

Nuffield
2018 Scholars
Introduction



Alison Larard, 2018 Nuffield Scholar supported by Westpac Agribusiness

- Home farm at Evelyn in Far North Qld, Australia
- Limousin cattle seedstock operation
- Undergoing succession
- Ag economist working as a business consultant
- Servicing govt projects & private beef businesses
- 2 sons, Ian & Andrew

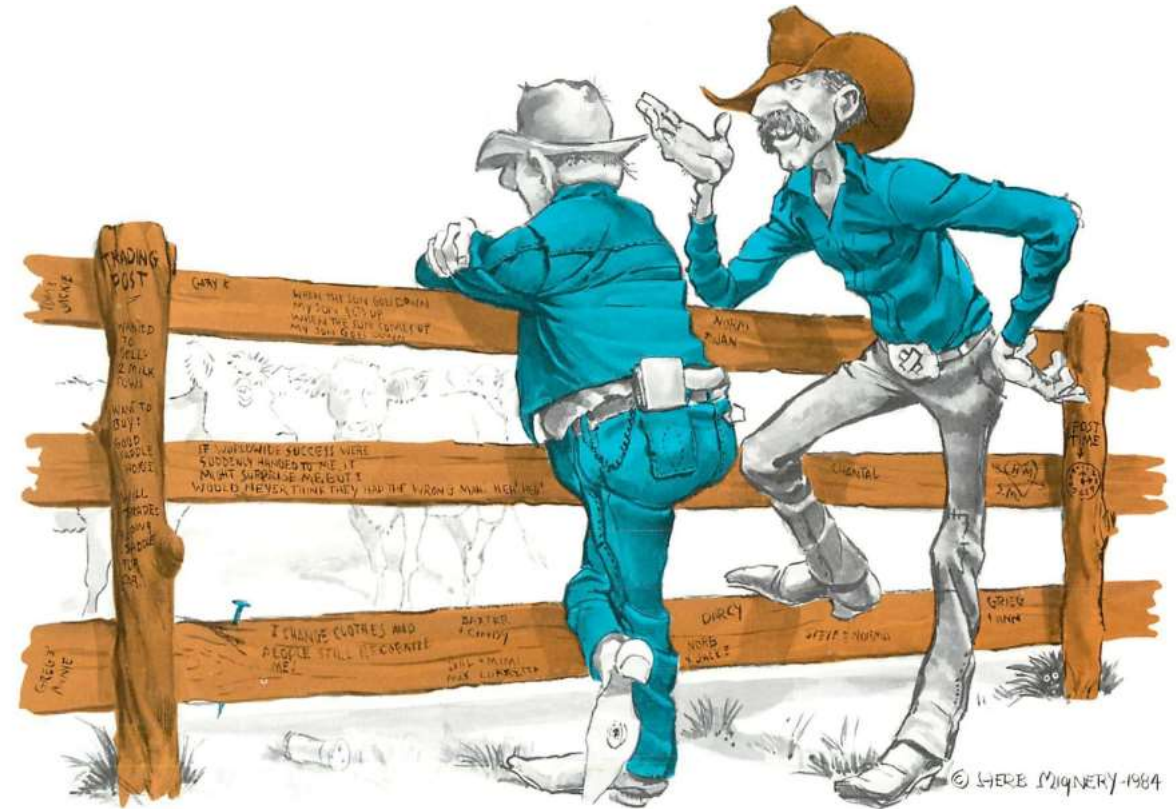


Study Topic: Better Business Management & Succession Planning in North Queensland Beef Businesses



Is “succession at all costs” the smartest option for families or the industry?

Is a Whole of Business (WoB) approach to strategic planning and management the answer?



I can't decide if I should give'm away now, or feed'm out and then give'm away.



Vincent GALLARD
2018 Nuffield scholar

Family dairy farming

Enhance link with
consumer

Dairy processing

Direct selling

Investment

Lack of market studies

Time to reach a mature market

Training in dairy processing

Sizing of the equipment



Nuffield study :

Technical and economic feasibility of a mobile dairy processing plant

Focus on some dairy products

Food safety issues

Viability of project

Kees Hemminga Dairy Farming The Netherlands



Nuffield research topic

- How do global trends and developments influence my dairy farm and the dairy industry?
- How do I deal with these kind of changes?





Dr Gus Selby

Can Institutional Investment Capital Provide Opportunities for Family Farmers and Young Farmers in the UK?



Dr Gus Selby

Can Institutional Investment Capital Provide Opportunities for Family Farmers and Young Farmers in the UK?

**Father/husband
Veterinary consultant
People/training**



Meanwhile back



farming

Understanding
how animal and
people behaviour
impacts on
performance!



Nuffield Canada



- Originally from Prince Edward Island
- Currently live in Nova Scotia



Nuffield Topic



- Attributes of beef production that consumers are willing to pay for
- Production that may be implemented on farm in Canada
- Links in the value chain
- Europe, Hong Kong, Japan, USA



Artur H. L. Falcette





Nuffield Topics

- 1) How the diversification and integration of production systems act increasing the farm profitability;
- 2) How the unions can create and deliver value to the farmers.





Andre Henry- 2018 Nuffield Scholar Australia

Family farm and food retail business- 300ha at Appin South, Victoria

Tomatoes-> pasta sauce, passata and vegan jerky

Wheat-> pasta

Barley, canola, shaftal clover





Study Topic-

Engineering and Energy uses for crop residues

Rapid Diagnostics: What Can We Learn From The Medical Industry??



Elizabeth Creak
Charitable Trust

Charlotte Evans

Point of care
diagnostics:
What can we learn
from the medical
industry?

Rapid Diagnostics: What Can We Learn From The Medical Industry??



Elizabeth Creak
Charitable Trust

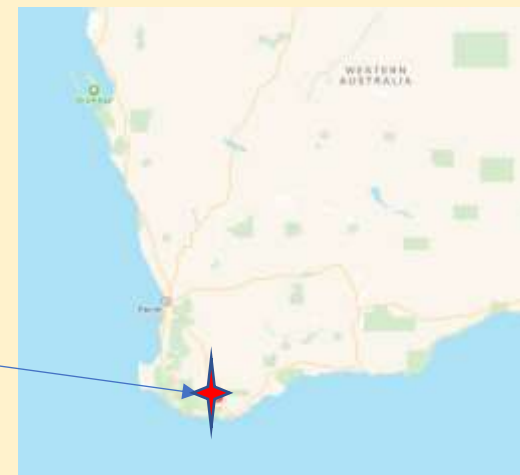
Charlotte Evans

Point of care
diagnostics:
What can we learn
from the medical
industry?

