Strategies for Carbon Success

Case Study Farm - ‘Milgadara’ Young

Bill & Rhonda Daly

3 March 2022

Boorowa Ex-Services & Citizens Club

Putting life back into the land

‘The way to get started is to quit talking and begin doing’

Walt Disney

Putting life back into the land

The Beginning – May 2002

- Started Biological/Regenerative Farming in 2002
- YLAD Living Soils held a Seminar with Dr Christine Jones speaking on Soil Carbon as a tradeable commodity on **February 15 2006**
- Sponsored Carbon Farming Seminars and run YLS Workshops over last 20 years
- September 28 2020 decided that it was time we registered a soil carbon project
- Nikolina a research scientist was working for us and set about undertaking research on the five largest soil carbon project developers
- Formulated a list of questions to help decide

CSIRO - National Soil Research Program – Scarpe Trials

Rhonda & Bill Daly
Paddock: Old Sheep Yard
Management system: Carbon farming
Zone: Central plains

Paddock name	Upper depth (mm)	Lower depth (mm)	TOC (g/100g)	POC (%)	HUM (%)	ROC (%)	CS (t C/ha)	System max (t C/ha)	System avg (t C/ha)	System min (t C/ha)
Old Sheep Yard	0	10	1.43	15	53	32	20.4	26.5	18.0	8.6
	10	20	0.43	7	61	33	6.1	14.5	8.4	4.2
	20	30	0.26	6	66	28	3.7	12.2	6.2	2.9
	0	30					**30.3**	**49.8**	**32.5**	**15.9**

- **The 53% humus is in the upper end of the trials done around Australia. Jeff Baldock**
- **Divide POC% by Humus% eg: 15/53 = .28 – this soil carbon is not vulnerable**
- **If there was high POC% and low Humus% then the carbon would be more vulnerable**

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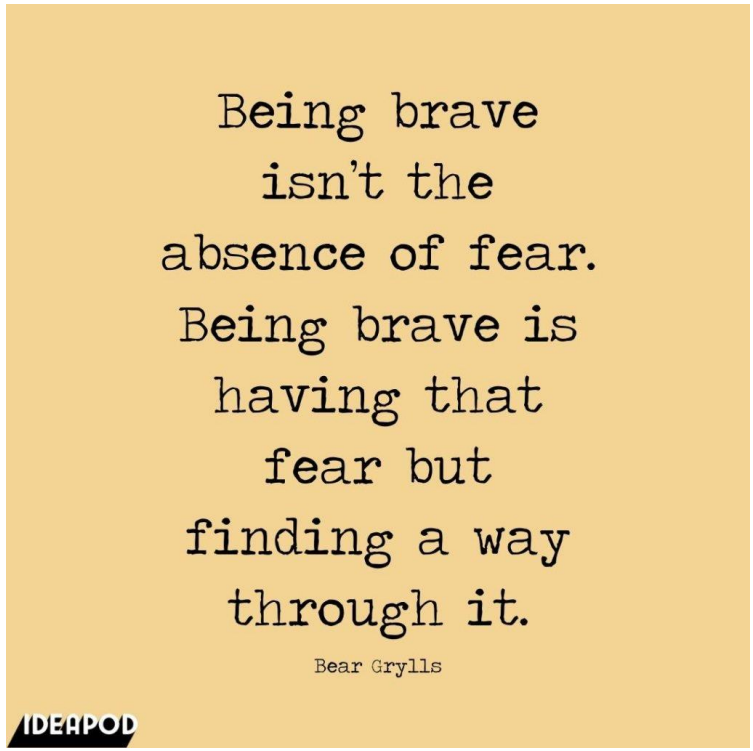
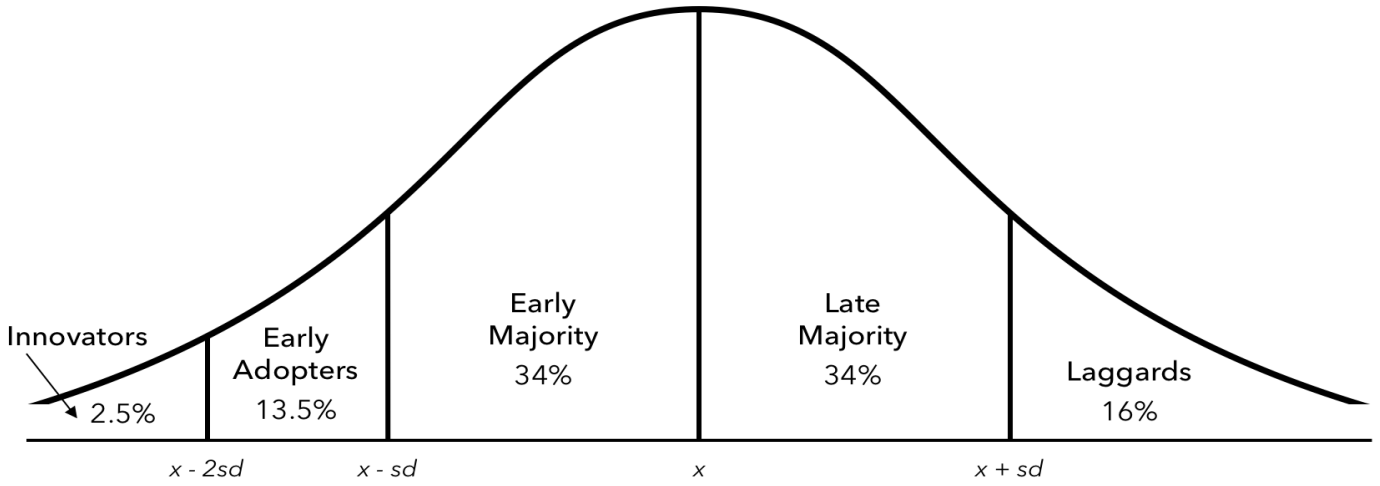
Tel: 02 6391 3814 | Fax: 02 6391 3899 | www.dpi.nsw.gov.au | ABN: 72 189 919 072

