



The Cellar

The Official Newsletter of the Colonial Ale Smiths and Keggers

Virginia Beer Blitz Wrapup

The Fourth Annual Virginia Beer Blitz was held on September 25, 2010. This year we had 239 entries. A big CASK Thank You to all of our judges, stewards, sponsors, and volunteers that made this event possible and special thanks to the St. George Brewing Company for hosting the event.

Congratulations to Art King of FBI for winning this year's Best of Show with his Mild. For a second year in a row, CASK won the Blitzkrieg Award for the club with the most 1, 2, and 3 place finishes, with JRHB coming in second and FBI third.

The winners from CASK are:

- John and Jared Smith, 1st Place Doppelbock, 3rd Place Belgian Speciality
- Steven Davis, 1st Place Northern German Altbier, 2nd Place Koelsch, 3rd Place Schwarzbier
- Christopher Reed, 1st Place Belgian Specialty, 1st Place Irish Red Ale, 1st Place Smoked Beer, Honorable Mention American Wheat or Rye Beer
- Rob Cardnell, 1st Place, Extra Special/Strong Bitter
- Bryan Falman, 3rd Place Scottish 80/-
- Walter Keeler, 3rd Place American Brown
- Greg Nowicki, 2nd Place Russian Imperial Stout
- Jeffrey Flamm, 3rd Place Dunkelweizen
- Eric Gold, 1st Place Belgian Golden Strong Ale
- Paul Scott, 3rd Place Fruit Beer
- Harrison Gibbs, 2nd Place Specialty Beer, 2nd Place Braggot, 2nd Place Fruit Cider, 3rd Place Common Cider

Congratulations to all the CASK Winners!

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The Cellarmaster

By Steven Davis

The Beers in Front of Us – CASK Homebrewers' Guide to Pure Decadence

Sometimes even the simplest of intentions can turn into the most extreme of circumstances. This is exactly what happened on August 29th when a few of your CASK loyal decided to get together for what was supposed to be a simple beer tasting at my house. In all actuality, the primary purpose was nothing more than to allow our VP, Warren Haskell, the opportunity to clear out some of the 25 cases of beer he had recently exhumed from the depths of his basement. That should have been out "first" sign of the potential outcome for the evening.



As the nine member team arrived for the mid afternoon get-together, the collection of coolers accumulating in my Bier Garden soon revealed that this was not going to be an easy task. It was evident that there was much more beer available to drink than people physically present to drink it and only the strong would survive. While some might have seen this as a problem, your illustrious fellow members truly saw it as merely a challenge.

One by one the beers were opened, and one by one they were tasted, evaluated and graded. As the empty bottles began to line up, it was quickly identified that what had started out as an innocent beer drinking endeavor had actually turned into a tasting of some very rare, unique and old beers. As Warren continued to pull beers from his stash, Eric Gold shared several of the beers he had

recently brought back from Belgium and yours truly felt obligated to dig into the back reaches of my beer fridges for some rare treasures as well. While others had also brought beers to share, I can honestly say I vaguely remember who brought which libations.

As the night came to an end almost 8 hours later, there revealed to be a total of 33 beers that had been opened with only a couple having the yeast remnants settling at the bottom. While a great time was had by all, I do not believe anyone had envisioned the decadence that was going to take place prior to arrival, and it is doubtful that anyone remembers all of the specific details throughout the evening. Maybe it's better that way...LOL.





Listed below are the treasures that were shared that evening (in alphabetical order):

- 3 Fontenien '07 Oude Kriek
- Alaska '08 Barleywine
- Alvinne Melchior Oak Aged
- Cantillon Zwanze 2010
- DeMolen 666
- DeMolen Bommen & Granaten
- DeMolen Haandbryggeriet
- DeMolen Hel & Verdemenis
- Dogfish Head '99 World Wide Stout
- Ezobeer Chocolate Stout
- Firestone 13th Anniversary
- Great Divide Chocolate Oak Aged Yeti
- Hansens Oude Gueuze
- Horal Oude Gueuze Mega Blend
- Kattenberg Ritterbock
- L'Hiver DuBouffay
- Lost Abbey Avante Garde
- Lost Abbey Judgment Day
- Malheur Biere Brut
- Malheur Dark Brut
- Narfe '08 StormaktsPorter
- North Coast '07 Old Stock Ale
- North Coast '08 Old Stock Ale
- Ommegang '08 Three Philosophers
- Panil Barriquee
- Pere Jacques '09
- Pike Double IPA
- Rogue XS Russian Imperial Stout
- Sacerroise Rose Blanche
- Schlafley Biere de Garde
- Schlafley Reserve '07 Barleywine
- Unibroue 17
- Unibroue Quelque Chose



The Beer in Front of Me ...

