



**Monaro Farming Systems
2022 - 2023 Annual Report**



Blank Page

TABLE OF CONTENTS

Chair Report – Mandy Horton	p.4-5
Financial Report – Julie Schofield	p.6-9

ONGOING PROJECT REPORTS

MFS Project 10.01	MFS Soils Club	p.10-11
MFS Project 10.06	MFS Worms Club	p.12-13

CURRENT PROJECT RESULTS

MFS Project 20.01	MLA PDS Fodder Systems and Feed Gaps (Winter Feed Gap)	p.14-15
MFS Project 22.04	Monaro Seasonal Outlooks – Preparing for the Upcoming Season	p.16-17
MFS Project 22.05	SNSW Innovation Hub	p.18
MFS Project 22.06	Farming Forecaster	p.19
MFS Project 22.11	Resilient Pastures (SNSW Innovation Hub Project)	p.20-21
MFS Project 22.12	Rabobank Client Council Prime Lamb Tour	p.23

MFS COLLABORATIVE PROJECTS

Serradellas for New Environments - MFS and CSIRO	p.24
Carbon Ready Farm Businesses – Irrigated Management Systems	p.25
Managing Fly Strike – MFS and AWI	p.25

MFS Supporters and Supporters	p.27-29
--------------------------------------	----------------

2023 CHAIR'S REPORT: MANDY HORTON

It is with great pleasure that I write this report one year on from taking up the Chair role. 2022/23 has been an extremely busy year for MFS. The scope and range of our projects and events has been varied and I encourage everyone to take the time to read the following reports for more detailed information.

Our 2023-25 three-year Strategic Plan, developed under the stewardship of our previous chair John Murdoch, has proven to be a valuable tool and guiding force for our strategies and activities. With the current funding opportunities few and far between MFS has begun to introduce a fee for service model, which will enable us to continue to offer relevant information and training to our members. We have commenced an extensive consultation phase for an improved membership offer, one that the Board feels will offer a more equitable and sustainable tiered fee structure for 2024. Our sponsorship package structure has also been revised, and much work has been done, and continues to be done, to improve communication and partnerships with our valued supporters.

Highlights of the year have included our inaugural Farm Tour, which was very well received by those that participated. The focus of this tour was all things Prime Lamb, and members gained a valuable insight into a large-scale Prime Lamb enterprise at Wallendbeen and a tour around Gundagai Meat Processors. Both visits were thought provoking, and of course the late-night discussions at the pub were intense and enjoyed by all! The advantages in knowledge and ideas to be gained by stepping outside our area are numerous, and MFS will offer more tours as part of our events into the future.

On Farm Field-days have again been well received over the course of the year. A highlight was our Carbon Field-day held at Hazeldean, with an exceptional line-up of speakers including Dr Richard Eckhart, one of the county's leading experts in this field. We thank Board Member Warwick Badgery for his role in organizing these speakers, as well as his continued input into the Farm Emissions area of research on the Monaro. This is a vital area for all farm businesses, and MFS will continue its focus of providing its members with topical and current information and training, remaining at the forefront on this issue.

Our Summer Field Day focusing on all things soils was again very well attended and valued. Our Soils Club continues to be strongly supported, and the value of our database steadily increases over time. It is also becoming an asset in terms of helping to attract future projects and funding for the Monaro. We are very fortunate to have the expert advice and guidance of Dr Richard Simpson in this field, and we sincerely thank him for his extensive work and guidance in this area. An interesting development has been the perception that there may be a Boron deficiency on the Monaro, and further work is being undertaken to collect data in this area. Watch this space as this unfolds in the coming months.

We thank those members that have graciously hosted our field days this year, have supported MFS behind the scenes with offers of support, hosting of trial sites and much more – we very much appreciate your assistance.

This year has seen the continuation of the FSGA Resilient Pastures Project, ably managed by Project Officer, Nancy Spoljaric. As we again find ourselves managing a drier time, this project's focus on the long-term persistence of our pastures is very valuable. It is the Board's hope that these established field sites will continue and give us long-term information and results.

Our current staff have continued to be our most valued asset in the organisation. It has been rewarding to observe over the past year the strong working partnership develop and strengthen between Frances and Bec.

Frances Lomas in her role as Executive Officer continues to progress the organisation, and her expertise in all aspects of the job, especially governance and management of the board, is highly valued. And of course, also her infallible good humour! Frances continues to develop relationships with not only our members and the wider community, but also other producer and industry groups. Her dedication to the Innovation Hub as a Knowledge Broker has led to involvement in projects around the state, which will enormously benefit the organisation. Bec Kading moves ever upwards taking on new responsibilities such as the Worms Club and Soils Club, as well as her role as Financial Manager. Her history and attention to detail in all things financial is of huge value to MFS. We truly thank them both for their continued dedication and service above and beyond to MFS.



The MFS Board continues to see transition, welcoming new members and farewelling those finalising their tenure. This refreshment of ideas and enthusiasm has always been and continues to be a strength and a critical success factor of this organisation. I strongly encourage all members to take their “turn” of a term on the MFS Board. It is not onerous, and I believe everyone has something different of value to add to the organisation.

