

# Right Noble Brewers Guild of Caid

## Beer Core Judging Class Outline

21 September 2024

### Beer Core (Core 1) Divisions:

#### A. Top Ferment – Light

Brewed with yeast that usually forms a krausen (foamy head that develops on top of fermenting beer) and is usually fermented at warm temperatures (60°–70°F). Ale yeast and Kveik yeast are considered top fermenters. Color should be less than 18 SRM (Standard Research Method). Examples are English Pale Ale, Belgian Blonde Ale, Kolsch, Saison.

#### B. Top-Ferment – Dark

Similar yeast characteristics as Division A but with an SRM equal to or greater than 18 SRM. Examples are Belgian Dark Strong, Schwarzbier, Porters, Stouts.

#### C. Bottom Ferment – Light

Brewed with yeast that does its work from the bottom of the fermentation vessel and is usually fermented at cold temperatures (35°–50°F). Lager yeast is considered a bottom fermenter. Color should be less than 18 SRM. Examples are Pilsners (e.g. Pilsner Urquell), Budweiser, Mexican Lagers (light colored, e.g., Modelo Especial), Vienna Lager, German Festbier (the Oktoberfest beer served in Munich currently).

#### D. Bottom Ferment – Dark

Similar yeast characteristics as Division C but with an SRM equal to or greater than 18 SRM. Examples are Black Lager, Eisbock, Dark Czech Pilsner, Mexican lagers (e.g., Modelo Negra - maybe).

#### E. Cider (Apple Cider, Perry, Etc.)

For The Right Noble Brewers Guild of Caid judging purposes cider is defined as a non-grape fruit wine of less than 10% ABV, usually but not necessarily carbonated. May range from dry to sweet. May include hops or other herbs for flavor and bittering. Examples are (hard) apple cider (e.g. Jefferson Dry from Apple Outlaw), Doux (sweet light French cider), pear cider (aka perry - e.g., Restoration Perry from Wildcraft Cider Works), fruit ciders (e.g., Pina y Canela from Tepache Sazon), apple or pear cider that include other fruit for added flavors. (Ferments that use honey or grape juice as components are not considered ciders and fall in Core 2 – Wines for judging purposes.)

# Right Noble Brewers Guild of Caid Judging Form Beer and Soda

Descriptor Definitions - Check whenever appropriate

**Acetaldehyde** – Green apple-like aroma; byproduct of fermentation

**Alcoholic** – The general effect of ethanol; and higher alcohols. Tastes warming.

**Astringent** – Drying, puckering (like chewing on a grape skin) feeling often associated with sourness. Tannin. Most often derived from boiling of grains, long mashes, over-sparging or sparging with hard water

**Bitter** – basic taste associated with hops; braun-hefe or malt husks. Sensation experienced on back of tongue.

**Chill haze** – haze caused by precipitation of protein-tannin compound at cold temperatures. Does not affect flavor. Reduction of proteins or tannins in brewing or fermenting will reduce haze.

**Chlorophenolic** – Caused by chemical combination of chlorine and organics. Detectable in parts per billion. Aroma is unique but similar to plastic-like phenolic. Avoid using chlorinated water.

**Cooked Vegetable/Cabbage like** – Aroma and flavor often due to long lag times and wort spoilage bacteria that later are killed by alcohol produced in fermentation.

**Diacetyl/Buttery** – Described as buttery, butterscotch. Sometimes caused by abbreviated fermentation or bacteria.

**DMS (dimethyl sulfide)** – A sweet, corn-like aroma/flavor. Can be attributed to malt, short or non-vigorous boiling of wort, slow wort chilling or, in extreme cases, bacterial infection.

**Fruity/Estery** – Similar to banana, raspberry, pear, apple, or strawberry flavor, may include other fruit/estery flavors. Often accentuated with higher temperature fermentations and certain yeast strains.

**Grainy** – Raw grain flavor. Cereal-like. Some amounts are appropriate in some beer styles.

**Hoppy** – Characteristic odor of the essential oil of hops. Does not include hop bitterness.

**Husky** – See Astringent.

**Light-Struck** – Having the characteristic smell of a skunk, caused by exposure to light. Some hops can have a very similar character.