"The Beer in Front of Me ..." is a new feature where you can tell your fellow CASK members about a beer that you are enjoying right now. Be it "true-to-style" or "way-out-there creative," if it is a beer that's your current "favorite" and you want to tell the club about it, e-mail your description to beer@colonialalesmiths.org

This month, Warren Haskell tells us about the Williamsburg Alewerks' Springhouse Ale, a Brewers Choice Selection in the Belgian Farmhouse Style ...

Saison has become one of my favorite styles to drink in recent months, especially during the heat of the past summer. For me it is a session beer, perfect for a warm afternoon. It is a traditional brew but with a wide level of variation, in strength and flavor.

The Alewerks Springhouse is a noble effort in the category. It pours a deep golden/amber with a thick white head that lingers, with a bit higher carbonation level than your regular ales. The nose is yeasty and a little fruity with maybe a hint of clove and spice. On the palate it has a noticeable sweet fruity character, with a bready backbone, and moderate hop presence. A completely quaffable beer, the only set-back for judging is that it is a bit sweeter than style guidelines would allow, however this in no way affects the enjoyment of it. For those BJCP inclined 38/50.

If there is any left at the brewery I suggest buying it all and drinking it before winter arrives!



Homebuilt Lagering System

By Jeff Flamm

I was recently watching some back episodes of the video podcast Basic Brewing Video, www.basicbrewing.com. In it, Steve and James, mentioned their "Low Tech Lagering System". They did not really elaborate on how they made it, but I got the impression it consisted of several coolers and ice...

Inspired by them and my recent wort chiller super charger experiment, I decided to take a shot at building my own home made lagering system. I wanted to try to make it mostly out of things I had in hand to keep costs down, but I did purchase a few things.

Equipment:

- Igloo "cube" cooler – in hand
- Small Coleman cooler – in hand - big enough to fit small pump and two 1 gallon milk jugs
- Aluminum duct tape – in hand
- Vinyl tubing, about 6 ft– in hand
- Hose clamps – in hand
- Small fountain pump – in hand - (about \$30 at a building supply store)
- 4 Empty milk jugs – in hand
- 2 Remote thermometers – in hand (Only needed for the experiment. You could just use one regular thermometer or adhesive thermometer strip to periodically check wort temperature)
- Johnson Controls Electric Thermostat – in hand (can be found at most homebrew supply shops for \$60 to \$70)
- Foam board panels – about \$8 at building supply store
- 20 ft of 3/8 inch copper tubing – about \$20 at building supply store

I wrapped the copper coil around my 6.5 gallon carboy. I attached two pieces of vinyl tubing (approx 3 ft each) to each end of the copper coil using hose clamps. I also attached the fountain pump to the piece of tubing hooked to the top of the copper coil (see figure 1). I placed the carboy with copper coil into the Igloo cooler. The cube style cooler was large enough to fit the carboy though the carboy was too tall to use the existing cooler lid. I built a new lid using foam board and tape. I made mine tall enough so that it would also fit a standard 5 gallon Cornelius keg. The lid fit snugly over the cooler, but was certainly not an airtight seal. I notched the lid to allow the two vinyl hoses to pass through (see figure 2).



Figure 1. Copper coil wrapped around carboy and attached to pond pump with vinyl hose.

I placed the fountain pump (water in) and second vinyl tube (water out) in the small Coleman cooler (see figure 3). I taped the water out tube in place so it would not accidentally fall out of the cooler with the pump running.

