



C.B.A. TO BREW AT G.B.B.F.

As we go to press plans are being finalised for CBA's stand at the Great British Beer Festival, being organised by CAMRA at Olympia, London from Tuesday 5th August until Saturday 9th August 1997.

This year we will be having our own stand and the CAMRA organisers have agreed to us brewing on the stand. This should attract quite a bit of attention and the smell of a mash and a boil wafting across the exhibition hall can only add a certain quality to Britain's (and the world's?) greatest beer festival. One main problem is the cost of the additional facilities, extra power points, water & drainage, we will need but it looks hopeful that we will receive some sponsorship to cover this cost. Without sponsorship we may not be able to afford it but, as we go to press the costs have not yet been quantified - however things look promising. Our outline plan is to repeat the concept of last year. That is, to show visitors to the GBBF that Craft Brewing is something different to what they think of homebrewing. We plan to show the quality and variety of malt and hops which we use and to give them small tastings of our brews. Our brewing demonstrations will cover yeast growth, mashing, boiling and fermentation. Whilst the usual temperatures in Olympia in August may not augur well for the quality of the brews we will be attempting to overcome this problem.

SOLENT BREWERS GET ORGANISED

CRAFT BREWERS in the Southampton, Fareham and Portsmouth area have got together to form the Solent Beer Brewers, thanks to the efforts of Steve Hawker.

Several of the members were members of the Southern Beer Makers Association based in Poole but that was quite a distance to travel for some, particularly those in the Portsmouth area. This is not really a 'break-away' as Steve's second newsletter, entitled 'Brewer's Log', published in April, was a joint production for both groups.

Solent Beer Brewers aims to promote and develop craft brewing in the South Hampshire area and meet on the 3rd Thursday of each month. Their newsletter is a very commendable production with good book and product reviews, which Steve has kindly allowed us to bring to other Craft brewers throughout the country - see inside.

If you live in this area you really should pay them a visit and if you are visiting, get in touch with Steve who, I am sure will make you most welcome. His address is on page 13

WE NEED YOU AND YOUR BREWS

See page 2

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We need you and your beers

Our stand at GBBF is not intended just for the few. We would like to see as many of our members as possible taking part. We hope to have sufficient members to allow those there each day to have a good chance to savour the whole festival and not spend all day on the stand. It really is good fun and very interesting to meet the people who visit our stand.

If you can't make it to London, please let us have some of your beer to offer as samples. We will work out a way to get it to GBBF.

Please let Gillian know how you can help as soon as possible, it is going to take quite a bit of organising but, if you can help at the last moment please don't hesitate to let him know.

Remember that as stall staff you get free entry to GBBF and cut-price beer tickets - what more can you ask for?

Well, a cut price CBA T-shirt could well be the deciding factor! Please phone Gillian on 01952-510468 (Home) or 0121-414-6970

OLD BRITISH BEERS AND HOW TO MAKE THEM

This excellent booklet describes the results of the Durden Park Beer Circle's research into old British Beers.

There has been a further reprint of the Second Edition so it is again available. Apart from the historical notes it contains 60 recipes amongst which are some of the best beers ever brewed. No craft brewer should really be without this book and it's recipes so we are pleased to announce that it is now available from CBA. Send a cheque or postal order for £4.00 to James and he will post a copy to you as soon as possible.

The Final Part of 'Simple Water into Liquor will, all being well, be published in our next edition

NEW CASKS

Micro-brewers are introducing new, non-returnable casks, to overcome the large expense involved with standard casks. We have heard about some plastic ones but the ones seen were of thin-ish steel, something like an old-fashioned 10 gallon oil drum. They actually hold 9 gallons and appear to be internally coated with an epoxy resin.

So if your pub stocks micro-brewed beer, if it doesn't change your pub, ask about these casks. I am sure you could find a use for them! Some micros have suggested to publicans that they could sell them for £5 but that may just be sales talk. I suppose it depends how much you spend in the pub!

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CBA-Progress Report

Finance and other things

When the last 'BC' was distributed in February CBA had 142 'paid-up' members. 129 who had not paid were sent just the first page and that reminded more than a few that they hadn't got round to paying. As we get nearer to going to press we have over 300 members, most of whom have paid their subscription and some 65 'Friends' of CBA, which includes Brewing Clubs, Retail shops and others who are supportive of what we are doing.

The last issue, at 20 pages, was relatively expensive in terms of paper and postage but was to make up in some small way for it's late appearance. Total costs for printing & distribution were just under £240.

This small amount was achieved through the kindness of Danny Green of the Homebrew Shop in Farnborough, who printed both the the journal and the envelopes free, as a contribution to CBA's development. We are most grateful to him for this and all his other help. Without his contribution the cost would have been more than twice what it was.

As we have budgeted the membership fee on the basis of 4 copies of 'BC' plus some other postings and practical realities have resulted in some delay in publication,

your 'membership year' will run for 4 issues of 'BC'. I don't envisage us bringing it out every 2 months to shorten your membership year!

No member of CBA gets paid for any work undertaken, indeed just the reverse, both Gillian and I have receipts somewhere for costs involved but not yet claimed. As at 10 April 97 our bank balance stands at £1,768.01 out of which must come the costs of at least a further 3 'BC's, the costs of GBBF and other expenses. As mentioned on Page 1 and elsewhere, we will not be spending more on GBBF than we can reasonably afford. Last year it cost us just over £300 but it looks hopeful that we will obtain some sponsorship to cover the additional costs involved.

Our Founder Members have been very patient in waiting for their Certificates. Some time ago I (not CBA) bought a special printer which produces high quality prints as masters for our publications and display material. This also held the promise of printing in gold and silver foil, which I thought would add a touch of 'posh' to our Founder certificates (even if people intend hanging them in their loo!) The metallic foils have just become available and my printer has been modified to use them so once 'BC4' is launched that will be my next priority.

