FARM SAFETY: WHAT A LIFESAVER

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(ii)
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- Other than where acknowledged as quotes, all of the rest of this work is mine;

- I also declare that this work has never been presented in whole or in part to qualify for any other academic award:

- I also declare that the content of the exegesis is the result of work which has been carried out since the official commencement date of the approved research program

Signed

Michael John Blake
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ABSTRACT

The implementation of a sound farm safety plan can reduce injuries and save lives on Australian farms. This project sets out to show that Bally Glunin Park is a good model for demonstrating the implementation of an effective farm safety system. It also provides the basis for presenting Bally Glunin Park’s farm safety system to the wider agricultural community for evaluation and implementation.

The overriding objective of this project is to change attitudes towards farm safety particularly of farmers who have a great reluctance to change. Some farmers are unsure of their abilities to handle change and, in some cases they will react in a negative way to change. I come out of this same environment but recognize that for economic and social survival this industry must take on the challenges of changes, especially as they relate to farm safety.

It is acknowledged that this work has a practical rather than academic focus. Sadly, it seems that from time to time there is some mutual lack of respect between both groups. It is argued that my influence as a farmer practising farm safety will be enhanced by being awarded an academic qualification. My credibility with government at all levels; rural employers and colleagues will also be enhanced. This will assist me in achieving my ultimate goal of reducing deaths and injury on farms. It is this goal that drives me to succeed.

One of the challenges of this work was to develop a credible association with the various government agencies as well as the media. Agricultural media and associated media, such as hobby farm magazines and safety booklets, play a critical role in communication about farm safety.

This exegesis will show the how, why, when and what has been achieved. The ‘how’ will incorporate the methodology used in developing my work. The ‘why’ will explain my commitment to this work. The ‘when’ will unfold the years from childhood learning through to my working career and the major time frames in the development of Bally Glunin Park’s farm safety policies. The ‘what’ will summarize the practical outcomes.

This Project will incorporate some of the work that I have done on farm safety in the past through my working organization and indirectly through my work with kindred organizations. This work will add to the primary data and information based on farm safety. On completion it is hoped that the project will gain academic accreditation and raise awareness of the major problem of deaths and injuries on farms.
GLOSSARY:

CATTLECARE: Name given to the Australian National Quality Control process for preparation for sale of Australian Beef.

CLIPCARE: Wool selling agency’s quality standards for preparation of wool within the shearing shed for sale through Wool Brokers i.e. Elders

CODE of PRACTICE: Standards for the operation of various enterprises drawn up by Government agencies.

DALCARE: Wool selling agency’s quality standards for preparation of wool within the shearing shed for sale through Wool Brokers i.e. DALGETY

FARM CHEMICAL STORAGE: Storage areas set aside to hold the various chemicals that are used for a variety of farming operations.

FLOCKCARE: Name given to the Australian National Quality Control process for preparation for sale of Australian Sheep and Lambs.

HOLISTIC: The process of incorporating many various components to develop a whole.

Safety MAP: Is the name given to an audit tool designed to assist organizations to improve their management of health and safety.
LIST OF ACRONYMS:

ACI: Australian Consolidated Industries
ACC.NZ: Accident Compensation Commission NZ
AGM: Australian Glass Manufacturers
ANSI: American National Standards Institute
ANZRSAI: Australian & New Zealand Regional Science Association International
ANZSIC: Australian & New Zealand Standard Industrial Classification
ATV: All terrain vehicle
AWTA: Australian Wool Testing Authority
AWU: Australian Workers Union
BROSH: Ballarat Regional Occupation Safety and Health
CFA: Country Fire Authority
CPSC: Consumer Product Safety Commission
DOCEP: WorkSafe Division, Department of Consumer & Employment Protection WA
DSE: Dry Sheep Equivalent. This is a unit to measure stocking rates. Each breed of animal has a different value. One DSE is a 60kg merino wether and the amount of feed he would eat.
DVD: Digital Video Disc
EU: European Union
FCAI: Federal Chamber Automotive Industries
Ip: Injury Prevention
LFL: Lempriere Fox & Lillie
MLA: Meat and Livestock Australia
MSA: Meat Standards Australia
MSDS: Material Safety Data Sheets
MUARC: Monash University Accident Research Centre
NOHSC: National Occupational Health and Safety Commission
NRE: Department of Natural Resources & Environment
NSCA: National Safety Council of Australia
OH&S: Occupational Health & Safety
PPE: Personal protection equipment, i.e. noise protection,
QA: Quality Assurance
RCD: Residual Current Device also known as a safety switch
RIRDC: Rural Industries Research and Development Corporation
ROPS: Rollover protection structure
SAP: Safety Access Platform
VFF: Victorian Farmers’ Federation. A commercial organisation representing the interests of farmers in Victoria
VIOSH: Victorian Institute for Occupational Safety and Health
Chapter 1  
OVERVIEW AND PROJECT DESCRIPTION

Dr Greg Keogh in just a few short phrases summarizes the simple solution to reducing deaths and injuries on Victorian farms. These are as follows:

“The farming community must change its attitude towards risk-taking,”
“The main problem is that farmers tend to think, as they have thought for generations, that there are risks that have to be taken, and you can’t do anything to avoid them.”
“The message is: if you take risks you end up dead, you end up amputated and you end up not farming.”
“Farmers don’t understand that when they have an accident they reduce their productivity and affect their livelihood, and in the long run their family’s future.”
“…. if farmers do the right thing, that is work out what the risks are on the farm, and then work out simple ways to avoid those risks, then they can reduce the number of deaths and injuries by a substantial amount.”

(Workcover Safety “Farm Safety what are we doing about it”, [Undated Workcover brochure] Dr Greg Keogh)

As an overview of this exegesis let me first identify what the subject of my research is about; secondly why this research has been undertaken; thirdly what the foundation of the learning methodology was and finally, how my research will improve or change the current practices.

The objectives of this exegesis are to:

• Establish that there are dangers associated with farming;
• Investigate what some of these dangers might be;
• Investigate whether these dangers can be reduced;
• Establish what solutions there might be;
• Investigate some of the other organisations working in this area and
• Explain why it is necessary to do an academic study on this topic.

Having investigated and discussed these objectives, the focus will shift to how best to utilize the information gained and to use it to influence three specific groups to focus on and contribute to improved farm safety:

• Farmers;
• Government, especially in terms of their policy and research;
• Agricultural educational institutions; both secondary and tertiary.
The success of this work will be presented in the conclusion where I will indicate what has been achieved as a consequence of this research.

My project title on the 23rd of October 2001 was “FARM SAFETY: WHAT A LIFE SAVER”. From day one I have had a clear understanding of what the problems are regarding farm safety and what I wanted to achieve by the end of the project. The content has changed and grown beyond this project’s parameters which has created difficulties in achieving a finished work, but even now, after five years, “FARM SAFETY: WHAT A LIFE SAVER” encapsulates all the research, collected data, literature reviews and practical experiences in a simple but accurate title.

The research undertaken includes literature reviews, sourcing reading material applicable to the topic through relevant books, papers, magazines, internet searches, safety guides, personal contacts and using all of the information gained to bench mark Bally Glunin Park as a good model farm to use for influencing farm safety in the broader agricultural farming community.

The practical outcome of this theoretical work is a portfolio of products demonstrating the contribution I have made to farm safety as a result of this study and my personal commitment to promote the benefits of a sound farm safety program. This portfolio is made up of a DVD showing some of the many dangers that exist on farms and some of the solutions that I have developed or incorporated into the management of Bally Glunin Park to remove these dangers. These solutions form an integral part of my research and will be discussed in greater detail in Chapter 5. Other parts of the portfolio consist of a number of publications taking these solutions to a wider selection of the rural community (included in the Appendix section) and also information about the public forums where I have delivered a number of papers relating to Farm Safety. I will draw upon this portfolio to support my work throughout the following chapters of this exegesis, and as I progress through this work I will identify the specific starting points for this research which will be based primarily on action research methodology as well as the effects of a life time’s exposure to the farming industry’s dangers.

I have chosen to do this research as my commitment to improving safety on farms.

Although this is a formal Masters, by project, I feel that to completely modify my writing style would be doing myself a great disservice and perhaps contribute to reducing my credibility. It is this informed and recognizable voice that contributes to my credibility in the industry and that allows me the opportunity to get positive responses from people. Furthermore, this document has two purposes, firstly to explain the process of my work to my academic reviewers, and secondly to explain the research process to users of this document who are not familiar with the process, that is a large section of the people I am attempting to influence.

As an overview I will discuss the contents of each chapter in two ways. The first as an overall concept related to the title and, secondly, chapter-by-chapter indicating how each chapter can stand-alone but also interacts with the others. In developing and structuring this exegesis I have changed priorities of chapters and the content of each chapter many times, but I now believe the structure develops systemically and builds a holistic approach and balance. To delete any one Chapter would remove what I believe is important research material that supports my work, and its outcomes.

In discussion of the overall concept it must be pointed out that when I began this work there was very little on-farm interpretation and sustained application of farm safety. There were Government agencies and some academic institutions (Chapter 6) providing educational material
and Workcover requirements but, in essence, the work that I was doing and continue to do is at the forefront of implementation of on-farm safety.

As explained above, improved farm safety relates to influencing three specific groups to improve their OH&S practices:

- Farmers and on farm implementation of farm safety;
- Government, their policy and research;
- Agricultural educational institutions both secondary and tertiary.

These distinctions are very important if positive outcomes are to be achieved. The reason for this is that each group has different conceptions of strategies to implement change. I will deal with these problems of change in Chapter 9.

It is also important to point out that the agricultural community is subject to the same OH&S Acts and Legislation as all other industries; however I have also restricted my research to the agricultural area. There is some specific legislation that will be dealt with in later chapters.

The contents of Chapter 2 were certainly my biggest priority. Chapter 2 needed to lay some foundation to build the rest of the work around, which is why I moved it from a much lower order of inclusion. It might sound a little egotistical but if you look beyond the self-acclaim you can see the work that can and has been achieved by an individual with a passion for farm safety.

Chapter 2, MY STORY - STORY OF MY RESEARCH AND WHY I GOT INVOLVED is the credentials on which the rest of this paper gets much of its validity. It also explains why I have undertaken this research. Although this work appears singular in its content and, as such, focuses on my achievements and my presentations, it has caused some initial concerns with my Research Supervisor who describes the situation as, me as a soldier restricted to the trench warfare whilst the General high on the hill oversees the larger battlefield. I pondered upon this point for some time, in fact for many months trying to work out how I could get to the hill- tops but I now believe that that’s not necessary; a good general can operate both from the hills and the trenches. One of the greatest modern generals who commanded the American 8th Army, General George Patton, was both commander and soldier. As the Supreme Commander of the 8th Army in the Egyptian desert he set up, commanded and executed the battle plans, but he did it as a soldier. He ate what his men ate, slept less than his men and marched with them. Why? Because he needed to know how they were feeling and what their capabilities were for fighting. He also earned the respect of his men and they, in turn, fought with dedication and won. I believe my work is both from a soldier’s position and from a commander’s position, which is why it works.

In Chapter 3, METHODOLOGY USED FOR MY RESEARCH I will describe the process that I have used over the period of my academic work. It is based around Action Learning methodology, and although the terminology is relatively new it has existed in a practical sense since the creation of man. Practitioner Research will also support this methodology and essentially be the main foundation.

The vast amount of change that I initiated to develop my protocols for farm safety has come from reflection and practical experience over a lifetime of involvement within the rural industry. Not all of these experiences were pleasant; the death of friends has brought about my urge to instigate change. In Chapter 5, a decision on element exposure was brought about by the death of an
acquaintance when lightening struck a hockey field in Hamilton, killing him and injuring the majority of players on the field.

The ingenuity of isolated youth has had immeasurable action learning experiences on me and strongly influenced my practical knowledge on occupational health and safety issues on farms. I will relate three small stories from my early youth that have had a profound influence on some farm safety outcomes. I have titled them:

- Smoking rabbits;
- Mary Poppins;
- Travel like an Eskimo.

**Smoking rabbits:**

Smoking rabbits is a story about my cousin aged 12 and myself aged 8. It was Easter late March; we were out rabbiting and discovered a number of rabbits in some hollow logs. We had equipment to dig but not to cut so devised a plan to smoke them out. Nets were set on one end of one of the hollow logs and plenty of dry grass in the other, the strike of a match and instant smoke, more smoke and more smoke but alas the rabbits stayed put in the middle of the log. With plans abandoned we extracted what grass wasn’t burnt and looked for new vermin control challenges. Some hours later the sound of bells and sirens heralded the arrival of a number of fire trucks bound for a large grass fire started by an unknown cause but the general opinion was that some swagman travelling the railway line was the culprit. The truth was only revealed some forty years later, but the learning experience started well before then. Sparks in summer have no boundaries; all machines carry knapsacks, no non essential work in the open on total fire ban days and no welding, mechanical cutting or grinding. In 1980 two people died as a consequence of the Ash Wednesday fires in the Hamilton area. The fire was started from a spark from a grinding wheel.

**Mary Poppins:**

The movie “Mary Poppins” was the inspiration for another adventure that involved one of my sisters and me. The thought of flying around under an umbrella got the better of us and one day we put the thought into practice. As I was the instigator of the idea I went first. We had taken the beach umbrella and climbed on to the roof of the highest shed. A few practice jumps on the ground before hand had given us great courage and reassurance that the idea would work. So having taken a strong grip of the umbrella pole, and a short run down the roof to jump into free fall, the umbrella snapped and turned inside out. Splat: The only saving grace was a little insurance if the plan failed. This was a soft landing into the water tank. In Chapter 4 I raise the issues of both elevated heights and water hazards.

**Travel like an Eskimo:**

Travel like an Eskimo involved the same sibling combination in yet another adventure. Living five miles from the local town, a mountain to cross and only little legs we needed some assistance to help us to get to town on our bikes. What better way for assistance, than two strong dogs roped to the front of the bikes and keen to travel? Instant success, away we went shouting commands and dogs responding, suddenly a post, dogs one side bike the other and over the handle bars. I regained consciousness a few minutes later, some blood, some stars and let’s try again. The
following day I went into a coma that lasted three days. In 2002 and 2003 some farm deaths occurred as a result of head injuries whilst riding ATVs, helmets were not being worn.

Writing about farm safety and my work has no relevance unless there is a yardstick for comparison. In Chapter 4, A FARM ANYWHERE I attempt to cover a large variety of farming enterprises, identify unusual risks and then group risks according to types. In grouping risks according to type I can then compare and offer solutions to each type and show in a practical sense how this has been done on, THE SPECIFIC FARM BALLY GLUNIN PARK, which is our family farm that I manage. I discuss this in Chapter 5, against the general farms from Chapter 4. In doing this I can show what is different with this farm and why. The differences discussed in Chapter 5 have come about from action learning. I have already spoken about adventuresome youth but some of this action learning comes from other work experiences when I worked with Australia Glass Manufactures (AGM). I didn’t know it then but their influence on implementing industry safety was part of the catalyst for change on this farm.

WHO ARE SOME OF THE OTHER SPECIALISTS IN OH&S? AND WHAT ARE THEY SAYING ABOUT OH&S? ESPECIALLY AS IT RELATES TO FARMS is support in itself for this work as it aligns what I have done and am doing with all of the requirements of the agencies mentioned in Chapter 6. This gives an overview of the hierarchy of some of these agencies associated with farm safety.

To show the complexity of trying to implement on farm safety both from a practical standpoint and Government agency legislation, I have reviewed one specific industry, as a major case study. I chose this area because it is the first to have a specific manual written about it and from both an industry base and a union base. In Chapter 7, THE SHEARING INDUSTRY, the reviews show how the one industry can be assessed in different ways and, as a result, progress can be made on improved OH&S implementation.

Since I began this project other enthusiastic farmers have become involved with farm safety and in Chapter 8, I highlight the achievements of some of these. These people have been recognized by the Victorian Workcover Authority as making a strong commitment to improving on farm safety. I also review three other case study areas chosen because they were the causes of many of the deaths on farms in Victoria in 2002.

In Chapter 9, I attempt to clarify some of the reasons for the difficulties of trying to implement on farm safety, as well as aligning this work back to my earlier comments, reiterating that, improving farm safety relates to influencing three specific groups:

1. On farm implementation of farm safety;
2. Government policy and research;
3. Educational institutions both secondary and tertiary.

And, as suggested, the distinctions are important if positive outcomes are to be achieved and again the reason for this is that each group has a different inherent conception of the importance of and nature of farm safety.

Chapter 10 will cover the outcomes of this work and also my conclusions from this work and deliver some recommendations that clearly can reduce deaths and injury on farms.
Although this academic work has spanned five years, time spent on it has always come from private time, my professional work has always taken main stage and in Chapter 5, the vastness of this professional work is well documented. It is a classic example of practitioner or action research. Occasionally I begin a chapter with a boxed quotation. I used these as inspiration to continue writing the chapter and I hope the readers of this exegesis will see their relationships to the chapters. It is appropriate to note at this point that some of the referencing of publications was difficult because many of the publications particularly Government WorkCover documents, had no publication dates or page numbers.

In the preparation for my final submission I have reviewed this work many times. I have adjusted chapters, their content and their priority order. I have presented this exegesis as drafts for review a number of times. It has been reconsidered, pruned and adjusted to enhance the subject material’s relativity and to improve the reader’s understanding of the complexity of both a theoretical and a practical approach to the implementation of farm safety. This review process is typical of the action research cycles as presented in McKernan’s diagram from his book, McKernan J. (1996). (See Appendix 1 for Diagram)

McGill & Beaty (2001) describe action learning as,

…a continuous process of learning and reflection supported by colleagues, with an intention of getting things done. Through action learning individuals learn with and from each other by working on real problems and reflecting on their own experiences (in Kember, p.35)

There is, however, a downside to too much reflection since in essence the cyclic process never stops. This is well described by Bell (1993, 160-1)

One problem about spending so much time on the original draft is that parts of it may seem right simply because they have been read so often. Another is that you may be so familiar with the subject that you assume something is understandable to the reader when it is not.

Throughout this cyclical review process a number of questions have continued to arise:

1. Why / how do I know what I know particularly about farm safety?
2. How creditable are the reviewers of my work?
3. What was the thought process in developing some of the solutions, the steps, and the action?
4. How did I decide on this topic and is this work worthwhile?
5. Why am I involved?
6. How do I continue to refine my research and thinking and data?

These questions will be addressed, either directly or indirectly, as I work through each of the following chapters of this exegesis.
Chapter 2

MY STORY- STORY OF MY RESEARCH AND WHY I GOT INVOLVED

Why and how do I know what I know particularly about farm safety?

The acquisition of knowledge stretches across our life time, part of the knowledge that I have, has been acquired through the initial parent-child life stage relationship and then the teacher-pupil relationship. In the agricultural industry this relationship is usually between father and son in a loose apprenticeship framework style. Sometimes this can be a more formal apprenticeship with recognized training programs and quantitative outcomes. In my case my original foundation of knowledge was developed through my relationship as a student with my father as the teacher. However this sort of learning process can have dangerous implications as indicated in its title, “Father-to-Son Knowledge”. The danger that can arise is that if the original knowledge was not correct any acceptance of this knowledge as the correct standard is already flawed and therefore jeopardizes any further knowledge. Advances in technology and changing work patterns also have an effect on traditional knowledge as the corner stone for training.

In implementing a sound farm safety attitude a lot of problems have developed or continued from the old-fashioned apprenticeship concept that could be summed up as: “This is the way my father did it and no one was ever hurt so it must be all right”. This attitude is a major stumbling block to the acceptance of good farm safety practices. Equally, repetition of an idea or practice resulting in a successful outcome may not necessarily make good training, particularly if during the process there are avoidable risks or dangers that are not apparent to the teacher.

Tragic example:

One recent story is a classic example in support of my previous statements. It clearly demonstrates the problem of repeatability, familiarity and the wrong foundation. It also demonstrates that a tunnel vision attitude inhibits the ability to look for change. I have included the full story here rather than in an appendix so that it is read in continuity with this work.

“The day Helen’s dreams shattered”

April, 13 last year (2004) was a day like any other for Helen Barrow, until one fateful slip turned her world upside down. Her husband, David, 65, was standing on a pallet raised by a forklift to mix feed for the pigs on their Leongatha South farm. It was a task he’d performed every day for more than 20 years. No one knows exactly what happened, but he lost his footing and fell more than two metres on to a concrete floor. An employee found him 45 minutes later but he was already dead.
With his death, Mrs Barrow’s dreams of sharing travels, the birth of their grandchildren, and old age disappeared in an instant. She knows nothing she can do, will bring her husband back. But she said if one person heard her story and rethought their attitude to farm safety, reliving the painful memories would be worthwhile. She said safety had always been a high priority on their farm, particularly where employees were concerned. But like most farmers, Mr. Barrow was too busy with day-to-day work to think about improving safety for himself. “We assumed the same thing most people do – that nothing bad will ever happen to us,” she said. “But bad things do happen to people who don’t deserve it.” She said even though it could be inconvenient and time-consuming, farmers and their families must minimise risks. “Farming is a dangerous occupation, there is no doubt about it,” she said. “Often, people have been doing jobs the same way for years and they don’t realise how dangerous they are.” A possible solution was to invite a WorkSafe inspector or similar professional to visit their property and advise them. They should also ask and look into new technologies.” “Sometimes it takes a third party to come in and tell people how they can make things safe,” Mrs. Barrow said. She said her husband was one of the “old school” farmers. He was hardworking, independent and strong willed. His death sent shockwaves through the Leongatha community, where the family had farmed for decades. “He loved hard work and he loved his pigs,” Mrs. Barrow said. “Farming was all he ever wanted to do and he was very good at it. The world has lost a wealth of knowledge. You can’t learn what he knew from any text book.” After her husband’s death, Mrs. Barrow was forced to sell the piggery, as well as her parents’ beef farm. She now lives in Leongatha, where she can enjoy the support of the CWA, friends and a close-knit community. But nothing can fill the void in her life. “Our dreams and plans went out the window and nothing will ever bring him back,” she said. “His death had a ripple effect. It isn’t just me who lost someone. The entire community was at his funeral to say goodbye.”

(Megan McNaught, The Weekly Times, January 12. 2005, p.3) (See Appendix 2)

There are a number of key issues in this story that need to be identified and examined in more detail as they throw additional light on my research.

• “Standing on a pallet raised by a forklift more than 2 metres”

This is a classic quick solution to getting the job done, but in this case the solution caused the fatality. The falls from heights legislation is there to make farmers think about solutions and sometimes think outside the square for those solutions, whilst still maintaining a safe work place. Without actually seeing the operation it is difficult to provide a solution but under the hierarchy of
control the risks have to be eliminated and a couple of solutions may have being to use an auger to elevate the mix into the hopper or to build a solid structure with proper railing and steps.

- “It was a task he’d preformed every day for more than 20 years”

Again this is a classic case of repeatability. In the operator’s mind the risk has diminished as the number of times the task has been done. The reality is that it was always very dangerous, life threatening the first time and fatal the last time.

- “If one person heard her story and rethought their attitude to farm safety, reliving the painful memories would be worthwhile”

In chapter 9 I discuss the problem of farmers’ attitude to change, which is supported by Dr. Marilyn Shrapnel and Dr Jim Davie in their paper presented to the 24th ANZRSAS Annual Conference 3rd–6th December 2000 in Hobart. This paper outlines similar findings on farmers’ personalities, also described in Chapter 9.

- “Safety had always been a high priority on their farm, particularly where employees were concerned”

As I said earlier, repetition of an idea or practice resulting in a successful outcome may not necessarily make good training, particularly if during the process there are avoidable risks or dangers that are not apparent to the teacher. Similarly one person’s conception of good farm safety as in Mr. Barrow’s case represents a minefield to another.

- “Farming is a dangerous occupation, there is no doubt about it” she said. “Often, people have been doing jobs the same way for years and they don’t realise how dangerous they are”

Again repetition of an idea or practice resulting in a successful outcome may not necessarily make good training, particularly if during the process there are avoidable risks or dangers that are not apparent.

Of the many case studies collected on farm deaths and injuries by me, I believe this case study covers so many aspects of my work that it was important to include it here to show what my research is about.

What makes my “Father to Son Knowledge” different? Or more importantly how can I be sure that what I say and do regarding farm safety is right and safe?

To answer this I need to give you, the reader, some indication of my family’s history. For generations my ancestors have been recognized as clear lateral thinkers, inventors and rural researchers. (Further reading of some of this history is available in Appendix 3 & 4). As a consequence, on farm research has become an inherent responsibility that has involved me in no less than seventy research, educational or practical projects being undertaken on Bally Glunin Park and I am currently involved in ten projects and two PhD research projects. These projects are outlined in Chapter 5 and clearly indicate a great and diverse interest in many subjects.

Information on a large array of subject material is gained from personal communications with experts from around the world as well as from reading material sourced from around the world.
My initial work on farm safety was to protect all those who were associated with Bally Glunin Park and so all of the current projects are accessed through a hierarchy of control for safety. Again it is important to prioritize. The need to have an academic qualification i.e. Masters Degree, has always been to be able to relate to the academic world on a basis of mutual understanding. Although many of the research projects have an academic starting point I must point out that many of these projects undertaken were instigated by government agencies or business that had approached us to evaluate their products or concepts from a practical farming base. The concept of an OH&S program was foreign to most of them. These requests were and are based upon independent, creditable methodologies and history. These farm-based research projects were based on the simple question, will this work and why?

In conversation I often use a phrase “knowledge is power”, but not as a power of conquest or dominance but in communication and debate. This phrase was attributed to Sir Francis Bacon (1561-1626) English philosopher, scientist and statesman, who explained that the more knowledge one has on a subject the more powerful and convincing one is in debate and discussion.

I was discussing this concept of knowledge with one of my local cluster group members and it was suggested that part of my knowledge was based on “tacit knowledge”, knowledge implied but not expressed in words, or without actually being aware of that knowledge. This tacit knowledge is acquired over many years based on observation, the father-son apprenticeship, living environments and associations. Again this tacit knowledge can be flawed by incorrect interpretations of any factors that contribute to this knowledge base. My knowledge on farm safety was developed from work experiences in industrial industries, my childhood exploits and correct on farm training. Why was it correct? It was correct because it was based upon the principles of hierarchy of control when managing OH&S issues.

The exposure through the vast number of projects to a broad range of scientists, researchers in collaboration with our practical work and educators created a large cauldron of ideas from which my personal tacit knowledge grew. Bear in mind not all of these projects had successful outcomes so there were always questions. One of those questions was, some of this seems dangerous how can I change this? And so another project developed. Chapter 2 is the story of the development of a safety system to protect all those persons associated with Bally Glunin Park, whether they are staff, family, friends, contractors, visitors, consultants or researchers.

I believe that the diversity of my reading, (a small example ranges from National & Australian Geographic, Animal Genetics CSIRO, Architectural Digest, Australian Farm Journals, National Workcover OH&S manuals, Australian Trade Union Safety Representatives Handbooks and ACI safety manuals) has also contributed to my tacit knowledge. Other contributing factors have come from my involvement in detailed research, communication of the findings and broad exposure to cutting edge technology and lateral thinking. These are all reasons why I know what I know and why it is appropriate for many rural workplaces. It also validates the outcome of the next chapter.

Farming with livestock is a constant balancing act between providing stock with sufficient feed and water for all year survival and growth, as well as protecting them from predators large and small, protecting them from the harsh elements and protecting their lives from natural and man made dangers. A great deal of work has been done on developing skills to enhance all of these requirements, and some such as myself have engaged in industry QA (quality assurance) programs to evaluate and monitor the implementation of these skills.
Family members, staff and contractors have always been involved in undertaking the farm work. Unfortunately none of the QA programs considered the safety of these people as they performed their farming duties. I felt that all these people should not only be protected from danger but should also be involved in the process of developing their own and others’ protection.