I plugged the pump in to the thermostat and placed the thermostat probe into the Igloo cooler. I filled the carboy with 5 gallons of tap water for my experimental trials. I placed ice and some water into the small cooler with pump. The ice water pumped through the copper coil chills the carboy in the large cooler. See figures 4 and 5 for the final assembly. I placed remote temperature probes inside the carboy and inside the Igloo cooler to monitor temperature of the water in the carboy and the air inside the cooler box. The thermostat probe was placed in the cooler box next to the air temperature thermometer for the trials in air.

The pump is an old fountain pump I had. I measure the flow rate at



Figure 2. Notch through foam lid for vinyl tubing.

hours) the box air remained stable at 55° F and the carboy was stable at 59° F. I found that water level had gone down in the small cooler with pump. I opened up the cooler with carboy and saw that I had small leak in my water line and there was about 4 inches of water in the Igloo around the base of the carboy. Also, the temperature probe in the carboy was floating on top of the water. I submerged the probe in the carboy and the temperature reading dropped to 51° F. So the system worked, but I needed to improve my setup and experimental technique.

I drained the water from the Igloo cooler. I added an extra hose clamp to each end of the copper coil and made sure there were no leaks. I also extended the temperature probe into the carboy to make sure I was getting a true reading. I warmed the water back up and tried again.

Trial 2 – Carboy in Refrigerated Air

The initial water temp in the carboy was 82° F. I set the thermostat to 50° F. I added two 1 gallon frozen jugs of water in the cooler with the pump. This time I did not add any loose ice cubes. It took much longer for the initial cool down on this attempt. After 4 hours the box air temperature was about 67° F and the carboy water temperature was about 65° F. I replaced the ice jugs about every 12 hours. After 12 hours the cooler box air was 61° F and water temperature in the carboy was 60° F. The carboy reached 55° F after about 24 hours. The carboy temperature reached 50° F between 30 and 36 hours after I started the trial (sometime in the middle of the night when I was not monitoring temperature). The temperature finally stabilized at about 48° F in the carboy and 51° F inside the cooler box. The 3 degree temperature difference is well within the accuracy of the thermostat and my thermometers which are typically rated at $\pm 2^\circ \text{F}$.

Trial 3 – Carboy in Refrigerated Water

I filled the Igloo cooler containing the carboy with tap water. The initial water temp in the carboy was 82° F. I set the thermostat to 50° F. The thermostat probe was submerged in the water surrounding the carboy in the Igloo cooler. Again I placed two 1 gallon frozen jugs of water in with the pump. After 4 hours the water was cooled down to 64° F. It reached 55° F at 7 hours. The temperature stabilized at 54° F after about 8 hours total. The

about 3/4 gallon per minute. Pretty low, but I don't believe a high flow rate is needed for this application. A similar small pump can be purchased at a local builder supply store for about \$30.

I conducted several trials. I wanted to try placing the carboy in the cooler and chill the air – like a refrigerator. I also wanted to try submerging the carboy in water in the large cooler. I thought the water immersion would be better at cooling the carboy down more quickly than the air alone and would maintain a more stable temperature.

Trial 1 – Carboy in Refrigerated Air

The initial water temperature in the carboy was 80° F. I placed two 1 gallon milk jugs with frozen water into the cooler with the pump and about 2 gallons of tap water. I also added and 7.5 lbs of loose ice in the small cooler to help with the initial chill down. I set the thermostat to 55° F and started the system. Room temperature varied between 72 and 74° F.

Within about 3 hours the air temperature inside the refrigerator box was approximately 55° F and the carboy was at 69° F. After 6 hour the box temperature remained at about 55° F and the carboy was down to 60° F. I replaced the frozen jugs with two fresh ones. After 12 more hours (total time 18



Figure 3. Pump assembly in second cooler.



Figure 4. Final Assembly with lids removed.

down in a little over a day and maintained a stable temperature. You typically want to cool your lager fermenter down slowly (about 1 degree per hour) which the air cooled system was able to do.

It is best to directly measure the temperature of the substance you are cooling. You would not want to keep a thermometer or thermostat probe in your wort as I did on this experiment, but you could put an adhesive thermometer strip on the exterior of your carboy to monitor temperature. Do not rely on the thermostat setting alone. It is likely not accurate. Ideally you should check the calibration of your thermostat and thermometer prior to using them – my thermostat reads 3 to 4 degrees F high. Opening the cooler periodically (once or twice a day) to check the temperature until stable will not make an appreciable difference in the wort temperature due to the thermal mass of the chilled wort. You also want to leak check your system. Also, the copper coil and exposed portions of vinyl tubing sweated. Keep that in mind. You do not want to damage your floor.

