

The Regenerative Approach – how to



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The Regenerative Approach – How to Guide

Farmers know that Soil isn't just "dirt" it's the foundation of healthy, productive & profitable crops!

So what is regenerative farming.....lets see what two global leaders think!

"We must make the adoption of regenerative agriculture available for all farmers from all backgrounds...we must educate not only farmers and ranchers but all society as to these concepts which are rooted in indigenous knowledge. It is not just about emission reductions. It's about our land's resilience and ability to function. Regenerating our soil ecosystem is the most cost effective national investment that we can make to mitigate climate change and heal society."

Gabe Brown

"Regenerative farming has reignited my passion for agriculture, as I totally believe we are what we eat and a healthy soil provides healthy food which results in healthy people."

Tim Parton

Tim Parton describes the impact of regenerative farming on soil health as transformative, emphasizing a shift away from synthetic inputs and toward practices that restore and enhance the soil's natural functions. He is passionate about building "functioning" soil by applying "brewed" biology—living microbial solutions—rather than relying on chemicals.

Tim highlights several key outcomes of regenerative practices:

Improved Soil Structure and Function: By focusing on biological nutrition and reducing synthetic fertilizers, Parton has observed increased soil aggregation, better water infiltration, and improved moisture retention. He especially stresses the importance of calcium for soil aggregation, which leads to quicker crop germination and greater resilience during drought or waterlogging.

Enhanced Biodiversity: Tim's approach encourages a thriving ecosystem both above and below ground. Cover cropping, reduced tillage, and the elimination of insecticides have increased biodiversity on his farm, supporting more birds, insects, and beneficial soil organisms.

Reduced Chemical Inputs: He has eliminated the use of phosphorus fertilizers for over a decade and significantly reduced nitrogen applications, relying instead on natural cycles and biology to supply nutrients. This not only improves soil health but also reduces environmental pollution from runoff and leaching.



Greater Resilience and Sustainability: By restoring carbon to the soil and working with natural cycles, Tim finds that his soils are more resilient to stress, such as drought or disease, and that crop yields remain high without heavy chemical use.

Long-Term Profitability: Parton believes that regenerative farming leads to both environmental and economic benefits, making farms more sustainable and profitable in the long run.

In his words, "Soil is our past, present and our future, so as a world community, we must take good care of it if we want to thrive as a species." He advocates for using science and technology to make informed decisions, emphasising that "using science to help make decisions is simply intelligent farming."

Overall, both Gabe and Tim's and multitude of innovative farmers experience demonstrates that regenerative practices can rebuild soil health, increase biodiversity, and create a more sustainable and profitable farming system.

Regenerative farming makes common sense. We don't know any farmers who want to keep putting more on and not improving their soils. Emerging trends are starting to see some amazing results and we hope that the regulatory framework and policy in Australia will reward farmers for taking this approach.





DIVERSE SPECIES

MICROBIAL DIVERSITY

COVER CROPS ORGANIC MATTER

CHEMICAL EFFICIENCY

WEEDS? STRUCTURE CARBON

CUSTOMISED BIOFERTILISERS build soil health



So what can you do?

Soil type, condition, & health are crucial for boosting yields & helping crops survive drought:

SOIL TYPE: (sand, clay, silt, loam, etc.) determines how well water and nutrients are held and delivered to roots. Understand your Cation Exchange Capacity and what is it tell you? Think about Ca:mg, ph and your trace elements in your paddocks. Good soil tests from NATA approved labs can help you with this.

MICROBIALLY HEALTHY SOIL: From our recent <u>**#FutureDroughtFund</u>** wheat trials we found that yields from different soils with similar organic matter, same soil classification by the lab, ph. and soil microbial counts showed significant differences in yields. We also saw that precision nutrient management is key including what is the job/jobs of all the different microbes available. As some microbes in some soils inhibit germination. Get in touch to find out more.</u>

SOIL CONDITION: How easily can roots can grow and access water, especially during dry spells.

DROUGHT RESILIENCE: Soils rich in organic matter/stable humus and with robust microbial life recover faster after drought.

Soil type, condition, and health are the backbone of strong yields and drought resilience but how can farmers actively build healthier soils? Here's how:

INCREASE ORGANIC MATTER: if practical add properly made compost, manure, crop residues, digestate, multi-species cover crops or green manures or biomassto boost soil organic matter and feed your hungry soil microbes. Increasing Om will also increase your water holding capacitiy

PLANT DIVERSE SPECIES: Use crop rotations and plant cover crops with varied root structures. Diversity breaks pest and disease cycles, supports beneficial microbes, and enhances soil stability.

MINIMISE DISTURBANCE: Reduce tillage and soil compaction to protect soil structure and organic matter. Less disturbance preserves soil life.

MAXIMISE SOIL COVER: Keep soil covered year-round with living plants, crop residues, or organic mulches.

MANAGE NUTRIENTS/CHEMICALS WISELY: Apply fertilisers, chemicals wisely and based on soil tests.

INTEGRATE LIVESTOCK THOUGHTFULLY: Rotational grazing and integrating livestock can stimulate plant growth, return nutrients, and improve soil structure.

REDUCE CHEMICAL INPUTS: Limit pesticide use to support earthworms and beneficial soil microbes, which are vital for nutrient cycling and soil structure.

At MADE our purpose is to help farmers thrive so feel free to get in touch to find out more and learn how we can make farming more viable for you and future generations.