Using resources gained from other industries and my own experiences I began to develop a farm safety manual. This manual was a blueprint of how all operations were to be done, by whom and why. This work took me two years to develop and when completed its success was only based on my opinions and experiences. I needed someone to audit my system. I felt the most appropriate people to undertake this task would be found at WorkCover within their field staff, as it was WorkCover’s responsibility to inspect workplaces, review their operations and assist in helping the owners or managers make the workplaces safer.

I contacted the local field officer from Warrnambool, Mr. Neil Gorring who then made arrangements to come and visit to review my work. Over a few hours he analysed my system and operation giving advice on small changes but generally providing encouragement for what I had presented, with an indication that he would come back in a couple of months to see how things were going. Two months later arrangements were made for him to come again. I went through the changes that I had made on his recommendations and at the conclusion of his visit he showed me the safety audit system Safety MAP for industry and suggested that I redefine my work to this industry standard. (25th June 1998) I thought this was a positive outcome and as agriculture had no standard model I thought my model could possibly fill the gap.

After several months of working on the model Neil contacted me to make arrangements for another visit. This time he came with another field representative, Mr. John Chick from Ballarat. I repeated the process of explaining my work and the changes that I had made. John introduced me to some new material on industry safety that had just been released that he felt I should incorporate into my system. He organized a follow up meeting in two months. This meeting took place off site between myself, John Chick and a new recruit to WorkCover, Alison Dawson. Extra components were reviewed and incorporated into the system.

A few months later Ministerial communication began with the then Minister for Workcover, Mr. Roger Hallam MLC (15th December 1997) writing to me about my work on farm safety. He indicated that he had spoken with the Chief Executive of WorkCover, Mr. Andrew Lindberg, about my work. Andrew wrote to me advising me of this (23rd December 1997) and indicated that as a result of my work on farm-safety he had asked Mr. Ron Ruff, Program Manager Industry Programs WorkSafe, to get in touch with me. Ron made arrangements to come and visit but subsequently was unable to come but sent Mr. Colin Burns, another WorkCover field officer in his place.

The Minister again wrote to me (4th March 1998) following Colin’s report of his visit. (Appendix 5) Colin had written about our system of operation and what he had seen. The Minister further indicated that as a result of my efforts to improve farm safety he was recommending me for a nomination for the 1998 Victorian Work Cover’s Health and Safety Awards in the Agriculture category. In October 1998 I received a WorkCover Award “For Excellence and Innovation in Workplace Health and Safety” (5th October 1998)

In early 1999 Ron Ruff telephoned me to organise a visit to come and review my system on managing farm safety. He brought along his colleague, Mr. Eric Young, (See Appendix 6) a man who would play a big part in expanding my commitment to farm safety, and who became my
mentor. This meeting lasted about five hours during which time we looked at methods of incorporating parts of my work into the QA programs and other publications. During all of these years that I had been working on implementing this farm safety system, my intentions were to use the system for internal farm use only. My purpose was to have a safe farm for my family, staff, friends, contractors and visitors.

Unbeknown to me the intention of the continuing Workcover audits by senior authorities was to have a proactive farm safety farmer with a farm safety system available to be promoted state wide. After a second visit from Ron and Eric, a change in State Government occurred and a new Minister for Workcover Mr. Bob Cameron MP was appointed (WorkWords Number 29 December 1999 p.1). Eric encouraged me to accept that the work I had completed was too important to be used for just one property; I agreed to the broader exposure of public presentation.

By this time the audit process for Safety MAP had been outsourced with a starting cost of $2000. It was impractical to expect this process to be undertaken by farmers when the majority would think that spending even $200 on farm safety was a mammoth expense and a waste. On The 12th April 2000, Mr. Shane Magrath, a WorkCover Inspector, visited me. He made a spot visit as part of Health and Safety Week 2000. He reported on nine criteria, which we passed with flying colours but my intentions were still to give my work to WorkCover for their operation. They had all the expertise and people in the field. A few days later Ron and Eric rang and insisted the work was mine and that it should be submitted to the Victorian WorkCover Awards. I declined; Ron and Eric persisted and won the day. They submitted my work to the Victorian WorkCover Awards 2000 and three months later I was awarded the Victorian WorkCover Award 2000 Category 4, “A safe systems entry for workplaces with 30 or less employees”. This was the first time that agriculture had won a major WorkCover award.

Several months earlier WorkCover had approached the Victorian Farmers’ Federation (VFF) to see what work they were doing on farm safety or on trying to incorporate farm safety into the QA programs administered by them. At that time no work was been done other than administering the Farmsafe Alliance programs. At a local VFF meeting one of the speakers for the night was the Farmsafe Alliance manager, Mr. David Rich. I met David and he indicated that he had heard about my work and was keen to see first hand what I was doing. A date was organized for him to come to Bally Glunin Park. By this time WorkCover visits (Ron and Eric) and Farmsafe Alliance visits (David) blended into each other, always with the same objective of raising the profile of practical on farm safety.

After one such visit (15th December, 1999) David wrote and asked if I would provide the site for the 4th Farmsafe Alliance Forum and demonstrate to industry bodies, media, farmers and students my work This was also to be the first time that the Forum was to be held outside the metropolitan area and on a working farm. Some outside agencies also involved in safety namely the CFA, Managing Farm Safety unit, Honda Australia, WorkCover, QBE Insurance and a work in progress building a tractor Safety Access Platform (SAP) by the Colac Farmsafety Group were to be incorporated into the day. I organized for Mr. Bob Cameron MP Minister for WorkCover to be invited to open the Forum. Minister Cameron did the Official opening of the 4th Farmsafe Alliance Forum on the 18th July 2000 at Bally Glunin Park two months after the Victorian WorkCover Awards on the 4th May 2000.
Three important things had happened between the two events:

1. QBE Insurance approached me to promote Farmsafety through their Workers’ Compensation and publication OUTLOOK. (Victorian – Winter Edition 2000);

2. Australian Chamber of Commerce and Industry (ACCI) wrote to me to ask permission to access my ideas for input onto the National OHS Solutions Database. (26th May 2000) (See Appendix 7);

3. I was invited to the Victorian Parliament where my work was acknowledged and recorded in the Legislative Assembly Daily Hansard Tuesday, 30th May 2000. (See Appendix 8).

Over the following months I received letters of congratulations from a number of political representatives, both State and Federal, as well as large exposure in the media in six different feature stories. As a result of one of these stories a friend contacted me and suggested I look at doing some academic work on my project. It was pointed out to me that RMIT was offering scholarships locally to undertake a Masters Degree by project, so on the 10th August 2000 I applied for one and on the 16th August I received my offer of a scholarship. This changed the whole direction of my work. All this work prior to commencement of this Masters Degree will be used as primary data, in essence the foundation of taking farm safety outside the boundaries of Bally Glunin Park.

One group of individuals who seemed very vulnerable to farm accidents were students, whether on work experience or as apprentices. I had had a number of work experience students from secondary school and university and observed that they had received little, if any, training in on farm OH&S. I would spend the first few days taking them through my induction program even before we looked at the farming enterprise. With the apprentices the situation was even worse and having previously been involved in teaching apprentices and retraining programs for long-term unemployed I was concerned with the teaching outcomes. The Masters Degree had come exactly at the right time. I began to lobby South West Institute of TAFE to restructure the Agricultural Apprenticeship training program to incorporate a strong OH&S training as well as accredited training in areas that presented the most dangers to trainees. (20th January 2001) A number of meetings took place with the heads of departments, Assistant Director and the Director as well as communication with the head of Rural Skills Australia. I was asked to prepare what I would consider to be an appropriate 3 year Agricultural Apprenticeship Course incorporating all the features that I felt would be the best training model for a pastoral trainee. This I did and presented it to South West TAFE and Rural Skills Australia on the 14th July 2001. A Grazing Industry Training Review Meeting was convened by the Director of South West TAFE (12th October2001) where my program was presented and accepted as well as the intention to appoint a Hamilton Coordinator to implement the program. I was then asked to sit on the interview panel to select the Hamilton Coordinator (9th November2001) and assist with the implementation of the new program. Some sections of the program continue to be delivered on Bally Glunin Park. This property has now supported rural training for over thirty years.

Influencing change at a tertiary academic level was always going to be more difficult than at an initial training level. This was also part of my purpose of pursuing the Masters Degree.
An important part of my commitment to my Degree is to demonstrate that the subject matter is valid, important to the industry and will make a difference in saving lives both on this property and in the general farming community. I have presented my work in three ways for critical review. The fact that in all cases where I was asked to and have presented my work, the organisations are well respected in the Agricultural community demonstrates this validity.

1. Speaking at public forums;
2. Publication of my ideas and my programs;
3. Demonstrations of my Farm safety programs through field days.

This work represents part of my portfolio and extracts have been used in Chapter 9. In Chapter 10 I will present material to demonstrate that I have successfully achieved all of these objectives.

**Speaking at public forums:**

Speaking at public forums has given me the opportunity to speak to large audiences.

On the 16th October 2000 I delivered the opening address at the Managing Farm Safety Instructors Update at the Victorian Farm Safety Training Centre. On the 13th March 2001 I was interviewed for a radio broadcast over the ABC on implementing Farmsafety. On the 17th July 2001 I gave an address at the VFF State Conference on “Why addressing health and safety on my property is important to me”. On the 27th September 2001 I presented a paper at the ip injury prevention 2001 conference, a conference linking research, policy and practice for safer injury-free communities incorporating “The Fifth National Conference on Injury Prevention and Control” and “The Fourth National Farm Injury Conference”. The paper that I presented was titled “The Challenge of Change, Farm Safety”. I continue to speak promoting farm safety at a number of Farm Safety Field days.

**Publication of my ideas and my programs:**

My ideas and programs have been widely published and this has assisted me in influencing and promoting change in the adoption of farm safety.

“Farmer’s safety program an award winner”, was the title of a feature story in Australian Farm Journal, January 2001. (Appendix 9) This journal is the leading Australian agricultural national publication. Stories have also been written in The Weekly Times, the Hamilton Spectator and the Warrnambool Standard. Ideas on safety solutions have been printed in the Shearing Shed Code of Practice (July 2001) and in, On farm chemical storage, codes. The VFF farmer’s magazine printed some of my ideas and David Rich, the Farmsafe Alliance Manager, listed my wool press safety stop on Farmsafety web page on the 29th January 2002. As a result of this listing the AWU sourced funding to implement it on as many presses as they could fund (6th June 2002). There are numerous other publications and videos showing ideas that I have developed. (See product)

**Demonstrations of my Farm safety programs through field days:**

Demonstrations of my Farm safety programs through field days have also been very rewarding, both personally and practically, as I have been able to talk to fellow farmers in their own comfort zone, the farm, and show them that safety does not have to be expensive but unsafe practices are.
The highlight of one of my demonstrations was reading the post press, because it reassured me that my work with farm safety was having a positive outcome.

“Michael Blake did an outstanding job of describing and showing us his approach to farm safety. Some would say Michael is obsessed with this, which he probably would not debate. He regularly points out that all he has done has been financed out of farm profits. It seems to me we need people like Michael to drag us along the path we really know we need to be taking”.

(BESTWOOL2010 Regional Meeting Hamilton 1st May 2003 Tour of Bally Glunin Park Spider Web Issue 4th July 2003 WORKPLACE OCCUPATION HEALTH AND SAFETY) Written by Peter Schroder

In titling this Chapter, MY STORY-STORY OF MY RESEARCH; WHY I GOT INVOLVED, I have recorded the progressive development of personal contacts, their influence on me and the direction these influences have had on me in implementing and promoting farm safety. The research process in this chapter pertained more to obtaining information to deliver in my presentations. The greater part of my research in developing farm safety policies incorporates the work in Chapters 4, 5, 6, 7, and 8. The methodology used for this research will be the basis of the next chapter.
Chapter 3

METHODOLOGY USED FOR MY RESEARCH

As the Victorian Minister for Workcover, Bob Cameron states, “Industry statistics show that the farming sector employs just 5% of the workforce but sustains 33% of industry deaths. (HANSARD Tuesday 30th May 2000).

This figure does not include the deaths of others on farms who are not involved in the farm workforce, i.e. owner/occupier, family/children and visitors, which also tell a grim tale.

These statistics are a frightening indictment of an industry that not only claims to be the number one export earner for this nation but also considers its record on safety as satisfactory. As a participant in this industry, I refuse to accept that this is part of our culture and have decided to try to do something about bringing about change.

The fact that I work within this hazardous industry has a large bearing on my passion for change. It is also part of my responsibility as an employer to provide a safe work environment for the permanent staff, contractors, casuals, visitors, family and friends.

Practitioner Research:

Practitioner research is a growing phenomenon bound up with the kind of society we live in and the changes that are going on in that society. Practitioner researchers are usually those that are researching their own work or work that is of importance and relevance to them.

(A Review of Practitioner Research in Education RMIT, p.1 18/10/01)

According to Peter Jarvis (1999, p.72) the typical practitioner researchers are involved in researching issues and aspects of their work like:

- The changing nature of their practice;
- The development of expertise;
- The development of professional identity;
- The relationship between practice and continuing education.

My work certainly fits well within these research issues, as it is worked based, seeking improvement in both knowledge and practice as well as developing a professional identity, in my case to be able to influence education. My practitioner research approach within this project has been informed by Nita Cherry’s approach to action orientated research and particularly Braun’s argument that:

Action research has as its central feature the use of change in practice as a way of inducing improvement in the practice itself, the situation in which it occurs, the rationale for the work, and in the understanding of all of these. Action research uses strategic action as a probe for improvement and understanding. (Braun et al. 1988 p.103 quoted in Nita Cherry, Action Research, 1999 p.5).
This has been my approach to the research that has enabled me to observe, reflect and act on issues that are central to my area of concern. Ethnographic observation has informed my approach to practitioner research and action research.

The term ethnographic literally means “description of a group”. Ethnography includes not only the kind of cultural and behavioural description typically associated with anthropology, but also the various forms of inquiry usually referred to as naturalistic research, field research or studies and participant-observation research. They all have in common the researcher’s immersion in, participation in, or direct observation of the life, behaviour, attitudes and concepts of a particular cultural or social group.

(Dr Carlene Boucher Issues of Methodology, Data Collection and Analytic Techniques in Research Degrees by Project’ RMIT, p.3)

Nita Cherry in her book Action Research, (1999, p.11) coined the notion of “first”, “second” and “third” positions or levels of awareness to assist students in understanding the meta-reflective process:

In the first position, we simply take action – we do what comes naturally, through habit, instinct or skills. We don’t stop and think about it, we just do it.

She goes on to explain.

In the second position, we do stop and think about it - usually because someone or something has challenged our first position behaviour in some way: perhaps we didn’t get the response we expected, or perhaps we were facing something new or unfamiliar or difficult that causes us to stop and review our actions.

For most farmers the work undertaken has a seasonal basis. Once having decided on the enterprise mix that they are happy with or their business will allow, there is generally a yearly cycle or repeatability. They are reluctant to come out of this comfort zone. Change is a challenge in itself.

Cherry goes on to explain.

In the third position, we stop and not only think, but think about the way we are thinking: we start questioning, why we are doing what we are doing.

Importantly in Mike Brown’s paper, “Higher Degrees by Project Program Module 1”, (Qualitative Research in Education) he presents extracts from Qualitative Research Practice in Adult Education, (Peter Wills and Bernie Neville, p.224) where Wills and Neville write that;

Action research reflects neither of the premises that only people with years of training, employed by universities, research corporations, or government agencies can conduct research, or that research must always be non partisan, serving no particular cause. From our perspective, research is a frame of mind – a perspective people take towards objects and activities. Outside the academy, people in the “real world” also can conduct research – research that is practical, directed at their own concerns and, for those who wish, a tool to bring about change.
Mike Brown in his paper, “Higher Degrees by Project Program Module 1”, (Qualitative Research in Education) again presents extracts from Qualitative Research Practice in Adult Education (Peter Wills and Bernie Neville, p. 230) where they add another relevant dimension for my research when they describe the benefits of action research.

What Action Research Can Do?

It helps you to develop confidence. It is difficult to act forcefully towards some goal when you rely on feelings without data to support your views. Data gathering helps you to plan strategy and develop community action programs.

This research methodology gives the opportunity to review findings from other areas and industries, such as the manufacturing industry (I worked for some time with Australian Consolidated Industry (ACI) in their glass closure production) and adapted some of these industry’s safety outcomes into the farming sector without the risk of death or injury whilst testing theories. In other words if a safety protocol works well in one industry then it should be successful in similar situations in other industries. It adds support to my own observations and experience.

Case Study Research:

Case study research is a process that tries to describe and analyse some entity in qualitative, complex and comprehensive terms, not infrequently as it unfolds over a period of time. The case study is the examination of some specific ‘case’ such as a program, organisation, event, person or process. In this qualitative approach, researchers are interested in insight, discovery and interpretation rather than hypothesis testing. (Dr Carlene Boucher Issues of Methodology, Data Collection and Analytic Techniques in Research Degrees by Project RMIT, p.3)

This form of research will be used in Chapter 7 where an in depth examination of shearing industry manuals will be done to identify their user friendliness, practical use and circulation to industry.

On completion of this exegesis I will have utilised all of these methodologies. In Chapter 4, the analysis of A FARM ANYWHERE begins the process.
More of us are killed and injured working on farms than in any other job. In the past nine years, 106 farmers and family members have died at work - 21 more than in Victoria’s entire construction industry. A shocking 27% of all work-related deaths! And more of us are dying every day.

Add to that our hideous toll of serious, disabling injury and you begin to realise how truly hazardous farm life can be if you’re not thinking danger 24 hours a day.

There’s no doubt that our workload, the enormous number of jobs to be done in a day, is one of the causes. There’s also no doubt that few of us can afford to hire the help or buy the new equipment we need to get that work done. But--stressed, over-worked and exhausted as we are – we owe it to ourselves and everyone around us to stay safe.

The Health and Safety Organisation, Victoria (HSO) is concerned

(A dangerous bloody job HSO Health & Safety Organisation Victoria 1995 [Undated Workcover brochure])

Chapter 4

A FARM ANYWHERE

To describe a shopping centre as a collection of shops would be as inaccurate as to describe a farm simply as a business producing wool, sheep, beef, milk, pork, poultry, grain etc. A farm is as intricate as the labyrinth of shops at the shopping mall.

You can read any agricultural newspaper and you will read stories of various people doing every conceivable agricultural operation.

Trying to find an agricultural book with a vast collection of different farming enterprises was not easy. There are a number of mail order publication outlets with good reputations on standards of production, content material and diversity. Three that I use are:

- Landlinks, Practical Sustainable Solutions for Agriculture and the Environment;
- MLA, Meat and Livestock Australia;
- RIRDC, Rural Industries Research and Development Corporation.

RIRDC was the only production outlet that had a suitable book to enable me to cover all the diversities of Australian agriculture. This book was a research project analysing 40 farms as case study farms for adoption of Environmental Management Systems. It collectively gathered all the information together and I used this collection to illustrate the many different operations that could be a farm anywhere.

Let’s start in Queensland with a citrus farm of mainly lemons and mandarins; a beef breeding enterprise operating a large beef feed lot growing corn, sorghum and barley and selling by-
product composted manure; another farm has bananas and sugar cane, whilst on another, prawns are a stand-alone enterprise. One farm grows stone fruit and persimmons. Brassica, pumpkin, lucerne, soybeans, barley, wheat, are all produced on a mixed farm and carrots, tomatoes, watermelons, silver perch and red claw crayfish make up another mixed enterprise.

In NSW farming enterprises are as diverse as Queensland and in addition crops like sunflower and agro forestry, irrigated cotton, tea tree oil, dairying and a very large feedlot, rice and pigs, plant nurseries and poultry for meat are other products produced on farms.

In Victoria, Bally Glunin Park was one of the case study farms. Its operations will be dealt with in the following chapter but its enterprise mix of cereals including oats, wheat, barley, faba beans and peas, prime lambs, sheep mutton, Border Leicester ram sales, vealer production and grinding beef, ultra fine and super fine wool, lucerne and agro forestry, agricultural research projects, and academic research enterprise make up the diverse mix generated from the farm, twenty five in all. On other study farms, farming enterprises were lavender, plantation timber, irrigated dairy and calf rearing.

In South Australia additional enterprises in the case study were grape growing and wine making, fish farming off Port Lincoln, and in the Riverland, apples, grapes, avocados and citrus.

Tasmania is often labelled the apple isle but in addition cherries, grass seed production, peas, potatoes, poppies, bush beans, onions, pyrethrum, are all additional to the traditional dairy beef sheep and cropping. Whilst in Tasmania I must mention a friend of mine who had a snake breeding enterprise, supplying meat to Asia, high quality snakeskin and venom for science; sadly his death ended this unusual farming enterprise. Another friend has diversified what was an original soldier settlement block growing sheep and wool into more than twenty sources of income; ranging from potatoes to poppies, peas to onions, lucerne, oats, wheat, triticale, spring barley, cabbage, and grasses as certified seed, essential oils of peppermint, dill, phenol and celery. As well beef steers are traded, dairy stock are agisted and wethers grown for wool production.

To Western Australian we go, and what other different enterprises do they have? One farm collects native tree seed for nurseries and on-farm re-forestation. Crops of lupins, canola, organic horticulture, olives and chillies are other farms products. One farm I visited was a tourist enterprise but its commercial operation added another dimension to farming, crocodile farming for meat and leather. Another farm was engaged in pearl farming.

This represents just a small part of the various farming operations in Australia but it highlights the diversity of the industry and also shows the complexity of trying to develop a safe farm. What are some of the risks in crocodile farming that are different to tiger snake breeding, or fish farming off Port Lincoln and carrot farming in Queensland.

Obviously each farm has to access its enterprise independently, but by grouping risks according to types I believe key aspects of all enterprises can be covered. These risks can be grouped as follows:

- Elevated heights
- Confined spaces
- Static machinery
- Mobile machinery
- Electrocution
Elevated heights:

Elevated heights are a cause of many injuries and deaths. In Victoria new height regulations began in April 2004 restricting free movement 2 metres above ground level. Unfortunately in a lot of farming situations no solutions were presented to overcome some of the difficulties associated with the implementation of the regulation, and some solutions have now created other problems. Structures that come under elevated heights cover a fairly broad area, including silos, fuel tanks, windmills, stock trucks, wool loading, small hay bales, haystacks and ladders.

Confined spaces:

A confined space is determined by the hazard associated with a set of defined circumstances (restricted entry or exit, hazardous atmospheres or risk of engulfment). A confined space is defined as a space in any vat, tank, pit, pipe, duct, flue, oven, chimney, silo, reaction vessel, container, receptacle, underground sewer, shaft, well, trench, tunnel or similar enclosed or partially enclosed structure.

(Confined spaces, the dangers of poorly ventilated workplaces, Victorian Workcover Authority) [Undated Workcover brochure]

There are also dangerous places that are not defined as confined spaces but because of their layout or purpose fit within this category. Poorly vented places that are not defined as confined spaces include cool stores, freezer rooms, control atmosphere rooms (used for long term storage of fruit), also rooms with poor ventilation should be included.

Static machinery:

Generally this involves machinery fixed in one spot but with moving parts, or creating excessive noise, noxious gasses, or excessive light. These machines can crush, cut or rip. Some examples are wool presses, grinders, welding equipment, petrol and diesel engines, conveyor belts, augers. Appropriate guards and silencing dramatically improves the safety aspect of most of this category.

Mobile machinery:

Unlike the static machinery the mobility of the machine is a danger in itself so operator skills are of high priority. All personnel not associated with the operation should be well clear. There are ways of making mobile machines safer, such as flashing lights, sound beacons and protecting operators with safety equipment is recommended. Examples of mobile machinery include tractors and their attachments, other motorised farm equipment, chainsaws, just to name a few.
Electrocution:

Electricity is always a hidden danger. There have been many deaths on farms from electrocution. Care should be taken in sighting structures and planning for placing upgrades and new wiring underground. The “Look up and Live”, campaign made people conscious while it was on and for some time afterwards, but still one farm death in August 2004 was caused by the failure to look up when a crane touched overhead power lines, killing the operator. The installation of residual currency devices (RCD) at the meters is an easy and cost effective way of safe guarding all farms. Some examples of dangerous situations are extension cables, metal irrigation pipes, moving elevated equipment under power lines, inappropriate wiring and unauthorised wiring.

Water hazards:

Drowning is the greatest cause of deaths with infants on farms. Restricting young children to a secure enclosure is an important preventative measure. There are a variety of water features on most farms including dams, tanks, troughs, wells, dips, bores, drains, irrigation channels, creeks, rivers and on some farms swimming pools and garden ponds. Unpredictable weather outcomes can create dangerous water hazards when trying to save stock or property. Care should be shown in these situations.

Livestock hazards:

In 2001 there were two deaths on Victorian farms caused by livestock. In one instance the livestock was a family pet (long horned bull). Wherever there is livestock there is danger. They’re unpredictable animals and should always be handled with caution. In May 2004 a three year old girl was trampled to death by a frightened dairy cow, the child was in the care of her grandmother who was also knocked down. Buying and breeding for good temperament as well as removing anxious and wild animals reduces the risk of injury or death. Training to work safely with animals is essential and being alert at all times is important in keeping oneself as well as working partners safe. Children should be kept away from, or at least outside, yards.

Chemical risks:

Farmers and others who use chemicals have legal responsibilities under a range of Acts and Regulations. When you use chemicals you must make sure that, as far as practicable, it does not cause a risk to human health, the environment, property and trade. There are a range of chemicals for various applications, including chemicals for livestock for internal and external parasite control and eradication, growth and fertility, disease control and eradication. There are chemicals for the destruction of pest animals, insects and weeds, as well as to stimulate pasture and crop growth. There are also chemicals to clean and sanitise. It is a legal responsibility to make sure that farm chemicals are used, handled, stored and transported safely, and that adequate information, training and supervision is given to employees. Material Safety Data Sheets (MSDS) provide information about substances, and the hazard associated with those substances. Substances can be a mixture, natural or artificial, liquid or solid, a gas, vapour, fume, mist and dusts used in workplaces. MSDS describe properties and uses of a substance, health hazards information and precautions for use as well as safe handling requirements.
Explosives:

Explosives should be divided into two categories: firearms and detonation explosives. Certain sections within the farming industry require the use of explosives for detonations for the destruction of vermin in warrens, for water construction sites and for removal of vegetation. This is a specialist area requiring licences and police authority. The requirement for firearms on farms is recognized and under the Firearms Act 1996. Primary production is classified as a genuine reason for use under licence category A, B, or C longarms. However to be classified as a primary producer you must be substantially engaged in primary production or the full time employee of a primary producer, and be able to show written evidence that this is so. There is a national firearms agreement between all states and territories. The firearm user must hold a current licence.

Firearms are used on many Australian farms to control vermin and destroy sick or unwanted stock. Firearm death rate is generally higher in rural and remote regions than in urban areas. The highest rate of firearm death per capita occurs in low population density rural and remote regions. The major hazard of firearms use is injury or death resulting from self-harm, interpersonal violence or accidental shooting. Suicide accounts for 75% of firearm deaths. Of the remaining firearms death, 15% are due to interpersonal violence (including domestic violence) and 5% are accidental. Exposure to loud noise from firearm discharge is also a hazard. Personal Protection Equipment (PPE) should be worn. There are requirements for proper storage of both the firearm and the ammunition.

