

Bromley Organics
Lisa Mahon
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Executive Officer
Environment and Natural Resources Committee
Parliament House
Spring St
East Melbourne 3002

Dear Sir

I would like to forward the following submission addressing the inquiry into soil Sequestration in Victoria.

Benefits to agriculture of increased soil carbon include better holding capacity of water in sandy soils which protects crops against drought. Increased carbon in clay soils assists with drainage and healthy root growth. In our own farming experience here in Central Victoria in heavy clay soils the organic matter has gone from 1% to 6% in some beds in the last 11 years. We have seen better growth hence better returns, less insect damage and less plant stress and healthier root systems which we believe is a result of our carbon capture in the soils.

Some climate change theories are even if atmospheric concentrations of greenhouse gases were quickly stabilized, anthropogenic warming and sea levels would continue to rise for centuries (IPCC 2007a). Even the most drastic reductions in emissions of anthropogenic greenhouse gases may not do enough, on their own, to preserve current environmental integrity for future generations. If the effects of global warming are to be kept to a minimum, carbon already emitted to the atmosphere as a result of human activities must be sequestered into stable forms. Reducing greenhouse gas emissions in future will not achieve this. It is important that we sequester the carbon which has been added to the atmosphere since the industrial revolution of the last 200 years through soil carbon increases.

Soils hold over three times as much carbon as the atmosphere (Lehmann and Joseph 2009). In the last 100 years we have reduced the amount of soil carbon worldwide. The easiest way to reduce atmospheric carbon is to trap it in the soil.

The best methodology would be to have a voluntary soil carbon trading scheme in place similar to the tree carbon scheme the government has enacted with Landcare. An independent operator would do the carbon testing

Farmers would need to establish a baseline which would include a soil test covering total carbon, total organic carbon, total moisture, total available phosphorous and soil type. Instead of sampling every single hectare it would be appropriate to take representative samples for example for areas up to 300ha, 4 10x10 m sectors could be sampled and tested.

Sites chosen according to being representative of the farming history and GPS points could be used to ensure future tests would be taken at the same location. An increase of carbon could be sold or traded to businesses wanting to offset their carbon emissions. The scheme needs government regulation however it could be operated successfully by private business.

Yours sincerely

Lisa Mahon
RIRDC Victorian Rural Woman 2008