Andrew Slade

2018 Australian Nuffield Scholar

- 5500ha South Coast WA
- 8500 composite ewes
- 800 Sussex/Angus Cows
- 2500ha Barley, Wheat and Canola



Precision Livestock Management

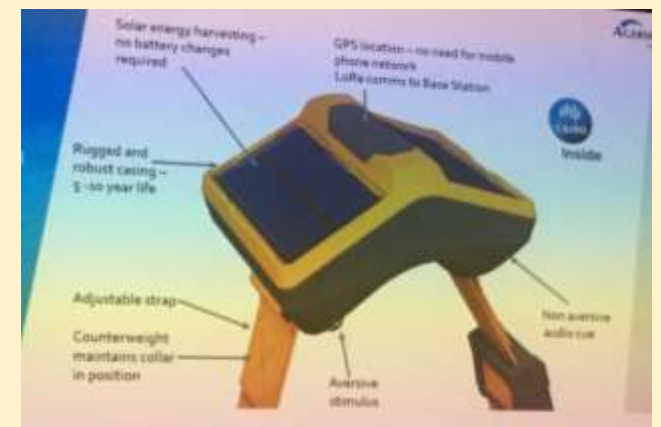
Issues

- Finite natural resource
- Declining skilled workforce
- Farmers exiting livestock production
- Social licence to farm livestock??

Potential Solutions

- IoT's farming
- Virtual Fencing
- Real time remote pasture monitoring

**And whatever else the
Nuffield Journey sends my way**





Tom Ormesher

Water Markets and
Farm Productivity



Tom Ormesher

Water Markets and
Farm Productivity

Boyd Carter
East Wubin Western Australia
2018 Nuffield Scholar



**Mixed farm, family business, 12,000 hectare in Jibberding:
Grains: Canola, Lupins, Barley, Wheat, Oats & Hay
Live Stock: 2000 head of Merino and SAM cross's**



**Nuffield study in 2018:
Readying Growers to Ride the Robots Back:
A study into preparation for the Robotic Revolution**



Emily Norton

Breaking the silos -
best practice in
global agricultural
policy for farm
business innovation



Emily Norton

Breaking the silos -
best practice in
global agricultural
policy for farm
business innovation

Simon Cook
2018 Nuffield New Zealand scholar



Kiwifruit Orchardist with a mix of Green and Gold varieties.
Own and manage orchard contracting business specialising in kiwifruit and avocado spraying



Nuffield study in 2018:
Biosecurity. Maximising our protection from pre-border to farmgate



Josh Oulton
Canada



TapRoot Fibre Lab





Colin Burnett
2018 Australian Nuffield Scholar
Beef Producer North West Queensland



Beef Production - 9000 Head of Brahman Cross Cattle – 85 000 Hectares –
Family Owned and Operated - 4th Generation – Julia Creek, QLD



Study Topic: Business Sustainability in North West QLD – Environmental, Social, Economic.

Dudley Mitchell



2018 Nuffield Scholar



- 50ha established avocado orchard + 50ha new orchard
- Clonal propagation nursery
- Packing
- Marketing



Nuffield Topic 2018: Trends in canopy management in high density avocado orchards

Julien Hérault
Farm machinery adviser & Arable farmer



My business :

- Improving equipment efficiency
 - Managing machinery cost
 - Teaching farm machinery
- Carrying out tests and diagnostics



Arable farm, 55 hectares :
OSR– Wheat - Barley– Corn– Faba bean–
Minimum tillage & Cover crops

Nuffield study :

Reducing the costs of mecanisation: how to reach an optimum level of investment in agricultural equipment ?

Julien Hérault
Farm machinery adviser & Arable farmer



My business :

- Improving equipment efficiency
 - Managing machinery cost
 - Teaching farm machinery
- Carrying out tests and diagnostics



Arable farm, 55 hectares :
OSR– Wheat - Barley– Corn– Faba bean–
Minimum tillage & Cover crops

Nuffield study :

Reducing the costs of mecanisation: how to reach an optimum level of investment in agricultural equipment ?



Barry O'Boyle

Innovation &
entrepreneurship -
Relevance for
business growth
post Brexit?



Barry O'Boyle

Innovation &
entrepreneurship -
Relevance for
business growth
post Brexit?

1 Karol Kissane

Ireland 2018 Nuffield scholar



1 Dairy farm, family business, 50 hectare in Kerry:
New entrant – converted from Beef – Previous career in banking and
Financial Services



