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BRITISH BITTER



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BY GORDON STRONG

BRITISH BITTER

The beers are generally well balanced, with flavor contributions from malt, yeast, and hops being evident.

BRITISH BITTER BY THE NUMBERS

OG:1.040–1.048
FG:1.008–1.012
SRM: 8–16
IBU: 25–40
ABV:3.8–4.6%



Photo by Charles A. Parker/Images Plus

Noted English beer writer Martyn Cornell described bitter as the “iconic pint” that is the “country’s favourite drink” in his excellent book, *Amber, Gold & Black*. That was certainly my impression the first time I visited the United Kingdom in 1998. The previous year I had heard Michael Jackson and Mark Dorber speak at the National Homebrew Conference, and I was inspired to visit. My first stop was Mark’s The White Horse on Parsons Green in London (he has since moved on to other pubs).

Upon entering this classic English pub with a reputation as one of the best places in the UK to get cask ale due to Mark’s renowned cellarmanship, I asked the barmaid about the beers. With pride, she swept her hand over the long row of hand pull taps and said, “These are our bitters.” Having only been familiar with US brewpubs at the time, I was expecting to see the full range of English styles, especially since it was late November. Nope, have anything you like on cask as long as it’s a bitter. Well, I guess they also had Highgate Mild there as well. But in London, bitter was the predominant cask beer.

In the south of England, cask beers are generally served on hand pump without a sparkler (a device used to put a foamy head on the beer). The beers are pulled gently to preserve the condition of the beer, and there is a light frothy head on the beer with larger bubbles. When I traveled further north, I began seeing sparklers used more frequently and publicans gave me an odd look if I asked them to remove the sparkler before pouring the beer. I guess I prefer the southern style better, and would take the beer on gravity feed directly from the cask if offered that way. It seemed to me to preserve the natural flavor better.

Armed with my trusty *CAMRA Good Beer Guide*, I proceeded to seek out places where I could try as many well-

known examples as possible and in locations that were recommended for their cellarmanship. I did taste a wide range of bitters, as well as other styles more popular in different areas (such as milds in the Midlands). One thing I noted immediately was that bitters were more fruity and less caramelly than I was expecting. More on this later.

When putting together the Beer Judge Certification Program (BJCP) Style Guidelines in 2004, I worked closely with my friend Steve Hamburg from Chicago, a great brewer and devotee of the finer points of British cask ales. We tried many examples and did our best to characterize them as we tasted them. We wanted to describe the cask versions of beers, since the British often have a different export formulation in bottles (Fuller’s London Pride, a classic best bitter, is 4.1% on cask but 4.7% in bottles, for example – a very different beer).

We were quite satisfied with ourselves at the time as we published the guidelines. However, over the years I heard small grumblings from friends in the UK or who had visited there. Something wasn’t right with the bitters. The problem was, nobody could articulate the problem. They were just “wrong.” Hmm, “in what way?” I would ask. “In the way that they aren’t right,” was generally the response. Thanks. Yet I kept this in the back of my mind as something to try to fix if given the chance.

Much later, I was visiting Chile for the first time and trying their versions of IPAs. I found them to be kind of sweet, caramelly, not very bitter, and lacking a big fresh hop impression. The brewers, clearly proud of their brews, would ask me what I thought. They seemed somewhat like IPAs, I said, but tasted quite old. Confused, they would tell me that the beers were very fresh. Then some of them gave me American imports and said, “try it, they taste the

MFB (MY FAVORITE BITTER)

(5 gallons/19 L, all-grain)

OG = 1.041 FG = 1.010

IBU = 34 SRM = 12 ABV = 4.1%

Based on the classic Timothy Taylor Landlord. That beer is defined by its choices in Golden Promise malt, yeast, and Styrian Golding aroma hops.

