

NUFFIELD AUSTRALIA

Acknowledges with thanks the support of the following for their 2012 Scholars



NUFFIELD AUSTRALIA FARMING SCHOLARS



P.O. Box 586 Moama NSW 2731 A.B.N. 33 092 327 396
Phone: (03) 54800755 Fax: (03) 54800233

2012 Scholar Presentations and Dinner ADELAIDE, SA 24th to 25th SEPTEMBER 2011



Mark Swift

PO Box 333,
Parkes, NSW 2870
0429 890 160
markswift@gmail.com



Mark Swift, from Parkes in New South Wales, receives the 2012 Nuffield Scholarship sponsored by John Deere. He hopes to study the effects and cost of the precautionary principle.

Mark works in his wife's family farming business in central west NSW. 'Kebby & Watson' is currently cropping 3400ha of winter cereals, canola and legumes in a continuous cropping rotation utilising no-till and control traffic management practices. In addition, Mark and his wife run a small prime lamb business consisting of 400 Dorper ewes.

He explains the precautionary principle is when, without scientific proof to the contrary, a person taking a particular action has to prove it is not harmful.

Mark says, "technological advancement is being shelved and access stifled due to this principle of treating all new developments as if they have catastrophic consequences for human health and safety or the environment."

He would like a better understanding of why the precautionary principle is applied to innovations in the agricultural sphere and wants to identify the kind of technology that is subjected to the precautionary principle by regulators.

The countries Mark hopes to visit include Mexico, Syria, the USA and Uganda.

Richard Weston

155 Fergusson Rd,
Brighton, TAS 7030
(03) 6268 0063

westonfarm@bigpond.com



Richard Weston, from Brighton in Tasmania, receives the 2012 Nuffield Scholarship sponsored by Impact Fertilisers and the Tasmanian Department of Primary Industries, Parks, Water & Environment.

Richard would like to investigate white asparagus production for the gourmet market.

He is self-employed and produces cut flowers, olive oil and fresh produce on his property, which is situated just north of Hobart.

Richard says he currently grows green asparagus but sees a great opportunity in white asparagus production.

“I feel that there is a wonderful opportunity for Tasmania to produce this gourmet product. White asparagus is highly sought after and numerous restaurants and chefs have approached me about it”.

Richard has already started investigating white asparagus production in Tasmania, acquiring white asparagus seed with plan to undertake a trial plot.

He says “we currently grow Chicory, Kohlrabi and Burdock, which puts us already in a niche market for fresh produce and white asparagus production would complement our operation well”.

Richard is hoping to visit Germany as it is a large producer and consumer of white asparagus.



SATURDAY 24th SEPTEMBER

6:30 pm Pre dinner drinks

7:00 pm Seated and entrée served

7:05 pm Formal Welcome, including apologies
Terry Hehir, Chair of Nuffield Australia

7:10 pm Presentation of 40 Year Achievement Award,
Guy Wheal

7:15 pm Main Course

8:10 pm George Wilson Oration - Professor Wyne Jones

8:30 pm Dessert

9:00 pm Presentation of 2012 Nuffield Scholarships
Terry Hehir, Chair of Nuffield Australia

Scholarships to be Awarded

Two **grain grower** in Southern NSW, Vic, SA or Tas, supported by **Grains Research and Development Corporation**

A **grain grower** in WA, supported by **Grains Research and Development Corporation**

Two **grain grower** in Southern NSW, Vic, SA or Tas, supported by **Grains Research and Development Corporation**

A **grain grower** anywhere in Australia, supported by **Grain Growers Limited**

A **woolgrower** anywhere in Australia, supported by **Australian Wool Innovation**

A **livestock producer** anywhere in Australia, supported by **Meat & Livestock Australia**

A **wine grape grower** anywhere in Australia, supported by **Grape and Wine Research and Development Corporation**

A **sugar grower** anywhere in Australia, supported by **Sugar Research and Development Corporation**

An **aquaculture and/or fish producer** anywhere in Australia, supported by **Fisheries Research and Development Corporation**

An **aquaculture and/or fish producer** anywhere in Australia, supported by **Woolworths and Fisheries Research and Development Corporation**

A **primary producer** anywhere in Australia, supported by **Woolworths**

A **primary producer** anywhere in Australia, supported by **Rabobank**

A **primary producer** anywhere in Australia, supported by **Macquarie Agricultural Funds Management Ltd.**

