

MAKING YOUR LANDSCAPE SUSTAINABLE

CONFERENCE
Goulburn Soldiers Club
16th September 2022

An initiative of the Landcare Goulburn Mulwaree Grazing and Farming Group (a part of Community Voice For Hume)

Welcome

Landcare Goulburn Mulwaree Grazing and Farming Group (part of Community Voice for Hume) welcomes you to "Lets Get Earthy", the first of our planned annual conferences & expos on building the sustainability of your farming landscape.

Audience

This conference and expo is for all farmers and especially for those who want to transition to practices that will build healthy soils and reduce fertiliser use. This, in turn. will improve farm resilience to drought, flooding and reduce costs. It will help to build soil organic carbon that can be converted into carbon credits. However the primary objective of sustainable and regenerative practices is to build healthy soil and to increase on-farm biodiversity as that will deliver productivity benefits and improved financial returns.

Why Attend?

The conference brings together not just acknowledged experts in their field, such as Walter Jehne and Prof Justin Borevitz of the ANU, but local farmers who have a good story to tell. The theme of the expo is:- "Working Together To Help Farmers On the Ground" and is about the potential of established sustainable and regenerative service and research organisations working in unison.

Next Steps?

For farmers who have either yet to start their transition, or are in the early stages, the question is how to progress in a way that maximises the return and minimises the risks? Post the conference, it is planned to run a workshop to address the foregoing topic. The first and most important step is to make the commitment to change practices.



Who Are Landcare Goulburn Mulwaree?

Our Vision

To have healthy, sustainable and profitable farms and farming families across Goulburn Mulwaree.

Our Mission

To promote and assist with the adoption of Regenerative Practices to help farmers make their landscape more resilient and productive in times of drought & floods.

Additionally we are committed to expediting the adoption of sustainable farming practices in NSW and across the country by working with key stakeholders such as the ANU Sustainable Farms. The Mulloon Institute, NSW Farmers and many more as per the list of exhibitors.

We are also committed to practicing and promoting large scale carbon sequestration.

www.cv-4h.org

Agenda

Time	Sessions: Friday 16 September 2022	
9:00 - 9:10	Acknowledgement of Country	
9:10 - 9:20	Welcome by the Hon. Wendy Tuckerman, MP and Minister for Local Government	
9:20 - 9:40	Keynote: Food Security – Walter Jehne	
9:40 - 10:00	Transforming Our Land and Our Lives – Jenny Bell, Farmer and Artist	
10:00 -10:20	A Comprehensive Approach to Ecological Sustainability - Dr Di Dibley Convenor of ZeroSE	
10:20- 10:40	Enhancing Farm Dams for Biodiversity and Productivity – Dan Florance, Ecologist, ANU Sustainable Farms Project	
10:40 -11:00	A Regenerative Journey - Adam Rabjohns, Farmer	
11:00 - 11:30	Tea and Coffee	
11:30 -11:50	Rehydrating Australia - Nolani McColl - Landscape Planner and Science Administrator, Farmer, at The Mulloon Institute	
11:50 -12:10	Verifying ecosystem health for farm productivity and satisfying market demand - Tony Hill - CEO Land to Market, farmer	
12:10 - 12:30	Soil Improvement Project/Farmer Regen Transition Program - Landcare Goulburn Mulwaree - Hannah McInerney, Agronomist and Project Officer, Craig Hunt, Farmer	
12:30 - 12:50	Climate opportunities for farmers in South-East NSW - Peter Holding, Farmer and Community Outreach Officer at Farmers For Climate Action	
12:50 - 1:50	Lunch	
1:50 - 2:10	Wondrous Wetlands – A Drought Resilience Strategy - Julia McKay - Dairy Farmer, Research Catalyst, Environmental Policy Specialist	
2:10 - 2:30	Riverine Restoration - Lori Gould - Australian River Restoration Centre	
2:30 - 2:50	Managing Your Mental Health - A Case Study - Dr Robert Favaloro - Farmer and Retired GP	
2:50 - 3:20	Tea and Coffee	
3:20 - 3:40	Helping Farmers on the ground - Local Land Services SE NSW	
3:40 - 4:00	Large Scale Carbon Sequestration in SE NSW - Prof Justin Borevitz of the ANU's Institute for Climate, Energy and Disaster Solutions	
4:00 - 4:30	Expert Panel	
4:30 - 5:30	Post Conference Drinks	



