

Established 1989

Incorporated 1994

Volume 28, Number 8

www.hvhomebrewers.com

Next club meeting

**HVHB August 8** 

8:00 pm

Juan Murphy's

Beer of the Month: Specialty IPA

Juan Murphy's

796 Main St, Poughkeepsie, 12603

August 8, 2018 juanmurphys.com

8:00 pm 845 473 1095 (Second Wednesday)

#### Club officers:

President - Jon Fry
Vice President - Kevin Drozinski
Treasurer - Brian Jameson
Sargent at arms - Justin Lomas
Communications Secretary- Hilon Potter
Recording Secretary - Phil Van Itallie

**Upcoming EVENTs on page 3** 



Juan Murphy's

### Minutes of July club meeting at Farmers and Chefs

Meeting called to order at 8:12 with 23 attendees.

One first time visitor joined the club after the meeting, Tim Gioia. Tim also brought a home-brewed beer to the meeting.

Justin Lomas poured the evening's beers:

Beer 1 - was Kevin Drozinski's pilsner. It was brewed a month ago and used pilsner malt and 3470 ale yeast. Kevin uses a "qquick fermenting with 7 days at 53 degrees araised the temperature to 70 over a two day period.

Beer 2 - was Jon Fry's pale ale . It was cloudy and hoppy. Jon used his home-grown hops to finish his 4% ABV creation..

Beer 3 - was Tim Giolia's pale ale brewed with spruce tips and Chinook hops.

Beer 4 - was Phil Van Itallie's bier de garde He used GY003 Belgian ale yeast from Gigayeast and Fuggle hops. It was brewed in November 2017 and won second prize in the club's 2018 competition.

Beer 5 - was Rich Rang's burbon barrel bier de garde.

Beer 6 - was Rich Rang's poter or stout.

Beer 7 - was Eric Wassmuth's Munich hellas. He brewed it in the 2018 club's brew day using pilsner malt..

Beer 8 - was Josh Youngman's pilsner.

Beer 9 - was Josh Youngman's witbier.

Beer 10 - was Jon Fry's IPB. It was cloudy and had been aggressively dry hopped.

<u>Beer 11</u> - was Josh Youngman's barley wine. It has been aging for 6-8 months and had a 12%ABV He used an imperial yeast from Wyeast.

Eric Wassmuth said that the club now has a 50 gallon kettle to support a club joint-brew project. There will be a club brew at Eric's home on Sunday August 12 starting at 9 am.

Eric Wassmuth said that preparations are underway for the club picnic at his home on July 28 starting at noon.

Kevin Drozinski said that the club will do a pre-judging for the Hoptember party at Dutchess Hops on September 8.

Kevin Drozinski said that bike ride starting in Highland and ending a Schotzi's for dinner is planned for October 6.

Paul Stolarski has arranged to use the Legion Hall on March 9. 2019 for the 30th annual Club Competition.

Jon Fry said that he will finalize the artwork selection by the end of July for the next set of club T-shirts.

Brian Jameson provided a snapshot of the club's treasury (\$8061.86) by email:

HVHB Treasury Report

6/13/2018 through 7/10/2018

Date	Account	Num	Description	Memo	Category	Clr	Amount
BALANCE 6/12/	2018						7,916.62
6/29/2018	Club Bank Acct	DEP	Amazon	amazon deposit	Donation	R	26.24
7/10/2018	Club Bank Acct	DEP S		Phil V Regulator	Comp:Raffle Prizes		35.00
				Rich R Regulator	Comp:Raffle Prizes		35.00
					50-50 raffle		29.00
				Dann G.	Donation		20.00
6/13/2018 - 7/	10/2018						145.24
BALANCE 7/10/	2018						8,061.86
					TOTAL INFLOWS		145.24
					TOTAL OUTFLOWS		0.00
					NET TOTAL		145.24

Nancy Muller won \$34 in the 50-50. Other prizes were distributed including posters, GigaYeast stickers and bottle openers. Tto Josh Youngman, Phil Van Itallie and Tim Gioia. Josh Younman work some yeast nutrient.

The Club approved a motion for Eric Wassmuth to purchase a large brew kettle for up to \$1000. At the meeting, there was no decision of how to heat the kettle or where to keep the kettle.

The meeting ended at 9:30 with the traditional pass the hat to collect for the servers.

The Club has a number of PBW and Star San canisters available at a discount. Contact Josh Youngman or Phil Metty.

