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## CHAIRMANS REPORT

2006 will be a year that most of the nations farmers will be happy to forget. It is resulting in great hardship for many, including some of our scholars.

There is an emotional as well as financial toll in all this and I would urge that if anyone is in difficulty, or knows of any of our scholars that need help, please make contact and we will do what is possible to assist.

It is with sadness that we report the passing of 2 of our scholars during this year. Graham Joppich (1976) and Stan Dilkes (1959).



### Australian Innovative Farming Conference.

What is happening in the bush was not reflected in the mood of our National Conference just completed in Melbourne.

The usual positive and optimistic outlook that always pervades Nuffield events was there in force.

The Governor-General opened the conference and accompanied by Mrs Jeffery, later met the new scholars, and joined other conference participants over morning tea. There were a number of outstanding papers, with our returning scholars who presented their reports, giving great account of themselves and adding another level of quality and interest.

14 new scholars were introduced at the Presentation Lunch on the Friday of the conference – their details appear within this newsletter. This event is one of the highlights of our calendar, and certainly one of the most popular. The Naval and Military Club provided the venue, and we had an excellent attendance from sponsors and other guests.



**Front:** Max Jelbart, Cathy Harvey, Caroline Nixon, Peter Nixon, Major General Michael Jeffery, Mrs Marlena Jeffery, Matt Dempsey, Shaun Welsh, Damien Smart.

**Rear:** Bruce Thompson, Andrew Bouffler, John Gladigau, David Jochinke, Jack Milbank, Jamie Snell, Ronald Thompson, James Walker, Andrew Heinrich, Camilla Philip & Helen Dalton.

The Gala Dinner and tour of the MCG was very well attended, and the tour of the grand stadium attracting a lot of interest. Our thanks also to Kerry Richards (1997) for providing a most entertaining fashion parade of her woollen garments from Merino Country, with a few young Nuffields showing a modest level of modelling ability. Kristan Lefroy (husband of a Nuffield), Andrew Nagorcka, Tony Barker, and Vaughan Templeton (NZ). They were complimented by a few young ladies - with considerable more modelling talent.



Kristan Lefroy, Andrew Nagorcka, Tony Barker, and Vaughan Templeton (NZ) modelling Merino Country clothing.



Nuffield's on the MCG



Peter Rose (1965 Nuffield Scholar) who camped at the MCG during WWII when it was used as a training camp and barracks.



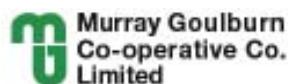
MCG

Apart from the presentation to the new scholars, we were delighted to have present, four of our pre 1960 scholars. Keith McLean (1958), Phil Young (1959), Hugh Brockway (1953) and David Asimus (1958). Much is owed to the pioneers of our scholarship scheme, and in honor of their presence, each was presented with a Nuffield shield to commemorate the occasion.



Our thanks to Bernadette Clark and her committee for putting together a great conference which has taken a lot of planning and input.

Thanks also go to our hosts during the Pre Conference tour, the outstanding panel of speakers and of course our Conference sponsors who share our goals, and whose contribution has made it all possible.



**New Board.**

The AGM was held on the 6th October and was well attended. Bernadette Clark did not re-nominate, and Steve Dilley retires from the Board at the end of his one year appointment. Our thanks to them both for their valued contributions.

Rob Henry nominated, and fills the position vacated by Bernadette, and Peter Treloar joins the board for a one year appointment. I re-nominated at the expiry of my 3 year term, and was elected unopposed. I am privileged to have been re-appointed Chairman for the next 12 months. Dave Brownhill was again elected Deputy Chairman.

Andrew Miller, who has given many valuable years of service to the Investment Committee, was made an Honorary Member, and we took the opportunity to make this presentation to him.

I believe this recent Conference and our Presentation Lunch, along with other events this year, have continued to raise the profile and credibility of our organisation as an important participant in the development of the next generation of young farmers. A professional and well-managed scholarship scheme can be a catalyst, and perform a crucial role in developing the talents of this generation. To remain internationally competitive it is essential for our farmers to adapt and lead the world in best practice. In a "city-centric" world we need farmers, with a world view, that can articulate the needs of our industry – particularly in an age where fads and emotion often dictate policy.

Nuffield can, and will, play an increasingly important role.

**Peter Nixon – National Chairman.**

**PRE CONFERENCE TOUR**

Sponsored by:



The pre conference tour encompassed an early morning tour of the Footscray wholesale fruit, vegetable and flower market, with some great presentations over breakfast by the Market Authority, Brendan Hopley from the Costa Group and Adrian Parsons from Wafex.



Then followed a visit to three very progressive operations on the Mornington Peninsula:



1. Paul Gazzola from Gazzola farms, an integrated vegetable production, packing and wholesale operation.



- Peter Wilkins from Tree Growers Advanced who supplies the “instant gratification” market with trees and shrubs 2-5 year old.



- Jelbart family, owners of “Caldermeade”, a large dairy that attracts tourists with a farm shop and varied children’s activities.



**THE AUSTRALIAN INNOVATIVE FARMING CONFERENCE**  
**Melbourne: 4<sup>th</sup> to 6<sup>th</sup> of October 2006**

The 2006 Australian Innovative Farming Conference was a success. With really great speakers around the Globalisation theme, we had an interesting discussion about the pros, but mostly constraints of “free trade”, as it stands, on Australian agriculture. Several case studies then highlighted how some sectors and businesses are prospering, and showed the determination and perseverance that goes into securing export markets in particular.



*Matt Dempsey – Key Note Speaker    Colin Teese    Stephen O'Rourke    Peter Mackie    Fran Freeman*

The Globalisation theme also attracted good media interest, as you may have already noticed in the various agriculture newspapers. The technology session showed how one of our scholars is using cutting edge precision ag technology to increase his productivity. Also 2 pro GM speakers stimulated debate over the effect on the competitiveness of various commodities, if Australian farmers had access to the GM technology which is already widely used world wide.



Trevor Stevenson

Lachie Hart

John Corboy

Tim Hunt

Lou Chimside

Jeff Bidstrup



After opening the conference, the Governor-General His Excellency Major General Michael Jeffery (who is the Patron of Nuffield in Australia) mingled with delegates during the morning tea break.



The Smart Family with the Governor-General

Tim Napier, Andrew Broad, Tracy Lefroy, Sarah Ackland, Andrew Nagorcka & Tony Barker

6 recently returned scholars gave really excellent presentations. Tracey Lefroy, who is one of those, then gave an outstanding summation at the close of the conference.

A lot of behind the scenes work goes into organising the detail of a conference that runs this smoothly, for which we have to thank Jim Geltch, Janette Lees, Sue Davies, Max Jelbart and Steve Dilley. Thanks guys! Further, we cannot run a conference of this caliber without the generous help of our conference sponsors. We also thank Richard Heath (2002) for his presentation and for being our official photographer during the conference.



Richard Heath

More detail from the conference, including speakers' PowerPoint presentations and executive summaries with photos of all the activities during the conference will be posted on the conference website soon. Follow the links from the Nuffield website.

Bernadette Clarke.

## INTRODUCING THE 2006 NUFFIELD SCHOLARS

### Ronald Thompson

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Ronald Thompson, from Chinchilla QLD, receives the 2006 scholarship supported by Grains Research and Development Corporation.

Ronald will study how we can use our diminishing workforce more effectively.

Ronald Thompson was presented his scholarship by Ross Johns, Deputy Chairman of GRDC.



Ronald has been farming at the current location with his wife Sally for 19 years. What started out as a basic wheat cattle enterprise has evolved over the years to a varied and diverse farm. Ronald and Sally have grown and irrigated watermelons, pumpkins, lucerne, cotton, sorghum, wheat and chickpeas during this time.

Their main activity is irrigated peanuts, supported by wheat and livestock. They are also in the process of planting leucaena for intensive cattle fattening under centre pivot irrigation. The irrigation water is recycled water from the local town and distributed through two low pressure centre pivots.