A **dairy farmer** supported by **Geoffrey Gardiner Dairy Foundation**

A **primary producer** anywhere in Australia, supported by **Sidney Myer Fund**

A **primary producer** in the Western Australia supported by **CBH and CSBP**

A **primary producer** in Victoria supported by **Rural Finance Corporation**

A **primary producer** in Tasmania supported by **Impact Fertilisers and Tasmanian Department of Primary Industries, Parks, Water & Environment**

A **primary producer** in New South Wales supported by **John Deere**

Bryce Riddell

83-87 Benalla Rd,
Yarrawonga, VIC 3730
0408 550 125

multicube@bigpond.com



Bryce Riddell, from Yarrawonga in Victoria, receives the 2012 Nuffield Scholarship sponsored by Rural Finance Corporation.

Bryce is looking to study commercial production and value-adding opportunities for alternative hay crops, such as Orchard Grass, Timothy Grass and Teff Grass.

“When it is the off-season for the northern hemisphere, mainly in the US and Canada, I think there could be a real opportunity to supply a gap in the international market with these hays,” he says.

Also Bryce would like to investigate domestic opportunities, saying “I’d like to establish local markets for these new hays for the equine and dairy sectors.”

In addition he plans to research different handling, processing and transport methods for hay, for both domestic and export markets.

Places Bryce plans to visit include both North America and Japan.

Bryce is a co-manager of their family-run farming business, which comprises of a commercial Angus herd of cattle, and also lucerne and oaten hay production. They also run a lucerne cubing plant based in Yarrawonga, where they produce lucerne hay cubes, as well as a variety of other types of hay cubes for the domestic and export markets.



RURAL FINANCE
Let's talk

Kelly Manton-Pearce

1118 Bullaring Rd,
Yealering, WA 6372
08) 9065 7089

k.pearce@murdoch.edu.au



Kelly Manton-Pearce, from Yealering in Western Australia, receives the 2012 Nuffield Scholarship sponsored by CBH and CSBP.

Kelly would like to investigate the supply-demand balance for the Australian sheep industry and how sheep farmers should respond to the growing demand for a high-quality retail-ready lamb product.

She says both prices and demand keep rising but, despite a good year generally across Australia, the sheep flock rebuilding rate is likely to remain constrained over the next five years, saying “I hope to work out whether the high prices for lamb due to low supply will impact on rebuilding potential and what the implications of the high price is for future lamb demand.”

With her husband Alan, Kelly runs a 4500 acre cropping and sheep farm. They run a Border Leicester stud and this year they seeded 3750 acres to wheat, lupins, canola (including GM) and barley as well as producing export hay. Kelly is also currently employed as a Research Fellow on a part-time basis for The CRC for Sheep Industry Innovation (Sheep CRC2).

Places Kelly would like to travel to include the EU and the US.



Michael Chilvers

“Winburn”,
1262 Nile Rd,
Nile, TAS 7212
0409 974 556

fchilvers@bigpond.com



Michael Chilvers, from Nile in Tasmania, receives the 2012 Nuffield Scholarship sponsored by the Grains Research and Development Corporation.

Michael is planning to research strategies to efficiently transition from a traditional family farming structure to a diversified agricultural business.

Along with wife Fiona and two young children, Charlotte and Felix, Michael farms 1080 hectares, with 400 hectares of crops such as poppies, wheat, processing peas, lucerne and tic beans under centre pivot irrigation. In addition, the Chilvers grow malt barley, canola and trade in prime lambs.

Michael is planning on using his Nuffield Scholarship to investigate models for managing production systems on his existing farm and in potential new areas of production as the business expands.

“I’d like to find examples of farmers managing efficient and profitable businesses spread over large distances and how systemising farming processes and applying new technology can aid in managing crop rotations of varying scale and intensity”

Rather than discovering a “one size fits all” solution, Michael anticipates drawing from a range of systems from places such as the UK, France, North America, Canada, South America, China and New Zealand.



Ashley Fraser

10 Springhurst Rd,
Lilliput, VIC 3682
0418 176 764

ashley.fraser@bakerseedco.com.au



Ashley Fraser, from Rutherglen in Victoria, receives the 2012 Nuffield Scholarship sponsored by the Grains Research and Development Corporation.

Ashley would like to study how seed coating both protects and enhances crop growth.