All of our events are publicized on Facebook - if you want to stay in the loop with club activities please visit <a href="https://www.facebook.com/hvhomebrewers">https://www.facebook.com/hvhomebrewers</a>

The club gets some money if you click on an Amazon link from the club website. <a href="https://www.hvhomebrewers.com">www.hvhomebrewers.com</a> or

https://www.amazon.com/?&tag=hudsovallehom-

20&camp=216797&creative=493977&linkCode=ur1&adid=0452K58TDKXXCSFAV84H&

# Upcoming Event(s):

July 28	Club Picnic	
Aug 9	Burger and Beer Bash at Dutchess Stadium	
Aug 12	Club brew day	
Sept 8	Pub Crawl	
Sept 22	Harborfest at HalfTime	
Sept 29	Wine and Cider fest at Stormville	
Oct 6	Bike ride and dinner	
Nov 14	Anniversary dinner	
2019 events		
Mar 9 2019 I	HVHomebrewer Competition at the American Legion	

#### **CONTESTS on Page 3 and Page 9**

<u>Date</u>	<u>Style</u>	Location
Aug 8	Specialty IPA 21B	Juan Murphy's
Sept 12	Vienna Lager 7A	King's Court
Oct10	Belgian Dark Strong Ale 26D	To be determined
Nov 14	Annual Dinner (No botm)	County Fare
Dec 12	Baltic Porter 9C	To be determined

# DogFish Head invitation to visit and a contest

With a new <u>Tasting Room & Kitchen</u> at our Milton brewery and distillery that now serves an expanded beer-infused menu, a freshly opened courtyard that sits between their two Rehoboth restaurants and a Super SWEET experience at the Dogfish Inn, there is much to see and do in coastal Delaware!

You'll also find a slew of new tour offerings, a Dogfish Head shuttle, boatloads of brewery and brewpub exclusives on tap, and lots of goodness coming out of the distillery world. They have got a little something for everyone to see, sip and savor, so let's start planning your next off-centered getaway!

### Win a trip to Dogfish Head!

There's nothing we love more than seeing off-centered ales out and about, and through your eyes! And now there is a contest to see where it all starts by winning a trip to their off-centered world here in coastal Delaware with an <u>Off-Center Your Summer contest</u>! https://t.e2ma.net/click/xjtwz/d8afml/x38djh Snap. Tag. Win.

Simply post a picture to Instagram using #offcentered now through Labor Day. They'll choose a photo and you'll be on your way to a weekend trip for two to the home of Dogfish Head!





# BEERADVOCATE'S IPA FEST (2018)

Event to be held at the following time, date, and location:

Flynn Cruiseport Boston 1 Black Falcon Avenue Boston, MA 02210



Beer Advocate's **IPA Fest** is coming to **Boston** on **December 15th!** Sponsored by Dogfish Head, the epic lineup of over 150 India Pale Ales from over 40 brewers is not to be missed.

Over 30 brewery friends have already confirmed.

https://www.beeradvocate.com/ipa/beers/ And tickets are on sale now.

https://www.beeradvocate.com/ipa/ Already going? Tell your friends and join us on Facebook! https://www.facebook.com/events/392851621125626/

## Half Time to host Harborfest on September 22



Thank you for making the first four years of the Harbor Island International Beer Festival a success! From the first drop of beer, your support and feedback has blown us away. So, we wanted you to know that sadly we will not be hosting this year's event. This was not an easy decision to make, and we will certainly miss celebrating what would have been our fifth year with all of you, our greatest fans and supporters.

Sponsoring and presenting HiiBF is our favorite event of the year, and although we are saddened by our decision, we are excited for the future. As many of you may know, 2018 has been a busy year for us. We are partnering with a brewery in our Mamaroneck space and are excited to share more details soon. We are also in the midst of reimagining HiiBF and coming up with new experiences that we think will make the festival even more exciting. These projects are no easy feat, and we always want to ensure that no matter the event, what we deliver to you is something we can be proud of. That's why we came to the decision that we would spend this year working hard on our brewery partnership (Decadent Ales) and concepting a revamp, so we can return in 2019 with the newly reimagined HarborFest (Check out the new logo above).

Don't worry...It's not all bad news.

We're happy to announce on September 22, 2018 Half Time Mamaroneck & Poughkeepsie will be hosting our FREE Big Tasting events in-store from 1-4pm.

