

## Portable filtration for brewing water

### Part I

By Neil Mezebish

Last year at BrewCamp, we were all surprised to find that the water supply to our sites was chlorinated. Fortunately for me, Charlie Heaps had these little pills he gave me that supposedly eliminated the chlorine, but didn't do much for the smell or taste of the water which wasn't the best. It was what we had so I figured all would be fine after the boil. After a few months when I finally tried the BrewCamp beers, which weren't prize winners, I decided I needed to figure out something to do to ensure I started off my beers with the cleanest and best water I could get – without having to buy 12 gallons of spring or distilled water from the store every time.

Enter: The Filterinator

I wanted to come up with a portable water filter system that I could easily bring along with me to brewing events. After a little online searching, I was off to Home Depot. I selected a GE Heavy-Duty Household Water Filtration Unit



(GXWH35F, \$54.00) and also bought the better Carbon Sediment Filter (FXHTC, \$33.98). (The above photo shows the filter canister connected to the hoses and fittings. The photo on page 3 shows the filter unit mounted inside a standard plastic fermenting bucket.)

As is always fun, I then spent about 45 minutes picking out all the valves, fittings and lines I wanted. This combination is a bit over the top for 5 or 10 gallon batches since it is intended for entire households, but I wanted to get something that everyone could use in our large group brewing events... plus, isn't more always better? If you decide to rig up a filter, you'll find many options for smaller and less expensive combinations.

*(Continued on page 3)*

## Fermentation refrigerators: everyone should have one

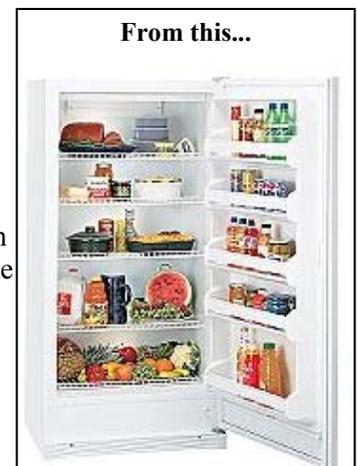
By Steve Kranz

In our last newsletter issue, I described converting a small dorm refrigerator to do temperature-controlled fermentations using 5+ gallon plastic "carboys" that B.J.'s bottled water comes in. Not content, I've been spending an unhealthy amount of time trying to figure out how to control the fermentation temperature of my 12.2 gallon conical fermenter. (I've only had the thing for about 6 years, so it was about time I got around to this project.) There were just no good options other than buying either a freezer or refrigerator that was tall and deep enough to hold the whole thing.

Because of the conical's height and depth, nothing smaller than a 16.7 cu. ft. freezer or a "freezerless" refrigerator will be large enough. Even then, the depth of the conical requires that the door of the appliance be removed, because the door shelves stick out too far and keep the door from closing

Also, all of the upright freezers I found in this size range have electronics in the door (like an external temperature control and monitor), which make removal of the door difficult-to-impossible. That leaves the only reasonable option being the freezerless refrigerator you see here.

The door is replaced with two panels of 32"x30" plastic sheets purchased at Lowe's. They actually come sized as 36"x30" so they have to be cut down, which is easy. In



From this...

...to this



*(Continued on page 8)*

# Club Hoppennings

## Club Mugs - time for a re-order?

Since the last time we ordered our engraved club mugs, we have gained some new members, and I know of several members who have lost theirs.

If you fall into one of those categories, or if you just want an extra mug or two, please send an email to [stevekranz@comcast.net](mailto:stevekranz@comcast.net) with the name(s) you want engraved, exactly the way you want them. If you are not familiar with our mugs, they are 12 oz. heavy glass mugs. The cost per mug is usually about \$16-\$18 including shipping, depending on the size of your order. You can see them on our web site at: [http://home.comcast.net/~midnighthomebrewers/membership\\_information.htm](http://home.comcast.net/~midnighthomebrewers/membership_information.htm)

## BrewCamp 2009 and beyond...

2009 will be the last time we have BrewCamp at Cunningham Falls State Park. If you'll recall, that is because the *pinheads* in our state government...the people who serve you and me (or is it we who serve them?) have banned alcohol from state parks and campgrounds after November 1.