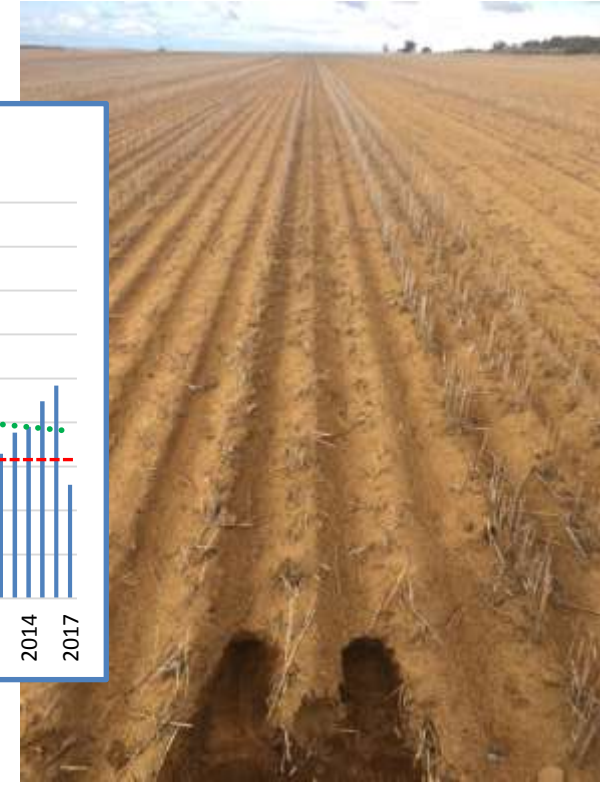
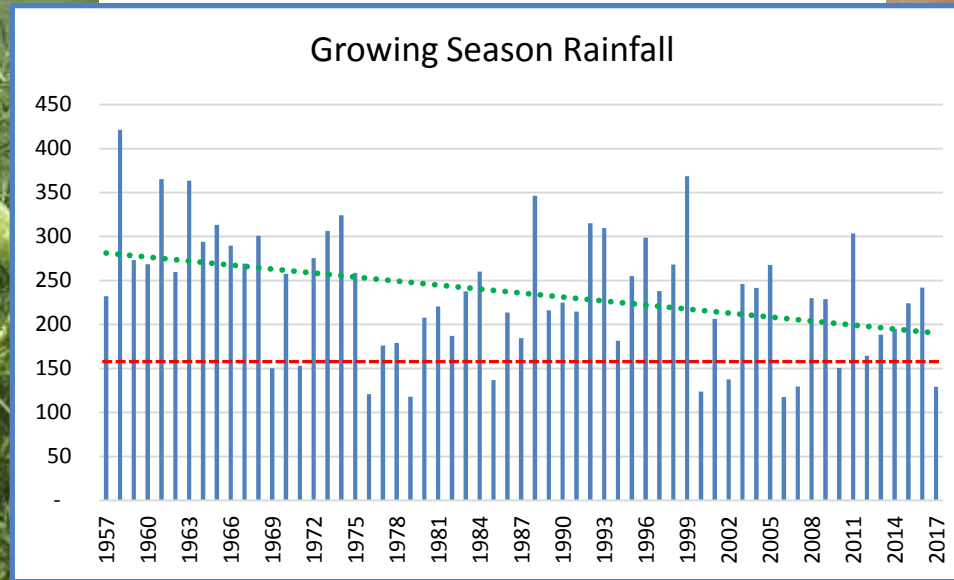
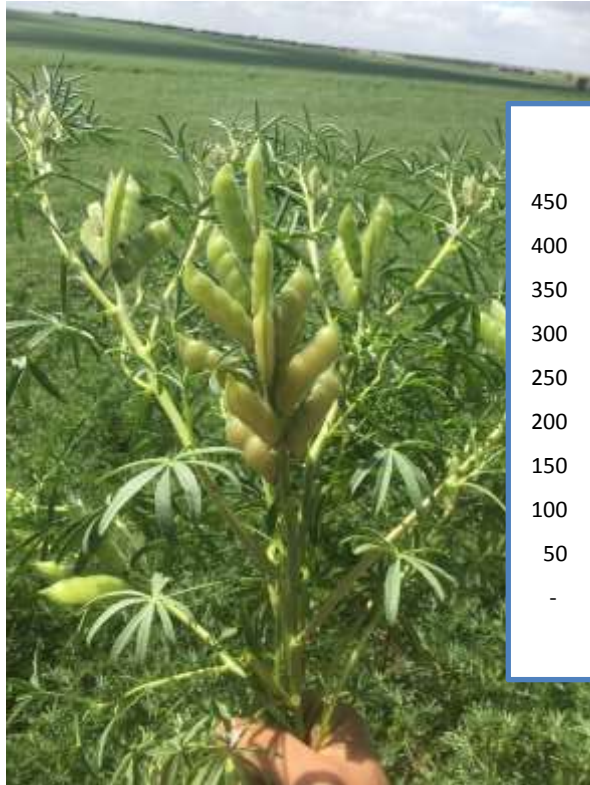
Nuffield study in 2018:
How to attract the next generation to a career in farming

**Dylan Hirsch – Latham, Western Australia
2018 Nuffield Scholar**



**6000ha cropping, family business, low rainfall region of Western Australia:
Wheat, Barley, Canola, Lupins.**

Income completely dependent on rainfall which is becoming more erratic.



**Nuffield study in 2018:
Financial tools which can be used to protect business risk from climate
variability**



Edwin Michiels



AandenHerenbosweg
stoombaden | akkerbouw | vleesvarkens



EMMA O'FLAHERTY

BAIADA BREEDER FARM MANAGER

NSW 2018 NUFFIELD SCHOLAR



- 10 shed set up (10,000-12,500 hens/shed)
- Automatic egg collection with Jansen nesting system and packing machine
- Only automatic farm to reach near 2% this current batch for floor eggs
- Other nesting systems in complex include PAX, JD and Vencomatic
- Produced just over 100,000 eggs a day in peak production with an average of 93% hatchability



NUFFIELD STUDY IN 2018:
WHAT ARE THE CONTRIBUTING FACTORS TO FLOOR EGGS?

Agriculture & the natural environment - building cross section relationships for the benefit of future policy



Kate Mayne

Agriculture & the natural environment - developing cross sector relationships to benefit future policy

Agriculture & the natural environment - building cross section relationships for the benefit of future policy



Kate Mayne

Agriculture & the natural environment - developing cross sector relationships to benefit future policy

GAVIN ROBERTSON

- *Winemaker, Vineyard Manager and Instructor*
- *Owner and Cidermaker*



THE NUFFIELD PLAN...



Grant Pontifex - Paskeville, South Australia



2018 Nuffield scholar supported by Nufarm Australia.

‘Improving soil health with organic amendments and cover cropping’



5th generation family farm

- Continuous crop, full residue retention system
- Jointly owned and managed with brother
- 6700ha in two different locations
- Diverse grain and cover crops
- Focus on soil health
- Chicken manure application





Jamie McIntosh

Explore New Ways In Which Eggs Can Be Marketed To Maintain A Steady Increase In Egg Consumption.

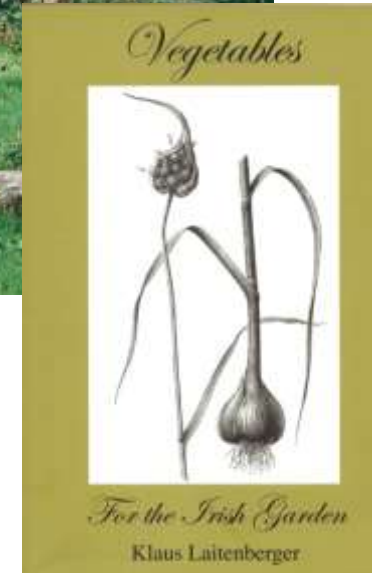


Jamie McIntosh

Explore New Ways In Which Eggs Can Be Marketed To Maintain A Steady Increase In Egg Consumption.