Bruce Thompson was presented his scholarship by Ross Johns, Deputy Chairman of GRDC.



### Bruce Thompson

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Bruce Thompson, from Temora NSW, received the 2006 scholarship supported by Grains Research and Development Corporation.

He will study Continuous Cropping Systems.

Bruce is a partner in a family farming business with his parents, brother and their partners.

They crop 4,000ha of their 5,000ha farming property, situated in a mixed farming area of winter cropping and stock. The balance of the property is under lucerne pasture supporting a Merino wether enterprise. Pasture phase primary purpose is to facilitate a chemical break and nitrogen top up.

The annual average rainfall of 500ml is evenly distributed throughout the year. The predominant soil type is a red brown earth. The cropping program is based on wheat and canola in rotation with barley and lupins used in frost prone areas.

Bruce will study continuous cropping systems to maximise the return on investment, larger farming operations to achieve critical mass, chemical resistance, unmanned machinery operations and how farmers are surviving in countries that have high land values.

### David Jochinke

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David Jochinke was presented his scholarship by Ross Johns, Deputy Chairman of GRDC.



David Jochinke, from Murra Warra VIC, receives the 2006 scholarship supported by Grains Research and Development Corporation.

David will study how farmers influence industry and government.

David is a Wimmera lad, born and bred 30 km north of Horsham, Victoria. He is a third generation farmer operating a mixed enterprise located at Murra Warra. He is actively involved in the local farming community especially with the Wallup Farmer Group.

A majority of the farm is ultra dryland cropped using a no-till system with some precision agriculture tools. The cropping is dominated by winter cereals (wheat or barley) rotated with pulses (lentils or chickpeas). The remaining land is sown to annual pastures for wool, prime lamb and first cross ewe production. The merino ewes produce 21 micron wool and are joined to Border Leicester rams to produce first cross ewes while White Suffolk rams are used for prime lamb production from the first cross ewes. Both are spring lambing with all prime lambs being finished in feedlots.

John Gladigau was presented his scholarship by Dr Timothy Ryan, Director, ABB.



### John Gladigau

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John Gladigau, from Alawoona SA, receives the 2006 scholarship supported by ABB Ltd.

John will study corporate farming and creating economies of scale through co-operative farming ventures.

John and his wife Bronwyn currently own and manage their family farm at Alawoona, in the Northern Mallee of South Australia. The property

consists of 2100 hectares, of which approx 1500 ha is cropped annually to wheat, barley, triticale and rye. They also sharefarm an additional 500ha of cereals for a total cropping program of about 2000 ha, as well as running a self replacing merino flock of 350 ewes.

Their farm is fairly undulating and predominantly sand over loam, which along with an eleven inch average rainfall, presents some erosion and fertility challenges. This has led to a move towards a more intensive cropping program using minimum and no till farming techniques.

John is very interested in developing business structures which provide the benefits of economies of scale, including increased profitability and sustainability, without losing the integrity and heritage of family farms.

Andrew Bouffler was presented his scholarship by Rob Forage, Program Director, Sheep Genomics, (Joint appointment by AWI & MLA).



### Andrew Bouffler

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Andrew Bouffler, from Lockhart NSW, receives the 2006 scholarship supported by Australian Wool Innovation Limited.

Andrew will study dual purpose sheep genetics, closely connected to this subject is developing the very best performance testing techniques and associated analysis tools to ensure a maximum rate of genetic gain is achieved in the Australian sheep industry.

Andrew currently works in partnership with his brother, Philip, in a 4<sup>th</sup> generation family farming enterprise. Trigger Vale Pastoral Company has 3000ha under

management. The current enterprise mix consists of a 1400ha cropping program including wheat, canola, faba beans, malt and feed barley and running 2600 breeding ewes and their progeny. The break up of the Trigger Vale ewe flock is 500 stud and 1650 commercial Bond dual purpose ewes and 320 stud White Suffolk ewes. The Trigger Vale Bond stud is the oldest yet most progressive Bond stud in Australia. Performance testing using Lambplan commenced in 1999 along with the founding of Trigger Vale White Suffolk stud. In house performance testing had however, been going on for many years prior with detailed pedigrees, extensive use of wool micron and wool weights and body weights. The White Suffolk stud was founded initially to compliment the Bond stud and allow clients to obtain both their maternal and terminal rams from one source but has quickly grown to become a major component of the farm business.

The Bond dual purpose maternal stud has the long stated breeding objective of "maximising the rate of genetic gain on the traits that impact directly on our client's profitability." These traits in order of our rankings are growth rates, fertility, fleece weight, eye muscle area, micron, scrotal circumference and faecal egg counts. These traits are being targeted by identifying proven stud sires both within our flock and in other breeds Australia wide and benchmarking their worth by using Lambplan performance testing.

James Walker was presented his scholarship by Rob Forage, Program Director, Sheep Genomics, (Joint appointment by AWI & MLA).



### James Walker

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James Walker, from Carrick TAS, receives the 2006 scholarship supported by Australian Wool Innovation Limited.

James will study agricultural production and wool on the global market.

James is both Operational Manager and Managing Director of William Walker Proprietary Limited, a family company owned in conjunction with his family.

They operate a mixed enterprise business encompassing fine Merino and Corriedale wool production, prime lamb production, beef production, stud Corriedale and stud Hampshire sheep, stud Murray Grey cattle, forestry, horticultural production and seed production and an AI programme with both sheep and cattle to allow continual improvement in their genetic base.

### Andrew Heinrich

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Andrew Heinrich was presented his scholarship by Rob Forage, Program Director, Sheep Genomics, (Joint appointment by AWI & MLA).



Andrew Heinrich, from Parndana SA, receives the 2006 scholarship supported by Meat & Livestock Australia.

Andrew will study how more efficient genetics can achieve improved carcass quality in sheep.

Enterprises on Andrew's 800ha Kangaroo Island property include: sheep, beef, prime lambs, canola, and triticale.

His closed Merino Flock with own ram breeding program is fully measured and recorded on MGS. Outside genetics introduced by semen from elite rams. His aims are to lower micron whilst increasing wool cut; breeding sheep to be worm resistant and measuring carcass traits to increasing carcass yields.

White Suffolk Stud emphasis is on Lambplan. The prime lamb industry needs to put higher importance in figures to move ahead and increase profitability. AI semen from high performance rams has improved their figures to almost double to that of the average terminal breeder.

Helen Dalton was presented her scholarship by Ian Mason, Deputy Chairman, Rice Research Committee.



### Helen Dalton

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Helen Dalton, from Binya NSW, receives the 2006 scholarship supported by Rural Industries Research and Development Corporation and the Rice Research Committee.

Helen will study the economic and ecological importance of native vegetation and biodiversity in farming systems, in particular rice growing areas.

Helen with her husband Nayce, own and manage their properties "West Merribee", "Gilgai" "Wilga Range" and "Bundarra". The properties consist of 2800 acres of irrigation and 5000 acres dryland

farming. Farming activities include rice production, cattle and sheep breeding, winter cereals, wheat, barley and oats as well as peas and lupins.

Helen's involvement in the business relates to office work, day to day activities, environmental works such as native plant propagation and establishment, and other activities such as mustering, harvest (pick up bin driving), weed spraying, stock husbandry and other related activities.

Helen also runs a small native nursery and consultancy business which in recent years has extended to dealing with buffer zones and windbreaks for rural residential areas as well as salinity control and shelterbelts for larger-scale.

### Jack Milbank

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*Sylvia & Charles Viertel  
Charitable Foundation*

Jack Milbank was presented his scholarship by Linda Sheppard, Manager, Philanthropy Partners, ANZ Trustees.

Jack Milbank, from Amamoor QLD, receives the 2006 scholarship supported by the Sylvia & Charles Viertel Charitable Foundation.

Jack will study globally competitive horticultural production and processing with a net benefit on farm ecology and regional environment through recycled power generation.