(Zoonoses Guide To Firearm Safety, VFF, p.2 February 1999)

Zoonoses:

Zoonoses are diseases transmitted between certain animals and humans. Such diseases are usually caught from physical contact with infected animals. Animals such as sheep, cattle, pigs, poultry and horses each have specific zoonoses diseases. Infected sheep, their products or secondary hosts such as dogs spread certain diseases. Cuts, scratches and grazes, from crutching/shearing activities, are common avenues for infection. Diseases such as Q Fever, hydatid infection, orf, scabby mouth and bacteriological skin infection known as “yolk boils” all come from infected sheep. In the majority of cases, the infection is limited to the infected individual, with person - to – person transmission rare. Some cattle diseases that infect humans can be transmitted between person –to– person. Removal of infected animals, vaccination against infection and good personal hygiene can go a long way in minimizing risk.

Element exposure:

Farming generally is a twenty–four hour a day, seven days a week job, and unchanged by extremes of weather conditions, uncertainties of nature, animals and plant. Because of certain activities work may well be done in the evening hours, or the heat of the summer’s day. Some disaster work may take place in extreme weather conditions both hot (fire fighting) and cold (floods, storms). John Mathews in his book, Health and Safety at Work, Australian Trade Union Safety Representatives Handbook, (p.167) writes, “In 1980 the Victorian Health Commission issued recommended guidelines for coping with a hot environment, and these concur with the Australian Standard in that they set 30C as the maximum acceptable temperature for continuous light working, there are no standards for cold work.” Recreational activities have not been mentioned within the temperature zones but vigorous activities also take place for extended times well above 30C under the banner of sport. Sun exposure and glare are problems for all outdoor
workers particularly in summer. The Australian Taxation Department has recognized outside workers have certain PPE expenses, and now allow claims on sunglasses, lotion and sun hats. Wearing appropriate clothing and maintaining proper levels of body fluids as well as more short rest periods minimize risk.

**Manual handling:**

Manual handling means any activity where a person needs to use force. That means any activity that requires lifting, pushing, pulling, rolling, carrying, holding or restraining an object or animal. Examples of manual handling include using hand tools or power tools, handling animals or loading a Ute. Most farm work involves some manual handling. Manual handling causes about 25% of work injuries and makes up about 50% of all WorkCover claims and costs. Proper lifting procedures, sharing loads, using machinery or lifting equipment are all ways of reducing risk. A balanced body and good exercise further reduce risk.

(HEALTH & SAFETY BULLETIN 5. How to Reduce Manual Handling Injuries, Farmsafe Victoria)

**Human error:**

All things being equal accidents don’t just happen. Tractors don’t just roll over; the thirty-meter auger just doesn’t get caught in the overhead power lines or the frayed electrical extension cord doesn’t lay itself through a puddle of water. All of these scenarios take human intervention and generally are the result of an accumulation of errors or oversights.

So what is the problem? What is going wrong? Lack of training, lack of thought, pre occupation or distraction are the cause of many of the deaths and injuries on farms. Poorly maintained plant and equipment result in a number of injuries and some times death.

“I had a big day in the morning. I hadn’t had lunch and I was just trying to put too much into one day.

It’s always like that for farmers. You’re thinking of a million things and you’re always racing against the clock. I’m sure accidents don’t happen early in the morning, they seem to happen at the end of the day.”

(Workcover Safety “Farm Safety what are you doing about it”), Russell Bott [Undated Workcover brochure]

Importantly, all of the discussion points above are covered in various bulletins, manuals and codes that are available from most WorkCover offices or Website [http://www.vic-workcover.com.au](http://www.vic-workcover.com.au) or the Australian Agricultural Health Unit PO Box 256 Moree NSW 2400, or from Farmsafe Victoria, Victorian Farmers Federation – Industrial Department 24 Collins Street, Melbourne 3000.

Having given a general description of each of the groupings I will now review in Chapter 5, “The Specific Farm” and how these hazards are being addressed.
At the Fourth annual Farmsafe Alliance Forum, farmers and agricultural professionals were told, “farming doesn’t have to be dangerous.”

Opening the event, the Minister for WorkCover Bob Cameron said he could not think of a better venue at which to stage the forum than at the Hamilton property of Michael Blake, this year’s winner of a WorkCover Award in recognition of his safety achievements.

“Michael Blake has proven that every farm has the potential to be a safe farm.”

(WorksWords Number 31 September 2000 Workcover Authority, Practical solutions offered at farm safety forum)

Chapter 5

THE SPECIFIC FARM – BALLY GLUNIN PARK

To fully appreciate my research it is important to understand the farm environment that has played a major part in my thinking, understanding and need for improvement.

Bally Glunin Park is a family owned agricultural property near Hamilton in western Victoria. Bally Glunin Park is some 1800ha in area and is principally grazing and farming land running 15,000 DSE. (Dry sheep equivalent) As a grazing business it operates as a closed environment to manage weed infestation and animal diseases. It produces prime lambs for export and domestic markets, yearling and mature beef for the European and domestic markets, ultra fine and superfine merino wool for the Italians and Koreans and grain and fodder for supplementary feeding.

The property produces approximately 31,000kgs of beef, 30,000kgs sheep meat, 36,000kgs prime lamb, 44,000kgs wool, 200,000kgs grain and 231,000kgs fodder annually.

Over the years Bally Glunin Park owners have built up a reputation for delivering quality products without compromising standards of preparation or ethical values.

As a result of this, this property is prominent in its agricultural and research achievements. Many groups call upon it for assistance, information input and output, and training and educational opportunities. In this work we provide all our time and land and resources in an honorary capacity. A good public relations attitude is essential as well as standards of compliance in Farm Safety and OH&S.

Over the last 30 years Bally Glunin Park and its owners have been involved with no less than 75 research projects and currently support 10 research projects and 2 PhD research projects.
The 10 research and evaluation projects operating on Bally Glunin Park currently are:

1. Evaluating the EM 31 as Salt Mapping Tool for saline pasture management;(NRE Hamilton)
2. Monitoring various influences on water table movement;(NRE Hamilton)
3. Monitoring various grazing styles to evaluate the pasture feed values of Dundas Wheat Grass;(NRE Hamilton)
4. Using the EM39 to monitor changes in soil profile and nutriment as a result of using deep-rooted perennials;(NRE Bendigo)
5. Evaluating various sowing techniques and seed mixes for establishment of Dundas Wheat Grass;(NRE Hamilton & Wrightsons Seeds Australia)
6. Trialling rotational shearing for specific length and strength requirements -fourth year of a continuing program;(Bally Glunin Park & Lempriere Fox & Lillie)
7. Drench efficiency testing has been undertaken since 1971 and continues every four years. All drench types and combinations are used as well as various stocking rates and body weights. Drench companies and Bally Glunin Park use this information for on going animal health projections;
8. A breeding program to develop worm resistant sheep was begun in 1998 and is currently into the third generation. It is envisaged that a further three generations of breeding will be required to successfully evaluate our progress; (Bally Glunin Park internal & Murray Elliott)
9. Evaluating various lucerne varieties stocking rates and management; (Wrightsons Seeds Australia & Bally Glunin Park)
10. Longevity breeding trial within the merino stud looking at heritability. (Murray Elliott & Bally Glunin Park)

Previous projects have varied from research by Melbourne University on sheep hydatids, CSIRO on lucerne pests, field trials for Canadian tractor manufacturer “Versatile”, to research for Bayer in the preliminary development of stand up plastic ear tags for cattle.

Bally Glunin Park operates on the cutting edge of change and will continue to push the boundaries for excellence in product preparation, presentation and delivery to customers. In striving for excellence we operate under a variety of Quality Assurance Programs, including

- **ELDER’S CLIPCARE** (Wool Harvesting)
- **DALGETY’S DALCARE** (Wool Harvesting)
- **FLOCKCARE P 300002** (Sheep /Lamb Production)
- **CATTLECARE P 3000038** (Cattle Production)
- **GO MARK V 000001** (Environmental Management Beef Enterprise)
- **MSA Accreditation** (Beef Meat Presentation)
- **EU Accreditation 3GMUL000** (Beef Meat Presentation for European Markets)
In 1998 Bally Glunin Park was nominated by the VFF to be a participant in a pilot program on Environmental Management for Beef Farming. The group coordinating the pilot was made up of The Australia Centre for Cleaner Production, the Environment Protection Authority & Tomorrow’s Food Today. Bally Glunin Park successfully completed this pilot and continued to develop its environmental management structure for complete accreditation under the GO MARK label. In addition Bally Glunin Park became the second FLOCKCARE accredited property in Australia and the second property in Australia with duel Accreditation CATTLECARE / FLOCKCARE.

Bally Glunin Park was the first property to sell sheep and prime lambs under FLOCKCARE accreditation in Australia, as well as being the first accredited farm in Australia under the GO MARK FOOD SYSTEMS and selling the first cattle under the GO MARK FOOD SYSTEMS ACCREDITED FARM in Australia.

A research project with AWTA in selling wool under clip specification via LASER SCAN resulted in Highest Wool Price for the selling period through agents Elders/VP at sale M31 (Melbourne 31) 06/04/00 under the description SUP AAAFM 2.800c and a micron thickness of 16.1u. This was the first fully commercial trial to compare traditionally prepared wool against laser scan wool preparation. The trial was to compare the financial advantages, if any, between preparing wool clip traditionally and presenting it for sale as opposed to taking the same clip and preparing it in half-micron increments and selling the lines at auction.

In association with Lempriere Fox & Lillie a new marketing strategy was developed to satisfy specific Italian wool processors. This requirement has brought about a rotational shearing every eight months to achieve a staple length of 70/75 mm. A change in pasture utilization to maintain this growth has also increased tensile strength to between 45 & 65 Newton’s per kilotex.

Prime lambs are all sold over the hooks on contract prices and all carcass data is collected to monitor growth rates, kill yields and quality controls. All lambs are inspected at slaughter and requirement and improvements are discussed with participating butchers.

Over the years being involved in on-farm research has kept the mind stimulated, exposes my staff and particularly my apprentices to cutting edge information and allows fast progression in the areas we are researching. It also allows us to tap into information and resources not available to the general farming community.

Another key area of achievement for Bally Glunin Park has been in the area of farm safety.

All of the above market management QA’s satisfied the quality and safety of our products to our end users but had no regard for the safety of those people at the preparation end, the farm. It was because of this that I began to develop a safety system on our farm. Family members, staff and contractors have always been involved in undertaking the farm work. Unfortunately none of the QA programs considered the safety of these people as they performed their farming duties. I felt that all these people should not only be protected from danger but should also be involved in the process of their own and others protection. As a result of the work I have done on farm safety and other areas including environment management, salinity management and wool production management a number of stories have been written about each subject over a number of years. It is important to highlight those that are related to farm safety, and they are:

Feature story Australian Farm Journal January 2001, Taking Safety Seriously;
Having described A FARM ANYWHERE in chapter 4, and given you an overview of a vast array of operations, let me now explain where Bally Glunin Park is different as far as farm safety is concerned. I will explain it under the specific topics previous used for reviewing A FARM ANYWHERE:

- Elevated heights
- Confined spaces
- Static machinery
- Mobile machinery
- Electrocution
- Water hazards
- Livestock hazards
- Chemical risks
- Explosives
- Zoonoses
- Element exposure
- Manual handling
- Human error

**Elevated heights:**

There are two different groups concerned with this issue, the first is children and the second is adults. From my youthful exploits I recognized that the silos and windmills were extremely dangerous so safety barriers were constructed as a result of reflection of my early youth as described in the story Mary Poppins (see Chapter 1) and similar escapades. As an adult I recognized the risks of death or injury from falling from such structures and also the enormous emotional loss so I sourced information on safety harness’s appropriate for the work. My own social lifestyle of abseiling and my experience in this area developed my trust in harness and ropes, which in turn, contributed to safety improvement for those working at heights on farms. I was not satisfied with this solution when working on grain silos and after attending a grain safety field day where I saw retrofit ground operated lid openers for silos, I have now converted two of the silos and will complete the conversion on the others before harvest.

There are a large number of elevated structures, besides the usual buildings there are eight grain silos, one elevated tower silo 27metre high, 19 windmills, 4 overhead tank stands and 2 overhead fuel tanks. All silos have child safety barriers, as well as the tank stand where a ladder exists. The elevated tower has a safety cage to the top and safety rails on top. It is a structure that requires climbing on a daily basis when being filled. All climbing on elevated structures is done whilst supported by a safety harness. Major works on windmills is done from cherry pickers or lowered to the ground for repair. There are still problems with loading small hay bales but as a result of my reviewing the falls from heights guidance material for the Victorian Workcover Authority wool will only be loaded two layers high when loading wool for delivery from Bally Glunin Park.
**Confined spaces:**

In 1972 I worked for Australian Glass Manufactures (AGM). My first job was working in the pits, which was a small area underneath the molten glass furnace; any faulty glass was redirected into a water pit where it shattered. My job was to empty the pit into a conveyor that returned the shattered glass to the furnace. Every work shift I entered the pit through a small passage and every shift I would plan escape routes. The thoughts and planning that took place then had a strong influence on me when I was developing the policy on working in confined spaces for my own property some years later.

Two silos created problems when cleaning, but ground opening accesses have been installed and this problem no longer exists. No chemicals are used on the grain so no toxic gases exist. The other silos have ground openings accesses. Ground operated lid openings and sight glasses have also been fitted. As all tanks have lids no entry is required to clean them but if access is required then circulating air machines are available for use.

**Static machinery:**

Good maintenance programs keep all machines in good order as well as all guards in place. A lot of injuries are caused from badly maintained or run down plant. Bally Glunin Park’s Occupation Health and Safety Policy, Mission Statement states;

Bally Glunin Park will:

- Provide safe plant and systems of work;
- Develop beyond manufacture standards safety controls;
- Provide written procedures and instructions to ensure safe systems of work;
- Ensure compliance with legislation requirements and current industry standards;
- Provide current publications to support industry standards;
- Provide support and assistance to employees;
- Guarantee standards of food safety on all products sold from the property.

This policy was developed after reading the codes of practices for various industries published by Workcover.

Importantly, all staff are instructed on the use of all equipment and staff are allocated work according to their training experiences. Appropriate PPE is provided for individual tasks requiring specific equipment. (e.g. helmet with face shield and ear protection, leather gloves, safety chaps and safety boots when using a chainsaw).

**Mobile machinery:**

The same procedures apply here as with static machinery. Importantly all staff are instructed on the use of all equipment and staff are allocated work according to their training experiences.

**Electrocution:**

Again my time spent working for AGM had a big impression on developing an electrical awareness and a safety policy. As with my induction to the AGM work force, all staff and casual
workers as well as work-place students are given an introductory tour of Bally Glunin Park which covers all risk assessed hazards. All power is underground except for one 30 metre covered overhead wire section. All underground cables are identified and are buried at the approved depths. All electrical systems are connected through RCD’s and licensed approved electricians do all electrical work. All extension cords are maintained in good order and are only used in active situations; that is whilst in use and if not in active use stored away. A number of farm deaths have occurred from electrocution including a personal friend. I had already developed my policy on power supplies well before his death. I have had first hand experience of the benefits on installed RCD’s on at least four occasions. The first occasion saved the destruction of a major farm building. More importantly on the other three occasions the RCD saved lives. When the shearing harness attachment cut through the electrical conduit on the main engine board, rather then receiving a deathblow the shearer involved sustained a minor zap for a split second before the switch kicked out. Electrical wiring was rerouted after this event from along the top of the engine mounting board to the back. A shearer with a different harness system caused a similar safety issue when mounting his system. There are now no electrical cables fixed to the engine mounting board. In similar circumstances I was saved by the same switch system when water ran down some timber and into the back of a power point as I was washing the shearing board. The safety switch was immediately activated.

**Water hazards:**

Young children are not permitted in any of the work areas. Visiting children are supervised at all times by their parents. The swimming pool has a safety fence surrounding it. When my children were young a confinement compound was created, because of the number of dams on the property and other dangers near the house. The children were taught to swim as infants.

“Of the 21 farm fatalities of children under 15 years in Victoria 1992-1999 drowning accounted for 6.”

( Coroners Facilitation System, Victorian Workcover Authority)

One of those six was my neighbour’s child. Two other children drowned in the 1980’s were also on neighbours’ farms and all of these drownings were the catalyst for increased vigilance and the development of the safety protocol around water.

**Livestock hazards:**

Again, young children are not permitted in any of the work areas. Visiting children are the responsibility of their parents and are required to be supervised at all times by them. When buying bulls for breeding, only animals with quiet temperaments are chosen as well as only purchasing poll animals. Again all staff are allocated work according to their experiences, and when working with cattle people don’t work alone. Three fatalities have occurred in the last four years in the Hamilton area from cattle attacking lone workers. Good handling facilities are maintained for a safer work place. I had been injured a number of times through misadventures with cattle. On one occasion I was very badly injured and without the assistance of a fellow worker who organized my hospitalization I most likely would not be writing this paper. An experience such as this clearly influenced my policy in this area for Bally Glunin Park.
**Chemical risks:**

All staff members are trained through accredited Farm Chemical Users Courses, and all chemicals are stored appropriately. When requiring chemicals they are assessed for their need and brought at the lowest level of activity that will do the job. Only chemicals with batch numbers and use by dates on containers are purchased, and always brought with long shelf life. Only accredited contractors are used and when only small volumes from large containers are required contractors generally provide the chemical under the same conditions of current use by dates and batch numbers. This process reduces the stock piling of chemicals. Animal health chemicals are regularly tested for efficiency. Operators are instructed in the proper procedures for application. The right equipment is provided for the job as well as the proper protective equipment and poison antidote. All staff members are required to read MSDS when new products are introduced to the program and instruction is given when beginning a new practice for the season. (Appendix 10 Chemical storage)

**Explosives:**

Only small arms are required for vermin and humane work. As a result of a review by David Rich and Andrew Sullivan for their studies in Occupational Health and Safety management Systems AS 4801:2000, it was identified that I was the only licensed firearm operator. If I was away then firearms could not be used, so all staff attended the required firearm safety programs and became licensed firearm operators. All firearms are stored in appropriate locked cabinets as is the ammunition and staff are instructed in the proper way of humanely putting down livestock.

**Zoonoses:**

Over many years working in the agriculture industry you come into contact with various diseases. The most respected text for reading about diseases in livestock and their effect on humans is *Diseases of Livestock* T. G. Hungerford B.V.Sc., H. D.A. From extensive reading of this book I developed my policy on dealing with animal diseases.

We manage disease by removing infected animals, vaccinating against infection and practicing good personal hygiene. All staff are provided with an array of personal safety equipment and a variety of gloves such as light disposable single use for noxious use (marking or lamb delivery), rubber gloves for wet use, long sleeves rubber gloves for chemical use and handling noxious livestock, light rigger gloves for general purpose use and heavy duty leather gloves for heavy manual and handling sharp materials.

**Element exposure:**

Flexibility with working hours during extremes of weather conditions particularly during electrical storms reduces the risks of injuries. This decision was made as a result of losing an acquaintance from lighting strike. He was killed when lighting struck him whilst playing hockey at Hamilton. A number of other players were injured. Early starts and early finishes during peak summer days also reduce risk. Proper clothing and “slip, slop, slap” is practiced as recommended by the anti-cancer council, and from personal experience. The property provides sunscreen and hot and cold clean water as well as hot and cold showers. Rest periods are more frequent on extremely hot days.
**Manual handling:**

Most manual tasks are assisted with mechanical equipment. Staff are encouraged to decide on their own capabilities and lift sharing. Equipment is generally supported with wheel attachments for easy movement.

**Human error:**

We all make mistakes but with proper training, good safe equipment and working in good teams, injuries will be minimal. In some situations good mechanical safety devices can over-ride the human element. An RCD is one device that will over-ride the human element. Near miss accidents are used as learning experiences and opportunities to remove risk. Where people do not respond favourably to the safety protocols on Bally Glunin Park, they are no longer employed regardless of whether they are staff or contractors.

The concept of developing a safer farm is never static and as work practices change the safety protocols must be reviewed as well. Although Bally Glunin Park operates under the recognized audit system SafetyMAP other audits take place periodically and through quite different system approaches. I consider these audits a valuable tool for fine-tuning the system.

One such audit was, Evaluation of Farm Injury Prevention in Victoria, involving a survey (2001) of Farm Owner/Manager and conducted by Monash University Accident Research Centre. [www.general.monash.sdu.au/muarc](http://www.general.monash.sdu.au/muarc) The project was funded by RIRDC. Through this project I was able to compare my work against a random sample. Although this was an extensive report I have reprinted some sections in their entirety because of their particular importance to this work and in assessing my progress in making Bally Glunin Park a very safe farm.

**Bench Marking:**

I used this research by Monash University Accident Research Centre as an important benchmarking tool to evaluate four areas of Bally Glunin Park’s safety policy and again I stress that the sections are quoted in their entirety and compare my practices against the random sample.

**Children on the property:**

Like yourself, 35.4% of the respondents had children under 15 years of age living on the property, and for 71.7% of these; the children were 10-14 years of age (like yourself).

Thirty three percent of the properties reported that their children had received lessons on farm safety in the last 12 months (like yourself), but all of these were in the classroom (unlike yourself).

**Farm practices:**

Like yourself, 67.7% of properties had purchased safety items or attended a seminar. Among the 235 tractors on the properties, 16.6% had no cabin or ROPS, compared with 12.5% of your tractors (in my case a vintage tractor stationary). A higher proportion of your tractors were fitted with evenly adjusted brakes, (100% compared with 71.9%), PTO shield (100% compared with 63%), and neutral switch (100% compared with 71.5%).
Your one tractor with a front-end loader had roll-back protection, compared with 48.8% of those reported by the respondents.

A relatively small proportion of respondents had ever conducted a formal safety check (23.1%), as you reported. Just over half (56.7%) were performed in the preceding 12 months (like yourself). Again like yourself, 75.4% of respondents reported having purchased safety items for the property in the preceding 12 months. The most common items purchased were personal protective equipment (PPE), fire extinguishers and first aid kits or items (like yourself).

Your adjusted farm safety behaviour index (based on questions 20-29) was 0.8222 compared with 0.7571. This means that on average the safe behaviour was reported 82.2% of the time for your property, compared with 75.7% for the others.

**Farm programs:**

Like yourself most respondents had seen or heard farm safety reports in the media in the preceding 12 months. A small proportion of properties (15.4%) reported, like yourself, that someone had attended a farm safety seminar in the preceding 12 months.

**Farm and farmer characteristics:**

Most commonly, properties were 100-400 hectares in size, with only 15.4% in the same size range as your property (1000-2499 hectares). The majority of respondents (84.6%) had been farming for over 20 years, like yourself. Only a small proportion reported having some university education (3.8%) or TAFE (4.6%), like yourself. Sixty-one percent had completed educational or training courses specific to farming. Most respondents were male (95.4%), and 23.8% were age 50-59 years like yourself.

Compared with how things were in 1998, 16.9% reported that their farm environment was considerably more safe (like yourself), 41.5% somewhat more safe and 36.9% reported that it was about the same.

(Monash University Accident Research Centre, 2001 Evaluation of Farm Injury Prevention in Victoria)

A second audit was conducted by Andrew Sullivan and David Rich as a requirement for studies they were undertaking on Occupational Health and Safety management Systems AS 4801:2000. They provided a number of recommendations to improve the systems management. One was highlighting the problem involving firearm security as discussed under Explosives above. Although the concept of making Bally Glunin Park a safe farm was driven entirely by myself, I have always made my work available to other people or organisations wanting assistance in improving farm safety. The changes in farm policy were developed over a number of years with strong influence from my own experiences either from personal physical involvement or association with close friends and work associates who had been involved in farm accidents. Finding solutions from extensive reading or reviewing visual material assisted in creating some solutions. A vast array of organisations have provided some of the documentation, identified the legal responsibilities and provided quantitative data. In Chapter 6 I will discuss who some of the other specialists in OH&S are and what they are saying about OH&S, especially as it relates to farms.
In Chapter 1, I identified one of the practical outcomes of this theoretical work and I quote,

“This portfolio is made up of a DVD showing some of the many dangers that exist on farms and some of the solutions that I have developed to remove these dangers.”

This DVD is simple and practical in its presentation since farmers are looking for simple solutions not complex gadgetry.

The physical presentation of the many standards that Bally Glunin Park operates under has also been identified. The purpose for this is to show that farm safety is very good for the business and dovetails in with all of the other operations, but the DVD is still simply a guide to farm safety solutions.
Chapter 6

WHO ARE SOME OF THE OTHER SPECIALISTS IN OH&S AND WHAT ARE THEY SAYING ABOUT OH&S, ESPECIALLY AS IT RELATES TO FARMS?

I have divided this chapter into four categories but I will only discuss those organisations that have had direct involvement in my farm safety work or in the preparation of this research. However the division is important as it shows the hierarchy of policy makers and where the policies come from. It also indicates how some policy makers may well retard any improvement in safety outcomes by the way recommendations are presented. Poor communication between the various organisations may also slow dissemination of useful information or result in duplication.

I have attempted to identify the major organisations involved as policy makers, administrators of the policies, or organisations assisting farmers and rural communities in improving safety on farms. Some of the organisations are tied together through funding processes and others as advisory partners. In some cases I will describe the fundamentals of an organisation to give you an overview of that organisation, particularly where I have had an involvement either through a research project or used it as a reference in this exegesis.

In Chapter 9, I discuss the impediments to implementing farm safety “The Farmers” and how they handle change, which all of the following policy makers should be aware of:

1. GOVERNMENT AND GOVERNMENT ASSISTED AGENCIES
   - Federal Government
   - State and Territory Governments
   - Farmsafe Australia
   - National Occupational Health and Safety Commission
   - National Safety Council of Australia

2. RESEARCH AND DEVELOPMENT AGENCIES
   - Farmsafe Australia
   - Australian Centre for Agricultural Health and Safety Moree NSW
   - VIOSH Australia; Victorian Institute for Occupational Health and Safety, University of Ballarat
   - Monash University Accident Research Centre
   - Victorian Farm Safety Centre, Ballarat

3. AGRICULTURAL ORGANISATIONS
   - Victorian Farmers Federation
   - Farmsafe Alliance
   - Farm Safety Action Groups

4. INDEPENDENT AND PRIVATE PROVIDERS
I consider this chapter the cornerstone of my research. Although I was aware of many of the organisations discussed prior to commencing this research I was not familiar with their structure or their degrees of responsibility. It was only by researching a lot of data through Internet library searches that I was able to establish each organisation’s authority, their responsibilities and their political makeup. This is important information for me where I wish to communicate with a specific body on a specific topic or where I see the need to influence change in a specific area. This chapter deals with the physical products such as what guide is available regarding firearm operation as an example and it allows me to develop credible conclusions and recommendations in Chapter 10.

1. GOVERNMENT AND GOVERNMENT ASSISTED AGENCIES

- Federal Government
- State and Territory Governments
- Farmsafe Australia
- National Occupational Health and Safety Commission
- National Safety Council of Australia

At the start of this chapter I indicated that I would only discuss those organisations that had a direct impact on this research and from the above list they are,

STATE & TERRITORY GOVERNMENTS

- State & Territory Workcover Authorities: Administer legislation of the State Parliaments

Under State and Territory Governments I will only deal with the Victorian Workcover Authority.

