















## 'Tis the season

### Here's to your local brew!

#### Why is Flat Rock Brew Cafe different?

It's not every café / restaurant that has their own working craft brewery on-site. We are a unique 'brewpub' and we are proud to say that the suburb of Naremburn is the owner of the only brewery on the Lower North Shore – you should be happy about that!

Beer is quite wonderful, and if you think about how it has evolved over time to end up in the form we all recognise, it is nothing short of amazing.

You see, in order to get a beer into your glass, the process is quite remarkable and complex. How it ever came about is incredible.

There are four ingredients in beer: malt (usually a malted cereal grain such as barley, wheat, rye); hops; water; and yeast. What's so remarkable about that you ask? Well, a cereal grain firstly has to be malted – now that process must have happened by mistake at some point – it is believed it first occurred in ancient Egypt, but I would expect wherever it happened, it can only be described as a fluke. In order to malt a grain, it has to soak in water, germinate and then dry out – this process basically converts the starches contained within the grain, into sugars.

Well, OK, that's easy, but the next stage is then to extract the sugars from the malt - that's where the brewer starts to get involved and things start to get a little tricky. The malt has to steep in hot water in order to extract the sugars that are later fermented, but it has to be at a certain temperature. Why, because too hot or too cold and you end up with the wrong sugars being extracted that are either very fermentable or not fermentable at all! It's the brewer who has to control this and make sure the required outcome is achieved. And did I mention the water? That has to be prepared by filtering and adding certain minerals that the beer style dictates. Still with me?

**'Beer makes you feel the way you ought to feel without beer' - Henry Lawson**

Once the sugars have been extracted, the spent malt is rinsed and removed and the liquid boiled. Hop flowers are added which come from the female flower from the hop bine (not vine!) and looks like a small pine cone. In between their leaves is a resin substance that provides the bitterness to balance the beer so it is not too sweet. There are bittering hops and aroma hops, American, European, English, New World, again, the type used is dependant on the beer style – generally different

varieties are added to the boil at different times whether to bitter the beer or give the beer a particular aroma.

**Once the boil has finished**, then the resultant wort (pronounced 'wert') is cooled to a point where the yeast can work effectively in the fermenting vessel. You see the yeast are the little critters that create the magic – they eat up the sugars and produce alcohol and CO<sub>2</sub>. This process lasts a few days, depending on the yeast strain, but the liquid comes alive with activity during this period. If the temperature goes too high though, the beer can start to display faults usually in the form of off flavours. Too cold and the ferment is sluggish. On top of that, if any bad bacteria gets into the wort, then you are in trouble. It's safe to say that,

without careful temperature control or a strict sanitising regime, you end up with an undrinkable, strange flavoured liquid.

Now do you see what I mean when I say that it is a remarkable process? There are a number of steps in the process and you would expect trial and error would have played a big part in the evolution of beer.

Well it probably did!

Anyway, that's what happens on a daily basis downstairs at Flat Rock. Amazing when you think about it really. So next time you take a sip of your local brew, hopefully you can fully appreciate all that goes on to get a beer from only four ingredients, into your glass.

But that is what Flat Rock is all about, educating our customers about one of Australia's favourite alcoholic beverages. Just ask our staff to explain or show you around the brewery.

- Karl Riseborough is proprietor and head beer quality tester at Flat Rock Brew Cafe.