Klaus Laitenberger
Ireland

2018 Nuffield scholar



**Organic Horticulturist, organic inspector, vegetable seed company,
Passionate about growing edible crops**



**Nuffield study in 2018:
Explore the potential of new and underutilised food crops
Oca, Yacon, Ulluco, Mashua
“The Lost Crops of the Incas”**

James Hawkins

2018 Nuffield Australia Scholar



**Mixed farm, family businesses, 4,500 hectare in Western Victoria:
Sheep (wool, meat) – Irrigated Lucerne seed/grazing - Cereal grain, Oil Seeds, Legumes – Contract
Manage Pigs, Compost production, Farm research**



**Nuffield study in 2018:
Overcoming soil constraints through soil amelioration
Many thanks to Nuffield Australia and Rural Bank my generous sponsor**

Guillaume Milard

Farmer in no-till system with cover-crops, working in two family farms



Our productions

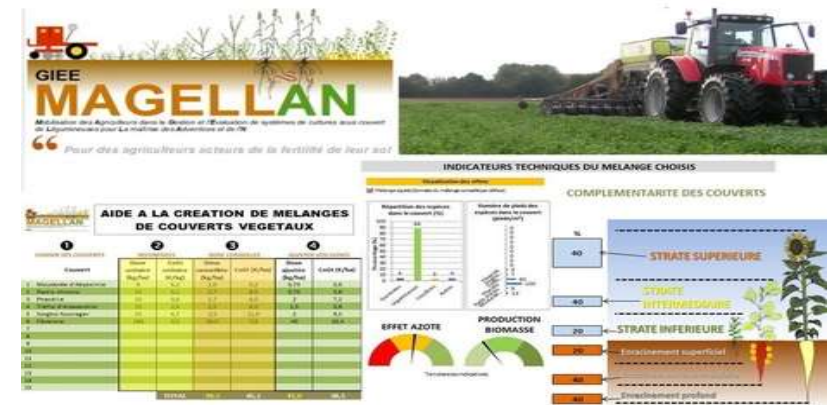
Wheat/Barley/Canola/Sugar Beet/Potatoes/
Maiz/Soya/lentils/Peas



- Member of Farmers Organisation called **MAGELLAN**



Permanent cover-crops of alfalfa started into canola field



NUFFIELD 2018

Nuffield Project

Nutrients quality analyses and comparison between Conventional and agro-ecological system

- Do we produce healthier production in agro-ecological system?
- **How can we use this enhanced quality on the domestic and international**
 - **New communication & economic Partnerships**





Angela Kirkwood

Growing the British
Pig Industry



Angela Kirkwood

Growing the British
Pig Industry



Andy Elliot





James Stacey – 2018 Nuffield Scholar
Australia





Mixed Farm 210 Ha Lucerne Hay and Seed, Cereal Crops, Beef Cattle, Contract Hay and Grain Harvesting.

Nuffield 2018 – Challenges and Opportunities for Agriculture in the Peri Urban Zone

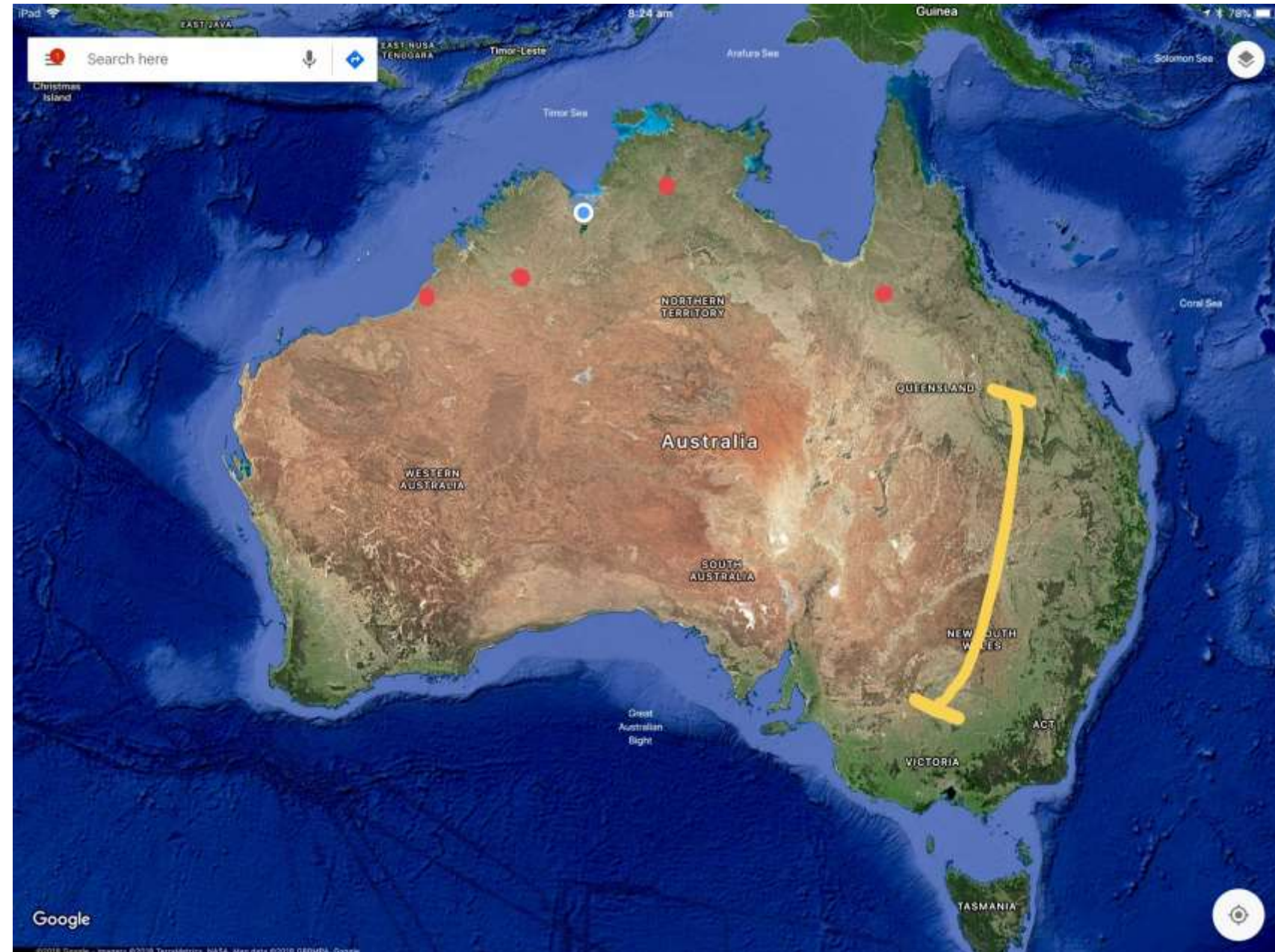


Luke McKay – 2018 Nuffield Scholar Kununurra, Western Australia



Issues Relevant to Tropical Cotton Production

- Farm Manager for Kimberley Agricultural Investment
- Development and farming in the Kimberley region of WA. Have access to 25,000 Ha for irrigation development
- 2018 is the fourth crop, Chia, Quinoa, Maize, Chickpea, Mung bean, Sorghum and fodder grown previously. First cotton crop this year
- Research will focus on maximising cotton production to build an industry and complement our existing crops
- Irrigation methods, Staff, Resource, Environmental and Biosecurity Management, Rotation Crops. Overcoming the challenges of “wet season” cropping
- Supported by Cotton Australia and CRDC