Keynote 9:20 - 9:40
Sustainable Agriculture and Food Security
Walter Jehne

Internationally recognised soil micro-biologist, plant ecologist and innovative strategist Walter has worked in Australia and overseas, retiring from the CSIRO some 15 years ago to concentrate on regenerating Australia's landscape and improving its agricultural and pastoral sectors.

Walter is an advocate of the need to restore the water cycles and sees carbon as a resource that we need to use to rebuild the soil and water in order to cool the planet. Walter articulated the concept of the soil carbon sponge. Walter is a proponent of farmers looking to develop new markets for their (healthy) products.



9:40 - 10:00 Opening the Door to Change

Jenny Bell: Landcarer, artist & partner in the farm with Husband Rod Edwards

When my husband Rod Edwards and I joined the local Landcare group thirty years ago to plant some trees along a fence line we didn't realise we were opening the door to a new relationship with our country. This talk will describe something of that ongoing transformation of our land and our lives as we have deepened our understanding of nature's cycles and our role within it.

Jenny Bell was born into a local farming family and after a decade away to study and work as an artist, returned and married Rod Edwards, a local farmer. At the time, although she had a lifelong love of stock work and being in nature she had no conscious desire to be a farmer herself but found that her work as an artist and their life and work together on the farm ignited her curiosity about how we interact and manage our land.

Together with Rod and the family they adopted regenerative practices enriching their environment and their lives within it.



10:00 - 10:20 A comprehensive approach to ecological sustainability

Dr Di Dibley: Environmental lawyer with a career in environmental policy and advocacy

- Human Systems and the Earth System
- Managing Landscapes at scale
- Human boundaries and natural boundaries

Di Dibley is an environmental lawyer with a career in environmental policy and advocacy. She has a doctorate from the Fenner School at the ANU

Her work history includes:

- Co-Convenor ZeroSE (Eco-System Restoration)
- National Policy Director Environment and Energy, The Australian Industry Group
- National Policy Director, Greening Aust.
- Director ACF Sustainable Industries Office
- Lecturer in Constitutional Law, University of Canberra



10:20 - 10:40

Benefits to water quality & animal health from fencing off farm dams

Dan Florance Ecologist, ANU Sustainable Farms Project

Farm dams provide essential water sources for stock, and their potential for biodiversity and wildlife conservation is increasingly recognised. To date, there has been minimal research on the production benefits of clean drinking water for livestock, or the impacts

of different management practices on improving dams in ways that can benefit both livestock and biodiversity. Under the Farm Dams project, Sustainable Farms has been monitoring 125 farm dams across NSW and Victoria to investigate the potential of grazing control (such as through fencing) and revegetation to improve biodiversity, at the same time as improving water quality.

Dan is a Research and Extension Officer with The Australian National University's Sustainable Farms project. He is a field-based ecologist with a strong interest in the conservation of native ecosystems, using scientific research to provide practical evidence-based solutions to effectively integrate conservation within agricultural landscapes



10:40 - 11:00 A Regenerative Journey Adam Rabjohns: Regenerative Farmer

Adam's focus on plant health and high utilisation grazing has not only seen ecological function improve but also the creation of a highly productive soil carbon project under the Australian Government's Emissions Reduction Fund.

Preliminary numbers indicate that some 11.5t of carbon dioxide equivalent /ha has been stored, which if verified will make for a significant extra income stream. So it pays to make the change. A 4th generation grazier from Goulburn NSW, Adam has been a driving force in his family's 285ha grazing operations transition from conventional to sustainable/regenerative practices.