Complexity creating Confusion?





Relationship between types of adopters classified by innovativeness and their location on the adoption curve.

SOURCE: Everett M. Rogers, *Diffusions of Innovations*, 5th ed. (New York: Free Press, 2003), p. 281.

Two Groups of Farmers:

- **The ones who know what needs to be done for the future and**
- **Those who don't**

Questions to ask when finding a Project Developer

Credibility	What expertise & qualifications do you have in agriculture, science or soils and how well do you understand the Government requirements?
	What successes and/or failures have you had in building soil carbon on your projects?
	Do you run any research trials as part of your soil carbon projects?
	What are the different ways of building soil carbon within 5 years – please state 3 or 4 different ways;
Services	What services do you offer?
	Can I do just an initial farm assessment to see what suggestions you will give me for me to start my project: What is the price of this and what information will I get by doing this?
	How do I find what our farm's potential is for building soil carbon?
	How many times do you come to visit the farm in the life of the Project?
Soil Testing	What depth do you advise to take the soil cores?
	How do I know if I have built soil carbon over the years or if it has actually decreased?
	What is the risk and possible reasons that I could have no additional or low levels of soil carbon built in my soils?
	What are the measurement methods and risks of projects not being profitable?
	How many times in the life of the Project do I have to soil test?

Questions to ask when finding a Project Developer

Size of Project	What is the minimum # of hectares that can be registered for a project? As a general rule 350 - 400 hectares is **considered** viable however small land holders may be able to aggregate their project. (This is another area for questioning?)
Grants	How much money do I potentially lose if I accept the government's $5,000 offer for soil testing?

