

Beer Education Series: Town Brewing

About Town Brewing:

Four friends came together to make a dream into a reality. Science. Math. Creativity. The workings of a great beer. A mix of personalities and talents. Requirements of a great brewery. Seeing a 2014 article by Daniel Hartis, "Want to build your own brewery," inspired them to open Town Brewing. 800 Grandin. Good things come to those who research. We found our spot. Things moved "quickly" after that. Friends and family got involved. Logistics took over, but at the heart of it all, a community we could be part of. Grow with. Thrive with. Home sweet home. Thank god the dream didn't die. See you soon.

The 3 Beers We're Sampling:

1. **Spratt's** [American Lager, 4.6%]: A crisp American light lager with notes of Loaf Bread and Honey.

BJCP Analysis of American Lager:

Aroma: Low to no malt aroma, although it can be perceived as grainy, sweet or corn-like if present. Hop aroma may range from none to a light, spicy or floral hop presence. While a clean fermentation character is desirable, a light amount of yeast character (i.e. apple) or DMS is not a fault.

Appearance: Very pale straw to medium yellow color. White, frothy head seldom persists. Very clear.

Mouthfeel: Low to medium-low body. Very highly carbonated with slight carbonic bite on the tongue.

Taste: Relatively neutral palate with a crisp and dry finish and a moderately-low to low grainy or corn-like flavor that might be perceived as sweetness due to the low bitterness. Hop flavor ranges from none to moderately-low levels, and can have a floral, spicy, or herbal quality. Hop bitterness at low to medium-low level. Balance may vary from slightly malty to slightly bitter, but is relatively close to even. High levels of carbonation may accentuate the crispness of the dry finish. Clean lager fermentation character.

2. **Breakaway** [Brown Ale, 5.7%]: A Honey Nut Brown Ale with notes of Honey, Caramel and Toast.

BJCP Analysis of Brown Ale:

Aroma: Light, sweet malt aroma with toffee, nutty, or light chocolate notes, and a light to heavy caramel quality. A light but appealing floral or earthy hop aroma may also be noticed. A light fruity aroma may be evident, but should not dominate.

Appearance: Dark amber to dark reddish-brown color. Clear. Low to moderate off-white to light tan head.

Mouthfeel: Medium-light to medium body. Medium to medium-high carbonation.

Taste: Gentle to moderate malt sweetness, with a light to heavy caramel character and a medium to dry finish. Malt may also have a nutty, toasted, biscuity, toffee, or light chocolate character. Medium to medium-low bitterness. Malt-hop balance ranges from even to malt-focused; hop flavor low to none (floral or earthy qualities). Low to moderate fruity esters can be present..

3. **Cruise to Nowhere** [Berliner Weisse, 4.8%]: A fruited sour ale with Mango, Passion Fruit, Guava, Orange, and Hibiscus.

BJCP Analysis of Berliner Weisse:

Aroma: A sharply sour character is dominant (moderate to moderately-high). Can have up to a moderately fruity character (often lemony or tart apple). The fruitiness may increase with age and a light flowery character may develop. No hop aroma. The wheat may present as uncooked bread dough in fresher versions; combined with the acidity, may suggest sourdough bread. May optionally have a restrained funky Brettanomyces character.

Appearance: Very pale straw in color. Clarity ranges from clear to somewhat hazy. Large, dense, white head with poor retention. Always effervescent.

Mouthfeel: Light body. Very high carbonation. No sensation of alcohol. Crisp, juicy acidity.

Taste: Clean lactic sourness dominates and can be quite strong. Some complementary doughy, bready or grainy wheat flavor is generally noticeable. Hop bitterness is undetectable; sourness provides the balance rather than hops. Never vinegary. A restrained citrusy-lemony or tart apple fruitiness may be detected. Very dry finish. Balance dominated by sourness, but some malt flavor should be present. No hop flavor. May optionally have a restrained funky Brettanomyces character.

4. **Choose 1 WILDCARD for your final Ladies Choice Selection!**

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Dropping Some Beer Knowledge:

Malts: Base vs Specialty:

- **Base Malt:** The larger percentage of a grain bill used to make a beer. These malts provide enzymes to convert malt starches into sugars. Provides extra enzymes to convert specialty malts/adjuncts without enough enzymes of their own to convert into sugars. Includes: Pale Malt, Pilsner Malt, Vienna Malt, Munich Malt, Rye Malt, & Wheat Malt. 2-Row vs 6-Row: Differentiates based on the formation of corns on the barley stalk rows.
 - o **Pilsner Malt:** type of pale lager malt made from two-row spring barley that is always highly modified (i.e., good protein degradation) during malting and is kilned to an exceptionally blonde color value of no more than 2.5 to 4 European Brewery Convention (EBC; approx. 1.5° to 2.1° Lovibond).
 - o **Carolina Gold Malt:** local malt bringing beautiful golden color and a delicately balanced, sweet and clean flavor. Kilned to a 2.5°-3.0° Lovibond color.
 - o **Wheat Malt:** a specialty malt with sweet, malty, mild bread dough characteristics, that contribute a light straw color and can be used as a specialty or base malt for wheat beers. Kilned to a 2.5°-3.5° Lovibond color.
- **Specialty Malt:** Smaller percentage of a grain bill used to make a beer. These malts are cracked & steeped to release the sugars and flavor compounds. The color of a beer typically comes more from the Specialty Malts. Includes: Roasted Malts, Chocolate Malt, Crystal/Caramel Malts, Smoked/Peated Malts, Acidulated Hops – **Oils, Acids, and Regions:**
- **Hop Oils:** Main source of flavor and aroma from hops; provide non-bitter tastes/aromas for hops.
 - o **Myrcene:** natural organic compound that is classified as a hydrocarbon. In thyme, bay, parsley, lemongrass, cannabis. Used in the perfume industry.
 - o **Humulene:** named after the scientific name for hops, *Humulus lupulus*, it's an isomer of Caryophyllene. Key part of hops that gives the "hoppy" aroma. It's been found to possess anti-inflammatory properties, and is being studied.
 - o **Caryophyllene:** one of the oils that help to give black pepper its spiciness. Gives a strong dry wood, pepper, earthy flavor, and an herbal character. This compound has been seen to reduce inflammation & been in anti-cancer studies. Used in the perfume industry.
- **Bittering:** During longer boil times hop oils evaporate, so they're added at beginning of boil to impart bitterness.
- **Aroma:** During shorter boil times and dry hopping, hop oils don't evaporate as much, so get the non-bitter aspects of the hops during shorter boil times and/or flameout/dry-hopping additions.
- **Alpha Acid:** Basis of bittering; quick breakdown: Humulone, Cohumulone, Adhumulone, Posthumulone, Prehumulone.
- **Beta Acid:** Slow breakdown: Lupulone, Colupulone, Adlupulone.
- **Noble Hops [original Hops, Central Europe]:** Terranger, Spalt, Hallertauer, Saaz; *Spalt, Styrian Goldings, Perle, Hersbrucker*

Examples of Hops:

- **Mosaic Hops:** Released in 2012 by the Hop Breeding Company, LLC, Mosaic hops feature complex but clean flavor characteristics and are known for their triple-use profile encompassing bittering, flavor and aroma. They have high alpha acids but low cohumulone which makes them pleasantly hoppy, carrying flavors of mango, pine, citrus and herbs and aromas of tropical and stone fruit. Mosaic is the first daughter of Simcoe and Nugget as has been humorously referred to by some as "Citra on steroids".
 - o Alpha Acid Composition: 11.5%-13.5%
 - o Beta Acid Composition: 3.2%-3.9%
 - o Co-Humulone Composition: 24%-26%
 - o Retains 75% alpha acid after 6 months storage at 20°C (68°F)
 - o Myrcene Oil Composition: 47%-53%
 - o Humulene Oil Composition: 13%-16%
 - o Caryophyllene Oil: 5%-8%
 - o Farnesene Oil: None
 - o Substitute Hops: Citra
- **Azacca Hops:** named after the Haitian god of agriculture. It is big in Alpha Acids (14-16%) and has a bright and refreshing aroma with juicy mango, tropical fruits, and citrus. Azacca® is a dual-purpose hop that produces sensational single-hopped beers. Whirlpool after flameout to maximize the juicy flavors and sweet aroma. Aroma: Fresh citrus, lemon, piney, tropical fruit.
- **Idaho 7 Hops:** first hop release from Jackson Farms just outside of Boise. This hop is ripe with zesty tangerine flavor that is reminiscent of marmalade. Its uniqueness shows up as a pleasant herbal character that melds with the citrus to come across like fine earl grey tea. A dual purpose hop capable of carrying a recipe, but it works best in conjunction with Citra or a bittering hop like Warrior. Mainly used as a late addition hop with a distinct tangerine flavor.
- **HBC 586 Hops:** HBC 586 is an experimental hop variety from the [Hop Breeding Company](#), which is a joint venture between John I. Haas and Yakima Chief Ranches. It is the result of a hybrid pollination of the mother YCR 21 and male #01239-2. The aroma of HBC 586 has been described as "a large medley of fruit flavors... Mango, guava, lychee, citrus, with slight sulfur and herbal notes."

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