CBA Administration

Gillian and I are both aware that we have to try to improve the response time to members' enquiries, particularly on membership and local contacts. We both have busy lives and other priorities but please don't mutter to yourself. If you get impatient please ring us and we will do our best to sort it out. We appreciate your patience over many things. However, anyone out there who can help will be warmly welcomed.

In the post with this 'BC' should be an up-date on your local members. I am convinced that the next stage is for Craft Brewers to get together with each other. Even if there are only two of you it is a start. Once we have an administrative system which can cope we shall seek more publicity and members but it would be crazy to do this before we can cope with it. We can only do so much from the centre. I feel that having Area Secretaries is useful in not just you having a local contact but they will serve as an essential pipeline for your views. More on this in my enclosed letter.

Very best wishes to you all,

James

AMBER ALES

Dr J C Harrison of the Durden Park Beer Circle looks at Amber Ale, a beer that has always been easy to drink but hard to define.

The somewhat limited information on pre-porter brewing in London suggests that the popular ales at that time were pale ale, old ale and brown ale. Following the development of Porter in 1722 the term 'brown ale' disappears from both published texts and brewing books. I have found no reference to brown ale in any brewing book between 1783 and 1914. It is only after the virtual demise of English porter in the 1920's that the description 'brown ale' reappears.

In the meantime the need for a flavoured beer less heavy than porter did not simply disappear, it re-surfaced under a different name i.e. Amber Ales. These used the various grades of amber malt to provide colour and flavour. **The following quote** lists the range of coloured malts below chocolate malt available in 1856.

"Various Shades of Malt

There are six shades of malt in general use; a difference from one shade to the next darker, only just visible to the eye, will require a variation of the heat of the liquor for mashing five degrees, viz.:

First: Pale, or white malt;
Second: Pale, or turned colour;
Third: Low amber;
Fourth: High amber;
Fifth: Low brown;
Sixth: High brown"

Later authors give the EBC colour range for amber malts as 30-100:-

Pale Amber 30-40

Amber 55-70

Dark Amber 85-100 (used mainly in Porters in place of brown malt).

In all the recipes discovered to date the amber malt is described simply as 'amber malt' without any indication of its place in the colour range occupied by amber malt. If the amber malt comprises more than 80% of the grist then it clearly has to be pale amber (EBC 30-40) as that is the only amber malt that is self mashing. Where the amber malt comprises only 25 - 30% of the grist it is most probable that the mid-amber malt (EBC 55-70) is meant as that amount of pale amber would not provide sufficient colour or flavour.

Recipes for amber ales are not easy to find but by early 1995 we had accumulated eight and planned a comparative tasting in September 1995.

Unfortunately the brewing periods for these ales coincided with one of the hottest summers on record. The three lowest gravity, lowest hop rate ales did not make it to the starting gate. The five that were evaluated are shown in the Table. As a part compensation for losing three of the planned ales we

had four samples of Kingston Amber available.

THE EVALUATION

With the exception of one Kingston Amber that showed signs of high temperature fermentation, the remaining samples were very high quality brown ales. The roast grain flavours from pale amber & mid-amber malts are soft and smooth. When correctly balanced with the right amount of hop flavours and residual sweetness, the impression is of luscious palate-fullness. This overall mellowness of flavour cannot be achieved by using small amounts of heavily roasted grain such as chocolate malt, brown malt or roast barley. The three fault-free Kingston ambers also demonstrated the importance of getting the final sweetness right. The one that had the edge over the other two had a near-perfect balance between the roast grain, hop and residual sweetness.

BREWING

The main difficulty in making amber ales is obtaining the correct grades of amber malt. I do not know of any stockist of pale amber malt (Durden Park Beer Circle has been home-roasting pale malt to pale amber for the past three years), mid-amber at EBC 55-70 is also difficult to obtain and I have recently taken to

home-producing mid-amber as well.

Ale/source	Date	Grist	Hops oz/gal	OG	Months maturing time	Verdict
Dark Amber Cobb & Co (A)	1812	94% Pale Amber 6% Brown	2 1/4	1057	7	Good - High hopping means long maturation.
Kingston Amber (B)	1830	47.5% Pale Malt 47.5% Mid-Amber 5% Brown	0.75	1060	3	Brown Ale at it's best
Breakspear Strong Amber (C)	1795	100% Pale Amber	0.9	1070	4	Very good strong Brown Ale
Amber Ale Cobb & Co (A)	1823	68% Pale Amber 32% Mid Amber	1.5	1080	5	ditto
Mr. Faunes Amber Ale (D)	1775	100% Pale Amber	1.3	1100	6	A First Class dark Barley Wine

Sources:

- A. Kent County Archive, Maidstone
- B. Nithsdale W.H. & Martin A.T. - 'Practical Brewing' 1913
- C. Oxford County Archive - Oxford

RECIPES

1 Gallon Kingston Amber Ale O.G. 1060

1 1/4 lb Pale Malt
 1 1/4 lb Amber Mast
 2 oz Chocolate Malt
 3/4 oz Fuggles or Goldings Hops
 1/4 oz Goldings dry hops.

Mash 2 hrs @ 67°C
 Hop boil 1 1/2 hrs = O.G. 1060
 Ferment @ 22 °C max.
 Maturation: 2 months will do
 but 3 months is better.

Residual sweetness in either ale can be adjusted upwards if necessary by adding a non-fermenting sugar, e.g. Zylitol

1 Gallon Brakespears Strong Amber Ale O.G. 1070

3 lbs Pale Amber Malt (EBC 30-40)
 3/4 oz Fuggles Copper Hops
 1/4 oz Goldings dry hops.

Mash 2 hrs @ 67°C
 Hop boil 1 1/2 hrs = o.g.1070

Maturation: 3 months but 4 months is better.