#### Pints for Less with AHA Discount

Sager Beer Works

\$1 Off Pints for AHA members

Rochester

NY

Saratoga Zymurgist

15% Off Beer-related purchases

Saratoga

NY



### **IPAs in Paradise**

https://punchdrink.com/articles/ipa-paradise-tiki-beer-founders-stone-avery-brewing/ By Justin Kennedy

Basil Lee grew up making Mai Tais and Piña Coladas at his parents' Chinese restaurants in Rhode Island. While Lee considered the drinks to be tacky in his youth, he still understood their history in Chinese-American restaurants and how well they paired with the Cantonese and Szechuan dishes that his family served. Recently, the founder of Queens-based Finback Brewery has found a more unorthodox pairing for tiki flavors: beer.

"Tiki is a great inspiration, because one, it's a thing that exists as a fixed set of drinks and flavors, and two, it's just so much fun," says Lee. Other breweries are following suit, creating rotating and one-off beers inspired by tiki's tropical fruits and spices. Chicago's Off Color Brewing, San Diego's Modern Times and Nashville's Southern Grist Brewing, who recently launched an entire collaboration series of beers with the Music City's first tiki bar, Chopper, have all released their own tiki beers. And it's not just small breweries, either. Big players in the craft beer world—including Stone, Founders and Avery—have also released tiki-inspired beers over the last several months.

Long-extinct rums critical to the genre's classic recipes are being brought back to life, "It just makes sense to search that realm for inspiration," says Trevor Williams, co-founder of Columbus, Ohio's Hoof Hearted Brewing. Williams believes that taking a page or two out of classic tiki cocktail books can only help brewers that were already using ingredients like tropical fruits and tropical hops. "They enhance IPAs and simple kettle sours, in particular," he points out.

Lee also sees the term "tiki" as a handy way to communicate flavor profiles to consumers. "Just calling it a 'tiki beer,' even if it's not necessarily the verbatim flavors as a specific drink, it immediately classifies it as this thing. Like, if you say 'Milkshake IPA,' that gives people a reference point," he says.

Khristopher Johnson of St. Petersburg, Florida's Green Bench Brewing Co. agrees. He recently brewed a collaboration beer with Sweden's Brewski; when it came time to name it, his mind immediately went to tiki. "It wasn't developed as a tiki beer per se but it kind of became one as we built it." The beer, called Tiki Tack (*tack* is "thanks" in Swedish), was a passionfruit-guava gose fermented with brettanomyces (which often produces a distinct, overripe-pineapple aroma) and spiced with coriander and pink sea salt.

"The way it came together—with the base acidity, tropical fruits on top and then the coriander and sea salt—really reminded me of the build of a lot of tiki drinks," says Johnson, a self-proclaimed tiki geek who takes weekend pilgrimages to the Mai-Kai in Fort Lauderdale, Florida. As Lee sees it, there's an even deeper connection. He believes the conceptual elements of tiki have plenty in common with the modern, boundary-pushing beers that he and his contemporaries are brewing.

"Both are totally constructed, kind of fantasy beverages," he says before pointing out that tiki started out as an irreverent celebration of beach life that pushed sweet and fruity flavors to the forefront.

Page 7 Hudson Valley Homebrewers Volume 28 Number 8 August 2018 "And, for better or worse, there's a lot of that happening in beer right now, too," he continues. "The tiki attitude is in line with [that of] beer people who are like, 'Let's just have fun with this."

### Five Tiki Beers to Try

#### Founders Barrel Runner

"I drink tiki cocktails probably more than I should and looked to them for inspiration when creating Barrel Runner," says Founders Brewmaster, Jeremy Kosmicki. "You get a lot of bright, tropical character from the abundance of Mosaic hops plus a nice kick of oak and rum from the barrels. Add a tiny umbrella and you've got yourself a beer perfect for enjoying poolside." At 11.1 percent alcohol, it almost has the fortitude of a tiki cocktail. Almost.

#### Off Color Spots

This tart little beer incorporates tiki elements like passionfruit and grapefruit peel to morph from a run-of-the-mill Berliner Weisse into a self-described "Tiki Weisse." A gentle funk runs through the background, reminiscent of some of the ester-y rums from Jamaica and Guyana. The name, derived from the tropical jungle-roaming jaguar, is in line with Off Color's relentless obsession with feline species.