The Victorian WorkCover Authority administers legislation of the Victorian Parliament that covers:

- Health, safety and welfare in the workplace under the Occupational Health and Safety Act 2004 (Previously the 1985 Act)
- The rehabilitation of injured workers and workers compensation under the Accident Compensation Act 1985 and the Accident Compensation (WorkCover Insurance) Act 1993
- Employer insurance and premium under the Accident Compensation (WorkCover Insurance) Act 1993
- Explosives and other dangerous goods under the Dangerous Goods Act 1985
- The transport of dangerous goods by road under the Road Transport Reform (Dangerous Goods) Act 1995
- High-risk equipment used in public places and on private premises under the Equipment (Public Safety) Act 1994

The Act contains the following significant information:
At the forefront of WorkCover’s business is the prevention of work-related injury, illness and death. WorkCover has a diverse community of stakeholders, including workers, trade unions, employers and their organisations, agents, self-insurers, the legal and medical professions, other service providers, the Victorian Government and the community. Within Victoria there are approximately 200,000 workplaces.

(Victorian Workcover Authority, Strategy 2000 p.6)

The Occupational Health and Safety Act 2004, is the main law in workplace health and safety for Victoria. It is a very general law (Act) but the main point is that the employer has to provide a safe and healthy workplace for themselves, their workers, and anybody else who might be affected by their activities. Anyone who designs, manufactures, imports or supplies any plant or substance to a workplace has to make sure that their products don’t present a risk to health and safety, even if they’re being used properly. Employees have a duty to take care as well. They should follow instructions relating to health and safety, and avoid putting others at risk wilfully. These points apply to every workplace in Victoria, large or small, except where Commonwealth or mines health and safety laws apply, or where a federal health and safety award applies. The Act covers other matters such as how to deal with OH&S issues, designated work groups, health and safety committees and representatives. The Act also spells out how the law will be enforced, the roles of WorkCover inspectors, notices, penalties and so on.

(Victorian Workcover Authority. info@workcover.vic.gov.au)

There are Codes of Practice, (Guidance Material) which aren’t legal requirements in themselves, but they do provide guidance on ways to comply with the Acts and Regulations. A code might not be followed exactly, but if not, the procedure undertaken must meet the requirements in the Acts and Regulations. Currently there are 17 Codes of Practice relating to workplace health and safety in Victoria. These are reviewed from time to time, and new ones may be produced, much like Regulations are.

I have had a close association with the Victorian Workcover Authority since I began the process of making Bally Glunin Park a safe place to live and work. (See Chapter 2) I have also utilized my knowledge on farm safety to assist in the development of guidance material relating to this subject and there are other areas highlighted throughout this exegesis where the Victorian Workcover has influenced my work. Similarly I have developed an association with Workcover Western Australian doing similar things.

Under the industry premium based rating system, employers operating in a particular industry are classified in accordance with the Australian and New Zealand Standard Industrial Classification (ANZSIC) code, which most accurately describes the nature of their predominant industry activity.

There are 480 individual industry classifications within ANZSIC each belonging to one of seventeen industry divisions. These divisions are:
Compensation statistics are recorded according to the above classifications.

(Workcover Western Australian Small Business Guide to, Injury Management and Workers Compensation, June 2000, p.6)

FARMSAFE AUSTRALIA

The mission of Farmsafe Australia is to improve the well being and productivity of Australian agriculture through enhanced health and safety awareness and practices. The key strategies and programs that Farmsafe Australia undertakes include:

- Community development approaches to develop a culture of safety in farming communities across Australia;
- Development of evidence based resources for education and training of farmers, farm families, health workers and service providers;
- Definition of OHS training competency standards for all rural industries and inclusion within the vocational training competency standards;
- Piloting and delivery of commodity specific versions of an OHS risk management based Managing Farm Safety course for farmers and farm managers, organized by a network of state Farm Safety Training centres and coordinated by the National Farm Safety Training Centre;
- Implementation of a planned program of research and development through the establishment by the Rural Industries Research and Development Corporation (RIRDC) of a Farm health and Safety Joint Research Venture of rural research and development corporations; (I have had an association with RIRDC in a number of areas involving farm safety and also through the research project that provided the data for Chapter 4.)
- Maintenance of a National Farm Injury Data Centre that assembles and supplies the available data to set priorities and agendas;
- Examination and review of pertinent legislation in relation to its effectiveness in agriculture;
- Development of strategies addressing specific issues –tractor safety, farm machinery safety, child safety on farms and hearing conservation.

I have worked with Farm Safe Australia in accessing their child safety material and circulating their publications to the appropriate learning centres in the district. I have also promoted and installed the “Safety Access Platform” for tractors on a number of my own tractors for demonstration and safety purposes, this is another initiative from Farm Safe Australia:
• Examination of a range of other health issues by the Farmsafe Australia Health Reference Group – an extension of the Farmsafe Australia partnership with rural health service providers, including the Royal Australian College of Surgeons, the Australian Divisions of General Practice and others;
• Development of a network of farmers with disability- the AgrAbility Australia network, and delivery of a Return to Work on the farm course for rehabilitation service providers. (www.farmsafe.org.au)

NATIONAL OCCUPATIONAL HEALTH & SAFETY COMMISSION (NOHSC)

The mission of the National Occupational Health & Safety Commission is to lead and coordinate national efforts to prevent or reduce the incidence and severity of occupational injury and disease by providing healthy and safe working environments. The National Commission was established under the National Occupational Health and Safety Commission Act 1985 (Cwlth) to provide a national focus for occupational health and safety (OHS). The National Commission is a forum of government, employer and employee and employer representatives; providing national leadership on prevention, and facilitating through its representatives, the implementation of better approaches to achieving improved health and safety outcomes in workplaces. It supports and adds value to efforts in all jurisdictions to tailor approaches to the improvement of workplace occupation health and safety. It also supports efforts to develop efficient ways for jurisdictions, employers and employees to meet their workplace health and safety obligations and ensures standards and codes of practice are developed only where there is a demonstrated need and where they further the goals of simplicity and clarity in regulation.

(The function of NOHSC has changed over the period of this research but has been included in this way because the early involvement that I had was in this function)

NOHSC was associated with the research on child deaths presented in Chapter 8.

NATIONAL SAFETY COUNCIL of AUSTRALIA (NSCA)

NSCA is Australia’s leading provider of occupational health and safety solutions for business. Clients operating in environments ranging from heavy industrial to office-based have used NSCA consultancy and training services to establish and continuously improve their OHS management systems and to drive their safety performance.
(National Safety Council of Australia www.nsca.org.au)

In Chapter 10 I refer to my involvement with the NSCA.

2. RESEARCH AND DEVELOPMENT AGENCIES

• Farmsafe Australia (Detailed above)
• Australian Centre for Agricultural Health and Safety Moree NSW
• VIOSSH Australia; Victorian Institute for Occupational Health and Safety, University of Ballarat
• Monash University Accident Research Centre
• Victorian Farm Safety Centre, Ballarat

AUSTRALIAN CENTRE for AGRICULTURAL HEALTH and SAFETY MOREE NSW

Australian Centre for Agricultural Health and Safety is a research centre working principally to improve standards and safety in rural Australia. It also houses the national catalogues of state and industry based OH&S data, as well as the National Children’s Centre for Rural and Agriculture Health. Farmsafe Australia also resides in the same complex.

VICTORIAN INSTITUTE for OCCUPATIONAL SAFETY and HEALTH (VIOSH)

VIOSH Australia provides high quality undergraduate, accredited postgraduate and industry focused occupational health and safety (OH&S) courses. VIOSH Australia encourages the inclusion of OH&S within all undergraduate courses and is striving to establish it as an integral part of management activities. VIOSH Australia conducts short courses and seminars for various organisations and enterprises on a contract basis. The consultancy activities of VIOSH have primarily focused on providing OH&S management auditing and advisory services for many high-profile organisations across a diverse range of industry groups.

My association with VIOSH is through the committee of the Victorian Farm Safety Centre and my support of the BROSH (Ballarat Regional Occupation Safety and Health) Awards where my agricultural apprentices summit their solutions for OH&S problems.

MONASH UNIVERSITY ACCIDENT RESEARCH CENTRE (MUARC)

MUARC Mission statement: "Through high-standard research and independent recommendations, to challenge and support citizens, government and industry to eliminate serious health losses due to injury."

Objective 1

To advance knowledge in safety science, and in injury and accident prevention, by:
  • Conducting research of the highest international academic standard;
  • Conducting multi-disciplinary, collaborative research, based on scientific principles and analytic techniques;
  • Ensuring our research is relevant to citizens, government and industry, and applicable to local, national and international contexts;
  • Being innovative, and creating new and improved methods;
  • Insightful interpretation of research findings;
  • Conducting a Ph.D. program of the highest quality.

Objective 2

To conduct high quality research within budget and on time;

Objective 3

To provide or access expertise across the range of research disciplines relevant to safety science, and injury and accident prevention, with particular depth in some key disciplines;
Objective 4

To assure continuing progress in injury prevention by identifying emerging problems, engaging in public debate, disseminating research findings and working co-operatively to translate research into practice;

Objective 5

To recognize the essential role of the Centre’s staff and students in its success, by attracting and nurturing committed and capable personnel, through teaching, training and development in a dynamic and supportive scholarly environment;

Objective 6

To build and maintain a strong ethical platform for all aspects of the Centre’s research and internal operations, and serve as a role model within the University and the broader society to enhance safety;

Objective 7

To invest available resources to produce new knowledge in key areas for the future.

In both Chapter 5 and Chapter 8 I refer to both my association with MUARC as a research participant and in the use of their research data.

VICTORIAN FARM SAFETY CENTRE

The mission of the Victorian Farm Safety Centre is to enable farms to be safe and healthy places in which to work and live.

Its vision is:

- To be a centre of excellence for providing farm health and safety education and training;
- To be a leading source of relevant and up to date information on farm health and safety;
- To be a provider of high quality health and safety services to the Agricultural Industry;
- To be a centre of best practice in workplace health and safety.

(Sullivan/VFSTC Steering Committee Meeting/Mission and Vision Statement 3rd Mar 2004.)

The Victorian Farm Safety Centre delivers training through courses in Managing Farm safety, ATV/Tractor training, courses on manual handling, confined spaces, fire extinguishers, farm safety workshops, employee health and safety, small business consultancy on farm safety. It also promotes field days, talks to groups (CFA, VFF, Industry and Schools) and Farmsafety action Groups.

The Victorian Farm Safety Centre also operates under the umbrella of the University of Ballarat – TAFE Division under a Manager and a steering committee made up of representatives from the VFF, AWU, Farmsafe Alliance, VIOSH (University of Ballarat), Primary Skills Victoria,
University of Ballarat, WorkSafe Victoria, and an independent Farmer. I sit as an independent farmer as well as the chairman of the committee.

3. AGRICULTURAL ORGANISATIONS

- Victorian Farmers’ Federation
- Farmsafe Alliance
- Farm Safety Action Groups

VICTORIAN FARMERS’ FEDERATION

The Victorian Farmers’ Federation (VFF) represents the interests of farmers affiliated with the organisation. The organisation develops policy on a range of issues and lobbies on behalf of those affiliated to policy makers. It also has representation on a number of the committees and in this instance those dealing with OH&S issues. It has involvement with the Farmsafe Alliance and the Victorian Farm Safety Centre. These are two areas that my work involves. In Chapter 10, I document the Minister for WorkCover’s (The Hon. John Lenders) package to the shearing industry. This was developed in association with AWU, VFF and Workcover representatives.

FARMSAFE ALLIANCE

The Farmsafe Alliance was envisaged at a farm health and safety workshop coordinated by the department of Agriculture Victoria, now known as the Department of Natural Resources and Environment (DNRE), the Victorian Farmers’ Federation (VFF) through Farmsafe Victoria, and the Victorian WorkCover Authority (VWA). The Department of Human Services (DHS) further supported the project initiative to create the Victorian Farmsafe Alliance, which is supported by these three Government departments. The Farmsafe Alliance was officially launched in February 1997 as a non-allied body to support an intersectional approach to farm injury prevention. Its brief is:

The Farmsafe Alliance addresses farm safety with a top down, bottom-up approach. Farmsafe Australia, the VFF and State Government departments direct the top down approach. The bottom-up approach is driven by the other members of the Farmsafe Alliance, which include Farm Safety Action Groups, VFF branches, community groups and their individual members. The Victorian WorkCover Authority, the Department of Natural Resources and Environment and the Department of Human Services fund the Victorian Farmsafe Alliance. The Alliance sits within Farmsafe Victoria, a Committee of the Victorian Farmers’ Federation and member of Farmsafe Australia, which has its operations centre within the Australian Centre for Agricultural Health and Safety.

(Victorian Farmsafe Alliance, 3rd Annual Report April 2000)

My association with the Farm Safe Alliance is documented in Chapter 2 and Chapter 5 but currently there are changes taking place in the restructuring of this alliance and the position of administrators.

FARM SAFETY ACTION GROUPS

Farm Safety Action Groups are represented in Barwon South- Western, Grampians, Hume, Loddon- Mallee, and Gippsland districts representing 19 groups. They are administered by the Farmsafe Alliance.
4. INDEPENDENT AND PRIVATE PROVIDERS

- Victorian TAFE Colleges
- Victorian Universities
- Rural Industry Skills Training Centre (RIST)
- Other Private Providers of Farm OH&S

Generally the independent providers tender to deliver prescribed courses on related farm safety issues. They could be courses on Managing Farm Safety, Chemical Users Courses, Chainsaw courses, ATVs, Front End Loader or Fork Lifts courses. Generally these courses are part funded by FarmBis. In Chapter 10 I present information that will affect all of these providers in the future, namely the State Parliamentary Inquiry into the Cause of Fatality and Injury on Victorian Farms. (p. 97). In Chapter 2, I also write about my involvements from an educational point of view with the TAFE and Universities.

Representatives from a number of the organisations discussed above (See Appendix 4 – Acknowledgements Health and Safety in Shearing) plus others came together to develop a guide for the shearing industry. I will discuss how successful this combination was in achieving their objective in the following chapter.
Chapter 7

REVIEW OF ONE SPECIFIC INDUSTRY: THE SHEARING INDUSTRY CASE STUDY

It is important to demonstrate how confusing and complex addressing farm safety can be. This is done by reference to the Shearing Industry. There are a multitude of sheep breeds and sizes and they are traded between all states; similarly shearers and shed staff travel throughout Australia seeking employment. In this chapter I will look at four different manuals all attempting to improve the OH&S aspects of the shearing industry.

This is part of my major research as a case study of the shearing industry and I have confined that research to the states of New South Wales, Victoria and Western Australia. The reason for this confinement is that these three states are the only states with a manual specifically dedicated to the shearing industry. There are three important reasons for selecting this part of the industry.

The first reason is that the formation of the AWU came about as a result of industry unrest due to poor working and pays conditions in the shearing industry. One of the practices that was used at the time and which gave rise to the AWU was raddling.

Raddle is a harmless substance used for putting a mark on the sheep’s wool, its too liberal use during shearing time was one of several causes, which led to the formation of the Amalgamated Shearers Union in 1886” wrote W.G. Spence the first president of the union. Shearers are paid so much per hundred sheep shorn; each shear has a pen, which holds a considerable number, into which he turns out each sheep after he has shorn the wool off. As the quality of the work affects the result very materially, both in quality and value, the employer or his representative naturally demands good workmanship. This is right and proper but in many of the agreements which men had to sign in pre-union days, a clause gave power to the employer to refuse to pay anything at all for a sheep which he considered had not been properly shorn. He therefore raddled such sheep by putting a mark on it and it would not be counted. Some of the squatters went one better than this and if they found one sheep badly done they condemned the whole pen full and would not pay for any of them.

(Patsy Adam Smith, The Shearers p.43, 1982)

The issue of forming a union was to bring about better pay and conditions but also to have all shearing done by union labour. The AWU was formed at Creswick in Victoria in 1888.

This same union is now sparsely represented in the shearing shed. 1985 was for the shearing industry a moment in time that changed union participation and union power in the woolshed. The wide comb dispute saw rank and file membership decline when the AWU would not allow wide combs to be used in the shearing shed. The wider comb and cutter enabled shearers to shear more sheep in a day and therefore make more money. The movement of New Zealand shearers on a seasonal basis who brought with them their wide combs caused major upheaval. Strikes and intimidation were the order of the day and occasionally a woolshed was burnt down or blown up but the wide comb was in and the union was out. These days few shearers are in the union but their working conditions and pay rates are still negotiated by the AWU. In highlighting how
previous standards arose it’s important to understand that a modern industry requires a modern record of standards particularly the new wool and sheep industry.

I have a strong view on co-operation between participants in implementing on farm safety that I hope will present itself as this document unfolds. My view is not unlike that expressed by John Mathews in Health and Safety at Work, Australian Trade Union Safety Representatives Handbook where he writes on page 47;

I have visited scores of work places over the past decade, some of which have been a credit to the employer and workers, and some of which have been an absolute disgrace. But over the past couple of years, I have been struck by the correlation to be found in successful workplaces between time and energy devoted to health and safety issues, and the success with which restructuring is achieved through workplace participation. Workers seem to measure the commitment of the employer to change, by attention paid in the first instance to the immediate working conditions of the plant. Better safety performance has provided improved profits through improved employee trust and relations, increasing productivity and lower costs.

The second reason for selecting this industry for review is that this section of the industry still employs the greatest number of personnel working on a seasonal basis and, in many cases in substandard and dangerous conditions. A large proportion of this work force use their seasonal work to support their own farming enterprises and so changes in OH&S within the shearing industry can initiate changes in the broader farming community.

The third reason for choosing this industry is two fold. The Bally Glunin Park woolshed and equipment are featured in the Victorian manual, as well as having a waiting list of shearers wanting to work at the shed as a direct result of good conditions based on sound OH&S standards. I will draw attention to the specific items as I discuss the manuals.

The states of New South Wales, Victoria and Western Australia have all produced individual manuals on Shearing Shed Safety as well as the Australian Workers Union with a National Code of Practice for The Shearing Industry (Health, Safety & Welfare Standards). Although each state has presented their own shearing shed document, collectively a majority of similarities exist but it is important to discuss each singularly and then compare them with each other.

The development of the industry guides (Shearing Shed Guides) is also an important means of introducing a more practical and bipartisan approach to improving conditions in the shearing industry.

The Western Australian manual is titled, Safety and Health in Shearing A guideline for industry. Victoria’s manual is titled Health and Safety in Shearing. The New South Wales manual is titled Health and Safety at Work Shearing guide. All are considered guides to the relevant state industries. The AWU manual is presented as a national code.

The AWU’s National Code of Practice was released in 1997 and developed by Michael Lawrance. It is a full technical document covering all aspects of the shearing industry. Victoria developed its manual around this code and released it in 2001. I have chosen not to include the AWU national code in any further comparisons because of its singular development. The state shearing shed manuals were developed by working groups, representing all players within the industry. New South Wales developed its manual in similar circumstances and released it in 2002. More recently
it has an additional flier indicating replacement of OH&S Acts. The Western Australian manual is a clone of the Victorian manual and was released in 2003 to industry and in June of 2004 its full introduction to the shearing contractors through a pilot usage was begun. The Western Australian WorkSafe division is managing the audit process.

How effective these manuals are to the industry will be discussed under the following headings:

- User friendliness;
- Practical use;
- Circulation to industry.

**User friendliness:**

User friendliness is undoubtedly the most important component if these manuals are to be successful especially for busy and, often cynical farmers. In dealing with user friendliness a good indicator is each manual’s forward. Of the three manuals the Western Australian’s foreword clearly states its purpose, why it was produced and what it wants to achieve. Although funded and developed through WorkSafe Division, Department of Consumer & Employment Protection WA (DOCEP) it gives no indication of this or highlights its origins as a government document. Speaking with Chris Kirwin of DOCEP Bunbury WA, Chris considers an important step in breaking down the barriers between safety organisations and farmers is good personal communications. (June 2004) It is worth including the WA foreword here as a positive step of educational and informative material.

**FOREWORD**

Farms are among the most dangerous workplaces in Australia. Statistics show that more than eight out of every 100-farm employee are injured at work each year. The figure would be much higher if all injuries to farmers, shearsers and their employees, their families and their friends were officially recorded.

A not insignificant proportion of those injuries are associated with the activity of shearing sheep and arise predominantly within the confines of the shearing shed. The safety of a shearing shed is therefore critical to the productivity and efficiency of the shearing team and each individual involved. In circumstances where speed and efficiency are key factors for a successful outcome, a high level of health and safety awareness is essential.

Where an employee cannot work due to an injury, the disruption can be costly, not only to the farmer or shearing contractor but may also cause economic hardship to the employee and his or her family.

This industry Guideline has been developed with a number of purposes:

1. to raise awareness of the legislative requirements for employers and employees to maintain a safe workplace and safe systems of work; To highlight particular areas within the working environment that requires more considered attention and
2. to highlight particular areas within the working environment that requires more considered attention and
3. to assist in developing a consciousness among farmers, contractors and employees of the benefits that will flow where a high level of safety and health is achieved within the working environment.

The parties who have developed this Industry Guideline believe that the best way to reduce the high number of injuries that occur in and around shearing sheds is for all those who take part in the process and activity to work together towards achieving a greater sense of safety all year round and not just when shearing is undertaken.

(Safety and health in shearing. A guideline for industry. WorkSafe Division. WA)

All three manuals were developed by extensive working parties; representation was from State Union, WorkSafe/WorkCover and State Farmer groups as well as shearing contractors. NSW policy direction came from The Australian Centre for Agriculture Health and Safety.

The format of both the Victorian and Western Australian manuals is identical other than technical changes in State Acts or names. As stated earlier the Western Australian manual was in effect cloned from the Victorian manual in written presentation but its photo presentation was done in Western Australian sheds. The photos in both, clearly assist in explaining dangers present in the shearing areas, provide solutions to these dangers and in the Victorian manual a larger selection of shed and shearing board styles are displayed and displayed well. Safety solutions on grinders and wool presses are well presented including a safety device on the Bally Glunin Park press. The red nose safety switch on the Victorian press is a cheap safety device when fitted appropriately ($120) that can save major accidents. The wool press was always a dangerous piece of equipment. The danger was getting one’s hands caught whilst holding the wool in the press as the ram came down. Often the press would be used by an operator working alone. I solved the problem in our shed by taking the concept of a stop switch which I had on my DYI saw bench and getting my electrician to wire one onto the front of the wool press. The knee of the presser could operate the switch if his hands became caught. Good lateral thinking, a cheap and simple solution. I should also add that this problem had been researched for over ten years costing in excess of ten million dollars by a group at Adelaide University in conjunction with press manufactures both in Australia and New Zealand and collaboration with rural organisations. This cheap solution would certainly have saved a young man in Western Australia from his major injuries.

7.30 NEWS ABC South Coast WA (Albany) 10/03/04
“WorkSafe say a man is lucky not to have lost his arms after getting his hands stuck in a wool baling machine” both arms were broken. (See Appendix 11)

The NSW manual has no photos and therefore needs to use a lot of written work to explain every detail. It is a very complete technical manual but as a lay around manual on the Shearer’s dining table it is certainly not very user friendly. A simple exercise was performed in a large shearing shed with many staff where all four manuals were left on the dining table for review and only the Victorian and Western Australian manual were of any interest. This exercise was performed in the Bally Glunin Park wool shed.

Bally Glunin Park provides the opportunity for all shearers and shed staff to take home a copy of the manual to form part of the shearsers/shed hands tools of trade.
Practical use:

If you follow the old proverb “You can lead a horse to water but you can’t make it drink” then improving safety and health in shearing sheds is going to be a long battle. For example it still amazes me that with all the requirements for improving health in sheds the majority of persons working in the sheds still smoke, even with all of the warnings on known carcinogenic related to smoking. Some sheds have indicated clearly defined “No Smoking” areas, particularly wool harvesting, wool preparation and eating areas. In Western Australia smoking in enclosed workplaces is prohibited by regulation 3.44b of the Occupational Safety and Health Regulation 1996. There are no health regulations identified in the manuals to adhere to in Victoria or New South Wales but under some clip preparations Quality Assurance systems smoking is prohibited in the wool harvest and preparation areas. I have just used this as an example of how difficult some things are to change even when they are life threatening.

The manuals’ objectives are to identify problems and provide possible solutions. Putting some things into print and photos is far more practical than giving verbal instruction and direction. Again the NSW manual falls short in not supporting definitions and print with the occasional photo. All manuals have a shearing assessment checklist but from my experience and anecdotal evidence both the Victorian and NSW manuals are not used to their full advantage. The WA manuals’ assessment checklist is removable and can be used as an audit checklist requiring areas of improvement to be completed by the next audit. This work will be under the direction of WA’s DOCEP and will be conducted by the department in conjunction with the shearing contractors.

A media release by the WA Minister The Hon. John C Kobelke, Minister for Consumer and Employment Protection, Indigenous Affairs, Minister Assisting the Minister for Public Sector Management, regarding WorkSafe’s pilot inspection project in the wool harvesting industry contained the following statement: “WorkSafe inspectors will be contacting shearing contractors during the coming weeks to arrange mutually agreeable times to inspect active shearing sheds”.

If successful, this use of the manuals will have an immediate effect on improving health and safety in the shearing industry, at least in WA. The next step is to influence NSW and Victoria to use the manuals in the same way. (Current information indicates that the Victorian manual is to be used in the same way).

Circulation to industry:

Producing a document to influence change for the better is admirable, but some times risky if the target group have not been canvassed properly in relation to need or acceptance of the document. Delivering it to those most in need of the influence and in an economical way is not quite as straight forward.

I was aware of the Victorian manual from the conception stage because of my involvement in some of the solutions that were included in it. Personally, I have circulated a large number of the manuals into the industry through visiting wool brokers, stock agents, shearing contractors, shearers and shed hands, tour participants and other interested people. Very few were aware of its existence. I have always been able to pick up any number of the manuals from the WorkSafe offices that I visit, but there are few circulating in the industry. One shearing contractor contacted, who is contracted to over 200 sheds can only recall three sheds where he has seen the Victorian manual present whilst an in-shed wool tester working in 50 plus sheds in Victoria can only recall one shed where the manual is in circulation, the Bally Glunin Park shed.
A similar story exists in WA where the publication was made but no consideration made as to how to circulate the manual to industry. Through their pilot program WA WorkSafe hope to get all their print run into the shearing industry. Only one print run has been funded through WA Workcover. This may change after the assessment of the pilot program.

The NSW WorkSafe are circulating their manuals to the industry on the basis of the first is free and thereafter each additional manual will cost $18.50. (In conversation with Tony Williams Workcover NSW at the National Shearing OHS Stakeholders’ Summit, November 21st 2006 this is no longer charged) This price would certainly restrict their circulation in and around the shearing shed, the exact place the manual is aimed at.

Undoubtedly each manual would serve its purpose and if used to the full extent of their contents, much improvement could be achieved within the shearing industry regarding health and safety. I believe that through their pilot program the WA WorkSafe will achieve the greatest and speediest improvement because it will be driven from two different directions within the industry. WorkSafe as the safety monitors and the shearing contractors because of their costs associated with work injury claims.

It is important to acknowledge that all three manuals in their Appendix refer to a publication Shear Sense by the Kondinin Group 1988. This manual has many ideas for improving efficiencies and safety in the shearing shed as well as in new and revamped sheds. A second publication by the Kondinin Group Yards ‘n’ Yakka 1990 is also an excellent book for identifying ways to improve efficiencies and safety in and around the sheep yards.

Although there are a large number of claims for work related injuries within the shearing industry, there have been no deaths directly associated with work within this industry during the period of undertaking this research. On the other hand the major death totals have resulted from tractor rollovers, tractor runovers, all terrain vehicle accidents and involvements with children. In Chapter 8 I will deal with these areas as additional case studies.
Chapter 8

OTHER OH&S ON FARMS,
CASE STUDIES & OTHER PEOPLE’S ACHIEVEMENTS

In the Abstract to this exegesis I indicated that as a consequence of my research, I expected to show that Bally Glunin Park is a good model for demonstrating the implementation of a sound farm safety system and, having done that, I then expected to present Bally Glunin Park’s system to the wider agricultural community for evaluation and implementation. In Chapter 5, I described Bally Glunin Park’s safety systems under a number of titles and described the production and content of the DVD showing some simple solutions to farm hazards. There are a number of other major hazards on farms where on farm solutions are not an option because of the legal requirements of manufacturing and connection such as Roll Over Protection Structures (ROPS).