Jack and his wife, Jacinta own and operate their Passionfruit, Nectarine, and Custard Apple Orchard, Villarica, in the Mary Valley. Together they are involved in the production, processing, distribution and marketing of fresh fruit and vacuum packed fruit pulp sachets. Villarica is in the process of attaining an Ecobiz partnership from the Environmental Protection Agency. Villarica currently employ students completing their horticultural traineeship through TAFE to provide the necessary practical experience. Produce is sold through most Independent Grocers of Australia outlets and fruit shops on Queensland's Sunshine Coast.

Jack is also a director of Global Fresh Connect Pty Ltd – a specialist supply chain management company for the fresh produce industry. The company provides a secure online platform for managing the effective trade of fresh produce. Previously Jack was the Vegetable Industry Development Officer for Northern Australia. He facilitated projects with specific focus on marketing and trade development that benefited Queensland Vegetable producers and their representative body, Growcom. He also coordinated the Vegetable R&D activities for Queensland and was the liaison between growers, Industry and researchers. Jack has consulted to producers in the Bundaberg region on integrated agronomic technology while working as an Agronomist with Crop Tech. After growing up on a cattle property in Zimbabwe, Jack came to study at the University of Queensland's Gatton Campus in 1999.



Damien Smart was presented his scholarship by Bruce Cairns, National Category Manager - Landmark.



### Damien Smart

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Damien Smart, from Keith SA, receives the 2006 scholarship supported by Landmark.

Damien will study water use efficiency, prescription livestock feeding and biological farming systems.

Damien is currently a Managing Partner in the family business SmartGroup, and a director on the SmartGroup Board. The business comprises vineyards, sheep, cattle and wine at Victor Harbor SA and irrigation, cropping and livestock at Keith SA. Since 2001, Damien has been the manager of the farming operation at Keith in the South East of South Australia, with 4 permanent staff plus casuals (seasonal). This farming operation covers 3400ha in 500mm rainfall and is complimented with flood irrigation, under canopy pivot irrigation and sub surface drip irrigation principally sown to Lucerne for seed, fodder and grazing.

Cereals, vegetable seeds and oilseeds together with an intensive livestock program of both cattle and sheep complete the diversified operation.

### Catherine Harvey

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Cathy Harvey was presented her scholarship by Christine Edwards, CEO, Myer Foundation.



Catherine Harvey, from Narrung SA, receives the 2006 scholarship supported by Sidney Myer Fund.

Catherine will study how to scientifically quantify and qualify biological farming practices.

Catherine has farmed on Tauwitche for the past 20 years with her husband, David. She has also kept up her veterinary studies and worked as a locum.

The dairy is an 8 year old 60 angle bale rotary, designed to enable one person to milk the herd for most of the year. Four hundred cows calve from July 23 to early October each year.

They have 110ha of irrigation (flood and centre pivot). Surplus grass is made into silage at spring. The dairy has won many awards including the Weekly Times Bulk Cell Count Award for the past 3 years, meaning it is in the top 5% of dairies in Australia.

The cows are fed grain supplements throughout the year. The rainfall is 400mm which mostly falls in winter and they rear 150 heifers every year plus 50 beef cross calves. Dairy heifers are synchronised and AI mated. Milkers are AI mated for 7 weeks then put with bulls.

Over the past 2 years Catherine has looked for ways to be more sustainable and environmentally sensitive, and has began compost tea brewing this autumn.

Shaun Welsh was presented his scholarship by Paul Hart, Marketing Manager – Incitec Pivot.



### Shaun Welsh

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Shaun Welsh, from Tabulam NSW, receives the 2006 scholarship supported by Incitec Pivot Ltd.

Shaun will study intensive pig production.

Shaun is currently employed as a working farm manager for Northern Bacon Pty Ltd and has held this position for the last 8.5 years. The farm is a High Health, Closed Herd Multiplier of 750 sows, farrow to finish.

Producing heavy bacon and also selling replacement females as part of a multiplier agreement with one of the largest breeding companies in Australia. Most of the sheds are conventional sheds with 4 progeny sheds being straw based sheds that provide a terrific fertiliser to be applied to the grazing land. The farm is 275ha and is home to a 220 cow breeding herd of Charolais, Santa Gertrudis and South Devon composite herd that runs the weaned progeny out as yearlings to sale as feeder steers or butcher calves. The cattle side of the enterprise is integrated into the re-use of the nutrient rich piggery effluent, excess fodder over the summer months is conserved as round bale silage of forage sorghum to reduce some of the nutrient in the effluent irrigation area. The silage also aids in further drought proofing the property.

Camilla Philip was presented her scholarship by Peter Knoblanche, General Manager, Rabobank Rural Financial Services, Australia.



### Camilla Philip

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Camilla Philip, from Bundaberg QLD, receives the 2006 scholarship supported by Rabobank.

Camilla will study whole of supply chain management process, in particular the growth of category management by major retailers.

SP Exports Pty Ltd is a family owned and operated business, which has grown to become an industry leader in the production and marketing of fresh tomatoes in Australasia, as well as producing a wide range of orchard crops.

The Philip family have a long history in managing intensive horticultural operations and have built up a national supply chain base to support a 12 month supply of fresh tomatoes.

To support this diverse operation the company operates world class packing facilities that meet stringent quality standards and HACCP guidelines. This has enabled SP Exports to pack over 1.7 million cases of quality fresh market tomatoes.

Camilla is the Director of the mango farming operation, and has been involved in the development of best practice for fresh market mangoes from production, harvesting, packing, ripening to the large retail supermarkets, central market system and the implementation of systems and processes, budget development, driving efficiencies, and developing and establishing harvest contractual arrangements for continuous supply of skilled labour.

Jamie Snell was presented his scholarship by Chris Nixon, Chairman, Gardiner Foundation.



### Jamie Snell

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GARDINER FOUNDATION

Jamie Snell, from Merrigum VIC, receives the 2006 scholarship supported by Gardiner Foundation.

Jamie will study business structures and efficiencies of the family farm, along with opportunities for new entrants and succession of the family business.

Jamie and Anne own and operate a 129ha irrigated dairy enterprise, 180km north of Melbourne in the Goulburn Valley of Victoria. It is supported by an additional 85ha outblock nearby. The irrigation season normally runs from August until May, and pasture and annual crops are irrigated for fodder production during this time, for milk production. They milk a 260 head herd of AI bred commercial Holsteins, with a split calving of 80% spring and 20% autumn. All AI bred heifer replacements are kept for replacements or sale opportunities.

Jamie and Anne both have a lifetime background in dairying. They sharefarmed in Gippsland for ten years prior to moving to the Goulburn Valley. During this period, they initially started with management inputs, before moving to ownership of some plant and equipment.

They then moved into herd ownership and ultimately farm ownership in 1996.

## THE YEAR AHEAD

DATE	EVENT	VENUE	Information
February 11, 2007 to March 25, 2007	Global Focus Program (GFP) February Departure	Various Locations	New Zealand, California, Canada, Mexico, Washington DC, Brazil and France
March 8, 2007 to March 11, 2007	2007 Autumn Tour	South Australia	2007 Autumn Tour with presentations from returning scholars. More information will be circulated at a later date
April 1, 2007			Nuffield Scholarships Applications open
June 10, 2007 to July 22, 2007	Global Focus Program (GFP) June Departure	Various Locations	Philippines, China, Nebraska, Canada, Washington DC, Ireland & France.

If you would like to promote an event that you believe would be of interest to the Nuffield community feel free to enter details via the link provided at [http://www.nuffield.com.au/news\\_f/events.php](http://www.nuffield.com.au/news_f/events.php) (**Add an event.**) Please note that all entries will be vetted before posting to this site. Nuffield Farming Scholars Association reserves the right to refuse the publication of material judged unsuitable.

## NEW SOUTH WALES

Supported by



State Chairman: Jim Friend

Greetings from NSW. As most of you will have gathered, we have had a change of stewardship in NSW. Brent Alexander has volunteered for the Secretary's job and I am now the Chair. Our thanks go to David Brownhill and John Trill for their years on the NSW Committee.