This year we say goodbye to Owen Smith, who has been on the Board for the past five years. We will miss Owen’s insightful and considered input, his full support for all things MFS and his dry humour, and we thank him wholeheartedly for his time on the Board. Dr Warwick Badgery also steps down from the Board after serving six years as an Industry representative. Warwick has offered an incredible amount of valuable advice to the Board over the years, and we will really miss his input. We thank him so much for his enormous contributions and dedication to MFS. John Murdoch will also step down from the Vice-Chair role and off the Board, after a mammoth effort and involvement in MFS over the past seven years, three of which in the position of Chair, the organisation owes him



a great debt for his terrific leadership and dedication. On a personal note, I thank him sincerely for his advice and support over the past year; it has been invaluable.

I firmly believe that the Monaro farming community has been, and continues to be, extremely fortunate to have a such a progressive and dynamic producer group as Monaro Farming Systems to drive agricultural research and education in this area. To their detriment, there are many farming areas without such an asset. The Monaro area has a strong reputation in the ag space, which I feel is largely a result of MFS and its strong work and partnerships over the years. I thank all members for their ongoing commitment and support of our organisation and look forward to the year ahead.

MONARO FARMING SYSTEMS
PROFIT & LOSS
FOR THE YEAR ENDED 30 JUNE 2023

30 Jun 22		30 Jun 23	Notes
Income			
\$ 93,852	Project Income	\$ 221,766	1
\$ 17,012	Sponsorship	\$ 9,200	2
\$ 26,300	Membership	\$ 25,850	
\$ -	Contract Labour Supply	\$ 23,707	3
\$ 102	Bank Interest	\$ 1,406	
\$ 137,266	Total Income	\$ 281,928	
\$ 137,266	Gross Profit	\$ 281,928	
Expenses			
\$ 640	Advertising	\$ 35	
\$ 45	Bank Charges	\$ 35	
\$ 546	Board Meetings	\$ 973	
\$ 4,250	Strategic Planning	\$ -	
\$ 339	Depreciation Expense	\$ 699	
\$ -	Events - Non-Project Related	\$ 2,474	4
\$ 2,496	Insurance	\$ 3,162	
\$ 196	Materials/Capital Items	\$ -	
\$ 350	MFS Employee Training	\$ 32	
\$ 1,848	Office Operating Costs	\$ 1,747	
\$ 97,162	Project Expenses	\$ 79,704	5
\$ 2,505	Subscriptions	\$ 3,176	
\$ 138	Sundry	\$ 19	
\$ 67,942	Wages	\$ 105,652	
\$ 3,472	Wages - Allowances	\$ 6,125	
\$ 6,670	Superannuation	\$ 11,093	
-\$ 11,619	Reimbursed Expenses	-\$ 4,558	
\$ 176,980	Total Expenses	\$ 210,367	
-\$ 39,714	Net Profit	\$ 71,561	



PROFIT & LOSS NOTES

1 Project Income is made up of the following:

Soils Club	\$ 11,840
Soil Moisture Probes	\$ 3,600
MLA PDS Supplementation	\$ 6,585
MLA PDS Winter Feed Gap	\$ 4,641
AgriFutures Tech Symposium	\$ 25,259
FRRR Drought Preparedness on the Monaro	\$ 19,050
Monaro Seasonal Outlooks Preparing for the Upcoming Season	\$ 28,786
Drought Hub	\$ 40,000
Serradella	\$ 10,000
FSGA Resilient Pastures	\$ 65,360
Bus Tour	\$ 6,645
Total	\$221,766

2 Sponsorship Income is made up of the following:

Rabobank	\$ 2,000
Monaro Livestock and Property	\$ 1,200
Commonwealth Bank	\$ 1,000
Elders	\$ 1,000
Nutrien Ag Solutions	\$ 1,000
Upper Murray Seeds	\$ 1,000
Virbac	\$ 1,000
Zoetis	\$ 1,000
Total	\$ 9,200

3 MFS Employee contracted out to separate organisation

4 2022 AGM

5 Project Expenses is made up of the following:

Soils Club	\$ 10,993
Worms Club	\$ 750
Soil Moisture Probes	\$ 4,332
MLA PDS Supplementation	\$ 1,409
MLA PDS Winter Feed Gap	\$ 8,125
AgriFutures Tech Symposium	\$ 6,630
Communications Workshop	\$ 6,312
FRRR Drought Preparedness on the Monaro	\$ 8,750
Monaro Seasonal Outlooks Preparing for the Upcoming Season	\$ 16,305
Drought Hub	\$ 714
Farming Forecaster	\$ 4,342
FSGA Resilient Pastures	\$ 5,147
Bus Tour	\$ 5,895
Total	\$ 79,704