Adam Banks

Insects as Food:
Opportunities and
challenges to
farming insects for
human consumption
in the UK



Adam Banks

Insects as Food:
Opportunities and
challenges to
farming insects for
human consumption
in the UK

**Marty Grandsen
Cumulus Vineyards
Orange, New South Wales - Australia
2018 Nuffield Scholar**



**Wine
Australia
for
Australian
Wine**

**Nuffield
2018 Scholars**

Break





Nuffield
2018 Scholars

Introduction part 2



Marten Dijkstra
Nuffield Scholar
2017

“Explore the possibilities for farmers to bring their innovative ideas into practice”



Organic dairyfarm "De Skans"

- Marten (36) & Linda (35)
Tessel (10), Friso (8) & Steffen (5)
- For almost 200 years owned by the family Dijkstra
- 80 cows with 50 youngstock, 53 hectares
- Agricultural nature for meadowbirds
- Agricultural chiddaycare for 12 kids a day
- Boardmember agricultural coop



**506 Hectare Cool Climate Wine Grape Vineyard
12 Varieties – Premium to Ultra Premium Wine**



**Nuffield Study in 2018:
Alternative Wine Grapes for the Australian Wine Industry.
Varieties that better suit Australia's climate, a changing climate
and a changing consumer palate.**



Bisi Oladele PhD UNSW

Technical Manager



- Automation in pack house
- Human capital requirement for increasing automated and expanding industry
- collaboration??
- Promoting career pathways in horticulture



Supported by
The William Buckland Foundation

Mauro Tadashi Nakata

2018 Nuffield Scholar



- Family Business in Fartura, State of São Paulo, Brazil;
- Tilápia farm, Processing plant and Distribution;
- Nuffield Study: competitiveness of Brazilian Aquaculture, focusing on costs, efficient production systems.



Sponsored by:





Dr Richard Harrison

Where next for soft fruit in the UK?
Addressing the yield gap and providing a path to 500 t/ha



Dr Richard Harrison

Where next for soft
fruit in the UK?
Addressing the yield
gap and providing a
path to 500 t/ha

Joseph Lyng Nuffield Scholar 2018



- Food and Agri-business Management Degree
- Food Business Strategy Masters
- Grass based dairy farmer along with family members
- Glanbia-Business Manager



“Value in the market for grass based dairy product”

1. Identify markets and companies achieving additional value.
2. Is there health benefits or is it perception ?(scientific papers)
3. How is Ireland positioned to take advantage of our grass based system?
4. What will it mean for the producer, Processor and retailer?





Robin Tait

Production Agronomist
Pyrethrum



The Bruce Wall Trust



THE ROBERT GATENBY
MEMORIAL TRUST



Botanical Resources Australia

- World leaders in pyrethrum production
- Owned and leased farms – 1400ha
- Potatoes, Poppies, Pyrethrum, Onions, Carrots, Wheat, Brassicas etc



Project

Investigate how Regeneration Agriculture Principles can be integrated into a high value cropping system to reduce synthetic inputs.





Caroline Kealey

Investigate developing and existing technologies for carcass grading and payment that can improve UK meat quality through producer/processor incentivisation.



Caroline Kealey

Investigate developing and existing technologies for carcass grading and payment that can improve UK meat quality through producer/processor incentivisation.



Rick de Vor



Dairyfarm Vof de Vor

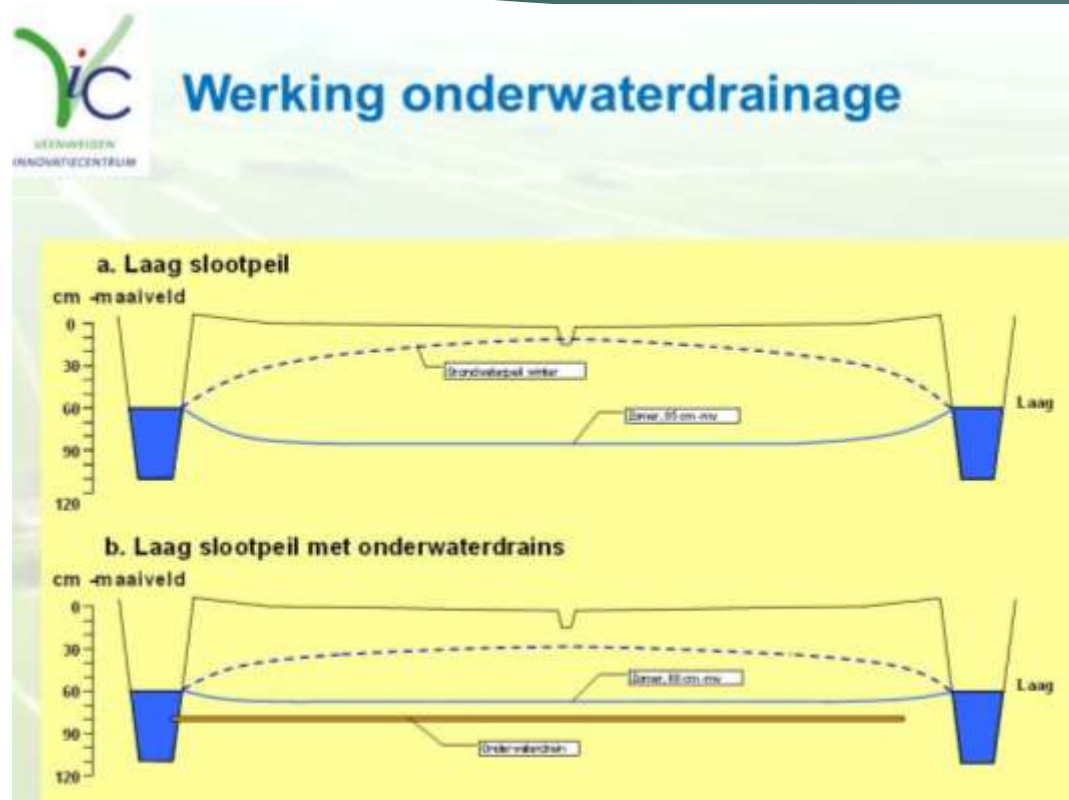
- 115 dairy cows
- 31 hectare grass and 7,5 hectare corn
- Soil type: clay on peat

Research:

soil subsidence, threat or opportunity?