Several alternate venues have been discussed, including private campgrounds such as Granite Hill Campground in Gettysburg, and Little Orleans Campground in Allegany County, about 100 miles from Westminster. We continue to solicit suggestions. Here are some considerations:

- We need easy access to running water;
- We need electricity;
- Our new BrewCamp home should be as close to Carroll County as possible, not because Carroll is so great, but because it is the center of gravity for our membership. If we go too far away, it will discourage members who cannot spend the whole weekend camping, from coming out just for a day to brew and have dinner.
- We need nearby bathroom and shower facilities.
- Many private campgrounds have Halloween weekend events during the month of October, to fill their campgrounds with families in the fall. Those might not be the best places or times for us to have BrewCamp.

If you think you know "just the place", please let us know as soon as possible.

## Lawnmower Beer Competition

Thanks to Debbie and Eric Lyons for hosting a perfect event in August. The turnout was excellent, as were the beers. Gary McNamara was the lucky (make that skillful) winner of a \$50 gift certificate to Maryland Homebrew, and Charlie Heaps won the 2nd Place prize of a \$25 Gift Certificate.

## 2009 Maryland Microbrewery Festival

This was another successful festival for our club, masterfully coordinated by Neil Mezebish. Thanks so much to all of our club volunteers. The homebrewing pavilion was a busy place, full of visitors all day long (the fact that we had a canopy in the rain didn't hurt), and did y'all see Melinda Byrd giving beginning and advanced homebrewing presentations to her audience? It was great to watch Melinda in action. Special thanks again go to Buffalo Wild Wings for its sponsorship of the homebrew competition.

## Holiday Party in December

This year, Charlie and Theresa Heaps will host the club's holiday party once again...thanks very much!. More details (and the date) to follow.

In the past, the Holiday Party is a time where we have tried to pencil in event dates and hosts for the upcoming year's calendar. We are always in the need for people to host tastings, so please don't be shy about volunteering to host an event..

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Since completing it, I brought it to Gary's for Big Brew, many of us used it at BrewHaHa, and I've used it for two other batches from my well. Though I have always felt my well water was good for brewing, and Gary feels the same about his, the beers from the filtered water are notably cleaner tasting and much clearer.

There's no question for me that filtering all the Chlorine, Bad Taste & Odor, Sediment, Sand, Rust, Soil, and Silt out of any water supply I connect to will help improve all the beers I brew.

I guess I now have to come up with some other excuse for brewing bad beers.

## Part II

By Steve Kranz

Since Neil started talking about his water filter plans, I decided to resurrect the water filter I had purchased long ago but only used a couple of times. I actually bought it from [www.morebeer.com](http://www.morebeer.com) to filter beer by pushing it with CO2 between two kegs, using a plain (non-carbon) filter cartridge.

But the filter's housing is basically a water filter that is used with a commonly available cartridge which can be used with a carbon filter to filter out chlorine and chloramines, as well as sediment and other impurities. The carbon filter cartridges something like \$15 and will last for 750 gallons. It was easy to configure a garden hose connection to the canister. Turn on the water, and the water coming out of the filter tests negative for chlorine. Woo-hoo!

I filter my tap water primarily to remove chlorine from it. Westminster's water supply is treated with free chlorine, which is the easiest form of chlorine to remove. Your brewing water should be free of any form of chlorine. If you are on a municipal water supply, call them to find out whether your water is treated with free chlorine, or chloramine. Either way, eliminate it by:

- Buying bottled water (the coward's way out);
- Boiling your water for 10 minutes, or letting it sit in an



open container, for several days (free chlorine only...chloramine does not evaporate);

- Chloramine: Treating your tap water with sodium metabisulfite (Campden tablets)
- Filtering through a carbon filter

Buying bottled water is the easiest way to deal with it. But it also adds a lot of cost to a batch of beer, and I'm tired of that.

Boiling as much as 20 gallons of brewing water takes a lot of time on brewing day, and uses a lot of propane. Treating with

Campden tablets costs almost nothing, I admit. But as Neil mentioned above, I'm not sure that the tablets don't add something unwanted to the water in addition to removing chlorine. Probably not, though.

Using a filter is also very inexpensive, when spread over the life of the filter. A cartridge with 750 gallons of filtering capacity will yield about 37 ten-gallon batches (I use about 20 gallons of brewing water for a ten gallon batch). That amounts to about \$.02 (yes, two cents!) per gallon. It also adds the benefits of removing sediment and other impurities.



For water supplies which use chloramine, a carbon filter will remove it, but it requires longer contact time with the carbon. In this case, the rate of flow through the filter should be less than one gallon per minute, which is like a trickle. If you have the time, fine. If you don't have the time, and your water is treated with

chloramine, go ahead and treat it with a Campden tablet. Boiling does not remove chloramine.