MONARO FARMING SYSTEMS
BALANCE SHEET
OR THE YEAR ENDED 30 JUNE 2023

30 Jun 2022		30 Jun 2023	Notes
Assets			
Bank			
\$ 84,113	Monaro Farming Systems Inc	\$ 113,443	
\$ 81,747	Business Cash Maximiser	\$ 82,496	
\$ 48,960	Term Deposit	\$ 49,617	
\$ 214,820	Total Bank	\$ 245,556	
Current Assets			
-\$ 198	Accounts Receivable	\$ -	
-\$ 198	Total Current Assets	\$ -	
Fixed Assets			
\$ 2,846	Computer	\$ 4,208	
\$ 1,145	Electronic Equipment	\$ 1,145	
-\$ 2,329	Accumulated Depreciation	-\$ 3,028	
\$ 1,662	Total Fixed Assets	\$ 2,324	
\$ 216,284	Total Assets	\$ 247,880	
Liabilities			
Current Liabilities			
\$ 96,773	Grant Clearing Account	\$ 50,389	1
\$ 3,420	GST	\$ 6,875	
\$ 4,472	PAYG tax liability	\$ 3,616	
-\$ 970	Superannuation liability	\$ 2,851	
\$ 103,695	Total Current Liabilities	\$ 63,731	
\$ 103,695	Total Liabilities	\$ 63,731	
\$ 112,589	Net Assets	\$ 184,149	
Equity			
\$ 152,304	Retained Earnings	\$ 112,589	
-\$ 39,715	Current Year Earnings	\$ 71,561	
\$ 112,589	Total Equity	\$ 184,149	

BALANCE SHEET NOTES

The Grant Clearing Account contains income from the below projects received in 2023 financial year and will be expended in the 2024

1 financial year:

Monaro Seasonal Outlooks Preparing for the Upcoming Season	\$ 29,905
MLA PDS Winter Feed Gap	\$ 8,524
FSGA Resilient Pastures	\$ 11,960
Total	\$ 50,389

ONGOING PROJECT REPORTS

MFS Project 10.01

Soils Club

Project Leader:

Owen Smith

Project Manager:

Rebecca Kading

Project Collaborators:

Dr Richard Simpson (CSIRO), Southeast LLS, Incitec Pivot

Project Funder:

Southeast LLS, Incitec Pivot, MFS

Now in its 13th year, MFS's Soils Club is one of our oldest ongoing projects, and one which we've found members find the most value in. The Soils Club database now consists of results from 3800 paddocks, 141 farmers and 39 different tests. The value of this project continues to increase, providing solid evidence for producers to be confident in basing fertilizer investment decisions on the trend lines indicated.

2022 saw a significant decrease in members testing due to wet conditions, with only 184 samples submitted (down from 387 the previous year). Historic trends show that a difficult year for testing is followed by an unusually large number of submissions, so MFS staff are already preparing for a busy soils season.

Southeast LLS once again contributed \$10,000 towards services and to help with associated testing costs. Incitec Pivot has continued to sponsor the project with a discounted rate for testing. MFS is pursuing ongoing funding to continue to deliver this valuable project.



Dr Richard Simpson, CSIRO, presents 2022 Soils Club results at our Summer Soils Field Day, at Kybeyan.

There has been an interesting development for Soils Club, with evidence of Boron deficiency affecting subterranean clover growth at a number of sites on the Monaro. MFS is currently working with Dr Richard Simpson, CSIRO, to develop a trial to assess whether B-deficiency is a widespread issue for Monaro farms. Boron deficiency is known to reduce clover seed production more severely than clover herbage production, so it may be a factor contributing to poor clover persistence in pastures even when it does not appear to be reducing pasture growth. If a wide issue is flagged, the survey data will be used to apply for funding to conduct more detailed research on MFS members' farms and to provide information to members on how to test for, and address B issues.



An example of red leaf symptoms that are typical of B deficiency in a 'well-fertilised' pasture during spring 2020 at "Jibolaro", Countegany.

MFS welcomes soil test results from all companies, as these can be used to build upon our database and offer valuable information to our members. If you do soil testing outside of MFS's Soils Club, and you are happy to share your results with us, please forward them to Bec: admin@monarofs.com.au.



**Local Land
Services**

MFS Project 10.06

Project Leader:

MFS Worms Club

Mandy Horton

Project Manager:

Rebecca Kading

Project Collaborators:

Dawbuts, Specialised Livestock Services, MFS Producers

Project Funder:

