

Minutes from The Midlands Craft Brewers meeting held at The Western, Leicester on 16th January 2016

Members present were Colin, Mark, Richard, Ray, Jon D, Des, Bruce, Tom A, John C, Allan, Charles, Karl, Jon A, Steve H, Peter, (chair) Alan, Dave, Mike C, Malc, Nick W, James F, Andy & Matthew. Apologies were received from Steve R, Adam, Sean, Russell, James S, Ian R-B, & Ian P.

The meeting commenced at 12:00 with the usual round of introductions.

Beer tastings; For this purpose the meeting was split into four groups. Members beer submitted included a Sweet Stout, Wheat Beer, Strong Bitter, Old Peculier Clone, ESB, Black IPA, Belgian and a Dark Winter Strong Ale. After sampling, feedback to the brewer was given by each group. The recipes where submitted can be found attached to these minutes.

This was followed by lunch.

Techniques / ideas from members resulting in improved beer quality.

Peter started off a general discussion by describing how water treatment with A/M/S and monitoring pH values had increased consistency and quality, also maintaining the mash temperature at the desired level. Other factors were pitching enough yeast and ensuring good temperature control during fermentation and in particular avoiding sudden swings. Originally an insulated thermostatically controlled fermentation cupboard had been utilised. However after a recent move a FV merely insulated with Thermal Wrap has been used whilst a water jacket has been imported from Coolzone for use in warm weather.

Peter has recently cultured yeast from bottle-conditioned beer rather than the slants he had been previously maintaining from Wyeast or Whitelab strains. The particular strains were obtained from Proper Job & Bengal Lancer, these being widely available from supermarkets. Using a fresh bottle for each brew to culture from had resulted in more consistent quality with predictable fermentations, also this had saved time spent preparing slants with no increase in overall cost.

John C mentioned that treating his water with 15ml A/M/S per 23L had improved quality plus monitoring pH values and controlling fermentation temperatures

Steve H explained that purchasing a malt mill had given him better and more consistent extraction rates from his malt. Other members reported similar findings and there was general agreement that malt bought pre-crushed can vary quite widely in extraction rates this being due to the husks becoming separated from the flour during transit which could vary widely depending how the sack had been handled. It was also mentioned that whole malt has a longer shelf life.

Richard stated that the water information received from Severn Trent differed from the water sample sent to Murphy's for analysis. Another member mentioned that water supplies are often blended from different sources by the various water companies so that may account for the discrepancy. Allan explained that S/T had informed him that they only blend water during drought conditions or when essential maintenance is being carried out. He also mentioned that Murphy's results were from one sample only whereas S/T results were from samples taken over at least a 1 year period. In addition Allan had found S/T to be very helpful particularly in supplying Ca & Mg values which are not included in the general information data.

Malc explained that attending MCB meetings and reading John Palmer's books had both been beneficial. Modifying a fridge with an STC1000 controller in conjunction with a tube heater had ensured complete control of fermentation temperatures, Malc also pointed out that paying close attention to cleanliness and sterility were important and mentioned that he now only used sodium percarbonate for cleaning followed by a rinse with Star-San to ensure sterility.

Mike C explained that changing from an immersion chiller to a plate chiller had resulted in quicker cooling times and in addition maintained that chilling the fermented beer before packaging helped in dropping excess yeast out prior to packaging.

Allan stated that treating his water in conjunction with pH monitoring had improved quality, the measurement being taken post-boil. Allan does this so that the effect of water treatment carried out at each stage of the brewing process is monitored. This final check is based on the fact that if the final pH is ok, then pH at each stage is also likely to be correct. Allan has established a standard water treatment for each beer style so this method ensures there is no drift in pH values over time. Mike C commented that the head brewer at Thornbridge had stated that maintaining the correct mash pH in the brewing process was the most important factor. Allan mention other measures leading to improvements, these included maintaining constant fermentation temperature which was monitored via a Thermowell, also re-hydrating dried yeast, a practice which most members carried out. Other factors Allan mentioned included were

using fresh ingredients; hop additions after cooling to 75- 80C and dry-hopping for a week at 12C.

