

# Hot Air/Cool Beer

J. Wilson



**“A fine beer can be judged with only one sip, but it's better to be thoroughly sure.”**

**-Czech proverb**



# About Hot Air Brewing

Founded by Katie Davidson and Andy [Rullestad](#), Hot Air is a third space where community members and their families can come after work or on the weekends to relax, try the latest in-house beer, and just be.

Hot Air opened to the public on Feb. 26, 2021, with brewer J. Wilson making a wide assortment of *both* kinds of beer: *high [falutin](#)* and *low [falutin](#)*. Hot Air offers a range of beers from German, British, and Belgian brewing traditions, with everything in between rotating frequently.

@hotairbrewing

#hotaircoolbeer



# Who is J.?

- 25+ years of award-winning brewing experience
- BJCP certified beer judge
- 2012 Beer Drinker of the Year
- Industry experience includes sales, lobbying, brewing, writing, event planning, education, and marketing
- Testified before Senate subcommittee on the proposed AB-InBev purchase of SABMiller
- Created iBEST educational conference and trade show, as well as the first DOL-approved apprenticeship program for professional brewing
- Along with many other publications, and internet and TV appearances, I'm mentioned in *Beer for Dummies*, by Marty Nachel





Trailbird Lager 6.2% ABV	Canary in a Coal Mine Pilsner 5.2% ABV
RECREATIONAL OUTRAGE IPA 6.8% ABV	HAGGIS WINGS 7.7% ABV
MICROPHONE SCARVES Saison 6.5% ABV	JULIET. OSCAR. ECHO Coffee Porter 5.9% ABV
HAPPY DAGGER Oatmeal Stout 5% ABV	Wit Spasmatic Winter 6% ABV
The Devil's Telephone Belgian Quadrapel 10% ABV	MOLOTOV COCK'DALE Imperial Stout 10.5% ABV
BALLOON ANIMAL Hazy Pale Ale 5.9% ABV	Staves of Stubblefield 4.8% ABV







# INGREDIENTS

- Malt
- Hops
- Yeast
- Water



# MALT

- The primary grain in the production of beer is malted barley.
- Malting is the process of steeping, germinating, and drying barley for use in beer or distilled spirits, and today is usually done by a maltster rather than in-house at a brewery.
- Malt can be pale, caramel, or dark in color to provide different flavor, color, and other characteristics in the finished beer.
- The brewer mashes the malted barley to convert starches into fermentable sugars (which the yeast will then convert to alcohol)





# HOPS

- Hops provide flavor, aroma, and bitterness to beer.
- They can also act as a preservative, but most hop-forward beers are best drunk fresh.

Generally speaking, hops from these regions carry the following characteristics:

**England:** grassy, woody, earthy

**Continental Europe (noble):** spicy, floral, herbal

**Pacific Northwest: (USA)** pine, citrus

**Australia/New Zealand:** tropical, fruity



# WATER

- Not that sexy, but terribly important, due to mineral content (or lack thereof) and water contamination issues
- 90% of beer
- Often the most truly “local” ingredient
- Certain beer styles emerged due to the local water: Munich, Dublin, Pilsen, Burton-Upon-Trent, etc.



# YEAST

## Ale

- Ferments warmer (68-72F)
- Ferments quickly
- More character (fruity, spicy, etc)

## Lager

- Ferments cooler (55-65F)
- Ferments slower
- “Lager”=“to store” so stored cold for several weeks
- Clean