Problems with poor crop establishment due to a variety of nutritional, disease, insect and seed bed issues prompted his interest, saying “in short Australian growers have hundreds of millions of dollars in lost production due to poor crop establishment, which in some cases could be solved with a \$3 per hectare seed coating.”

Ashley believes research into seed coating technologies could result in targeted insect controls, fungicide control, better water harvesting properties, biological enhancement through species targeted rhizobia and more.

He would like to travel to Canada, USA and Europe to visit research facilities and manufacturers of coating equipment, coating materials, powder manufacturers and chemistry experts.

Ashley is general manager for Baker Seed Co, a family owned and operated business centred around an extensive seed processing and processed grains plant. Within the family they also crop approximately 3000 hectares for seed production in the Rutherglen area and operate a small feedlot to utilize the by-products from the processing plant.



Matthew Simmons

56c Stones Rd,
Ebenezer, NSW 2756
(02) 4579 8185

matthewandsue@bigpond.com



Matthew Simmons, from Ebenezer in New South Wales, receives the 2012 Nuffield Scholarship sponsored by the Sidney Myer Fund. He hopes to investigate the relationship between pigs and cropping.

Matthew is the owner-manager of Swallow Rock Organics and Melanda Park Free Range Pork. With his wife Sue, he has been growing certified organic potatoes for 6 years and running 80 free-range sows for the past 2 years. The property is about 115 acres and turns off around 1000 pigs a year.

Matthew would like to study free-range pig production with a specific focus on the relationship between the pig phase and cropping phase of a rotation system, and how to best manage nutrient build-up to avoid an environmental hazard.

He believes nutrient build-up should actually be viewed as an asset, with real potential existing for outdoor pigs to dramatically increase the fertility of marginal land.

“Cereal crops, hay and vegetable crops can all be grown after the pig phase without the use of any extra chemical fertilisers, and in most cases with better results,” he says.

He hopes to visit the UK as well as New Zealand and the USA during his Nuffield travels.



Damian Murphy

680 Farmers Rd,
Dumbalk North, VIC 3956
(03) 5664 5488
dtmurphy@activ8.net.au



Damian Murphy, from Dumbalk North in Victoria, receives the 2012 Nuffield Scholarship sponsored by the Geoffrey Gardiner Dairy Foundation.

Damian would like to investigate the different finance schemes in place around the world which young farmers use to start building their asset in agriculture.

With his wife Trudy and boys Shem, Caleb and Luke, Damian share-farms on his parents property, milking 270 cows on 102 hectares of milking area with out blocks to support this.

While there is a Young Farmer Finance Scheme in Victoria, Damian would like to see a more dynamic program, saying "I hope my study will allow me to design a scheme that covers the finance needs of young entrants to agriculture right through to the possibilities of equity partnerships and farm ownership."

"Finance is relevant to nearly every farmer no matter what commodity they produce. For the next generation of farmers the amount of equity needed to be in a position to purchase a farm can be quite daunting - of course this does not mean it can't be done but is becoming harder" Damian says.

Damian is hoping to travel through Europe, the US, South America and New Zealand.



Jemma Sadler

PO Box 108,
Wongan Hills, WA 6603
0408 721 029
jemmasadler@bigpond.com



Jemma Sadler, from Wongan Hills in Western Australia, receives the 2012 Nuffield Scholarship sponsored by the Grains Research and Development Corporation.

Jemma would like to study profitable cropping with sustainable weed management, an issue she sees as an increasing problem in the WA wheatbelt.

She works on her family's mixed livestock and cropping property in partnership with her brother and father. They have a 4500 hectare cropping program consisting of wheat, canola, barley and lupins as well as 3000 breeding ewes.

Jemma hopes to gain an insight into how farmers and farming groups around the world are dealing with increasing opposition to chemical use and genetically modified (GM) technology saying, "I would like to see how other countries are handling the integration of GM growers with non-GM growers, and how these different farming practices can co-exist amicably."

She adds, "although I believe Australia is a world leader in research into integrated weed management, I would like to investigate how other countries are profitably controlling their weeds, without the use of herbicides."

Jemma is planning to visit Europe, the USA, Canada and South America.



Robin Schaefer

PO Box 182,
Loxton, SA 5333
0417 877 578
rsc10092@bigpond.net.au



Robin Schaefer, from Loxton in South Australia, receives the 2012 Nuffield Scholarship sponsored by the Grains Research and Development Corporation.

