

This document contains archived material previously from the DCPG website under Workshops and Firings – removed text from main page November 2022 and now appears as a single PDF for reference purposes.

BOXMOOR WOOD FIRED KILN

For those of you interested in taking part in the wood firings in the future, please do take the time to read the articles below in preparation for the firings coming up.

1. [wood firing briefing details](#)
2. [Glaze testing brief](#)
3. [DCPG Glaze Tests](#)
4. [Glazes cone 10 wood-firing \(1\)](#)
5. [DCPG RiskAssessment Boxmoor 2018 \(revised\)](#)
6. [accident form](#)

BOXMOOR WOOD FIRING APRIL 2018 - details

27 July 2018

Boxmoor Kiln 28th April 2018 Firing Report

The full report includes documents -

[Boxmoor Kiln Design Principles](#),
[Boxmoor Firing 28 April 2018 Kiln Log](#),
[Boxmoor Glaze Recipes 28 April 2018 Firing](#).

The programme was as follows -

April 21st AM - Put up gazebo, tables etc and start glazing pots for firing.
- Carry out works to the kiln as previously listed before being able to pack kiln.
PM - Continue glazing and start packing kiln

April 22nd AM -Continue Glazing and packing kiln
PM - Complete packing kiln and brick up

April 28th AM - Start to fire kiln
PM - Continue with firing

April 29th AM - Continue with firing

May 2nd - Strike and clear kiln, take down gazebo and clear away.

This programme was very successful. Once again I would like to thank those 14 or so members

who turned up over the two weekends, to glaze their pots and participate in firing the Boxmoor Kiln. We counted 183 pots that made it into the kiln, and collected £70 for Guild funds.

The two glazing days went superbly, helped no end by the glorious weather. The Guild provided four glazes, a Shino, Celadon, Tenmoku and an Ash glaze, details as set out in the Boxmoor Glaze Recipes 28 April Firing report. A number of other members glazes were

available

The last weekend, the weather not so good, but that did not appear to put anyone off. I hope everyone had a good time, it seemed a very social occasion.

It's a pity the Kiln Gods were not with us on the day.

This firing did not reach the required temperature of 1300deg C and consequently the glazes failed

to mature. Test rings of the four glazes detailed on the recipe sheet, pulled from the kiln at the end

of the firing, showed that they were all underfired. Therefore, we can't say for certain that these

glazes work in this kiln at 1300deg C.

Previous firings have reached the correct temperature or at least in parts of the kiln, though I can't

confirm whether this was 1300 or 1280. These are all now anecdotal reports, though the Ben Brierley firing was reputedly the most successful. His firing did take a long time and did stall due

to wet wood. This could also be a feature of too short a chimney slowing the combustion of the wood.

Paul Rowbotham remembers that Ben kept the top stoke sealing bricks in place during the firing,

which has the effect of drawing air through under the top fire bars, and across the hot embers, adding to the efficiency of the burn. We had planned to make a stoke hole door for the same purpose, but never completed it. During the firing we did utilise a broken kiln shelf to block the

stoke to achieve the same purpose, but as it was a lash up, it was clumsy and not easy to do. However in the September 2017 firing, we had the stoke completely open and that fired OK to

1280deg C and fairly quickly. I personally think it very unlikely that this contributed in any major

way to the kiln stalling.

Possible Reasons for kiln stalling -

Ignoring those actions that may require major structural works to remedy

1. The current chimney is clearly too short, as set out in the Design Principles Report. This leads to problems with the burn, and especially leads to choking when too much wood is fed into the stoke.

Solution is the raise height of chimney. Better to try with a dis-mountable chimney section first

before building in brick. The Trust may not allow the chimney to be extended permanently anyway.

2. Wood not good quality. We used almost entirely garden prunings and pallet wood, both of uncertain parentage. This is not very good wood. For the Sept 2017 firing we had the benefit of

some kiln dried, pine offcuts from college projects, though small, it burned really well. Pine and

soft coniferous woods give a greater calorific value than hard woods. See the Olsen Kiln Book page

195 and Ian Godfrey "Kiln Building" page 14. Also they burn quicker as they are less dense.

Solution is to try to find convenient source of better timber. Pallet wood is cheap though, and if the

extra chimney height works with pallet wood, then problem goes away.

3. Wood too big. The thinner the wood the easier it is to burn and the quicker. We did increase the amount of chopping we did at the end of the firing to see if we could overcome the stall

but to no avail. Problem is that it requires quite some physicality to chop wood for the length of the

firing, and is very tiring. As the Guild members are generally mature individuals, this is quite some

ask. There is still a tendency to over-stoke as well, "to get the big yellow flames", a real problem

when the wood size is quite big.

Solution. This will probably make the most cost effective difference, in combination with the taller

chimney. If we continue to use pallet wood for cheapness, then we need to get it cut down using a

saw bench or similar, that is not as physical as chopping wood. Pallet wood does not chop straight

anyway. Otherwise we could pay more for better quality wood of the right size, but this could be

expensive.

For the Sept 2017 firing there was a Working Party on a Wednesday morning where members were

asked to help "chop logs". I don't know how successful that was, but for the next firing we would

be advised to consider a weekend or a long enough period to ensure all the wood was of an appropriate size.

4. Use a forced air system. For my small garden kiln, I used a Hoover as a blower to raise the temperature as I was sticking at the same cone 5. It may be that for the next firing we have a couple

of fans on standby, that we can bring into play if we get the kiln stalling again.

5. Fire to a lower temperature. If all else fails, this is also a solution, but you will lose the high

fired wood effects on the pots.