Seasonal conditions have not improved with over 95% of the state in drought. On the upside if you do have grain, now is the time to sell it.

It is interesting to see the how some farmers are looking for opportunities in this situation – essentially having faith in the industry they are in, just needing a different angle.

Ethanol is very popular at the moment with plenty of interest being shown by agriculture. I listened to an economist from MLA recently who showed a 10% mandate on Ethanol would depress cattle prices by between 70 and 90 cents/kg live weight across the board! It would also destroy the fledgling Lamb feeding industry. Talk about the law of unintended consequences!

There are four new NSW scholars Helen Dalton, Shaun Welsh, Bruce Thompson and Andrew Bouffler.



All the best with harvest, roll on 2007 I say!

## NORTHERN TERRITORY

Supported by



State Chairman: Ashley Severin

All fairly quiet on the North Territory front. Everyone is desperately waiting for rain – as is all the country with a hot start to the southern fire season.

Curtin Springs and the Severin family are celebrating their 50 year anniversary at Curtin Springs during the first week in November, so anyone who would like to join them for the weekend of the 3<sup>rd</sup> & 4<sup>th</sup> would be more than welcome.

Ashley attended the Conference and tour in Melbourne and as always a great event with thought provoking speakers. The MGC tour was a hit with all and a great inclusion. (See Ashley on the MCG on page 2).

## QUEENSLAND

Supported by

*Sylvia and Charles Viertel Charitable Foundation*

State Chairman: Warren Drynan



We congratulate our Queensland Scholars for 2006, Jack Milbank, Camilla Philip and Ronald Thompson, on their scholarship and look forward to meeting them in the near future.



## SOUTH AUSTRALIA

Supported by



*State Chairman: Steven Jaeschke*

The year has moved on quickly, with some disappointing prospects for the end of season harvests. Even as we near the harvest, there is uncertainty as to how well crops generally will fair in the extreme dry. Damage by frost has also occurred in a large part of the grape and fruit growing regions.

*John Gladigau, Damien Smart,  
Cathy Harvey, & Andrew Heinrich*



State selections took place in July, in Adelaide. This was a very successful process, and the quality of people being attracted to apply for scholarships is of a high standard. As a result of that process, four people from this state were ultimately awarded Scholarships in 2006.

Thank you to all people involved in this very important process. We need to continue our effort in attracting people to apply for Scholarships.

Following selections, SA Nuffield had its AGM in July this year, resulting in Steven Jaeschke going in as Chairman, Mark Branson as Secretary and David Shannon remaining as Treasurer. Thank you to Peter Treloar for his work as Chairman for the last twelve months.

Over this July weekend, we conducted our winter tour to the SE of the State. We visited two recently returned scholars, Graham Clothier and Andrew Johnson. Thank you to Graham and Andrew and families, for your kind hospitality and look over your operations. All these events were well supported.

Caroline Brown has returned from her scholarship travel. No doubt she will be ready to use her new knowledge and experiences to advance her business and the experience she has gained will be of great benefit to the SA farming community.

Both Andrew Johnson and Steven Jaeschke had the pleasure of travelling last month with some new, older and UK Scholars on a Global Focus (GF) Programme to China for 2 ½ weeks. This was an informative and well organised experience. I feel sure the UK scholars will return home and encourage UK Nuffield to include more than their current GF Programme in their Scholarship Programme. We, in Australia, New Zealand, Canada and France, are fortunate to be involved in the Global initiative.

Planning is under way for the Autumn Tour in March 2007. This will again be an opportunity to see innovation working in our State and particularly the potential which is being harnessed and exists on the West Coast of SA, covering facets of agriculture, horticulture and aquaculture.

There will be a Christmas get together again this year, the details of which will be sent out very soon.

### **Winter tour to the SE of SA**

What a great weekend SA Nuffield had on 15<sup>th</sup> and 16<sup>th</sup> July 2006 when we had our annual farm visits for the returning Nuffield Scholars from the South East of South Australia.

The weekend began on Friday night when our AGM was held at Ayers house in Adelaide.

Mark Branson also reported on his findings from his trip last year on "Using Precision and Conservation Agriculture to improve farm profits and the environment" during the dinner, which was followed by some searching questions from the SA Nuffield's.

On Saturday the 15th July, 17 adults and around 20 children travelled to the Clothier property near Lucindale. The Clothier property, "Greenvale", is run by Graham and his two brothers, Phil and Leigh.

They farm 2100 hectares, running all sheep with 4 different studs and 5000 commercial ewes, the 2 main ones being Poll Dorset and White Suffolk.

After a delicious lunch of Limestone Coast Lamb, the group visited a new raised board shearing shed and "Clayed" and "Delved" improved pastures, and finished the farm tour alongside the Fairview Drain (part of the Southern Drainage Scheme).

The farm looked a picture and is a credit to Graham and his brothers for the farm at that time had only received 175mm of rain for the calendar year.

The tour continued to "Brooklyn" where the manager of the McBride property, Jim McRae, showed us an 80 hectare innovative native flower enterprise and gave us an insight into the merits and problems of the native flower industry in South Australia.

Recent heavy frosts had damaged current production and one innovation had been to sell bunches of up to 10 varieties in a bunch with the frosted tips cut off, which looked very marketable. While the farm tours were on some of the children and parents decided to visit the world heritage listed Naracoorte Caves where they toured the Fossil Cave and Wonabi Centre.

The group stayed in Naracoorte that evening, and during the dinner Graham entertained the group by reporting on the findings of his trip last year on "Lamb – Production, Marketing and Quality Assurance".

On Sunday the group travelled to Andrew Johnson's 4200ha extensive family farm at Tintinara and 600 sow, farrow to finish, piggery. The day started with Andrew discussing his findings on his trip. He highlighted the conflict between the costs associated with good piggery practice, and the reluctance of the Australian consumer to pay for the drop in production associated with high animal welfare systems. The group then visited the 5000 grower sheds where they have straw based eco-shelters housing 5 batches of weaners and growers. The morning finished with a tasty BBQ lunch of roast pork and marinated pork spare ribs, during which extensive networking occurred before the group broke up early afternoon.

It was great to have Jim Geltch with us for the weekend. His contribution to the trip was valuable.

On behalf of the SA Nuffield Scholars I would like to invite you all to the National Nuffield Autumn Tour to be held in the Lower Eyre Peninsular of SA on the week of March 8<sup>th</sup> to the 11<sup>th</sup> (subject to changes). This area is famous for its fisheries with a large tuna industry out of Port Lincoln, oysters out of Coffin Bay and dryland, broadacre farming. It is also the area that was burnt in an horrific fire in 2004, with large rebuilding and regeneration of natural vegetation occurring. It should be an excellent trip, and should challenge the minds of Nuffield Scholars, and we look forward to meeting you all then. *Mark Branson, Secretary*

## TASMANIA

*State Chairman:* Robert Dent

Supported by



Our information evening for potential scholars in April held at Rabobank's Launceston office was very successful with interested young farmers attending to hear what Nuffield can offer them. Many thanks to David Young and his team for making this a great evening. We are hoping that the interest shown will develop into applicants over the next few years.

June saw a successful scholars' weekend in the far south of the state. The tour included a cherry and apple orchard, a beef operation owned by Ray Bender of Impact Fertilisers (Tasmanian sponsor), a mushroom operation, the Tahune airwalk, the Wooden Boat School and lots of great food. Ray's was a very impressive beef cattle operation with stunning views of the Channel and Bruny Island. Once again, it was both a learning and educational experience but above all heaps of fun and a chance for all the Nuffields to get together and catch up.



We're looking at holding a meeting prior to Christmas to welcome home Sarah, Tony and Anthony from their study tours and hear what they've found out. We will also welcome James Walker to the "fold". For those interested, James is the son of Don Walker (1972).