#### Stone Scorpion Bowl

A prime example of how notes of tropical fruit and citrus can be derived from hops alone, Stone's recently released Scorpion Bowl IPA is a tiki-inspired beer made without the addition of any actual fruit or spices. "It was initially brewed with the intent to add fruit," says Jeremy Moynier, Stone's Senior Innovation Brewing Manager. "However, once we brewed it, we couldn't believe the amazing fruit aroma and flavors we'd coaxed from the hops alone. To heck with the fruit."

#### **Modern Times False Idol**

Most tiki beers feature either a base IPA or a simple kettle sour. But when Modern Times sat down with the folks at the San Diego tiki bar False Idol to collaborate on a beer, they decided to structure it around a clean pilsner instead. "The beer itself was made to embody the tiki spirit," says brewer Andrew Schwartz, "but in the end, it's just a summer crusher."

#### **7venth Sun Brewery Freak Your Tiki**

Tampa Bay area 7venth Sun Brewing threw an all-out tiki party for last month's release of this collaboration ale with neighbors Overflow Brewing Company. The base is a tart cherry wheat ale that's been conditioned with mango, guava, passionfruit and vanilla.

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# **Beer&Brewing** Magazine ■

by kim Sturvadant

The Brut IPA from San Francisco's Social Kitchen and Brewery.

https://beerandbrewing.com/social-kitchen-and-brewery-brut-ipa-

recipe/?utm\_campaign=edit&utm\_medium=email&utm\_source=autopilot&utm\_content=brut-ipa

#### ALL-GRAIN

Batch size: 5 gallons (19 liters)
Brewhouse efficiency: 72%

OG: 1.054 FG: 0 IBUs: 25 ABV: 7% ABV

#### MALT/GRAIN BILL

8 lb Pilsner malt

1 lb flaked corn

1 lb flaked rice

#### HOPS AND ADDITIONS SCHEDULE

.17 oz Mosaic [12.25% AA] at 15 minutes

2.5 oz Mosaic [12.25% AA] at Whirlpool

7.5 oz Mosaic [12.25% AA] at Dry Hop

#### YEAST

Neutral Ale yeast

.65 ml Amyloglucosidase

#### DIRECTIONS AND BREWER'S NOTES

Social Kitchen and Brewery's brewmaster Kim Sturdavant says: "I would encourage folks to add the enzyme in the mash, shoot for a mash temp of 143 - 146 to not denature the enzyme. The equivalent of 20mls / 100#s of grain is enough. Add the enzyme 1/3 of the way into mashing to ensure the mash isn't too hot to denature the enzyme. Stir very well and let the mash have an hour-long rest to let the enzyme do its work."

"The other option would be to add the enzyme to the kettle while lautering, then hold off on heating the kettle until all wort is in and has 30 minutes of contact with the enzyme at around 145 degrees (lower would be fine, too)."

"I know a lot of homebrewers just throw grain on top of all their mash water, so this option makes more sense to them. I preferred not to mash this way, when I was a homebrewer... I think the conversion temp is more consistent adding grain and water at the same time, I also like being able to react to the consistency so I can end up the thickness I want."

"The enzyme will denature in the boil, but it's already done its work."

"That would all mean that the amylo in the fermentation is no longer needed. I'm finding better results with fermentation character and hop aromatics by having no enzyme present in the fermentation."

Lastly, it is very important to add nutrient to the boil as well as 1/2 way through fermentation (with something like BSG's Startup) since the wort will be almost entirely glucose, there is not a lot of nutrition for the yeast.





Want to win a trip to the Burning Can beer festival in the hills of Western North Carolina with 3 buddies? How about a custom, hand built mountain bike, and a ton of gear? Enter to win an amazing weekend of rides, races, beer, gear and more could be yours! Getchyer Can Outside!

#### **ENTER TO WIN**

Grand Prize: One lucky winner will score a 3 day/3 night trip for four (4) to Burning Can in Brevard, NC (August 9-12, 2018) including airfare, transportation, VIP passes to the beer festival, lodging, and meals, PLUS a REEB custom built mountain bike and limited edition gear from ENO Hammock, YETI coolers and Simms.

https://www.DRAFTMag.com/GetchyerCanOutside

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Contest ends July 31, 2018 at 11:59:59 pm Eastern Time

SPONSOR: All About Beer, LLC dba DRAFT Magazine P.O. Box 110346 Durham, NC 27709

# Hops: Start to Finish by Josh Weikert Beer&Brewing Magazine

https://beerandbrewing.com/hops-start-to-finish/?utm\_campaign=edit&utm\_medium=email&utm\_source=autopilot&utm\_content=aa-tea

Timing matters. In hopping, it matters because we're doing a delicate dance that extracts distinctly different things from the hops, and getting more of one usually results in getting less of the other. I'm speaking here about the productive tension that exists between hops oils and hops resins/acids. You have a hop cone. Inside of it are oils, which we generally think of as being the flavor-producing agent.