In this chapter, I will analyse one of the solutions to one of these major hazard, ROPS. I will also explain the benefits of erecting Safety Access Platforms (SAP), (Examples of two of these were presented in the DVD), as well as review ATVs and child safety on farms.

To balance the negative aspects of this chapter I have also included some short reports of other peoples’ achievements.

As I indicated in Chapter 1 the reason for the selection of the three,

- Tractor rollovers;
- Tractor runovers;
- All terrain vehicles (ATV).

is that they were the major causes of deaths on farms in Victoria in 2002. I felt that the actual fatalities and the accompanying email from Eric Young, Rural Safety Adviser should be included here rather than in the Appendices so the harsh reality of farm deaths is prominent.
Agricultural Fatalities: 2002

Fatalities: = 12.

24 January:  A 72 year old farmer was found crushed beneath an ATV on his farm. He was spraying thistles along a fence and it appears the ATV has hit a dip and bend on the fence line, tipping it and landing on him. (Country North-East).

13 February:  A 76 year old retired farmer was found dead across an electric fence on his son's property. He appears to have suffered a heart attack induced by electrocution from the fence which a post mortem has confirmed. (Country- North).

17 February:  A 58 year old farmer was spraying weeds on his property at night. His ATV has rolled over and crushed him as he attempted to ride across a steep incline. (Eastern).

20 March:  A 59 year old farmer was digging fence post holes on his property with an auger attached to his tractor when his right arm has been caught in the auger. He was working alone and found dead some hours later. (Country-Eastern).

25 April:  Two sons were assisting their father fell a tree on their property when the chain saw jammed in the trunk. Returning in their vehicle with a new saw the tree commenced to fall, striking the vehicle and the 12 year old son as he attempted to escape. Badly injured he was transferred to Melbourne where he died in hospital. (Country-Eastern).

17 August:  A 42 year old son was assisting his mother on her property to feed out hay to stock. He was driving the tractor with the hay bale to the paddock when he has fallen and been crushed by the rear wheel. Indications are that he may have had a fit that resulted in him falling but the post mortem indicates death resulted from severe crush injuries. (Country-South-West).

18 September:  A 48 year old dairy farmer was attempting to remove fallen tree branches from a fence with a chainsaw. A limb from the remaining part of the tree fell, striking and killing him. (Country-Eastern).
3 October: * A 16 year old son was riding an ATV through a paddock with his father. He turned his ATV down a channel slope, lost control and was thrown over the handlebars. He suffered head injuries and was airlifted to hospital where he later died. (Country-North).

4 November: A 50 year father of the farm owner was operating a tractor with a front end loader attached. He sustained fatal injuries when the tractor rolled over crushing him between the seat and the dam embankment where he was working. The tractor had been fitted with a ROPS but it had been cut off. (Central-Melbourne).

15 November: A 56 year old operator has died when a front end loader rolled down an embankment on a property he was working for the owner. He appears to have lost control and thrown from the loader, receiving fatal injuries. (Country-Eastern).

29 November: A 56 year old wife of a farmer and her 3 year old grandson have sustained fatal injuries from being crushed whilst riding an ATV. On starting the ATV it has reversed and crushed the two between the bike and a stationery trailer. (Country-North).

*This fatality has been identified as a recreational incident and as such will not show as a recorded workplace fatality for 2002. It is shown here as a fatality that has occurred on a farm.

And in the words of Eric Young,

“Dear All,

Our November update tells a tragic tale, 4 fatalities for the month, a farmer's wife and grandson involving an ATV and 2 rollovers! What can you say, it is so traumatic and all so unnecessary, it seems that we have been unable at present to make any real progress or improvements in preventing these terrible incidents.

Clearly, ATV's have become a real concern with 5 deaths on farms so far this year and clearly they will be a strong priority for us into the new year.

Any feedback you can provide on initiatives to curb incidents with these bikes would be most welcome.

Though my mood is fairly (See attached file: Agrpt 2002.doc) sombre at present, may I wish you all a happy and safe festive season, I'll have our yearly summation and data update to you early in the New Year. Best wishes, Eric.”

**Tractor rollovers & tractor runovers:**

Tractor rollovers and tractor runovers have been major causes of farm deaths and injuries. In all of Australia except Queensland, it is illegal to sell new or second-hand tractors without rollover protection structures (ROPS). These structures are the most effective way of providing protection if a tractor rolls over. The rollover protection structures became mandatory in 1998 in Victoria regardless of when tractors were purchased. In Victoria there have been two-rebate subsidy schemes.

The first subsidy scheme was from 1 December 1993 to 31 May 1994 providing $120 rebate. At that time the law did not require you to fit a ROPS to tractors manufactured prior to 1981,
however regulations were prepared to provide that where an employee drives a tractor, then a ROPS frame would be required. The rebate was not available for machines manufactured after 1981, as the law required that all tractors manufactured after 1981 were required to have a ROPS frame or similar strength cabin installed at the time of manufacture.

The second rebate scheme was in 1997/98 and is an important example of a successful prevention program for WorkCover. The rebate was $150 and more than 12,000 structures were fitted to tractors.

The program has become an important example of industry development funding and with analysis and understanding of the key elements that made the prevention program work it is expected to use this as a guide for future programs. In summary the scheme operates as follows:

Scheme structure:

- Funded by WorkCover
- Administered by Victorian Farmers Federation

Key elements of the scheme:

- Regulatory amendments
- Publicity
- Education
- Financial incentive $150 rebate

Impact:

- 70% reduction in unprotected tractors (from 12,000 to 5000) between 1996 and 1998
- Estimated to prevent 2 deaths a year for the next 10 years.

What has been learnt from ROPS?

- The imperative for stakeholder ownership of prevention initiatives;
- The power of incentives, in this case a direct financial incentive, to motivate behaviour;
- The force of regulation;
- The influence of publicity and public education campaigns.

As a result of the success of the scheme in Victoria, NSW began a similar scheme in May 2000 providing a $200 rebate up until December 30. It had been compulsory since 1982 to have ROPS fitted to tractors between 560kg and 15,000kg. The scheme had a similar group of players as Victoria, including NSW WorkCover, Farmsafe NSW, NSW Farmers, Unions NSW and the scheme was administered by the Australian Centre for Agricultural Health and Safety.

**Tractor runovers:**

Runovers account for the second highest fatalities associated with tractors. The Australian Agricultural Health Unit indicates approximately 35% of deaths where related to tractor runovers between 1985-90 in NSW and QLD. This figure is replicated in the Victorian statistics.
In response to these findings the Australian Agricultural Health Unit contracted Geoff McDonald and his associates at the University of Queensland to design and construct a tractor safe access platform.

The Australian Agricultural Health Unit provides a simple hand out showing construction of a safe tractor access platform.

Victorian WorkCover is providing a rebate as an incentive to construct a safe tractor access platform to existing tractors within a research project at the present time.

The Monash University Accident Research centre is presently undertaking some important work in this area.

Evaluation of safe tractor access platforms:

Run-overs are the second leading cause of tractor deaths in agriculture and will become increasingly prominent, as tractor rollovers are addressed. The Safe Tractor Access Platform guidance note, produced by the Australian Centre for Agricultural Health and Safety, has been used in Victoria by two farm safety action groups (FSAG) to fit some 18 tractors with the platforms. This project will examine the implementation of this preventive strategy. Semi-structured interviews will be held with farmers who have fitted platforms. Farmers will be asked to comment on tractor operations before and after fitting the platform, and the average cost per fitting the platform to the tractor will be determined. This information will be complemented by engineering inspections of the fitted tractors, and comparison with access points of a sample of new tractors. The inspections will be based on the features included in the guidance note. The benefits and hindrances of platform fitting will be identified, and features of the fitted platforms will be compared with those of the access points on new tractors. Main outcomes will be: 1) A short report for dissemination to other farm safety action groups to encourage further uptake; 2) Marketing information, such as benefits identified by farmers and cost to farmers, for use in further promotion; 3) Early identification and therefore potential remediation of any serious hindrances.

(Sponsor: Rural Industries Research and Development Corporation)
Project Contact: Lesley Day
(Appendix 12)
March 26 2003

A girl, aged 4 was killed when her toddler brother accelerated a quad bike through fences in northern NSW at the weekend.

Police said the girl was sitting on the idling, four-wheel bike when her two-year-old brother activated the accelerator.

The bike careened through two wire fences, police said.

The girl suffered internal injuries.

The children and their parents were holidaying on the property near Walcha where the accident occurred. Their parent’s, who had just got off the bike, were unable to revive their daughter.

(The Weekly Times March 26, 2003) (p.23)

All terrain vehicles: (ATV)

Of the twelve agricultural fatalities for 2002, five were involved with the use of ATVs and of these two were child deaths.

According to the Federal Chamber of Automotive Industries, the body representing ATV distributors estimated there were 30,000 ATVs used in Victoria.

In Australia at least 90% of ATVs are used in agricultural.

The ATV in most instances has replaced the horse or two-wheel motorbike. Used properly and by following all manufacturers’ instructions and recommendations they are very efficient, economical, practical and safe but what has gone wrong when the Victorian Coroner is reviewing eight ATV-related deaths, six in Victoria and two in Tasmania, covering just two years. It would be inappropriate for me to pre-empt the Coroner’s findings but it is important to explain to the uninitiated the differences that exist with an ATV and the recommendations for safe operation of ATVs.

An ATV is an all terrain vehicle that has high-flotation tyres, weighs under 399kg and is rider active. The high flotation tyres mean that ATVs place very little pressure on the soil compared to other vehicles, which is one of their great advantages, but because of their narrow wheelbase and high riding operator they have a high centre of gravity. Proper tyre pressure is essential for safety and stability. Because of their nature the tyres are generally tubeless but once punctured tubes are sometimes inserted and to stop the tube shifting inside the tyre higher pressures are inserted against all manufacture recommendations. Dual wheels are now a new addition to increase stability but they are outside manufacturer’s recommendations.

ATVs can carry a variety of loads across surfaces other vehicles would have great difficulty traversing. They can be used through all seasons including even the wettest winters. They have
exceptional manoeuvrability making them ideal for stock work, and they can tow small implements.

The essential rules for using ATVs as recommended by the manufacturers are:

• Riders need to have training in how to ride and work ATVs safely and to understand limitations of their use;
• The minimum operator age for ATVs with engine sizes of 70cc up to and including 90cc is 12 years, for engine sizes above 90cc, the minimum operator age is 16;
• ATVs require active movement for steering;
• The vehicles are not designed for two people;
• Helmets should be worn;
• Riders should follow the manufactures safety instructions;
• Extra equipment such as spray tanks should only be added in accordance with the manufacturer’s recommendations to ensure there is no effect on stability or driving behaviour of the ATV;
• Riders should be aware of their own limitations and be aware of changing conditions;
• Machines need to be well maintained.

**Accident review: (ATV Death)**

It is important to include at least one case study on an ATV death and to analyse some of the main issues that pertain to it.

6yo ‘competent rider’ – inquest told

BURNIE – “A six year-old Tasmanian boy killed in a farm accident was an experienced motorcycle rider despite his tender years a coronial inquest was told on Monday”. Jye Jones was killed when the all-terrain vehicle (ATV) he was operating unsupervised at Yolla, near Burnie, in the state’s north-west, overturned and pinned him across the upper chest and neck on November 27 last year. Victorian coroner Graeme Johnstone opened an inquest into the boy’s death as part of an inquiry, which is also investigating another six ATV related deaths in Victoria. It will also examine the death of a 72 year old southern Tasmanian man in an ATV accident last year.

Giving evidence on Monday, Jye’s father Kay Jones said he hoped the inquest would help improve safety issues surrounding the popular four-wheel farm vehicles. “I’d like to help any way I can …so that this doesn’t happen to another family because we miss that little boy like you wouldn’t believe,” Mr Jones said.

Jye’s grandfather Lance Jones, who was first on the scene of the accident, told the inquest he believed Jye was heading home after a day shifting rocks from paddocks when the ATV hit a protruding rock and overturned on a slope. Jye was not wearing a helmet or protective gear at the time of the accident. Mr Jones Snr said his grandson loved to work on the family’s 100-hectare cropping property and rode the ATV “pretty much daily”. Mr Jones Jnr said he began teaching Jye to ride a small Suzuki LT50 two wheel motorbike when the boy was about two-year old. “He was so keen to be able to ride a motorcycle because his dad did, his mum did, his brother did,” Mr Jones Jnr said. His son was a “very
accurate and very confident” operator when he progressed to riding an ATV about 18 months before the accident, he said.

Under cross-examination, Mr Kay Jones – a motorcycle mechanic – was asked if he knew about a warning in the operator’s manual that children under the age of 14 should not operate an ATV. He said he was aware of the recommendation, but had spent considerable time riding with Jye on both two and four-wheel bikes and considered his son very competent. “I know ATVs are dangerous, I’ve got no qualms about that, I’ve known that all my life, but I don’t think putting it in Jye’s hands was wrong,” he said, “He was an experienced boy.” Mr Jones said it was not uncommon to find children under the age of 14 riding ATV’s in his area.

(The Standard, July 10th 2003 p.9) (See Appendix 13)

There are a number of issues in this report that need highlighting.

• “A six year-old Tasmanian boy killed in a farm accident was an experienced motorcycle rider despite his tender years a coronial inquest was told”

The issue of ATVs is dealt with in the final report of “The Inquiry into the Cause of Fatality and Injury on Victorian Farms tabled on the 8th August 2005 and has a number of recommendations, but the rules already identify the minimum age for safe ATV riding. (14 years)

• “The ATV hit a protruding rock and overturned on a slope. Jye was not wearing a helmet or protective gear at the time of the accident”, Mr Jones Jnr said. His son was a “very accurate and very confident operator when he progressed to riding an ATV about 18 months before the accident,” he said. (Four and a half years old)

In this case the recommendations on helmet wearing and protective clothing was not taken and the result was the death of a child.

• Under cross-examination, Mr Kay Jones – a motorcycle mechanic – was asked if he knew about a warning in the operator’s manual that children under the age of 14 should not operate an ATV. He said “he was aware of the recommendation, but had spent considerable time riding with Jye on both two and four-wheel bikes and considered his son very competent. I know ATVs are dangerous, I’ve got no qualms about that, I’ve known that all my life, but I don’t think putting it in Jye’s hands was wrong,” he said, “He was an experienced boy.”

In Chapter 9, I deal with personal attitudes and the above case is a good example where personal attitudes were in conflict with manufacturer’s recommendations. (Further reading on ATVs is available at Appendix 20)
Child safety on farms is also an important issue:

It was a Sunday morning and Thomas had just finished the mowing on the ride on mower. He was a typical farm boy – and that’s important to remember because Thomas, despite his age, could do things most kids in the city wouldn’t dream of. He asked me if he could take Emily for a bit of a ride.

“For some inexplicable reason they ventured out of the garden and over the grid to the dam. Then the wheel got caught in the corner of the dam and Thomas didn’t have the strength to turn the mower.”

“They were missing for only a few minutes when their older sister, Hannah who was seven at the time, went to look for them. She came running back to me, calling out that Emily had drowned, Hannah had found her floating on the dam.”

“I found Thomas some time later at the bottom of the dam. I was walking around the dam and my foot hit him. He was in about five or six feet of water and I had to dive down and pick him up. I carried both Thomas and Emily out and lay them both on the side of the dam.”

“We have trees at both those very spots now”, said their father.

(Workcover Safety “Farm Safety what are you doing about it”), Ian Chafter father. [Undated Workcover Brochure]

One child dies as a consequence of injuries sustained in a farm related incident every 10 days in Australia. I have not compared this with the national death figures for children, as it has no relevance in this instance.

Unlike the suburban house block that generally has four fences surrounding it, farmhouses may have minimal fences and in some instances none at all surrounding them for a considerable distance from the house. A farm is many things; it is a work place, a home, a playground and an educational facility. All of these places singularly have their own hazards and singularly these hazards can be minimized, so in attempting to create a safer farm for children it is important to access all risks. If elimination is not possible (eg. as with house dams) a confinement compound must be created.

Planning for kids in the country is no different from planning a garden and as with a garden the plan starts with infancy and grows as the child/ren grow. It should always be remembered that another generation might also come along and require additional planning. Farmsafe Australia INC has produced a very good manual, Safe Play Areas on Farms Version 2, Feb 2005.

For the 30 children that die on farms each year in Australia approximately 600 children are hospitalized. The National Study conducted by Australian Centre for Agriculture Health & Safety, National Occupational Health & Safety Commission & Rural Industry Research & Development
Corporation, Moree NSW found that of the farm fatalities in Australia 1989-1992 the causes were:

- Drowning of children aged 0-5 years
- Injury associated with farm machinery- for both younger (0-9 yrs) and older children (10-15)
- Injury associated with other farm vehicles (all ages)
- Injury associated with 2 and 4 wheeled motorcycles for all ages 5-14 yrs
- Horse-related injury

Who was involved?
- 75% were boys
- 63% were under 5 years
- 21% were 5-9 years
- 15% were 10-14 years
One third were visitors to the farm.

What were they doing?
- Most children (73%) were playing when the incident occurred
- 13.9% were involved in recreational transport
- 8% were working

Machinery and children don’t mix anywhere but especially on farms. I have dealt with ATVs earlier and the death toll they are having on young children but an important point is that under appropriate supervision, the correct protective equipment and the right machine for the right size person they can be fun machines.

Farmsafe Australia has created a Child Safety on Farm Checklist and has also created a flyer, Child Safety in a Rural Environment. (See Appendix 14)

I do believe that it is important to highlight three sections of the material in this part of my work to show the various capacities of children in their learning outcomes.

1. Toddlers and small children 0-4 years:
   Small children and toddlers lack the physical and mental capabilities to avoid many rural hazards and may even be attracted to them. They are still developing their balance and are mobile, curious and determined to explore. They have no/poor concept of danger and are easily excited/confused by multiple/sudden changes. Children 3-4 years cannot be relied upon to follow rules and children under this age cannot understand the concepts of rules or safety. They should not be exposed to rural work hazards.

2. Young children 5-9 years:
   Young children may understand basic rules, but are easily distracted by play and may forget them or not apply them to situations. They seek greater independence to play and explore the world. They can accept small responsibilities on the farm (eg. Collect eggs feed small animals, use hand tools, water plants), but not necessarily complete all parts of a job that involves several steps. They lack eye-hand co-ordination and have difficulty being able to adapt/react if circumstances suddenly change. They are not ready to play unsupervised on the farm or engage in long or complex farm tasks.
3. Older children and young teenagers 10-14 years:
   Older children may have better coordination but can have lapses of awareness. They want to prove themselves as independent and capable and may try to impress parents or peers or try out new skills without adult supervision. They may be able to work with some equipment under close supervision (e.g., lawnmower, some power tools). However, they lack the coordination and judgment skills required to safely operate large vehicles and machinery, especially if something out of the ordinary were to happen. They also lack a sense of caution and have unfounded confidence in their own ability—so they begin to engage in risk-taking behaviour.

(Farmsafe Australia: Child Safety on Farm.)

Understanding children’s behaviour is the pinnacle in developing safe surrounds on a farm. The Australian Farm Journal, April 2004 Edition has a special farm safety report and an excellent feature on a safe play area for children. The playground has taken into account all of the three stages of child development.

Safety reviews:

A second evaluation by the Monash University Accident Research Centre evaluating Victorian farms’ safety initiatives was dealt with back in Chapter 5 but I have included a small description of the project here to show what sort of safety reviews are carried out.

Evaluation of Victorian farm safety initiatives:

   The objective of this project is to compare the impact of differing approaches to farm injury prevention in Victoria and Queensland. Two random postal surveys, of 3000 Victorian farmers and workers have been conducted in the winters of 1998 and 2001. The questionnaires covered safety practices, exposure to key farm injury prevention programs and activities, exposure to farm work, injuries on the farm (previous 1 & 12 months), and farm/farmer characteristics. In the analysis, comparisons will be made between (1) the two time points, (2) those who have and have not been exposed to prevention activities, (3) major commodity groups. The Victorian results will be compared with the Queensland results, in collaboration with Mr. Keith Ferguson (Dept of Industry Relations) and an analysis made of the differences or similarities. Prevention activities in Victoria and Queensland will be documented and compared.

(Sponsor: Rural Industries Research and Development Corporation)
Project Contact: Lesley Day

Other People’s Achievements:

I believe it is important to highlight some of the successful implementations of farm safety programs that I have researched during the period of this project. The reason is to show that change is happening.

WorkSafe Victoria over a number of weeks released a series of articles explaining what people at the coalface were doing about farm safety. The series was called “SAFETY HEROES”
The series of articles were printed in The Weekly Times and rather than print the full article on each individual and the article date I have précised each into dot points with the essential information on their safety effort:

- **September 5th 2001** Michael Blake: Michael was nominated for the Smart Safety Award for his work on WorkSafe Victoria’s nationally accredited SAFETY MAP health and safety management system, modifying the system so it can be easily used by farmers.

- **September 12th 2001** John Dawson: John was nominated for the Smart Safety Award for his work with a pioneering group which is developing new systems for use with the sheep loading and manipulation platform machine (SLAMP).

- **September 19th 2001** Peter Miles: Peter was nominated for the Smart Safety Award for his positive response to a WorkCover Claim made by one of his employees. Peter spent $25,000 to make his farm safer.

- **September 26th 2001** Graeme Prince: Graeme was nominated for the Smart Safety Award for his work on obtaining subsidies for farmers to install safe tractor access platforms to their older tractors.

- **October 3rd 2001** Macalister Research Farm was nominated for the Smart Safety Award for responding to a safety audit by VFF industrial consultant to ensure farm safety for the many visitors that come to the farm each year.

- **October 10th 2001** Don Walpole: Don was nominated for the Smart Safety Award for his help to form the Ovens Valley Safety Action Group.

- **October 17th 2001** Ann O’Keeffe: Ann was nominated for the Smart Safety Award for making safety a focus on her 200 milking herd farm after attending a Managing Farm Safety Course.

- **October 24th 2001** Shirley Watts: Shirley was nominated for the Smart Safety Award for her designation of home areas and farm areas for her children and their friends.

- **October 31st 2001** Richard Puddicombe: Richard was nominated for the Smart Safety Award for a commitment to safety that began with the production of a 16 page work procedure manual and more recently included the construction of a safe chemical storage shed.

- **November 7th 2001** James Richardson: James attended a Managing Farm Safety course and implemented changes to improve safety on the farm.

- **November 14th 2001** John Phillip: John for a detailed health and safety regime over the past four years for the farm.

- **November 21st 2001** Genetics Australia for implementation of a special OH&S regime at Barwon Park handling 900 bulls for Artificial Insemination Programs.
It’s important to acknowledge these individuals as their contribution to on farm safety has come from an active farming stand point, rather than from an administrative professional body.

Farmers can make a significant contribution to improving OH&S in their own industry. It is sad that the promulgation of positive stories on farm safety has not continued. Through ill health or death the drivers of the project are no longer working with Victorian Workcover.

In this and the previous chapters of this exegesis I have written about the physical aspects pertaining to farm safety, about my driving force and about the various methodologies that I would use for my research, about the farm, the safety organisations associated with farm safety, some case studies and some solutions, but all of this has no relevance in improving farm safety unless there is an understanding of the major impediment to implementing farm safety, “The Farmer”. In Chapter 9 I will discuss these impediments and how the farmer relates to them.
Chapter 9

IMPEDIMENTS TO IMPLEMENTING FARM SAFETY

THE FARMER

From this research and my experience and discussions with my fellow farmers I believe that there are four major causes of death and injury on farms:

- Insufficient or poor training;
- Being under pressure;
- Lack of resources;
- Personal attitudes.

**Insufficient or poor training:**

Training is an essential component of good on farm safety. I have had and continue to be involved in a number of training arenas. I believe that resources such as the recent commitment by the State Government of $450,000 to the Victorian Farm Safety Training Centre at Ballarat is a very positive move and will support a number of farmer training programs.

Training of individuals however needs to be separated into a number of areas.

Dealing with children on farms is a difficult dilemma. A farm is recognized as a work site, a home and entertainment area and for many the next generation’s training ground. The dilemma is to try and separate the three for safety reasons without destroying the nurturing of knowledge, the development of harmony, interaction and observation of nature and farming at work. Practice and repeatability are the foundation for spontaneous and successful reactions. Early age learning is recognized by educational organisations as the most important period in a person’s development. There are safety programs developing for inclusion into kindergarten and early primary school learning. The message is kids can influence change on farms. If there is unsafe machinery or the working procedures are dangerous don’t be afraid to listen if your child says something about the dangers.

Many of today’s employment opportunities have their career paths etched in childhood activities, which are further enhanced by both primary and secondary school curriculum. The professional sporting codes have their foundation rooted in backyards across the nation. Sports like football, cricket, basketball and tennis are but a few. As soon as you can hold a ball or bat the training starts. The arts are fostered from playschool, through kindergarten, primary and secondary school, as well as computer technology and IT. There are many more that could be described.

Parents’ careers and interests also play a large part in preparing the foundation for children’s interests and possible employment.

Farming should be no different in its function of stimulating interest in a career path. However the dangers that are always present whether actual or perceived must be identified, removed,
restricted or isolated to prevent accidents. Attendance at a Managing Farm Safety course will help in this identification, as well as availing oneself of the vast amount of published material covering all of the divisional topics grouped in Chapter 4 and discussed in a practical nature in both Chapter 4 and Chapter 5.

There are two other areas of training that I believe have great importance and they both involve students. The first relates to agricultural apprentices.

You will note that I developed a three-year course for South West TAFE Agricultural apprentices a few years ago and continue to follow its implementation but I have found that where there is a choice of minimum standard against a higher standard, the minimum standard is generally chosen. I believe that where this standard applies to subjects relating to farm safety or occupation health and safety the highest existing standard in the state should be the minimum training outcome. The standards are generally reviewed by Rural Skills Australia but as many apprentice employers are unaware of the extent of their apprentice’s training requirement in these two specific areas they are generally not questioned. A well-trained apprentice can in many cases influence change in his or her employer but a badly trained apprentice is very vulnerable to death or injury on some farms.

The second training area of significance is the development of programs for secondary schools.

Where students undertake work experience or Vocational Educational Training in agricultural fields a farm safety awareness program must be developed and become an essential component of the program before any physical involvement in a farming activity takes place. Again this is to protect the student but would help enhance a safety culture in the host employer or trainer. In both cases attendance at a Managing Farm Safety Course would help in identification of risk situations, host responsibilities and help provide solutions to risk situations. At the moment I am reviewing for the Victorian Curriculum and Assessment Authority their study design for The Victorian Certificate of Education in Agricultural and Horticultural Studies to try and incorporate a safety module into these courses.

Before finishing this section it is important to highlight the demographics of generations associated with the farms.

It is not unusual to have farming operations incorporating three working generations. The patriarchal generation has survived world war, depression and huge technological changes. This generation learnt to be independent, inventive and self-reliant. The second generation has generally been cast in the shadow of the patriarchal generation but developed with the technological changes. Whilst the third generation accepts technological change as common place, and has an understanding of shared attitudes. To me this group, the third generation and new age farmers, become the most important target group for implementation of Farm Safety.

There are in some instances a fourth generation of children who are very receptive to safety and it is important to direct campaigns at this target group.