The working of under water drainage

Duckweed as protein substitute?



Sarah Bolton

2018 Nuffield Scholar

Sponsored by Dairy Australia and the Australian Dairy Conference



Co-manager 300 cow dairy farm north of Grafton, NSW with on farm bottling plant
Owner/operator 220 acre beef farm - growing out dairy beef calves
District Vet for NSW government - disease surveillance, animal health, welfare & production



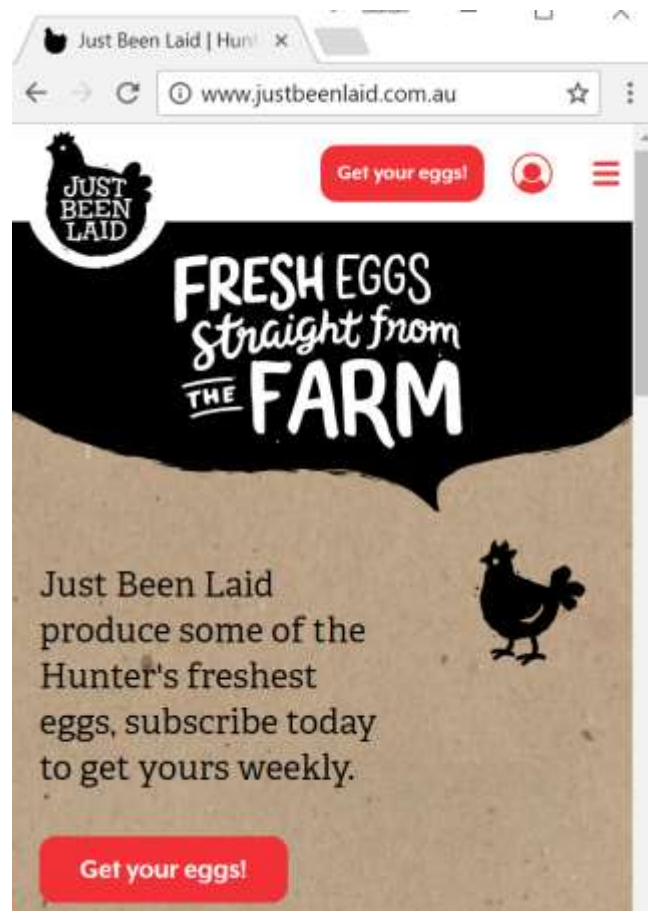
Nuffield study topic in 2018: Dairy beef production - how Australia can turn a waste product into a valued commodity, thereby diversifying farm outputs and addressing animal welfare, industry social license, food waste and sustainability issues



Just Been Laid – Australia's first online egg subscription business



100% mobile system



100% online
www.justbeenlaid.com.au



100% about the chook

Getting the eggs from the caravan to the cafe



Who am I?



Team Meeting

- *Chemical engineer*
- *5th generation farmer*
- *Worked in food security for the World Bank and Syngenta*
- *Developed Rabobank's continuous improvement program in Australia*
- *Super average dog trainer*



What's my topic?

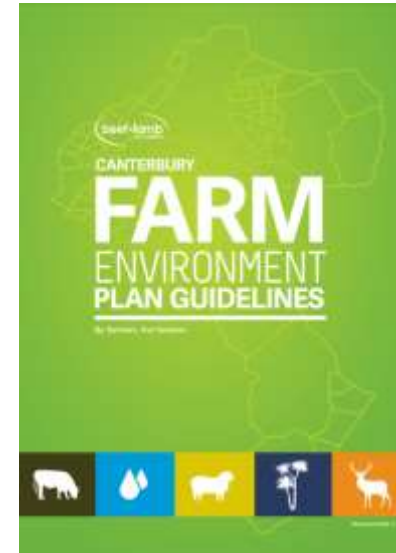


Different business models to take a premium product, add value and then gain scale

Turi McFarlane
Senior Farm Environmental Consultant
2018 Nuffield Scholar



Senior Farm Environmental Consultant – Ravensdown Environmental
South Island Committee Member – Tahuri Whenua



Nuffield study in 2018:
Design and delivery of Environmental Sustainability tools in Agriculture



Martin Gott

The prevalence and importance of indigenous bacterial cultures in raw milk cheese





Martin Gott

The prevalence and importance of indigenous bacterial cultures in raw milk cheese





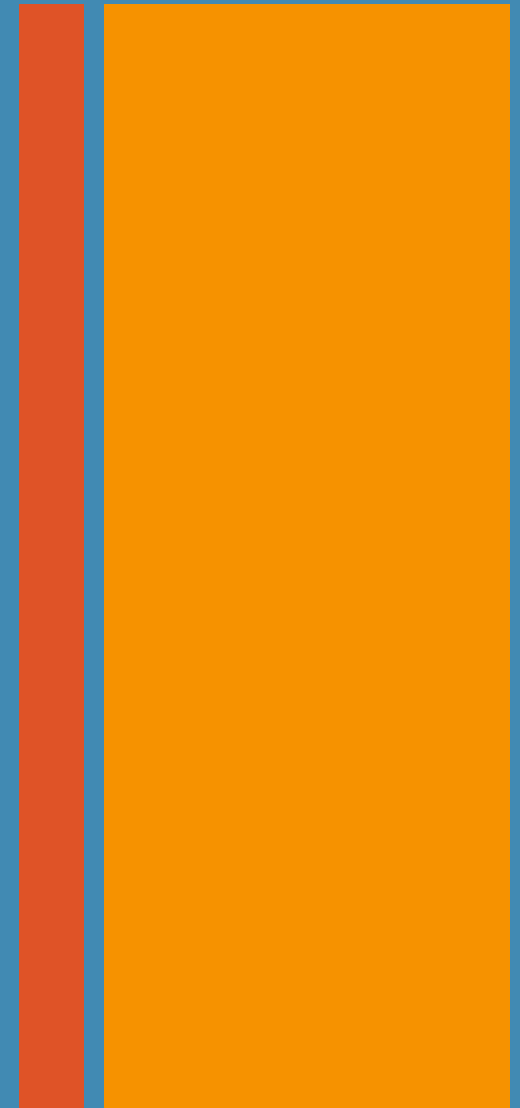
2018 NUFFIELD SCHOLAR

CANADIAN SCHOLAR: SHELLEY SPRUIT

VARIETY TRIALS FOR WHEAT AND BARLEY



Participatory Plant Breeding Programs for Cereal Crops



Brian Dougherty
Recovering dairy farm addict - 2018 Nuffield Scholar



The home farm in Waukon, Iowa – Central United States

Graduate Research Assistant - Iowa State University
Dept. of Ag & Biosystems Engineering - Land & Water Resources Engineering



