LIST OF ORIGINAL TREE FELLING SAFETY GROUP MEMBERS

The group has representation from a number of different parts of the industry including logging contractors, arboriculturists, urban tree workers, training advisory bodies, WorkCover employer groups and trade unions. A more detailed profile of the group follows.

David Coate - Forest & Forest Products Employment Skills Company (FAFPESC)

David has been employed for 18 years as a forest industry worker. The past eleven of these in a variety of roles including: occupational health and safety; industry liaison; skills development and workplace assessment within the forest industries. He is currently employed as the Forest Liaison Officer by FAFPESC, the national training advisory body for the forest and forest products industry.

David is also the Chairperson of the Tree Felling Safety Group.

FAFPESC, P O Box 307 Nunawading 3131 Mobile: 0419 571 606

Telephone: (03) 9894-2411 Facsimile: (03) 9878-0850 email: dcoate@fafpesc.com.au

Denise Clayton - Victorian Association of Forest Industries

Denise is the Occupational Health and Safety Manager for the Victorian Association of Forest Industries (VAFI). Her role encompasses all facets of managing workplace health and safety including the provision of advice to members on a wide range of issues. VAFI are an industry association which represents the interests of it's membership across a wide range activities. The VAFI membership includes sawmillers, pulp and paper companies and logging contractors in both the hardwood and softwood sectors.

Denise is also the Deputy Chairperson of the Tree Felling Safety Group.

Victorian Association of Forest Industries, 320 Russell Street, Melbourne 3000

Telephone: (03) 9662-1444 Facsimile: (03) 9662-3444 Email: vafi@mira.net

Gary Harding - Arbortrim

Advanced Certificate Arboriculture - Burnley College; Certificate IV Workplace Training Category II - RMIT Training Pty Ltd; First Aid Instructor - St Johns Ambulance Australia; FAFPESC Assessor. Gary has 20 years experience in the powerline clearance industry, including confined space tree removals and tree pruning.

Arbortrim, PO Box 279, Emerald 3782

Telephone/Facsimile: (03) 5968-6330 Mobile: 0408 130 548 Email:

arbor@netspace.net.au

Graeme McMahon - Professional Tree Feller

Graeme has over 20 years industry experience, specialising in regrowth falling and large confined space removals.

Graeme McMahon, PO Box 162, Cockatoo 3781

Telephone: (03) 5968-8041 Facsimile: (03) 5968-8454

Yorick Piper - Construction, Forestry, Mining, Energy Union

Yorick is employed as Assistant Secretary - CFMEU Forest Division (Victoria). The CFMEU represents workers at all levels of the forest and forest products industries. Yorick has worked diligently in his role as union official for six years to raise the safety standard across the industries.

CFMEU Forest Division (Victoria), P O Box 661, Carlton South 3053

*Telephone: (03) 9348-1888 Facsimile: (03) 9349-1511 email:
ppwskill@ozemail.com.au*

Don Gilmour - Victorian WorkCover Authority

Don comes from a background in the manufacturing industry (metal trades) and has been employed by the Victorian WorkCover Authority for over 20 years in a variety of roles. These have included being a member of the original working party for the Code of Practice for Safety in Forest Operations; Senior Inspector - Investigations; Central Investigation Unit; Manager Central Group and more recently, Manager Emergency Response.

*Victorian WorkCover Authority, 222 Exhibition Street, Melbourne 3000
Telephone: (03) 9641-1710 Facsimile: (03) 9641-1715*

Trevor Lawrence - Arboriculturist

Trevor is currently overseas and Steve Fitzgerald has taken his place in group during this absence.

Stephen Fitzgerald - Arboriculturist

Advanced Certificate Arboriculture - Burnley College; Bachelor of Applied Science (Horticulture).

Steve has 15 years experience in the arboricultural industry (applied works and consultancy) and is involved in training through the University of Melbourne, Burnley College and a number of private providers.

Telephone: (03) 9882-5778 Email: stephenf@netspace.net.au

David Balsamo - International Society of Arboriculture, President Australian Chapter

David is employed in the amenity tree industry since 1983 in commercial and municipal arboriculture. He is currently employed as 'Coordinator of Tree Care' with the Banyule City Council. David is also the incoming President for the International Society of Arboriculturists - Australian Chapter.

*Telephone: (03) 9490-4403 Phone/Fax: (03) 9830-6170 Email:
treeman@21century.com.au*

All members of the Tree Felling Safety Group volunteer both their time and the resources of their respective organisations.

APPENDIX 3: GUIDANCE MATERIAL FOR FORESTRY AND AMENITY TREE INDUSTRIES