Sustainable Farms 2018–2023

A SUMMARY OF ACHIEVEMENTS AND OUTCOMES



Vision:

Healthy Farmers, Healthy Farms, Healthy Profits

Mission:

To support the improvement of natural asset management on farms in the temperate woodlands, to enhance biodiversity, increase farm profitability and improve farmer wellbeing.



ABOUT US

Sustainable Farms is a unique multi-disciplinary research and education program led by the Australian National University.

Our work focuses on the integration of biodiversity conservation and agricultural production on farms in the sheep-wheat belt of south-eastern Australia. These landscapes are characterised by the critically endangered Box-Gum Grassy Woodland ecological community.

Our regionally-based team works with farmers, other landholders, Landcare and regional Natural Resource Management (NRM) organisations to share research and support practice change on farms.

It started with conversations in the paddock, our ecologists talking to farmers.

These conversations sparked the need to explore the role biodiversity plays in supporting farm productivity, and farmer wellbeing.

So, we built a multi-disciplinary approach to research and extension to support adoption of the natural asset management practices on farms.

Our Vision: Healthy Farms, Healthy Farmers, Healthy Profits Box-Gum Grassy Woodland – Less than **5**% remains



77% of remaining Box-Gum Grassy Woodland is on private land – So farmers have an important role to play in the conservation of this ecosystem!

OUR GOALS

Undertake innovative multi-disciplinary research that informs recommendations for the management of natural assets on farms.

Increase landholder knowledge and adoption of enhanced natural asset management practices.

Support the capacity of the NRM sector to support farmers to improve management practices.

Our 6-year Evaluation

Since the establishment of the project in 2018, Sustainable Farms has been working collaboratively with a diversity of researchers across the Australian National University and other institutions to undertake world-class research and share scientific learnings that empower landholders to make more informed decisions about the management of their natural assets.

The following pages highlight key achievements of Sustainable Farms from 2018–2023, based on the results of an external evaluation of the project.¹

Linking farmer wellbeing with biodiversity – it takes a community!

Five years ago, Sustainable Farms asked the question: could practices that improve biodiversity, like tree planting, be good for farmer mental health? We found that the most significant signal for better mental health among farmers was social connectedness. Our data showed that practices like tree planting didn't in and of itself improve mental health

- rather, there is an important middle step: it's the social connectedness arising from participating in these practices that is good for wellbeing.

And social connectedness comes through engagement in Landcare or similar local, community, volunteer-driven groups. So, we took our science to these groups.

OUR RESEARCH

Our research team investigates how managing natural assets can integrate conservation objectives with agricultural production on farms.



"Ecological science is the backbone of ANU Sustainable Farms' unique role and contribution."

— NRM professional

Long-term ecological research

Our research is made possible by the incredible work of landholders who have been innovative, proactive and forward thinking in how they've managed their properties.

Our long-term ecological monitoring on farms in the sheep-wheat belt of south-eastern Australia is unique both nationally and globally. The results provide evidence for science-based management actions to enhance the condition of natural assets, on which biodiversity depends.

farm study sites

10,000+
biodiversity surveys

REMNANT PLANTINGS WOODLAND SHELTERBELTS PADDOCK ROCKY OUTCROPS TREES

Natural Assets on Farms

Healthy natural assets support biodiversity, which underpins the ecological systems and processes that support sustainable agriculture.

Multi-disciplinary research

Over the past 6 years, Sustainable Farms has undertaken 20 different research projects. This has involved collaborations with researchers from the science, economics, health and law colleges at ANU, as well as several other institutions including the University of Canberra, the Deakin University Blue Carbon Lab and the Australian Bureau of Resource Economics and Sciences.

Farmers need to make informed decisions regarding the costs and benefits of investing in natural asset enhancements. Our research has shown the benefits of fencing dams include improved water quality and water security, which have economic benefits for livestock enterprises. We have also undertaken an analysis of the factors that either constrain or support farmers in enhancing their farm dams.

ECOLOGY PROJECTS AGRICULTURAL ECONOMICS PROJECTS

MENTAL HEALTH & SOCIAL SCIENCE PROJECTS SCIENTIFIC JOURNAL ARTICLES EDUCATIONAL RESOURCES FOR LANDHOLDERS

BOOKS

A COLLABORATIVE APPROACH

Sustainable Farms partners with regional Landcare and NRM organisations to add value to the work they do with local rural communities.