**Metallic** – Caused by exposure to metal. Also described as tinny, coins, bloodlike. Check your brewpot and caps.

**Oxidized/Stale** – Develops in the presence of oxygen as beer ages or is exposed to high temperatures, winy, wet cardboard, papery, rotten vegetable/pineapple, sherry, baby diapers. Often coupled with an increase in sour, harsh, and bitter. The more aeration in bottling/siphoning or air in headspace, the more quickly a beer will oxidize. Warm temperatures dramatically accelerate oxidation.

**Phenolic** – Can be any one or combination of a medicinal, plastic, electrical fire, Listerine-like, bad-aid-like, smoky, clover-like aroma or flavor. Most often caused by wild strains of yeast or bacteria. Can be extracted from grains (see astringent). Sanitizing residues left in equipment can contribute.

**Salty** – Flavor associated with table salt. Sensation experienced on sides of tongue. Can be caused by presence of too much sodium chloride, calcium chloride, or magnesium sulfate (Epsom salts); brewing salts.

**Solvent-like** – Flavor and aromatic character of certain alcohols; often due to high fermentation temperatures. Like acetone, lacquer thinner.

**Sour/Acidic** – Pungent aroma, sharpness of taste. Basic taste like vinegar or lemon tart. Typically associated with lactic acetic acid. Can be the result of bacterial infection through contamination or the use of citric acid. Sensation experienced on the sides of the tongue.

**Sweet** – Basic taste associated with sugar. Sensation experienced on front tip of the tongue.

**Sulfur-like** – Rotten eggs, burning matches. Is a byproduct with certain strains of yeast. Fermentation temperature can be a factor of intensity. Diminishes with age. Most evident with bottle conditioned beer.

**Yeasty** – yeast-like flavor. Often due to strains of yeast in suspension or beer sitting on sediment too long.

Entry # \_\_\_\_\_ Date \_\_\_\_\_

Core: \_\_\_\_\_

Division: \_\_\_\_\_

Item Judged: \_\_\_\_\_

Judged By: \_\_\_\_\_

Judge's Guild Ranking: \_\_\_\_\_

MAX SCORE

DOCUMENTATION 15 \_\_\_\_\_  
Recipe (2), Bibliography (2), Log Notes (6),  
Historical Notes (5)  
Comments

PRESENTATION 4 \_\_\_\_\_  
Bottle (1), Cork/Closure (1), Air Space (1), Label (1)  
Comments

APPEARANCE (as appropriate for style) 8 \_\_\_\_\_  
Color (2), Clarity (4), Head Retention (2)  
Comments

BOUQUET / AROMA (as appropriate for style) 20 \_\_\_\_\_  
Aromatic Characteristics (Malt, Hops, Other) (12),  
Development (8)  
Comments

FLAVOR (as appropriate for style) 50 \_\_\_\_\_  
Malt (6), Hops (6), Other Flavor Characteristics (8), Body (6),  
Balance (8), Developed (8), Aftertaste (8)  
Comments

DRINKABILITY & OVERALL IMPRESSION 3 \_\_\_\_\_  
Comments

TOTAL (100 possible points) \_\_\_\_\_

## Notes regarding judging criteria:

### Documentation:

Fairly straight forward on form

### Presentation

Containers should be clean and appropriate for beer or cider.

### Appearance:

Color – should be appropriate to style. Brewer indicates light or dark on entry form.

Clarity – this is more subjective. Some styles are cloudy (e.g., some wheat beers, hazy IPAs). Also, most entries are “bottle conditioned” to produce carbonation. Sediment from this process can be stirred during judging process and the brewer should not be penalized for this.

Head Retention – this should not be judged too critically. Head retention for most commercial brews are fairly short in many cases. Head retention can be effected by temperature and other causes. For example, even a small amount of oil or grease will kill the head on beer. The “glass” you use to do the tasting can have a big effect on head retention.

### Bouquet:

Development – Does the aroma of the brew have the proper characteristics? Are there aromas that not appropriate to the style? Is there too much yeast aroma?

### Flavor:

Are the Malt, Hops, and other Flavor Characteristics, and Body appropriate for the style?

Balance: Are the flavors in the right proportions for the style? For example, a hefeweizen should not be hopped up like an IPA and should have much lower bitterness than a stout. Alcohol should also be in balance and appropriate to the style.

Developed: Is there too much yeast flavor (too young a brew or bad process)? If the brew is “oaked” is the appropriate flavors apparent? Only certain styles benefit from “aging”.

### Drinkability and Overall Impression:

Judge’s choice

## Judging Do’s:

Fill out the judging form COMPLETELY. This makes final scoring and recording possible.

