

**HOMEBREWING**

# Make Your Best..

Going beyond the simple question of “what” and instead exploring the “why” will help you understand how to design and brew better beers. **By Josh Weikert**

## English Mild

Like chefs who demonstrate their skills by cooking an egg, many brewers consider mild to be a real test. It should be light but malt-forward, impactful but not overbearing, rich but not heavy, and low enough in ABV to drink by the pint.

**Style:** I once heard someone describe mild as being “like a bitter, but dark.” Wrong. Although the two styles share a country of origin, English mild and bitter are not that similar. Dark mild is a light beer, but not in color or flavor. It should be easy to drink and low in alcohol. Go easy on bitterness, using just enough to balance the malt flavors, which should do most of the work for you. The style allows for a wide range of malt expressions; the key is selecting malts that reinforce and complement each other, adding complexity without making the beer too bulky.

**Ingredients:** Use a good Maris Otter as your base. For the rest, I use equal parts amber, brown, and chocolate rye malts. The amber adds a rich biscuit flavor with some caramel notes; it also works better than light crystal, which can taste too thinly sweet. The brown offers rich, toasted, nutty flavor and a touch of roast, creating an impression of dryness. Finally, the chocolate rye is an easy-on-the-palate chocolate malt. Many brewers like pale chocolate, but it can impart more roast character, while the chocolate rye is softer and adds some great secondary spice notes. In such a light beer, there is a risk of it tasting more like watered-down coffee than beer, so I like a substantial dose of specialty malts that leave behind plenty of dextrins.

Hops are simple; all we need is a little bittering. Use any hops you like in a 60-minute addition to get about 15 IBUs.

Yeast is important if you want a bit of ester to come through (it is, after all, English). I like Wyeast 1318 (London Ale III), which can add a pleasant berry ester. It isn't a great attenuator, so you can be reasonably sure you won't thin out the beer too much. But we want to be careful of diacetyl with this strain, as it's both undesirable in this style and unpleasant in this flavor profile.

**Process:** Optionally, you can add a degree or two to your usual mash so that your wort isn't too fermentable. For the sake of repeatability, I prefer my standard 152°F (66°C) mash, using grist rather than temperature to adjust body.

For fermentation, avoiding diacetyl is your mission, so start cold and finish warm. I pitch this yeast at a brisk 60°F (15°C) and hold it there for the first four days. Then I let it free-rise to finish fermentation and clean up any lurking diacetyl precursors. With such a low gravity, you can be sure of a complete fermentation pretty quickly; I usually bottle this beer 10 days after pitching. Thanks to a highly flocculent yeast, it clears up rapidly, and you can serve it almost immediately. It's one of the great “speed beers” out there, and it provides big flavor in a small package.



**MAKE IT**

## Grantham English Mild

If ever you buy specialty malts specifically for a batch, let it be for this one. Fresh crystal and chocolate malts really make it sing, and at such a light ABV, you'll be able to enjoy all of that flavor by the dimpled mug full.

**ALL-GRAIN**

**Batch size:** 5 gallons (19 liters)

**Brewhouse efficiency:** 72%

**OG:** 1.040

**FG:** 1.010

**IBUs:** 15

**ABV:** 3.9%

**MALT/GRAIN BILL**

6 lb (2.7 kg) Maris Otter

8 oz (227 g) amber malt

8 oz (227 g) brown malt

8 oz (227 g) chocolate rye malt

**HOPS SCHEDULE**

0.5 oz (14 g) Northern Brewer [8% AA] at 60 minutes

**YEAST**

Wyeast 1318 London Ale III

**DIRECTIONS**

Mash the grains at 152°F (67°C) for 60 minutes. Vorlauf until the runnings are clear, then run off into the kettle. Sparge the grains and top up as necessary to obtain 6 gallons (23 liters) of wort. Boil 60 minutes, following the hops schedule.

After the boil, chill the wort to slightly below fermentation temperature, about 60°F (16°C). Aerate the wort with pure oxygen or filtered air and pitch the yeast. Ferment at 60°F (16°C) for 4 days, then let the temperature rise to 68°F (20°C) and hold for an additional 7 days. Allow the beer to free rise from there until 2 days after airlock activity ceases, then crash the beer to 35°F (2°C), bottle or keg, and carbonate to about 2 volumes of CO<sub>2</sub>.