Since Westminster water uses free chlorine, it is easily removed by running the water full speed through the carbon filter. I use this filtered water for both mashing and sparging. But there is no need to waste the filter's capacity on water used for chilling, since that water doesn't go into your beer. Checking the filtered water with a chlorine test strip results in a nice chlorine-free result.

After use, you'll need to take the filter out and let it completely drain and dry for several days, to prevent any algae, mold or bacteria from growing on it. Put it away dry, and it'll be ready for your next use.



# Brewers' Tips & Tricks

Easy-to-do ideas and hints to help you brew better, and easier, beers. Send your own tips & tricks to Steve Kranz for them to appear here.

## Buying the impossible beer to buy

By Anonymous

A recent issue of **Zymurgy** discussed a beer (brewed by the monks of the abbey of Saint Sixtus of Westvleteren, Belgium) that is impossible to buy in the U.S. because the abbey only sells on-premises.

If you don't have the scratch laying around to fly to Belgium to buy some Westvleteren 12, dubbed "the best beer in the world", and you are willing to break a few state (and probably federal) laws to acquire it, here are the options:

1. First, the "probably legal" way is to find a "mule", i.e. someone who is going to Belgium and is willing to go to Westvleteren to buy some "Westy" for you. It is legal to bring alcohol into the U.S. in your checked baggage for your own consumption. No comment on whether it is legal for you to pay someone else to bring it into the U.S. for you.

So, good luck with that.

2. Go to <http://shop.belgianshop.com/index.html>. Contrasted with U.S. online vendors who won't ship to Maryland because of this state's asinine laws, BelgianShop is based in...Belgium. They apparently don't care about Maryland (or U.S.) law, and they happily ship anywhere. Options range from 2 - 4 individual bottles, to a whole case including the wooden crate. But hold onto your hat when you click "Checkout", and get ready to pay between \$27 - \$33 **per 11.2 oz. bottle** when you add shipping to the United States.

That's just plain stupid.

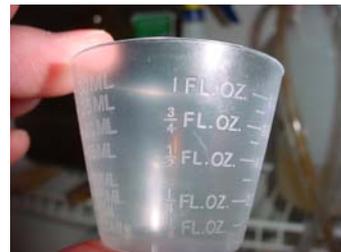
3. eBay to the rescue, where there are sellers in Belgium offering various Westvleteren beers by the six-pack or by the case, at more reasonable (but still outrageous) prices. For example, there's a seller who sells a six-pack of Westvleteren 12 to U.S. buyers for what amounts to \$98 including shipping. That's *only* \$16.33 per bottle. Your package will be delivered to your home by the U.S. Postal Service in about 8 days, well-packed

in a Styrofoam-lined box. Or, so I've heard.

And in compliance with eBay rules against buying or selling alcohol, you are only buying the bottles for their value as collectibles. Any alcohol in the bottle is incidental, and **not for consumption**. ☺

## Use medicine cups to accurately measure small amounts

The homebrewing aisle of the Washington Heights Pharmacy sells small plastic medicine cups in sleeves of 100 for about \$5.00. They are the same as those little dosing cups that come with many liquid over-the-counter meds like NyQuil. They are conveniently calibrated in units of Ounces, Drams, CC, ML, and teaspoon/tablespoon. I find measuring small amounts of liquid like StarSan in teaspoons, ounces or milliliters (ML) is a lot easier and more accurate when pouring into a cup, than a spoon.



## Drip tray for BBB conicals.

The lid from a round 10-gallon Rubbermaid water cooler is **the** perfect drip tray and utility shelf to fit underneath 12.2 gallon conical fermenter from [www.morebeer.com](http://www.morebeer.com). The lid fits comfortably within the diameter of the legs, and the three support braces which keep the stand rigid fit snugly and perfectly inside the molded channels in the top of the lid, to keep the shelf from moving when in place. Lastly, the formed inner lid will contain a significant volume of spillage.



# Pub Review: Red Brick Station - White Marsh, MD

By Steve Kranz

Red Brick Station is a pub in the Avenue at White Marsh. The bar has nice pub-style seating which was comfortable and gave us a good view of the Preakness on TV. The service was prompt and attentive.