Add helpful comments.

## Judging Don’ts:

Don’t be a jerk.

## Bibliography:

[Beer Judge Certification Program \(BJCP\) website \(https://www.bjcp.org\)](https://www.bjcp.org)

[Beer Scholar - Tips for New Beer Judges \(https://www.thebeerscholar.com/blog/judging-beer-for-the-first-time-here-are-10-tips\)](https://www.thebeerscholar.com/blog/judging-beer-for-the-first-time-here-are-10-tips)

[WestCoastBrewers.com IBU Chart - https://i0.wp.com/westcoastbrewer.com/BrewersBlog/wp-content/uploads/2013/07/Average-IBU-Bitterness-By-Beer-Style.jpg](https://i0.wp.com/westcoastbrewer.com/BrewersBlog/wp-content/uploads/2013/07/Average-IBU-Bitterness-By-Beer-Style.jpg)

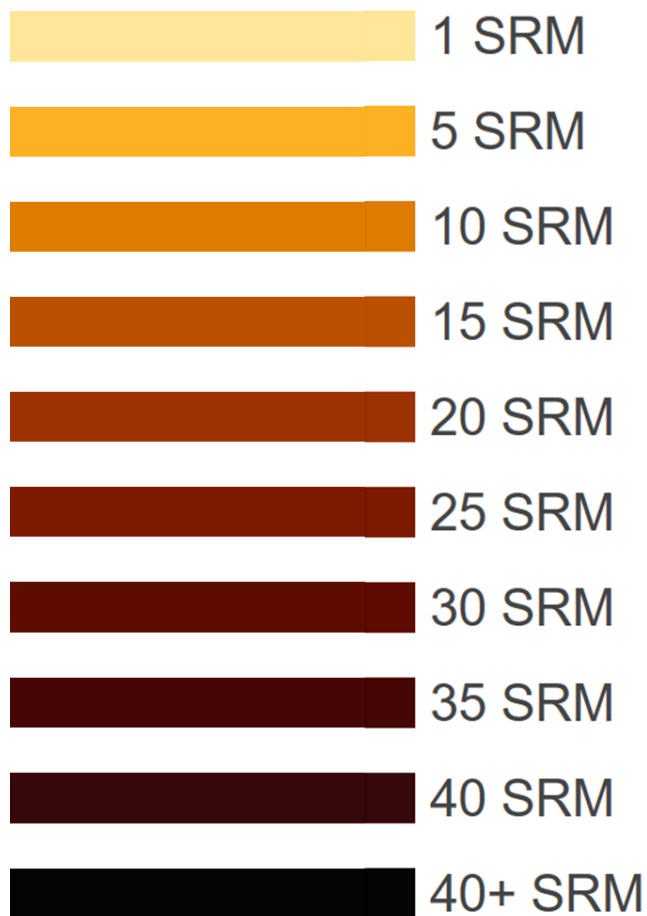
# Beer Scholar's Tips for New Beer Judges

<https://www.thebeerscholar.com/blog/judging-beer-for-the-first-time-here-are-10-tips>

## Beer Judge Certification Program (BJCP) Color Guide

[BJCP Instructions for Use](#)

### Beer Color Standard Research Method (SRM) Scale



## Average International Bittering Units (IBU) by Beer Style

<https://i0.wp.com/westcoastbrewer.com/BrewersBlog/wp-content/uploads/2013/07/Average-IBU-Bitterness-By-Beer-Style.jpg>

## 12 Off (?) Flavors in Beer

**Acetaldehyde** is a common off-flavor in beer that can taste and smell like **green apples, oxidized apples, or acetic cider**. It is present in all beers, but in low concentrations that are usually below detectable thresholds in healthy fermentations.

Common sources: Fermentation product, staling or contamination

**Acetic Acid** ( $\text{CH}_3\text{COOH}$ ) is a weak, monocarboxylic volatile fatty acid (**sour flavor**) produced by yeast as a natural by-product of metabolism. It is a key component (along with ethanol) in the generation of ethyl acetate, which is the most common flavor ester in beer. It may also be produced by acetobacter (acetic acid or vinegar bacteria) and can turn ethanol to acetic acid during fermentation if excessively aerated. This acid can also be generated from the oxidation of acetaldehyde and is thereby involved in complex reactions of flavor-generation during wood maturation of beer. In lambic beers and some other sour beer styles, acetic acid can be a desirable component that adds to the complexity of the flavor and aroma profile.

