



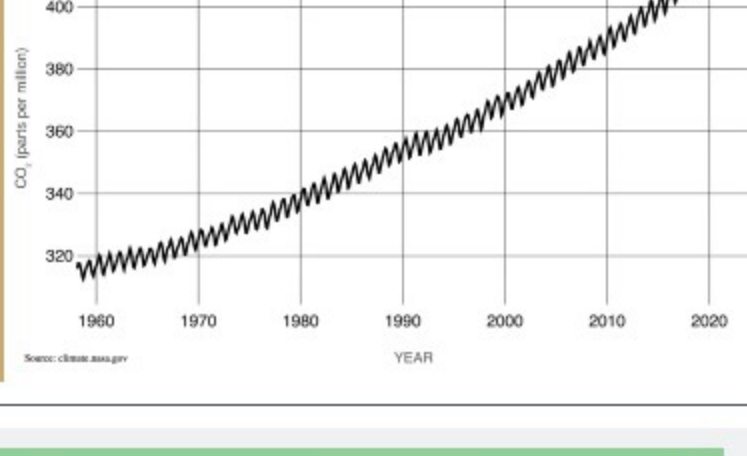
AgZero2030 is committed to supporting the WA Agriculture sector to be part of the climate solution by targeting carbon neutrality by 2030, sharing stories of the diverse range of profitable climate-smart practises and actively contributing to improved climate and carbon literacy and education. AgZero2030 also aims to contribute to and promote good climate policy.

CO₂ Levels

January 2024

423ppm

<https://climate.nasa.gov/vital-signs/carbon-dioxide/>



The Power Shift

Transitioning Farm Communities to Renewables



Save the Date - Thursday, June 20

AgZero2030 is proud to present our 2024 annual forum - The Power Shift: Transitioning Farm Communities to Renewables

This is a one-day forum for farmers, government officials, industry bodies and renewable energy systems providers to hear from thought leaders about the challenges and opportunities facing rural and regional towns, industry and farming businesses as they transition to renewable power generation and energy systems.

Date: Thursday, June 20, 2024
 Venue: Mineral Resources Park - 42 Bishopsgate St, Lathlain WA 6100
 Cost: FREE

Stay tuned for more updates and ticket sales.