## Beers:

- **Honeygo Lite:** very pale and thin. no aroma to speak of, an ok but faint malty flavor.
  - **Avenue Ale:** a degree more golden in color, but not much more aroma than the lite...a mild beer but with a little hoppy bite.
  - **Maibock:** solid malt backbone. Good crisp flavor, medium body,
- and faint nose, leaning to malt.
  - **Something Red...**copper red ale described as a "true beer lover's beer". Very crisp. Malty with minimal hops, just enough for balance. Distinctly drinkable.
  - **Dunkelweizen.** cloudy and brown. Nice banana nose and mild dark malt flavors come through the wheat. Most aromatic of them all
  - **IPA:** solid and tasty beer, but it seems that the brewer is holding back on both malt and hops. Good hop aroma but not enough hop flavor. More like an ESB.
  - **Spooners Stout:** roasty and "grainy", not smooth enough for

my taste in a stout.

**Food:** We only ate appetizers in the bar...

- **Shrimp potstickers** were tasty & pan fried (also available steamed), and served with a delicious ginger dipping sauce.
- **Buffalo Wings** were excellent.
- **Crab Soup** was very basic but tasty enough.
- **Crab Dip** was hot and served with bread. OK flavor, but *very* little discernible crab meat in it.

Overall, both the food and beers were just OK...a combined score of B-



## Dare we judge a man (or a President) by the beer he drinks? Oh, yeah.

By Steve Kranz

Remember the mess caused by Barak Obama's (referred to hereinafter as B.O.) comments about the arrest of Professor Henry Gates by Sgt. James Crowley? Having realized (or been told) that he himself had "acted stupidly", B.O. invited the two guys to a "beer summit" on the White House lawn. A "teachable moment", he said. Each of the three guys sat at a table and had a beer of his choice...also a "teachable moment". What do their choices in beer teach us about them?

B.O. drank Bud Light. That's sad. He could have used this teachable moment to "man up" and show us skeptics that he's OK with real beer. He could have, for example, had a Boston Lager. Or he could have wowed us with a 60 Minute IPA. Instead, he girded up and went for a Bud Light. It's clear that B.O. has no taste in beer, and no concern for his persona as President Of The United States, which is now that of a wussy beer drinker. I can't imagine Hugo Chavez, or

Vladimir Putin, or whoever the heck is in charge of Great Britain these days, showing him much in the way of respect now. What a lost cause...

Professor Gates requested Red Stripe at first...a risky choice, being an import. But he ultimately settled on Sam Adams Light. At least he had an American beer, right there on the White House lawn. In fact, he had the distinction of drinking the *only* American beer there, since the other two (Bud Light and Blue Moon) are owned by foreigners. But since his *first* choice was Red Stripe, I surmise that B.O. said, "Look, just pick something American." If that's how it played out, and he preferred a Red Stripe, a real man would have held his ground for the beer he really wanted. So, I'm not taking him for a real beer drinker, either.

Lastly, Sgt. Crowley had Blue Moon, a witbier, which identifies him as the only beer aficionado at this garden party. Yeah, he would've earned more points with me, and shown

himself to be a guy with some real stones, had he ordered a Rogue Arrogant Bastard instead. Still, Blue Moon is a decent beer that's somewhat off the path beaten by the drooling masses who drink Bud Light. So, Crowley's a guy who has expanded his beer palate. When important matters of state are to be discussed over a beer, in front of a national audience, he's the only one who went for a real beer instead of something "light". He no doubt realized that his choice had to withstand scrutiny from real men across the Fruited Plain, and he made a man's choice...a good, if safe, choice.

And as much as I might like to, we can't forget V.P. Joe Biden, who we learned also attended the party. He's from Delaware, home of one of the nation's most renowned micro-brewers. And what did he drink? "Buckler", a Heineken non-alcoholic beverage. How lame is that? Now to be fair, B.O. probably told him "Look, Joe. If you come, there'll be no beer for you. I can't have you sitting there saying something stupid...AGAIN!"

# Midnight in California

Five club members traveled to Oakland, California to represent the Midnight Homebrewers' League at the 2009 National Homebrewers Conference. We attended seminars, had many good beers (and a few crappy ones), took in many beer and brewing venues of Oakland and San Francisco, and served four of our own outstanding beers to the conference's 1,100+ attendees during Club Night on Friday evening.

The hotel was by far the best venue of all NHC's I have attended. The meeting rooms were all on one floor except for one, and the hall where they set up large events like Pro Brewers Night and Club Night was absolutely huge, with lots of room.

The vast majority of clubs represented at Club Night were from California, with a smattering of clubs from nearby states. We were by far the club which had traveled the longest distance to get there, and although it didn't win us any prize, dozens of people marveled at how far we had traveled, and thanked us for bringing such good beers with us.

## Most memorable beer that was good at club night:

- Chocolate cappuccino hazelnut stout...yuh!

## Most memorable beer that was bad at club night:

- Some mead which both Gary and Fritz said was just plain putrid.