Common sources: Fermentation product, staling or contamination

**Benzaldehyde** has a flavor similar to **marzipan, sherry, boozy candy**, and some say almond. These flavors may not appear until months later. For some styles, like bigger beers, including Russian imperial stouts, barleywines, or Belgian ales a light sherry note can be appropriate.

Common Sources: Oxidation of melanoidins (melanoidins = chemical compound from caramelization of sugars/proteins in the wort), yeast growth, or raw materials.

**Diacetyl** is a chemical compound that can cause an unwanted **buttery or butterscotch flavor** in beer. It's a natural byproduct of fermentation, but it's generally considered undesirable. Diacetyl is produced when alpha-acetolactate oxidizes during fermentation. It can also be produced by bacteria like Lactobacillus and Pediococcus. Factors that influence diacetyl levels include yeast strain, fermentation temperature, aeration, and maturation time. To reduce diacetyl levels, beer can go through a diacetyl rest after fermentation, where the temperature is slightly raised to allow the yeast to reabsorb the diacetyl. A small amount of diacetyl is acceptable in some beer styles, especially those from the British Isles. However, German lager brewing does not allow any perceptible diacetyl.

Common sources: Microbial contamination or improper maturation.

**Dimethyl sulfide (DMS)** ( $(\text{CH}_3)_2\text{S}$ ) is a compound that's commonly described as having the **aroma of cooked corn**, or even boiled cabbage. DMS is fairly common in light lagers, even appropriate in small amounts, but its presence is usually considered a flaw. In moderation it does make a significant contribution to the aroma of many lager beers and indeed has been identified as a key feature of German-style lagers.

Common sources: Wort boil, wort cooling or contamination

**(E)-2-nonenal** is a compound claimed to be a principal determinant of beer staling, affording a **cucumber aroma and wet paper/cardboard note** to beer.

Common sources: Oxidation, staling.

**Ferrous sulfate** can cause the beer to taste or smell **metallic, similar to old copper coins, tin-like, or blood**. Excessive levels of ferrous sulfate can make beer taste like copper or rusty iron. If the level of ferrous sulfate in beer is higher than 1.5 mg/L, it can cause dizziness in drinkers.

Common sources: Water sources, non-passivated vessels.

**Hydrogen sulfide (H<sub>2</sub>S)** in beer is a gas that produces a strong, unpleasant **rotten egg smell**, considered an off-flavor in most beers, although small amounts can be acceptable in certain styles due to its natural production by yeast during fermentation

Common sources: Fermentation, maturation or contamination, yeast strain, fermentation temperature, nitrogen composition of the wort, yeast handling practices.

**Indole** is an off-flavor in beer that can be described as **barnyard or pigs on a farm**. Indole is produced by bacteria that cleave indole from tryptophan. These bacteria are gram-negative, pH and alcohol sensitive, and only grow in the early stages of fermentation. The threshold for indole in beer is 10-20 µg/L. It is best to dump any batch with this flavor as it could lead to stomach ache or diarrhea. Around half of the population are very sensitive to Indole.

Common sources: Bacterial infection during fermentation.

**Isobutyraldehyde** can contribute **grainy, husk-like, nut-like, or musty** taste in beer. It can also be a key flavor in some lagers and ales, while being an off-flavor in low alcohol beers.

Common sources: Young pale malts, malt crushed too finely, malt mashed for too long or sparged with water at too high a temperature, excessive run-off from the mash or insufficient wort boil.

**Isovaleric acid** is an organic compound that is generally considered an off-flavor in beer, particularly non-sour beer. It's often described as having a **cheesy, sweaty, putrid, or old hops-like** flavor. Some English-style ales may consider isovaleric acid to be appropriate as a background note. Many brewers find small amounts to be acceptable in mixed fermentation sour beers and lambics.

Common sources: Use of old, degraded hops, high hopping rates, wild yeast, and bacteria.

**3-Methyl-2-butene-1-thiol (MBT)** is a compound that gives beer a **light-struck appearance and an off-flavor that some describe as skunky, toffee, or coffee like**. MBT is produced when beer is exposed to light, which causes chemicals in hops to undergo a photo-oxidation reaction. This reaction can occur almost instantly in strong sunlight, and tasting panels can detect it after less than 10 seconds of full sunshine.

Common sources: Exposure to light.