11:30 - 11:50

Rehydrating Australia

Nolani McColl: Landscape

Planner and Science

Administrator, Farmer, at The

Mulloon Institute

In this presentation, an outline of the Mulloon Institute will be followed by an explanation of landscape rehydration, along with examples from our demonstration farm – Mulloon Creek Natural Farms near Bungendore. A video will also be played demonstrating how water moves through a landscape, how modern farming techniques have altered this and how landscape rehydration techniques can assist its amelioration.

Nolani has 15 years' experience in freshwater management, with a long career in Federal Government and with the Murray–Darling Basin Authority, and more recently with the Mulloon Institute. She assists landholders in applying Landscape Rehydration practices by providing on-farm inspections and advice on landscape restoration with a focus on water. Nolani and husband Peter run a small property near Braidwood where they are producing fine mohair using regenerative practices,

biodynamics and holistic management to improve farm productivity and biodiversity.



11:50 - 12:10 Verifying ecosystem health for farm productivity and satisfying market demand

Tony Hill CEO Land to Market and Capital Consulting, Farmer

Various organisations are now stepping forward to support sustainable agriculture. In the past, great work has been done by volunteers and philanthropists in campaigns to protect important environmental assets.

But the pace of improvement in ecosystems is not fast enough while it does not address the ecosystem health of agricultural production land. In the face of global challenges, how can we engage all of the population to be active and move beyond sustainable, to a regenerative world?

Land to Market Australia seeks to transform our food system and take robust information about the ecological health of our farmland into a place where businesses and consumers can support regeneration.

Tony teaches Holistic Management in NSW and is an accredited professional with the Savory Institute. With a background in economics, policy making, regional development, ecology and biodiversity, he has worked for government and consulted on design applications for Cooperative Research Centres.

Tony chairs the Australian Holistic Management Co-operative and is an accredited teacher of the NSW TAFE Holistic Management Diploma. He is the founder of the Land to Market Australia project incorporating Ecological Outcome Verification.



12:10 - 12:30 Soil Improvement Project with Multi-Species Pasture Craig Hunt, Farmer & Hannah

Craig Hunt, Farmer & Hannah McInerney, Agronomist Project Officer Landcare Goulburn Mulwaree Regen Grazing & Farming Group

Craig will talk about the motivation of his project to improve his soil by planting a multi-species in a paddock, comprising 12 separate plots and a control plot. Differing amounts of fertiliser have been used on each plot and the control has neither the two chosen biological agents or fertiliser on the other plots.

Hannah has been investigating how to best measure the results, but in the knowledge that the principals are simple:- to reduce chemical inputs and; to increase the soil biology. Hannah will talk about plans to take the project to other farmers in the Landcare Group, as a foundation of making their farms more sustainable and, in one case, to increase stocking numbers.

The Hunt family has been farming in Parkesbourne for over 150 years and at the moment there are two generations farming 600 acres of land. Craig is principally grazing prime lambs on his property. The soil on the trial plots is a sandy loam. The trial plot is a 2ha paddock that was most recently planted with a lucerne crop and prior to that a wheat crop. Both were used for fodder.

Hannah grew up on the family farm and qualified as an agronomist following a BSC at the ANU, majoring in Sustainability and Natural Resource Management. Hannah also has a diploma in Organic Farming. As well as working as an agronomist Hannah has worked on an Organic Farm and as a Volunteer on the ANU Sustainable Farms Project. Hannah is also currently working for Transport NSW as a Senior Environment and Sustainability Officer.



12:30 - 12:50 Climate opportunities for farmers in South-East NSW

Peter Holding: Farmer & Community Outreach Officer, Farmers for Climate Action

Peter will discuss the challenges that climate change presents for farmers in SE NSW, as well as the myriad of opportunities that exist for farmers in taking climate action on farm and beyond.

He will also discuss how agricultural leaders and rural Australians can work together to secure strong climate solutions from our leaders, particularly climate solutions which can benefit rural communities.

He will also explain what Farmers for Climate Action does and the various ways we can support farmers Peter is a third-generation farmer in Harden NSW, growing crops such as canola and wheat, as well as running sheep for wool.

Peter is Farmers for Climate Action's Community Outreach Officer, which involves working with farmers to enable them to take action to secure strong climate solutions.