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HOME-ROASTING MALTED BARLEY

by Dr J C Harrison

There are several reasons why home brewers should consider home-roasting malted barley. In Victorian times there were a number of grades of roasted, or over-kilned, malt that were widely used to impart desirable flavours to beers. Some of these e.g. pale amber, high amber and brown malts are difficult to obtain and even stalwarts such as mild ale malt and mid-amber are getting scarce. Even when a particular grade of malt is available commercially e.g. carapils (caramalt) homebrew shops may decline to hold stocks because of low demand. Another reason is that freshly roasted malt, used soon after production, has a better aroma and flavour than roast grain kept for some time.

One consideration that needs to be taken into account when grain roasting is how the roast malt is to be used. If used in small amounts as a flavouring with large amounts of pale malt the enzyme content of the roast malt is not important and quick roasting methods can be used. If however the roast malt constitutes the major part of the grist (as with some amber ales) then retention of brewing enzymes is essential. This needs a long pre-drying of the malt followed by a gentle roasting schedule. It is difficult to roast malt to an EBC (European Brewing Convention) Colour Number exceeding 50 and retain enzymes.*

Equipment

- A medium-large oven preferably with fan stirrer.
- Large stainless steel roasting dishes (preferably 2).**
- An accurate thermometer, range 50°-200°, that can be left in the oven.
- Spoon for stirring the malt.
- A sharp knife e.g. Stanley knife or razor.
- A4 size white card.
- Portable lamp with a daylight bulb.

In non-fan stirred ovens there are advantages in using two trays of malt, one close to the top of the oven, another 3 - 4 inches lower. The top tray roasts quicker than the lower tray so initially one can check just the top tray. Should this overshoot slightly, mixing it with the lower tray should even the colour numbers out. It is, of course, not essential to use stainless steel trays. Normal, clean, roasting tins lined with baking foil are ideal for the beginner or occasional roaster.

Checking The Colour

The simplest equipment for measuring the EBC colour number of grain costs about £500. Durden Park has the equipment but it takes approximately 2 hours to produce a value and this is too slow to control the roasting process. This has to be done as follows:

On the white card fix a 3" length of double-sided sellotape. Take 15 assorted corns of pale malt, slice them in half crossways with the knife and stick them on to the sellotape with the cut faces forwards. This provides a benchmark against which to compare samples taken during the roasting process. These should be cut in half as above, lined up close to the pale malt and the average colour compared with the benchmarks. Particularly with the palest roast samples this requires bright daylight or a daylight lamp. A few corns darken prematurely. These should be ignored when making the comparison.

Traditionally, maltsters often used a pestle & mortar to grind up a few grains to check for colour. A modern version of this would be to use a small coffee mill or grinder. This may require the waste of more grain but can be easier and also evens out the colour variations of individual grains.

Method 1. Quick Roast

Fill the stainless steel pan 1" to 1.5" deep with malt. Place near the top of the oven pre-heated to 95°C- 100°C. Dry the grain with occasional stirring for 45 minutes then raise the oven temperature to 150°C. When the oven temperature has stabilised, stir the malt and check colour. Stir and check the colour every 20 minutes until the desired colour is reached (see table 1). Remove from the oven, cool and keep in airtight containers.

Method 2. Slow roast

Repeat the procedure for the quick roast but dry at 95°C-100°C for 2 hours. Stir and raise the oven temperature to 110°C for one hour, stir and check colour. Raise oven temperature to 120°C. Stir, check colour. Raise oven temperature to 140°C and insert the thermometer into the centre of the malt. Pale amber colour is normally reached when the grain temperature is in the range of 120°C - 125°C.

Grain colour v Type		
Type	Average Colour of Cut Corn	Approx. EBC No
Pale Amber	Palest buff	30 - 35
Amber	Distinct light buff	60 - 70
Brown	Full buff/Pale brown (Colour of pale brown envelope)	140 - 150

Editorial

Summer is upon us and out in the garden my hop plant is romping along the fence. No doubt it will have taken over the hedge by the end of the season and I will be getting complaints from the neighbours. Clive Le Pensee has similar problems with his hop plants - or should that be blessings?

I grew my hop plant from seed and it hasn't yet flowered but I don't expect that it will be particularly good for beer making. I live in hope though.

I still haven't found time to attempt a brew yet. Fortunately several beer kits, including Yeo's

'Old Porter' and 'Old Stoute', have appeared in a cupboard so I may still beat Dave to full mash! For me brewing is going to have to be a winter pursuit - I just can't make myself stay inside when the weather is good. And there is always the next issue of BC to work on if it rains...

Dave has been working hard to collect brown bottles from supermarkets, off-licences etc. for storing purposes. We now have boxes of the damn things all over the house. And the worst of it is that they are empty!
With the end of spring comes

the rhubarb glut and I have been trying to find a recipe for rhubarb beer. Whilst looking I found a book called "Healthy Wine & Beer Making" by Peter McCall who advocates beer with an SG of 1030 so that very little unfermented sugars remain and hence the calorific value is low. This makes for weak beer which he says can be sweetened using artificial sweeteners. It sounds horrible to me - has anyone out there tried it? Drop us a line and tell us what you think.

Here's happy brewing

Jude

Brewing Computer Program Review (Part 2) By Michael Newman

SUDSW v4.0a by Michael Taylor (shareware \$20.00)

The centre of this program is the Recipe Formulator. Like most of the available programs it originates in the USA and "Beer Styles" (as defined by the American Homebrewer's Association) are a central feature of it. US homebrewers do seem to be obsessed with arbitrarily defined beer styles. Why? You either like a beer or you don't whether its a "Scotch Ale" or an "Extra Special Bitter" seems irrelevant, to me at least. That's not to say that styles are not a useful way of explaining what a beer may be like, especially if it hasn't been tasted but they are a restriction on creativity in recipe design as far as I'm concerned. OK that's enough rant.