Ray informed the group that steps taken to minimise oxidation resulted in improvements to quality, in particular avoiding splashing and always using tubing when transferring hot wort or beer. He told us that all his brewing water is now treated with Campden tablets to ensure chlorine removal and that this had also helped.

James F had found a water filter useful to remove chlorine and stated that his insulated mash tun (thermopot) had managed to reduce any heat loss to only 2C after 90 minutes. A brief discussion on how effective thermopots and picnic type mash tuns were at maintaining temperatures and various comments followed, citing the pros and cons of both types. Some have found thermopots to be of poor quality with missing insulation and ineffective seals and the general advice was to buy from reputable dealers.

Bruce mentioned the importance of keeping meticulous brewing records enabling the brewer to make comparisons of differing techniques, recipes and ingredients.

Jon A mentioned that a starch test that he'd performed has shown starch still present after a 90 minute mash. After some discussion the opinion seemed to be that stale malt may have caused this as other members who used this test reported that after 45 – 60minutes all starch had been converted.

Jon D enquired about temperature discrepancies between thermometers, after a brief discussion it was suggested that a high quality guaranteed master thermometer be purchased from group funds to enable members to check the accuracy of their own models. *Note: Subsequent enquiries have found that a standard thermometer from Stevenson Reeves at about £7.50 plus vat with a +1 / -1 degree error rate would seem adequate for our requirements, so purchasing a more expensive model would seem unnecessary. Allan will be contacting members shortly to place a bulk order which would minimise postage costs.*

Members Discussion Topics

Tom A enquired if there were any members with experience of upscaling their brews from 23L to 100L or even larger. He was interested to know any problems / advantages encountered and changes to equipment.

Steve H cited improved consistency and control

Peter suggested that the initial temperature rise after pitching the yeast would be greater than usual and should be allowed for.

Malc drew attention to the drawbacks of manual handling at larger scales and the advisability of pumping liquids to tanks already positioned.

Alan stressed the need for the suitable location of larger equipment and ensuring that there was extra storage space available.

Nick suggested that splitting the brewing preparations over a few days could be helpful and save much time on brew day.

Announcements and Treasurers Report

Allan announced that the next meeting will be held at the The Bridge Inn, Burton (Burton Bridge Brewery) on Saturday 5th March.

A brewery trip is planned to visit Charnwood Brewery in Loughborough and will be organised by Alan. It was proposed that the date should fall in between the MCB meetings.

Peter (treasurer) announced that the balance for both MCB accounts was approximately £1000 in total. At this time he was unable to provide the exact figure due to uncompleted current transactions. *Now that the transactions are complete the total MCB account balance is confirmed at £977.33*

Allan announced that the annual joint MCB / NCB competition would take place as usual, members preferring a one day event similar to the last two years. The beer style would be decided later.

Any Other Business

Karl enquired if it would be worth purchasing a grain mill for MCB use, however no decision was reached at the meeting.

Bruce announced that he had some equipment that was no longer required, consisting of a 45L aluminium pot plus a S/S 30L pot and interested members should contact him directly.

Andy enquired if there interest in holding an internal competition; after a brief discussion a W. Mids vs E. Mids event seemed favourable.

The meeting closed at 16:00

Midlands Craft Brewers

BEER RECIPE CARD

BREWER:	Richard and Colin	RECIPE NAME:	Ruby Tuesday
ORIGINAL GRAVITY =		1.057	
GRIST (Malt Extraction Efficiency Calculated @ 78%)		Weight (gm)	Ratio %
Maris Otter – Warminster Low Colour (2.5 EBC)		4.962	89.3%
Crystal Malt (100 EBC)		0.241	4.3%
Carapils (3.9 EBC)		0.207	3.7%
Chocolate Malt (1050 EBC)		0.147	2.6%
TOTAL GRIST		5.557	100.0%
COPPER SUGARS		Weight (gm)	
N/A			
HOPS FOR START OF BOIL	FWH /YES	Weight (gm)	Time (Min)
Celeia (4.36%)		22	60
Fuggie (5.68%)		18	60
Celeia (4.36%)		22	30
Fuggie (5.68%)		18	30
HOPS FOR AROMA		Weight (gm)	Time (Min)
Celeia (4.36%)		15	0
Fuggie (5.68%)		15	0
ADDITIONAL INFORMATION	DETAILS	COMMENTS	
BREW DATE	15 December 2015		
BATCH SIZE (LITRE)	23.0		
PRIMING SUGARS			
BITTERNESS UNITS (IBU)	36		
MASH TEMPERATURE (°C)	69	Mash out 76C for 10 mins	
BOIL TIME (MINS)	90		
FINISHING GRAVITY (AG)	1.017		
ALCOHOL (ABV)	5.20%		
COLOUR (EBC)	35		
YEAST VARIETY	Nottingham		
QUANTITY OF YEAST (GRAMS, DRY OR BALM)	18g		
DATE RACKED TO CASK/BOTTLE	09 January 2016		
FINAL CASKING/BOTTLING GRAVITY (FG)	1.017	Forced carbonated	