Repeated freeze-thaw cycles caused the milk jugs I used to eventually crack and leak. I switched my milk jugs to 1 gallon Arizona tea jugs which are made of heavier gauge plastic with the hope would up hold up better. They too eventually broke (shattered). Keep a few spare jugs on hand.

Certainly it is more convenient to just use a refrigerator with add-on thermostat. If you brew a lot of lagers then a refrigerator with auxiliary thermostat is the best method to keep your wort cool. However, the refrigerator is a more expensive option than the homemade system for a couple of reasons.

measured temperature was about 4 degrees higher than the set temperature. This is not a surprise given the error margin of the equipment. I reduced the set temperature to 46° F. The water temperature stabilized at 50° F after about 5 more hours (total time 13 hours).

The frozen jugs melted much quicker during the initial cool down in this trial. I had to replace them about every 4 hours. Once the temperature stabilized the frozen jugs would last about 12 hours.

I let the system run several days in this trial. The water in the Igloo cooler became cloudy after a few days. I also noticed that the thermostat probe showed some signs of corrosion from being immersed in the water. The water did not begin to smell, but I don't think I would want to maintain the water immersion method for long-term lagering without changing the water frequently. The water in the carboy was ok as was the water in my pump cooler. Perhaps the Igloo cooler, carboy exterior, or copper coil were not entirely clean when I started.

Conclusions

The homemade lagering system worked. The water immersion system chilled the carboy more quickly than refrigerated air alone. Both water immersion and the air-cooled version maintained stable temperatures. However, the sour water in the cooler and potential for corrosion of temperature probe were knocks against the water immersed system. I

would probably just go with the air-cooled method in the future. It cooled the wort



Figure 5. Final Assembly lids in place.



First is the upfront cost of the equipment: cost of buying the refrigerator and thermostat (a couple hundred dollars used) vs. some ice chests (which you may already have) plus copper tubing, pump, and thermostat. Total cost for the homemade system is a little over a hundred dollars for the pump, thermostat, and copper if you don't already have them.

Second is the cost of operating the refrigerator. I connected Kill-A-Watt meters to both the pump and my spare refrigerator during this experiment to monitor the kilowatt hours of electricity used. Over 17 days my pump system and homemade lagering system used 1.05 kWh and my refrigerator used 45.9 kWh. Assuming 10.6 cents per kWh (my last bill rate) that is \$.007/day (\$3/year) and \$.286/day (\$104/year) respectively. The electric consumption will of course vary with the season – my spare refrigerator is located in my un-heated un-cooled detached garage. You also have to make and rotate the jugs of ice which uses energy and is not convenient. If you have room for 2 milk jugs in your household freezer, which you run anyway, this adds no more appreciable cost for power than you are already using. The pump system is significantly cheaper to operate than a refrigerator, particularly, if you only wish to make a lager occasionally. Additionally, you do not have to dedicate a full-time space in your home for a spare refrigerator.

Prost,

Jeff

Tips from the Tap

CASK Members Like You

"Tips from the Tap" is a new feature where we can share with each other all the little "tricks of the trade" that we have learned over the years to make the brew day easier. So if you have some tips to share, send them to tips@colonialalesmiths.org.



Install Perlick forward sealing faucets on your draft system instead of conventional rear seal faucets. They stay cleaner and do not gum up and stick like conventional faucets if left unused for several days. I switched my faucets several months ago and wish I had done it years ago. Austin Homebrew Supply seems to have the best online price as of this week: \$39.99 for model 425SS (which I have and can recommend) and \$29.99 for model 525SS (which I have not tried yet). **[A tip of the hat to Jeff Flamm for this tip]**

Beer in Spaaaaaaaaace!

By Byline, we don't need no stinking byline ...