Robin would like to study farm business management systems as well as medium to long-term weather forecasting, with a particular focus on management tools to aid decision-making.

He believes having good systems in place can streamline the practical and business management of a farm, making it easier to make decisions and manage employees, saying, “we have developed systems within our own business which work for us, but I want to see what other people are doing as well which may be better, including how people make decisions using weather forecasts.”

Robin is managing director of Bulla Burra Operations, which is a collaborative farming venture based on low rainfall dryland cropping. Their cropping program consists of 8000 hectares of wheat, canola, barley, mustard, rye, hay and this year they are also trialling lupins and lentils. Also, within the family farming business ‘Schaefer Enterprises’ Robin has a small irrigation enterprise growing quandong.

He hopes to visit the USA, England, Argentina and Europe during his Nuffield travels.



Natalie Williams

“Granville Station”,
5240 Texas Rd,
Jericho, QLD 4728
(07) 4651 0309
hickwill@bigpond.com.au



Natalie Williams, from Jericho in Queensland, receives the 2012 Nuffield Scholarship sponsored by Macquarie Agricultural Funds Management.

Natalie would like to investigate soil carbon sequestration in agricultural environments, particularly rangelands and semi-arid environments saying, “I am interested in the Kyoto Protocol rules surrounding permanence and additionality of soil carbon in rangelands and semi-arid environments and what that might mean for agribusinesses wanting to be involved in carbon trading.”

Natalie is also keen to investigate the technology used to measure and verify carbon levels and how it may be used in Australian landscapes. In addition, she would like to study the impact of cattle on soil biology, particularly their effect on carbon sequestration permanence.

Countries Natalie hopes to visit include Columbia, the US and the UK.

She is a business partner and on-ground manager of the family’s beef cattle grazing property “Granville” in central western Queensland. The property is 7600 hectares in size and they run Brahman/Droughtmaster breeders with Bos Taurus/Euro bulls.



Matthew Neumann

RSD 1013,
Mundulla, SA 5268
0400 000 152

mjneumann@hotmail.com



Matthew Neumann, from Mundulla in South Australia, receives the 2012 Nuffield Scholarship sponsored by Rabobank.

He is planning to investigate how to iron out inefficiencies in the fresh food supply chain.

Matthew and his wife own 800 acres of reliable farming country, of which 300 acres is under centre-pivot irrigation. Presently, they produce around 1000 tonnes of onions for the fresh market, crop 160 hectares of clover for certified seed, wheat, barley and canola and have 50 hectares of hay and seed lucerne under irrigation. They also currently have 650 Border Leicester Merino cross ewes that are mated to Poll Dorset rams.

Matthew is passionate about food supply chains and seeing primary producers receiving a fair price for what they produce. He believes while every commodity needs a supply chain to meet the product with the end user, there is a lot of profit taking and inefficiencies along the chain.

“I would like to look and study the opportunities in the fresh market for producers of our size to work together to market our produce in a co-operative setup,” Matthew says.

Matthew says he would also like to investigate vertical integration by meeting individuals who have made the next step through initiatives such as packing their own produce and using branding to differentiate their product.



Ryan Smart

“Akeringa”,
Carew Rd,
Keith, SA 5267
0407 566 065

ryansmart@bigpond.com



Ryan Smart, from Keith in South Australia, receives the 2012 Nuffield Scholarship sponsored by the Grains Research and Development Corporation.

Ryan would like to study ways of managing farm energy use to maximise efficiency.

He says farmers must adopt systems that minimise emissions and maximise sequestrations at the farm level and he aims to review every aspect of operations to work out how this might be done.

“I’d like to gain an understanding of global practices that are addressing carbon and maximising energy use efficiencies on-farm,” he says.

“An ideal outcome would be to rate various practices so implementation can occur for best net value,” Ryan concludes.

His travel plans include Canada, California and Germany.

Ryan is a partner and board director in the family business SmartGroup. The operation consists of vineyards and cattle at Victor Harbor, broad-acre cropping, sheep and irrigated pasture seed production at Kingston SE and broad-acre cropping, fodder production, irrigated lucerne seed production, sheep and cattle at Keith. Ryan manages the Keith farm for SmartGroup.