BREWER:	jc	RECIPE NAME	Haunta weizen
Style, description and any background information about the beer:			
ORIGINAL GRAVITY =			1050

GRIST (Malt Extraction Efficiency Calculated @ 75%)	Weight (gm)	Ratio %
Maris Otter	1550	33.2%
Pale Wheat Malt	3000	64.3%
Torrified Wheat	100	2.1%
None	4	0.1%
None	5	0.1%
None	6	0%
TOTAL GRIST	4665	100.0%
COPPER SUGARS	Weight (gm)	
None		

HOPS FOR START OF BOIL	Alpha acid	Weight (gm)	Time (Min)
SAAZ	4.5%	12	60
SAAZ	4.5%	17	30

HOPS FOR FLAVOUR AND/OR AROMA		Weight (gm)	Time (Min)
SAAZ	4.50%	30	15

ADDITIONAL INFORMATION	DETAILS	COMMENTS
BREW DATE	24 Sept 2015	
BATCH SIZE (LITRE)	23	
PRIMING SUGARS	as normal	½ teaspoon sugar per bottle
BITTERNESS UNITS (IBU)	18.09782609	calculated
ALPHA ACID UNITS	??	
MASH TEMPERATURE (°C)	67	until pass iodine test
BOIL TIME (MINS)	75	
FINISHING GRAVITY (AG)	1010	
ALCOHOL (ABV)	4.9	
COLOUR (EBC)		
YEAST VARIETY	US safale 05	dried
QUANTITY OF YEAST (GRAMS, DRY OR BARM)	Lots	Taken from previous brew
DATE RACKED TO CASK/BOTTLE	30th Sept 2015	
FINAL CASKING/BOTTLING GRAVITY (FG)	1010	

Auto fill and protected cells

Midlands Craft Brewers

BEER RECIPE CARD

BREWER:	Jon D	RECIPE NAME:	Dale OP
This is a variation on the Old Peculiar recipe in the 3rd edition of the CAMRA brew your own real ale book			
ORIGINAL GRAVITY =			
GRIST (Malt Extraction Efficiency Calculated @ 85%)		Weight (gm)	Ratio %
Pale Ale malt		6720	86.3%
Crystal 30L malt		400	5.1%
Wheat malt		400	5.1%
Chocolate malt		280	3.5%
TOTAL GRIST			#DIV/0!
COPPER SUGARS		Weight (gm)	
HOPS FOR START OF BOIL		FWH /YES	Weight (gm) Time (Min)
Challenger FWH			37.29 90
Fuggles FWH			17.5 90
HOPS FOR AROMA		Weight (gm)	Time (Min)
Fuggles Late Boil		17.5	10
Cascade Whirlpool		12	20
ADDITIONAL INFORMATION	DETAILS	COMMENTS	
BREW DATE	27/11/2015		
BATCH SIZE (LITRE)	30.0		
PRIMING SUGARS	Dark brown sugar		
BITTERNESS UNITS (IBU)	31		
MASH TEMPERATURE (°C)	67		
BOIL TIME (MINS)	90		
FINISHING GRAVITY (AG)	1012.000		
ALCOHOL (ABV)	~ 5.7%		
COLOUR (EBC)	39		
YEAST VARIETY	WPL001		
QUANTITY OF YEAST (GRAMS, DRY OR BALM)			
DATE RACKED TO CASK/BOTTLE	14 days later		
FINAL CASKING/BOTTLING GRAVITY (FG)			