**EXTRACT**

Substitute 6.2 lb (2.8 kg) of pale liquid malt extract (LME) for the Maris Otter. Bring 6 gallons (23 liters) of water to about 162°F (72°C) and hold. Using a mesh grain bag, steep the remaining grains for 15 minutes, then remove the bag and allow it to drain into the wort. Add the LME while stirring and stir until completely dissolved. Boil for 60 minutes, following the hops schedule.

After the boil, chill, aerate, and ferment following the directions above.

# Brett Beer

Like my granddad says, “You roll the dice, you take what you get.” Instead of designing a special recipe for a 100 percent *Brettanomyces*-fermented beer, I figured, “Why not just take a hoppy recipe I already have, tinker a bit, and see what happens?” Darned if it didn’t work. I can’t promise the same will be true for you—for a variety of reasons, *Brett* beers are an exercise in “your mileage may vary.” I’m willing to wager, though, that you’ll like what you get, even if it’s not what you expect.

**Style:** *Brett* beers can use any base style as their foundation. Often, they’re pale and hoppy, but you needn’t be constrained. This recipe happens to be a variation on my Peachtree IPA, but *Brett* produces flavors complementary to a whole host of recipes. Generally, it should yield a beer that’s drier and fruitier than the traditional version of that style, often with a few funky notes. Those come through more as the beer ages, so you may not notice them at first (especially if you go heavy on the hops). This should not be an aggressively funky or sour beer.

**Ingredients:** Although this is an IPA in construction, it may not seem that way upon completion—it tastes more like a straight American pale ale, despite the high IBU load. Its gravity also is modest for an IPA. Two-row pale and a bit of Munich serve as the base, with dabs of British crystal and flaked barley. I dropped the 20L crystal from the original recipe; it adds light caramel sweetness to the IPA, but dry is the point here. Flaked barley smooths out the mouthfeel. Flaked wheat or flaked oats would also work. My IPA recipe calls for dry hopping, but here I use those hops in the whirlpool instead. I don’t like dry hops in this beer; they distract from the *Brett* character.

**Process:** This might be a good time to dedicate a fermentor and a set of plastics as your “*Brett/sour*” gear, to minimize the risk of contamination. Ferment at 68°F (20°C) for four weeks, then check your gravity. If it’s still above 1.015, wait. Check the gravity every two weeks until you get down to about 1.010 or lower, then package. *Brett* can work slowly, and if you bottle too soon, you can end up with gushers or bottle bombs. A relatively low carbonation target gives you some breathing room, but if your finishing gravity is a pretty-darn-dry 1.006 or so, go ahead and bump it up to 2.25 volumes.

Bottle conditioning can take a little while, just like primary fermentation. Be patient (or just get a keg and force carbonate).

The end result should seem like a lighter, brighter pale ale with a flavor that is probably clean and fruity at first. Over time it may develop those barnyard *Brett* aromas, but they should complement the peach/pineapple character. Consider aging a few bottles to see what develops. Roll the dice and see what you get.

## MAKE IT

# Peach in the Sun *Brett* Pale Ale

Don’t expect barnyard flavors here: When *Brett* is the sole fermenting agent, the result should be relatively clean.

## ALL-GRAIN

**Batch size:** 5 gallons (19 liters)  
**Brewhouse efficiency:** 72%  
**OG:** 1.057  
**FG:** 1.009  
**IBUs:** 52  
**ABV:** 5.9%

## MALT/GRAIN BILL

9 lb (4.1 kg) 2-row pale  
1 lb (454 g) Munich  
8 oz (227 g) British medium crystal (45L)  
8 oz (227 g) flaked barley

## HOPSCHEDULE

1 oz (28 g) Nugget [12% AA] at 60 minutes  
1 oz (28 g) Simcoe [10% AA] at 5 minutes  
1 oz (28 g) Amarillo at whirlpool  
1 oz (28 g) Citra at whirlpool

## YEAST

Wyeast 5112 *Brett Bruxellensis*

## DIRECTIONS

Mash the grains at 152°F (67°C) for 60 minutes. Vorlauf until the runnings are clear, then run off into the kettle. Sparge and top up as necessary to obtain 6 gallons (23 liters) of wort. Boil for 60 minutes, following the hops schedule.