Linda Eldredge

PO Box 845,
Clare, SA 5453
0428 832 167

glenryden@bigpond.com



Linda Eldredge, from Clare in South Australia, receives the 2012 Nuffield Scholarship sponsored by Grains Growers Limited. Linda would like to study 'real-time' business management.

Linda and her husband Rhys farm in the mid-north of South Australia, with 2000 acres at the foothills of the Clare Valley and an additional 1000 acres in the Apilla district. They are predominantly prime wheat growers with additional crops of barley, canola and some legumes as well as 1000 sheep for prime lamb and merino lamb production.

In addition, Linda services the rural community with educational opportunities and business management consultancy.

She is planning on using her Nuffield Scholarship to investigate 'real-time' business production systems such as information portals and management applications (apps) to drive increased production and profitability.

Linda has identified the US, Canada Ireland and India as countries where she could learn the most about cutting edge technology and leading software developers.



Dave Reilly

PO Box 1029,
Loxton, SA 5333
(08) 8583 8314

reilly@gurradowns.com.au



Dave Reilly, from Loxton in South Australia, receives the 2012 Nuffield Scholarship sponsored by Woolworths. Dave is plans to study management of date palm plantations for premium date fruit production.

With his family, Dave owns and operates a mixed horticulture enterprise in the Riverland district of South Australia. While they do grow wine grapes and pomegranates, their primary focus is on the production of premium table dates.

The focus of his study will be to increase his learning and expertise in the management of date palm plantations for premium date fruit production and to explore the markets for high value table dates.

He says "while the international date industry is very large, producing some 7 million metric tonnes in 40 participating countries, Australia only produces around 20 tonne per annum."

In particular, Dave would like to look at date palm plantation management methods including low labour systems and mechanisation, in both organic and conventional systems.

He hopes his study itinerary will include meetings with date producers in the USA and the Arab Gulf countries, a visit to Europe to study consumer buying habits, as well as investigating inter-row cropping in north Africa.



Rhys Arangio

96 Arkwell St,
Willagee, WA 6156
0402 883 195

rarangio@australfisheries.com.au



Rhys Arangio, from Willagee in Western Australia, receives the 2012 Nuffield Scholarship awarded by the Fisheries Research and Development Corporation and Woolworths. Rhys is planning to study ways to reduce marine mammal depredation in fishing operations.

Rhys explains “depredation is when an animal such as a whale or seal ‘steals’ fish from a fishing operation, meaning extra food for those mammals, but also an increased risk of injury or death of the mammal, and reduced catch rates for the fisherman.”

He is part of the management team for Austral Fisheries Pty Ltd, a commercial fishing company with interests in Australia’s Northern Prawn Fishery, as well as Australia’s sub-Antarctic zones of Heard & McDonald Islands (HIMI) and Macquarie Island.

Rhys says a Nuffield Scholarship would enable him to study some of the available mitigation methods currently in use around the world, including sub-marine harvest systems for longliners, the use of acoustic deterrents or different gear types such as pots to avoid interaction between these animals and the fishing operation.

He hopes to visit Norway, Alaska and France to meet with equipment manufacturers, government, industry and fishers.



Ray Vella

“Bald Hills”,
Marlborough, QLD 4705
(07) 4935 6046

rlvella@bigpond.com



Ray Vella, from Marlborough in Queensland, receives the 2012 Nuffield Scholarship sponsored by Meat and Livestock Australia. Ray would like to study beef genetics and pasture management.

Ray is manager of one of his family’s properties which is 18,000 acres, where they breed and fatten approximately 3000 Brahman cross cattle. Ray and his wife have also established their own Brahman stud to start breeding bulls to be used back into their cattle herd to increase quality.

He would like to investigate which breeds of cattle best maintain the quality of beef in harsh environments.

Ray says he hopes to find answers by visiting successful cattle grazing/ breeding operations, saying “I would like to tour properties being run productively and efficiently and to implement their concepts back into Australian farming enterprises, with enough flexibility to suit every individual grazing capacity.”

In particular Ray would like to investigate ways of improving industry understanding of stud herds, better decision-making support for graziers and smarter pasture management.

He hopes to visit Mexico, New Zealand, South Africa, Europe, the USA and Brazil.



James Walker

“Camden Park”,
Longreach, QLD 4730
07) 4658 2141
james.jumbuck@bigpond.com



James Walker, from Longreach in Queensland, receives the 2012 Nuffield Scholarship sponsored by Australian Wool Innovation.