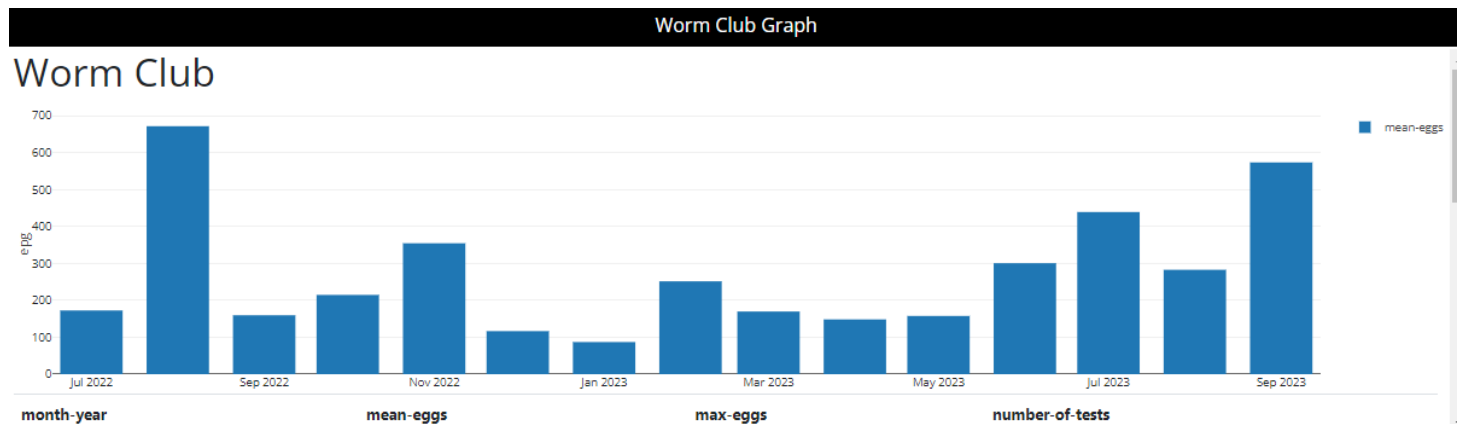
MFS

MFS's Worms Club project is now into its 8th year.

While the goals of the worm club remain the same, i.e., to increase awareness of worm conditions on the Monaro, this project is evolving.

Recent years have seen a steady decline in the number of worm egg count results being forwarded for use in the database.

This has prompted conversations between the board and staff, with questions asked: 'what benefits are our members currently receiving from the Worm Club?' and 'where do we see our Worm Club going in the future?'.



The outcomes from these questions have resulted in three main focus areas for Worms Club:

1. Make use of our database to provide meaningful information to producers across the Monaro on current worm conditions and risks. In May 2023, we engaged Richie Cartwright, Specialised Livestock Services, to review and analyse our current database, and provide quarterly worm risk outlooks. These worm risk outlooks are updated on our website and shared to members via email.
2. Broaden our database with a drive for more producer's results. An increase in results being included in the database creates more meaningful worm risk outlooks across the Monaro. Numbers are slowly but steadily increasing. We are aware that the number of results we receive is not indicative of the number of tests being conducted by our members, we are currently problem solving the most efficient way for our members to forward us these results.
3. Follow up on members' interest in on-farm worm testing by providing a one-day workshop to build upon our members' knowledge in this area. This workshop is currently still in the planning stage, and we will update members as the information is available.



If you are currently receiving WEC results from a lab, and you are happy for MFS to use these results for our database (all results remain anonymous) please list the organisation's email address on your sample submission form to the lab, or forward results to: admin@monarofs.com.au.

MFS Project 20.01: **MLA PDS Fodder Systems and Feed Gaps (Winter Feed Gap)**
Project Leader: John Murdoch
Project Manager: Frances Lomas
Project Collaborators: Doug Alcock (GrazProphet), Josh Barron & MFS Producers
Project Funder: Meat and Livestock Australia

PDS Aim: *Can granular and foliar pasture applications such as Nitrogen and Gibberellic Acid significantly increase dry matter production on pastures on two soil types on the Monaro over the winter period to optimize stock production and performance relative to untreated winter pastures?*

Severe cold winter temperatures with a high frequency of frosts, lead to low soil temperatures and subsequently restrict pasture growth creating an inhibitive “winter feed gap” on the Monaro from May to September.

Many producers currently use supplementary feeding over the winter period at a major enterprise cost to maintain stocking rate rather than looking at ways to utilize / enhance the feed base by strategically applying pasture growth stimulants such as gibberellic acid (GA) and nitrogen (N). Winter stocking rates generally dictate enterprise production capacity over the spring and summer period therefore winter carrying capacities remains a major profit driver for the whole grazing system.

Anecdotal observations suggest GA and N products to optimize dry matter production (DMP) is significantly underutilized in the Monaro grazing Industry compared to other grazing regions.

There has been no scientific based, trial work on a paddock scale done for our local area or cost benefit analysis to determine if N & GA applications are actually translating into additional, measurable DMP and therefore improving animal performance and enterprise net profit. Some strip trials that have been done on improved pasture suggest increases of 200-600 kg/DM/ha are possible using GA however this data has not been integrated into livestock performance or gross margin comparisons.

2023

Overall results from years one and two were inconclusive due to abnormally wet seasonal conditions. As a result, Monaro Farming Systems sought a variation from MLA to duplicate the trial for a further period of one year covering one site only. The site chosen was ‘Woburn’ at Bungarby. Following a series of project meetings including the host participant, the site was refenced and pegged in April 2023. The project team will monitor the progress closely over the winter and spring period.