**Nuffield study in 2018:
Manure management in Iowa cropping systems for improved soil health and water quality**

Victor Monseff de Almeida Campos
Nuffield Brazil



- Ribersolo – Agricultural Analysis Laboratory
- Coffee and Cattle Producer

sustainable coffee production



Nuffield Study:
New technologies for soil and plant evaluation, including soil health



New approaches to pest management in agricultural landscapes; from hard sell to crisis management

www.csiro.au

Sarina Macfadyen (Sarina.Macfadyen@csiro.au), Research Scientist





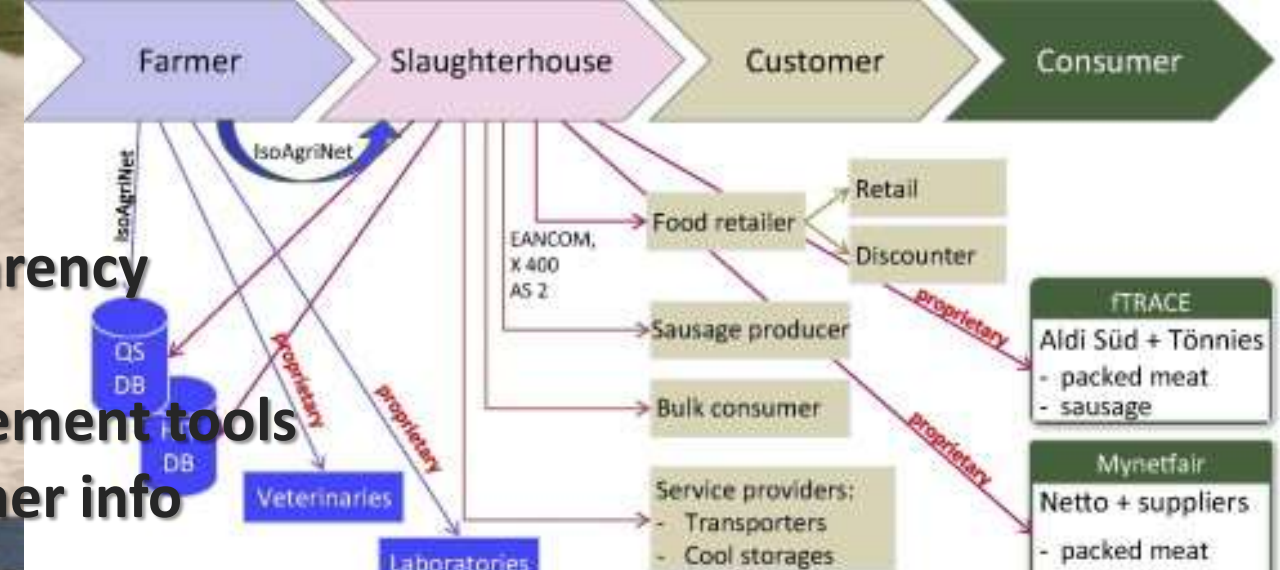


Robert Nijkamp

- (Slower growing) broilers**
- Dairy cows**
- 23 ha pasture**
- 70% coverage electricity use**
- Sustainable heat from roof and milk**
- Loose housing system dairy cows**
- Natural ventilated poultry house**



Transparency
Trust
Management tools
Consumer info



NIJKAMP





SCOTT NICHOLSON 2018

Campbells Bridge, Victoria Australia





Bretton Estate

(Owner/Manager - Average Rainfall 450-500mm rainfall in Western Victoria)

- 2000ha owned land, 900ha leased land
 - Mixed farm operation 6000 Merino Ewes for wool and lamb production
 - Dryland Cropping (Wheat, Barley, Canola, Legumes)
 - Hay Production
 - Lamb finishing feedlot (Bretton Auto Feeder)
- NUFFIELD study topic – ‘Research ways technology can help modernise and improve profitability in the sheep and wool industry’.***





Neil Eastham

How can UK dairy farmers use Genomics to breed a better herd?



Neil Eastham

How can UK dairy farmers use Genomics to breed a better herd?

**Shannon Notter
Nuffield Australia
2018 Nuffield Scholar**



350ha spring calving dairy farm. 500 crossbred cows. Family owned business. Located in South West Victoria, 2 hours west of Melbourne



**Nuffield study in 2018:
Increasing Australian dairy farmers' focus on profitability**



Mark Dewes

Can UK agronomy learn from best practice abroad to better serve arable farmers with advice and crop protection inputs?



Mark Dewes

Can UK agronomy learn from best practice abroad to better serve arable farmers with advice and crop protection inputs?



Sonya Comiskey
Beef Producer from Queensland Australia
2018 Nuffield Scholar supported by Rabobank



"Old Mount Stuart", 24,500 acre cattle property Central Highlands of Queensland
Commercial cross bred Bazadais cattle // Bazadais cattle stud // Part of extended family company
New business to launch May '18 // Producer-led beef brand for "authentic French heritage beef"



My Nuffield study centres around **PRODUCER LED BEEF BRANDS**
Supply chain models (pre- and post-farm gate) + opportunity for co-operatives // Provenance, niche markets + premiums // Technology such as Blockchain for traceability // Engaging with provenance

Solis Norton, New Zealand

Deer PRO



Nuffield topic: Optimising farm systems under energy constraints





Alexa Parker

Where Corporate
meets Family in
Business



Alexa Parker

Where Corporate
meets Family in
Business

Steve Grist 2018 Nuffield Scholar

Cairns Australia



CAIRNS
MICROGREENS
& EXOTICS



First generation farmer growing Microgreens, microherbs and edible flowers



Study Topic- Bio-intensive and closed loop farming systems

Sponsored by **Hort
Innovation**

STEWART BORG

2018 NUFFIELD SCHOLAR

SPONSORED BY MEAT AND LIVESTOCK AUSTRALIA



MARKLANDS STATION

“Marklands” is a 6500 acre mixed grazing, farming and soon to be feedlot operation nestled on the North Queensland tropical coast, 45km south of Mackay and the beautiful Whitsundays. 2500 head of cattle and 1000 acres of mixed farming



Steven Archie Griffin
2018 Nuffield International Scholar



Only child - Family Business operated with my Mother and Father
~1700 Acres or ~700 Hectare in Washington, NC
Sweet Corn – Field Corn – Wheat – Soybeans – Tobacco
Soybeans and Wheat are grown for seed



Nuffield Study: Transformational ways crops are sustainably planted, cultivated, harvested and brought to market through innovation and technology.