Space.com (9/28/10, Chow) reports, "Astronauts4Hire, a non-profit space research corporation, will conduct the tests on an Australian beer that has been brewed specifically for easy drinking in both microgravity environments, as well as here on Earth." The beer, developed by Saber Astronautics Australia and Australian 4 Pines Brewing Company, was noted for being the first "certified" for space travel. "Testing for the new space beer is set to begin in November on board Zero Gravity Corporation's modified Boeing aircraft, which flies a series of parabolic arcs that simulate environments of weightlessness." An Astronauts4Hire astronaut will drink the beer as his while "biometric data on body temperature, heart rate and blood alcohol content" are taken.



CASK Member Profile: Harrison Gibbs

Full Name: Robert "Harrison" Gibbs, Jr.

Hometown: Muskogee, OK

Town of Residence: Williamsburg, VA

Occupation: Attorney

Years Brewing: 16 (I began in November 1994)

Favorite Beers to Brew: Lagers, Sour Ales, British Ales, German Wheats. I really like to brew Belgian styles but find mine are very inconsistent.

Favorite Commercial Brew: Cantillon Gueze, Hoegaarden, Guinness, La Fin du Monde, and the list goes on.

Favorite Brew Pub or Beer Bar: Locally, the Green Leaf on Richmond Road, but I am impressed with the Biergarten in Portsmouth.

How did you started brewing?: A couple who were grad students at UCLA invited me over to brew after I had enjoyed their beers at a party. They still brag about making that love connection.



Type of Brewing (Extract, Partial Mash, All-Grain): All of them. My last two batches included an extract recipe brewed during the mash of the all grain.

Why do you brew?: I really love the craft, art, and connection that I get to a truly ancient process. I also like the good beer and the chance to share homebrew with friends and family. As part of my homebrew evangelism, I have encouraged or pushed my family (although my Dad makes more wine than beer now and my brother makes mainly ciders), and countless friends and strangers toward brewing. I even taught a brew class to a couple on a "date" for the Show Blind Date and appeared on the Public Access Show "BeerTV" back in 1998.

Awards, Beer Related Associations, etc: I have won numerous awards, including at AHA National Home brew Competitions -1 AHA Gold Medal (Lambic), 2 Silver AHA Medals (Pymment and Helles), 3 AHA Bronzes (Herb and Spice- my second homebrew, Scottish, and Cider); Best of Shows at the California State Fair, Great Lakes Old World Cyder Competition, Dominion Cup, and BobFM Colonial Beer Cup; and first places finishes at Mayfaire in Woodland Hills, CA, Pacific Brewers Cup in LA, California State Fair, Los Angeles County Fair, Dominion Cup in Richmond, and the Virginia Beer Blitz.

As far as beer related associations, I am a Certified Member of the BJCP with 3 points away from being a "National" judge. I am also a lifetime member of Pacific Gravity Homebrew Club in Culver City California (as long as I do not come back, then I have to pay dues) and a founding member of CASK. Having organized CASK back in 2001, Don Welsh and I remain the only original "paid up" members of that ten people who attended that first meeting on August 16, 2001.

Editor's Note: Harrison also wrote the questions above. Back when he stepped down as CASK president, he thought it would be a good idea to introduce the new officers to the club. The responses of those new officers, Norm Schaeffler, Steven Davis, and Don Welsh, to the questions above appeared in the February 2005 issue of *The Cellar*.

Next year, August 16, 2011 to be exact, will mark the 10th Anniversary of the first meeting of CASK. We need to start thinking now how big of a party to throw!



The CASK Calendar of Club Events and Competitions

Plan your brewing year now and hit as many club-only and other competitions as possible.

October - Strong Ales (COC)

November - Mead

December - Spiced/Christmas Beers

January - English Pale Ales (COC)

February - TBD

March - Bock (COC)

April - Wood Aged Beer (COC)

May - TBD

June - TBD

July - TBD

August - Mead (COC)

September - Specialty/Experimental/Historical (COC)

October - TBD

November - Hefeweizen (COC)

December - TBD

You, yes you, can add items to the CASK calendar and keep your fellow club members informed about beer-related happenings in the area!

Either:

1. logon to the CASK Message Board to find out how to add events to the calendar or

2. E-mail information about the event to calendar@colonialalesmiths.org

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CASK meets the third Thursday of the month, usually at the Green Leaf Gourmet in New Town section of Williamsburg. But always, check the website, www.colonialalesmiths.org, first.