

Soil CARBON means WATER to me!! Do you want more SOIL or less? More CARBON or less? More WATER or less?

Part 2

Factors which reduce soil organic carbon levels and therefore reduce the ability of soil to store water, include

- ➤ Loss of perennial groundcover
- > Intensive cultivation
- ➤ Bare fallows
- > Stubble burning and pasture burning
- Continuous grazing

Most conventional agricultural practices include one or more - or all - of the above. Over the last 50 to 100 years, soil organic carbon levels in many areas have fallen by about 3%. This represents the LOSS of the ability to store around 504,000 litres of water per hectare.

A 3% reduction in soil organic carbon also represents almost 500 t/ha extra carbon dioxide (CO₂) emitted to the atmosphere, contributing to increased levels of greenhouse gases and the possibility of climate change. With global warming, rainfall levels could fall even further while evaporation rates increase ... and degraded soils continue to lose their capacity to hold water.

What are we going to do??

Charman and Roper (2000), note that in order to increase soil organic matter levels and develop optimum physical and biological conditions for crop production, the soil needs to be managed in a similar way to a perennial pasture ley.

Landholders now have the opportunity to combine crops and perennial pastures in the revolutionary 'one-stop-shop' land management technique known as Pasture Cropping (Cluff and Seis 1997).

What will be YOUR first step to learning about this?

Farming Secrets says: Learning how to build soil carbon is paramount

With thanks to Christine Jones, PhD Founder, Amazing Carbon www.amazingcarbon.com

References

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