You also have alpha and beta acids which, when isomerized or oxidized, add bitterness. The trouble is that isomerizing alpha acids is accomplished by boiling them, and boiling drives off the chemicals that make our hops oils so flavorful. This means that we have a construction challenge when it comes to producing beers with both bitterness and flavor—or one and not the other—and knowing what you'll get out of hops based on when they're added to the beer is essential to producing the beer you want.

In short, the longer your hops are exposed to heat—and the higher the temperature—the more likely it is that you're getting bitterness and not flavor, and it may be happening faster than you think. Of the potential bittering you could get out of the hops you add, a majority is produced in just about 20 minutes. At the same time, most hops oils deplete by half or more with just 15 minutes of boiling. Linalool, a lavender aroma—producing hops oil, reaches 50 percent depletion in just 6 minutes.

The upshot here is that even short-added hops still yield most of their bittering potential and lose most of their flavoring potential. If you want to have a better chance of getting bigger impressions of those hops oils in your beer, then you need to look beyond the boil.

Let's take a walk through the brewing and fermentation process and examine the role hops tend to play when—and the roles they likely won't or can't.

Mash Hops. Nothing stops us from adding hops in the mash, but your expectations for either bittering or flavor should be modest. You'll likely yield a few IBUs from isomerization (the mash is, after all, warm if not hot), and especially if you use pellet hops, you may get some pulverized plant matter carrying over into the boil where it can then impart some isomerized alpha acids—it just won't be much. Likewise, only the most robust of hops oils will have a chance of surviving the boil, so extracting them here probably won't produce noticeable flavors.

First Wort Hops (FWH). Once upon a time, we were told a story of how "first wort" hops—those added to the kettle while the lauter and/or sparge were running off—added to the beer unique flavors or bitterness of a different, softer character. Having looked for empirical evidence of this, I have to say that it's pretty thin. I suppose it's possible that, in some recipes and on some systems and in some contexts, FWH can have desirable flavor impacts, but I've seen nothing to suggest that it's broadly generalizable. However, there is data to suggest that FWH consistently adds more IBUs to the beer. The longer exposure to higher temperatures squeezes out a small increase in utilization of alpha acids and, therefore, juices the measured IBU count. If you're making a beer that should have firm bitterness, it's probably not a bad idea to add your early-boil hops as first wort hops, if only to err on the side of "more bitter."

**Boil Hops.** Conventional wisdom among brewers was (and probably still is) that hops added at the start of the boil are your "bittering" hops, those added at about 30 minutes remaining are

Page 11 Hudson Valley Homebrewers Volume 28 Number 8 August 2018 your "flavor" hops, and those in the final 10 minutes or less are your "aroma" hops. That's probably not a productive or accurate way to think about it. Given the quick-start nature of both alpha-acid isomerization and hops-oils volatilization, I find it better to assume that in the boil, they're all bittering hops. Adding them later in the boil (especially in the final 10 minutes) will certainly make it more likely that some hops oils survive and that some potential bittering won't materialize, but if I'm looking for medium-high or prominent hops flavors, I'm adding hops postboil. The impressions will be there, but they're not nearly as likely to be as bright, crisp, or notable.

**Post-Boil Hops**. If you're concerned about boiling away your hops oils, you can always just wait until you're done boiling to add those hops. We have essentially three ways to add post-boil (but pre-chill) hops: flame-out, whirlpool, and hopback.

Flame-out hops are just that; when you kill the heat, you toss in your hops. You're still over the 170°F (77°C) threshold that will act to volatilize your various hops oils, but they won't be at full-boil temps, nor for very long, which should mean greater odds of survival for the extracted oils.

Whirlpooling is the practice of stirring your wort to form a whirlpool that will gather solids in the center of the kettle to aid in getting a "clean" runoff, and it's possible to use this time (especially if you wait for the temperature to drop) to add flavor and aroma hops that will preserve almost all of their character. Experimental studies find that the longer you allow the hops to rest in 140–170°F (60–77°C) wort, the greater the flavor impacts.