The project is tracking well against the contracted agreement. The PDS is being managed by the Executive Officer and members of the Monaro Farming Systems group, operating out of Bombala office. There was a slight delay in the second application which occurred on the 12 July 2023, due to independent contractor’s family commitments.



Dry matter has not been calculated at time of writing and will be progressed and presented to the Summer Field Day scheduled for 29th November 2023. With support from the Southeast Local Lands Service, additional feed soil samples have been taken, which included 36 tests (3 harvests x 12 samples) and will be tested, and the results provided.



Site 1 - Location

Phalaris; Woburn at Bungarby

Site contact: Tim Keighley

Site location: -36.653810, 149.008196

Aspect: South

Elevation: 954m

From Bungarby Road travel 2.4 km down Ironmungie Road

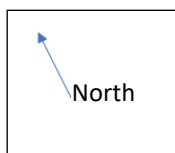
Site layout

Rep 1 and 3 are located closest to the boundary fence. There is a cattle tag with the rep and treatments in the first plot of each rep.

R = REPLICATE

T= TREATMENT

R2	R2	R2	R2	R4	R4	R4	R4
T2	T3	T4	T1	T3	T4	T1	T2
R1	R1	R1	R1	R3	R3	R3	R3
T1	T2	T3	T4	T4	T1	T2	T3



MFS Project 22.04: Monaro Seasonal Outlooks, Preparing for the Upcoming Season
Project Leader: Frances Lomas
Project Manager: Frances Lomas
Project Collaborators: Doug Alcock - Graz Prophet Consulting, MFS Producers
Project Funder: Department of Industry, Black Summer Recovery Grant
Duration: March 2022 – March 2024

Background:

MFS were successful in a grant application to continue its delivery of seasonal outlooks during the period March 2022 to March 2024, through the Department of Industry – Black Summer Bushfire grant.

Aim:

A primary outcome of the Seasonal Outlook will be to provide a platform for engagement and discussion in a group setting so producers can share and reflect on disaster management and mitigation strategies going forward. The Seasonal Outlook will also provide local producers with scientific modelling (utilising the Farming Forecaster tool) that will be helpful in their on-farm decision making.



Winter Field Day 2023 “Mila”



Summer Field Day 2022, “Kybeyan”

Benefits of Seasonal Outlooks:

- Increased confidence and understanding of seasonal outlooks and trigger points.
- Pasture growth potentials, soil water holding capacities, different wilting points of certain pasture species.
- Translate this to the amount of feed availability for the next three months and the likely impacts on ground cover, stock performance and condition score, weight gains, lambing/calving and weaning success rates as well as the probability of needing supplementary feeding etc.
- Better understanding of the different water use efficiencies of crop and pasture systems.
- Better understanding of soil and water interactions at critical crop & pasture growth stages.



Autumn Field Day 2023 , “Hazeldean”

Outcomes to Date:

Autumn 2022 Seasonal Outlook – 22nd March 2022

Venue: “Delegate Station”, Delegate & “Woburn”, Bungarby

Attendance: 40

Spring 2022 Seasonal Outlook – 3rd August 2022

Venue: Ag Tech Symposium, Cooma Showground

Attendance: 230

Summer 2022 Seasonal Outlook – 7th December 2022

Venue: “Kybeyan Station” Kybeyan

Attendance: 60

Autumn 2023 Seasonal Outlook – 15th March 2023

Venue: “Hazeldean”, Cooma

Attendance: 105



MFS Executive Officer, Frances Lomas, and Doug Alcock, Graz Prophet, preparing for a Seasonal Outlook presentation.

Background and overview

MFS entered into a Collaboration Agreement with the Southern NSW Drought Resilience Adoption and Innovation Hub for the period Jan 2022 to 30 June 2024.

The SNSW Hub is one of 8 across Australia funded by the Future Drought Fund - an Australian Government Initiative. It is a partnership led by CSU including University of Wollongong, University of Canberra, Australian National University, NSW DPI, NSW Local Land Services, First Nations Governance Circle, Rural Aid and Farming Systems Group Alliance (comprised of Farmlink, CWFS, Riverina Plains, Southern Growers, IREC, ICC, Holbrook Landcare Network, MFS and TBC)

The Executive Officer, Frances Lomas, continues to hold the position of Knowledge Broker for MFS.

Reporting and outcomes

As part of its obligations under the Agreement, MFS has a targeted set of activities to deliver for each 6-month period, a report of which is submitted to the Hub including project co-design, identify priorities and projects for development, networking and relationship building with Hub partners, stakeholder engagement and communication and promotion of the Hub's activities amongst its networks.

Since the inception of the Hub eighteen months ago, MFS has benefited greatly from its partnership through increased and improved access to research and knowledge sharing, collaboration and more recently, project participation. Projects to date include the Resilient Pastures trial and a Return-on-Investment Calculator which, at time of writing, was being developed and will be distributed throughout the network for testing.

A co-design approach is central to the hub's philosophy and helps ensure all activities and projects are responding to real needs and opportunities on the ground. "Co-design is one way we ensure we are enabling real changes with positive impact for the people, farms, communities and landscapes of Southern New South Wales" Cindy Cassidy, CEO Southern NSW Hub.