INGREDIENTS

8 lbs. 6 oz. (3.8 kg) Golden Promise malt

2.5 oz. (71 g) debittered black malt

6.75 AAU UK Fuggle hops (60 min.)

(1.5 oz./43 g at 4.5% alpha acids)

4.1 AAU UK Golding hops (10 min.)

(0.75 oz./21 g at 5.5% alpha acids)

1 oz. (28 g) Styrian Golding hops

(0 min.)

Wyeast 1469 (West Yorkshire Ale)

or White Labs WLP037 (Yorkshire Square Ale) yeast

$\frac{3}{4}$ cup corn sugar (if priming)

STEP BY STEP

On brew day, prepare your ingredients; mill the grains, measure your hops, and prepare your water.

This recipe uses reverse osmosis (RO) water. Add $\frac{1}{4}$ tsp 10% phosphoric acid per 5 gallons (19 L) of brewing water, or until water measures pH 5.5 at room temperature. Add 1 tsp. calcium chloride (CaCl₂) to the mash.

On brew day, mash in the Golden Promise at 152 °F (67 °C) in 13 qts. (12 L) of water, and hold this temperature for 60 minutes. Add the black malt to the mash. Raise the temperature by infusion or direct heating to 168 °F (76 °C) to mashout. Recirculate for 15 minutes. Fly sparge with 168 °F (76 °C) water until 7 gallons (26.5 L) of wort is collected. Add $\frac{1}{2}$ tsp. of calcium carbonate (CaCO₃) to the kettle.

Boil the wort vigorously for 70 minutes, adding the hops at times indicated in the recipe. After adding

the flameout hops, allow the hops to rest in the kettle for 40 minutes as the wort cools naturally. Chill to 66 °F (19 °C) and rack to the fermenter. Oxygenate, then pitch the yeast. Ferment at 68 °F (20 °C) until complete. Rack the beer, prime and bottle condition, or keg and force carbonate.

MFB (MY FAVORITE BITTER)

(5 gallons/19 L,

extract with grains)

OG = 1.041 FG = 1.010

IBU = 34 SRM = 12 ABV = 4.1%

INGREDIENTS

5.6 lbs. (2.54 kg) Maris Otter liquid malt extract

2.5 oz. (71 g) debittered black malt

6.75 AAU UK Fuggle hops (60 min.)

(1.5 oz./43 g at 4.5% alpha acids)

4.1 AAU UK Golding hops (10 min.)

(0.75 oz./21 g at 5.5% alpha acids)

1 oz. (28 g) Styrian Golding hops

(0 min.)

Wyeast 1469 (West Yorkshire Ale)

or White Labs WLP037 (Yorkshire Square Ale) yeast

$\frac{3}{4}$ cup corn sugar (if priming)

STEP BY STEP

Steep the black malt for 15 minutes in 6 gallons (23 L) of water at 158 °F (70 °C). Remove the grains, add the malt extract and stir thoroughly to dissolve the extract completely. You do not want to feel liquid extract at the bottom of the kettle when stirring with your spoon. Turn the heat back on and bring to a boil.

Boil the wort vigorously for 70 minutes, adding the hops at times indicated in the recipe. After adding the flameout hops, allow the hops to rest in the kettle for 40 minutes as the wort cools naturally. Chill to 66 °F (19 °C) and rack to the fermenter. Oxygenate, then pitch the yeast. Ferment at 68 °F (20 °C) until complete. Rack the beer, prime and bottle condition, or keg and force

carbonate.

same.” Then I figured it out. They were accurately cloning oxidized beers. You see where I’m heading?

Yeah, the Chileans had just shown me the same mistake I made when I first was describing bitters. I was relying on well-known brands but bought off the shelf in the US. Those beers were not fresh, and many weren’t even the same beer due to export reformulation. I thought the caramelly-sweet flavors were from malt additions, but they were really due to oxidation. So the Brits must have been upset that I was describing old beer. I tried to take this into account when revising the style guidelines in 2015.