## VICTORIA

Supported by



*State Chairman:* Paul Bethune

We'll all be ruined said Hanrahan before the year is out !!!!. Incredibly with a complete lack of spring rain there are still a few small area's hanging on. Parts in the Northern mallee the likes of Chillangollah and Chinapook could still see a harvest, places around Quambatook and Ultima still have some potential if rain arrives. Hobbsie's crops at Kaniva were basically dead three weeks ago and he was very chuffed he picked this excellent year to build his ethanol plant.

Massive frosts up to – 6 degrees wiped out many fruits crops in the Goulburn Valley. One of my mates lost 3500 acres of canola and wheat all heading for average yields with the frosts and that is now going in the hay baler. He said he is taking five to ten calls a day from desperate Goulburn Valley dairy farmers wanting to buy it. They are in a terrible state with 20% of water allocations and temporary water trading around \$450 per megalitre, many farmers are already out of water before the end of spring. Complete herds are disappearing by the day.



On the up side it always rains at the end of a long dry spell and the warm and sunny weather has provided excellent opportunities for improving gumboot tans. Trevor Caithness reports his crops are going well in East Gippsland just need one more rain to finish off and get some handy above average yields.

The conference was terrific and we have two great new scholars in David Jochinke and Jamie Snell.

*(PS: Congratulations to Paul who married Sally in July).*



*Victorian and Tasmanian Scholars for 2006, Jamie Snell (Vic), James Walker (Tas) and David Jochinke (Vic).*

## WESTERN AUSTRALIA

Supported by



*State Chairman:* John Foss



As is the case for most of Australia the adverse season conditions have dominated the minds of farmers in WA . With the exception of a few areas most of WA has received record low winter and spring rainfall. A notable exception is the Esperance area. While the hot dry windy spring has reduced the yields from what showed enormous potential the Esperance region crops will be some of the best in Australia this harvest. See picture of Dave and Sally Anne Cox in a crop of barley on their Esperance farm this spring. (Photo taken by Nicole Witham, AgWA)

WA Nuffield held the annual sponsors lunch and AGM at the Royal Fresh Water Bay Yacht Club in Perth recently. The lunch was attended by about forty sponsors, scholars and partners who were treated to two outstanding returned scholar presentations from David Fulwood and Tracey Lefroy. WA Nuffield acknowledged the special effort that both Dave and Tracey put in to their scholarship year with their travels coinciding with major family events in the past year. David and his wife Jo are the proud parents of twins and Tracey and her husband Kristin were married on the eve of Tracey's scholarship and spent part of their honeymoon and anniversary at Nuffield events.

The election of office bearers was held at the AGM and John Foss was returned as chairman, Brian McAlpine elected as vice chairman, Murray Gmeiner as treasurer and Aaron Edmonds as secretary. Sandy Forbes did not stand for re-election as vice chairman due to additional farm business demands this coming year. WA Nuffield thanked Sandy for her significant contribution to her various roles on the committee which she has held since returning from her scholarship travels in 2001.

### New Arrivals to the Nuffield family

Sebastian Henry Fulwood & Annie Victoria Fulwood born Sunday morning October 8. Sebastian arrived first weighing 2.25kg (5 pound) and his bigger sister arrived soon after 5 cm longer, weighing 2.5kg (5 pound 10). Everyone is well and parents very excited. Proud parents are Dave & Jo Fulwood



**RETURNING SCHOLARS REPORTS - EXECUTIVE SUMMARIES**  
(FULL Scholars reports can be found at [www.nuffield.com.au](http://www.nuffield.com.au))

**Executive Summary**

*Sponsored By*

*Topic: Cool Season Pulse Crops Suitable for Rotation with Rice*

**By 2003 Nuffield Scholar – Peter Draper**



Following the completion of six weeks overseas joint Nuffield study of general agriculture issues, I visited a number of countries to study cool season pulse options which may be suitable for rotation with rice. Rice is our most profitable broad acre crop on the heavy clay soils of southern NSW but for environmental and quality reasons is grown in rotation with other crops.

Less than twenty percent of the world's cultivated land is irrigated but it accounts for half the value of global crop production. International and national crop breeding and research programmes however place a high priority on overcoming stress from drought. This is not always conducive to achieving maximum yield when moisture stress can be alleviated with irrigation. Despite this negative for irrigators, big gains are being made in a number of areas which will open new opportunities for irrigators in southern Australia.

Good collaboration exists between Australian pulse breeders and their international colleagues which is backed by funding through GRDC and the Australian government. The benefits of this are beginning to flow and new varieties are becoming available which overcome some of the previous difficulties with pulse production under irrigation in southern NSW. Coupled with this is the move toward "beds in bays" combined with high speed watering which will reduce the impact of waterlogging and allow a wider range of pulses to be grown in the rotation without the current cost of removing levees and installing new beds at the completion of rice cropping. It is also a more preferable form of irrigation than sprinkler which can make the environment more favourable for disease pressure in pulses.

Growing cool season pulses provides a number of positive benefits including no requirement for nitrogen fertilizer, increased yields for the next cereal, no issues with stubble residue and an irrigation requirement which is supplementary to normal rainfall. Despite the positive features of growing pulses, the need for continuing disease resistance and markets will restrict irrigators to producing the main pulses supported by the Australian breeding programmes. Opportunities which are now opening for cool season pulses include chick peas with *Ascochyta* and *Phytophthora* resistance, faba beans with chocolate spot resistance, field peas with lodging resistance and *Lathyrus* with lowered neuro toxin levels.

We have to remain mindful that similar opportunities are also opening up in other countries and the pressure will remain to use irrigation to produce high yields, of high quality, at least cost with opportunities to value add also fully explored. We have to continue to encourage Grains Research and Development Corporation (GRDC) investment in pulse development and breeding including linkages with ICARDA and ICRISAT. It is essential that we liaise with breeders for selection of high yield under irrigation, encourage the release of granular inoculants and ensure our pH and sulphur levels are optimum.

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## Executive Summary

*Topic: Water Medication for Livestock Production*

*Sponsored By*

*Sylvia & Charles Viertel  
Charitable Foundation*

**By 2003 Nuffield Scholar – Michael McKellar**

Studying water medication has taken me to nine countries around the world only to find that Australia leads the way. No matter where we may farm it's tough; short growing seasons, prolonged winters, harsh summers and variable climate, short day light hours, infertile soils, animal welfare issues, world trade tariff barriers, customer perception and demands all impact on our business. As a result of my scholarship, and in parallel, an intensive review of water medication was conducted by Meat and Livestock Australia. My report addresses many issues and is intended as a guide to other producers considering the implementation of a water medication system.

Water medication has been an alternative in feeding nutrients to livestock for over 35 years and developments in the last decade with equipment, technology and adoption of the system has resulted in many producers using this management tool. Water medication is the supplying of dissolved nutrients that have been mechanically administered into the drinking water at a calculated dosage to supplement and enhance animal requirements.

Water medication does work and it can be a very cost effective supplementation method for feeding NPN (Non Protein Nitrogen) and other nutrients. Strategic feeding of supplement can greatly improve the performance of livestock and maximise pasture utilisation low in nutrients. In Northern Australia's native and improved pastures the major limiting nutrients are protein and energy in the dry/winter season and Phosphorus (P) in the summer/wet season. When livestock producers are using water medication to feed supplement they need to be aware of the water quality issues, the chemical interaction between what products they are mixing and the water they are using, the solubility of the products, the sheeting or striping and absorption characteristics of products. All these factors greatly affect the efficiency of the supplementation method when diluting and feeding to livestock. Producers also need to be aware of commercial biases and misleading information.

My recommendation to anyone who is using or intending to use water medication is:- research what you want to achieve, analyse your resources and monitor your results. Be prepared to change and be prepared to shut the system down from time to time to get up to speed with new developments.