Number of organisations we have collaborated with:



REGIONAL NRM ORGANISATIONS

GOVERNMENT AGENCIES

NON-GOVERNMENT ORGANISATIONS

We collaborate with regional organisations to provide support through:

- Farm field days and community events
- Training workshops for Landcare & NRM staff
- Educational resources
- Data and expertise to inform project planning
- Collaborative funding applications
- On-ground monitoring

Our regional partners play a vital role in our work by bringing their knowledge and experience to:

- the interpretation of our research findings
- the dissemination of knowledge and resources
- the development of new research projects to respond to the needs of NRM managers and landholders



WORKING TOGETHER...

Sustainable Farms engaged with over

13,800 PEOPLE

at 232

extension events



TAKING SCIENCE TO THE PADDOCK

Government or industry professionals

75% Farmers or landholders

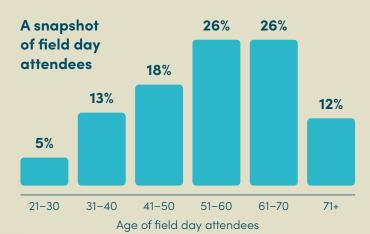
Farm field days

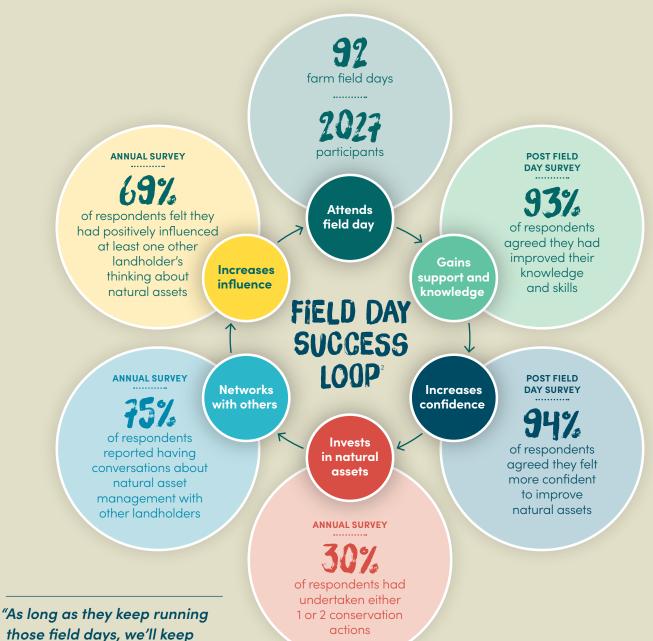
attending." — Landholder

We run field days in partnership with local Landcare and NRM organisations, typically out in the paddock where conversations naturally flow.

Field days provide an opportunity for landholders to learn from each other and hear about the latest research on natural asset management.

Our goal is to ensure that landholders feel confident to make informed management decisions, and to share the knowledge and experience they have gained with other landholders.





IMPROVING NATURAL ASSET MANAGEMENT

Landholders taking action!

Results from annual surveys demonstrate the management actions being undertaken by landholders who participated in a Sustainable Farms field day.

While many landholders reported already doing some practices prior to attending a field day, survey responses and interviews indicate that Sustainable Farms helps landholders to 'fill the gaps' in their knowledge and continue making changes to their management practices more confidently.

Within 2 years of attending a Sustainable Farms field day...



Revegetation

- 64% of survey respondents planted new areas of native vegetation or paddock trees.
- 53% established new shelterbelts using native species.
- 58% regenerated vegetation in and around farm dams.



Protecting or enhancing native vegetation

- 59% of respondents protected existing paddock trees or patches of native vegetation through fencing.
- 63% improved existing shelterbelts using native species.
- 59% increased the area of deep-rooted perennial grasses on their property.



Enhancing farm dams or waterways

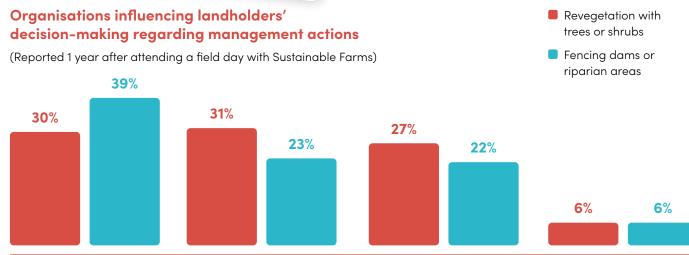
- 51% of respondents excluded stock access to dams.
- 39% excluded stock access to waterways.
- 47% installed stock watering points away from dams or waterways.
- 10% installed stock access points to dams to manage access and reduce damage.

