

Trees on farms projects

Lifting farm gate profit through high value agroforestry

Headline results from the first year of pasture trials and interviews with 44 farmers and advisors in Tasmania.

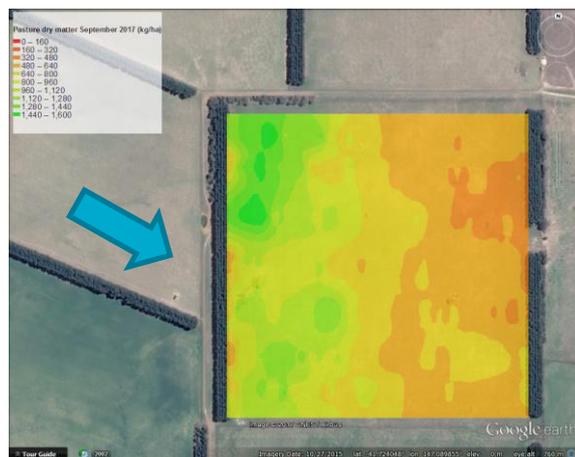
Introduction

- Trees integrated into agricultural systems benefit many other parts of farming enterprises that are rarely accounted for.
- This research aims to increase farm enterprise profitability, through:
 - Quantifying and integrating the direct and indirect economic benefits of trees.
 - Understanding farmer motivations and barriers to adoption of trees on farms.
 - Promoting adoption of profitable trees in configurations that will increase farm profitability.



Photo credit: Arthur Lyons, Private Forests Tasmania

Impact of shelter on pasture biomass at Formosa – September 2017 (arrow shows prevailing wind direction)



Trees improve pasture production

At the most advanced field site of Formosa, near Cressy in Tasmania, pasture growth across 80% of the paddock is improved by as much as 15% in the peak season of autumn and up to 6% in other seasons. Both wind speed and evaporation are substantially reduced irrespective of season.

Farmers have relatively narrow perceptions of agroforestry

Most farmers thought of monoculture plantations for commercial harvest when talking about agroforestry, rather than other configurations of trees on farms such as along riparian areas or in shelter belts. However, our field studies demonstrated that trees can add significant value to other parts of the farm enterprise, as well as through direct returns from harvest, if they are located appropriately.

Support for trees is high

Trees were highly valued as part of the landscape by farmers and a number of benefits of trees on farms were recognised by farmers.

“Philosophically I think that growing trees is the most sustainable thing that we can do. Trees are incredibly valuable.”
(Interview 7)

Farmer perceived benefits of trees

- Shelter
- Biodiversity
- Aesthetics
- Direct economic benefits
- Restoration
- Other benefits such as privacy, security and property value

Encouraging farmer engagement in establishing trees

The most common opportunities to encourage more planting of trees by farmers include:

- Support farmers to plan their tree plantings to match their objectives (we are currently working on some ideas to address this).
- Investment strategies to help manage upfront costs such as fencing.
- Produce positive success stories about agroforestry to counteract the negative perceptions of MIS failings.
- Reduce costs and risks by networking and cooperative arrangements (shared machinery, skill networks).
- Simplify market information and potential market opportunities.
- Raise awareness of the multiple benefits of trees and how to maximise returns from these benefit streams.
- Develop policy and cohesion across primary industries and support organisations to work together and promote trees.



Photo credit: Arthur Lyons, Private Forests Tasmania



Photo credit: Daniel Mendham, CSIRO

Three main views of trees on farms

Farmers interviewed by the project can be grouped into 3 broad categories:

1. Those who see trees as a valuable component of the farm in all types of farming enterprises.
2. Those who see trees as not being valuable enough to justify the cost of planning, planting, management and use of prime land.
3. Those who see trees as being vital beyond the farm scale and essential to have on farm regardless of cost or economic return.

Most respondents fell into Category 1, suggesting that a 'hearts and minds' approach to encouraging trees on farms (for economic and social, as well as environmental imperatives) will encourage greater adoption by farmers. Understanding farmer motivations helps us to tailor recommendations, based on individual objectives.

Next phase of the research

We are also progressing the economic modelling and field work components of the project to quantify and integrate the benefits of different configurations of trees on farms. Additionally, up to 50 interviews will be conducted with farmers and advisors in Victoria in 2018. The outcomes will aim to motivate farmers to plant more trees in such a way as to allow them to increase their farm gate profit.

How to find out more

We welcome comments, questions or suggestions!

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Acknowledgements

Funded by the Tasmanian Government through the Agrivision 2050 scheme, and by the Australian Department of Agriculture and Water, through the Research and Development for Profit Initiative, Round 2. Additionally supported by Forest and Wood Products Australia, Dairy Australia, Agrifutures Australia, Private Forests Tasmania, the University of Tasmania, Greening Australia and Forico.