**Being under pressure:**

Like many small businesses farmers’ responsibilities to keep more and more documentation, collect taxes and pay taxes, account for environmental works, manage predators (the list goes on), is becoming a very heavy burden to carry. In a lot of cases they do not have the skills for the
multiple functions they are now required to perform but they still continue to try. In their 
endeavour to continue short cuts are taken that are often the cause of injury and sometime death. 
Requirements need to be simplified and assistance made available to reduce the burden of the 
administrative nightmare.

Having a yearly plan of major farm operations will help reduce some of the work pressures. It will 
allow for planning of workloads and the possibility of organizing additional staff or making 
arrangements with a neighbour. It may be only for a few days a year but if the work outcome is 
achieved that is success and pressure on individual farmers is reduced.

**Lack of resources:**

Unlike most other industries, farming is generally considered a price taker in all commodities 
sold. The farmer rarely has the opportunity to pass on costs associated with additional investment 
in what is considered by many to be non-productive, farm safety.

Again it is important to approach this dilemma from an entirely different perspective. I have 
found from my involvement in farm safety that great savings can be made both from direct 
savings as with reduced injuries, and from indirect savings such as having an enthusiastic work 
force and a positive casual labour force, just to name two.

**Personal attitudes:**

Changing a farm into a safer working environment is mainly about changing how people think 
and how they approach tasks before they reach crises point. The majority of farmers have a great 
reluctance to change, are unsure of their abilities to handle change, and in some cases will react in 
a negative way to change. The survival of this industry depends upon taking on the challenge of 
change. Implementation of farm safety requires change.

From my experience it seems that most people demonstrate five attitudes towards change and that 
includes the implementation of farm safety. These attitudes include:

- Being receptive to change if it benefits the individual;
- Taking a little bit of time but then embracing change;
- Needing some prodding and some support mechanisms to adjust to change;
- Responding if Legislation or Law;
- There is also the response of not changing at all because of a rejection of authority. The 
  “you are not telling me what to do” attitude.

A paper presented by Dr Marilyn Shrapnel and Dr Jim Davie to the 24th ANZRSAI Annual 
Conference 3rd –6th December 2000 in Hobart outlined similar findings on farmers’ personalities.

(i) They are very independent
(ii) They are used to making their own decisions
(iii) They are very stubborn and resistant if they are being forced to do something about 
    which they have not been consulted.
(iv) Doing the right thing is very important to them and they become angry and 
    defensive when accused of not doing the right thing
They don’t embrace change readily and need time to consider before making major changes.

They also suggested:

The recognition of the unique nature of farming as a family business and the unique pressures associated with this way of life are extremely important for understanding the impediments to rural prosperity. By being aware of the particular characteristics of these personalities, government policy can be tailored to better meet their needs.

One such issue that is currently causing great debate and alienation is the Child Employment Bill and I believe this has set back the cause of positive implementation of the rest of the farm safety processes. As Dr Marilyn Shrapnel and Dr Jim Davie say “Farmers are very stubborn and resistant if they are being forced to do something about which they have not been consulted.”

For details of this Bill, (See Appendix 15)


In 1984 a tripartite Steering Committee on occupational safety, health and welfare, was established by the South Australian government. In the committee’s report, “The Protection of Workers Health and Safety”, the argument was distilled into seven basic principals. I will outline items 1 and 2.

1. The present toll of injuries and disease is high and can be reduced by appropriate preventative measures. These may be applied at all levels, from the workplace to the State. (This implies that a balance should be struck between a] allocation of resources towards clinical treatment of injuries and diseases, and the compensation of victims, and b] preventive measures. )

2. Accidents and diseases do not necessarily or even usually occur because of “apathy”, and certainly not because of carelessness, stupidity or laziness on the part of the workers, but through unsafe and unhealthy systems, processes and tools. Therefore a preventative strategy needs to focus on these underlying work systems, and not solely on making workers (and employers) “aware”.

These principals (and the other five that aren’t related to this work) were endorsed by union and employer representatives on the South Australian Steering Committee.

It cannot therefore be dismissed as “outrageous”. Yet it is a position which is rarely stated explicitly, because of the myth of the “careless worker” which is subscribed to as much by workers as by employers. As long as the myth remains unchallenged, progress by workers themselves in securing better conditions to protect their health and safety will be slow. For while workers hold this view, they see the role of unions and of the law as being to impose further discipline, to “make” them work safely. This is why so many workers reject the idea of safety; for them it is associated with extra discipline and more meaningless procedure.

(Health and Safety at Work, Australian Trade Union Safety Representatives Handbook, p. 8/9)
I see this union problem having great similarity with the Australian farmer. In most instances, although they are self-employed, a farmer is fundamentally a worker.

With all these different attitudes as identified on the previous page, there is a real problem of taking on board the complexities of all the different people involved (i.e. the three different groups that I hoped to influence that I previously identified) in changing farm safety culture.

It is important to establish which attitude to change I have. (Although this should be apparent by now). The reason for this is that it identifies what response I will have to change in the future.

I come from the “Receptive to change” attitude.

Farm safety was always important but not a priority in my management as it is now. In saying this it identifies that there are degrees of implementation of farm safety. Personally one of the things that has sharply underlined my passion for the need to educate people into implementing safer work habits was being involved in a farming accident myself. When I look back I see that not only were some of the practices I used dangerous they were utterly stupid. Many of these practices were brought about by expediency, lack of manpower and not a great deal of thought for the consequences.

I believe it is important to emphasis these last three points:

- Expediency;
- Lack of manpower;
- Lack of thought for the consequences.

And having done so I would like to tie them back to the five attitudes of change outlined at the beginning of this chapter, again they include,

- Being receptive to change if it benefits the individual;
- Taking a little bit of time but then embracing change;
- Needing some prodding and some support mechanisms to adjust to change;
- Responding if Legislation or Law;
- There is also the response of not changing at all because of a rejection of authority. The “you are not telling me what to do” attitude.

To me this is the crux of the dilemma of implementing farm safety on farms. For example, you may be very receptive to change but lack of manpower impedes implementation.

All of the various attitudes to change are present across the rural community. When you then consider the various degrees of expediency required completing work tasks, and the availability of manpower, short cuts and innovation become the norm and there is a general lack of thought for the consequences. This is the situation that can create the deaths and injuries that a good farm safety program can prevent.

In Chapter 10 I will offer some solutions to some of the problems where certain attitudes will impede some safety programs, as well as providing outcomes and recommendations that will also assist in developing a broader attitude to implementing farm safety.
Chapter 10

OUTCOMES, RECOMMENDATIONS AND CONCLUSIONS

Because of my concerns about the number of deaths and serious injuries sustained in the agricultural industry I began this Masters to gain an academic qualification to be able to further influence three specific groups to focus on and contribute to improved farm safety:

- Farmers;
- Government, especially in terms of their policy and research;
- Agricultural educational institutions; both secondary and tertiary.

I referred to this in my overview in Chapter 1. In Chapter 3, I referred to the methodology that I would use to explore the development of practical solutions to improve safety on farms, namely action research, incorporating practitioner research and case study research. However I also indicated that in some circumstances action research could not be fully implemented because testing of theories could result in death or serious injury. Over the period of this exegesis fate (or inadequate safety standards) has played a hand in the action learning process and on no less than four occasions tested a process that had been researched. It strengthens my efforts to have RCDs compulsory on all switchboards. I will further develop this aspect later in my conclusion.

How to best judge the success of this work from a practical point of view was difficult to decide. Ultimately the solution came by organizing a farm safety day incorporating practical demonstrations and presenting some of my solutions and some retrofitted safety equipment to a number of people incorporating the three groups identified at the start of this chapter and previously mentioned throughout other sections of this work.

As with this research I used my involvement with the Victorian Farm Safety Centre to support the organisation of the day. The farm safety forum was presented as a joint project between Bally Glunin Park and the Victorian Farm Safety Centre.

As this has become a somewhat lengthy document, I will not explain the whole process but instead incorporate some of the key components of the farm safety day as dot points below and outline other sections in the Appendix 16 & 17:

- Invitation to the Minister for Workcover, The Hon. John Lenders, to open the Farm Safety Forum
- Full Program
- Press release of Ministers launching new safety project for the shearing industry
- Farm Safety Update & Practical Workshop (See Appendix 18)
- Letter from Minister for Workcover, The Hon. John Lenders MP (See Appendix 19)
It is important to me to present this data here as it shows the logical development of the whole research process. The program was developed to cover the main issues that farmers had raised with me over the last few years. I chose the specific presenters because of their positive approach to their specific areas and because in a number of cases I had worked with them in developing government policy. One such presenter was John Champion (Field Officer, Industry Programs-Field Operations) who previously had asked me to review his “Falls from Heights” drafts that later became guidance material for a number of working from heights problems.

And most importantly this work supports the methodology process previously mentioned in Chapter 3; a vital part of the success of this exegesis, and emphasized by Mike Brown in his paper, *Higher Degrees by Project Program Module 1, Qualitative Research in Education*, where he quotes from, *Qualitative Research Practice in Adult Education*, (Peter Wills and Bernie Neville, p. 230.)

**What Action Research Can Do?**

It helps you to develop confidence. It is difficult to act forcefully towards some goal when you rely on feelings without data to support your views. Data gathering helps you to plan strategy and develop community action programs. Action research strengthens one’s commitment and encourages progress toward particular social goals.

It is vital to the outcome of my exegesis that I include,

- Invitation to the Minister for Workcover, The Hon. John Lenders, to open the Farm Safety Forum;
- Full Program;
- Press release of Ministers launching new safety project for the shearing industry,

in this section rather than as an appendices as they show the confidence that has grown in me over the years of this study and the knowledge and respect that I have gained from the professional people in the field of farm safety, all aspects of what action research can do.
Minister for Workcover
The Hon. John Lenders MP
Level 5, 1 Macarthur Street
East Melbourne
Victoria 3002

Dear Minister,

I previously wrote to you on the 25th February and the 11th March regarding a Farm Safety Forum. I am again writing to you regarding this same Forum that I was proposing to run in conjunction with the Victorian Farm Safety Centre.

Part of the function of the Victorian Farm Safety Centre is to run forums and field days on farm safety.

At the meeting of the Victorian Farm Safety Centre 24th February I put forward a proposal to run an extensive forum covering a number of areas that I recognise are of concern to the farming sector. Some of the issues that the forum would deal with would be:

- Falls from heights (I have worked with John Champion reviewing all the drafts on this area)
- Farm chemical management
- Fire extinguishers and their proper use
- All Terrain Vehicles
- Tractors –(ROPS) Roll over protection structures and (SAP) Safety Access Platforms
- Shearing shed Manuals
- Machinery and equipment retro fits for safer working
- New farm machinery New Holland

The proper opening of what I believe will be a very full day of information and learning on farm and rural safety can only be achieved by Ministerial officialdom and so I would like to extend to you an invitation to officially open the forum.
The intended date of the forum will be the week 19\textsuperscript{th} to 23\textsuperscript{rd} September and since your presence is of high priority we would allow you to set a date that best suits you for availability rather than us choosing a date that might not be suitable.

You will notice that I have used the terminology “Farm and Rural Safety”. I believe that farm safety has wider boundaries than just the farm and therefore needs a new title. Farm safety involves many other players, rural merchandise sellers, stock and station agents, machinery dealers and farm equipment sellers, rural teaching agencies just to name a few. As the new Minister to Workcover this might be something you might consider.

I am writing to you in two capacities, the first as Executor-Manager of the family farming business “Bally Glunin Park” and secondly as Chair of the “Victorian Farm Safety Centre” in Ballarat.

As the manager of Bally Glunin Park I realised some years ago that Occupation Health and Safety would play an important part in the success of the business. I began to develop a system of audits and practical solutions to improve the safety of all those people who chose to visit whether as friends and family or work colleagues, casual, permanent or in an advisory capacity.

Over the years my work has been recognized in Parliament, recorded in Hansard (Tuesday 30\textsuperscript{th} May 2000) and received a number of awards, notably the 2000 Workcover Award, Category 4 for “Best health and safety system by a business with 30 or less employees”.

I have continued my commitment to Farm Safety both on this property and in more recent years to the wider farming and rural community and as a consequence I was asked to join the committee of the Victorian Farm Safety and Training Centre.

With the death of Eric Young, the ill health of Ron Ruff and the instability of a constant Workcover representative and the fact that I joined the committee as an independent farmer representative I was asked to sit as the chair, a position I currently hold.

I look forward to a positive response to our invitation.

Yours sincerely,

Michael J. Blake
Executor Manager Bally Glunin Park
Chair Victorian Farm Safety Centre
Farm Safety Update
A Practical Workshop
23/9/05

Program

9.00 Registration
Tea and coffee

9.30 Welcome - Michael Blake, Bally Glunin Park
Official Opening by: The Hon. John Lenders MP
Minister for WorkCover

9.55 Thank you – Ross Pilkington, Acting Director ML& A WorkSafe Victoria

10.00 Format for the Day - Andrew Sullivan
Each session will run for 20-25 minutes and rotate with four supervised groups

10.05 Break into groups

ATV Demonstration - Peter McDonald, Honda Australia Roadcraft Training and
Tim Andrew, Kondinin Group

FEL Demonstration - Geoff Pickering, Challenge Loaders, New Holland & Phillips
Farm Machinery

Fire Extinguisher Demonstration - John Hosking - Chubb Fire Safety Ballarat

Fall from Heights Demonstration - John Champion, WorkSafe

12.30 Lunch

1.00 Farm Accident Insurance, Are you covered?
Self employed, Contractors and Employees - Steve Kolotylo, Victorian WorkCover
Authority

1.15 Break into groups

Shearing Shed Safety
Ergonomics - Michael Lawrance
General Shearing, Shed Safety - Sam Beechey AWU

Farm Chemicals and Hazard Substances - Les Toohey, Senior Chemical Standards
Officer and Trevor Pollard, WorkSafe Ballarat

Machinery Modification, What you can do and can’t do - Phil Ritchie WorkSafe

3.15 Evaluation

3.30 Finish
LENDERS LAUNCHES SAFETY PROJECT

By PHILIP STEWART

WROCLOVEY Minister John Landers officially launched a farm safety project in the area yesterday. More than 30 producers from the Murrumbidgee and surrounding districts attended.

"It's important to have these types of events," Mr Landers said. "It's about making sure that everyone is aware of the risks involved in agriculture and how we can work together to reduce them.

"We have seen significant improvements in safety practices in recent years, but there is still room for improvement. We all have a role to play in ensuring that our workplaces are safe and that everyone goes home safe at the end of the day.

"The safety project is aimed at helping farmers to understand the risks associated with their work and how they can take steps to reduce these risks. It's about empowering farmers to take control of their own safety.

"I encourage all farmers to take part in the project and to work together to make our workplaces safer for everyone.

WORKROCKY Minister John Landers addresses the crowd at the Farm Safety Week launch in Wrocke last Friday.

The project is supported by a range of organisations, including WorkSafe NSW, rural councils, and local farm groups.

"It's great to see so many farmers here today," Mr Landers said. "I'm confident that this project will make a real difference in improving safety on our farms.

"I look forward to seeing the results of the project, and I encourage all farmers to take part and to make sure that their workplaces are safe for everyone.

"Thank you all for your support and for your commitment to farm safety."
In Chapter 7, I reviewed the shearing industry manuals and presented a number of solutions to major risks in the shearing shed. It was fitting that the Minister used the Bally Glunin Park woolshed and farm safety day to launch his new initiatives for his shearing shed safety project. The Bally Glunin Park woolshed features in the Victorian Shearing Shed manual, and improving shearer safety in the wool shed has been an important part of my farm safety program.

In Chapter 9, I outlined my concerns relating to proper OH&S training for students. These concerns prompted me to present a submission to the Parliament of Victoria, Inquiry into the Cause of Fatality and Injury on Victorian Farms, p.97,

> “Some witnesses described their concern at what they perceived as a lack of consistency across training providers on occupational health and safety education.” 258

258. Michael Blake, Submission, no. 30, 12 December 2003 (Parliament of Victoria, Inquiry into the Cause of Fatality and Injury on Victorian Farms)

The Committee’s findings supported my concerns as highlighted below and their supporting recommendation.

**Committee’s Findings 8:**

Education plays a key role in any strategies to improve farm safety. Victorian farmers can benefit from access to state-of-the-art education programs, information and research on practical health and safety initiatives and methods to implement these in the farm environment

(Parliament of Victoria Inquiry into the Cause of Fatality and Injury on Victorian Farms, p.97)

**Committee’s Recommendation 2:**

That as a condition of funding for agriculture industry education and extension programs, the Department of Primary industries require that best safe practice be integral to course presentation

(Parliament of Victoria Inquiry into the Cause of Fatality and Injury on Victorian Farms, p.97)

In Chapter 1, I wrote about influencing specific groups and their policies on farm safety. I identified both the Commonwealth and the State Government as two of those groups and my presentation to the Parliament of Victoria, Inquiry into the Cause of Fatality and Injury on Victorian Farms, clearly indicate that I have been successful at influencing policy at a State Government level.

In Chapter 5, I described Bally Glunin Park and presented it as the model farm to be used for
“Bench marking for farm safety”. On the 6th October 2005 at the NSCA/TELSTRA National Safety Awards Dinner, Bally Glunin Park won the Farm Safety section for Best Rural Impact in Australia. This clearly supports Bally Glunin Park as the model for farm safety and again, underpins the importance of this practitioner research.
A SAFE PLACE TO WORK
Bally Glunin tops awards

By PHOEBE STEWART

HAMILTON agriculture business Bally Glunin Park has won a prestigious award for raising awareness of farm safety in rural communities.

The National Safety Council of Australia awarded Bally Glunin Park the 2005 Farm Safety Award - Best Rural Impact for their work in educating staff and the community about farm safety over the past 10 years.

Bally Glunin Park owner, Michael Blake, said it was crucial all rural employers understood their responsibilities to provide a safe working environment for staff.

“At Bally Glunin Park, I have gone beyond the farm gate to develop new solutions to old problems and create the safest possible working environment for staff,” Mr Blake said.

“I have undertaken a variety of work from developing an agricultural safety farm manual and a training course for agriculture apprentices to providing community talks on farm safety.”

Mr Blake said simple measures, such as reversing vehicles into sheds so clear vision is available when the vehicle was next driven, and ensuring staff were wearing the right safety equipment, could reduce injury and save lives.

“The award underlines our commitment at Bally Glunin Park to building a safe farming community in Hamilton and beyond.”

Farm apprentice Ben Riddick, who works on the fine wool, prime lamb, beef and cereal crop operation, also took out this year's Encouragement Award for an occupational health and safety project he designed for Bally Glunin Park.

Telstra Country Wide sponsors the award and Bally Glunin Park have received a $2000 winner’s prize.

Telstra Country Wide south-west general manager, Grant Wiltshire, said the company was a passionate supporter of the awards.

“These awards are crucial to recognising the outstanding work of employers such as Bally Glunin Park who strive to achieve safety excellence in the workplace,” he said.

“On behalf of Telstra Country Wide, I would like to congratulate Mr Blake for his commitment and leadership in building a better workplace for his employees, and educating the wider community about the importance of agricultural safety.”
As I conclude this work there are a number of recommendations that I will continue to lobby to have implemented. They include:

**RECOMMENDATIONS:**

1. The development of a standard on farm audit kit administered by Workcover and that is acknowledged by a farm gate sign and can be used to demonstrate to the public the involvement of the land occupier, as with Cattlecare/Flockcare and Land for wildlife. This would be of great benefit. The benefits would be a change in social policy that could lead to not only a reduction in farm accidents but also a reduction in risk that could extend to some financial rewards such as subsidies to interest rates on farm loans, reduced insurance and a rebate where applicable on Workcover premiums.

2. The second is the implementation of a suggestion that I put to the Victorian Government in a letter to The Hon. John Lenders MP, Minister for WorkCover 25th February 2005: that the campaign on improving farm safety could be retitled ‘Farm and Rural Safety’. I believe that farm safety has wider boundaries than just the farm. Farm safety involves rural merchandise sellers, stock and station agents, machinery dealers and farm equipment sellers, rural teaching agencies just to name a few and such a title would better reflect the target area.

3. As mentioned in my opening paragraph there is one device that can certainly make a difference and that is the installation of residual currency devices (RCD). I believe that these should be a compulsory attachment on all old electrical metering systems. It is a requirement for all new work and must be installed by licensed electricians. It is one device where installation is relatively simple, can be observed easily by meter readers and if installation is not implemented then the power supply can easily be terminated

In mentioning these three proposed campaigns focused on reducing death and injury on farms, it is suggested that the levels of promotion should be different and appropriate to the target audiences. As mentioned in Chapter 6 it is compulsory under law to fit roll–over protection structures on tractors but what do you do with those farmers with the attitude and the response of not changing at all because of a rejection of authority, The “You are not telling me what to do” attitude.

With the RCD, currently there is a lot of promotion both in the press and through fliers circulating by power suppliers yet there are still farm deaths from electrical shocks. This is an easy one to fix with legislation as unlike the ROPS all farms have meters read three times a year, giving access to inspection and disconnection.

How do you run over yourself with your own tractor? Easy, farmers will continue to hop off and on moving tractors to perform farming operations, so a forth recommendation would be;

4. The attachment of a safety access platform can reduce the risk of this happening. The use of safety access platforms on tractors has the same potential to save lives as the fitting of ROPS has (Deaths 4th November 2002 & 15th November 2002 Chapter 8 WorkSafe Agricultural Fatalities 2002).
Finally it is worth quickly touching on the positive outcomes of having a safety protocol in
operation. I find that many of the practical solutions although cheap are easy to implement and
quickly stimulate further ideas. The success of having made an improvement (and publicising it
and having it recognized, especially by one’s peers) seems to break the barrier hindering change.

In the end do some farmers do things to impress others, as with the stack of five large square bales
of hay that subsequently fell down (See Appendix 18)? Yes I believe so, or are they “just stupid”
as John Mirtschin describes himself after he was trapped in a plastic water tank for two days (See
Appendix 19). However I believe the crucial issues restricting improvements in farm safety are
those already identified in the last few paragraphs of Chapter 9 namely;

- Expediency;
- Lack of manpower;
- Lack of thought for the consequences.

The two farmers mentioned above are classic cases incorporating all three contributing factors to
accidents. We can only continue to promote good farm safety and hope the messages will some
day get through. My research and outcomes are part of this endeavour to promote good farm
safety and the DVD is a practical demonstration of this commitment.

I am almost at the end of this exegesis but am I at the end of this research? I don’t think so; just
the beginning of another cycle of action learning.

How do I know? The last paragraph provides the answer: farm safety doesn’t end, it evolves. New
technology creates new problems even when we haven’t solved all the old problems.

Do I think there has been a positive change in farm safety since I started this work? On average
for 2001 to 2004 inclusive, twelve people died per year on farms in Victoria. For 2005 there were
no deaths. For 2006 we have had five deaths including a child drowning.

I know that I have directly influenced the outcomes of at least three incidents that most probably
would have resulted in death as mentioned on the previous page when discussing RCDs.

In Chapter 1, I presented questions that I proposed to answer through this exegesis; I believe that
this has now been achieved either directly or indirectly. However, I continue to think about how
to continue to refine my research and thinking and data and practice. The following issues
continue to influence my thinking and actions.

With changes in work policy, new OH&S Acts, and more publicity on farm safety there has been
a growing development in the marketing of farm safety packages, auditing guides and farm safety
Consultancies, mostly for profit by private businesses. There are also organisations developing
their own safety programs, some very good, but others unsatisfactory. Some of these businesses
may end up in court defending their programs when accidents continue to happen. The
organisations that have a true commitment to proper farm safety research and development
continue with their commitment and it is these organisations that I continue to be involved with.
They include Farm Safe Australia, Australian Centre for Agricultural Health and Safety, Moree
NSW, Monash University Accident Research Centre and the Victorian Farm Safety Centre as
well as both Victorian and Western Australian Workcover Authorities. These organizations and
key individuals – both farmers and those concerned about farm and rural safety will continue with their commitment to bring about change and make Farm Safety a true Lifesaver.

The DVD is part of the product of this research and was the result of documenting some of the simple solutions to dangerous farm situations and proper operation of some equipment. The Appendix 7, 8, 9,10,11,17 are further extensions of my work that expands the horizons that I have been able to influence. From a personal point of view I am very proud of this work and know that it had to be done.
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Diagram of McKerrow’s action research cycle

Figure 1.6 McKerrow’s model of action research: a time process model
The day Helen’s dreams shattered

BY MEGAN MCHAAUGHT

APRIL 13 last year was a day like any other for Helen Barrow, until one fearful step turned her world upside down.

Her husband, Dennis, 65, was standing on a pole raised by a forklift to move feed for the pigs on their farm near Leongatha.

It was a task he’d performed every day for more than 50 years. No one knew exactly what happened, but he lost his footing and fell more than two metres on to a concrete floor.

An employee found him 45 minutes later but he was already dead.

With his death, Mrs Barrow’s dreams of sharing travel, the birth of their grandchildren, and even disagreement in an instant.

She knew nothing she could do will bring her husband back.

But she said if one person heard her story and thought about it, it could help others.

She said she’d always been a high priority on their farm, particularly when employees were concerned.

But, like most farmers, Mr Barrow was too busy with day-to-day work to think about improving safety for himself.

“We assumed the same thing most people do — that nothing bad will ever happen to us,” she said. “But bad things do happen to people who don’t deserve it.”

She said even though it could be inconvenient and time-consuming, farmers and their families must remain vigilant.

“Farming is a dangerous occupation, there is no doubt about it,” she said.

“Often, people have been doing jobs the same way for years and they don’t realise how dangerous they are.”

A possible solution was to invite a WorkSafe inspector or similar professional to visit their property and advise them.

They should also ask local farmers to keep an eye out for each other.

“A sometimes takes a friend to come and tell people how they can make things safer,” Mrs Barrow said.

She said her husband was one of the “old school” farmers.

He was hardworking, independent and strong-willed.

His death sent shockwaves through the Leongatha community, where the family had lived for decades.

He loved hard work and he loved his pigs,” Mrs Barrow said.

“Farming was all he ever wanted to do and he was very good at it. The world has lost a wealth of knowledge. You can’t learn what he knew from any text book.”

After her husband’s death, Mrs Barrow was faced with selling the property, as well as their pet’s shed.

She now lives in Leongatha, where she can enjoy the support of the CWA, Friends and a close-knit community.

But nothing can fill the void in her life.

“Our dreams and plans went out the window and nothing will ever bring him back,” she said.

“This death had a ripple effect. “It isn’t just me who lost someone. The entire community was at his funeral to say goodbye.”
Blake History Tuam Ireland

Anecdotal history reveals that Martin J Blake developed a railway to carry workers from their homes in Tuam Galway to Ballyglunin Tuam to overcome the twenty-five mile journey they needed to make for work. This was my great, great grandfather.

Photographs of the railway station and similarly the post office in a more recent building are presented on the next page.

His father created his own currency for his workforce to deter highwaymen from robbing them. The local traders, who accepted the currency and were later reimbursed by Blake with coin of the realm, knew all the staff at Ballyglunin.

Extract from: TUAM by OAthi S. O. MURCHU May 1971 p.29

BLAKE’S BREWERY

“Around 1855, Martin J. Blake, M.P., lived in the house now owned by Doctor Cunningham. Here at the Bridge in Shop Street on the Milltown Road the Blake family had a thriving brewery. Its situation on the Nanny River, gave it an added advantage. The buildings at the back of the house and along the river were used in the manufacture of Blake’s beer—which was a great success. The barley was provided by the local farmers who received good payment for their grain and labour.