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BEER RECIPE CARD

BREWER:	Malc	RECIPE NAME:	Aussie Black IPA	
Water as for a bitter rather than pale ale to get softer hop flavour CA 120ppm, Mg 16ppm, SO4 196ppm, Cl 90ppm. Addition to whole HLT not just mash 1.5ml 80% lactic in mash, 2ml 80% lactic in sparge.				
ORIGINAL GRAVITY =				
GRIST (Malt Extraction Efficiency Calculated @ 85%)		Weight (gm)	Ratio %	
Pale Malt (Minch)		4200	87.1%	
Carafa III Special		220	4.6%	
Crystal		200	4.1%	
Pale Chocolate		100	2.1%	
Wheat Malt		200	2.1%	
TOTAL GRIST		4820	100.0%	
COPPER SUGARS		Weight (gm)		
HOPS FOR START OF BOIL		FWH /YES	Weight (gm)	Time (Min)
Ella 15.7% FWH			8	90
				90
HOPS FOR AROMA		Weight (gm)	Time (Min)	
Summer 6.4%		35	10	
Ella 15.7%		15	10	
Summer 6.4% Flameout		35	30	
Ella 15.7% Flameout		35	30	
Summer 6.4% Dry hop. Days 5-12		30		
Ella 15.7% Dry hop. Days 5-12		40		
ADDITIONAL INFORMATION	DETAILS	COMMENTS		
BREW DATE	25/11/2015			
BATCH SIZE (LITRE)	23.0			
PRIMING SUGARS	2g/l granulated sugar			
BITTERNESS UNITS (IBU)	53			
MASH TEMPERATURE (°C)	66.5 down to 65.5 90min			
BOIL TIME (MINS)	90 min	Electric boiler + Hop spider		
FINISHING GRAVITY (AG)	1.009			
ALCOHOL (ABV)	5.60%			
COLOUR (EBC)	53			
YEAST VARIETY	Safale US05			
QUANTITY OF YEAST (GRAMS, DRY OR BALM)	11g dry. Rehydrated 20m			
DATE RACKED TO CASK/BOTTLE	10/12/2015	In Primary 14 days. Dry hop days 5-12 Crash chill days 12-14 Straight to keg		
FINAL CASKING/BOTTLING GRAVITY (FG)	1.009 to keg			

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BEER RECIPE CARD

BREWER:	Nick W	RECIPE NAME:	Milky
Brewed as my first milk stout, took for sampling at MCB meeting in Jan 2016			
ORIGINAL GRAVITY =		1.045	
GRIST (Malt Extraction Efficiency Calculated @ 69% including lactose)		Weight (gm)	Ratio %
Marris Otter		3300	58.9%
Flaked Barley		1000	17.9%
Roasted Barley		500	8.9%
Crystal (150EBC)		300	5.4%
TOTAL GRIST			#DIV/0!
COPPER SUGARS		Weight (gm)	
Lactose (Granules) - Added at 10 mins to go on the boil		500	8.9%
HOPS FOR START OF BOIL		FWH /YES	Weight (gm) Time (Min)
Challenger (AA 6.1%)		50	90
HOPS FOR AROMA		Weight (gm)	Time (Min)
ADDITIONAL INFORMATION	DETAILS	COMMENTS	
BREW DATE	30th October 2015		
BATCH SIZE (LITRE)	23.0		
PRIMING SUGARS	Half tsp per bottle		
BITTERNESS UNITS (IBU)	34.6		
MASH TEMPERATURE (°C)	67c/68c		
BOIL TIME (MINS)	90		
FINISHING GRAVITY (AG)	1.020	Inclusive of lactose	
ALCOHOL (ABV)	3.50%		
COLOUR (EBC)	35.9		
YEAST VARIETY	Nottingham	Rehydrated	
QUANTITY OF YEAST (GRAMS, DRY OR BALM)	1 Pack		
DATE RACKED TO CASK/BOTTLE	14th November 2015		
FINAL CASKING/BOTTLING GRAVITY (FG)	1.020		