Costs/Payment	How much does it cost to Register a Soil Carbon Project?
	What Bill and I have found is that there are few different options offered. It is important that you consider both these options carefully. Bill and I have chosen to take the second option:
	1. Many Brokers offer to pay for most of the Steps in the Project however then take a larger percentage of the Total ACCU's sold. e.g. 15% – 30%
	2. Second option is where Bill and I pay for the costs of each Step and receive all the ACCU's in our name and the Broker/Facilitator takes a 5% success fee

Project Registration	Whose name should the Carbon Project be registered in? Why does it matter?
	In whose name are the Carbon Credits (ACCU's) issued? (watch the fine print)
	How long is a Project Registered for?
	Can I have more than one soil carbon project and using different methodologies at the same time on my farm?
	What are the consequences and potential financial loss for me if I decide to go with a different Soil Carbon Broker/Facilitator while my project is on going?
	If the farm is sold and the new owner does not want to continue with the project what are the options?

Questions to ask when finding a Project Developer

Claim - Sales of ACCU's	What will the price of Aust Carbon Credit Units (ACCUs) be in 5 years time when I want to sell units?
Profit	How much money will I make on a farm of around 1000 hectares? You need an overall figure not a yearly figure.
	What are the potential dollars I can make on a 1000 hectare farm soil carbon project?
	With market ups and downs, will there be a secondary market available beside the Government contracts?

Milgadara (Daly Pty Limited) Emissions Reduction Fund Project

ERF Project ID: ERF163929 2021 – 2046

Australian Government
Clean Energy Regulator

EMISSIONS REDUCTION FUND

ERF Project ID: ERF163929

Declaration of an Emissions Reduction Fund project

I, Karen Graham, delegate of the Clean Energy Regulator, declare under subsection 27(2) of the *Carbon Credits (Carbon Farming Initiative) Act 2011* (the Act) that Daly Pty Ltd (the project) is a registered project for the purposes of the Act.

The participant for the project is Daly Pty Ltd, with ABN 78316574829 and Client ID 100384111.

The project is located in 186 Milgadara Road, Young, New South Wales 2594. The relevant land titles are 44/DP753611, 23/DP753623, 125/DP753611, 126/DP753611, 127/DP753611, 129/DP753611, 187/DP753623,10/DP1209143, 2/DP543138, 270/DP753611, 128/DP753611, 247/DP753611, 119/DP753623, 125/DP753623, 138/DP753623, 124/DP753623, 113/DP753623, 118/DP753623, 127/DP753623, 304/DP753611, 306/DP753611, 229/DP753623, 126/DP753623, 1/DP223854, 1/DP170042.

The project is in the local government area of YOUNG SHIRE COUNCIL and in the Riverina Local Land Services natural resource management region.

The applicable method for the project is the *Carbon Credits (Carbon Farming Initiative— Measurement of Soil Carbon Sequestration in Agricultural Systems) Methodology Determination 2018*.

The crediting period for the project is 25 years, commencing on 24 June 2021.

Attached is a scale map of the project area.

I also declare that the project is a 25-year permanence period project.

The following condition applies to this declaration:

- That the written consent of each relevant interest-holder to the existence of the declaration must be obtained before the end of the first reporting period for the project.

Karen Graham
Manager
Savanna, Agriculture and Soil
Emissions Reduction Fund Branch
24 June 2021

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GPO 621 Canberra ACT 2601 T 1300 553 542 E enquiries@cleanenergyregulator.gov.au W www.cleanenergyregulator.gov.au

- Started conversation with Australian Soil Management September 2020
- April 12 2021 - Farm Management Plan completed
- June 24 2021 - Soil Carbon Project registered
- January 4 2022 - Base Line Soil Testing performed

Flexible Future Planning:

- **January 2024 Soil Test** – government retains 25% ACCU's, we can choose at that time to sell ACCU's or keep 75% in reserve and sell later
- **January 2027 Soil Test** - Look at our options Make a decision and to sell any increases to the voluntary market