Blake had a peculiar currency of his own. These coins were called token coins-coin3, coin4, coin 6 etc. These numbers meant that each coin was the value of 3, 4, 6 or 8 bushels of corn for a particular year. These coins were given to the shopkeepers in return for goods. On the other hand, they were traded back again to the Brewery by the shopkeepers-so the coins arrived back at their owner once more.

Some of those old “brewery coins” may be seen to-day, forming part of a local collection. Another item in this collection are the dies used for their minting”.

As luck would have it a number 6 token coin came into my possession in 1977, which I still have.
Mr Michael Blake
Bally Glarin Park
HAMILTON VIC 3300

Dear Mr Blake

I have received advice from the Victorian WorkCover Authority that Mr Colin Burns, a field officer with the Authority, visited your farm recently to examine aspects of your Flockcare accreditation process.

I understand Mr Burns was most impressed by the professional way in which you conduct your farm business activities and in particular how you integrate farm safety into these business activities. He was also impressed by the way in which you engender a safety “culture” (by example of your own personal commitment and actions) for the employees on your farm.

Key strategies which you have adopted and could be adopted by others include:

- personal commitment to the development and implementation of sound health and safety policies;
- the safe storage and movement of dangerous goods, chemical and produce;
- the development of health and safety work procedures;
- the training of staff and employees both on-the-job and at educational institutions on courses such as Chemical Users Course and the use of Industrial Equipment;
- an onthe person qualified to First Aid Level 2;
- signs indicating the policies and procedures applying to the farm;
- consultation with contractors and employees regarding safety issues; and
- maintenance of records and information available to employees.

I know that the Authority would welcome any contribution you could make to farm safety activities being conducted in Western Victoria and I will arrange for Ms Heather Baker-Goldsmith, Group Manager Western, to contact you to discuss this matter further.

Meanwhile I have recommended that the systematic approach you have adopted towards health and safety being an integral part of your farm management plan be included as a candidate for the 1998 Victorian WorkCover’s Health and Safety Awards in the Agriculture category. WorkCover will contact you soon to discuss this with you.
Finally, congratulations on a job well done. I trust that your excellent work will continue and that your example will lead to many other farmers adopting a similar approach to managing health and safety on their farms. I have no doubt this would result in a reduction of the terrible number of farm accidents, injuries and fatalities occurring in Victoria.

Yours sincerely

ROGER M HALLAM, MLC
Minister for Finance
Minister for Gaming
Posthumous award for injury researcher

Richard Franklin*

Eric Young
Died 2 August 2003

The National Injury Conference held in Mackay in September 2004 provided the Australian Injury Prevention Network with an opportunity to acknowledge the contribution made by Eric Young to the field of injury prevention. The AIPN posthumously awarded Eric an Extraordinary Award for Sustained Achievement. Eric was nominated for the award by Lesley Day of the Monash University Accident Research Centre.

Eric Young had a diverse professional life devoted to public service. After spending seven years in Government Administration in Papua New Guinea, he returned to Australia and took up a number of roles in health management before being appointed as the Industrial Liaison Officer with the Melbourne Metropolitan Board of Works. In 1985, Eric was seconded to the then Department of Employment and Industrial Relations for a one year assignment, and was subsequently appointed to a substantive role in 1986. Eric remained with the Department’s successor organisations, including ultimately the Victorian WorkCover Authority (VWA) in a range of senior and strategic roles, until his death.

In 1998, Eric took on the brief of rural safety within the VWA. This area had become a passion for him and he worked tirelessly to make a difference to the toll of death and injury in the agricultural sector. He brought his substantial people skills and community networks to bear on the issue and was able to effect real change in community attitudes and farm safety practice.

Among his many contributions in this sector, Eric’s role in the reduction of tractor roll-over related deaths in Victoria is particularly noteworthy. In 1997/98, the VWA and the Victorian Farmers Federation (VFF) implemented a tractor roll-over protection rebate program, prior to the introduction of new regulations which requires roll-over protection on virtually all tractors. Although many people contributed to the development of this program, it would not have happened without Eric’s stewardship. His significant communication skills nurtured an excellent working relationship between the VWA and the VFF to the point where there was acceptance of the need for a change in regulation. During this period, Eric had to keep the commitment to the rebate program and regulatory change alive in the VWA, to the detriment of his public profile. However, when the rebate program was finally legislated, it was estimated that about 2 lives per year would be saved for at least 10 years as a direct result of the 12,129 tractors which were retrofitted during the program. The trends since the end of the program have confirmed this estimate. Inspired by the Victorian experience, other States in Australia are now implementing similar programs, and the Victorian model has also drawn attention from the United States, where tractor roll-over deaths remain a significant issue in the agricultural sector. Eric always made himself available to other jurisdictions interested in the Victorian program, including visiting the US and making presentations at key institutions.

Eric had a broad view of safety and made contributions beyond the traditional bounds of workplace safety in which he was employed. In the mid 1990s, Victoria developed an injury prevention strategy. The process of development drew together many government departments and authorities, as well as non-governmental organisations. This developed a spirit of cooperation between the different key stakeholders across the whole field of safety. Eric was prominent in this cooperative effort.

Eric also played a role in developing Community Safety Week, which has now developed into Community Safety Month. He was an active participant in SafeComm 5, the World Health Organisation’s Fifth International Conference on Safe Communities, held in Victoria in 1999. Eric helped shape community safety programs in the workplace, providing support and encouragement to programs in Hume and Latrobe cities.

Eric was a courageous and tenacious contributor who was always optimistic about what could be achieved and unfailing in his commitment to make a difference. The Award was made in recognition of his important contributions to injury prevention at local, state, national and international levels. Eric’s unrivalled communication and networking skills, and his natural collaborative style provided unique opportunities to bring together key players in agricultural safety. He willingly gave support and guidance to many colleagues, and had great respect for people’s abilities. His contributions extended well beyond his role in the VWA, extending to injury prevention activities outside the workplace and a contribution to the development of the injury prevention field.

*The author acknowledges that the material for this article was partly drawn from documents and letters written by Greg Tweedly, CEO, VWA, and Michael Bourne, Chairperson, Victorian Safe Communities Network.
Mr Michael Blake
Michael John Blake
Bally Giun Park
Hamilton Vic 3300

Dear Mr Blake

Congratulations on your recent entry to the Victorian Workcover Awards, which earned you recognition as a valuable contributor in providing ideas to improve OHS performance in the workplace.

ACCI, the peak employer body, is working closely with the Victoria Workcover Authority and the commission (NOHSC) to ensure that ideas like yours are not lost to the OHS community.

ACCI is assisting in the development of the National OHS Solutions Database, which already has 400 simple practical solutions available to employers and others and aims to have 2000 solutions on the database in the next 12 months.

We would like your permission to access your idea for input onto the database.

We will, if you agree, convert your idea into the website format, clear the entry with you then submit for inclusion on the database. All you have to do is complete the attached back form and we will do the rest.

You would gain recognition on the national Database for your contribution.

The database launched by Minister Reith on April 7 is "live" and if you would like to see how the ideas are presented you can call up the NOHSC Website at:


If you would like to be involved and gain recognition on the Nation Database please complete the attached back form or contact me at ACCI on:

Phone: (03) 9289 5286
Fax: (03) 9289 5250
EMAIL: dshaw@melb.acci.asn.au

Yours Sincerely

David Shaw
OHS ADVISOR

Level 4, 55 Exhibition Street, Melbourne VIC 3000 • PO Box 18008 Collins Street East, Melbourne VIC 8003 Australia
Phone: (03) 9289 5289 • Facsimile: 61-3-9289 5250 • Email: melb@acci.asn.au

LEADING AUSTRALIAN BUSINESS
PROOF

PARLIAMENT OF VICTORIA

LEGISLATIVE ASSEMBLY
DAILY HANSARD

Tuesday, 30 May 2000

SUGGESTED CORRECTIONS FOR THE FINAL EDITION MUST BE NOTIFIED TO THE SENIOR SUBEDITOR BY 12 NOON — THURSDAY, 1 JUNE 2000


By authority of the Victorian Government Printer
Rural Victoria: farm accidents

Mr DELAHUNTY (Wimmera) — On behalf of farmers and farming communities I ask the Minister for Workcover to investigate programs, initiatives and support services that might reduce the incidence of farm accidents. Last year, based on Workcover figures, there were 15 deaths on Victorian farms and 4 of them were of children.

However, Workcover claims do not provide a complete picture because many farmers are self-employed. Better figures have come from the work done by the Murray Plains division of general practitioners. Their area stretches from Swan Hill to Dimboola and Echuca to just north of Bendigo. There are 57 general practitioners and 13 hospitals in the region. Details have been recorded for the past two years of every farm injury and illness suffered by patients.

When the figures for the region are extrapolated across all Victorian farms it can be estimated there are about 7500 farm injuries each year in Victoria. The Murray Plains figures show that 17.5 per cent of all farm injuries are to people under 20 years of age, 35 per cent of injuries are cuts and lacerations, 30 per cent of injuries are to arms, hands and fingers, and 10 per cent of injuries are to the eyes. The biggest causes of death and injury on the farm are machinery and motorbike accidents.

Farming should not be dangerous. Other industries such as mining have higher levels of risk, but their safety performance is far better than is the case with farming.

I recently attended the dinners in Melbourne at which the Minister for Workcover presented awards to individuals and companies for their contributions to workplace health and safety. Hamilton farmer Michael Blake received an award for a business with 30 or fewer employees. Mr Blake has integrated safety principles into his various quality assurance and husbandry programs at his farm, Bally Glanin Park, where the policy is ‘work safe, stay safe, make it safe’. Mr Blake’s commitment demonstrates it is possible for the farming industry to put in place a comprehensive health and safety management program as other more structured industries do.

The previous government provided various prevention and support services such as a regional safety program, displays of machinery at rural shows and the Farm Safety Alliance — a joint program involving Workcover, the Victorian Farmers Federation and the government. Another initiative to reduce farm accidents was making subsidies available for farmers to take part in the ROPS program — a tractor rollover protection scheme.

Will the minister continue the good work of the previous government, Workcover and the farming community in reducing farm accidents and deaths?

Local government: restructure

Mr LONEY (Geelong North) — I raise a matter for the attention of the Minister for Local Government and refer him to an article in today’s Age titled ‘Kennett city council “cure” failed’. The article quotes the chief executive officer of the City of Melbourne saying that the new system does not work:

“The Kennett government’s restructuring of Melbourne City Council has failed to produce its promised, new strategic focus, the city’s chief executive Michael Malouf said yesterday.”

In a short admission, Mr Malouf said the council had not made the system of regional ward and city-wide councillors work well enough.

The article states further:

‘Under the mixed electoral system, where some councils represent local wards and others represent the entire municipality, there was confusion and a seemingly unequal workload. We have not made this system work as well as we would like. It has no focus, generally speaking, a more monotonous, city-wide focus,’ Mr Malouf said. His thoughts have been echoed by a number of people in the City of Greater Geelong, where Mr Malouf was the chief executive officer before taking up his appointment in Melbourne. Indeed the current chief executive officer of the City of Greater Geelong recently made statements supporting a review of the Geelong council structure and saying that in his view the council should be expanded to more than 20 councillors to get the workload out.

Great support exists in the Geelong community for change, with many organisations supporting a return to broad-based councillors and the only support now existing in Geelong for the mixed system is from reactionary and local government Luddites.

I ask the minister to clarify for the people of Geelong how a restructure might occur in Geelong, what is the timetable, and how we can go about allowing the community back into local government decision making in the city of Geelong and, given Mr Malouf’s remarks, the city of Melbourne. I ask the minister to address the issue as a matter of ——

Opposition members interjecting.
A FIERCE desire to ensure his property is a safe workplace has earned a western Victorian the first ever Workcover award for systems management on farm.

Michael Blake and wife Cathy farm the 1500-hectare Bally Glenn Park at Hamilton and are among the leading proponents of holistic monitoring for activities taking place on the property.

According to Blake, all farm activities are interrelated in some way so monitoring and management for one complements the others.

Record keeping has been part of the dairy on Bally Glenn Park with Blake’s father and grandfather’s records still in existence. The catalyst for taking record keeping a step further into more structured monitoring programs occurred when Blake took over management after his father died. After an accident involving one of the farm staff, he found the workers compensation policy taken out by his father was no longer valid.

"If I died, how would my family know what to do, handling all the different aspects of the farm business which I organise. The development of documented programs helps overcome that threat," he says.

Since that incident Blake has put in place 14 documented monitoring programs covering all aspects of the farm business, ranging from drought proofing through to workplace safety. Nothing is left to chance.

The whole farm safety system has received special attention over the last three years because it has been singled out by Victoria’s Workcover Authority, and Victorian Farmers Federation, as an outstanding example of what can be done. It subsequently won a range of awards culminating in the Victorian Workcover award 2000 for systems management in an enterprise of 30 or less employees.

Blake was approached by Workcover to develop a Safety Management Achievement Program (MAAP) for farms. He says, however, its idea of incorporating safety in programs such as Fleckcare and Cattlecare while initially appealing became impractical when Workcover auditing was outsourced. Safety MAAPs are ISO 9000 accredited and require professional auditors who charge upwards of $5000 per audit. Such auditing would crush any hope of a safety MAAP being adopted on farm.

He says his safety system will continue to evolve over time. But so far the benefits achieved are:

- Safer physical structures, such as silos, yards, shearing shed, electrical safety switches;
- Machinery adaptations which provide safer working operation, such as steps on tractors.
SPECIAL REPORT: FARM SAFETY

Safety on Bally Glunin Park

CHANGES IN WORK PRACTICES
- All staff are trained with accredited Farm Chemical Courses.
- All staff are instructed on use of all equipment.
- Instructions are logged in appropriate manuals.
- Hazard identification before work program begins.
- Personal protection and safety equipment provided and worn, that is: Gloves - Light, disposable, single-use, for various use (marking, lambing, shears). Rubber gloves for wet use.
- Long-sleeve, rubber gloves for chemical use.
- Light, rigger gloves for general purpose use.
- Heavy-duty for heavy manual and handling sharp materials.
- Changes in work practices; and
- Changes in buying procedures.

Changes in working culture; an awareness of safety and an interest in accessing and eliminating dangerous situations by all staff. Near miss accidents are used as learning experiences and opportunities to remove risks,” Blairs says.

AAA-Farm Innovation Program

INNOVATION – THE KEY TO SUCCESS

CALL FOR GRANT APPLICATIONS
The Commonwealth Government's Aid – Farm Innovation Program opened on 1 August 1995. The two-year pilot program is part of the Federal Government's Agriculture - Advancing Australia (AAA) package and was introduced in May 1994. The program is delivered under the Farm Innovation - The Key to Success initiative and is delivered by the Commonwealth Department of Agriculture, Fisheries and Forestry - AAA (AFFA).

The AAA - Farm Innovation Program provides grants to eligible farming, food, horticulture and forestry businesses to adopt innovation practices, processes and products. Individual businesses or groups of businesses in these industries are invited to submit project proposals for funding under round 1.

Applicants need to be registered businesses with annual turnover in the range of $50,000 to $2 million in any of the previous 3 years and be willing to work with AFFA to profile their project throughout the program. Successful projects may receive funding of up to 30% of eligible project costs. There are no minimum or maximum funding levels under the program.

Three further funding rounds are planned at this stage:
Round 2 (closing: 28 Feb 2001)
Round 3 (closing: 29 June 2001)
Round 4 (closing: 31 Oct 2001)

To find out more, or to receive the application form or program guidelines, phone AFFA staff on (08) 8666 175 or visit the ‘Add – Farm Innovation Program’ website: http://www.affa.gov.au/farminnovation

Australian Farm Journal, January 2001
Risk Assessment Process

Decide who will carry out the assessment

You can delegate the job of doing a risk assessment but remember the responsibility for the assessment and the accuracy of the assessment is on the employer.

The risk assessment should be based on what actually happens or what might happen when chemicals are used on your farm.

Identify all chemical and hazardous substances

Keep a record of chemicals and hazardous substances stored on your farm and a register of their use.

Check the label and MSDS to find out if a substance is hazardous. If you are still not sure, ask the supplier.

Collect and review information about the chemicals

Read the MSDSs and chemical labels to get information about the health hazards, ways in which exposure can occur, precautions and safe handling details.

Consider the most likely situations where exposure may occur.

Assess exposure by examining your work systems and conditions.

Assess procurement procedures and systems for handling chemicals. Assess the effectiveness of existing control measures used to reduce the risk of exposure.

Make sure to consult with all workers to assess who may be at risk and estimate the level of exposure.

Check that safe practice are consistent with label instructions.

Assess the risk and decide what action is needed

You need to consider:

- the nature and magnitude of the risk
- the amount of exposure of persons in the workplace
- whether existing control measures adequately control exposure.
SIGNIFICANT INCIDENT SUMMARY - WORKER INJURED IN UNGUARDED WOOL PRESS

10/2005

A young shearing shed hand suffered severe injuries to his arms while operating a wool press.

The rouseabout was holding wool in the press with the compression ram in the downward motion.

The wool press was not fitted with an emergency stop system.

As a result, the rouseabout’s forearms were trapped in the press, causing him to suffer fractures to both arms.

FACTORS TO CONSIDER

- The wool press was not fitted with an interlocking door mechanism, emergency stop or trip bar.
- There was no system of work for the safe operation of plant.
- Operators had not been provided with sufficient training on the safe operation of the wool press.

RECOMMENDATIONS

1. All wool presses must be fitted with:
   - An interlocking door mechanism which stops the press if the doors are not fully closed; or
Wool Press Closed

- A readily accessible trip bar to stop the operation of the press if the bar is "tripped", or

Safety Trip Bar
FURTHER INFORMATION

Further information is contained in Safety and Health in Shearing, A Guideline for Industry.

Date: March 2005

Copies of this publication may be freely printed and distributed provided that the Department of Consumer and Employment Protection receives appropriate acknowledgement and that no substantial changes are made to the text.

Disclaimer

6yo ‘competent rider’ — inquest told

BIRKENHEAD — A six-year-old Tasmanian boy killed in a farm accident was an experienced motorcycle rider despite his tender years, a coronial inquest was told on Monday.

Joe Jones was killed when the all-terrain vehicle (ATV) he was operating overturned at Yolla, near Binalong, in the state’s north-east, yesterday and pinned him across the upper thigh and neck on November 27 last year.

Mr Jones’ great uncle Graeme Jenkins pressed an inquest into the boy’s death as part of an inquiry which is now investigating another six ATV-related deaths in Victoria.

It will also examine the death of a 73-year-old southern Tasmanian man in an ATV accident last year.

Giving evidence on Monday, Joe’s father Kay Jones said he hoped the inquest would help improve safety standards on the popular four-wheel farm vehicles.

‘I don’t believe our son would — that this doesn’t happen to another family because we know that little boy like you wouldn’t believe,’ Mr Jones said.

His grandfather Lance Jones, who was first on the scene of the accident, told the inquest he believed Joe was heading home after a day shifting cane from paddocks when the ATV hit a protruding rock and overturned on its side.

Joe was not wearing a helmet or protective gear at the time of the accident.

We said the boy was loved to work on the family’s 100-hectare irrigated property and rode the ATV “pretty much daily”.

Mr Jones said he began teaching Joe to ride a small Suzuki LT50 two-wheel motorcycle when the boy was about two-years-old. “He was so keen to be able to ride a motorcycle because he loved it. His mum and his brother did,” Mr Jones said.

Mr Jones said Joe was a very confident operator when he progressed to riding an ATV about 15 months before the accident. He said:

Under some circumstances. Mr Jones — a motorcycle mechanic — was told by his friend about a meeting in the operating room that children under the age of 14 should not operate an ATV.

He said he was aware of the recently incidence, but had never considered how riding with Joe on both two and four-wheel bikes and scooter was so very competent.

Mr Jones said his friend was a “very competent” operator when he progressed to riding an ATV about 15 months before the accident.

The inquest was continuing.
Child Safety on Farms Checklist

Make the farm safe for kids this summer. Better get on to that now!

Horses
- Are children only allowed to ride horses suited to their age and riding ability?
- Are children appropriately instructed and supervised on your farm when learning to ride horses?
- Do children on the farm always wear well-fitting riding helmets and smooth-toed riding boots when riding horses?

Tractors and Machinery
- Does your farm prevent children from riding as passengers on tractors and mobile farm plant?
- Are children encouraged to keep away from tractors and farm machinery on your farm?

‘Tractors, farm machinery and children do not mix’

Farm Vehicles
- Do children always use seatbelts and proper restraints and never ride in the back of utilities?
- Are drivers careful when moving vehicles near the house in case children are present?

‘Watch out – children about’
- Are keys kept out of reach of children when vehicles are not in use?

Other hazards
- Have other hazards (e.g., firearms, chemicals, electrical, noise, oil) that children could access on your farm, been identified and addressed?

Copies of this checklist can be downloaded from FarmSafe Australia’s website at www.farmsafe.org.au. The website also contains more information on these risks and their control. Please note that the checklist is not a substitute for a comprehensive ‘on-farm’ safety inspection and occupational health and safety management program. More information on this and ‘Managing Farm Safety’ courses for farm owners and managers is available from FarmSafe Australia and your State Farm Safety Organisation.

For more information about managing farm safety risk contact your State Farm Safety Organisation:

FarmSafe Australia
Tel. 1800 4792 4433
Fax. 1800 4792 4433

FarmSafe NSW
Tel. 1800 4792 4433
Fax. 1800 4792 4433

FarmSafe Queensland
Tel. 1800 4792 4433
Fax. 1800 4792 4433

FarmSafe Victoria
Tel. 1800 4792 4433
Fax. 1800 4792 4433

FarmSafe South Australia
Tel. 1800 4792 4433
Fax. 1800 4792 4433

FarmSafe Western Australia
Tel. 1800 4792 4433
Fax. 1800 4792 4433

FarmSafe Tasmania
Tel. 1800 4792 4433
Fax. 1800 4792 4433
Child Safety on Farms Checklist

Make the farm safe for kids this summer. Better get on to that now!

Farms can be wonderful places for children, where independence and responsibility is fostered, where family relationships are strengthened, and where children are exposed to unique experiences. However, farms are both a home and a workplace, and children may be placed at great risk when playing or helping out around the farm.

Every year, about 30 children die on Australian farms. Many more children are injured seriously enough in farm-related incidents to require hospitalisation. The greatest risk for toddlers (0-4 yrs) is drowning—most commonly in dams— but rivers, pools, troughts, and ditches are also drowning hazards. For older children (5-16 yrs) working farm machinery, farm vehicles, motorcycles and horses are the biggest risks.

Complete the checklist to determine how well you are managing these child safety risks on your farm.

A Safe Place to Play

☐ Is there a safe play area (e.g., a fenced house yard) for small children which is securely separated from farm machinery, vehicles, work activities and other hazards?

☐ Does the safe play area have shade and interesting things for children to do?

☐ Are there 'out-of-bounds' rules for children who are not with a supervising adult, which are regularly enforced?

☐ Do 'out-of-bounds' areas include all hazardous places (e.g., water storages, farm machinery and vehicles, silos, workshop and areas where stock are penned)?

Water

☐ Are swimming pools, effluent ponds, channels or dams near the house securely fenced?

☐ Are tanks, wells and troughs near the house fitted with lids/mesh and are unused ditches filled in?

☐ Have those who look after children been alerted to keep watch when children are around or could wander off into water?

☐ Do you know how to resuscitate a drowning child?

Farm Motorcycles

☐ Are children appropriately trained and supervised when learning to ride two-wheeled motorbikes?

☐ Do all riders always wear a correctly fitted motorcycle helmet, long pants, and sturdy footwear when riding farm motorbikes?

Does the farm adopt manufacturers' recommendations and:

☐ Prevent children under 16 from riding quadrunners (ATVs)?

☐ Prevent passengers riding on quadrunners (ATVs)?
Child laws pass quietly

By PETER HURST

The Government's stand firm on the Child Protection Bill, which is expected to be passed into law by the end of the parliamentary session.

The Bill, which is designed to protect children from abuse, includes provisions for the appointment of child protection officers and the establishment of a national system for the reporting of child abuse. It also includes measures to enhance the powers of the courts to deal with cases of abuse and neglect.

The Bill has been the subject of intense debate in Parliament, with some opposition members expressing concerns about the potential for it to be used to target children from certain cultural backgrounds.

What the Bill says

What is child neglect?
The Child Protection Bill defines child neglect as "any act or failure to act that results in or is likely to result in the harm or the need for care or protection of a child." The Bill also includes provisions for the protection of children from sexual abuse and exploitation.

What can be done about neglect?
The Bill provides for a range of measures to address child neglect, including the appointment of child protection officers and the establishment of a national system for the reporting of child abuse.

What are the penalties for neglect?
The Bill includes provisions for the imposition of fines and other penalties for neglect, as well as for the removal of children from their homes in cases of severe neglect.

The Bill has been welcomed by child protection organizations and by many MPs, who have praised its provisions for the protection of children.

However, some opposition members have expressed concerns about the potential for the Bill to be used to target children from certain cultural backgrounds.

"I have been receiving a lot of support from my constituents," said one MP. "They are concerned about the potential for the Bill to be used to target children from certain cultural backgrounds."

"I think we need to be careful," said another MP. "We need to make sure that the Bill is fair and just, and that it is applied to all children, regardless of their background."
The Victorian Farm Safety Centre in conjunction with Bally Glunin Park will be conducting a

Farm Safety Update
A Practical Workshop

Date: Friday 23rd September
Time: 9.00am to 3.30pm
Location: Bally Glunin Park, Hamilton (Shearing Shed)
(Shearing Shed) (See Map over page, follow Farm Safety Signs)
No Cost: Lunch provided
Opening by: Mr John Lenders MP
Minister for WorkCover

Topics Include:
- Front End Loader, Safe Operation
- Phillips Farm Machinery Hamilton - New Holland
  - Shearing Shed Safety
  - ATV Safe Operation
  - Farm Chemical Storage and Use
  - Working from Heights (silos etc)
  - Fire Extinguisher Selection and Use - Chubb
  - Machinery Alterations to Improve Safety
  - Accident Insurance Update

Practical demonstrations and up-to-date information to improve safety on the farm for family, employees, visitors and contractors.

RSVP for catering purposes: 19 September 2005
Victorian Farm Safety Centre - University of Ballarat on 53343512
Enquiries: Andrew Sullivan
Victorian Farm Safety Centre (University of Ballarat) on 0419 874636
Mr Michael Blake  
Chair  
Victorian Farm Safety Centre  
Bally Glanin Park  
Mt Bannbridge Road  
HAMILTON VIC 3300

- 3 OCT

Dear Mr Blake

I write to thank you for inviting me to participate in the Farm Safety Forum on 23 September 2005.

I commend you for organising an event which was addressing the key issue of improving safety of the farm for employers, employees, contractors and families.

I wish all parties involved in the forum well in developing initiatives that will assist the farming community in Victoria.

Your and Cathy’s hospitality and enthusiasm made it an even more memorable day.

Yours sincerely

JOHN LENDERS MP  
Minister for WorkCover
2 days trapped in tank

By Dyan O'Shaughnessy

A PENSHURST man has had a lucky escape after being trapped inside a water tank for nearly two days.

John McInerney, 79, had just the companionship of water in the tank to keep him company.

But he says he wasn't really worried as he was about a quarter of the way down the tank and he could see daylight and feel the wind on his face, and it was comforting to know he would be found in time.

Although one of the two days was quite hot, he said he didn't feel too bad and was able to get some sleep in the bottom of the tank.

However, the tank's oxygen level has been upregulated by Workcover and it's likely that the man's body will be removed from the tank to make sure the tank is safe for future use.

McInerney's neighbour, who is also a former firefighter, said that the man's decision to go inside the tank was a good one.