Planning is underway for the next iteration of the Drought Resilience Adoption and Innovation Hub with listening, stakeholder input and co-design continuing to play a key role in the future vision. Significantly, the Productivity Commission is part way through its review of the Future Drought Fund (and, by extension, the

eight drought hubs). The interim report from this review suggests that it is too early to definitively assess the hub impacts – but the early indications are positive. They suggest that the hub operations be extended for a further four-year term so the impact can be properly assessed, and additional effort can be invested in climate resilience more broadly.

Taking this opportunity to reflect on the hub's past performance and people's experience with it will be critical to making the hub even better and more effective for the next four years.



MFS Project 22.06

Farming Forecaster

Project Leader:

Frances Lomas

Project Manager:

Rebecca Kading

Project Collaborators:

Farming Forecaster, TFS, LLS, Bookham Ag

Project Funder:

MFS

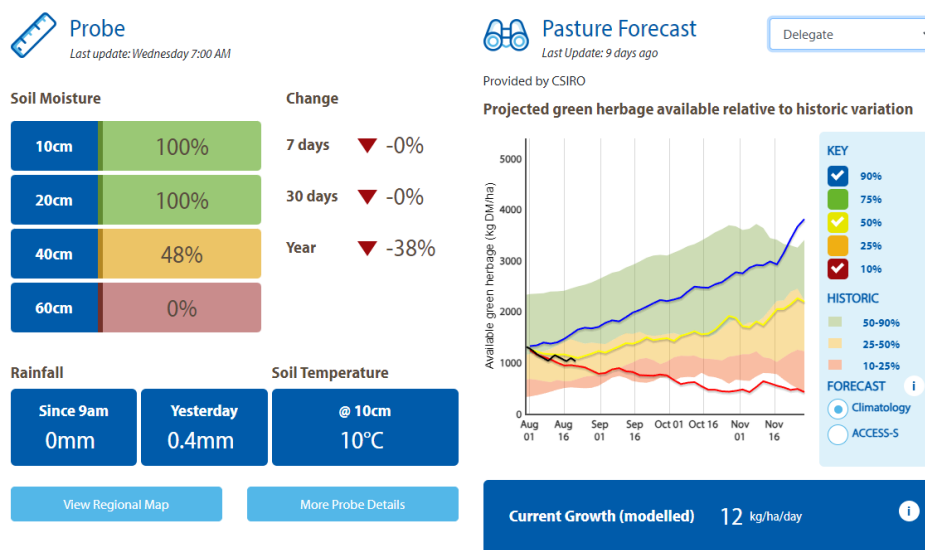
Following the successful completion of the Next Gen Forecasting project on 21 October 2022, the then Farming Forecaster committee moved to establish a separate legal entity, Farming Forecaster Inc. Monaro Farming Systems is proud to partner with and support the continued expansion of this specialised decision support tool. Nancy Spoljaric, Project Officer for Farming Forecaster is working closely with the existing collaborators to ensure the ongoing success of the entity.



Farming Forecaster is one of the most advanced pasture forecast tools available to the grazing industry, and has expanded its area to include the Hunter, Central Tablelands, Murray, Tasmania and Western Australia.

Monaro now has 12 probe sites transmitting data to the FF tool. They are located at Ando, Bibbenluke, Bukalong, Bungarby, Burando, Countegany, Coolringdon, Delegate, Kybeyan, Maffra, Mila and Nimmitabel. Farming Forecaster recommends using the tool to review the information from a wide area around your property, rather than one individual probe location, to gain a more accurate pasture forecast.

As the Monaro once again moves into dryer conditions, the Farming Forecaster tool will be a valuable tool for graziers stocking rate decisions.



Pasture Forecast for Delegate taken from Farming Forecaster website

The Farming Forecaster committee is interested in our members' feedback. Do you use the FF tool? What improvements would you like to see? Reach out to Rebecca Kading: admin@monarofs.com.au.

MFS Project 22.11: **FSGA Resilient Pastures**
Project Leader: Nancy Spoljaric
Project Manager: Frances Lomas
Project Collaborators: Holbrook Landcare Ltd, S&W Seed Company, CSIRO, Doug Alcock - Graz Prophet
Project Funder: Australian Government, Future Drought Fund (FDF) Drought Resilient Soils and Landscapes Grants program
Duration: **June 2022 – June 2024**

Background & Overview

MFS is continuing two established experiments that have a primary focus on the long-term persistence of grasses, alternative legumes and lucerne varieties. The Resilient Pasture Project provides a critical opportunity to resume these experiments that support future resilience in Monaro pasture systems.

Three demonstration sites have been set up on the Monaro including two at Burando, Bombala and one at “Kenilworth”, Springfield Road.

Trial 1

Question: Which of a range of alternative pasture species deliver equivalent or better persistence than existing benchmark species, through variable growing seasons on the Monaro?