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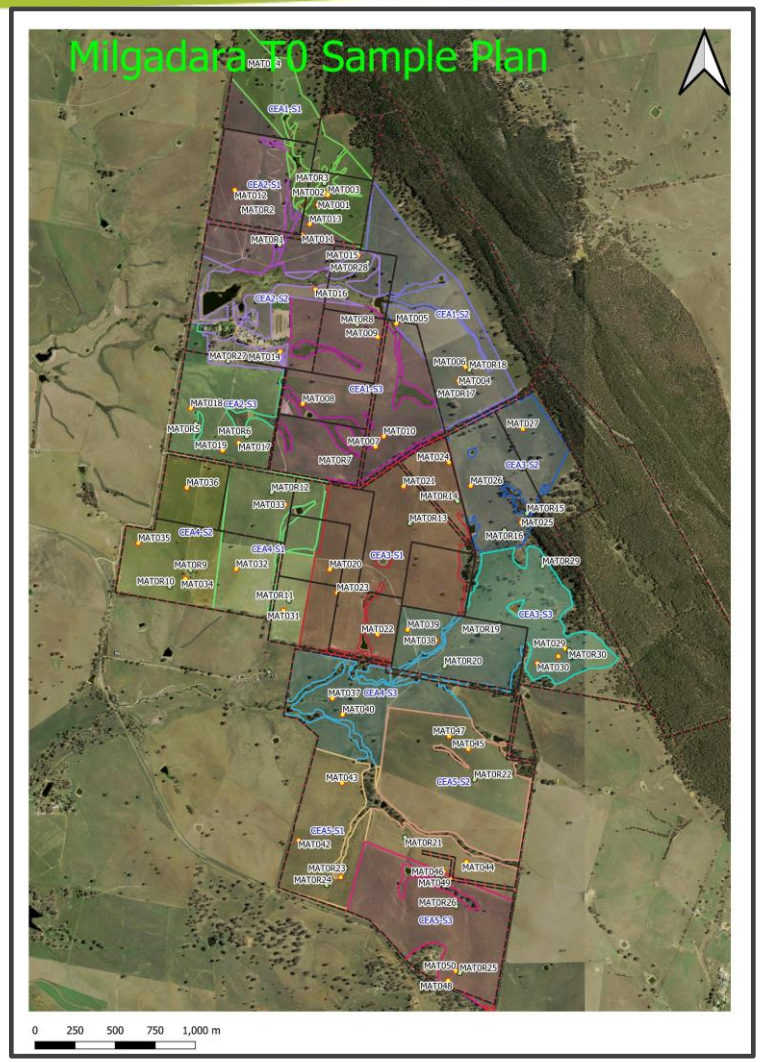

Base Line Soil Testing January 2022
Sample Plan

MAT001-L1

The MA stands for Milgadara
The T0 stands for the time zero sample round ie baseline
The 001 is the sequence number - all your cores are numbered from 1 to 50