Initially a style is entered in the Recipe Formulator followed other data such as Name, Method of Production (mash, partial mash, extract), Batch Volume, Units (US gallons, gallons, litres), the Mash Efficiency of your system, Malt, Sugars, and Hops. From this is calculated the estimated colour (in US SRM units), original gravity, and bitterness in IBUs. You can change the figures until you are happy with the results, which are altered dynamically. It is very instructive to see how, say, IBUs are altered by changes in boil time. You can also enter freeform notes about the recipe from this screen.

Having happily sorted out the ingredients required for your brew you move onto the Mash Water Calculator screen. Here you enter (once only) the

temperature of boiling water at your location (not very essential for most UK brewers I guess but more important if you live in Denver). This information is used to ensure that IBU levels, which are dependent on boil temperature, are correctly calculated. You also have to enter the Starting Temperature of your Grain, and the Thermal Mass of your mash tun (this is a "fix-it" which you adjust until the calculated figures agree with the measured figures. Don't worry its simply to use). The program calculates the strike temperature of the mash water for both a simple infusion and a second infusion at a higher temp (if required). I find this function very useful. I usually do a single infusion and with the thermal mass of my mash tun set to zero SUDSW consistently calculates the strike temperature 1°C too high. Consistency is, of course, much more important than absolute accuracy and I can live with the slight adjustment needed. This inaccuracy may be either due to an error in SUDSW or my method. I can't answer for the method of calculation used by SUDSW but my method involves preheating my insulated mash tun by filling with water at 80°C and allowing the temperature to naturally fall to a strike temperature of 72°C, which usually takes about 15 minutes. Once the grain, at 18°C, is added to the mash liquor the temperature of the mash falls and the tun is at a higher temperature and it may be that this, together with the increase in temperature due to chemical reaction that naturally occurs as the liquor wets the grains, accounts for the error. Having completed this screen

you next complete the Mash Water Usage screen where you enter Boil Time, the Amount of Water Absorbed in the Grains, the Wort Evaporation Rate, and the Wort Left in the Brewpot. From this information the amount of sparge water required is calculated. I find that the sparge water calculation is fairly accurate but obviously run-off pH or SG are more important ways of calculating how much to sparge. The above three screens are the guts of SUDSW and I think that this is the best interface of all the programs mentioned in this survey. Of course there is more to SUDSW than this.

The method of calculation for hop utilisation method can be altered to use Jackie Rager's figures (Zymurgy 1990), Mark Garetz's figures (Zymurgy 1993), or Glen Tinseth's figures. I personally use Glen's figures. You can also manually alter the IBU calculations to your preferred figures factoring in yeast flocculation rates if you desire. To change between the Rager, Garetz, or Tinseth figures you have to run an MS-DOS batch file which is fairly straight forward. Manual alteration of the numbers to your own preferences involves editing the figures (which are in text files) using Notepad. Hop utilisation is also dependant on boil volume and this information has to be entered, once only, for correct calculation.

There is the usual Windows Help screens which are detailed enough to get you out of trouble (which is just as well because you haven't got a manual) and also include a basic brewing

tutorial which is aimed at beginners.

Having entered your recipes you might want to do a brew. That's the idea after all. To enter details of a particular batch you enter the Log section of SUDS. This allows you to enter Starting Date, Starting Gravity, Bottling Date, and Final Gravity. It also displays IBUs. If you need to modify the recipe to use different hops, or the same variety with a different alpha acid content, the Log features an IBU Calculator which allows to adjust the hop rate as appropriate. There is also a notes section which enables you to enter other details of the process pitching rates, temperature of fermentation, or whatever.

The program is supplied with many varieties of malt, unmalted grains, extracts, and hops already entered in its database. These can be modified and altered as necessary which is important as they have an US slant, including some ingredients which are unusual in the UK and omitting some which are common. This is very easily done via the Malt Dialogue Box. In the Hop Dialogue Box you are able to enter, or alter, the database's hop varieties' names and alpha acid contents. In the Malt Dialogue Box the malt/grain names can be entered or altered together with the lab extract in terms of original gravity and colour in SRM. None of the programs I have seen, including SUDSW, support colour in degrees EBC nor extract in degrees per kilogram per litre. Fortunately these are once only entries so just reach for your calculator!

You are also able to print your recipe, notes, and log entry. The print out is not exactly exciting but all the information is there. Personally I usually print out the recipe just before brewing so I

have details of strike temperature, mash liquor volume etc. to hand and I record notes on the printout as I go. I enter these into the Log when I've finished.

SUDSW is able to import and export recipes and comes with a datafile of recipes some of which are very interesting. You can search through the datafile using filters to find the particular recipes or group of recipes you require.

All in all I like SUDSW. It is simple to use, gives you useful data to simplify the brewing process, and is easily adapted to use by UK brewers.

The shareware version is fully functional except that the Log's IBU calculator isn't available and the datafile of recipes is not included.

CAUTION: If you use metric units ensure that you get version 4.0a NOT 4.0. The latter contains a bug which prevents the correct calculation of second mash temperatures (they are always negative and 10l of water at -12C can be hard to find!).

NOTE FOR USERS OF IMPERIAL GALLONS: SUDSW is the only program in this review (other than BrewWizard) which supports these units. So if you are unwilling, or unable, to change this is where your choice lays.

The final part of Michael's article will appear in issue 5.

CAMRA SEEKS HOMEBREW AUTHORS

CAMRA Books plan a series of practical home-brew titles, each based on a group of beer styles e.g. stout & porter, pale ale & bitter.

Roger Protz has been commissioned to write introductions to each style and to discuss history, ingredients etc.

They now need to recruit some home and craft brewers who can provide the necessary recipes.

They are looking to use the recipes of only one brewer in a book to maintain consistency and will be following the style of previous CAMRA books.

They have a modest budget to help fund the creation of the recipes and a royalty will be paid on sales of the books - which do well here and in America.

If you are interested in taking part in this project please ring or email Mark Webb, details below, to find out more.