Species production measurements (dry matter cuts and plant frequency counts) are being continued to give a data set from 2019 to 2024. Some of the species being trialled include tall fescue, cocksfoot, perennial ryegrass, prairie grass, chicory, plantain, phalaris, and brome. The legumes include white clover, Caucasian × white clover cross, Caucasian clover, talish clover, red clover, strawberry clover, subterranean clover and lucerne.



Doug Alcock's herbage mass and quality cuts at Lucern trial, Kenilworth



Legume trial plots, Burando



Weather station, Burando



Perennial grass/herbs plots, Burando

Trial 2

Question: What degree of winter dormancy in a lucerne variety best suits the unique climate of the Monaro (i.e., very cool winters and significant summer rainfall), to achieve herbage production during key feed gaps that is balanced with long term persistence ie which dormancy rating is best suited to use the rainfall in our wetter months and shut down during our drier months.

The challenge is how to best manage lucerne growth profiles to conserve soil moisture at strategic times of the year. The trial at Maffra was sown in September 2021 with varieties of differing winter-dormancy ratings with the specific objective of understanding which varieties provide a good balance between winter production and longer-term persistence.

This site has been revived and measurements of 20 varieties will continue to record production (DM) and relative dormancy assessments as well as herbage yield in winter versus summer.



Burando Site

Trial 3

Question: Does a traditional phalaris/lucerne/subterranean clover pasture mix provide the best solution for optimised seasonal production, botanical stability and long-term persistence?

Where lucerne can be grown on the Monaro (i.e., well-drained soils with favourable pH), it is used as the base of a premium pasture system for animal production. The deep rooted nature and seasonal growth pattern of lucerne provides advantages (drought tolerance; summer production) and disadvantages (very dry soil profiles in autumn-winter) that impact the compositional stability of mixed pastures and the ability of this pasture system to provide feed into a winter feed gap. The hypothesis that will be tested include “grass is essential for maintaining a reasonable level of winter production” and “a reduced lucerne composition may lift winter productivity due to water-sparing over summer, (with some cost to summer production?)”

Measurements at this site include herbage mass, botanical composition, and soil moisture profile under the control pasture.



Australian Government
Department of Agriculture,
Fisheries and Forestry



Future
Drought
Fund



MFS Project 22.12:**RaboBank Client Council Prime Lamb Tour**

Project Leader: Frances Lomas

Project Manager: Mandy Horton, John Jeffreys

Project Collaborators: Gundagai Meat Processors, Lambpro, “Wallendoon East”, Wallendbeen.

Project Funder: RaboBank

In April 2023, Monaro Farming Systems took a small but enthusiastic group of members and industry representatives on an overnight bus tour to Wallendbeen and Gundagai to visit a large-scale prime lamb operation and the Gundagai Meat Processing Plant.

Day one began with a tour of “Wallendoon East”, located in the highly productive Wallendbeen region. The group was extremely interested in all aspects of the tour, including the well-planned yards, ewes and lambs, and highly productive pastures. The systems that have been developed to manage such an enterprise created a lot of interest and comment.

The day was concluded with an informal dinner with guest speaker, Rozzie O’Reilly. Rozzie was the 2021 recipient of the Zanda



Attendees of the tour at Wallendoon East

McDonald Award, a prestigious award for those in agribusiness in Australia and New Zealand. She is currently the Operations Manager at Lambpro, which is Australia’s largest prime lamb seedstock business.

Day two of the event featured a tour of the Gundagai Meat Processors, one of Australia’s most innovative and progressive lamb processors which processes over one million lambs annually. Attendees heard about the new technologies which GMP is known for and were provided a very comprehensive tour of the plant.

The group found this fascinating and tracked the lambs from just after they were killed, right through the plant to the finished packaged product.



Crops and pastures are rotated every five years, which was interesting compared to our Monaro practices.

ADDITIONAL MFS PARTNERSHIPS & COLLABORATIVE AGREEMENTS

Serradellas for New Environments

Project Leader: Frances Lomas
Project Collaborators: MFS and CSIRO
Project Funder: Meat and Livestock Australia

On the 9th September 2022, Monaro Farming Systems entered into an agreement with CSIRO to participate in a new project 'Serradellas for new environments'. The project is funded by Meat and Livestock Australia and involves researchers from CSIRO, NSW DPI and the Tasmanian Institute of Agriculture.

Serradellas present many potential benefits for mixed pastures including providing high quality dry matter, fixing nitrogen and lowering the requirement for phosphorus fertiliser relative to subterranean clover. Serradellas also have a low bloat risk and low oestrogenic activity and are adapted to both sandy and duplex soil types. The project aims to develop serradellas as viable legume options for permanent pasture systems in south-eastern Australia. Current research activities aim to identify the cultivars and agronomy required to successfully establish serradellas in permanent pasture systems.