AgZero2030 explores soil organic carbon levels in WA

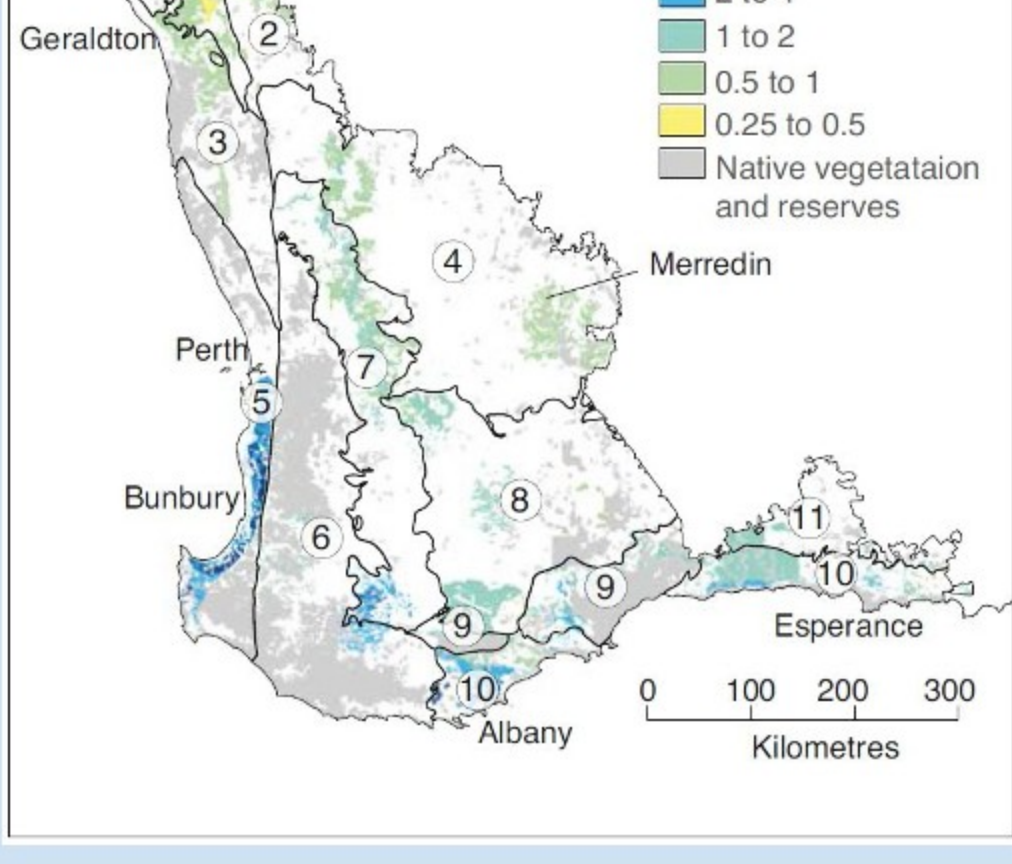
By SHANNON BEATTIE

A recent study conducted by AgZero2030 and funded by Landcare Australia has provided insights into soil organic carbon (SOC) levels and soil health across Western Australia's agricultural landscape.

The project, involving farmers from AgZero2030, the Corrigin Farm Improvement Group, and the West Midlands Group, consisted of two main components which shed light on historical trends and future opportunities for farmers in the region.

AgZero2030 secretary Cindy Stevens highlighted the importance of understanding SOC levels for farm productivity, sustainability, and resilience.

"Soil organic carbon is a crucial component of farm ecosystems, influencing everything from crop yields to farm and environmental sustainability," Ms Stevens said.



Soil organic carbon concentration in the top 10cm of the agricultural areas of Western Australia. Areas of low confidence are white, grey areas are native vegetation and reserves (DPIRD, 2013).

The first part of the project focused on analysing historical trends in SOC under total cropping and mixed enterprise farms in the Corrigin and Bruce Rock district over a 25-year period.

A gradual downward trend across 25 years of between 0.1-0.4 per cent of SOC losses was observed in total cropping farms.

Mixed enterprise farms displayed more variability in SOC levels of up to 1pc on individual farms and 1.5pc across farms, yet still exhibited a similar downward trend overall.

"It was worth noting that half of the individual farmers in mixed enterprise farms showed an upward trend in their SOC levels, indicating the potential to build SOC levels under mixed farming practices," Ms Stevens said.

"The real challenge is building, and then maintaining soil carbon, as it is heavily influenced by seasonal conditions and WA's typically sandy soils, and this becomes more challenging in a drying and warming climate."

The second part of the study focused on assessing SOC levels and soil health under various farm management practices sampled and tested across the WA agricultural region in 2023, from Badgingarra to Gnowangerup.

The results demonstrated that most remnant vegetation sites had the highest SOC levels and soil health scores.

These results could aid farmers in setting realistic target SOC levels specific to their farm and soil types when planning to increase SOC levels.



Soil sampling amongst remnant vegetation.

The study also identified farm management practices that can enhance SOC levels and soil health.

"Improved pastures, legume-based or perennial, along with soil amelioration practices such as mould board ploughing and liming, were found to increase SOC levels compared to traditional methods," Ms Stevens said.

The study suggested farmers would benefit from testing SOC levels consistently and at precise locations to obtain baseline levels to be tracked over time, in order to effectively monitor the impacts of their farming practices on SOC.

This data will help inform sustainable and profitable management strategies and may allow farmers to capitalise on future market opportunities in banking and markets with sustainable or low carbon products.

"Soil carbon projects and practices that promote SOC permanence not only benefit farm productivity but also contribute to broader sustainability goals," Ms Stevens said.

As AgZero2030 continues to work on climate literacy and the energy transition in the agricultural industry, it hopes farmers can make informed decisions when it comes to carbon projects and farming for business and climate resilience.

[View the full report on the AgZero2030 website](#)

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