This year's seminars were a mixed bag. The two which I enjoyed the most were both on the subject of yeast. Also

enjoyable and informative was a discussion of brewing great German lagers, a panel discussion on mead, and a "Squeaky Clean" seminar on cleaning and sanitation. Not so good were seminars on water chemistry, proteins and head retention, and beer color.



The Bay area has an excellent beer scene, which we enjoyed as much as we could in the limited time we had. In the immediate vicinity of the conference hotel sits a nice brewpub called Pacific Coast Brewing Company, where we had many meals because a) their beers and food were good, and 2) it was less than a block away. Another block and a half past Pacific Coast, is The Trappist, a small, crowded beer bar (no food), that serves only Belgian style beers! Bottles, drafts, imports and domestic Belgian styles are all served in that particular brewery's glassware.

Across the bay in San Francisco, members of our party also visited the Magnolia Pub and Brewery, and the 21st Amendment Brewing Company. We almost paid a visit to the San Francisco Brewing Company which we passed while in search of Chef Jia's restaurant for dinner in Chinatown, but it just didn't work out. But we did have the best hot and sour soup, and fried rice dishes we'd ever tasted at Chef Jia's, along with many other different entrees, so none of us felt too badly about skipping the brewpub at the end of the block.

Next year's National Homebrewers' Conference is in Minneapolis, Minnesota.





## Events Calendar

For all tastings, \$5 per member (\$7 for guests) covers the host's costs. RSVP directly to the host, or as otherwise indicated. If you wish to schedule an event, contact Event Coordinators Eric & Krista Custer.

### October

8-11 BrewCamp @ Cunningham Falls State Park

TBD Annual Chili Cook-off hosted by Gary & Lydia Cress

### November

OPEN - Happy Thanksgiving!

### February

TBD Annual Mardi Gras themed tasting hosted by Michelle and Steve Kranz

### December

5 Free State Homebrew Club Guild Holiday Party @ Clipper City.

### March

TBD Quarterly Membership Meeting

TBD Holiday Party hosted by Charlie and Theresa Heaps

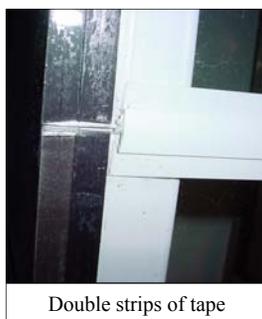
### April

TBD

### January

*(Continued from page 1)*

between the two panels, you can see a white plastic strip which keeps the two panels together so there are no gaps for cool air to escape. The strip is actually a piece of vinyl siding connector, that has a channel on the top into which the plastic sheets sit and come together. And holding the whole thing onto the refrigerator is 1/2" magnetic tape.



Double strips of tape

But about the tape...the stuff works OK for lightweight items. Not that the plastic sheets are all that heavy, but they are large, and flexible. And when the refrigerator is cooling, the differential in temperatures on the inside and outside of the 'fridge causes the plastic to "deflect" or bow out slightly. When they are hanging on the 'fridge this puts a lot of stress on the tape. It was too much stress for the tape I bought at Lowe's or Home Depot, which both came un-stuck from the plastic sheets, and did not hold the plastic snugly against the metal refrigerator frame. So I went online and found some heavier-duty magnetic tape with a stronger-bonding adhesive. Then, I used two strips instead of one, for added holding power.

It works great now. Both the top and bottom plastic windows are easy to take off to access the fermentation going on inside, and I can see what's going on without opening the door.

As this photo shows, when the large conical fermenter is not in the 'fridge, I can replace one of the shelves, and put a number of fermenter buckets or carboys inside.



What's in there in the photo below are the two batches of mead (the two buckets are one batch, and the carboy is the second) which I brewed at the Brew-Ha-Ha. The carboy on the top shelf has the thermowell and temperature-controller probe inserted down into the fermenting must, and the controller is keeping the whole fermentation down to whatever temperature I set on the controller. In this case, it's at 67°. Because the fermentation in the

two buckets was initially so vigorous, I replaced the airlocks with blow-off tubes which release CO2 into the glass jar with water in it.

So, more on the 'fridge.

The one I went with is the

Sears 16.7 cu. ft. freezerless refrigerator which is also available as a Fridigaire brand. It comes with wire shelves which are completely removable. A version with glass shelves is available, but it's more expensive.

As of this writing, the refrigerator is on sale at Sears for \$479.



Fermentation of the Buckwheat-Cherry Mead went a little crazy at first.