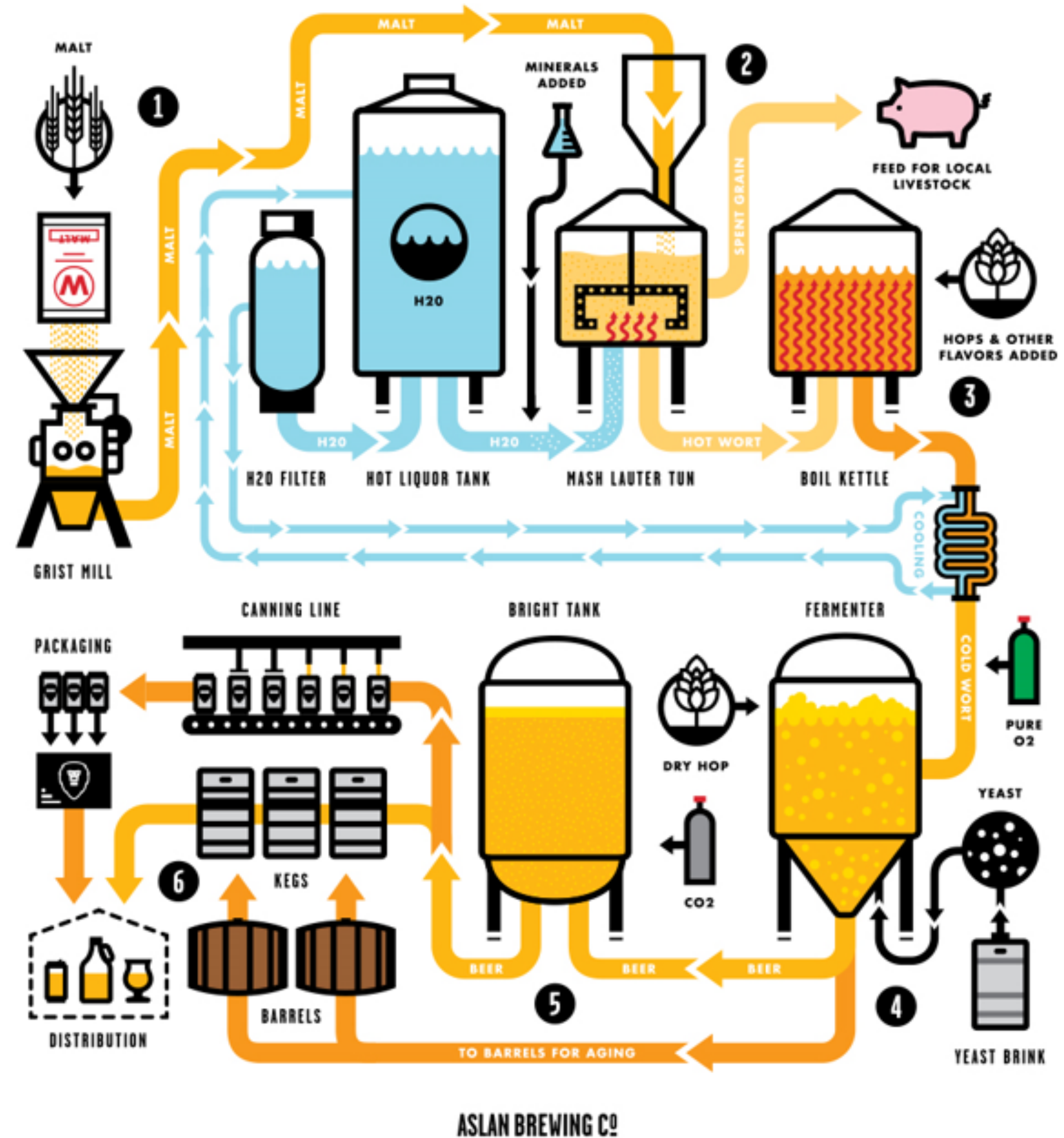
# OTHER

- Time
- Wood
- Fruit
- Coffee
- Other grains
- Spices
- Bacteria
- Cacao nibs
- Honey (and other alt-sugar sources)
- Smoke
- And much, much more!



# How to Make Beer

- Malting
- Mashing
- Lauter/Sparge
- Boil
- Ferment
- Condition
- Packaging







Item	Quantity	Unit	Notes
Water	100	gallons	
Grain	10	kg	
Hops	5	kg	
Yeast	1	kg	
Sanitizer	1	gallon	
Ice	10	kg	
Electricity	1	kWh	
Water	100	gallons	
Grain	10	kg	
Hops	5	kg	
Yeast	1	kg	
Sanitizer	1	gallon	
Ice	10	kg	
Electricity	1	kWh	

55.4	3.15	ON
54.5	4.25	ON
53.0		ON
54.7		ON

# Sensory Analysis

There's a difference between TASTING beer and DRINKING beer.

Tonight, we'll be TASTING in order to explore the sight, aroma, flavor, mouthfeel, and more of a variety of beer styles.

Image credit: *Tasting Beer*, by Randy Mosher

## Deconstructing a Beer



**Aroma:** Derived from ingredients such as malt and hops, but modified and augmented by yeast.

**Head:** From the medium-length proteins present in malt and adjunct grains such as wheat, oats, and rye. Affected by mashing, and possibly by filtration.

**Color:** Primarily from kilning of malts chosen for the brew, but affected by mashing and boiling specifics, and even to some degree by fermentation and filtration.