The 2015 BJCP Style Guidelines have British bitter as Category 11. The category has a lengthy introduction pointing out some of these issues in tasting imported bitters, as well as describing some regional differences. The British bitter category recognizes three separate styles (ordinary bitter, best bitter, and strong bitter), which are basically separated by original gravity and alcohol content. Those distinctions exist in British beer descriptions, and I saw the effect in pubs where it appeared that beer was priced by the alcohol content.

In this article, I’m primarily describing best bitter but most comments also apply to the full range of bitters. I’m also discussing the cask beers more than the bottled versions. Many bottled versions of bitters are called pale ales, the historical parent to the style. While there is no strict rule that bitters are cask beers and pale ales are bottled, that is a fairly common observation. I think of bitters as a running beer, that is a beer designed to be moved quickly to the pub and consumed young and fresh.

SENSORY PROFILE

British bitters are bitter in the balance, but not in the extreme. A bitterness level of around 30 IBUs is common, although good examples can be found in the range of 22 to 40. IBUs can rise with the alcohol level and the finishing gravity.

I found many examples to be more fruity than hoppy, but many English hop varieties have fruity character-

istics. Hops that have an orange or orange marmalade flavor are quite tasty in these beers. English variety hops with floral, earthy, resinous, or fruity characteristics are common, but a light use of American or continental hops can be used.

Traditional cask beers could be dry hopped in the pub by the publican, not the brewer. This is a less common tradition nowadays, but it still can be found. This can introduce some additional difference from pub to pub when sampling the same brand. Obviously, a dry hopped beer will have more of a fresh hop aroma present, but it is rarely at a high level.

Malt aromas and flavors are typically British in character, showing a more bread-like, toasted, nutty, or biscuity flavor than more neutral malts. Caramel can be present, often as a component to round out the palate rather than as a dominant flavor. A very light diacetyl character may be seen in some examples, but it certainly isn’t required; when present, it often can be confused with caramel or toffee.

The yeast character of the beer can vary but is also typically British in nature. Depending on the strain, the result can be fruity, malty, mineral, or some combination. The yeast is rarely neutral, however it should not dominate the beer’s profile as in some Belgian styles.

The body typically isn’t heavy; a medium-light to medium level is common. Carbonation, especially in cask examples, is on the low end. Alcohol is restrained, often closer to the 4% level, so is typically not noticed. These attributes combine to make a pint easy to drink.

Bitters can be fairly light in color in modern times, but traditionally were amber to copper in color. The amount of head depends greatly on the dispense method. As I said, cask beers in London often appear nearly flat (but actually do have more carbonation still in them than when a sparkler is used).

In summary, drinkability is key to this style. When served on cask, the pints should pour down quickly. The beers are generally well balanced, with flavor contributions from malt,

yeast, and hops being evident. My observation is that the flavor dimension tends to dominate the aroma of these beers, particularly when served at proper cellar temperatures (52–56 °F/ 11–13 °C).

BREWING INGREDIENTS

Since the style is fairly simple and within a relatively narrow range, some might assume that most bitters taste the same. That is not the case, however. Brewers actually take steps to differentiate their beers from others through their specific ingredient choices, mainly in hops and yeast, but to a lesser extent specialty malts.

Hop varieties like Challenger, Fuggle, Target, Northdown, Golding, Progress, WGV, and Styrian Golding are traditional, but more modern hops can be used. I think there is more experimentation in hops with more modern English styles like British golden ale than in bitters, however.

Traditional hopping techniques are widely used, with most hops being added as a bittering addition. Bitters do not typically have a huge late hop aroma and flavor, so traditional flavor and aroma hopping techniques can be used. Dry hopping is relatively rare, but can be done (often by adding hop plugs to a cask).