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PRODUCT REVIEW - BRUPAKS 'CRAFTSMAN' Ingredient Pack

by Steve Hawker

This new range of Beer Kits marks the next stage of development in the 'quality' end of the market.

It moves beyond the premium 3kg hopped kits and introduces the brewer to the idea of using unhopped malt extract, in combination with a small quantity of crushed grains and whole hops.

Each kit comprises 2 x 1.5kg tins of premium grade pale malt extract together with an ingredient pack which contains the grains, foil sealed hops and dried yeast. There are a number of different ingredient packs allowing for the production of beers ranging from German Pilsner through two varieties of Bitter to Porter and Old Ale.

Each kit comes with brief instructions which indicate the minimum equipment requirements and a suggested method of production.

The suggested method of production requires a pan of minimum size 10 litres. The crushed grains are added to 3 litres of cold water, heated to between 65-70 C and held there for half an hour.

The liquid is then strained into the boiling vessel containing as much liquid as is safe. Next, the liquid is warmed before the malt extract is added. The wort is

brought to the boil and the hops added (a small quantity is held back for late aroma hopping). A rolling boil is carried out for an hour. The wort is then cooled before being strained into a fermentation vessel, and the dried yeast pitched and the fermentation allowed to commence.

In early November I made a batch of Brupaks Craftsman 'London Bitter'. I used Wheeler's instructions for a simple mash in his book 'Home Brewing: A CAMRA Guide'. For those who would wish to do this, rather than follow the adequate instructions provided, the book is recommended. The dried yeast was made up into a starter culture a few days in advance. Primary fermentation took about 5 days, before being transferred into 2 x 2.5 gal. barrels for storage and maturation.

The first barrel was tapped in mid-December. The first draught was not completely clear but was drinkable. It was malty and had a good hop bitterness. The second barrel was taken along to the inaugural meeting of **Solent Beer Brewers**. It was slightly disturbed by the transportation but was clear after the first couple of glasses were drawn off. Those present felt it to be a very drinkable beer of a

surprising quality for a kit beer. One person at the meeting felt it was 'reminiscent of London Pride', which I took to be a compliment for the product as I assume this was the model that the manufacturer was looking to emulate in compiling the ingredients pack.

I have only a couple of minor quibbles. First, there is no indication anywhere which gives an idea of the original gravity of the beer to be produced. Second, be sure to identify the final volume of beer to be brewed as these do vary (the information is on the ingredient pack label).

For those who want to develop their skills, these kits offer the opportunity to try something a little more complex and provide a useful stepping stone between hopped malt extract kits and partial and full mashed beers.

Steve Hawker is the founder of Solent Beer Brewers and Editor of its newsletter, 'Brewer's Log' where this review was first published. It is reprinted here with his kind permission.

Spring Time Brewing By Clive La Pensée

Spring has finally arrived in the frozen North, and with it a fine flush of green hop shoots, far more than I can manage. Most I shall have to consign to the compost heap, which seems a callous way to treat the offspring of the plants, which have for the last 10 years provided me with enough hops of the finest quality for the forty or so gallons of beer I produce in a year. As I hop at a rate of 20g/litre of beer, this has been quite a saving, not only in money, but more importantly in beer. The hard water off the Wolds makes life difficult unless you get the right hops. My variety was scrounged from the Brewing University at Weihenstephan in Bavaria, and I have been root splitting and distributing this high aroma, moderate alpha-acid plant ever since.

My neighbours are baffled at the "pernicious weed", as English Ale drinkers once referred to it, which stretches its roots and shoots far and wide. They should of course be eternally grateful to me. I just don't care to tell them what it is or where it comes from.

If you would like me to spread it your way then let me know. I can't promise anything this year as no one can be sure when Brewers Contact will hit the door mat, but all requests will be kept over for 1998. The address is
6, Minster Ave., Beverley,
HU17 0NL
Phone/fax 01482 869609.
E-mail 100644,1725
@compuserve.com.

Hahn admonished all house brewers in 1805 to keep their own hop garden, "because it is so simple to do". Complete instructions for planting, maintaining, harvesting and drying hops are contained in my book "The Craft of House-Brewing" which James may or may not get round to reviewing sometime in this very paper. You'll find an artists impression of Hahns House brewery as the logo James has chosen for the Craft Brewers Association.

Pilsen Pays Off.

Easter was spent in Vienna and that is not far from Pilsen, home of Pilsner Urquell. We arrived in that hallowed city around lunch time on a Monday. I only record this seemingly useless piece of information to save you the frustration we experienced. The brewery museum is shut on Mondays except in the summer months. We only managed to do a brewery visit by using a mixture of stealth and deceit. A party of German students was about to start their pre-booked tour and so we stood at the end of the line and pretended to be teachers. Not difficult but I did feel sorry for our guide, who counted the party so many times and never managed to make the numbers tally. The Czechs are so laid back about protocol that they would have let us in anyway, but this will change as the pressure on the brewery from tourists increases. My advice is to book a tour. We would have been stuffed had it been a party of French or Japanese students.

Mecca is worth it or important to Catholics or Muslims. Nine kilometres of underground caves for lagering, the sight of the wort pouring from the huge copper mash tuns and this charming man explaining the magic number twelve, when making a genuine Pilsner. Twelve hours to mash, twelve days to ferment and twelve weeks to condition, is their rule of thumb.

Kellereibedarf

Kellereibedarf is the name for everything you could need for the cellar. Upon discovering that there is a shop in Vienna with this name, it seemed worth the flog across town on the U-Bahn to pay a visit. We should have been on the Strassenbahn, and when we alighted we were still five kilometres from the Gurkgasse, where Kellereibedarf, and its charming Viennese owner Roswitha Babitsch are to be found, on the road to Linz. (Please note. Its shut on Saturdays and you won't find any of these vital snippets of information in your Baedekers guide to Wien. Perhaps Aunt Charlotte was right after all). (*Who is she?-Ed*)

Kellereibedarf defies description. There are quite a lot of UK kits on the shelves, all supplied by Youngs Homebrew, but I shan't frown as Youngs have also made sure that there are copies of my book "Hausbrauen Heute" on the shelves, which is a beginners guide to mashing.

