

## Warren Catchments Council

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# MEDIA RELEASE

Although little is known about agricultural biochar in Western Australia, its use is widespread in Europe. Biochar is the by-product of a pyrolysis process – the heating of biomass at high temperatures in an oxygen-limited environment. Carbon is trapped in this bio-energy production process, not released into the atmosphere. End products, besides biochar, are bio-oil, syngas and heat.

Warren Catchments Council is supporting farmers with a particular interest in exploring various applications of biochar. Research undertaken in this state, mainly by DAFWA, UWA and CSIRO, has been limited to the wheatbelt region, examining its capacity to boost crop production. Biochar characteristics of retaining moisture, reducing nutrient leaching, improving soil structure, decreasing soil acidity and improving soil structure are appealing soil amelioration properties.

Biochar, and the whole pyrolysis process, has captured the attention of a number of people in the Warren region. Lateral thinking Middlesex farmer, Doug Pow, has adopted what is now referred to as the cascading use of biochar. European and Vietnamese studies indicate livestock benefit from a daily dose of biochar.

“My beef cattle free feed from a drum containing a mixture of biochar and a carrier such as molasses. They self-regulate the amount consumed which is calculated to be approximately 300g a day.”

The cascading effect is achieved by using a suite of dung beetles to incorporate the biochar-infused manure to depths of up to 60cm. The passing of biochar through the gut of both ruminants and beetles magnifies the microbial inoculation of biochar particles and its potential effect on soil biology.

Anecdotal soil benefits noted by Mr Pow led to WCC being awarded funding to conduct two biochar trials. One is based at the Daubney family’s Bannister Downs Dairy, a large scale replication of Mr Pow’s work. The second is looking at the effect of biochar in altering soil bulk density as a means of suppressing phytophthora infestation of avocado roots.

“If the trials are able to verify quantifiable advantages in the application of biochar, the focus will then be placed on its availability,” said WCC project officer, Kathy Dawson.

To pre-empt this potential barrier, WCC has invited Energy Farmers Australia to bring their mobile biochar pyrolysis kiln to Manjimup to demonstrate not only how biochar is produced, but how its energy producing capacity may be a cost-effective alternative for high energy-use

agricultural businesses. Energy Farmers Australia has just been selected as a finalist in the Australia Technologies Competition.

“Euan Beamont will be using hardwood sawdust as the feedstock in this demonstration at Middlesex Hall on 8<sup>th</sup> August. WCC is grateful to Doug Pow, Julius Cutts, Michael Drake and Manjimup Production Centre for their support in organising this event,” said Mrs Dawson. Besides the demonstration, details of the projects will be outlined as well as more wide-ranging topics such as the role of biochar in the carbon market.

Enquiries can be directed to [info@warrecc.org.au](mailto:info@warrecc.org.au) or 97718180.