Finally, you can also employ a **hopback**, which is a device that you pack with whole-flower hops that are then "washed" with the post-boil wort en route to the chiller. Any (or, even, all) of these methods are preferable if your goal is big hops aroma and flavor: you'll add a nominal number of IBUs but extract and preserve more hops oils.

**Dry Hopping**. Post-chill hops are typically referred to as dry hops. Dry hopping is a common practice among homebrewers and professional brewers, but not all dry hops are the same. Adding dry hops at the start of primary fermentation has been shown, in some basic experiments, to yield less flavor than adding them post-fermentation.

Using more than one hops variety can also add more flavor. In addition, multiple dry-hop additions seem to impart more overall flavor than simply adding multiple varieties of dry hops all at the same time. On a personal note, my own experiments in this area have shown no noticeable difference between a "replacement" method (adding and then removing each bagged dry-hop addition in sequence, so there's only one dry-hop variety in there at a time) and an "additive" method (adding dry hops in stages but simply leaving the initial dry hops behind), so feel free to free-add your first dry hops, then subsequent additions in succeeding days, without removing the initial additions.

Dry hopping adds hops oils, obviously, but no measurable IBUs, since there's no heat involved. This does not mean, though, that no bitterness is added: extracted beta acids impart bitterness if/when they ultimately oxidize, and if you use a large enough charge of hops, this bittering may be noticeable, especially in beers that seek to avoid it. Dry hopping also often adds a resiny flavor to the finished beer, which you should take into account in your recipe design.

**Post-Packaging Hops**. Since I have been asked this, sincerely, on multiple occasions, I'll answer it. You can add hops to the bottle at packaging. But why would you want to?

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The form of the hops can be **whole** flower/cone, **pellet**, **powder**, **extract**, and even "**hash**."
Whole-flower/cone hops use the entire hops cone, and some believe that the unprocessed plant material imparts subtle authentic flavors. Pellet hops have been ground and "standardized" into homogenous pellets by grinding the hops flowers and then forming them into pellets that break apart in the boil. This process results in additional exposed hops surface area, increasing access to the oils and resins/acids in the hops. Hop powder is a concentrated form of only the hops resins and acids, and early impressions are that it can (at least early in a beer's life) add much more pronounced flavors than are possible with traditional flowers/pellets. Other extracts are available as well, in the form of gelatinous hops liquids containing both resins and acids, and even pure isomerized alpha-acid extract. Know what form you're using and choose based on your desired outcomes.

Whichever form you choose, composition matters as well. Not all hops varieties are identical, of course, but even within strains and within harvests, you'll find varying (but measurable and measured) concentrations of alpha acids, beta acids, and a wide range of hops oils. Savvy brewers can select hops with greater proportions of the elements they want, whether it's superhigh-alpha- acid hops to minimize the amount needed to bitter a Double IPA or a caryophyllene-heavy hop for that woodsy, rustic Cal Common recipe.

And let's not neglect the hops' point of origin. Terroir is a concept more common to winemaking than brewing, but there is absolutely no question that climate, soil composition, and growing condition variations that are part of the hops-growing process have a substantial impact on their flavor. American Hallertau is simply a different hop from German Hallertau, and we should consider hops geography when we plan out our recipes.

Simply put, the "how, what, and where" of hops matter.

Hops are a key component of beer—maybe the key component of beer—and we owe it to the beer to use our hops purposefully, thoughtfully, and deliberately. A good grounding in what hops add to our beer based on when we add them to the beer is a valuable and useful thing. It allows us to set realistic expectations of the likely flavor profile we're going to get. It makes it possible to make meaningful changes to recipes and processes when we seek to incorporate our impressions and feedback. It also increases the odds that we can make that "perfect" beer a second, third, or tenth time when we want to because we're aware of how the composition and use of our hops made it the way it is.

All of this should carry an important disclaimer, however: try, then trust. We know too little about hops, and though that base of knowledge is increasing quickly, a wide range of recipe- and system-specific factors can make your mileage vary. Water chemistry, burner and kettle geometry, ingredient interactions, and more can all blunt or amplify different elements of hops flavor and contributions. Brewing is, after all, still as much art as science. A thoughtful and purposeful approach to hops and hopping will minimize your learning curve rapidly. Best of luck, and good hopping to you.