Milgadara Soil Cores were sampled to 90 cm

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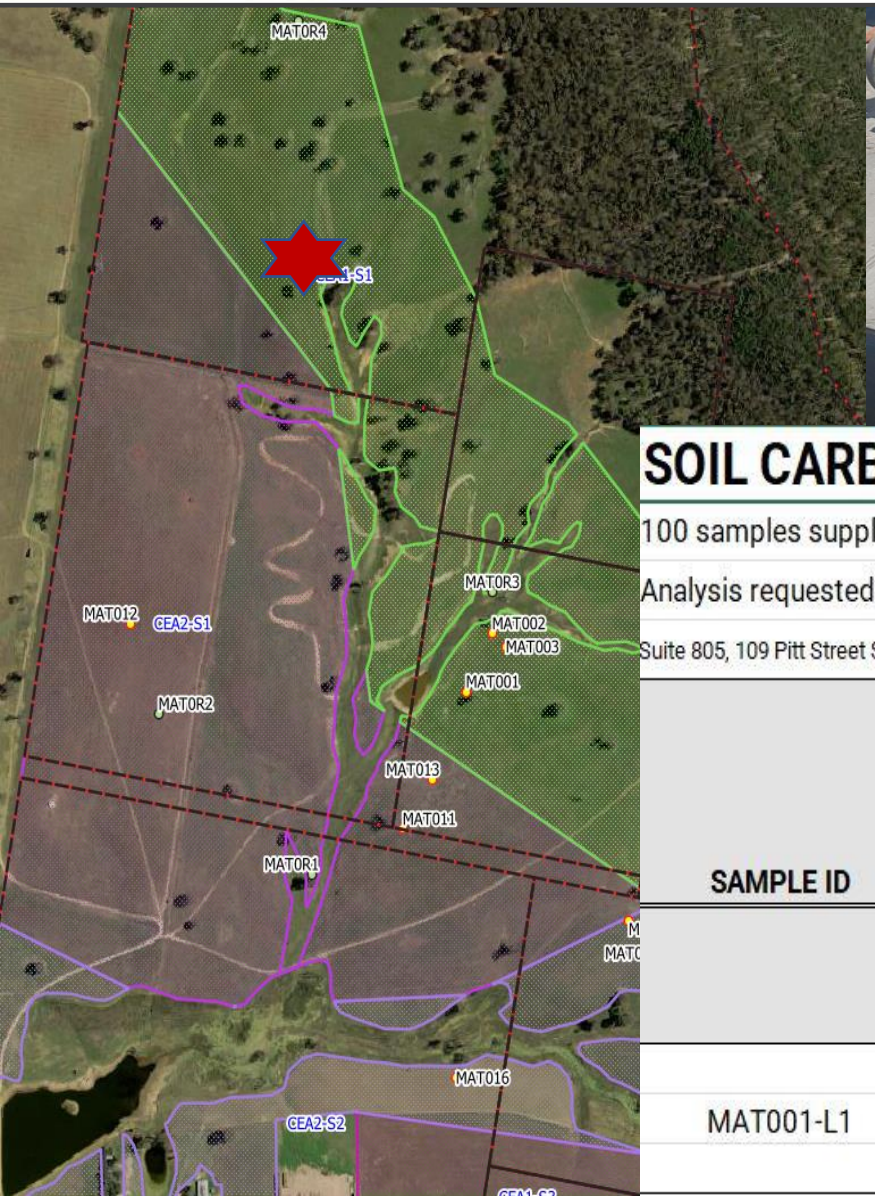
MAT001-L1



SOIL CARBON ANALYSIS REPORT

100 samples supplied by AgriX Operations Pty Ltd on 31st January, 2022. Lab Job No.M5561

Analysis requested by Ignatius Verbeek. Your Job: Milgadara Project

Suite 805, 109 Pitt Street SYDNEY NSW 2000

SAMPLE ID	*Job No.*	Moisture** (%)	Gravimetric water content ** (g water/g oven-dry mass)	Air Dry Mass ** (g)	Oven Dry Equivalent Mass ** (g)	Gravel Content ** (g)	Total Organic Carbon (% C)
	Method	*Carbon Farming Initiative - Measurement of Soil Carbon Sequestration in Agricultural Systems 2018*					
MAT001-L1	*M5561/1*	7.34	0.007	662	658	118.2	1.22

STEPS & INDICATIVE COSTS

Step 1: Carbon Assessment

Step 2: Farm Management Strategy

Step 3: Project registration

Step 4: Baseline soil carbon estimation & audit

Step 5: Second soil carbon testing regime & audit (T1). Reduced costs likely by year 4.

Step 6: Third soil carbon testing regime & audit (T2). Reduced costs likely by years 5 & 7.

Step 7: Reporting & monitoring requirements ($9,000/year from year 2 to year 10)

E & OE **$211,284.51**

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1000 HECTARE EXAMPLE OF COSTS & INCOME

INCOME

1000 ha @ $50/ACCU	$6,800,000
1000 ha @ $60/ACCU	$7,800,000

Success Fee to Project Developer on $7,800,000

5%	**$390,000**
15%	**$1,170,000**
30%	**$2,340,000**

****These calculations are based on a net gain of 1% SOC for the top 30 cm.***

This translates to 45 tonnes of additional organic carbon per hectare or 165 tonnes of CO2 captured per hectare or 130 ACCU's. The total for 1000 hectares being 130,000 ACCU's

Baseline Soil Testing at Milgadara January 4 2022

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Continuing into the Future, Leaving our Legacy

'We have only one generation to turn this around – that's all'

Paul Hawken

YLAD 20 YEARS of Capturing Carbon 2002-2022

YLAD Living Soils

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LIVING YLAD COMPOST

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