James would like to study intensive breeding systems which maximise sheep production and fertility.

He is managing director of Wakefield Grazing, a family-operated grazing business located in Longreach and Isisford with a 5 year production charter based on sheepmeat, wool and lamb production. They currently run 15,000 sheep and are targeting 30,000 ewes in five years.

With the national flock dwindling to below 70 million head, James believes there is a great need to rebuild flock numbers by moving from observation to real time measureable data management.

He says a major focus for his study will be on breeding cycles, which for many enterprises centres on annual wool harvesting.

James believes this is an inflexible system that could be improved by capitalising on the polyestrus trait of ewes and speeding up the lamb-to-lamb interval with remote weight and health management.

He would like to visit Europe, the US, South America, China and India.



Ewan McAsh

2/(8-10) Wuru Dve,
Burill Lake, NSW 2539
0414 890 581
ewan@mcashoysters.com



Ewan McAsh, from Burill Lake in New South Wales, receives the 2012 Nuffield Scholarship sponsored by the Fisheries Research and Development Corporation. Ewan would like to research a new strategic direction for the NSW oyster industry.

Ewan is managing director of McAsh Oysters based on the Clyde River, Batemans Bay, where they produce Sydney Rock Oysters. Their goal is to increase production from 50,000 dozen to 150,000 dozen in the next two years and have also opened a licensed oyster and wine bar in Ulladulla.

With declining production in the Sydney Rock Oyster industry in NSW, Ewan would like to revive what he calls a ‘sunset industry’ saying, “with strong market conditions and the availability of labour-saving technologies, the oyster industry has great potential for growth - a lifestyle of working on the river is surely attractive to potential investors and new entrants to the industry.”

However Ewan doesn’t believe those new entrants and up-and-coming farmers are given the necessary direction or support on efficient, profitable ways to farm oysters saying, “as an industry we need to review our strategic direction and communicate this vision to industry members to assist and guide them.”

Setting his travel itinerary is a pretty easy decision for Ewan – he’s going to follow the oysters to Toronto and Quebec in Canada, Massachusetts and New York in the USA and Europe, particularly France.



Bryan Granshaw

8328 Ayr/Dalbeg Rd,
Dalbeg, Qld 4807
(07) 4784 0141

bryangranshaw@skymesh.com.au



Bryan Granshaw, from Dalbeg in Queensland, receives the 2012 Nuffield Scholarship sponsored by the Sugar Research and Development Corporation.

He would like to research how to get more out of the natural biology and synergies existing within our soils.

Bryan is a third generation farmer on his family's property, where he works in partnership with his brother and father. They are predominantly sugarcane growers, however also rotate with legume crops such as soybeans and mungbeans.

Soil health forms the foundation of their farming system, and it's this passion that has driven Bryan to his Nuffield research topic.

As sugarcane is a perennial crop, and is in the ground for up to five years, Bryan and his family face a unique ongoing monoculture issues saying, "to try and address this we in the past have grown a sacrificial soybean crop intercropped with sugarcane, which showed encouraging results but also threw up new challenges".

Bryan is keen to learn how farmers in North America, South Africa and India manage two different crops when intercropping, as he believes a lack of knowledge on this system is a big impediment for his industry..



Stuart Sharman

PO Box 328,
Coonawarra, SA 5263
0411 241 891

sharman@mellorfarm.com.au



Stuart Sharman, from Coonawarra in South Australia, receives the 2012 Nuffield Scholarship sponsored by the Grape and Wine Research and Development Corporation.

He will study Continuous Improvement (CI) principles and how they can be applied to viticulture.

Stuart is a vineyard manager for Wynns Coonawarra Estate, which comprises of 791 hectares of bearing vineyard and 63 hectares of redevelopment of mixed varieties, with the focus being Cabernet Sauvignon and Shiraz.

He believes CI principals, widely used in line manufacturing, can be adapted to viticulture, explaining, "the over-arching philosophy of CI is to develop a culture where open-minded thinking and challenging the norm is encouraged and rewarded."

Stuart continues, "the principals of employee problem solving, measuring performance, waste identification and elimination and clarity of reward for effort, are all management tools encouraged by CI but not necessarily used regularly in primary production."

He would like to visit Toyota in Japan, considered the birthplace of CI in manufacturing, as well as New Zealand and the Netherlands to study further examples of CI in agricultural production.

