

Water II or Take Me To The River

By Greg Hackenberg

"Thou ought to knowe that clere rennyng Water that ben nyghe to cytees in pure grounde as small brokes be the best and lyghtest. Water that cometh out of stony erthe where as is moche fumosityes is hevy, contagious, & noysom. Water of puddles or fenne full of frogges, addres, and other venymous worms be unholsom." - *Secretum secretorum*

In putting together the lesson on water for Beer School inevitably things need to be cut. This month's installment is going to cover some of things that could not be included or glossed over. So, for those who took the class, this could be considered a follow up, "for further reading" sort of thing. And for those that didn't, just keep on reading.

I mentioned last time that there were a few basic steps any brewer could take that could greatly improve their beer. Well, the most basic of all is simply to understand the water you are using and how it is going to interact with the beer you would like to make. It's going to take more than this one installment to do that, but this is going to get you on your way.

As I said last time, just about any potable, decent tasting water can be used to make beer. And our quote at the start generally concerns the best water to drink, but it has relevance. Potable water...you see what I did there? Working around the archaic language, it talks of three possible sources. The first is the clean flowing brooks, the best.

The second would be your "mineral water" often from some legendary source, typically renowned for some healing quality or what-not. I've been to a couple of these "healing" springs, and basically you're talking about water that tastes so awful it must be good for you. Whether it is or not, water from these sources possess high concentrations of off putting minerals, not to mention being terribly hard (more on that to come).

The third is good old swamp water. Fens are swamps, like Fenway Park in Boston which is nothing but a fetid morass built on the swampy bits off Boston Bay...okay, I digress, but I grew up a Yankee's fan...Bucky Dent and all that. While you could, given the boiling, make beer from it, surface water of this sort is typically very soft (again, more on that). Stick with the "best and lightest".

So what sort of water do we have 'round these parts? Is it the best and the lightest? Well, if you're talking Orleans and Jefferson...it aint bad, despite rumors to the contrary. Yes, the "we live along the nation's sewer..." and all that. And despite the bottled water craze, which more often than not is just filtered domestic tap water, even here we have pretty much the safest water in recorded human history. But what about beer?

I'll spare you the "how to read a water report" crap, because without seventeen phone calls and a few transfers to get to a hydrologist, what you would get from your water company is a laundry list of chemical names showing a whole lot of stuff federal regulation deem important for water to be deemed potable, that as brewers we could care less about. Potable water . . . remember?

What I mean by not bad, is that for brewing purpose, good old Mississippi river water falls in at the mid-range of the spectrum for beer, meaning, it's going to work reasonably well for nearly all beers, and there are no fundamental flaws with it that might have any detrimental effects on most beers. Hooray!

By "all beers" the range I'm talking about is generally the SRM. And this is the first definition I am going to throw out. That's **Standard Reference Method - SRM**, which is a measure of beer color. Anyone perusing BJCP style definitions have run across this, and most recipes and beer software will include it. Charts abound, but here are some highlights via BJCP: 2-3 is straw, 3-4 gold, 5-6 gold, 6-9 Amber, 10-14 amber/copper, 14-17 copper, 17-18 copper/light brown, 19-22 brown, 22-30 dark brown, 30-35 black, 35+ "It's like, how much more black could this be? And the answer is none. None more black." – Nigel Tufnel. I actually met Harry Shirer aka Nigel Tufnel, Mr. Burns, Smithers, et al...total, pompous, ass. Yeah, I know, now I'm starting to sound like Harold, but I digress...

So where are we? So Roughly 9-15 SRM is the ideal range for our water. Roughly because the water profile will vary as much as the river stages do, so we do see some significant oscillation throughout the year. The long and the short is, we're pretty fortunate with a middle of the road water that allows us to make most beer without too much trouble. Not everywhere can say the same...Houston...But we can go a lot better with a few tweaks.

I mentioned a few simple steps you can take, right? The one I'm going to start with, and this month's lesson is to **run your water through a carbon filter**. Club equipment includes one, with good reason. While chlorine will boil out, and our levels are not as high as some places, a simple carbon filter will get it out of the way from the get go. And it will remove any particulates and even some undesirable odors (read: summer river water, when the river stage is low). There are numerous options. I've got the basic cartridge type that will hook up to a standard hose which ran around \$30. The basic level carbon filters are cheap and since you are not running a household water supply through them, will last a long, long time.

Next, hoses. There are varicose web sites warning of the supreme dangers of drinking from a garden hose. It is true trace chemicals will leach into the water, but to do so you generally need to leave a hose full of water out in the sun a few days. I'm guessing you might have tasted such water in your lifetime and said "blech!" or something along those lines. So long and short is to do what you did then and just flush out the water that's been sitting around in the hose. Once you do the water should be just fine. If you have any concerns, you can pick up a Boat/RV/camper water hose with an FDA approval for drinking water.

Next up...what is next up? Mash pH. I know you're waiting with baited breath.