Other factors to consider



Regenerative farming is a holistic approach that restores soil health, increases biodiversity, and builds resilience to climate extremes. Here's a step-by-step guide for farmers to implement regenerative practices effectively:

1. Assess Your Farm's Current State

- Make records, photos or set aside a wet day to take photos etc. Test compaction, bring a shovel to see whats happening below the surface?, see any worms?
- Test soil health: Measure organic matter, pH, NPK levels, and biological activity.
- Map your farm: Use aerial photos and soil maps to understand field variability and infrastructure. Most farmers will have GPS or satellite images of your farm. Google earth is free, simple tool or lots of apps exist online for mapping your farm. CSIRO have soil type maps etc that you can refer to.
- Review current practices: Identify areas where compaction, disease or decline is prevlent. Ask yourself why, as your trusted friends or advisors why they think you are having current problems? Keep asking why and researching to trial small trials to see what works. What are the weeds telling you?

2. Set Clear Goals

- Define what you want to achieve (e.g., improved soil health, higher biodiversity, reduced inputs, increased profitability). Set yourself short and long term goals which are achievable or a slight stretch. Don't set yourself up to fail. Listen and learn from others. Learn from your mistakes and keep asking why did that work or fail.
- Involve all stakeholders in goal-setting for better buy-in and clearer direction. Ask your neighbours, family and talk to somebody different to get a different perspective.

3. Build a Support Network

• Connect with other regenerative farmers, extension agents, landcare groups, and local experts for advice and encouragement. Listen and absorb what they say and test what they are saying.

- Farming is a bit like gambling with weather, commodity prices and the ever increasing cost of inputs. If we keep doing the things we have always done the same way is it likely to change? Do managed risk experiments. Farmers are great at trying new stuff but sometimes struggle with measuring results.
- Participate in workshops or field days to learn from others' experiences.
- Whilst in your mobile office listen to regenerative farming podcasts like VicNotill, SoilsforLife or MADE Chats which is focused on building soil microbial health to create resilience for drought

Principle	Practical Actions	
Minimize soil disturbance	Adopt no-till or reduced-till practices to protect soil structure and biology 2 4 6.	
Keep soil covered	Use cover crops, mulches, or maintain permanent pastures to prevent erosion and retain moisture 2 5.	
Maintain living roots year-round	Plant cover crops or relay crops to keep living roots in the soil as much as possible 2 4.	
Increase plant diversity	Rotate crops, interseed, and use diverse cover crop mixes to boost biodiversity and soil health 2 4 5.	
Integrate livestock	Use rotational or adaptive grazing; livestock manure adds nutrients and enhances soil biology 2 3 5.	

4. Core Regenerative Principles and Practices

5. Start Small and Scale Up

- Pilot new practices on a manageable section of your farm before expanding[3].
- Monitor results, adjust, and scale successful methods across more acreage.

6. Practical Tools and Equipment

- Use appropriate seeders for cover crops and no-till drills for planting[1]. Is their second hand equipment or equipment you already have that you can adapt for trials? Can you borrow a drill or get a contractor in to minimise costs?
- Invest in soil probes, moisture meters, or handheld sensors for real-time data collection.



7. Monitor, Adapt, and Record Progress

- Regularly test soil, Fungi:Bacteria or soil microbe ecosystem (DNA testing get in touch to find out more) and track changes in organic matter, nutrient levels, and crop yields. Measure carbon levels in your soils including emissions.
- Observe biodiversity (e.g., insects, birds, earthworms) as an indicator of ecosystem health[5].
- Look at your weeds to understand what grew or what impact the weather had?
- Adjust management based on outcomes and feedback from your support network.

8. Economic and Environmental Benefits

- Expect to see both short and long-term improvements in soil fertility, water retention, and resilience to drought or flooding[5] if done properly and expect to learn from mistakes
- Consider how to improve/reduce reliance on synthetic fertilisers and pesticides to improve your profitability and lower nutrient run off and environmental impact[5].
- Potential to access carbon markets or sustainability incentives for regenerative practices[7].

9. Collaborate and Communicate

- Work with supply chain partners, advisors, and local organisations to share knowledge and access resources[5].
- Document your journey and share successes and challenges with the wider farming community.

Summary:

Regenerative farming is a journey, not a one-size-fits-all solution. Start with small, manageable changes, build your knowledge and support network, and adapt practices to your unique context. Over time, these steps will restore soil health, boost biodiversity, and increase your farm's resilience and profitability[1][2][3][5][7].

Limitations of this document

This document is created as a high level guide and may not be suited to your specific soil, farm or plant conditions. This document is not to be read as recommendations and we accept no liability for the information provided.

References

Reference Number	Title/Source	Key Content Used
1	Reading List – Center for Regenerative Agriculture (Chico State)	Recommendations for practical regenerative agriculture books and guides, step-by-step soil improvement practices
2	Turning Pages on Regenerative Agriculture: 20 Must-Read Books (RegenX.ag)	Book recommendations and practical lessons from leading regenerative farmers (e.g., Gabe Brown, Richard Perkins)
3	The Regenerative Agriculture Manual (EIT Food)	Crop-specific, practical guidance for transitioning to regenerative agriculture
4	Practical Guide to Regenerative Agriculture (PwC)	Real-world examples, economic and environmental benefits, stepwise implementation
5	Six Simple Steps to Regenerative Agriculture (Agricology)	Core principles, practical steps, and case studies for implementing regenerative practices

