

Why is a Biochar Network of Western Australia Inc website important?

There's no systematic approach to researching benefits of biochar as a soil ameliorant in Western Australia, or to pyrolysise organic waste to produce biochar from forest and non-forest (waste) resources. Warren Catchments Council has supported a group of local members since 2010: holding presentations by Barry Batchelor (Black Earth Products, Victoria), Dr Syd Shea (former Director Rainbow Bee Eater Project, Kalannie); attending and relaying information from workshops conducted by Dr Paul Blackwell (DPIRD) and Dr Dan Murphy (UWA) where they reported on biochar wheat trials in the mid-West.

WCC secured funding to replicate a local member's private trial at Bannister Downs Dairy - a greenfield site: feeding biochar to cattle and introducing suites of dung beetles to bury the manure. Bannister Downs Director, Mat Daubney, has continued the use of biochar since the trial's conclusion and encourages further research.

A current trial investigating biochar's effect on soil structure in avocado production has produced dramatic results mid-way through the four year trial, prompting local growers of avocado, citrus and apple to adopt the practice with new plantings. Similarly, an organic orchardist has used biochar in compost, which seems to be an enhanced means of fertilising; a free-range egg producer is using it in bedding materials (James Cook University study reports reduced mortalities and other benefits). Northern Agriculture Catchment Council has funded a trial where Energy Farmers Australia is working with horticulturalists in the Geraldton region.

Warren Catchments Council is providing governance support to the fledgling Biochar Network of Western Australia as it develops its own structure - its members reach beyond WCC boundaries. Though an important part of building experiences and learnings, a Facebook page and other social media will enable individuals to exchange information but it is of an ad hoc and transient nature. A website will provide more structured support - an area where local practical experience can be reported and a go-to place where local, national and international information can be presented systematically to support local applications or encourage new uses and technologies and promote events.

Membership of International Biochar Initiative gives access to additional resources. Currently, Western Australia has few researchers or academics conversant with international advances, and few opportunities for funding to develop farmer-tertiary institution studies - funding through GRDC enabled trials in the wheatbelt but were of a limited application of biochar's potential uses in largely hostile environments. The adoption of biochar as an agricultural input will stimulate an industry producing customised biochar from what is currently considered waste - eg stubble, forest thinnings, effluent, organic landfill.

Gathering together bodies of work informs a more cohesive approach to trials - avoids duplication, builds on emerging knowledge and fills the knowledge gaps. An awareness of the potential involvement of biochar as a carbon sequestration mechanism is another aspect to consider as well as its ability to convert conventional fertilisers to slow release, reducing leaching, environmental damage and economic waste.

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