Pale ale malt is the predominant base malt for bitters, although differentiation can be obtained through using different barley varieties (e.g., Maris Otter, Alexis, Halcyon, Pipkin, Optic, Golden Promise). Some are kilned differently than others, but pale ale malts are more highly kilned than the more neutral 2-row brewers malt. A mix of base malts is possible; I often use Maris Otter for a biscuity flavor, but don’t want it to dominate the beer. So I blend with something more toasted or neutral.

Crystal malt can be used, but usually in a low percentage (often less than 5%). About 10% is the practical maximum in the grist, lest the beer seem too sweet. Sometimes crystal malt is used more for color than flavor, and there is a wide range of kiln levels in British crystal malt. Darker crystal malts increase the color, but they also increase the burnt sugar flavors and

dark fruit flavors.

Traditional specialty grains are rarely used, except perhaps for color adjustment with more highly roasted grains. Biscuity and bready flavors come from base malt in general, not adding additional specialty malts.

Wheat, particularly torrified wheat, can be used for up to 10% of the grist. Typically used at a lower level, if at all, it can enhance head retention but also provide toasty, nutty, bready flavors. British brewers are not afraid of using adjuncts, sugars, and colorants. Flaked maize is sometimes used to round out the flavor, and sugars can provide flavor. Invert sugar and darker sugar syrups are fairly rare, but should not be seen as surprising. Plain, flavorless sugar is generally not used since it is not needed to boost gravity.

Single infusion mashes are still the most traditional method in the British Isles, and that works well with this style of beer. Bitters are typically dry, so a conversion temperature within a few degrees of 151 °F (66 °C) is common.

There are many well-known yeast strains from the UK that can be used in this style of beer. If you can associate the origin of the yeast with the flavor profile of a commercial beer that uses it, you may be able to pick a yeast that suits your needs. I'm fond of the fruity Fullers strain – Wyeast 1968 (London ESB) or White Labs WLP002 (English Ale) – as my main English yeast, but I've recently added Wyeast 1335 (British Ale II) as a balanced yeast. Wyeast 1318 (London Ale III) tends to make a malty beer, while Wyeast 1469 (West Yorkshire Ale) seems minerally to me. Wyeast 1028 (London Ale) can be a bit sulfury but does a great job attenuating. Any of these, or their White Labs equivalents, can work with this style very well.

HOMEBREW EXAMPLE

While I have a large number of bitters in my brewing repertoire, I'll give you one of my favorites – a beer based on the classic Timothy Taylor Landlord. That beer is defined by its choices in three ingredients: Malt (Golden Promise), yeast (Wyeast 1469), and hops (Styrian Golding in the aroma). While

I'm usually OK with substitutions, these cannot be changed and still get the desired finished beer. You'll still make a good beer, but it won't have the specific character of this world-class commercial example.

Golden Promise makes up the full grist of Timothy Taylor Landlord, so I use that. However, the beer has a darker color that I'm not sure I can reach with just that malt. The easiest approach is to use a small amount (2%, maybe) of a darker malt to adjust the color without adding significant flavor. I also use a very hard boil and a little chalk in the boil to increase color. Other methods could be used, such as decocting or caramelizing the first runnings. These methods don't just make the color darker, but also help develop the malt flavor. I like the hard boil to bring out subtle caramel flavors over the option of using crystal malt.

Landlord uses Fuggle, Golding, and Styrian Golding, so I chose the same varieties. The aroma of Styrian Golding is pretty much a must. The unusual method is to add the Styrians as the boil is ending, and then let them steep for an unusually long 40 minutes. I think this method adds a more tannic bite to the beer that I remember.

The Wyeast 1469 yeast is reputed to be the strain used at the brewery. I find that it adds a minerally quality to the finished beer, which I didn't like in a mild or Scottish beer, but find works well with a dry, bitter beer. I found that I didn't need to adjust my water very much with the yeast providing sufficient minerality.

The key ingredients combine to create a wonderfully flavorful and balanced beer. I know they're a little less common and may be more expensive, but when you make a beer with only a few ingredients, quality and character becomes even more important. **BYO**