Peter is also a member of the Climate Kelpie – a central location for farmers looking for practical information and tools with which to manage climate change risk and impacts. Peter has an extensive knowledge and first-hand experience with the strategies farmers can use to manage and adapt to climate change.



1:50 - 2:10
Wondrous Wetlands A Drought Resilience
Strategy The When,
Why, How and Where of
Wetland Grazing. Mapping,
Protecting, Using and
Monitoring Wetlands from
a Grazing Viewpoint.
Julia McKay Dairy Farmer,

Julia McKay Dairy Farmer, Research Catalyst, Environmental Policy Specialist

Keywords: Biodiversity, Carbon, Nutrition, Economics

For many years Julia was involved in various agricultural and environmental programs, many of which were ahead of their time. These included waste to energy, composting, the use of fly ash as a soil amendment, trading platforms for carbon and biodiversity credits, stewardship policy and research projects, including the "Wondrous Wetlands" topic of Julia's presentation at this Conference.

Julia has been a regenerative farmer for more than 30 years - long before this farming system had a name.

Now, regenerative agriculture is enjoying its "moment in the sun", backed by a realisation that resilience and adaptation to climate change is paramount. Julia's long suit is Natural Capital encompassing agricultural emissions reduction and carbon sequestration through best practice land use. Her company, Growing@Goulburn is working with University of Canberra, Charles Sturt University, CSIRO and Government to develop tertiary training in Natural Capital to equip students and scholars with the tools required for the new, green economy.



2:10 - 2:30
Riverine Restoration
Lori Gould: Program Manager,
Australian River Restoration
Centre

Overview of river management issues (loss of biodiversity and vegetation, soil erosion, poor water quality etc), and practical ways to address these within sustainable farming systems. Case study using the Rivers of Carbon project and stock and waterways guide.

Lori Gould runs an environmental consulting business – GrassRoots Environmental and specialises in natural resource management, particularly riparian rehabilitation, landscape planning and community engagement. She is the Program Manager for the large-scale river restoration program 'Rivers of Carbon', a partnership with the Australian River Restoration Centre. Lori is a PhD candidate, holds a Master's Degree in Integrated Water Management, a Post Graduate Certificate in River Restoration and Management, an Environmental Science Degree and Associate Diploma in Animal Science. Lori is also a Fellow of the Peter Cullen Trust.



2:30 - 2:50 Managing your mental health - A case study Dr Robert Favaloro: Farmer

Dr Robert Favaloro: Farmer and retired GP

Recognising and understanding mental health issues. Mental health problems can affect us all. We are learning to recognise them early and the steps to take for better mental health. Some 'Rules of Life' that may help are discussed. Dr Robert Favaloro was a GP for 45 years in southern Sydney. He spent the latter years involved in more mental health support.

Robert and his wife came to Goulburn 18 years ago. They commuted weekly back to Sydney but the part of their time out of Goulburn gradually reduced. They became serious farmers during the drought & have been full time for five years.



3.20 - 3.40 Helping Farmers on the Ground

Matthew Lieschke: (Senior Agriculture Advisor - Livestock) at SE Local Land Services

Over the last 2 years South East Local Land Services (LLS) has been running 'Soil testing and interpretation workshops' throughout the Southern Tablelands. These workshops have been designed to help landholders gain a better understanding of how to obtain a robust soil sample and how to interpret the numbers on the results sheet from the laboratory.

Using the successful "Five Easy Steps" course, producers have been able to develop a soil management program that is tailored to their soil type, environment and production goals.

Over 300 properties have completed the course with close to 1700 samples submitted for testing. As part of this program, LLS staff have also played a key role in developing an Excel based tool for producers, enabling them to easily monitor soil fertility, pH and soil carbon changes over time at the paddock level.

Matt was raised on a wheat-sheep property in the Riverina NSW. Since graduating from Charles Sturt University with a Bachelor of Agriculture (Hons), Matt has worked in a number of roles in the public and private sector. Since joining Local Land Services in 2013, Matt has been involved in the development and delivery of a range of courses and extension programs covering grazing management, soil fertility, weaner performance and beef marketing.