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Remember, Johann Gottfried

Is it worth it? That is a bit like asking if a trip to Rome or

BREW CLASSIC EUROPEAN BEERS AT HOMEby **GRAHAM***A Review by Gillian Grafton*

Graham Wheeler admits he had give up the thought of writing any more homebrewing texts, but was easily persuaded by the Campaign for Real Ale to re-enter the field. This book, *Brew Classic European Beers at Home*, written with Roger Protz, represents their second foray into the realm of recipe books. Protz, of CAMRA fame, was responsible for coaxing the recipes from the many brewers represented, but the hard work of transforming these into something suitable for homebrewing was all Wheeler's.

Wheeler has squarely aimed this book at a wider audience than his previous writings, so all recipes have versions for five U.K. gallons, five U.S. gallons and 23 or 25 litres. With an eye on the U.S. market, temperatures are now quoted in Fahrenheit as well as Celsius, and alcohol content is given by weight and volume.

The recipes themselves, and there are 92 of them, are centred on a more realistic 80 percent mash efficiency, a welcome move away from the unrealistically low 75 percent he has previously used. However, he still uses hop utilisation rates of 20 percent based on a 90-minute boil, and sticks to his assertion that late hopping (last 15 minutes) does not contribute much bitterness to the wort. I have to disagree with him here. I always find myself reducing Wheeler's hop rates to a lower level.

The range of recipes is impressive, from classic British beers such as Bass and Worthington White Shield, through some well-known lagers (Budvar, Pilsner Urquell), German beers (Paulaner Salvator, Schneider Weisse) to a welcome range of Belgian beers from

Hoegaarden White to Cantillon Lambic and gueuze. The recipes are all full mash, but 27 also have malt extract versions. All of the recipes use infusion mashing techniques, and for those that traditionally call for decoction mashing, temperature stepped infusion mash schedules are detailed. For those who prefer the decoction mash, explicit instructions are given.

No recipe book can ever guarantee the beers produced will be identical clones of the commercial item or even that the same beer will be produced every time by all brewers. Such are the variabilities inherent in homebrewing. The recipes in this book are close to the real thing, in some cases (Tolly Mild), impressively so. Even so, they should be treated as valuable starting points for the experienced brewer to tweak the procedures to develop a personal recipe.

This book is much more than simply a collection of recipes. Wheeler gives a competent basic introduction to mashing briefly covering all the major areas. The shortcomings are few; for example, the failure to mention at all the requirement for soft water in brewing certain beer styles. While the discussion of yeast is more complete than in his earlier writings, he still fails to indicate specific types for the recipes. The deficiencies are more than made up by an excellent section on soured beers. I haven't seen this discussed in any of the homebrewing texts in my possession. This is a valuable contribution and well worth a read. There are some interesting speculations on how the composition of brewing water affects the souring of beers.

I wouldn't recommend the book for a new brewer, but for one who is experienced and looking to produce high-class, commercial standard beers, this book is a must. You will obtain not only a collection of excellent recipes, but also some useful, even novel, tips on homebrewing.

Brew Classic European Beers at Home by Graham Wheeler and Roger Protz, CAMRA Books, 1995, publisher's suggested retail price is £8.99 from good homebrew and book shops or, for CAMRA members, £8, including postage, direct from CAMRA.

Reviewed by Gillian Grafton, a biochemist researching leukaemia for the UK's Medical Research Council at the University of Birmingham. Grafton has been homebrewing for 15 years and is Membership Secretary of the Craft Brewing Association, the UK National Homebrewer's Association.

This review was first published in the Winter 1996 edition of 'ZYMURGY', the Journal of the American Homebrewer's Association and is reproduced with the kind permission of it's Editor, Dena Nishek.

In their previous collaboration 'Brew Your Own Real Ale at Home', Wheeler and Protz showed how numerous beers from the British Isles

Please note that, as published in the previous edition of Brewers' Contact the 'Alemaster Zymopure' yeasts mentioned by Graham Wheeler are not yet available.

BREW CLASSIC EUROPEAN BEERS AT HOME

A review by Steve Hawker

could be simulated on a domestic scale. This time their journey spits in the face of the Eurosceptic and explores the vast variety of beer and ales which are produced on the continent. Using Protz's contacts in the world of commercial brewing and Wheeler's knowledge and experience of home brewing they have again combined to produce a book to grace the shelves of any craft brewer.

The book divides into three sections. However, before exploring these further it is worth noting that this is not a book for the beginner, rather it is aimed at the competent Masher looking to expand their repertoire and explore the complexities of the marriage of malt, hops, yeast and water.

The first grouping of chapters briefly discusses these topics, and those who are new to brewing or wish for greater information would do well to purchase and brew a few times from a good introductory book. (Wheeler's first book 'Home Brewing: A CAMRA Guide' is recommended. Also good, if slightly less accessible is Dave Line's 'Big Book of Brewing'). In particular the chapter on Yeast is noteworthy for the information it presents about the liquid yeast cultures that are beginning to find their way into the UK market.

The next group of chapters contain a short discussion of the various mashing methods. Infusion, decoction and temperature stepped mashes are explored and there is a small section concerning equipment. There is then a section on 'Miscellaneous matters' which looks at 'those aspects of the brewing process that are fairly standard,..., and do not justify a chapter to themselves.' Water treatment, boiling, fermentation, maturation and lagering and bottling are all covered before the authors move on to give instructions for the production of beer from malt extracts and both the infusion and temperature stepped mash techniques.