Michael McKellar

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## Executive Summary

*Topic: Climate Change Greenhouse & Agriculture*

*Sponsored By*



**Rabobank**

**By 2004 Nuffield Scholar – David Cattanach**

### Greenhouse Gases

These are a group of gases in the atmosphere that have the ability and potential to cause the surface of the Earth to warm. Their effect is much the same as that of a greenhouse and this where they take their name from. Of this group of gases three gases namely carbon dioxide, methane and nitrous oxide are the main ones contributing about ninety four percent of all the greenhouse gases released through mans activities. These are naturally occurring compounds and not man made but rather are accelerated through human intervention and released to the atmosphere. All greenhouse gases have been rated for their relative global warming potential (GWP) and are expressed as carbon dioxide equivalents (CO<sub>2</sub>e).

Carbon dioxide was assigned the arbitrary value of one, methane 21 and nitrous oxide 310. These gases envelope the planet acting like a one way mirror allowing solar energy to pass through unhindered to the planet's surface but reflecting back the infra red radiation emitted from the Earth's surface thus interrupting or blocking the planet's normal cooling cycle and so the surface steadily gets warmer. It is interesting to note that although there is still a group of people that don't believe that the planet is getting warmer no one is questioning the ability of these gases to cause global warming and no one is questioning the increased concentrations of these gases in the atmosphere. Therefore the only debate is at what level of concentration of these gases will global warming occur!

The major source of these gases is from the mining and use of fossil fuels, coal, crude oil and natural gas. Agriculture is itself a significant contributor in its own right however the majority of our emissions are the result of biological activity without which we would not be able to produce high quality food. From livestock the main sources are methane, a by-product of enteric fermentation, as part of ruminant animal digestive process and in intensive operations effluent and nitrous oxide from urine. For cropping systems the largest area is nitrous oxide from nitrogenous fertilisers and carbon dioxide from loss of soil organic carbon.

### **Climate Change**

The Earth's average surface temperature is rising, particularly the surface temperature of the oceans which in turn is causing a change in our weather patterns. For the mid latitudes this generally means dryer conditions, warmer temperatures and increased water deficit during the crop growing season. The only areas that may benefit are in the far north of the northern hemisphere but as they do not have the transport infrastructure to take advantage of the more favourable conditions. As a result this potential is unlikely to be realised. Most of Australia's agricultural regions will have some serious problems within 20 years not only due to dryer conditions but also due to increased average temperatures during the grain fill period of most crops. The predictions for south eastern Australia by 2030 are that we will be on average about two Celsius degrees warmer, maximums up by about half a Celsius degree and minimums up by about four Celsius degrees, with a reduction of about sixteen percent in the winter/spring rainfall.

### **Opportunities**

The biggest opportunity for agriculture will be in the energy sector. Ethanol will be the main one in the next few years, giving us a new alternative market for our grains and as crude oil prices rise then vegetable oils will become an economic option for diesel fuel.

### **Research**

Research needs can be split into two categories.

#### **i) Reduction of emission**

- a. Timing and application of nitrogenous fertilisers to improve nitrogen use efficiency and reduce nitrous oxide emissions
- b. Identify limitations on soil organic carbon levels with the aim of increasing soil organic carbon
- c. Reducing methane emissions from livestock
- d. Reducing nitrogen content in animal urine and so reduce nitrous oxide emissions from livestock

#### **ii) Adaptation**

- a. Increased water stress tolerance in crops and pastures
- b. Reduce the effect of warmer temperatures during grain fill period on yields
- c. New stone and pome fruit varieties that don't require a winter chill for bud burst
- d. Alternative methods of achieving uniform bud burst in years where there is not enough winter chill for this to occur naturally

We urgently need an international standard emissions inventory that can be applied at farm level. Internationally recognised inventory's are available for other industries so why not agriculture?

David Cattanach

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## Executive Summary

*Topic: Weed And Insect Control, Beyond Pesticides*

*Sponsored By*

**By 2004 Nuffield Scholar – Mark Modra**



What is the current biggest threat, common to all agricultural production in Australia, apart from climate change? Soil erosion? Environmental legislation? Red tape? In my opinion it is herbicide resistance! Glyphosate is to agriculture as penicillin is to the medical world.

In Australia we have the worst incidence of herbicide resistance in the world with currently 33 weed species resistant (Preston), including a ryegrass population that is resistant to 4 different groups of chemical, and that is not including glyphosate resistance.

### **Could we economically and environmentally farm without herbicides?**

My approach was to look at ideas and systems to combat resistant species that our research bodies like GRDC could look at applying here. For example bio herbicides that are specific in controlling wild oats and rye grass. These work in a similar way to the herbicides Hoegrass ® or Achieve ®, but would reduce the competitive ability of the root systems.

Not only has research shown these bio herbicides reduce the competition of a pest species (wild oats) but also to produce a hormone which stimulates crop growth. Another promising area I studied is allelopathic plants that have activity on weeds. For example, varieties of wheat and barley that have activity against ryegrass and brassica with high glucosinolates that kill weed seeds. Such brassica have been shown to achieve results similar to methyl bromide, that is 100% weed control. The focus was to look at specific glucosinolates and apply seed meal which is more effective than plant material. I looked at parasitical insects that prey on problem insects and reduced the problem insects to a non threatening level. The models I was shown were cost effective.

I also visited a researcher developing a new system of spray technology that claims to achieve similar levels of weed and insect kill with a 50% reduction to current chemical rates. It uses two jets to deliver fine droplets to a plant surface, yet without drift issues that one would normally have.

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## Executive Summary

*Sponsored By*

*Topic: Using Precision and Conservation Agriculture to improve farm profits and the environment.*



**By 2004 Nuffield Scholar – Mark Branson**

Australian farmers need to increase farm efficiencies to stay competitive in world grain markets. My Nuffield Scholarship “Using Conservation and Precision Agriculture to improve farm profits and the environment” took me to Europe, Canada, and USA where agriculture has been practiced for long periods of time under very different environments and farming systems. My aim was to look at these systems, new cropping technologies, and assess whether these applications maybe relevant to improve profitability and sustainability in Australian broadacre cropping.

Conservation agriculture is keeping a healthy, living soil that has the ability to breakdown plant residues into future nutrients, have a structure that is able to maximize water storage with reduced soil erosion, and active micro-organisms that are able to help in the breakdown of the plant residues plus aid in the adsorption of pesticides and other chemical wastes.

There are two aspects to conservation agriculture that I studied. The first being Carbon farming, involving no-till, stubble retention, and high carbon crop rotations, and the second being removing compaction from our soils by adopting no-till and controlled traffic systems.

Two trials that stood out on my trip were Jim Halford's long-term no-till trial at Indian Head Canada, and Dwane Beck's high Carbon rotation trial at Dakota Lakes research farm in USA. Both showed that by adopting conservation agriculture techniques you could dramatically improve the soil and the farms profits.

Precision agriculture (PA) is matching agronomy with paddock variability and has opened up a new level of management in broadacre cropping. It has come about by the advent of GPS technology where any position in a paddock can be repeatably logged.

In Australia the initial adoption phase of PA is looking at zonal management where areas of variation within the paddock are identified and used to form a management zone. Now there is series of on-the-go sensors that have been developed overseas that will aid in making precision agriculture easier and affordable.

There is the development of the Verris Mobile Sensor and an Australian developed Buffer pH sensor, which will be able to map pH and other soil attributes quickly and at a reasonable price. Plus an on-the-go grain protein sensor for protein mapping and nitrogen budgeting has been released by Zeltex, and was partly developed by the Australian Centre for Precision Agriculture.

I was most excited about the new remote sensing technology to be used primarily for post nitrogen applications, but can be used with plant growth regulators and fungicides. The sensors that have promise are the satellite package from EADS France called "Farmstar", numerous aerial imagery companies carrying Multi-spectral or Hyper-spectral sensors, and the on-the-go ground sensors, the improved Yarra N Sensor, N-Tech's GreenSeeker®, and the new Crop Circle sensor developed by Holland Scientific in the USA. These sensors have been shown to increase crop profits by Aus\$28/ha to Aus\$100/ha in overseas research, plus can lead to a third less nitrogen being leached into the environment. I see potential for these sensors to be used in Australian broadacre cropping systems, but application algorithms need to be developed and the economics need to be defined for Australian conditions.

