

The Newton Road Brewery



“Brewing better beer”

(than you can buy...)

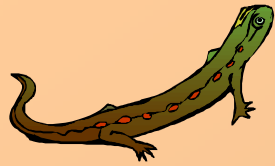
A personal solution to a global problem!!

- presented by -

Gareth Evans

“And gentlemen in England now abed, shall think themselves accursed they were not there”

(especially once they have tried a sample or two!)



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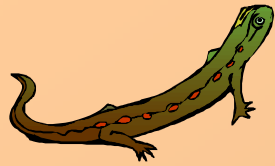


I first started ‘home brewing’ in about 1976 when the long hot summer produced a surplus of fruit and a friend introduced us a nice little shop opposite Purley Station that sold everything for wine and beer. It coincided with my second year of university life and a growing love of *real ale*!

I bought a book called ‘Brewing Beers like those you buy’ by Dave Line and tried several recipes – they produced
“Beer Jim, but not as we know it”!!

Over the next 24 years I tried many and varied kits, I added honey in place of sugar, I tried the breweries own yeast.....

.....but it STILL tasted like ‘HOMEBREW’!!



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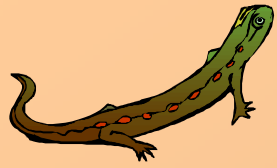


At the end of the Millennium ‘Boots the Chemist’ (by now one of the few retailers of homebrew kits) stopped selling anything to do with brewing and cookware so I sought alternative supplies.

I was recommended to try “*Cheers! Wine and Beer*” at *94 Priory Road, Cheam*. Although up to an hours journey (on a bad day), Richards well stocked shop and helpful nature made the journey worthwhile. He also sold ‘two tin’ kits which made the *homebrew* taste a bit more like *beer*.

He also told me about a course he ran, called ‘*Full mash brewing*’.

I signed up there and then and haven’t looked back since.....(about 250 gallons and counting!!)



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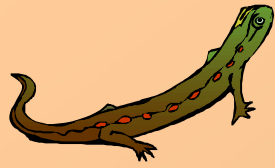
Beer is basically made up of three main components....

Sugars which are derived from ***MALTED BARLEY***

Bitterness and aroma from ***HOPS***

and ***WATER!!***

The whole lot is stewed and boiled to help extract and blend everything. It is then fermented using ***YEAST*** which turns most of the sugar into alcohol whilst often adding it's own unique character.



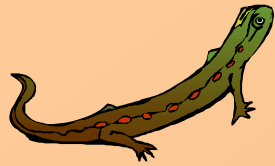
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Here's where it all starts, Kentish Goldings and Fuggles hops starting life in the Spring. 18 foot high runner beans, or so the neighbours thought!!!



Raw ingredients for a brewing session, *malted barley* (*dark* and *pale malt* seen here) *hops*, (3 different varieties), a recipe book and a crib sheet to keep order during the brewing process!

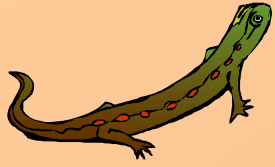


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The *MASH TUN* is made from a converted cool-box. The polystyrene insulation has been 'beefed up' with an inner and outer layer of aluminium foil, shiny side in. This improves its ability to retain heat, vital for a good *predictable mash*.



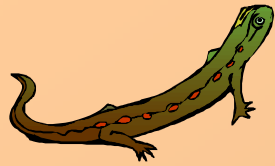


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The *manifold*, shown here inverted, is to help the extraction of dissolved sugars from the barley malt. The liquid is known as '*sweet wort*'. The lines are actually junior hacksaw 'slits'.

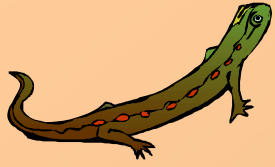
The whole assembly sits in the bottom of the *mash tun* as the second photo shows. A short piece of plastic pipe connects the *manifold* to the back of the tap.



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Water Treatment is vital if you are trying to copy a beer from another part of the country/world. Most brewers use '*Burton water*' and although fine to drink, Thames Waters 'finest' needs some adjustment to its chemistry. Seen here is Carbonate Reduction Solution, Lactic Acid, Water Treatment Salts and 'Irish Moss'.



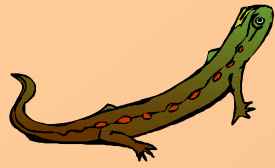
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The *Hot Liquor Tun* is shown here with 20 litres of 'liquor' (treated and heated water) ready for running into the mash tun. Gravity saves a lot of messing about! Victorian brewhouses were often 'gravity assisted' (Tower Breweries).



Running in the *hot liquor* at about 170F. (*Strike Temperature*)



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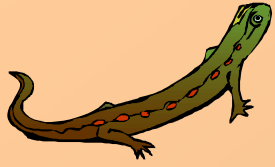
The *sparging head* and *anti-siphon tube*, yet more equipment for a good brew!



And the *copper*, showing rough markings for volume and the outlet tap.



Inside are the heating elements (2.2 and 2.4 KW) and the *hop filter*, which does what it says.....more plumbing!



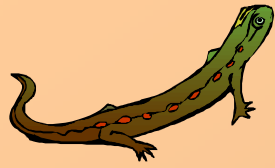
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‘*Sparging the wort*’ is the technical term for rinsing the sugars from the malted barley. The *mash* has been sitting in the *mash tun* for an hour (times can vary) and the temperature has been regularly checked and adjusted if required.



The *Sweet Wort* is run off into the *Copper* after passing through the copper manifold shown previously. The ‘*grain bed*’ acts as an effective filter.



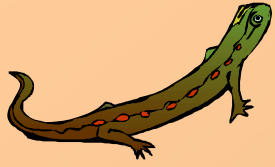
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As the *run-off* continues, *hot liquor* is added via the *sparging head* to continue rinsing the sugars out.



Son Reuben (10) helps with the *sparging* process but complains about the smell!

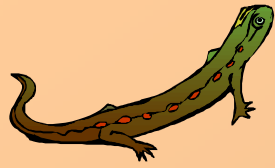


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As *sparging* draws to an end, the *anti-syphon* tube can be seen doing its work. Note the paler colour of the *wort* in the tube as most of the sugars and colour have been rinsed out by this time.

When the required volume of *wort* has been collected, the *boil* may commence.



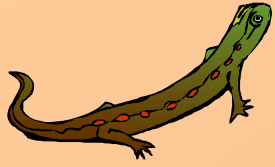
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Insulation (bubble wrap) and plenty of kilowatts helps a quick return to the boil. A protein scum forms and this is usually skimmed off.



About half a pint of 'waste' is common.



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At this point the ***Bittering Hops*** are added to the ***copper***. As their name implies their role is to impart bitterness to the beer.

Fifteen minutes from the end of the boil the ***Aroma hops*** are added, together with the ***Irish Moss***, a seaweed rich in copper. This helps improve the clarity of the end product.