The book then progresses to the most substantial and interesting section for the brewer the recipes. They are sub-

divided under five headings. Ales; Stout and Porter; Pale and Pilsner-style Lagers; Dark lagers and Bock beers and Esoteric beers. Each section is briefly introduced with a description and potted history of the various products lumped together under these broad headings. For instance the 'Ales' introduction discusses the numerous beers produced by top fermentation. British Pale Ales, Scottish Ales and Mild are joined with relatives from their continental family such as Alts, Bieres de Garde, Kolsch and Trappist ales.

Each Recipe begins with Protz's description and tasting notes of the original that the brewer is looking to emulate, and this is followed by information about the original gravity which is given as both the specific gravity and in degrees Plato. Next Wheeler's computer provides a breakdown of the quantities of malt and hops required to brew four different final quantities of beer. The ingredients to produce 25 or 23 litres are given in metric weight, whilst the traditionalist is offered imperial measures to produce 5 UK gallons. Our American cousins will also find the quantities to make 5 US gallons.

The instruction notes give the style of brewing and the type of fermentation to be employed, together with mash temperature and time, and the boil required. The racking gravity is given, before notes concerning the alcohol content both by volume and weight. Bitterness and colour indicators are given using the standard international indicators. Many of the recipes are followed by footnotes which give further information to aid the brewer in their attempt to recapture the original. Where it is possible to brew a malt extract version the required amount of extract is given in these notes.

The section on Esoteric beers is particularly tempting. It offers the brewer the chance to try their skill in producing some of the less common beers from the continent. The reader will find examples of wheat, fruit, spiced and smoked beers as well as most intriguingly soured ales.

by **Graham Wheeler**

The book closes with an easy to understand appendix to souring beer. The index highlights with an asterisk those beers suitable for malt extract brewing (27 out of the total of 92 ales).

The partnership between Wheeler and Protz has once again produced a book which will inform and entertain the brewer. The instructions are brief and clear, and should prove to be easy to follow. The variety of beer styles illustrated should prove to be inspirational to those wishing to produce a range of interesting and different beers. As with all the books that Wheeler has been associated with 'Brew Classic European Beers at Home' comes highly recommended.

Steve Hawker is the brave chap who has formed the Solent Beer Brewers, whose target membership covers the Southampton-Fareham-Portsmouth area. They are closely associated with the Southern Beer Makers Association, based in Poole. He has also taken on the Editorship of their Newsletter, the 'BREWERS LOG'. This review first appeared there and is reprinted with Steve's kind permission. New members are welcomed, contact Steve at 39 Inverness Avenue, Fareham, Hampshire PO15 6AS

PRODUCTION BREWING

By Jack Stansfield

Production brewing is a logical step for any homebrewer whether he (or she) brews from kits, malt-extract, or grain malt. Lots of people only brew 5 gallons every so often, and then brew some more when it runs out, often bottling it. As the object of craft brewing is to produce good beer to be on tap at all times to drink freely as required it follows that some kind of production line needs to be organised. It needn't be expensive - my own little brewery produces in excess of 200 gallons a year and could do a lot more. All my gear is years old so it's repaid its capital cost many times over.

As I said, it doesn't matter how you brew but let's assume that you are mashing. I mash in an old dixie on top of the (equally old) gas stove in the kitchen. All I do is put about 2 gallons of cold water from the tap into the dixie and raise it to 165 °F on the stove. My floating thermometer only floats now-a-days with the aid of an old Rotokeg float so I have to take it out when I mix in the pale malt but 6 lbs of crushed pale malt, well stirred, ends up at about 150 °F or mashing temperature.

I then just more or less leave it since brewing day is always Sunday and I always have a million other things to do. I usually have to raise it back to 150 °F about twice over a one and a half hour mash. Next I sparge it through an ancient, tatty grain bag pegged into the top of my two equally old and tatty 5 gallon fermenting bins. None of my two bins have taps - I just pour it all through the mesh and scoop out what is left of the grain with a spoon.

I sparge up to about 3 gallons using water from the electric kettle which I just pour over the grains and let it drain often while the next lot of water is heating up in the kettle. When I sparge to the 3 gallons mentioned I pour the wort back into the dixie, bung it back on the cooker and put the ring on full to bring it up to the boil. In the meantime I re-mash the malt in the grain bag in the fermenting bin with two kettles of boiling water and a good stir. When the main wort comes to the boil I add the first batch of hops and the few pints of wort from the re-mash. Then I discard the spent grains and wash out the fermenting bin ready for the boiling wort. I boil for 1½ hours, using (usually) 2 ounces of challengers hops in the first place then another half an ounce about halfway through the boil and ending with a quarter ounce just as the boil is switched off - for aroma. I let this soak for about 20 minutes before pouring the (hot) wort through the old grain-bag into the equally old fermenting bin and sparging the hops with a couple of pints of (cold) water. At this point I whizz the hops and add 1 lb of sugar (usually white, sometimes demarara) and top the bin up to five gallons with cold water stirring vigorously. It's usually about 120 °F at 5 gallons so I put the bin (lid on!) outside to cool adding the Boots special yeast (flakes) at 70 °F (approx.). I then lug the bin upstairs into the box room where it ferments out. After about a week I transfer it by syphon to an old Boots wine fermenter with an air lock where it stays until it goes into the Keg.

This is the dropping system as advocated by Graham Wheeler; and I think it is the most important part of the whole process (well almost!) - because it really helps to give an almost - ready beer to go into the keg for final conditioning (and drinking!) My kegs are both old but sterile, like all my gear, and I always have one conditioned (drinking!) and one conditioning - i.e. getting ready, fined and primed.

It will be obvious that a 'production' brewer needs two fermenting bins, two secondary fermenters, and two barrels (kegs) - at least. I always have one five gallon brew in primary fermentation, one in secondary (under air-lock), one in keg conditioning, and one drinking ~ my idea of heaven!! I'm not suggesting for a moment that anyone should drink to excess but a ready supply of good beer is a great thing to have! My house beer is a pale coloured bitter - I only use pale malt and a little sugar but you can make what ever you want obviously.