Phosphorus is an element that if adequate, should be placed in the soil at the replacement rates derived from the previous years yield map.

The ability to accurately budget nutrients is a vital step in making precision agriculture work in relation to applying fertilisers, and for this to occur one needs to determine what nutrients are able to come from the soils natural pool. This is something worldwide scientists are working on, and I found only one company that has worked on a scheme trying to predict the uptake of nutrients into the roots of plants. This work has been done by Western Ag. Innovations Inc. from Canada, and they use plant root simulation probes (PRS) to attract nutrient ions to the probe over a 24 hour period, and hence are able to tell what nutrients in the soil would be available to the plant in that time. Alongside of this is a computer model, developed by the company, which forecasts yield potential and demand from the crop, which when added to the PRS data is able to optimise profit from the fertiliser inputs.

Conservation and Precision agriculture have bright futures for Australian broadacre cropping farmers, and my report covers the reasons why they will help in improve farm efficiencies, as well as reasons why they are essential in preserving the environment.

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## Executive Summary

Sponsored By

*Topic: Animal Welfare Within The Pork Industry & Evaluating Alternative Sow Housing Systems. Disease Management Systems And Producer Integration*



**By 2004 Nuffield Scholar – Andrew Johnson**

To quote an English rural journalist:

“Prerequisites of being a Pork Producer are: have deep pockets, boundless enthusiasm and eternal optimism, I suspect the really clever ones have even mastered the art of pushing water uphill”. (Stuart Lumb, July 2005).

Similar phrases have also been used in a general sense for Australian agriculture. If I could use Stuart’s symbology but rephrase with a more positive approach, “A careful and more strategic decision process combined with boundless enthusiasm will create a very optimistic and exciting future” (Andrew Johnson, 2005). Our industry has changed and will continue to change in order to survive. I am passionate about Agriculture and specifically the pork industry in the way we adopt new techniques. We as producers have to become more consumer conscious, developing production systems that step by step move us further up the supply chain capturing market share. For the vast majority of farmers we don’t produce food, but raw materials, whilst someone else turns this into food and capitalises on that.

It is also said that we as farmers have the most marketable products, but are the poorest marketers. We need to be conscious of cost and invest in systems that will give returns for the markets we pursue. Animal welfare is an open ended discussion which can be very marketable, but needs much education from producer to consumer on what is best for our livestock, to be responsible producers and lift public perception towards our industry. The initial perception of high animal welfare is not always correct and many facets of the production process need to be analysed to implement strong management systems from technology to education. Just banning the sow stall will have other serious animal welfare implications and needs to be a management process, rather than a band aid regulation, as sow reproductive performance is paramount for commercial viability.

My topic of study started broad, to gain an understanding of policies and future directions, then narrowed looking at alternative housing systems, including electronic feeding, incorporating good health outcomes and to see how other countries manage disease within piggeries. It was my intention to become more channelled with the study, but realised one subject can’t be done alone, for all are linked as important considerations in the whole production process.

My study gave me the opportunity to visit many countries with different cultures, political platforms, forming many different perspectives particularly when it comes to animal welfare, disease management, associated systems and the way they structure their business competing on this global market. I visited the United Kingdom, Holland, Denmark, Sweden, Germany, Canada and the United States, incorporating all aspects of the study in each country. Each country had various pressures from consumer groups in relation to welfare and environment creating strategic production techniques to remain efficient. One country, while having relatively a large market but imports significant quantities of pork has seen nearly 50% reduction in domestic production in less than ten years, WHY???

Pressures on pork production and marketing will continue, with international market trends dominating production outcomes worldwide. Clearly my study shows the only way to survive is to manage the pressures, increase in scale or in operating partnerships – to increase market share, sustain margins and hence viability.

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## Executive Summary

*Topic: Best practice canola production:*

*Exploring biotechnology, agronomic advances and new grower techniques*

### By 2005 Nuffield Scholar - Andrew Broad

- Australia's canola industry is in decline, with no improvement in five-year average yields, and total area seeded reduced by 44% in five years.
- Canada has grown genetically modified canola for ten years, yields have increased by 15.8% over ten years with total area seeded now five million hectares annually.
- GM and non-GM canola receive the same price on the world market.
- In the last ten years Canada has produced tonnage of genetically modified canola equivalent to fifty years of Australian canola production.
- Canola oil is ideal for biodiesel and should put long-term stability in product demand.
- GM canola has assisted the Canadian wheat industry through rotational weed management options.
- There are yield advantages through hybrid varieties, particularly under moisture stress.
- Better fertilizer utilization GM varieties are in the development stage.
- There is an over reliance of glyphosate within the Canadian farming system, and an integrated weed management strategy is essential to maximise the long term benefit of GM technology within Australia.
- Length of growing season and moisture are the two most important components to maximising canola yields.
- Maintaining leaves on the stalk as the canola runs up to flowering is essential to achieve high yield. Test plot yields in the United Kingdom are reaching 7-tonne/ hectare.
- Sound environmental management and genetically modified canola need to be promoted as complimentary to one another.
- Coexistence from paddock to port, of GM and non-GM can be achieved if admixture levels are increased.
- In the future there will be a greater differentiation of specialty oil types within canola, for specific oil applications.
- Both the Australian farmer and the public are being poorly informed by well organised, anti GM campaigners.
- The cost of the Roundup Ready technology for the farmer is significant, and needs to be reduced in order to be consistent with Australia's low input / low output farming system.

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## NUFFIELD HISTORY LESSON PART 1 - *NUFFIELD - The Man*

*Despite the ongoing success and widening appreciation of the Nuffield Scholarship scheme, we suspect knowledge of the founder is somewhat diminishing. A condensed summary of Lord Nuffield's life is to appear in a four-part series.*

### *To Start With:*

From the early days of the 20<sup>th</sup> Century the name Morris was as much a household name in Great Britain as was Holden in Australia. Since its foundation in 1910 by the manufacturer and industrialist William Morris (later Lord Nuffield), the *Morris Motor Company* was to launch some twenty five different models of Morris cars on the motoring public. A factory was opened in 1913 at Cowley, Oxford, and William Morris's entrepreneurial skills as a bicycle maker transferred to the manufacture of motor cars.

By the forties, fifties and sixties many post-WWII families were the contented owners of such models as Morris Oxfords, Morris Cowleys, Morris 1000 Travellers and the ubiquitous Morris Minor. In his book *Nuffield A Biography* Martin Adeney tells us that in fact its designer never particularly liked the Morris Minor, however its immense popularity; longevity and recent rebirth leaves us in no doubt that it will feature amongst the all-time greats of the motor industry.

Although born in Worcester in 1877 William Morris, one of seven children, actually grew up in the countryside and outskirts of Oxford occupying summer days with walking, fishing, and cycling the neighbouring villages. Industrial life in Britain was advancing rapidly and embracing the modernisation of industry and widespread education for all. Morris's father, Frederick Morris, had travelled and worked widely, including Canada, and records show that working class occupations and modest lifestyle were the hallmarks of William's forebears. However, this was not the image Morris himself welcomed and he went to considerable lengths to cultivate a more impressive family tree and to portray in later years the dapper, well-connected image he regarded as commensurate with his success. Aspirations and petty vanities are frequent companions of ambition - they are also a small price to pay for the brilliance and determination that leaves society a legacy of unequalled opportunity.

At fourteen mounting his first bicycle, a penny farthing, Morris's love of this activity reflected the public's growing craze for cycling. Names such as Rudge and Raleigh were but two cycle brands on the move. At fifteen and a half, his father's health failing, young Morris was apprenticed to a cycle maker in Oxford at five shillings a week. By seventeen he was tapping into the undergraduate army of cycle riders and by seventeen he was not only repairing cycles but selling his own model. He excelled in cycle racing and competed widely. He did well equally at short and long distances and over the following years won about a hundred championships. The local press stated that 'Morris has stamped himself as one of the finest riders ever produced in Oxford'.