After the boil, chill the wort to slightly below fermentation temperature, about 65°F (18°C). Aerate with pure oxygen or filtered air and pitch the yeast. Ferment at 68°F (20°C) for 4 weeks, then check the gravity. If it’s above 1.015, wait and check each week until the number holds steady or drops below 1.015 (preferably 1.010). Then bottle or keg, and carbonate to 2 volumes of CO<sub>2</sub>.

## TIPS FOR SUCCESS

To avoid bottle bombs, be absolutely sure fermentation is complete (or gravity is below 1.010) before packaging. Aim low with CO<sub>2</sub> if bottle conditioning to account for any long-term chewing-down of remaining sugars. If it gets as high as 2.5 volumes, you’ll still be fine.



COOKING WITH BEER

# Farmhouse Flavors

Let's get rustic: French and Belgian country ales can lighten and brighten savory main dishes, while a splash of sour cherry lambic adds complex juiciness to a simple berry crumble. **Justin Wright** and **Justin Kruger**, aka "Two Fat Justins," share recipes for their *cuisine à la bière*.

## Turkish Meatballs with Bière de Garde

**Serves:** 4–6

1 $\frac{2}{3}$  lb (756 g) ground lamb (may substitute ground beef or pork)  
1 medium yellow onion, finely chopped  
1 tsp chopped fresh flat-leaf parsley  
1 tsp chopped fresh garlic  
 $\frac{3}{4}$  tsp ground allspice  
 $\frac{3}{4}$  tsp ground cinnamon  
1 large egg  
3 Tbs vegetable oil  
8 oz (237 ml) bière de garde  
6 oz (170 g) shallots, peeled  
1–2 sprigs of thyme  
1–2 bay leaves  
5 oz (142 g) dried figs or raisins  
2 tsp sugar

In a large bowl, mix by hand the ground meat, onion, parsley, garlic, spices, and the egg. Once combined, form into 1 $\frac{1}{2}$ -inch (3.8 cm) balls, about the size of golf balls. In a large cast-iron skillet or steep-sided sauté pan, heat oil over

medium-high heat. Working in batches, sear the meatballs on all sides until golden brown. Change oil if needed.

Once all meatballs are seared, drain the oil from the pan and add the bière de garde. Scrape up any bits with a wooden spatula and reduce heat to low. Arrange the meatballs and peeled shallots in the pan. Add thyme, bay leaves, figs, sugar, and chicken stock, until meatballs are covered, and bring to a simmer. Cover the pan with foil and simmer on low for 1 hour. (Use the foil instead of a lid, as some liquid evaporation is good for this recipe.)

Remove the meatballs to a plate. The liquid should be reduced to nearly a sauce, so add salt and pepper as needed. Serve the meatballs with herbed Greek yogurt (see below) and steamed basmati rice.

### HERBED GREEK YOGURT

1 Tbs diced dill  
1 Tbs diced chive  
1 Tbs diced parsley  
1 Tbs diced basil  
1 Tbs diced green onion  
1 tsp of lemon juice and sherry vinegar  
Dash of salt and pepper  
1 cup (240 ml) plain Greek yogurt

Combine all the ingredients in a bowl and mix well.

**Beer Sensory Notes:** A bière de garde (aka "beer for keeping") is a classic farmhouse style from the Nord-Pas-de-Calais region of France. Typically, it has less of the spicy yeast character than traditional saisons. Traditionally, this is a strong pale ale, but it can use amber or brown malt, causing a darker, more malt-forward profile. Generally, this beer pours clear to mildly hazy, with foam that ranges from white to slightly tan, depending on the color of the beer. Aroma should be more malt-forward, with a lot of toasted-bread character, and subdued hops, with some spicy or peppery notes on the nose. The taste should be a bit of biscuit, caramel, and a touch of toffee, with minimal hop character, balancing toward the malt. The finish should be nearly dry to dry, with just a touch of sweet malt character and perhaps a bit of light alcohol warmth with higher-ABV versions. If you're fortunate enough to find a Jenlain from Brasserie Duyck or a Brasserie Castelain Bière de Garde, those are classic examples of the style. Otherwise try to find Lost Abbey Gift of the Magi or Avant Garde, Ommegang Grains of Truth or Bière de Mars, or Jolly Pumpkin Oro De Calabaza or Bière De Mars.