Over the past 6 years Matt has played a key role in establishing a soil moisture probe network throughout the Southern Tablelands and development of the online tool Farming Forecaster (farmingforecaster.com.au).



3:40 - 4:00 Large Scale Carbon Sequestration Across SE NSW

Justin Borevitz: Professor Research School of Biology College of Science

Agriculture and ecosystems are tipping toward collapse due to land use and climate extremes. Irreversible feedbacks in the land system can lock in food insecurity, biodiversity loss and a hot house world. However regenerating agroecosystems is possible and can be profitable.

In this talk, Prof Justin Borevitz will introduce the components of precision landscape regeneration, linking genotype, phenotype and environment, and the outsized role Australia can have in the world. The solutions are to both increase carbon capture via photosynthesis of grasses and trees and to reduce emissions from plant stress (autotrophic respiration) and soils (heterotrophic respiration). Smart farming practices including regenerative agriculture and ecosystem restoration can rebuild agroecosystems. This includes methods for boosting soil carbon with microbes and management. Integrating and scaling these land-based solutions.

Justin Borevitz obtained his PhD in 2002 from the University of California at San Diego with Joanne Chory dissecting the genetic basis of adaptive traits and environmental response in model plants. He performed postdoctoral research with Joseph Ecker (2002-2004) at the Salk Institute mapping plant functional genomic diversity.

From 2004 until 2011 he was an assistant and associate professor in the Department of Ecology and Evolution at the University of Chicago. In 2012, Borevitz moved to ANU and became Professor in 2014. His current work within the Centre of Excellence in Plant Energy Biology is using Landscape Genomics to select the gene variants underlying adaptation to shifting climates and soils for restoration of global crops and woodlands.

Sponsors, Partners & Exhibitors

ANU Sustainable Farms

https://www.sustainablefarms.org.au/

The ANU Sustainable Farms Project is a long running project having been in existence for some 20 years and its mission is to support nature, improve farm productivity and connect with community.

Australian River Resource Centre Australian Riverine Restoration

https://arrc.com.au/

The ARRC is about "On The Ground River Restoration"



(L Citizens' Climate Lobby Australia

Citizens Climate Lobby

https://ccl .org.au

CCL in the form of two of their volunteers from Sydney, has kindly offered their services to run the conference online and to make a recording. Their help is much appreciated.

Communities Against Tarago Incinerator

https://www.notaragoincinerator.com/

CATTI is fighting the plan to build a waste incinerator in Tarago as it will pollute agricultural land and our water with dioxins that cannot be removed

Divalls - Earthworks

https://divalls.com.au/

In agricultural circles, Divalls is best known for its expert dam building services but also earthmoving for the building of swales etc.

Nicola Fraser

Many thanks to Nicola for being our volunteer photographer for the conference.

Farmers for Climate Action

https://farmersforclimateaction.org.au/

Our vision is Farming Forever: Farmers and our representatives are climate leaders. Our mission is to influence Australia to adopt strong economy-wide climate policies & realise a prosperous and sustainable future, full of opportunity for farmers & farming communities.



Goulburn Soldiers Club

The Goulburn Soldiers Club has sponsored the use of its facilities for the Conference and Expo for which we thank them



Goulburn Workers Club

The Goulburn Workers Club has sponsored Community Voice for Hume and Landcare Goulburn Mulwaree by the use of its facilities for its meetings and events. We would like to thank the Workers Club for their sponsorship.

Gundaroo Regenerative Land Management

https://www.facebook.com/groups/179784741028710

The Gundaroo Regenerative Land Management group has been on the ABC News as an example of the fast growing demand of farmers looking for support in their desire to move to sustainable and regenerative practices. The group is meeting this demand through its informal approach that is based on monthly farm visits. Their farmers are an eclectic mix of large and small enterprises across a range of farming, horticulture and beyond.

