



The Midland Craft Brewers Association



Brewing crafted ales.....at home

**Meeting Saturday 5 March 2011.
Questionnaire on brew topic: Yeast.**

1. Have you or do you use dried yeast for fermentation? Please state which brands you've used.

Yes 17/17

Nottingham Danestar

Munton's Gold

Safale 04

Safale US 05

Safale T 58

Saflager S23

Windsor

Gervin

2. Have you or do you use liquid yeast cultures? Please state which brands you've used.

Yes 12/17

White Labs; Various WLP 002, WLP 023, British Ale, Belgian, Danish Lager, Czech Lager,

Wyeast Y1469, Y1318, Y1728

3. Have you used yeasts from any other source, for example from yeast slopes, a brewery, a bottle conditioned ale? Please give details.

**Brewery 3/17;
King**

Marstons , London Brewery, Nottingham Brewery, Fullers, Greene

**Bottled 6/17;
Lightning**

Guinness, White Shield, Fullers, Youngs, Breakspear Summer

Pub barrel 1/17

Brewlab slopes 2/17; TV1, TV3

4. Of the 3 options above, which do you usually use? Why?

Liquid 4/17 flavour, variety, value for money

Dried 10/17 for Q5 reasons.

6/4 in favour of dried.

5. Do you have a particular yeast which you have come to use more often than not? If so what is it, and why have you selected it?

Cost	7/17 (Dried)
Convenience	12/17
Reliability	11/17
Attenuation	5/17
Flocculence	5/17
Flavour	7/17 (Neutral!) (not good for hop flavour and aroma)
Alcohol tolerance	3/17

Other (please give details) **Availability as bought large box.**

Clarity and clean flavour.

Good all-rounder.

Repeated use of a particular strain cultured and

stored.

6. When you vary your yeast selection, what criteria influence your choice?

Cost 2/17 (Dried)

Convenience 5/17

Reliability 8/17

Attenuation 7/17

Flocculence 5/17

Flavour 10/17

Alcohol tolerance 7/17

Other (please give details) **Suitability for beer primary concern. Suitability for style.**

7. Do you or have you cultured your own yeast? If so why..?

Yes, 9/16

Selectivity

2/17.

Flavour

3/17 - Clones

Cost

1/17

Fun

1/17

Just giving it a go

1/17

8. ...and how do you store it?

Refrigerator 7/17 4/6 months on Agar slopes.

Freezer 1/17

9. How do you store the brought yeast you keep in stock?

Store Cupboard 3/17 (Dried)

Refrigerator 15/17

Freezer 1/17 (500g Tubs)

10. Do you make a yeast starter culture in advance of the brew day?

Yes from Agar/liquid cultures.

Yes near sell by date increase yeast cell count

Yes sometimes

11. If so, what procedure do you follow?

- Streak fresh slope, incubate, use to streak 3-4 fresh slopes, incubate, transfer to broth on stirrer. Details depend on temperatures, volume of brew and strength. Have even fed starter culture with sugar to up biomass on occasion.

- 1 – 2L starter with spraymalt OG 1040.

- Follow instructions

- 20ml ->200ml -> 2000ml of ~1040 DME.

- Warm sugar solution in sterile milk bottle for about 4 hours then some wort an hour or so before pitching

- 1L Starter 100g DME

12. Do you rehydrate dried yeasts?

Yes 11/17

No 2/17

Sometimes 3/17

13. If so, what procedure do you follow?

Instructions on packet 13/17

½ pint of cooled boiled water and spraymalt; rehydrate and starter.

14. If you don't rehydrate dried yeasts, do you simply chuck 'em in? Why?

Just following the instructions on the packet

Works for me

Sometimes – no apparent difference in performance RC

Convenience

15. Please explain why you've chosen this process.

It is easy and it works!

Short of time and it works

I believe that after re-hydration, a greater number of live yeast cells survive.

16. If you make a starter culture or rehydrate dried yeast, at pitching do you match it's temperature with that of the wort? If so, how?

Yes 12/17 With cooled wort, within a few degrees, with rehydration medium at correct temperature. No prob within 5°C

No 4/17 Cooled to room temp and starter stored at room temperature.

17. Textbook advice for pitching temperature tends to be in the 18°C – 22°C range. What temperature do you pitch at, and why?