### What the Beer Does for the Dish:

For this recipe, we substitute bière de garde for the traditional stock. Instead of a rich vegetable flavor, we get a much deeper caramel and toast character, which enhances the browned flavor of the meatballs. Allspice and cinnamon are enhanced by extra bit of sugars from the beer and stock. While the hops are sub-



duced in this style, they're present enough to complement the herbs, leaving a slight touch of grassiness to go with the parsley and thyme. Overall, the beer enhances the meatballs with its clean malt and subtle hop character by accentuating, not overpowering, the flavors in the dish.

## Ricotta Gnocchi with Saison Lemon Brodo and Spring Vegetables

**Serves:** 4

Salt  
12 oz (340 g) ricotta cheese  
3 eggs  
2 Tbs (or as needed) all-purpose flour  
1/8 tsp nutmeg  
Pinch of black pepper  
Olive oil  
3 Tbs butter, cubed  
1 shallot, peeled and thinly sliced  
12 oz (340 g) wild mushrooms, picked and cleaned  
4 oz (113 g) asparagus, sliced in half-inch pieces  
1 lb (454 g) sweet peas\*  
Zest and juice, separated, from 2 lemons  
12 oz (355 ml) saison  
1 Tbs fresh herb, chopped\*  
2 Tbs Parmesan cheese, grated  
*\*Choose whatever fresh/frozen sweet pea you enjoy or that may be in season. We prefer parsley or chives for the herb, but any soft green herb works well.*

Bring a large pot of water to a boil. Season the water with salt—the water should taste salty, but not quite ocean-level salty. Mix the ricotta, eggs, flour, nutmeg, and pepper together in a stand mixer and whip for 15 minutes using the wire whip attachment. Roll out into ropes, dusted with flour around the outside. Cut 1/2-inch (1.27 cm) lengths and place onto a parchment-lined baking sheet.

Have a large bowl of ice water ready. In small batches, toss the gnocchi in the boiling water, and time them for 2–3 minutes after they start floating. Remove them from the water and place in the ice-water bath to chill for 1 minute. Remove from the ice water and allow to dry on paper towels. Tossed with 1 tsp of olive oil, the gnocchi will keep covered in the fridge for a week or in the freezer for much longer.

For the broth, melt 1 Tbs of butter in a skillet. Add the shallot and cook over medium heat for 2–3 minutes. Add mushrooms and season with a pinch of salt. Cook for 3–4 minutes more. When the mushrooms

are soft, add the asparagus and peas. Season lightly with a bit more salt. Cook until the peas are bright green. Add lemon zest and saison and bring to a light simmer.

Once broth is simmering, add gnocchi and heat through. Finish with the remaining butter and chopped herbs. Serve with the Parmesan cheese.

**Beer Sensory Notes:** Saisons are amazing food-pairing beers and make great additions to dishes as well. The archetype is Saison DuPont from Brasserie Dupont, and it should be widely available. This beer has a beautiful nose of clove, bananas, and similar flavors from the unique yeast strain and a whiff of fresh-cut grass from Saaz hops. It should be poured into a tulip glass and will appear pale golden in color with a 1–2-inch (2.5–5 cm) head of white foam that should linger the entire drink. The mouthfeel is lively, and there is a mild, grassy bitterness. The finish should be dry, with no lingering sweetness. What makes saisons pair so well is their unique yeast character, high effervescence, and dry finish. Other fantastic options are Ommegang Hennepin, Funkwerks Saison, and Boulevard Tank 7.

### What the Beer Does for the Dish:

Beer is inherently acidic, and the unique character of saisons adds brightness to the dish. Instead of stock, which has onion, garlic, and other rich vegetable flavors, this beer adds zip from carbonation and effervescence. The spicy yeast flavors enhance the herbal notes of the dish. Overall, this dish should be more acidic, lighter, and more herbal than you get with a traditional stock.

## Kriek-Braised Berry Crumble

**Serves:** 4

### BRAISED BERRIES

12 oz (355 ml) kriek  
1/2 cup (110 g) sugar  
2 lb (907 g) fresh berries (blueberries, raspberries, blackberries, etc.)  
1 tsp cornstarch  
1/8 tsp salt

In a large nonreactive pot, combine the kriek and sugar, bring to a gentle simmer, and cook until reduced by one-third or one-half (about 30 minutes). Add the berries, sprinkle the cornstarch and salt over top, and lightly simmer until the berries begin to break down. If too acidic, add 1 tsp of sugar at a time until the acidity is


to your liking. If too watery, sprinkle 1 tsp cornstarch at a time until the mixture is like a thin jam or jelly.