While it was hot, he said, it was also dry and he had to be careful not to inhale any of the dust. He said the man was very brave and was able to remain calm throughout the ordeal.

McInerney was trapped in the tank for two days, and he said he was just able to survive thanks to his good fortune and the quick thinking of his neighbour.

The neighbour said that he had helped him to climb down the ladder and to get out of the tank.

McInerney's neighbour said that he was just happy to be able to help.

There was nothing he could do to save the man, he said, but he was able to help him get out of the tank and to safety.

A tank was filled with water and a man was put inside it, and he was just able to get out thanks to the quick thinking of his neighbour.

There was a lot of water in the tank, he said, and it was just able to keep the man alive until he was able to get out.
APPENDIX 20

An Annotated Bibliography which outlines recent research and development in relation to safety issues surrounding the use of ATVs

PREAMBLE:

After nearly fifteen years of research and developing farm safety procedures, I have found that the use of relevant and legitimate data has become essential for providing useful and acceptable advice to farmers and other ATV users. The legitimacy of data in Australia comes from sources such as:

- Coroners’ reports
- Workcover Authorities’ data collection
- Workers’ Compensation claims
- Insurance Agencies’ claims
- Hospital Emergency admissions
- Long term research (including national demographics)
- Short term research (Funding for research projects)
- Media Researchers and Reporters

Similar organisations collect data internationally. The information is collected under an international code known as the International Classification of Diseases. It is this classification system that creates difficulty in accessing and analysing data. For example, in the USA, The Consumer Product Safety Commission Washington, DC 20207 Annual Report of All-Terrain Vehicle (ATV)-Related Deaths and Injuries 2005, identifies the difficulty in gathering relevant statistical data.

Deaths Reported to the Commission

On December 31, 2005, the Commission had reports of 7,188 ATV-related deaths that had occurred since 1982. The number of new reports increased by 694 since the December 31 2004 tabulation reported by Commission staff in September 2005. The new reports include deaths occurring over the period 1999 to 2005 inclusive. Data collection for 2002 through 2005 is ongoing. Consequently, the numbers of reported deaths for 2002 through 2005 are expected to rise before the next annual report.

Values above 1999 reflect a revised classification system from the one used prior to 1999. Specifically, the line marks the switch from data collection under the Ninth Revision of the International Classification of Diseases (ICD-9) to collection under the Tenth Revision (ICD-10), a transition that occurred worldwide in January 1999. Any comparison of numbers above and below the line should be undertaken with caution.

There is also difficulty in comparing Australian data on ATV deaths and injuries where, in some cases, the ATV statistics were combined with 2 and 3 wheel motorcycles statistics and in the USA 2, 3, 4 and unknown number of wheels were combined.
The Parliament of Victoria’s Parliamentary Inquiry by the Rural and Regional Services and Development Committee into: “The Cause of Fatality and Injury on Victorian Farms 2005”, also stated they had difficulty collecting and interpreting data. The Inquiry noted that there were limitations to the data; including:

While the Committee has endeavoured to conduct a thorough investigation into the causes of injury and fatality on Victorian farms, in some cases there is insufficient data and research to establish with certainty the causes of injury and death on farms.

Nevertheless, the recommendation of my examiners was to present a more in depth analysis of my research undertaken in relation to ATVs and farm safety. Where previously I had only used the most creditable information, in this annotated bibliography I will review a wide range of material that I have collected for this research. The areas of research were:

- Helmets
- Training
- Research
- Data collection and analysis.

ANNOTATED BIBLIOGRAPHY


Tim Andrew from the Kondinin Group, a research organisation similar to Choice magazine but specialising in all agricultural fields, did a research project on ATVs. The report is a 39 page document that accesses the performance of sixteen ATVs from five manufacturers. I read this document as a follow up from my field day (23rd September 2005) and found it to be a very thorough and detailed piece of work. One area of particular importance to my research was their test for noise of the machines.

At 30 kilometres per hour fourteen of the sixteen models exceeded the 85 decibels (dB) hearing damage threshold and all models exceeded 100 dB with the throttle fully opened. This data identifies conflict when suggesting the wearing of a modified cut-a-way helmet that exposes the ears. This is a very worthwhile and informative report.


This report is specific to Victorian farms, detailing deaths and injuries between 1992 and 2002. My involvement with this research was as a participant in responding to data collection, particularly regarding farm injuries and hospital admissions. In Chapter 5 I refer to this contribution of farm data and the comparisons that were made. Some of this data included ATV usage and operations. The report also identified prevention priority areas based on numbers and trends and highlighting “continued attention to tractor and ATV related fatal injury’s for adults”. The report indicated that there were a cluster of ATV related fatalities in 2002 but has not categorised the causes.
In Chapter 9 under “Impediments to implementing Farm Safety”, I identified insufficient or poor training as one of those impediments to improving farm safety, including ATV training. I looked at the ATV rider training package from the Australian Centre for Agricultural Health and Safety:

- As an on farm induction program;
- As a TAFE Agricultural apprentice training program; and
- As a RTO (Registered Training Organisation).

The ATV rider training package covered all of the learning outcomes, has an assessment criteria, a performance criteria, and an assessment method based on worksheets and practical task assessment. This document is extremely useful in providing information to inform participants in all of the three key training delivery methods as identified above, in ATV operation, maintenance and safety.

Brent, Walth (May 13, 2007) Feds let ATVs off with a warning; The Oregonian

This is a story about the researcher Roy Deppa who was an engineer for 25 years with the US Consumer Product Safety Commission (CPSC) until he retired in 2005. This story indicates the frustration of research, when recommendations for solutions for reducing deaths and injuries from ATV riding appear to hit brick walls. The article quotes CPSC data including estimated usage of over 7 million ATVs in the USA with annual sales at 900,000 units mostly for recreational use. In Australia it is estimated by the Federal Chamber of Automotive Industries (FCAI) that 16,000 units are sold annually, mostly for use in the agricultural and horticultural industries. This data was important to my research particularly when trying to influence policy making on proper training. In Chapter 10, I identified where I was successful in changing Government Policy on training.

The article uses a few case studies of ATV deaths as well as research that Deppa did on tipping points. This is important information and needs to be included here because other research that I looked at gives a different perspective.

At the commission (CPSC), Deppa had helped develop a way to learn just how prone an ATV is to roll over. It involved measuring and weighing the machine to find its center of gravity and tipping points. Testers also put ATVs on a platform and tilted them to find the angle at which the uphill wheels lifted off.

The ATV industry accepted the commission’s method for measuring pitch stability – the tendency of the machine to flip forward or backward. But when it came to lateral – or side – stability, the companies fought.

They argued that a measurement taken when the machine was sitting still had little meaning. ATVs were “rider active”, the companies said, requiring users to shift their weight to the front, back and side to stay upright.

The research failed to consider the centrifugal force (O-> an object from the centre flying out) and the centripetal force (O <- an object wanting to move to the centre).
I have included that section here as the referencing about stability and rider activity is present in all the training material that I researched that is available in Australia.


The Canadian Safety Council is similar to the National Safety Council of Australia. It works in a wide range of safety areas as diverse as Traffic Safety, Child Safety, Home Safety, Senior’s Safety, OH&S and Sports and Active Living. My research was looking at similarities between Australia and Canada in farm safety issues and for this document ATV usage. ATVs in Canada are used in farming, forestry and natural resources exploration; all similar activities to Australia. Other areas are law enforcement and peacekeeping. (The Australian Army use ATVs in combat and peacekeeping). The biggest growth has been in adventure tourism, trail riding and camping. This is an area of use that Australia as yet has not entered. What was important to me was that under “Injury Alert” it said:

> With increased exposure has come a rise in injuries – most of them preventable. Speed, inexperience, improper apparel, non-use of helmets and alcohol are common factors. A US study found that only four per cent of the drivers involved in injury incidents reported having had any training.

The article included some important statistics from the Alberta Centre for Injury and Research where they examined 20 ATV related deaths that occurred in that province between July, 1999 and June 2002. Amongst its findings:

- Eighty-five per cent of the deceased were the drivers of the ATVs;
- Therefore fifteen per cent were passengers;
- At least sixty per cent of the fatalities were due to head injuries;
- Children and teens represented forty-five per cent of those killed, including two passengers and seven drivers. The deceased drivers were all from 10 to 15 years old;
- Alcohol was involved in forty five per cent of the deaths.

In Chapter 8, I highlighted the essential rules for using ATVs as recommended by the manufacturers. Passengers, alcohol use and children riding ATVs were all identified as dangerous activities that could lead to death or serious injury.

Another province of Canada, New Brunswick had the largest increase in ATV-related injuries (90%) in the 2000/2001 year. Under its Legislation the definition of an “all-terrain vehicle” includes dirt bikes, snowmobiles and amphibious machines. This piece of information again highlights the difficulty in analysing data. What was more important for my future work on ATV safety was that the task force established to review the injuries in their province, recommended that youths between the ages of 14 and 16 years be required to obtain an all-terrain vehicle learner’s permit, for which they must have parental permission. The learner’s permit should only be obtained under the following conditions:

- Must successfully complete a mandatory Canada Safety Council approved training course;
- Must be supervised at all times by a parent or legal guardian who has successfully completed a Canada Safety Council approved training course and has a valid driver’s licence; and
- The size of the all-terrain vehicle being operated cannot exceed the size recommended for their age by the manufacturer.
In Australia we have no such licensing for ATV riders.

As far as safety with ATVs the Canada Safety Council does say that, “ATVs are safe as long as riders have the appropriate type and size of vehicle, and follow the instructions in the user’s manual”.

Federal Chambers of Automotive Industries, (FCAI) You & Your ATV, Video

Representing ATV Manufacturers’ Honda, Kawasaki, Polaris, Suzuki and Yamaha this video is a very good training video incorporating ATVs from all manufacturers’ involved. It is available to purchasers of new ATVs. I obtained a copy for my research in 2004; my recent inquiries to FCAI indicate that the video is still available.

The video acknowledges that a mid range 300 – 500 cc ATV has a good power range for most jobs. That the ATV has definite limits for towing and carrying capacities. The owner’s manuals state both of these towing and carrying limits and they are clearly displayed on all machines, as well as the carry racks on the front and rear. The video strongly advises to read the owner manual before riding the ATV. The ATV is described as a rider active vehicle and no passengers should be carried on an ATV. All machines carry decals identifying this. The video also talks about rider safety, including “that all manufacturers strongly advise the wearing of a safety helmet and also specify the approved age of the rider”. One important point presented on this video was that ATVs are not designed for riding on smooth surfaces such as bitumen, concrete or hard gravel because of the function of the high flotation tyres.

Some of the data that I have reviewed for my research recorded that road surfaces were a major cause of some ATV deaths.


This is the most up to date data on ATV deaths and injury in Australia. As part of my early research I had looked at old data from the Centre to support what I believed about ATVs; “that using ATVs within the boundaries of the manufacturers’ recommendations, they were a safe, economical and versatile piece of plant”. From the current data presented in this report I believe this is still the case. Data such as:

- Approximately 10 deaths per year across Australia are ATV related
- Twenty six per cent of deaths between July 2001 and January 2007 were under16 years
- Speed was a factor in eleven per cent of the fatalities
- The use of alcohol or drugs was a factor in fourteen per cent of the fatalities
- Other factors contributing to deaths were crashes into fixed objects, overpowered ATVs for the operators, excessive or unmanaged loads and lack of or no maintenance on the machines.

The document also uses the very effective Hazard Hierarchy of Control to discuss ATV safety.

1. Eliminate the Hazard
2. Substitute for a lessor Hazard
3. Engineer solutions
4. Administrative Controls and Safe Practice
5. Personal Protective Equipment (PPE)

The report acknowledges that the collection of data has affected the accuracy of analysing data and in response has included an appendix detailing, “Data Requirements for ATV Deaths in Australia.” The full completion of this data sheet will make the accuracy of research on ATV deaths, in the future very valuable.

Google.COM

ATV.COM ATV-Helmet. (No date, no name of article writer, no title)

This article creates impressions that are strictly outside the manufacturers’ recommendations with its opening paragraph.

Depending on the state you live in, odds are a helmet is a required piece of equipment for all ATV riders and passengers.

All manufacturers’ recommend that passengers are not permitted on ATVs.

Information such as this discredits the article and is therefore of very limited value to ATV users and may actually undo work towards better farm safety, the essence of my research. The article goes on to describe what to look for in an ATV helmet, suggesting if possible to opt for an off road or motocross helmet over a standard motorcycle helmet. It does identify the certification requirement for manufacture but not the standard required. The standards have been developed based upon impact pressure at speed, and hard surface density. In Chapter 1, I identified the consequences of head injury from a bike fall and what that taught me; no helmet no riding.

A Google search for ATV information on the internet ATV.COM also showed general information on Bombardier, Honda, Kawasaki, Polaris, Suzuki and Yamaha. A more extensive search provided important information on ATV operation and safety. The Kawasaki site was chosen for reviewing this. The site gave a general description of an ATV but then went on to define the American Standard, a standard we use in Australia to also define an ATV.

The American National Standards Institute (ANSI) defines an All-Terrain Vehicle (ATV) as:

Any motorised off-highway vehicle 50 inches (1270mm) or less in overall width, with an unladen dry weight of 600lbs (275kg) or less, designed to travel on four low pressure tyres, having a seat designed to be straddled by the operator and handle bars for steering control, and intended for use by a single operator and no passengers. Width and weight shall be exclusive of accessories and optional equipment

The Kawasaki ATV site, fully describes the development of ATVs in general and specifically their own brand. Kawasaki acknowledges that the ATV is commonly called a four wheeler in Australia and are used extensively in Agriculture.

Two important issues were raised under “Safety Issues” that were important to my research and my current work on ATV safety. In Chapter 9 I indicated that “lack of resources” and “lack of thought for the consequences” were impediments to implementing farm safety.
Kawasaki explains that;

Since the expiration of the consent decrees between the major manufacturers and CPSC in April 1998, the manufacturers have entered into “voluntary action plans” that mimic the previously mandatory consent decrees. The action plans in place with CPSC cover only certain manufacturers of ATVs. Other manufacturers that have entered the market since the expiration of the consent decrees are not covered by the action plans and so are not bound by the rules governing things such as labelling and safe marketing practices, and what ages a distributor may recommend a particular sized ATV for. These manufacturers and distributors, most of whom originate from Asia and Italy, are completely exempt of government oversight.

As a consequence there are a number of ATV makes with reduced safety standards entering both the US and the Australian market. These bikes have a pricing structure well below those produced by manufacturers’ that abide by the voluntary action plan. It appears that gains on implementing safety with ATV operation will be inhibited by these inferior ATVs.

HART, ATV OWNER’S MANUAL SUPPLEMENT; Honda Australia Rider Training

In Chapter 10, I included a program of the “Farm Safety Update – A Practical Workshop” held on Bally Glunin Park on 23rd September 2005. One of the activities was a practical demonstration by Peter McDonald, (Honda Australia Roadcraft Training) on correct riding of ATVs and another was Tim Andrews, (Kondinin Group) who spoke of his research on ATV operations and safety. Support materials (ATV Owner’s Manual Supplement, Parents Youngsters and ATVs, Honda ATV Safe Ride Guide) were provided with each demonstration. These are very useful guides both as an accompaniment to the demonstrations and as stand alone information.

Each phase of the training is described under warning guides identifying the potential hazard, what can happen and how to avoid the hazard. Each phase has a graphic drawing indicating the consequence of the hazard.
Clockwise from top left, Peter McDonald demonstrating riding technique; Tim Andrews speaking about riding technique and his research on ATVs; Peter McDonald holding the two recommended helmets. In his right hand is the full Australian Standard helmet and in his left hand is the THH Shorty, a light weight cutaway style; Peter McDonald talking about ATV riding and safety.

Jafari, Samira (Friday June 1, 2007) ATV deaths on rise in Kentucky, State is No.1 in fatal wrecks, The Courier Journal Louisville, Kentucky.

This is a story in response to the release of the CPSC 2005 Annual Report. It quoted accurate data highlighted by the death of a 5 year old girl as a passenger with her mother when they crashed, neither were wearing helmets. What was important about this for my research?

In 2006 US Congress passed a law requiring ATV riders 16 and under to wear protective gear including a helmet.

The State Police Spokesman indicated that the deaths were related to “reckless operation of the ATVs themselves and people operating their ATVs beyond their capability”.

Livingston, Mike (January 9, 2007) Safety Experts Urge Parents to Keep Children Under 16 Off ATVs: Safe Kids Worldwide.

I receive information on farm safety from around the world. I received this warning release on January 15th 2007
Safe Kids Worldwide is a global organisation formed to protect children from accidental injuries and deaths. Their activities range from action on land mines to irresponsible parenting. They monitor causes of injury and death worldwide and they try to influence change by lobbying Governments. The Worldwide response was sent out after the death of a two year old boy when he crashed while riding an ATV.

The report incorporates data and policy from the US Consumer Product Safety Commission. (CPSC) Similarly the National Ag Safety Database USA uses data obtained from CPSC as does most research in the USA on ATV deaths and injuries.

Rural & Regional Services and Development Committee, The Cause of Fatality and Injury on Victorian Farms 2005 Parliament of Victoria's Parliamentary Inquiry

When I began this Masters in 2001 I indicated in Chapter 1, that besides my previous practical work on farm safety, there was very little other work of a similar nature being done, other than by small groups of researchers. This is still the case and my observations are well supported by the Parliament of Victoria’s Parliamentary Inquiry, by the Rural & Regional Services and Development Committee into, The Cause of Fatality and Injury on Victorian Farms 2005 where they state on page 6:

> While the Committee has endeavoured to conduct a thorough investigation into the causes of injury and fatality on Victorian farms, in some cases there is insufficient data and research to establish with certainty the causes of injury and death on farms.

They further suggest that:

> To date, most studies of farm injury and fatality have focused on acute, external and unintentional injury, and for this reason the Committee is best placed to make observations about the causes underlying this aspect of farm morbidity and mortality. Even within this somewhat narrower field of interest there is a lot that could still be done to improve knowledge, as most of the studies that have been done to date are short-term, or regionally focused (and so have limited potential for general observations), or have focused on issues that may not have a direct effect on factors that contribute to farm injury and fatality. (Note 11. Studies that describe people’s “knowledge of risk”, for example, may tell us how many people know they shouldn’t dismount a moving tractor, but they don’t tell us how many people actually do get off moving tractors.)

The number of researchers in Victoria working on farm safety issues is also small. The core groups are lead by such people as:

- Dr. Lesley Day: Senior Research Fellow, Monash University Accident Research Centre.
- Dr. Yossi Berger: Director National OH&S Unit, AWU.
- Associate Professor Daryl Pedler: Director Gippsland Regional Clinical School, Monash University.
- Dr. Stephen Cowley: VIOSH Ballarat University.

On a national basis the principal research is undertaken at Moree in NSW by, Associate Professor Lyn Fragar: Director Australian Centre for Agricultural Health & Safety.

The Inquiry received extensive submissions on a wide range of issues. It is important to point out that all of the researchers mentioned above made submissions to the Inquiry on ATV deaths and
injuries and presented data for review.

The Inquiry was also very specific when analysing data on ATVs.

8.24 Motorcycles and All Terrain Vehicles (ATVs) have been shown to feature prominently in a number of studies on farm injuries.

8.25 As noted in Chapter 3, it is often difficult to separate deaths and injuries associated with two-wheeled motorcycles from those associated with ATVs (principally four-wheeled) due to the methods currently employed in the collection of data.

8.27 The Committee heard a range of explanations, and possible solutions, for the high proportion of injuries and deaths that are associated with the use of motorcycles and ATVs. Some explanations focused on the inexperience of riders, others on the instability of the machines (most obviously in the case of motorcycles, but also ATVs), or the excessive speed employed in farming environments. Others highlighted the dangers associated with carrying passengers, the failure to use adequate protective measures, and loading vehicles with excessive or unbalanced loads. Solutions suggested by witnesses included better training for motorcycle and ATV users, the use of helmets, speed governors, legislative and regulatory means to discourage dangerous activities, and in the case of ATVs, the use of a roll over protective structure.

The Parliamentary Inquiry dealt with all of the above solutions and made a number of recommendations about ATVs and their usage. Some of these recommendations clearly support my own thoughts as outlined in Chapter 8, but more importantly they identify specifically what they wanted to happen as regards ATV operation and training.

Recommendation 9

That the State Government establish a program to encourage riders of ATVs and motorcycles to wear an appropriate helmet at all times and:

- That this program focus particularly on portraying of helmet use in both the mass media and in Government publications; and
- That the State Government seek to obtain a financial contribution from the ATV industry to support this program in the mass media.

Recommendation 10

That the State Government introduce an education program to demonstrate that:

- Children should not ride adult-sized ATVs; and
- Passengers should not be carried on ATVs; and
- Loading and attachments should not exceed manufacturer’s recommendations.

Recommendation 11

That the State Government ensure that safe use of ATVs and motorcycles is portrayed in all Government publications;
And

That the State Government work with industry and media stakeholders to develop a Code of Practice for the safe portrayal of ATV and motorcycle use, with specific attention paid to:

- Helmet use;
- Passengers;
- Loading and attachments; and
- Age-appropriate vehicles.

Recommendation 13

That the government provide complimentary vouchers for training course on the safe operation of ATVs and tractors upon purchase of new and second-hand ATVs and tractors, or upon the purchase of rural properties.

(Some of my research is on going and I believe that a further update relating to this research is important. There is no other place to include it other than here and it is relevant to the research on the Parliamentary Inquiry that I had already undertaken. The Victorian Workcover Authority had the responsible to respond to those recommendations. Part of that response has been to contract “The Victorian Farm Safety Centre” at Ballarat to develop Guides and a Training program for the operation and operators of ATVs. An ATV Reference Group incorporating all the major stakeholders has been established. I sit as the Chair of this Reference Group. Our work is Confidential to Reference Group Members only and should be released by August 2008).

The Accident Compensation Commission NZ. (ACC NZ) ATV helmets & How to manage and ride an ATV.

The ACC NZ released a bulletin on, “ATV helmets”:

Specially designed helmets aimed at reducing deaths and head injuries from ATV accidents are now available in New Zealand. The helmets are manufactured to Standards New Zealand specifications by Pacific Helmets (NZ) and Ferrentino Manufacturing. The Standard (NZS 8600:2200: All-Terrain Vehicle Helmet) was developed last year by a committee made up of a representative of each of the stake holders.

The ACC NZ released a bulletin on “How to manage and ride an ATV”.

This is a five page document similar to WorkSafe Victoria’s document “All-Terrain Vehicles (ATV) Farm Safety Series.

What was of particular interest to me for my research was that the NZ document specifically identified cornering techniques. Why is this important? Because Roy Deppa from the US CPSC when measuring pitch stability did not consider the centrifugal and the centripetal forces.

Cornering techniques

- Body position has an important influence on stability and handling of an ATV when cornering and riding on slopes.
• When an ATV is cornering, the inside rear wheel needs to travel a lesser distance than the outside rear wheel. However, many ATVs are not fitted with a differential at the rear axle; in these ATVs the wheels will always turn at the same speed so you need to be able to make the inside rear wheel slip when cornering.

Cornering at slower speeds; The problem

• At slower speeds centrifugal forces acting on the ATV will not shift enough weight from the inside to the outside wheels to allow slippage of the inside rear wheel. So, even though the front wheels have been turned the ATV will try to carry on in a straight line.

The answer

• At slower speeds the rider needs to move their bodyweight to the outside of the turn so that the inside rear wheel can slip and turn through the corner.

Cornering at higher speeds; The problem

• In a higher speed turn the centrifugal forces acting on the ATV automatically shift weight from the inside wheels to the outside wheels, allowing the inside wheel to slip.

The answer

• At higher speeds the rider needs to counteract the tendency for the ATV to tip over towards the outside of the turn by moving their bodyweight to the inside of the turn. Riders must be able to judge which of the two techniques should be used. This will depend on the speed during the turn and the individual characteristics of the ATV.

Why is this important to my research? In Chapter 9, I identified insufficient or poor training as a major impediment to implementing farm safety. Training is the only way to learn how to safely ride and work an ATV.


The report compiles data from all 52 states, but it also reports that not all of the deaths are reported to the Commission and therefore they have to develop a formula using a statistical estimation method. By using this formula they have produced an “Annual Estimate of ATV-Related Deaths and Risk of Death for Four Wheel ATVs”. For example under the year 2003 first column, this is the original data collected and recorded however the second column for the year 2003 is taken from the 2005 report as more data was collected on the deaths. This clearly shows that using specific data for one year can corrupt legitimate arguments when trying to agree or disagree on the risks associated with using ATVs.
<table>
<thead>
<tr>
<th>Year</th>
<th>2003</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reported deaths</td>
<td>569</td>
<td>636</td>
</tr>
<tr>
<td>Estimated deaths associated with ATVs with 3, 4 or unknown wheels</td>
<td>740</td>
<td></td>
</tr>
<tr>
<td>Estimated deaths involving 4 wheeled ATVs</td>
<td>703</td>
<td>721</td>
</tr>
<tr>
<td>Estimated 4 wheel ATVs in use (millions USA)</td>
<td>6.2</td>
<td></td>
</tr>
<tr>
<td>Estimated risk of death per 10,000 4 wheel ATVs in use</td>
<td>1.1</td>
<td>1.2</td>
</tr>
</tbody>
</table>

Unlike in Australia where usage is mostly in Agriculture and Horticulture, in American usage is mostly recreational. The only data that was similar was the per cent of children 0-15 years who died from ATV accidents.

In the year 2003, 25% of the deaths in the USA were 0-15 years and in Australia on average between 2000 and 2007 the average was 25% for 0-15 years.

The Parliament of Victoria’s Parliamentary Inquiry into The Cause of Fatality and Injury on Victorian Farms 2005 highlighted the accuracy of data:

> The Committee has noted in previous chapters that information surrounding the extent of and factors surrounding injury on Victorian farms is relatively out of date, or has been derived from databases that have not been specifically designed for the purpose of analysing farm-related injuries.

> While these criticisms are true of Victoria, they are also applicable to research on the extent of farm injuries in Australia and internationally.

Although the CPSC reports represent the best accumulated data on deaths and injury that I could find in the USA it was of little value in my research.

Workplace Standards Tasmania:(April 2005) WORK PLACE ISSUE No 36

This issue has an excellent article on ATVs and helmets. It discusses the difficulties associated with wearing a motorcycle helmet whilst riding an ATV, such as;

- Not being able to hear stock or co-workers;
- Hot and heavy;
- Narrow profile vision;

making them a reluctant choice for ATV riders.

It then goes on to describe a suitable replacement the THH Shorty, which is:

- A multipurpose helmet
- Is ideal for ATV users because it doesn’t restrict your side vision
- Nothing over the ears to interfere with hearing
- It is also light weight and
- Comfortable to wear
Importantly the helmet complies with AS. 1698-1988 Protective helmets for vehicle users. The Workplace Health and Safety Act 2004 says, “an employer has a duty of care to ensure that workers are adequately trained and wearing protective gear such as helmets.

Other sources that I looked at for my research were:

- Yamaha Ride Smart Ride Safe ATV rider training DVD, similar to the video. This is an excellent training DVD.
- The Victorian Farm Safety Centre Ballarat, Introduction to Farm Safety one day workshop. There is a good section on ATVs. A good first start.
- WorkSafe All Terrain Vehicles (ATVs) Farm Safety Series. A good little booklet but lets itself down with the photos. Under solutions for Hazards it recommends “Always wear an approved motorcycle helmet, strong over the ankles boots, gloves, eye protection and long sleeve shirt and pants”. All the photos show the operator wearing shorts.