Entering the blossoming car industry was out of the question at that stage, he simply did not have the capital but a shrewd business sense and a sturdy cycle frame allowed him to mount a single-cylinder one-and-three-quarter horse power home-made engine. Thus he entered the motor-cycle business in the March of 1902. He was then to join forces with a Joseph Cooper, a fellow cycle maker in Oxford, at the same time opting for the purchase of engines from the French manufacturer de Dion. Morris's partnership with Cooper seems largely of a financial nature and Morris continued to work every hour God sent. The Stanley Show in Islington London was regarded as the pinnacle of motor-cycle exhibition and, despite near exhaustion with work and the journey to the show, Morris made it to the site with minutes only to spare. His combination of counter shaft chain drive and three speed with a clutch were a hit.

Sadly, his partnership with Cooper had not been proceeding comfortably. Morris regarded Cooper as too cautious and the defining moment came when the latter decided the purchase of one machine at a time would suffice. Morris on the other hand regarded himself as a man who would take risks, and ordered three! The partnership was subsequently dissolved and, although they did maintain a friendship, Morris again faced the eternal business dilemma, lack of working capital.

On a more personal note this proved the point at which Morris decided that trusting nobody but yourself was the way forward a philosophy that had both a making and breaking influence in his life.

Although initially there may have been some merit in operating solo, in later years, his unwillingness to take into his confidence tried and trusted friends was to isolate him, and distance him from experience and advice which could have been of such benefit.

However, Oxford beckoned once more in the form of F.G. Barton a local businessman who, with the help of an undergraduate who'd inherited money, was investing in the motor-cycle industry and was advised that he should bring Morris with him because of his engineering skills.

Partnership was on again with the main premises in George Street, Oxford. Other branches were opened in Bicester and Abingdon. Morris's concentration was still on developing his carburettor and novel design to open the clutch by means of cable from the handlebars. In 1904 the Oxford Automobile and Cycle Agency journal was extolling the virtue of his motor cycle and its performance, even in wet weather. It seems that Morris was not a man to engage in light-hearted socialising and preferred his time and energy devoted to his work. But even this was insufficient to ward off the looming failure of another business venture. A year later the business collapsed, and Morris himself was left with virtually nothing but a small debt and his own tools.

It was during this inauspicious time that he met and married Elizabeth Maud Anstey on April 9th 1904. She and her sisters were the daughters of a farrier who, when she was sixteen, had left their mother and taken off for Leeds. The girls worked hard to support themselves with two becoming teachers, and Elizabeth becoming a dressmaker, working in Oxford's renowned department store Ellistons. The misses Anstey were keen members of the cycle club to which Morris belonged and it was here of course that he and Elizabeth met. She proved a hearty companion on the tandem bicycle and they spent many happy hours cycling. Their trips covered considerable distances bearing in mind the inhospitality of roads to cycles, and it was not unknown for them to venture into Wales for weekends.

This woman who came into Morris's life brought not only the fellowship of a shared pastime, but a very similar background of the heartache and disappointment they both experienced in those early teenage years, due to the shortcomings of their respective fathers, something which was to affect them both throughout their lives. Elizabeth supported Morris at the very difficult time prevailing at their marriage, to the extent of selling her own few possessions of worth. She was a very shy person by nature and her inclination always was to avoid the public spotlight, as Morris's profile grew, and this was something which he fully endorsed to the extent that he would not allow any interviews with her. Despite their growing affluence in the years ahead, Elizabeth always maintained a philosophy of frugality which bordered on meanness; it was a close family member who reasoned that Elizabeth's great fear was that the hardship she had experienced in her youth and the difficult situation she encountered when she married Morris resolved her never to find herself under financial duress again. The Morriss's had no children and it was suggested by one of the few people really close to them that they did not enjoy a particularly happy home life.

It is against this rather sad and unpromising background that Morris harnessed his brilliance, and applied the fierce determination that would generate a world-renowned manufacturing empire.

***To be continued***

*I would like to fully acknowledge Martin Adeney's work 'Nuffield - A Biography' as my source of information for these articles.* Caroline Nixon

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## **THE NUFFIELD WORLD CONFERENCE WILL BE HELD IN 2008**

The provisional dates are the 5th to the 17th June 2008 to coincide with the Royal Highland Show in Scotland and the Royal Show in the UK. Both these shows will take place after the Nuffield Conference and Tour.

A pre-conference tour is planned for Northern Ireland over 3 days. The conference itself will take place in Dublin (2 days) and there will be a post conference tour in the South-West of Ireland.

This is the provisional timetable but as more information arrives we will keep you briefed.

## WELSH SCHOLAR - LOOKING FOR WORK

A 2006 Welsh Nuffield Scholar, Nicola Raymond, will be in Australia over the next 12-18 months and is looking for work.

Nicola has been employed as General Manager of the Welsh Meat Company/Celtic Pride for 4 years and has had great career development to-date. Following her Nuffield award and the opportunities that exist in the world, she handed in her resignation effective from Mid-October!

She is currently applying for a 12 month work visa for Australia and plans to get some Agric work/consultancy whilst there. Any additional assistance with both contacts for her topic, (beef marketing and branding) or ideas with some potential businesses who may be eager to employ an outgoing, committed, Welsh girl would be great!

She is planning to arrive in Australia 22nd/23rd December and is spending Christmas and New Year in Sydney (and also has a ticket to the Ashes in Melbourne!). After that, the plans are still sketchy!

In the meantime any help would be gladly received. Can you please note her contact details:  
Nicola Raymond, Mobile: 07795 960032, Email nicolaraymond@hotmail.com.

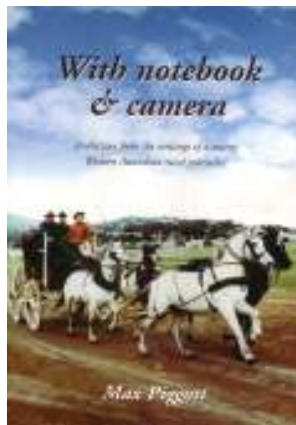
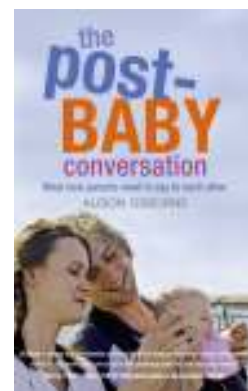
## NUFFIELD AUTHORS

### Alison Osborne (1996 Nuffield Scholar)

*The Post Baby Conversation* is a first: a relationship book for new parents. It is not a book about babies and it's not about how to be a parent. It's about how to be a happy couple after the arrival of children.

More information can be found at <http://www.rockpoolpublishing.com.au>.

Price: \$27.95. Available at all good bookstores



### Max Piggott (1954 Nuffield Scholar)

*With notebook & camera* is a selection from the writings of a roving Western Australian rural journalist.

Much of the collection in this book comes from the writings and photos Max took while writing for the Western Farmers & Graziers.

Max sells his book (posted anywhere in Australia) for \$20, and Angus and Robertson also stocks it.

Max can be contacted on 08 9841 1543 or 63 Parade Street, Albany WA 6330.

## INTERNATIONAL WEBSITE DATABASE

The UK Website <http://www.nuffieldscholar.org/> has a Scholars Area, which has a confidential database of all Nuffield Scholars. <http://www.nuffieldscholar.org/Scholars/ScholarNews.asp>

This section incorporates a scholars search area. Nuffield scholars can register to be a member, and after being issued with a password can search for other scholars by name, country, state/region and award year. There is also the facility to search by industry.

As a scholar you are also able to update your contact details as well. We will be sending the UK our updated information soon so that they will have the latest contact details for our scholars.

## ACCOMODATION AT THE FARMERS CLUB

We have received a few requests for information relating to accommodation at the Farmer's Club in London. We would like to inform you that we can arrange accommodation for you if you are not currently a member. Please contact Jim Geltch to help with your bookings.