Sponsors, Partners & Exhibitors



Landcare Goulburn Mulwaree Regenerative Grazing and Farming Group (ORGANISERS)

https://landcare.nsw.gov.au/groups/ community-voice-for-hume/

Landcare Goulburn Mulwaree was formed to promote sustainable and regenerative farming with a focus on carbon sequestration and to speed up the adoption of the above practices across NSW and Australia. A key part of this to be achieved by promoting a more collegiate approach by our leading farming organisations.

Our vision is to have healthy, sustainable and profitable farms and farming families across Goulburn Mulwaree. Our mission is to promote and assist with the adoption of Regenerative Practices to help farmers make their landscape more resilient and productive in times of drought & floods.

Land To Market

https://landtomarket.com.au

Land to Market is art of a global network committed to farming practices that measurably regenerate the land. It provides its members with training, mentoring, and verified branding of their products.

Local Land Services SE NSW

www.lls.nsw.gov.au

Local Land Services SE covers from Stanwell Park in the north to the Victorian border in the south, and westward from Boorowa in the north to Thredbo in the South. LLS SE NSW offers a wide range of support to farmers to help them get the best from their land. LLS is the principal supporter of Landcare in NSW.

NSW Farmers (Upper Lachlan)

https://www.nswfarmers.org.au/

NSW Farmers advocates for a profitable and sustainable NSW farming sector. NSW Farmers is Australia's largest state farming organisation, representing the interests of its farmer members in the state. We are Australia's only state-based farming organisation that represents farmers across all agricultural commodities. We also speak up on issues that matter to farmers,



Nutrisoil - Biological Stimulants

https://nutrisoil.com.au/

Vision: All people can live a healthy life through a complete biological balance in the soil.

Purpose: To empower farmers to produce life-enriching food.

Values: Honour nature – know that it knows. Support the leaders in natural farming practices. Connect and build the regenerative agricultural community.

NutriSoil Pty Ltd is a biological solution made by worms, which is manufactured, distributed and wholesaled direct to farmers. Nutrisoil run on-farm events under the heading of Biological Farming Roundtable and have established a series of podcasts under that name.

Tablelands Farming Systems (TFS)

https://www.tablelandsfarmingsystems.com.au/

As a grower-owned organisation founded in 2013, Tablelands Farming Systems has quickly established itself as a credible provider of localised farming information and delivers training and workshops to improve the way farms operate. We are focused on supporting farmers of all size and shape and we work closely with government agencies, agribusiness and local agricultural service providers to offer the latest industry information direct to our members.

Sponsors, Partners & Exhibitors

The Mulloon Institute Landscape Restoration

https://themullooninstitute.org/

The Mulloon Institute (TMI) is a not for profit, research, education and advocacy organisation. It is recognised globally as a demonstrator of sustainable agriculture and environmental regeneration through landscape rehydration and restoration. TMI believes the long-term sustainability of both agriculture and the environment requires balance and working together in unison. TMI provides both training and consultancy services.



TM Best Farming Systems

Biological stimulants and Farming Advisers https://bestfarmingsystems.com.au/

Best was established in Edmonton, Alberta, Canada, in 1999. It has since expanded operations in North America, Australia, New Zealand, Europe, Africa, and Asia. Best Farming Systems Australia started selling TM Agricultural in Australia in 2006, 6 farmers in Western Australia first used it. Since then, its use has spread rapidly through all states and territories, and we export to New Zealand and Japan. 100% Australian owned, our products are manufactured in Goulburn NSW, using both imported and local ingredients. Our ultimate goal is to help producers reduce their reliance on inputs. This, in turn, reduces their risk (both health and financial) and increases their profits. all whilst improving soil health and food quality.

Community Organisations

These groups are playing a key role in building the sustainability of our community.

The Australian Communi Conservation Foundation Goulburn

The local branch of the ACF are a foundation member, together with Community Voice for Hume in the formation of the Community Sustainability Hub.

Community Energy 4

Community Energy 4 Goulburn is building a community-owned solar farm and is a shining example of what can be done with commitment.

The Goulburn Group

The Goulburn Group was a pioneer in building community projects that progressed its aspirations. Two such projects were the Goulburn Wetlands and CF4G

Notes		

Notes

Notes		

Notes