Monaro Farming Systems called for expressions of interest from within the membership base to host a serradella Producer Demonstration Site. Each site was to comprise replicated strips of different cultivars of yellow and French serradella grown in a mixture with grass, along with a control treatment of subterranean clover. The total site area would range from 50 x 50 m up to 100 x 100 m and have prior weed control. The sites would be run under normal farm management and did not require separate fencing but did require the area to be closed to grazing to allow establishment and seed set. The sites, sown in autumn 2023, will be monitored by the project team for a 2 -3 year period (until at least 2025).

Carbon Ready Farm Businesses – Integrated Management Systems

Project Manager: Lachy Ingram

Project Assist: Frances Lomas

Project Collaborators: Department Primary Industries and Meat and Livestock Australia

Following the MFS AGM 2022, where Lachlan Ingram presented a brief overview of the proposed CN30 Project, the first of a series of meetings was held at the Nimmitabel Hall on 2 November 2023. Led by a team of personnel from NSW Department of Primary Industries, consisting of Warwick Badgery, DPI & MFS Industry Board member, Lachlan Ingram, Trudie Atkinson, Sarah Baker and Katrina Sinclair, a number of MFS members were provided with an overview and background to an existing larger project '*Delivering integrated management system IMS options for CN30*' and how the Carbon ready farm business workshops fit into the bigger picture project.

The workshops have continued over the last nine months providing participants with educational materials, definitions and terminology, carbon balance, carbon account, audits, carbon footprint and reducing carbon emissions.

The Integrated Management systems (IMS) project will:

- Combine technologies from the emissions avoidance and carbon storage work areas into packages for adoption;
- Include the underlying frameworks, software, business cases and models to support adoption of these recommended practices.

Participants of the project will receive a carbon audit of their business, a review of current and emerging GHG emission reduction options, an understanding of different markets and mechanisms to reduce GHG emissions and regionally specific approaches and tools to reduce GHG emissions.

A further report will be provided for the 2023-24 Annual Report.

Managing Fly Strike

Project Leader: Frances Lomas

Project Collaborators: MFS and Australian Wool Innovation

Project Funder: Meat Livestock Australia

Working with NSW DPI, and in collaboration with AWI, MFS called for expressions of interest in participating in a research project to investigate blowfly resistance to the commonly used flystrike chemicals.

The tests were carried out on sheep where there is a suspected resistance to chemicals, but also those who don't as yet have a problem or have sheep that are less genetically susceptible to flies. The tests were taken from a broad cross section of the Monaro, particularly geographically dispersed properties.

Each producer who participated in the project received a free testing kit which tested maggots to determine if resistance is present to Dicyclanil (e.g. Clik), Cyromazine (e.g. Vetrazin), Ivermectin (e.g. Coopers Blowfly and Lice), Spinosad (e.g. Extinosad) and Imidacloprid (e.g. Avenge + Fly). These tests were valued at \$346.

Future Benefits for MFS:

Results will give valuable information to producers on which chemicals show resistance.

Lead Researcher, Narelle Sales, DPI will collate the findings to show resistance for all the Monaro.

As the project is Australia wide – MFS will see how it rates against other areas. All results will be anonymous.

MFS IS PROUD TO PARTNER WITH MANY ORGANISATIONS WHO PROVIDE ASSISTANCE TO THE CONTINUED GROWTH AND SUCCESS OF THE ORGANISATION. MFS REMAINS GRATEFUL TO THIS CONTINUED SUPPORT – BOTH INKIND AND FINANCIAL. THANK YOU

Project Funders

Southeast Local Land Services
Meat & Livestock Australia (MLA)
Rabobank Client Council
Department of Industry – Black
Summer Recover Grant
S&W Seed Company
Future Drought Fund – Drought
Resistant Soils and Landscapes Grant

Financial Sponsors

Rabobank
Incitec Pivot
CommBank
Elders Cooma
MLP (Monaro Livestock & Property)
NutrienAg Bombala
Upper Murray Seeds
Virbac
Zoetis

MFS Partnerships

Southern NSW Innovation Hub
Southeast Local Land Services
NSW DPI
CSIRO
University of Sydney
Tablelands Farming Systems
Holbrook Landcare Network
Bookham Agricultural Bureau
Meridian Agriculture
Australian Wool Innovation Ltd
Mercado
Dawbuts
Boyce Cooma
Farming Forecaster
Graz Prophet
Josh Barron
Specialised Livestock Services



Local Land
Services
South East



Department
of Industry



CommonwealthBank



Upper Murray Seeds®
Sow much better



zoetis



**SOUTHERN NSW
Innovation Hub**
SUSTAINABLE AGRICULTURE,
LANDSCAPES AND COMMUNITIES



**Department of
Primary Industries**



**THE UNIVERSITY OF
SYDNEY**

TFS Tablelands
Farming
Systems

Next Generation Agriculture



Holbrook
Landcare Network


MERIDIAN
Agriculture



awi **Australian Wool
Innovation Limited**



mecardo
A NUTRIEN AG SOLUTIONS BUSINESS

DAWBUTS



BOYCE
CHARTERED ACCOUNTANTS

Knowledge. Insight. Experience.



Farming Forecaster



**Specialised
Livestock
Services**