

MACCY BIOCHAR MEMBER BULLETIN

No. 2 - November 2019

Published by maccybiochar. Edited by Brian Lewis.
Auspiced by the Macclesfield Community Association Inc.

Email: maccybiochar@adam.com.au

Website: www.maccybiochar.com

HELLO ALL.

Welcome to our second Member Bulletin. The purpose of these bulletins is to keep members promptly informed of all maccybiochar developments and biochar developments in general.

HERE IS A SUMMARY of our activities since the previous bulletin:

- Biochar Conference at Temple Bruer winery;
- Grant applications;
- Working Bees to make biochar and train other members;
- New members;
- Website extensions;
- Macclesfield Strawberry Fete planning;
- Scoreboard of averted CO₂.

BIOCHAR CONFERENCE AT TEMPLE BRUER

Temple Bruer winery at Milang organised a gathering of Langhorne Creek viticulturalists to demonstrate and explain the production and application of biochar in vineyards. Barrie Williams, the senior viticulturalist at Temple Bruer explained that they decided to use biochar, not just because it sequesters carbon, but because it enhances the flavour and the quality of their wines. The group were able to witness biochar being made and the method of application to the soil was explained. Deane Belfield, a regenerative farmer and consultant to Temple Bruer, described some of the techniques being used in regenerative farming. Deane was very positive about the role that biochar could play in regenerative farming. And yours truly was given the opportunity to tell the gathering what maccybiochar is all about!

GRANT APPLICATIONS

Kelvin Williams has prepared and submitted 3 applications for grants to assist us with the funding of new larger kilns and associated gadgets to measure biochar quality. At time of writing we have been successful with one of these grants, viz. Mount Barker Community Grant for \$2000 for manufacture of new kilns. Thankyou Kelvin for your efforts with this significant achievement.

WORKING BEES

More Working Bees were held on 9 and 29 October and on 5 and 12 November to make biochar and train new operators. Between 4 and 7 members attended on each occasion and each time approx. 250 litres of biochar was made using our 2 small kilns.

Here is Ken feeding the fire:



Here is one kiln ready to quench:



Here is the finished char after quenching:



MACCY BIOCHAR MEMBER BULLETIN

Issue No. 2 – November 2019

TECHTALK – Temperature measurements

During one of the working bees the following temperatures were measured using a laser scanning thermometer:

750 C at the open fire front;
480 C at the top outside metal surface;
280 C at the bottom outside metal surface.

So it would seem that the pyrolysis temperature ranges from about 500 C at the initial stages and then as the level increases the lower levels reduce to about 280 C as the distance from the flame-cap increases.

The time taken for the char to reach the lower level is about an hour so we can say that the typical pyrolysis temperature over that hour is in the range 400 to 500C. This is useful to know because some users of biochar wish to know the temperature at which the biochar was made.

NEW MEMBERS

A special welcome to the following new members: Ken Smith, Colin Darcey, Alex Pearse and Barney Lewis. And also to our first Honorary Member, Greg Goding, for his support with the provision of our first operating site.

WEBSITE EXTENSIONS

New sections on carbon accounting and char analysis have been added to our website at www.maccybiochar.com. Also Greg Godings Farm Supplies logo now appears on the Home page along with the Mount Barker Council.

Information Brochures can be downloaded that are written to help Home Gardeners and Schools learn about biochar and how to use it. This needs to be expanded to cover the needs of farmers, orchardists, viticulturalists etc. We will need help with this so please call if you have special knowledge in any of those areas.

In addition our wholesale prices for biochar have been added.

STRAWBERRY FETE

Don't forget to come to the Macclesfield Strawberry Fete on Sunday 24 November. We will have a stall there selling raw biochar and enhanced biochar. And information on how to use it in the house and garden.

Thanks to Meegan Semple we will have an array of 12 large photographs explaining the process of making biochar.

If you can spare an hour or two on the day to help on the stall please call me to let me know the time you can be there.

OUR FIRST TONNE OF CO₂

This is the current summary of biochar production at 15 November 2019:

SCOREBOARD		
DATE	15/11/2019	Units
BIOCHAR PRODUCED	1720	Litres
CARBON CAPTURED	389	Kg
NET CO2 CAPTURED	1387	Kg
TOTAL KWHR OFFSET	2719	KWHr

While 1 tonne does not seem like much on the national scale it seems like a lot at a personal level. Certainly too much to lift! And this is just the start!

WORLD EVENTS

USA House Select Committee – Climate Crisis

The U.S. House of Representatives has formed a Select Committee on the Climate Crisis to “investigate, study, make findings and develop recommendations on policies, strategies and innovations to achieve substantial and permanent reductions in pollution and other activities that contribute to the climate crisis, which will honour our responsibility to be good stewards of the planet for future generations.”

Check it out at:

<https://climatecrisis.house.gov>

MACCY BIOCHAR MEMBER BULLETIN

Issue No. 2 – November 2019

I was particularly interested in the section on Agriculture which asks:

What policies should congress adopt to reduce carbon pollution and other greenhouse gas emissions and maximise carbon storage in agriculture?

And on Carbon Removal which asks:

How can congress accelerate development and deployment of carbon removal technology to help achieve negative emissions?

I am sure we all know what the biochar sector would like Congress to adopt. Biochar can play an important part in this if properly harnessed. We will have to wait and see what they come up with and meanwhile hope that our Government will follow the U.S. lead.

COMING UP:

Sunday 24 November: Biochar Stall at Macclesfield Strawberry Fete. Come and see us and buy some biochar!

WHAT NEXT?

With the fire ban season now on us it is unlikely that we will make any more biochar until May next year. During this off-season we will concentrate on the following activities:

- Fundraising;
- Completion of business plan;
- Design and manufacture of new larger kilns;
- Design and purchase of a trailer fitted with water tank and kiln to serve as a mobile unit to take onto properties to process burn heaps. This will be an essential part of our operating strategy.
- Plan our production target and organise a volunteer base large enough to enable us to meet the target.
- Plan another Open Day for May 2020 with related activities such as biochar sales, demos, wood gas stoves, folk music etc.

At the committee level we will need to appoint a secretary and treasurer, and others to concentrate on specific target areas such as individual membership, corporate membership, industry liaison (dairy farming, beef production, horticulture, viticulture, etc); site supervisor and volunteer coordinator; schools coordinator; Facebook coordinator; etc., etc.

So please think about how your experience could lend itself to any of the above and maybe put up a hand.

COMMITTEE MEMBER ROLES at present are:

Brian Lewis – Chairman; Website; Newsletters; Bulletins; Volunteer coordinator; Carbon accounting.

Kelvin Williams – Operator; Grant applications; Biochar analysis.

Kath Thurmer – Community Liaison; Membership.

Greg Marlu – Technical advisor; Operator.

Stephen Heading – Technical and general advisor.

Ivars Eglitis – General advisor; Operator.

Geoff Brockhouse – Operator.

Meegan Semple – Horticulture and Viticulture liaison.

HOW CAN YOU HELP?

Continue to support this community initiative!

Encourage others to Join. We want a membership of 100 by the New Year!

Enlist as a Volunteer.

Advertise your biochar products or biochar-related activities on our website.

Help with Working Bees and Open Days!

Use the drop-off service as a household supplier of woody waste. Free for all Macclesfield households and those with a Macclesfield PO box address.

Engage us to make biochar on your property for your use.

Tell us what you think we should be doing next.

CONTACT DETAILS:

Brian's Mob: 041 148 0935

Email: maccybiochar@adam.com.au

Website: <https://www.maccybiochar.com>

Facebook: www.facebook.com/maccybiochar