Production Brewing

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You don't need a fixed, standard recipe to go into mass production just enough

equipment and a system. The benefits are incredible once you've got used to it and gone 'on stream'.

My recipe is;-

- 61b crushed pale malt (Maris Otter)
- 1 lb. sugar
- 2oz Challenger hops (main boil)
- 2 oz Challenger hops (half way through)
- Quarter oz Challenger hops at the end of the boil (aroma)

As I have said I mash in 2 gallons of water at 150 °F for one and a half hours (I do not favour 4 hour mashes!), sparge with the kettle to 3 ½ gallons - more or less - and boil with the hops for one and a half hours, adding the hops as described.

I find that the Boots special yeast (£1.48 for 5 sachets) works perfectly and consistently. (No, I don't work for Boots PLC!)

As I said, the final result is an aromatic, hoppy, straw coloured bitter of 1036-1038 original gravity - not too strong for a good drinking session! I buy my malt in bulk and mash because it makes the best beer and it's cheapest.

For the same reason I tend to use Challenger hops. They are very versatile, have a good flavour and aroma and are reasonably priced. Recently however I have begun to use Goldings again as a flavour and aroma hops - the flavour is hard to beat. My brother-in-law (a very accomplished brewer) swears by Goldings and Fuggles and he's got a point!

The foregoing are just my views on the practice of home brewing. Production brewing is very satisfying but it needs an organised, even professional, approach.

If anyone disagrees with my ramblings then I will be delighted to hear from them. Free exchange of ideas is the whole crux of the Association and without this we may as well all carry on going our own separate ways. We all have our own little ways of doing things and our preferred methods. For example I add my sugar after the hop sparge whilst topping the wort up to length but my brother-in-law Frank adds his to the wort and boils it with the hops. He swears that the beer clears better as a result. I don't agree but we agree to differ and we both produce excellent beer.

Jack Stansfield

Spring Time Brewing

Continued from page 11

More interesting were all the things we never get to see in the UK. Sixty litre stainless steel boilers with high surface area heaters, all copper stills from Italy and a fully integrated stainless steel mash tun, thirty litre capacity with built in stirrer and fully insulated. I'm still making enquiries about the temperature control but if it is good as I gleaned in my short visit, I shall be studying how to make these available to UK Mashers! I have to check the price again. Impressions were coming in to thick and fast, but a figure less than £200 is stuck in my mind.

House Brewery

In view of this off the shelf option, I'm quite glad that I haven't made much progress in converting my buckets and basins method of brewing into the more sophisticated house brewery of which I dream. Simon Barnes of Leeds responded to my Crie de Coeur in the last edition of *Brewers Contact* and is now busy sorting out a control system for brewers like us. Rest assured, I shall move British House-Brewing into the 21st century, even if we do actually spend most of our lives trying to brew beers from the last.

Clive

Just in case you haven't heard, Clive's latest book

'The Craft of House-Brewing' is available from Montag Publications, 6 Minster Avenue, Beverley, HU17 0NL, and from the better Homebrew Shops. It really is a fascinating and 'must have' book for the keen craft brewer. We will have a full review in our next edition, Editor.

Just Published**CLASSIC STOUT AND PORTER****by Roger Protz (Prion £9.99)****A Review by Graham Kingham**

A very well presented easy read packed with a lot of interesting material from around the world, divided into several chapters, including the brewing process, a world tour of producers and cooking with stout (does modern man do this sort of thing?). Aimed at the serious beer drinker, not home brewers, but any good book on brewing must be a most welcome addition to your library. I have tried some of the local brews mainly at Beer Festivals and do not disagree with his selection, many not being readily available. However, some Porters and Stouts that have been bottled are occasionally found.

I was surprised at the brewery's interpretation of styles; the historic background, particularly Ireland, has been well documented. Whether the action of CAMRA has caused the success of this style as stated remains to be seen.

From a Craft Brewing perspective, I would have liked to see more recipe information for a comparison; some details are given and could be used, although I do not think I could rise to the challenge to mix a lactic old batch with a fresh brew to emulate an old entire, whose name escapes me!

I hope that this book encourages more people to seek out our heritage, all be it in a modern interpretation, and keep the variety of beers available.

A highly recommended addition to any serious homebrewer's library.

Graham Kingham.

Graham is an enthusiastic craft brewer, living in West Sussex. He is developing local homebrewing courses, of which more in the next issue of 'BC', and is encouraging his local landlord to brew his own beer. Anyone interested in running local classes is advised to contact Graham, via James.

STOP PRESS

As we finally go to press in mid-July, rather than early June as planned, first please accept my apologies for the delay.

The idea of actually brewing at GBBF has been an ambition which I thought we might achieve in about 5 years time but when it suddenly became a possibility this year turmoil set in.

Firstly when we were eventually told how much the essential 'Olympia facilities' would cost, £400 for water and drainage, or £630 with a sink, and £59 for each electricity socket, the idea seemed impossible. These charges are made by the Olympia management, not by CAMRA who offered us the stand space at a reduced £176.

However in conversation with some contacts in Messrs Wm. Baird & Sons, Edme Ltd. and Lupofresh Ltd there was much support for our plans to the extent that provisional offers of sponsorship were made. I am delighted that these offers have turned into practical reality, not only in making financial donations towards the costs but also in considerable practical help by providing malt, hops and material which will help us decorate the stand for GBBF.

We have decided to do without the sink!

There then remained the practical problems, particularly in relation to the usual high temperature at Olympia affecting the fermentations and wort chilling. We hope we have sorted this. I am sorry for the short notice but please try to come to GBBF and meet your fellow CBA members and other home brewers. Must dash to sort out my beers for the GBBF tastings.

James

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