# MACCY BIOCHAR MEMBER BULLETIN

No. 4 - January 2020

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

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#### **HELLO ALL.**

## Welcome to our 1<sup>st</sup> Member Bulletin for 2020.

Did you know that we are now just on 1 year old? The group began with the formation of the Steering Committee at a public meeting held in the Institute on the very warm evening of Monday 22 January 2019.

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

- New Kiln;
- New Donation;
- New members;
- Website extensions;
- 2020 Job Campaign;
- Volunteers SA & NT advertisement;
- Volunteer Connect registration & advertisement.

#### **NEW KILN**

An order has been placed on local fabricator Firth Engineering for our new larger kiln with a capacity of about 1 m³. It will include a stand and winch to enable tipping of the kiln to decant the biochar. Delivery is expected in February.

The combination of this new kiln with our original 2 small kilns should ensure a production capacity of 1000 litres of biochar per day of operation.

#### **NEW DONATION**

A new donation of \$200 has been gratefully received from one of our members to assist with further expansion. The donor wishes to remain anonymous.

# **NEW MEMBERS**

There have been no new members since the previous bulletin although there have been some enquiries.

However if every member could just get one more member we could boast a membership of over 50 and obtain some useful additional funds **plus** additional potential volunteers. So please put on your sales hat when you are out and about and have a spare member form with you at all times to put to good use. Simply print one off from the website.

#### WEBSITE EXTENSIONS

The section on Volunteering has been updated to explain how volunteers can help us with our 2020 campaign and how to register their interest. Check our website at:

https://www.maccybiochar.com/volunteers

## **2020 JOB CAMPAIGN**

We plan to start wood collection sometime in April depending on the weather and go through to the end of November. We are planning 4 collection days per month on Tuesdays and Fridays. For this we will need more volunteers than we currently have. So either:

- More members will need to participate; or
- We obtain more volunteers from outside the membership.

Of course those who are able are encouraged to deliver their wood to site themselves. All deliveries need to be pre-arranged with either Kelvin Williams or myself.

#### **HOUSEHOLD REGISTRATION**

Those households who wish to have their CO<sub>2</sub> emissions offset by the biochar we produce from their wood can register with us NOW. Simply go to the website and look under

https://www.maccybiochar.com/summary to register.

# **VOLUNTEERS SA & NT**

We have loaded a volunteer vacancy position onto the Volunteers SA & NT website using their VIKTOR platform. Please go to <a href="https://www.volunteeringsant.org.au/volunteers/">https://www.volunteeringsant.org.au/volunteers/</a> and check it out. If you have any suggestions for improvement please let me know.

Volunteers need to be physically fit and able adults and preferably with experience using gardening shears, etc. and to wear specified safety clothing. Hours will be from 9:30 am to 4pm meeting at Macclesfield. Job training will be provided where necessary. So please pass this on to anyone who you think may enjoy a day out in Macclesfield in the fresh air picking up sticks to help us fight Climate Change!

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#### **VOLUNTEER CONNECT**

We have also registered with the Volunteer Connect website hosted by Mount Barker and Adelaide Hills councils and have loaded a volunteer vacancy position there also. Our page can be reached via the volunteering prompts on either the Adelaide Hills or Mount Barker Council websites. However the direct link is simply: <a href="http://bttr.im/fuzzi">http://bttr.im/fuzzi</a>

If you have any suggestions for improvement please let me know.

#### TECHTALK - BOTTOM lit versus TOP lit.

Can you explain in simple words to a prospective member what we do and why it works? It all comes down to the fundamental difference in outcome between lighting a heap of wood at the bottom or at the top.

When you light a heap of wood at the bottom and there is plenty of air available to burn the heap then **complete combustion** of the wood takes place. This results in complete conversion of the carbon in the wood to CO<sub>2</sub>. So all that is left is the ash (or minerals).

But when you light a heap of wood at the **top** and there is plenty of air available, then the top part of the heap will completely combust **BUT** as hot air can only rise, then the wood beneath the top burning part will not get enough air so it will only **partially combust**. This partial combustion causes the volatiles in the wood to be released. These volatiles (typically methane, hydrogen and carbon monoxide collectively known as biogas) rise up into the burning part of the heap and are immediately ignited. This partial combustion is not enough to burn all the carbon in the wood. So it effectively just cooks at a very high temperature until all the volatiles have been released and the "wood" has become char. The minerals (ash) cannot be decomposed so remain in the char.

## **BUSHFIRE CLEAN-UP**

There is an opportunity to help landowners clean up tree remnants left over after the bushfires while making biochar. This where our mobile rig (yet to be) could be used to great advantage. Farmers will naturally just make a heap and burn it from the bottom. So much better to burn from the top down!

And even better to enclose the heap so as to limit air availability to ensure effective pyrolysis. This is what is going on right now in the USA. Take a look at the following link to photos of various enclosure methods. Courtesy of Kelpie Wilson.

## https://photos.app.goo.gl/x3TyiZz6TjuK9AETA

Is this something that our members would like us to do? If so please tell me.

#### FINANCIALS:

MACCY BIOCHAR
PROFIT & LOSS (No GST)

PROFIT & LOSS (No GST)	
For period	2019
INCOME	\$
Membership fees	440
Jobs	20
Strawberry Fete	75
Sales	150
TOTAL INCOME	685
COST OF GOODS SOLD	
Strawberry Fete	29
Shady Grove road site	70
TOTAL COGS	99
GROSS PROFIT	586
EXPENSES	
Website	231
Motor veh. exp.	0
Office Exp.	0
Postage	0
Promotions	0
Rent	0
Workcover	0
Telephones	0
Travelling & Accomm	0
TOTAL EXPENSES	231
OPERATING PROFIT	355
OTHER INCOME	
Council Grant	2000
NET PROFIT/LOSS	2355
Income tax paid	0
Profit/Loss after tax	2355

# MACCY BIOCHAR MEMBER BULLETIN

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MACCY BIOCHAR	
BALANCE SHEET	
Issued	31/12/19
ASSETS	
<b>CURRENT ASSETS</b>	
Cheque Account	2,355
Cash Management	0
Debtors	0
TOTAL CURRENT ASSETS	2,355
NON-CURRENT ASSETS	
Inventory	300
Plant & Equipment	0
At Cost	
(Accum Depreciation)	
Incorporation Exp	0
TOTAL NON-CURRENT ASSETS	300
TOTAL ASSETS	2,655
LIABILITIES	
<b>CURRENT LIABILITIES</b>	
Creditors	0
TOTAL CURRENT LIABILITIES	0
NON-CURRENT LIABILITIES	
Contractors	1,750
TOTAL LIABILITIES	1,750
NET ASSETS	905

#### **COMING UP:**

Feb – March: Basic Training. Dates to be advised.

April: Start wood collection & receivals at site.

May: Open Day. Details to be advised.

#### WHAT NEXT?

During this off-season we will concentrate on the following activities:

- Fundraising;
- Completion of business plan;
- 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, etc. etc.
- Conduct basic training courses.

At the committee level we still 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 if it does then please call me to discuss.

#### **COMMITTEE MEMBER ROLES at present are:**

**Brian Lewis** – Chairman; Website; Newsletters; Bulletins; Volunteer coordinator; Carbon accounting. **Kelvin Williams** – Site coordinator; Operator; Grant applications; Biochar analysis; Kiln development coordinator.

**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 need at least 100 members to make a real difference.

Enlist as a Volunteer.

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

Help with Wood Collection and Kiln Operation.

**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.