Chris Rose

On-farm anaerobic digestion:
maximising use and
enhancing the
value of CO₂, heat
and nutrients



Chris Rose

On-farm anaerobic digestion:
maximising use and
enhancing the
value of CO₂, heat
and nutrients



Stuart McDonald

2018 Nuffield Scholar from Canowindra NSW, Australia

Area of Study: To sustain a continuous cropping system in a high rainfall environment by incorporating livestock



**“Belmont” 1380Ha Family Farm Producing-
Wheat, Canola, Chickpeas, Lupins, Merino
Sheep, Stud Illawarra Dairy Cattle**





Jonathan Gill

How do we
embrace
Automation in
Agriculture?



Jonathan Gill

How do we
embrace
Automation in
Agriculture?

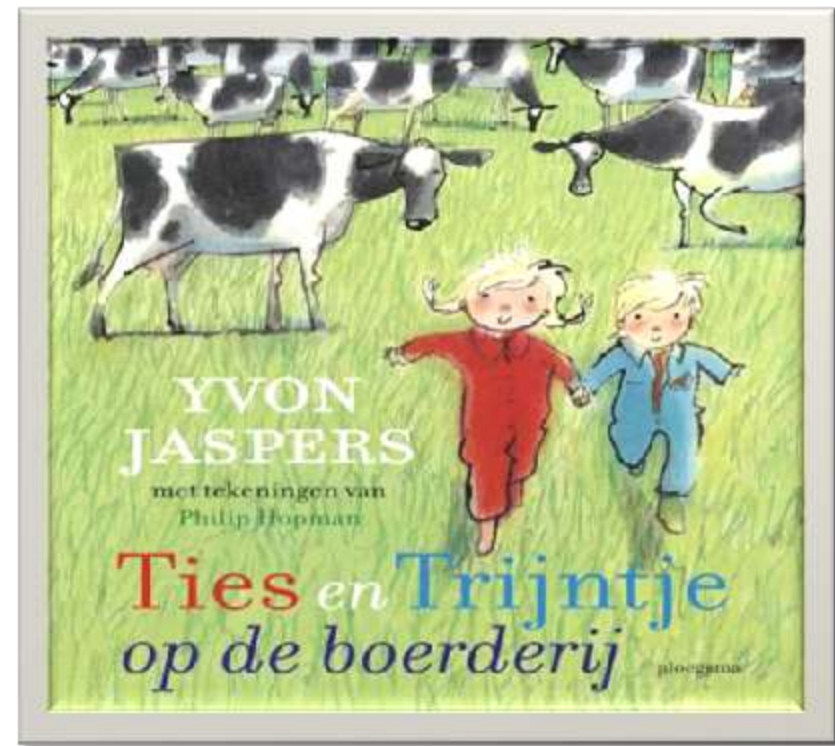
Colm O' Leary
2018 Irish Nuffield Scholar





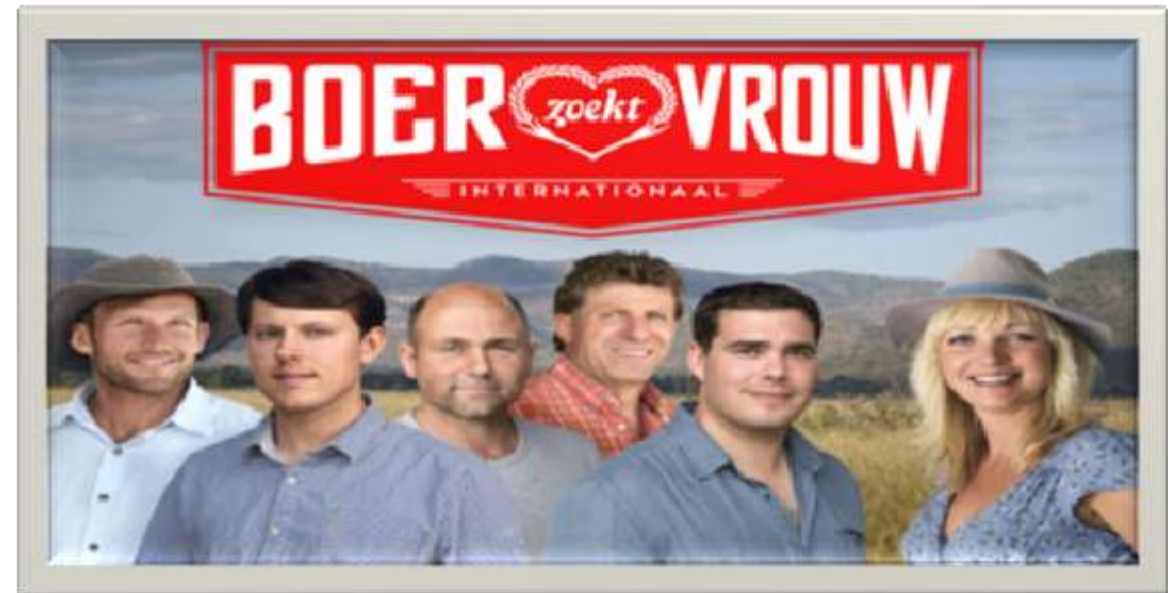
YVON JASPERS

2004 - 2018



ON A MISSION

IN SEARCH OF GOOD AND INSPIRING EXAMPLES





50 ha Family Dairy Farm in County Cork

Milking 140 spring-calving crossbred cows.



Tom Robinson

Commercial Pipi Fisher
(Who can't fish)

Software developer
(And can't code)



Can we manage our fisheries smarter by replacing paper based reporting with iPads?





Kate Scott – 20



CHRIS

ORGANIC

HERBS

VEGGIES





WEEDING

ROBOT

?

SOLAR

AFFORDABLE

A landscape photograph featuring rolling hills in the background, a green field in the middle ground, and a foreground of dry grass and shrubs. Two vibrant rainbows are visible in the dark, overcast sky. The text is overlaid on the top half of the image.

Environmental consultancy business servicing cross sector agri-businesses (Sheep & Beef, Dairy, Horticulture, & Viticulture) to solve variety of regulatory and land management related challenges; Technology Solutions; Environmental Considerations part of Strategic Farm Planning; Family Dairy Farm

2018 Nuffield Study Topic
“the policy/technology nexus – practical solutions for reducing the environmental footprint of agriculture”



Jenna Ross

Riding the slime wave: Gathering global data to enhance slug control in the UK



Jenna Ross

Riding the slime wave: Gathering global data to enhance slug control in the UK