**Carbonation:** Carbon dioxide (CO<sub>2</sub>) gas, a by-product of fermentation by yeast.

**Body and Mouthfeel:** Proteins from malts, affected by the brewing, fermentation, and filtering procedures; sweetness from malts, brewhouse decisions, and fermentation.

**Flavor:** Malt, hops, and brewing water, all affected by many aspects of the brewing process.

**Alcohol:** More fermentable material means more alcohol, along with everything else.







**Bread**

|

**Honey**

|

**Balanced**

**ABV: 6%**



**Spicy**

**Fruity**

**Effervescent**

**ABV: 6.4%**

**Recreational**

**Outrage**

**Hazy IPA**

**Tropical | Citrus | Hazy**

**ABV: 6.3%**



Juliet.

Oscar.

Echo.

# Coffee Porter

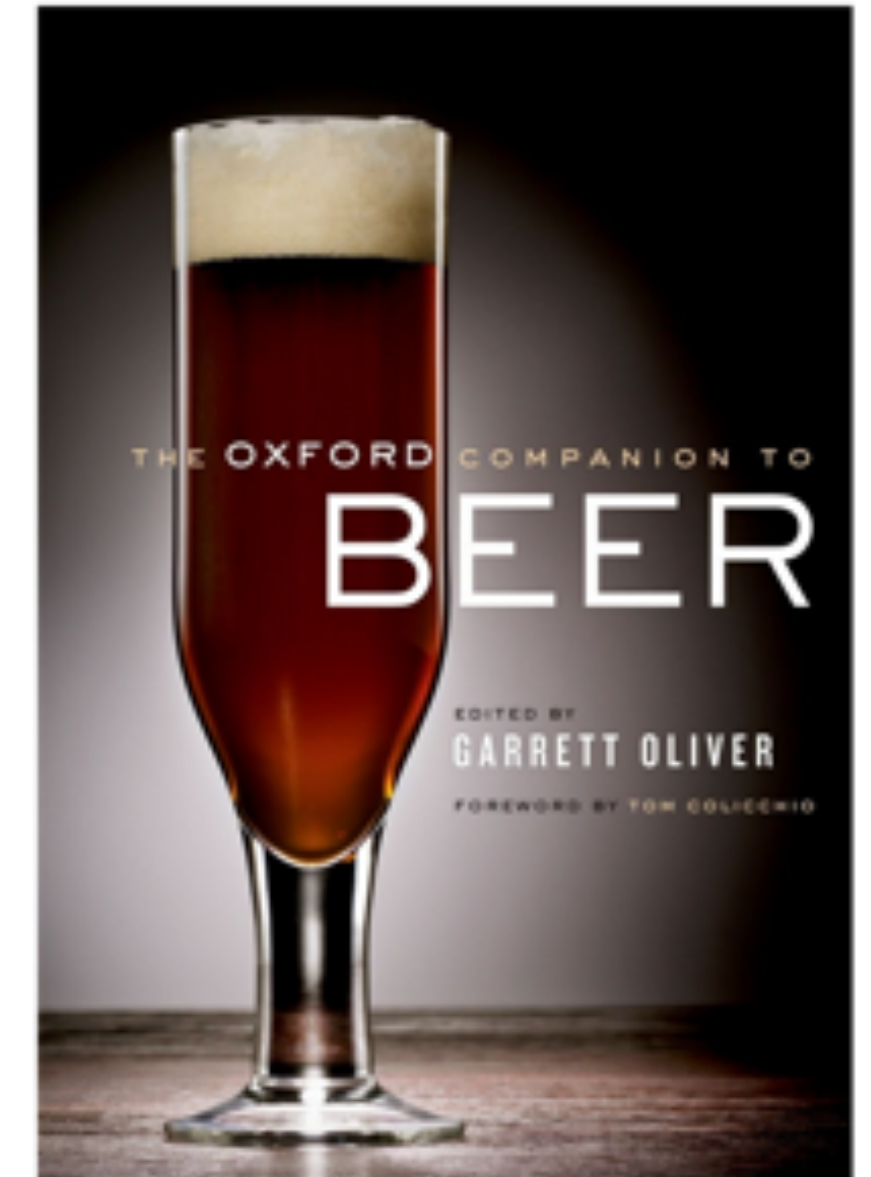
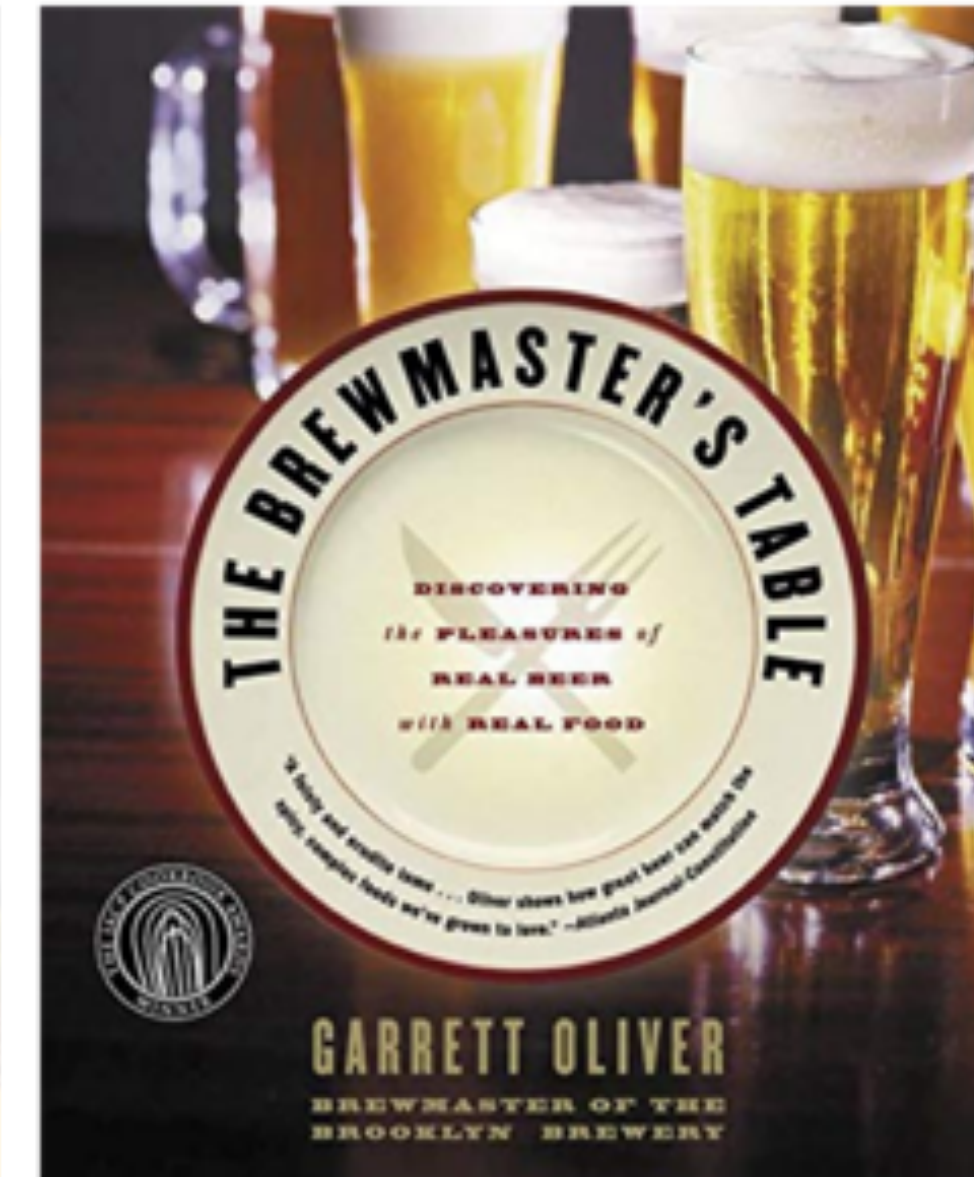
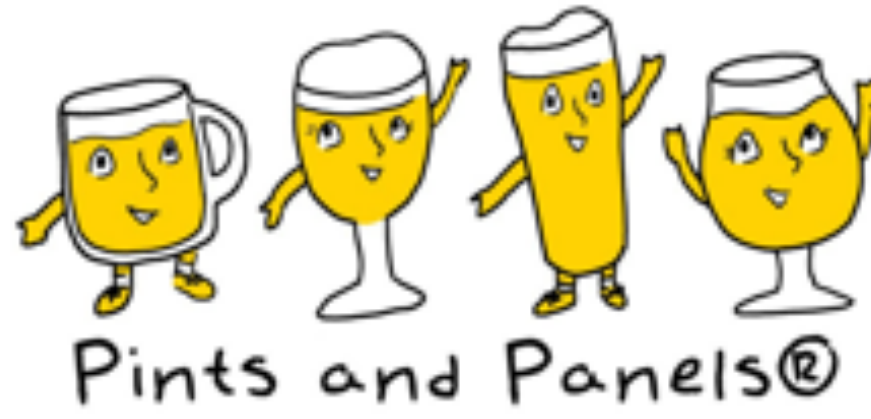