As above 7/17 Occasionally Higher 1/17

20°C – 24°C 3/17

24°C difficult to get lower

25°C – 30°C It works

Varies – 20°C ale malt interest 17°C ale hoppy interest, 10°C for lager,

22°C – vigorous start and cold break ends here

16°C – 18°C – Increase O2 solubility allow natural °C rise.

18. Do you pitch into the wort after the cold break or do you transfer the wort to another container after the cold break, leaving the trub behind, before pitching?

Directly pitch 7/16

Transfer and then pitch 8/16

19. What temperature do you maintain for the primary fermentation?

18°C - 20°C

20°C 4/17

20°C - 24°C 4/17

25°C then drop to 20°C when head forms

Ambient

19°C – 23°C

20. Why?

Gives good length fermentation. 3/17

Clean flavour

No temp control – Room temp.

It works

To suit beer/yeast.

'Textbook' advice/ Middle of recommended temperature range

Ambient – temperature control not yet set up.

Avoid diacetyl and fusel oils

Speedy fermentation – 48hrs!

21. Do you deliberately vary the temperature during fermentation?

Yes **1/17**

Cool 24hrs before racking **4/17**

No **9/17**

Will be doing so **1/17**

Warm to 22°C – no reason stated.

Warm a bit then chill

22. If so do you do this to elicit a reaction in the yeast?

Yes **1/17**

Flocculation **3/17**

Diacetyl control **1/17**

Raise the temperature to help the yeast clean up any off flavours and then drop the temperature to

help the yeast drop.

23. Do you have any experience of fermentations carried out beyond the ideal temperature range, and if so, what were the results like?

Once SO4 @ 27°C – fine.

Once at 26°C results were fine

Wheat beers can be fermented at a higher temperature to produce more phenolic flavours.

Slow in cold off flavours in summer.

24. Yeasts require various nutrients obtained from the wort, to reproduce and ferment. Do you add yeast nutrients to your wort at pitching?

Yes **2/17**

Yes to starter **2/17**

No **13/17**

25. If so why?

Forum advice. Helps them get going! - Starter.

To ensure good attenuation and flocculation, reduce diacetyl and help maintain the yeast in good condition for future re-pitching.

Ensure healthy yeast performance

26. What do you use?

Youngs yeast nutrient

Wyeast

27. Yeast needs dissolved oxygen to reproduce. Do you aerate your wort?

Yes

16/17

No

1/17

28. How do you aerate your wort, if you do so?

In-line aerator and vigorous stirring and transfer outlet via a mesh.

By Dropping

Pouring from one bucket to another.

Sploshing about.

Stirring

Shaking in $\frac{3}{4}$ full gallon containers.

29. Have you or do you re-pitch directly from one fermentation to another?

Yes, I pour the fresh wort on top of the yeast in the bottom of the previous fermentation vessel 2/17

Yes, I collect the yeast from the bottom of the previous fermentation vessel and pitch it into the fresh work. 5/17

Stored in fridge 1 week

No. 7/17

When brews follow one another closely.

Collect yeast from second head – avoid dead cells, trub in bottom.

30. If so, what steps do you take to ensure the yeast is clean and avoid passing on undesirable waste from the previous fermentation such as trub?

Skim

Double drop for bottom yeasts that can't be skimmed from head

It's never been an issue, once didn't because hints of acetic in the aroma of the yeast.

Why are you worried about trub??? Never an issue for me in 21yrs of brewing.

31. Before bottling or kegging do you krausen (reseed) with fresh yeast or do you rely on the yeast from the primary to ferment the primings?

Primary Yeast 11/17

krausen 1/17

Once Belgian/ 1070 2/17

32. If you krausen, what procedures do you follow?

left - 1/2tsp Nottingham, rehydrated. Added to bottling bucket with primings, stirred gently, for 15 mins then stirred gently every 10 bottles.

- 1 tsp yeast slurry

- Take a jug of vigorously fermenting wort from another brew which has an alcohol tolerant yeast such as Nottingham or Gervin, and put 2 to 3 tsps into the bottle (for 500ml bottles), proportionately more or less for smaller or larger bottles, ie 2 or 4. Also add normal amount of priming sugar.**
- Fermenting wort 1ml per bottle/20ml 11.5L keg.**
- Have experimented with small yeast starter mixed into bottling bucket prior to bottling**

33. If you do krausen, do you for technical reasons do so with a different yeast than that used in the primary, and why?

Flocculation 1/17

Essential for less tolerant strains