### CRUMBLE

2 cups (440 g) all-purpose flour  
1/2 tsp salt  
1 1/4 cups (275 g) brown sugar  
3/4 lb (340 g) butter (cold and cut into small pieces)

Mix everything in a stand mixer with a paddle attachment until combined and about the size of peas. Preheat the oven to 400°F (204°C). On the stove top, heat a cast-iron pan over medium heat. Add the fruit to the pan and sprinkle the crumble on top. Immediately put in 400°F (204°C) oven for 15–20 minutes, until the top is golden brown and the filling is bubbling. Serve with vanilla whipped cream or ice cream.

**Beer Sensory Notes:** Simply put, kriek (Flemish for cherry) is a lambic beer with sour cherries steeped in it for several months. What you should get from this type of beer is a very strong sour-cherry note that dominates the aroma and flavors. Pour into a tumbler or snifter, and you will get a beautiful dark red or pink color, with a pinkish-white head. The aroma can range from slightly funky, like barnyard, to almond or marzipan, or just simply sour cherries. The mouthfeel should be lively, acidic, with a strong flavor of sour cherries. The sour character should linger, but there should be no sugary “cough syrup” character at all. It should finish dry, with a touch of lingering sour-cherry character. If you're fortunate enough to find Cantillon, Boon, or 3 Fonteinen krieks, buy them; they are among the pinnacles (*see page 90 for our blind panel's review of 3 Fonteinen Oude Kriek*). Others that may be available include Van Honsebrouck St. Louis Fond Tradition Kriek and Lindemans Oude Kriek Cuvée René.

**What the Beer Does for the Dish:** Since this beer is pretty acidic, you won't need the traditional lemon juice/zest to bring out the acidity. In addition, the sour cherries add a variable fruit character to the other berries, complementing their natural sugars and acidity—who doesn't love a mixed-berry crumble? The crumble on top will have a rich buttery note, offset by the subtle minerality and phenolic notes of the beer. For some other fun variations, try a framboise (raspberry lambic) with the same mixed berries, or a *pêche* lambic with stone fruits such as peaches and apricots in the crumble. 



# Learn to Brew



With Craft Beer & Brewing Online Classes!

Are you new to brewing, or do you want to improve your brewing skills? Craft Beer & Brewing's online learning platform can help you become a better brewer, one video lesson at a time. 40 classes, led by CB&B staff, contributors, and brewers from renowned breweries, are now available for purchase, either as individual classes or through a low monthly subscription price that gives you access to all classes plus a new class every month:

- » **The Secrets to Brewing Great Lagers**
- » **Coffee & Beer: From Roasting to Brewing**
- » **Introductory Extract Brewing**
- » **Introductory All-Grain & Partial-Mash Brewing**
- » **Basics of Yeast Propagation**
- » **Kegging Your Beer**
- » **Adding Flavors to Beer**
- » **Temperature Control for Lagering**
- » **Home Draft System Setup**
- » **Brewing Water**
- » **Wood Aging Your Beer**
- » **Quick Souring Methods**
- » **Advanced Packaging Methods**
- » **Make the Most of Your Extract Kit**
- » **Fundamentals of Malt**
- » **Advanced All-Grain Methods**
- » **Advanced Yeast Management**
- » **Hot Rod Your Kettles and Mash Tun**
- » **How to Build Your Electric Brewery, 1 & 2**
- » **How to Make Great Mead**
- » **Fundamentals of Opening a Brewery**
- » **Hops: How to Best Use the Spice of Beer**
- » **Introduction to Evaluating Beer**
- » **Troubleshooting Your Beer**
- » **Recipe Development From Start-to-Finish**
- » **How to Adjunct Like Weldwerks**
- » **How to Brew Great Stouts**
- » **Introduction to Cider Making**

## Don't Miss These New Classes!



### How to Fix Sh\*t in Your Brewery with 2nd Shift Brewing

Steve Crider, founder-brewer-handyman at 2nd Shift Brewing in St. Louis, shares his know-how on keeping a brewery running, and what to do when things break down.



### Mastering Barrel-Aged Stouts with Side Project Brewing

Side Project Owner/Brewer Cory King teaches you how to brew world-class barrel-aged stouts.

Visit now for a free preview

**[beerandbrewing.com/learn](http://beerandbrewing.com/learn)**