The other feature of this and earlier firings is the difference in temperature between different areas

of the kiln. It is clear from the Kiln Log Report that the floor of the kiln near the door, is hotter than

the top/rest of the kiln. Also, we still have the problem as in earlier firings that the door end fires

hotter than the chimney end. It is probable that we won't solve this until we can get the kiln to temperature easily and be able to properly soak the kiln. We know what to do with the split dampers to help control the temperature at each end of the kiln, but the difference in temperature

top to bottom may just be a feature of the high kiln chamber.

Part of the work we carried out on the 21st April, was that we opened up the spy holes into the kiln,

and we are now able to see cone clusters top and bottom both ends of the kiln easily, so

enabling

better control. Also for this firing, we had cones in the central stack and we kept a record of all

these cones, as given in the illustrations to the Kiln Log Report. We need to do the same for the

next firings.

The additional kiln props we ordered from Bluematchbox proved adequate and we did not need, and

hopefully will no longer need, to borrow from others.

The scrap drainage grating that we fitted as a fire grate both sides of the kiln, worked well and

allowed small wood pieces to be burnt at the lower level, as well as the larger pieces that fitted on

the upper fire bars.

Jerry

Grangrad71

The Box Moor Trust

London Rd, Hemel Hempstead, HP1 2RE

<https://goo.gl/maps/6dn6XYwGJBB2>

Addendum – I have a 3 metre tall metal kiln chimney, the same cross section as the Boxmoor Kiln. This was originally from Pauline Ashley's kiln, and I used it on my gas kiln that I blew up.

I am prohibited from re-building a gas kiln, so this chimney would be available to the Guild, should the Committee wish it.

16 April 2018

Further to the message below, start time will be 9am on the 21st and 10am on the 22nd.

The address is -

The Box Moor Trust

London Rd, Hemel Hempstead, HP1 2RE

<https://goo.gl/maps/6dn6XYwGJBB2>

The Guild will provide the glazes noted below. Other participants may have other glazes. We will also provide red iron oxide for decoration. Any other glazes and oxides that you need for your own purposes, you will supply. Bring anything you may need for decorating, like brushes, resist emulsion etc.

Depending on the weather, you will need to wear appropriate clothing. Boots or substantial footwear is required as the ground is rough and muddy. You will need to bring food, hot drinks and water as required.

Please send me your mobile phone number so that I can contact you urgently if required, and make a note of mine as below. Also please bring £5.00 payment on the day, unless you only have refires.

Any other information you need, please contact me.

Thanks, Jerry

Mob - 07766 305431

Just to update you, those who follow me on Instagram @grangrad71, will already know I had somewhat of a torrid time firing the BOGI (Bread Oven & Garden Incinerator). If you are not on Instagram you can search for me through the website as set out in the [Search Instagram via DCPG](#) in the useful links section. For some reason it stuck at cone 5 (1200deg C) and after trying everything else I could think of, I ended up getting the Hoover out and used it as a forced air system. Anyway, I now have 80no glaze tests completed, split generally into Shino, Tenmoku, Celadon & Ash glazes. Hopefully we can get a suitable mix for each of these glazes to use at Boxmoor. Now, I will have the best of them with me at the Friday 13th April meeting, so ask me for a look at them and comment on them.

The programme now is as follows -

April 21st AM - Put up gazebo, tables etc and start glazing pots for firing.
- Carry out works to the kiln as previously listed before being able to pack kiln.

PM - Continue glazing and start packing kiln

April 22nd AM -Continue Glazing and packing kiln

PM - Complete packing kiln and brick up

April 28th AM - Start to fire kiln

PM - Continue with firing

April 29th AM - If necessary continue firing kiln overnight.

May 2nd or 3rd - Strike and clear kiln, take down gazebo and clear away.

Those of you putting pots in the kiln need to bring them along to Boxmoor ideally on the Sat 21st or Sun 22nd latest. Please now confirm when you will bring your pots along. Also which days and times you are able to help with any of the jobs above. Those helping with the firing Sun PM please confirm if you are able to continue overnight if required.

18 March 2018

[revised April firing details](#)

26 February 2018

Please put the following dates in your diary.

The next work party weekend will be **March 17th and 18th**, when we are planning to cover the kiln with an kkadobe layer, please let me know if you can assist in this, either one or both days.

The **glazing weekend** will be on the **21st and 22nd April**. Please bring your bisqued pots to be glazed and packed in the kiln over this weekend. The Guild will provide a number of glazes as before, one of which we hope will be an ash glaze. Those who were on the Ash glazing course, perhaps you have developed a personal ash glaze that you could share with the other members? There will be a flat charge of £5 for the firing, so the more pots you make the better.

The **kiln will be fired** on the following weekend, starting on the **28th and over night into the 29th April**, if necessary. This firing will only be possible if we have enough pots to fill the kiln. Please consider refiring items that did not quite reach the correct temperature in earlier firings, and indicate if any of the pots you intend to fire, are refires.

Can those members who intend to include pieces of their work in this firing, please register your interest with me. Please indicate if you wish to be included on the firing rota (this is likely to be overnight, so also indicate if you are OK to be there at night). Also, provisionally, the number of pots you are aiming to have. We will need have these details finalised before the glazing weekend. Also, please indicate if you would be able to come one evening in the following week to collect your pots, rather than the next weekend, which is the May holiday weekend

Jerry Seaborn

07766305431 (text or Whatsapp)

JJSeaborn@outlook.com

Woodfiring at Boxmoor, September 2017



Soda firing at Northfields, Tring, August 2016