Other landholders



What influence did Sustainable Farms have?

Landholders report many influences on their decision–making around management practices on their properties. Sustainable Farms was rated as the most significant influence for making improvements to dam and riparian areas (through fencing to restrict to stock access). While Sustainable Farms, Landcare and NRM organisations (LLS and CMAs) had a relatively similar role in influencing the establishment of new areas of native vegetation.



Regional NRM organisations

Landcare

Sustainable Farms

EDUCATIONAL RESOURCES & COMMUNICATIONS

Creating connections through communications

We utilise a wide range of digital communication platforms to maximise the reach of our news, stories and resources.



Empowering landholders with science-based resources & tools

We translate our research learnings into a suite of practical educational resources and tools to ensure landholders have access to science-based management recommendations. Our products are designed to provide clear guidance on pathways for improving the condition of natural assets and expected benefits.

Sustainable Farms has produced a suite of 42 printed and online educational resources.

Over **35,000** printed resources have been distributed



'Ten Ways to Improve the Natural Assets on a Farm' booklet: An introductory overview of options to improve natural assets



Management guides:
A series of brochures
on the science and
management of different
natural assets



best practice guides:Booklets providing more in-depth technical advice



Annual calendars:
Each month features
a stunning photo and
story about biodiversity
conservation

Our award-winning BirdCast planning tool

Eureka Prize for Applied Environmental Research 2022

Banksia Foundation NSW Sustainability Award – Biodiversity 2022 BirdCast is a free online tool to help landholders make more informed management decisions.

Based on our long-term research data, BirdCast predicts how woodland bird diversity is likely to change on a property with different management actions. Visit sustainablefarms.org.au/birdcast



FROM LANDHOLDERS...

THE VALUE OF SUSTAINABLE FARMS

Both landholders and NRM practitioners acknowledge the benefits of Sustainable Farms' multi-faceted approach to sharing the science of natural asset management.

Delivering landholder education

Farmers and other landholders reported that the combination of Sustainable Farms' research, staff, events and resources were all of value in supporting their learning journey and boosting their confidence to implement new management actions.

"There is no one thing that is most useful about Sustainable Farms – it's a combination of their resources, their field days, their print publications, their people, and knowing that they have various research projects going on."

"Land management can be a very daunting thing, and there are a lot of recipes out there, but a lot of them don't talk about the whole farming landscape. That is the advantage of Sustainable Farms – they are looking at it as a whole system."

"We had a gut feeling that we needed to protect our waterways. We recognised our dams were mucked up, and we started fencing independently...

The recommendations made by Sustainable Farms gave huge support to the project".

Supporting Landcare and NRM practitioners

Regional NRM practitioners reported Sustainable Farms had **improved their internal capacity to deliver extension and outreach services** mainly through the provision of scientific research data and the availability of Sustainable Farms staff to support delivery of agricultural extension services. The **interpersonal skills and technical expertise** of Sustainable Farms staff are greatly valued.

Landcare and NRM practitioners also felt they were giving better advice and were better able to address landholders' questions.

Funding for the Sustainable Farms initiative came from the ANU, Australian Government, philanthropic trusts and private donors.

Sustainable Farms

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¹ The material in this report is derived from: Healy, D., Bennetto-Peris, M. & Bryan, H. (2024) Evaluation of the Sustainable Farms Project: An initiative of the Australian National University.

FROM LANDCARE & NRM PRACTITIONERS...

"It's their responsiveness and their knowledge, their ability to communicate, they are good at presenting, they're based in research, which is really good, but they're also really willing to listen to farmers' experiences and integrate that into the framework that they're working from as well."

"There is still a gap in the market with [the NRM sector]
having a connection to universities and academic
research. And Sustainable Farms helps with that _
they have the right people and can give [us] access
to that community."

"They make available their ecologists for field days to share their knowledge... We've found them fantastic, and all their ecologists that we've had at these events have been great. They know how to talk to farmers, not in technical sort of lingo. And when you're promoting [events], when you can say that the ecologist who's done the research is presenting on it, it's got a bit of weight behind it."

Sustainable Farms acknowledges the Traditional Custodians of the land we work on and we pay our respects to their Elders, past and present.





² The Field Day Success Loop is adapted from Iowa Learning Farms resources: www.iowalearningfarms.org