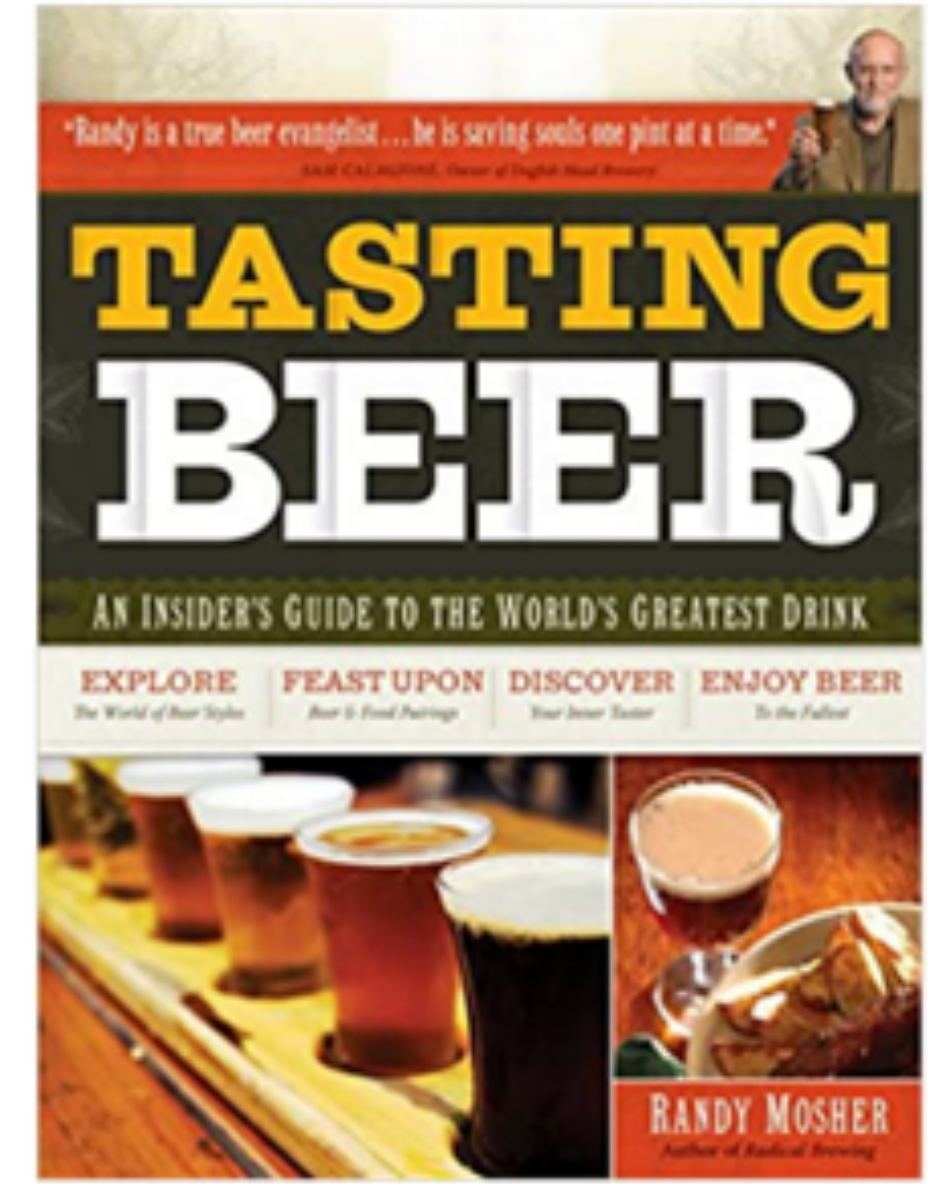
**Coffee | Chocolate | Smooth**

**ABV: 6.3%**



# Next Steps for Learning

- Books
- Apps
- BJCP
- Tasting
- And more!



# Anniversary Week Beer Releases



2/21: Illuminator Doppelbock

2/22: BA Haggis Wings Wee Heavy

2/23: Trunkshot Smoked Porter

2/24: Yorick English Strong Ale

2/25: WTF—Strawberry Shortcake

Any Questions?



@hotairbrewing

@pablo\_fahrenheit

